Dreamweaver CS3

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David Sawyer McFarland

Dreamweaver CS3

THE MISSING MANUAL

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Dreamweaver CS3: The Missing Manual

by David Sawyer McFarland

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In addition to building Web sites, David is also a writer, trainer, and instructor. He's taught Dreamweaver at the UC Berkeley Graduate School of Journalism, the Center for Electronic Art, the Academy of Art College, Ex'Pressions Center for New Media, and the Art Institute of Portland. He currently teaches in the Multimedia Program at Portland State University. He's written articles about Dreamweaver and the Web for *Practical Web Design, MX Developer's Journal, Macworld* magazine and CreativePro.com.

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—David Sawyer McFarland

The Missing Manual Series

Missing Manuals are witty, superbly written guides to computer products that don't come with printed manuals (which is just about all of them). Each book features a handcrafted index; cross-references to specific pages (not just chapters); and RepKover, a detached-spine binding that lets the book lie perfectly flat without the assistance of weights or cinder blocks.

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Excel 2003 for Starters: The Missing Manual by Matthew MacDonald

Excel 2007 for Starters: The Missing Manual by Matthew MacDonald

Mac OS X Leopard for Starters: The Missing Manual by David Pogue

PowerPoint 2007 for Starters: The Missing Manual by E.A. Vander Veer

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Introduction

The World Wide Web continues to evolve, growing in scope and complexity, with new technologies popping up every year to make the Web look and work better. Even people building personal Web sites now use various programming languages and server technologies to dish up content. Throughout its history, Dreamweaver has managed to keep pace with this changing technological landscape with each new version.

Dreamweaver CS3 is no exception: It's capable of working with more technologies than any previous version. Whether you're creating database-enabled PHP Pages, adding your favorite site's XML-based news feeds directly to your home page, using Cascading Style Sheets for cutting-edge design effects, dipping into the dynamic world of JavaScript and AJAX, or simply sticking to straightforward HTML pages, Dreamweaver has just about all the tools you need.

Any enterprising designer can create Web pages, Cascading Style Sheets, and even JavaScript programs with a simple text editor. In fact, Dreamweaver CS3 provides powerful text-editing abilities for creating basic text files or complex database-driven Web pages. But why go to all that trouble when Dreamweaver's *visual* page-building approach makes your job of creating beautiful and complex Web sites so much easier? Whether you're new to building Web pages or a hard-core, hand-coding HTML jockey, Dreamweaver is a powerful tool that lets you build Web sites quickly and efficiently, without compromising the quality of your code.

What Dreamweaver Is All About

Dreamweaver is a complete Web site production and management tool. It works with Web technologies like HTML, XHTML, CSS, and JavaScript.

The enhancements in the latest version, in fact, make it easier than ever to design and lay out Web sites. In particular, revamped Cascading Style Sheet support lets you access the latest Web techniques for creating fast-loading, easily modified Web page designs; while the new "Spry" technology provides one-click access to complex, interactive layout options like drop-down menus. Dreamweaver also includes plenty of tools for managing Web sites once you've built them. You can check for broken links, use templates to streamline site-wide page changes, and reorganize your site in a flash with the program's site management tools.

Note: Get used to the acronym CSS, which you'll encounter frequently in this book. It stands for Cascading Style Sheets, a formatting language used to design HTML Web pages. Dreamweaver CS3 continues to integrate advanced CSS creation, testing, and editing tools into Dreamweaver.

It's also a serious tool for creating *dynamic* (database-driven) Web sites. You can now turn your company's database of products into an easily updated online catalog—or turn that cherished recipe collection into an online culinary resource for an adoring public. You can even create Web pages for updating and deleting database records, meanwhile keeping designated areas of your site secure from unauthorized visitors. Best of all, Dreamweaver CS3 does the programming for you.

If you've never used Dreamweaver before, but have already built one or more Web sites, you won't have to start from scratch. Dreamweaver happily opens Web pages and Web sites that were created in other programs without destroying any of your carefully handcrafted code.

Why Dreamweaver?

There are other Web design programs—dozens of them, in fact. But Dreamweaver has become one of the leading programs thanks to key benefits like these:

- **Visual page building.** If you've spent any time using a text editor to punch out the HTML code for your Web pages, you know the tedium involved in adding even a simple item like a photograph to a Web page. When your boss asks you to add her photo to the company home page, you launch your trusty text editor and type something like this: *<img src="images/staff/bigcheese.gif" width="100" height="150" alt="The Boss">.*

  Not only is this approach prone to typos, but it also separates you from what you want the page to *look* like.

  Dreamweaver, on the other hand, takes a *visual* approach to building Web pages. If you put an image on your page, Dreamweaver shows you the picture on the screen. As in a word processor, which displays documents onscreen as they look when printed, Dreamweaver provides a very close approximation of what your Web page will look like in a Web browser.

- **Complex interactivity, simply.** You've probably seen Web pages where an image (on a navigation bar, for example) lights up or changes appearance when you move your mouse over it.

  Dynamic effects like this—mouse rollovers, alert boxes, and navigational popup menus—usually require programming in JavaScript, a programming language that most Web browsers understand. While JavaScript can do amazing things, it requires time and practice to learn.

  Dreamweaver CS3 introduces an easy to use and innovative JavaScript-based technology called Spry. With Spry, you can easily create interactive, drop-down menus (Chapter 5), add advanced layout elements like tabbed panels (Chapter 12), and add sophisticated form validation to prevent visitors to your site from submitting forms with the proper information (Chapter 11).

- **Roundtrip code.** Every now and then, even in Dreamweaver, you may sometimes want to put aside the WYSIWYG (what you see is what you get) view and look at the underlying HTML code of a page. You may feel more comfortable creating some of your HTML by hand, for example, or you may want to tweak the HTML that Dreamweaver produces.

  Adobe realized that many professional Web developers still do a lot of work "in the trenches," typing HTML code by hand. In Dreamweaver, you can edit the raw HTML to your heart's content. Switching back and forth between the visual mode—called Design view—and Code view is seamless and, best of all, nondestructive. Unlike many visual Web page programs, where making a change in the WYSIWYG mode stomps all over the underlying HTML code, Dreamweaver respects hand-typed code and doesn't try to rewrite it (unless you ask it to).

  In addition, Dreamweaver can open many other types of files commonly used in Web sites, such as external JavaScript files (.js files), so you don't have to switch to another program to work on them.

  See Chapter 10 to learn more about how Dreamweaver handles writing and editing code.

- **Site management tools.** Rarely will you build just a single Web page. More often, you'll be creating and editing pages that work together to form part of a Web site. Or you may be building an entire Web site from scratch.

  Either way, Dreamweaver's site management tools make your job of dealing with site development easier. From managing links, images, pages, and other media to working with a team of people and moving your site onto a Web server, Dreamweaver automates many of the routine tasks every Webmaster faces. Part 4 of this book looks at how Dreamweaver can help you build and maintain Web sites.

- **Database-driven Web sites.** Data makes the world go round. Whether you're a human-resource records manager or a high school teacher, you probably keep track of a lot of information. Today, companies and individuals store reams of information in database systems like Microsoft Access or Oracle 10g. Dreamweaver

UP TO SPEED

Hand Coding vs. WYSIWYG Editors

Creating Web pages in a text editor was long considered the best method of building Web sites. The precise control over HTML available when code is written by hand was (and often still is) seen as the only way to assure quality Web pages.

Hand coding's reputation as the only way to go for pros is fueled by the behavior of many visual page-building programs that add unnecessary code to pages–code that affects how a page appears and how quickly it downloads over the Internet.

But hand coding is time-consuming and error-prone. One typo can render a Web page useless.

Fortunately, Dreamweaver brings solid code writing to a visual environment. Since its earliest incarnation, Dreamweaver has prided itself on its ability to produce clean HTML and its tolerance of code created by other programs–including text editors. In fact, Dreamweaver includes a powerful built-in text-editing mode that lets you freely manipulate the HTML of a page–or any other code, including JavaScript, Visual Basic, XML, PHP, or ColdFusion Markup Language.

But the real story is that the code produced when working in the visual mode is as solid and well written as hand coding. Knowing this, you should feel free to take advantage of the increased productivity that Dreamweaver's visual-editing mode brings to your day-to-day work with its one-click objects, instant JavaScript, and simplified layout tools. Doing so won't compromise your code, and will certainly let you finish your next Web site in record time.

Besides, no Web design program is really WYSIWYG (what you see is what you get). Because every browser interprets the HTML language slightly differently, Web design is more like WYSIRWYGOAGD: what you see is roughly what you'll get, on a good day.

CS3 can help you bring that information to life on the Web without having to learn a lot of programming along the way. From accessing information—such as the latest items in your company's product catalog—to updating and editing databases online, Dreamweaver CS3 can help you build database-driven Web sites. Part 6 of this book offers a gentle introduction to building dynamic Web sites.

- **Have it your way.** As if Dreamweaver didn't have enough going for it, the engineers at Adobe have created a software product that is completely customizable, or, as they call it, *extensible*. Anyone can add to or change the menus, commands, objects, and windows in the program.

  Suppose, for example, that you hardly ever use any of the commands in the Edit menu. By editing one text file in the Dreamweaver Configuration folder, you can get rid of any unwanted menu items—or even add new commands of your own creation. This incredible flexibility lets you customize the program to fit your work methods, and even add features that Adobe's programmers never imagined. Best of all, the Adobe Exchange Web site includes hundreds of free and commercial extensions to download and add to Dreamweaver. See Chapter 21 for details.

- **Part of the Creative Suite.** Since Adobe purchased Macromedia (the original creator of Dreamweaver), Web designers now have access to a much larger family of design tools including Adobe Photoshop and Illustrator. Ultimately all of these Adobe programs will work together seamlessly and share a common appearance. Dreamweaver CS3 hasn't yet adopted the look of an Adobe application, but it does include some useful integrations with the Adobe universe: You can now paste images from Photoshop directly into Dreamweaver (Chapter 6), and test your page designs in various cell phone models using Adobe's Device Central product (Chapter 17).

What's New in Dreamweaver CS3

If you've never used Dreamweaver before, see Chapter 1 for a welcome and the grand tour. If you're upgrading from Dreamweaver 8 or some other version, you'll find that Dreamweaver CS3 offers a host of new features aimed at both the novice Web designer and the seasoned HTML guru.

- **CSS power.** Dreamweaver CS3 adds significant improvements to the program's already impressive *Cascading Style Sheet* tools. The program improves on Dreamweaver 8's already excellent display of complex CSS designs. Now, even as you use cutting-edge CSS techniques to design your pages, Dreamweaver's visual Design view provides near WYSIWYG—what you see is what you get—editing power. In addition, Dreamweaver CS3 introduces new tools to effectively managing a site's ever growing list of *styles* (the powerful design instructions that lay at the heart of CSS). You can quickly move styles between style sheets, rename styles, and convert old-school inline styles to the more efficient external style sheet. In addition, Dreamweaver includes new CSS layouts to help jumpstart your page designs, as well as a diagnostic tool called the "Browser Compatiblity" tool to help make sure your CSS works across different browsers.

- **Photoshop integration.** If you're a Photoshop user, Dreamweaver CS3 can help you work faster. Dreamweaver adds integrated support for the world's pre-eminent graphics software. In Photoshop CS3 you can select a single *layer* (separate virtual canvasses used to build complex images); a *slice* (a selection of an image that you want to export as a separate Web graphic); or even draw a marquee around one area of a document and copy all layers in that section. You can then copy that selection, switch to a Dreamweaver document, and paste away. (Or you can skip all of these steps and just drag a PSD file directly onto a Dreamweaver page.)

  Dreamweaver's new image optimization window lets you apply file compression settings directly in Dreamweaver (great for creating slim-sized graphics that appear in Web browsers more quickly). Even better, without leaving Dreamweaver, you can launch Photoshop and open the original image file for editing. After making any changes you want in Photoshop, copy the layer, the slice, or the portion of the Photoshop file you want, and then paste the new, edited image back into Dreamweaver (thereby replacing the older image). Dreamweaver remembers all the optimization settings you previously applied (including the optimized file's name), making edits fast and painless.

- **Active pages made easy.** The most glamorous new addition to the program is a set of tools for adding dynamic layout elements and visual effects to your Web pages. Based on the "Spry Framework" (a collection of JavaScript programs developed by Adobe), these new features make it easy to add pop-up navigational menus, validate HTML forms, include complex, animated, visual effects, and add interactive data tables. The Spry Menu Bar, for example, lets you quickly and easily add a pop-up navigational menu to your site—without you having to learn all the messy JavaScript and CSS to make it happen.

  In addition, Spry Form Validation widgets let you verify entries in a Web form before your site visitors try to submit the form. So, for example, you can make sure dates are properly formatted. (This widget provides a much more powerful solution than the tired, old "Validate Form" behavior that has shipped with Dreamweaver for years). The Spry Data Set feature lets you take data from an XML file and display it in a table. People viewing the Web page can sort the table by clicking column headers and even see detailed information about one item inside a table cell—all without ever requesting a fresh page from the Web server. And that's just a quick preview of what you get thanks to the new Spry tools; Chapter 12 has the full story.

- **Souped-up speed.** As with most updated software, Dreamweaver CS3 sports under-the-hood enhancements like better performance, more accurate display of CSS designs, and fixes to bugs that were in Dreamweaver 8. And, for you "I like to own the latest and greatest Apple computer" people, Dreamweaver CS3 has been rewritten to run natively (translation: faster) on the new Intel Macs.

Note: Adobe occasionally issues updates to Dreamweaver. To make sure you're using the latest version, visit the Adobe Web site at *www.adobe.com/products/dreamweaver/*.

HTML, XHTML, and CSS 101

Underneath the hood of any Web page—whether it's your uncle's "Check out this summer's fishin'" page or the home page of a billion-dollar online retailer—is nothing more than line after line of ordinary typed text. With its use of simple commands called *tags*, HTML (Hypertext Markup Language) is still at the heart of most of the Web.

The HTML code that creates a Web page can be as simple as this:

```
<html>
<head>
<title>Hey, I am the title of this Web page.</title>
</head>
<body>
<p>Hey, I am some body text on this Web page.</p>
</body>
</html>
```

While it may not be exciting, the HTML shown here is all you need to make an actual Web page.

Of Tags and Properties

In the example above—and, indeed, in the HTML code of any Web page you examine—you'll notice that most commands appear in *pairs* that surround a block of text or other commands.

These bracketed commands constitute the "markup" part of the Hypertext Markup Language and are called *tags*. Sandwiched between brackets, tags are simply instructions that tell a Web browser how to display the Web page.

The starting tag of each pair tells the browser where the instruction begins, and the ending tag tells it where the instruction ends. An ending tag always includes a forward slash (/) after the first bracket symbol (<), which tells the browser that it is a closing tag.

Fortunately, Dreamweaver can generate all of these tags *automatically*. There's no need for you to memorize or even type these commands (although many programmers still enjoy doing so for greater control). Behind the scenes, Dreamweaver's all-consuming mission is to convert your visual designs into underlying codes like these:

- The *<html>* tag appears once at the beginning of a Web page and again (with an added slash) at the end. This tag tells a Web browser that the information contained in this document is written in HTML, as opposed to some other language. All the contents of a page, including other tags, appear between the opening and closing <html> tags.

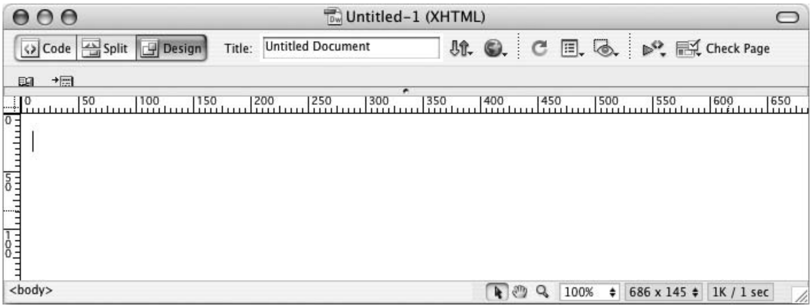
  If you were to think of a Web page as a tree, the <html> tag would be its trunk. Springing from the trunk are two branches that represent the two main parts of any Web page: the head and the body.

- The *head* of a Web page, surrounded by *<head>* tags, contains the title of the page. It may also provide other, invisible information (such as search keywords) that browsers and Web search engines can exploit.

  In addition, the head can contain information that the Web browser uses for displaying the Web page and adding interactivity. *Cascading Style Sheet* information, used for formatting text and other elements, may be defined in the head of the document (see Chapter 4). In addition, JavaScript scripts, functions, and variables can be declared in the head of the document. In fact, Dreamweaver's new Spry widgets (Chapter 12) achieve their interactive effects with the help of JavaScript code stored in a page's head.

- The *body* of a Web page, as set apart by its surrounding <body> tags, contains all the information that appears inside a browser window—headlines, text, pictures, and so on.

In Dreamweaver, the blank white portion of the document window represents the body area (see Figure I-1). It resembles the blank window of a word processing program.



Title: Untitled Document

Figure I-1: *The document window displays your page as you build it. You can add text, graphics, and other elements to it, and—thanks to Dreamweaver's visual approach—see a close approximation of how the page will appear in a Web browser.*

Most of your work with Dreamweaver involves inserting and formatting text, pictures, and other objects in the body of the document. Many tags commonly used in Web pages appear within the <body> tag. Here are a few:

- You can tell a Web browser where a paragraph of text begins with a *<p>* (opening paragraph tag), and where it ends with a </p> (closing paragraph tag).
- The *<strong>* tag is used to emphasize text. If you surround some text with it and its partner tag, </strong>, you get boldface type. The HTML snippet <strong>Warning!</strong> would tell a Web browser to display the word "Warning!" in bold type on the screen.
- The *<a>* tag, or anchor tag, creates a link (hyperlink) in a Web page. A link, of course, can lead anywhere on the Web. How do you tell the browser where the link should point? Simply give address instructions to the browser inside the <a> tags. For instance, you might type *<a href="http://www.missingmanuals.com/">Click here!</a>*.

  The browser knows that when your visitor clicks the words "Click here!" it should go to the Missing Manual Web site. The *href* part of the tag is called, in Dreamweaver, a *property* (you may also hear the term *attribute*), and the URL (the Uniform Resource Locator, or Web address) is the *value*. In this example, *http://www.missingmanuals.com* is the *value* of the *href* property.

Fortunately, Dreamweaver exempts you from having to type any of these codes and provides an easy-to-use window called the *Property inspector* for adding properties to your tags and other page elements. To create links the Dreamweaver way (read: the easy way), turn to Chapter 5.

Tip: For a full-fledged introduction to HTML, check out *Creating Web Sites: The Missing Manual.* For an HTML primer that's geared to readers who also want to master CSS, pick up a copy of *CSS: The Missing Manual.*

XHTML, Too

Like any technology, HTML is showing its age. Although it's served its purpose well, it's always been a somewhat sloppy language. Among other things, it allows uppercase, lowercase, or mixed-case letters in tags (<body> and <BODY> are both correct, for example) and permits unclosed tags (so that you can use a single <p> tag without the closing </p> to create a paragraph). While this flexibility may make page writing easier, it also makes life more difficult for Web browsers, PDAs, and other technologies that must interact with data on the Web. Additionally, HTML doesn't work with one of the hottest up-and-coming Internet languages: XML, or Extensible Markup Language (see page 477 for a quick intro to XML).

To keep pace with the times, an improved version of HTML called XHTML is finding its way into more and more Web sites. Once again, Dreamweaver CS3 is right on the cutting edge: it can create and work with XHTML files. If you understand only HTML, don't worry—XHTML isn't a revolutionary new language that takes years to learn. It's basically HTML, but with somewhat stricter guidelines. For example, the HTML page code shown on page 6 would look like *this* in XHTML:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml">
<head>
<title>Hey, I am the title of this Web page.</title>
<meta http-equiv="Content-Type" content="text/html; charset=iso-
8859-1" />
</head>
<body>
<p>Hey, I am some body text on this Web page.</p>
</body>
</html>
```

Notice that everything below the <head> is *exactly* the same as the HTML page. The information that begins the page, however, is how the page identifies which standards it conforms to. In this case, it merely says that the page is using a particular brand of HTML, called XHTML, and more specifically a type of XHTML called Transitional 1.0. (Don't worry—Dreamweaver automatically writes all of this code when you create a new XHTML page.)

As you can see, the real code used to make the page is much like HTML. To make an XHTML file comply with XML, however, there are a few strict rules to keep in mind:

- **Begin the page with a document-type declaration and a namespace.** That's the first few lines in the code above. They simply state what type of document the page is and point to files on the Web that contain definitions for this type of file.

- **Tags and tag attributes must be lowercase.** Unlike in HTML, typing the tag <BODY> in an XHTML file is incorrect. It must be lowercase like this: <body>.
- **Quotation marks are required for tag attributes.** For example, a link written like this: <a href=http://www.missingmanuals.com> is valid in HTML, but doesn't work in XHTML. You have to enclose the value of the *href* property in quotes: <a href="http://www.missingmanuals.com">.
- **All tags (even empty tags) must be closed.** To create a paragraph in XHTML, for example, you must begin with <p> and end with </p>. However, some tags don't come in pairs. These tags, called *empty tags*, have no closing tag. The line break tag is one example. To close an empty tag, you must include a backslash at the end of the tag, like this: <br />.

If all this seems a bit confusing, don't worry. All these strict XHTML rules are built into Dreamweaver, so creating an XHTML page using Dreamweaver's visual design tools won't feel one bit different from creating an old-style HTML page. (For more information on creating an XHTML page in Dreamweaver, see page 35.)

Adding Style with Cascading Style Sheets

HTML used to be the only language you needed to know. You could build pages with colorful text and graphics and make words jump out using different sizes, fonts, and colors. But today, you can't add much visual sophistication to a site without Cascading Style Sheets (CSS). CSS is a formatting language used to make text look good, add sophisticated layout to pages, and basically add style to your site.

From now on, think of HTML as merely the language you use to give organization to a page. It helps identify and structure the stuff you want the world to know about. Tags like <h1>, <h2>, and <title> denote headlines and assign them relative importance: a *heading 1* is more important than a *heading 2*. The <p> tag indicates a basic paragraph of information. Other tags provide further structural clues: for example, a <ul> tag identifies a bulleted list (to make a list of recipe ingredients more intelligible).

Cascading Style Sheets, on the other hand, add design flair to the highly structured HTML content, making it more beautiful and easier to read. Essentially, a CSS *style* is just a rule that tells a Web browser how to display a particular element on a page—for example, to make a <h1> tag appear 36 pixels tall, in the Verdana font and the color orange.

But CSS is more powerful than that. You can use it to add borders, change margins, and even control the exact placement of an element on a page.

If you want to be a Web designer, you need to get to know Cascading Style Sheets. You'll learn more about this exciting technology throughout this book. In fact, it's so important for current Web design, that this edition of *Dreamweaver: The Missing Manual* now includes expanded coverage and examples of CSS in most chapters.

The Very Basics

You'll find very little jargon or nerd terminology in this book. You will, however, encounter a few terms and concepts that you'll encounter frequently in your computing life:

- **Clicking.** This book gives you three kinds of instructions that require you to use your computer's mouse or trackpad. To *click* means to point the arrow cursor at something on the screen and then—without moving the cursor at all—press and release the clicker button on the mouse (or laptop trackpad). To *double-click*, of course, means to click twice in rapid succession, again without moving the cursor at all. And to *drag* means to move the cursor while holding down the button.

- **Keyboard shortcuts.** Every time you take your hand off the keyboard to move the mouse, you lose time and potentially disrupt your creative flow. That's why many experienced computer fans use keystroke combinations instead of menu commands wherever possible. Ctrl+B (⌘-B for Mac folks), for example, is a keyboard shortcut for boldface type in Dreamweaver (and most other programs).

  When you see a shortcut like Ctrl+S (⌘-S), it's telling you to hold down the Ctrl or ⌘ key and, while it's down, type the letter S, and then release both keys. (This command, by the way, saves changes to the current document.)

- **Choice is good.** Dreamweaver frequently gives you several ways to trigger a particular command—by selecting a menu command, *or* by clicking a toolbar button, *or* by pressing a key combination, for example. Some people prefer the speed of keyboard shortcuts; others like the satisfaction of a visual command available in menus or toolbars. This book lists all the alternatives, but by no means are you expected to memorize all of them.

About This Book

Despite the many improvements in software over the years, one feature has grown consistently worse: documentation. Until version 4, Dreamweaver came with a printed manual. But since MX 2004, all you get is a *Getting Started* booklet. To get any real information, you need to delve into the program's online help screens.

But even if you have no problem reading a help screen in one window as you work in another, something's still missing. At times, the terse electronic help screens assume you already understand the discussion at hand, and hurriedly skip over important topics that require an in-depth presentation. In addition, you don't always get an objective evaluation of the program's features. Engineers often add technically sophisticated features to a program because they *can*, not because you need them. You shouldn't have to waste your time learning features that don't help you get your work done.

The purpose of this book, then, is to serve as the manual that should have been in the box. In this book's pages, you'll find step-by-step instructions for using every Dreamweaver feature, including those you may not even have quite understood, let alone mastered, such as Libraries, Layout view, Behaviors, Dreamweaver's Dynamic Web site tools, and Dreamweaver CS3's new Spry tools and CSS features. In addition, you'll find clear evaluations of each feature that help you determine which ones are useful to you, as well as how and when to use them.

Note: This book periodically recommends *other* books, covering topics that are too specialized or tangential for a manual about using Dreamweaver. Careful readers may notice that not every one of these titles is published by Missing Manual parent O'Reilly Media. While we're happy to mention other Missing Manuals and books in the O'Reilly family, if there's a great book out there that doesn't happen to be published by O'Reilly, we'll still let you know about it.

Dreamweaver CS3: The Missing Manual is designed to accommodate readers at every technical level. The primary discussions are written for advanced-beginner or intermediate computer users. But if you're new to building Web pages, special sidebar articles called "Up To Speed" provide the introductory information you need to understand the topic at hand. If you're a Web veteran, on the other hand, keep your eye out for similar shaded boxes called "Power Users' Clinic." They offer more technical tips, tricks, and shortcuts for the experienced computer fan.

About → These → Arrows

Throughout this book, and throughout the Missing Manual series, you'll find sentences like this one: "Open the System → Library → Fonts folder." That's shorthand for a much longer instruction that directs you to open three nested folders in sequence, like this: "On your hard drive, you'll find a folder called System. Open that. Inside the System folder window is a folder called Library; double-click it to open it. Inside *that* folder is yet another one called Fonts. Double-click to open it, too."

Similarly, this kind of arrow shorthand helps to simplify the business of choosing commands in menus, as shown in Figure I-2.

Macintosh and Windows

Dreamweaver CS3 works almost precisely the same way in its Macintosh and Windows versions. Every button in every dialog box is exactly the same; the software response to every command is identical. In this book, the illustrations have been given even-handed treatment, alternating between the various operating systems where Dreamweaver feels at home (Windows XP, Windows Vista, and Mac OS X).

One of the biggest differences between Mac and Windows software is the keystrokes, because the Ctrl key in Windows is the equivalent of the Macintosh ⌘ key.

And the key labeled Alt on a PC (and on non-U.S. Macs) is the equivalent of the Option key on American Mac keyboards.

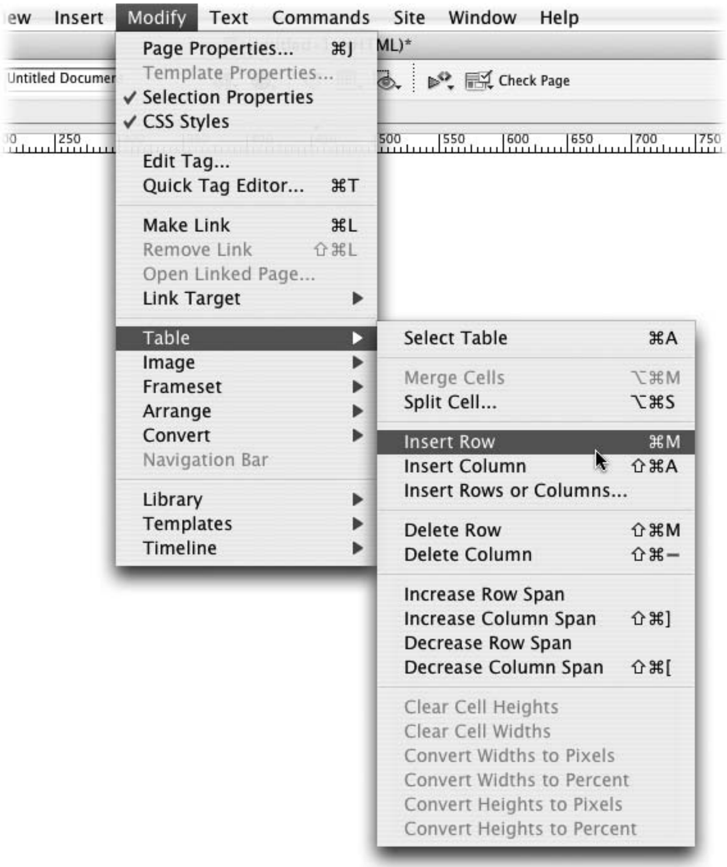


Figure I-2:
When you read in a Missing Manual, "Choose Modify → Table → Insert Row," that means: "Click the Modify menu to open it. Then click Table in that menu and choose Insert Row in the resulting submenu."

Whenever this book refers to a key combination, therefore, you'll see the Windows keystroke listed first (with + symbols, as is customary in Windows documentation); the Macintosh keystroke follows in parentheses (with - symbols, in time honored Mac fashion). In other words, you might read, "The keyboard shortcut for saving a file is Ctrl+S (⌘-S)."

About the Outline

Dreamweaver CS3: The Missing Manual is divided into six parts, each containing several chapters:

- **Part 1, Building a Web Page,** explores Dreamweaver's interface and takes you through the basic steps of building a Web page. It explains how to add text and format it, how to link from one page to another, how to spice up your designs with graphics, and introduces you to Cascading Style Sheets.

- **Part 2, Building a Better Web Page,** takes you deeper into Dreamweaver and provides in-depth CSS coverage. In addition, you'll get step-by-step instructions for creating advanced page layouts, as well as advice on how to view and work with the underlying HTML code of a page.

Note: Previous versions of this book contained a chapter on HTML frames–a method of displaying several Web pages in a single Web browser window. This technique is going the way of the dodo bird. Since Dreamweaver CS3 has so many new and exciting features and this book's already bursting at its seams (if we added any more pages, we'd have to issue a medical warning to those with bad backs), the frames chapter has been moved online. You can find it, free of charge, at *www.sawmac.com/missing/dw8/appc.pdf*.

- **Part 3, Bringing Your Pages to Life,** helps you add interactivity to your site. From using forms to collect information from your site's visitors to adding interactive page widgets like tabbed interfaces with the new Spry framework, this section guides you through adding animation, multimedia, and other interactive effects with ease.

- **Part 4, Building a Web Site,** covers the big picture: managing the pages and files in your Web site, testing links and pages, and moving your site onto a Web server connected to the Internet. And since you're not always working solo, this section also covers features that let you work with a team of Web developers.

- **Part 5, Dreamweaver Power,** shows you how to take full advantage of such time-saving features as Libraries, Templates, and History panel automation. It also covers Dreamweaver's Extension Manager, a program that can add hundreds of new free and commercial features to the program.

- **Part 6, Dynamic Dreamweaver,** presents a gentle introduction to the often confusing and complex world of database-driven Web sites. You'll learn what you need to know to build a dynamic Web site; how to connect Dreamweaver to a database; and how to use Dreamweaver to build pages that can display database information as well as add, edit, and delete database records. The last chapter of this section covers the powerful XSLT tools for converting XML files (including RSS feeds) into browser-ready Web designs.

At the end of the book, two appendixes provide a list of Internet resources for additional Web design help and a menu-by-menu explanation of Dreamweaver CS3.

Living Examples

This book is designed to get your work onto the Web faster and more professionally; it's only natural, then, that half the value of this book also lies on the Web.

As you read the book's chapters, you'll encounter a number of *living examples*—step-by-step tutorials that you can build yourself, using raw materials (like graphics and half-completed Web pages) that you can download from either *www.sawmac.com/dwcs3/* or from this book's "Missing CD" page at *www.missingmanuals.com*. You might not gain very much from simply reading these step-by-step lessons while relaxing in your porch hammock. But if you take the time to work through them at the computer, you'll discover that these tutorials give you unprecedented insight into the way professional designers build Web pages.

You'll also find, in this book's lessons, the URLs of the finished pages, so that you can compare your Dreamweaver work with the final result. In other words, you won't just see pictures of Dreamweaver's output in the pages of the book; you'll find the actual, working Web pages on the Internet.

About MissingManuals.com

At *www.missingmanuals.com*, you'll find articles, tips, and updates to *Dreamweaver CS3: The Missing Manual*. In fact, we invite and encourage you to submit such corrections and updates yourself. In an effort to keep the book as up to date and accurate as possible, each time we print more copies of this book, we'll make any confirmed corrections you've suggested. We'll also note such changes on the Web site, so that you can mark important corrections into your own copy of the book, if you like. (Click the book's name, and then click the Errata link, to see the changes.)

In the meantime, we'd love to hear your own suggestions for new books in the Missing Manual line. There's a place for that on the Web site, too, as well as a place to sign up for free email notification of new titles in the series.

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Part One:
Building a Web Page

CHAPTER

1

Dreamweaver CS3 Guided Tour

Dreamweaver CS3 is a powerful program for designing and building Web sites. If you're brand-new to Dreamweaver, then turn to page 2 to get an overview of what this program can do and what's new in this latest version. This chapter provides a basic overview of the different windows, toolbars, and menus that you'll use every time you build a Web page. You'll also learn to set up the program so you can begin building Web pages. And, because *doing* is often a better way to learn than just *reading*, you'll get a step-by-step tour of Web page design—the Dreamweaver way—in the tutorial at the end of this chapter.

The Dreamweaver CS3 Interface

Dreamweaver's windows let you add and modify elements of a Web page. Adobe refers to most of these windows as *panels*, and Dreamweaver has an almost overwhelming number of them.

Many of these windows are used to assist with specific tasks, like building style sheets, and are described in the relevant chapters. But you'll frequently interact with four main groups of windows: the document window, the Insert bar, the Property inspector, and panel groups.

Note: The look of these windows depends on what kind of computer you're using (Windows or Macintosh) and what changes you've made to the program's preference settings.

Even so, the features and functions generally work the same way no matter what your situation. In this book, where the program's operation differs dramatically in one operating system or the other, special boxes and illustrations (labeled "For Macs Only" or "For Windows Only") will let you know.

The Document Window

You build Web pages in the *document window*. As in a word processor, you can simply click inside the document window and type to add text to the page. You'll work in this window as you build your page, and you'll open new document windows as you add or edit pages for your site.

Several other screen components provide useful information about your document. They may appear in different locations on Windows computers and on Macs (see Figures 1-1 and 1-2), but they work the same way. For example:

- **Title bar.** The *title bar* shows the name of the file you're currently working on and, in Windows, where the file is located on your computer. In addition, if the Web page is XHTML-compliant (see page 9), then that's indicated in parentheses. For instance, in the example shown in Figure 1-1, the Web page is written in XHTML and is saved as a file named *features.html* in the folder *htdocs*, which is nested inside another folder on the Z: drive. (In Windows, the title bar appears on the top of the screen; on the Mac, it's at the top of the document window, and although the location of the file isn't listed, if you hover your mouse over the file name—*index.html*, for example—you'll see the location of that file on your Mac.)

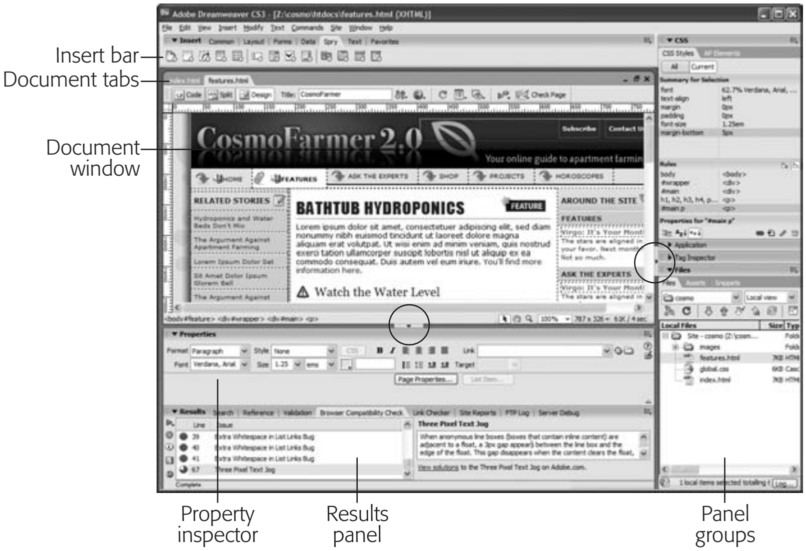
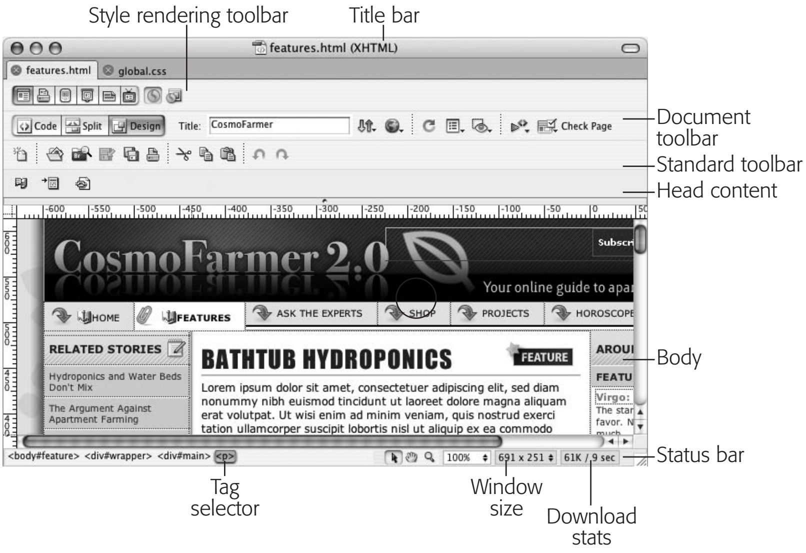


Figure 1-1: *You can switch between open documents by clicking each file's tab immediately above the Document toolbar. Here, clicking the features.html tab brings that page to the front. (This nifty feature works only if the document window is maximized.) You can also hide the panels in one fell swoop (either the stack of panels on the right edge of the window or the panels at the bottom left) by clicking either of the Hide Panels buttons (circled). To show the panels, click the button again.*

- **Document toolbar.** The *Document toolbar* (see Figure 1-2) lets you change the title of a page, switch between Design and Code views, preview the page in different Web browsers, access a context-sensitive reference (help) system, and change the look of the document window. You'll read about its various buttons and menus in the relevant chapters of this book. (To make the toolbar visible if it's not already, choose View → Toolbars → Document.)



Title: CosmoFarmer

Hydroponics and Water Beds Don't Mix

The Argument Against Apartment Farming

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo

<body#feature> <div#wrapper> <div#main> <p>

Figure 1-2: *A document window like this represents each Web page; here's where you add text, graphics, and other objects as you build a page. You can also title the page, preview it in a Web browser, and take other useful actions using the Document toolbar.*

- **The Standard toolbar.** The *Standard toolbar* (see Figure 1-2) includes buttons for frequent file and editing tasks like creating a new page, opening a page, saving one or all open documents, cutting, copying, pasting, and undoing and redoing actions. (This toolbar is hidden until you summon it by choosing View → Toolbars → Standard.)

- **The Style Rendering toolbar.** The *Style Rendering toolbar* (see Figure 1-2) lets you preview the effect of different CSS style sheets on your page. As described on page 301, you can use different style sheets for different types of displays and output devices. For example, you can make the page look one way when displayed on a monitor, but completely differently when printed. This tricky use of CSS, as well as how to use this nifty toolbar, is described on page 304. (This toolbar is also hidden until you choose View → Toolbars → Style Rendering.)

Tip: You can hide or show a toolbar such as the Style Rendering or Standard toolbars by right-clicking (control-clicking on a Mac) on the Document toolbar and then selecting the toolbar from the pop-up menu that appears.

- **Head content.** Most of what you put on a Web page winds up in the *body* of the page, but some elements are specific to the region of the page called the *head* (see Figure 1-2). This is where you put things like the title of the page, *meta tags* (keywords) that provide information for some search engines and browsers, JavaScript scripts, and Cascading Style Sheet information (Chapter 6).

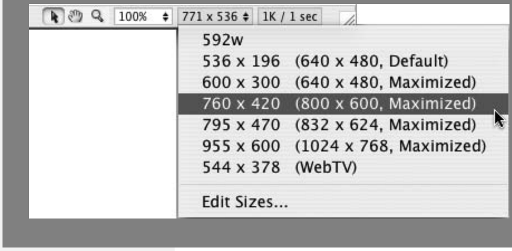
  None of this information is actually visible on your Web page once it's "live" on the Internet. But while working in Dreamweaver, you can have a look at it by choosing View → Head Content. You'll see a row of icons representing the different bits of information in the head.

GEM IN THE ROUGH

The Window Size Pop-Up Menu

Creating pages that look good on different monitors set to a wide range of resolutions is one of the most difficult tasks facing Web designers. After all, not everyone has a 21-inch monitor or views Web sites with the browser window maximized to fill the whole screen. Nothing's more dispiriting than spending a solid week designing the coolest-looking Web page, only to have your client call up to say that your design doesn't fit his 15-inch monitor (a painfully common story).

You could simulate browser windows of different sizes by dragging the resize handle at the lower-right corner of the document window. But Dreamweaver has a better tool for such experiments: the Window Size pop-up menu on the status bar at the bottom of your document window. Clicking the black arrow next to the window-size stats lets you choose a different setting for the document window, as shown here. Use this feature to test how your page will look inside different-size browser windows. The numbers indicate the width and height in pixels.



100%
771 x 536
1K / 1 sec
592w
536 x 196 (640 x 480, Default)
600 x 300 (640 x 480, Maximized)
760 x 420 (800 x 600, Maximized)
795 x 470 (832 x 624, Maximized)
955 x 600 (1024 x 768, Maximized)
544 x 378 (WebTV)
Edit Sizes...

(Note to Windows folks: If your document window is maximized, this feature doesn't work. Choose Window → Cascade to "unlock" the document window from its space on the screen. Now you're free to resize the window and use the Window Size pop-up menu. However, this gets rid of the nifty document tabs that let you quickly switch between open documents–as pictured in Figure 1-1. To get them back, just click the Maximize window button in the document window.)

The first pair of numbers indicates the amount of usable space in the document window; the numbers in parentheses indicate the resolution of the monitor. The fourth option shown here, in other words, indicates that if someone has an 800 × 600 monitor and maximizes the browser window, there are 760 × 420 pixels of space to display a Web page. (Even though a monitor's resolution is, say, 800 × 600, after you subtract the space required to display the browser's toolbar, location bar, status bar, and other "chrome," 760 × 420 pixels of space will be visible when a Web page is opened.)

In any case, note that the Window Size pop-up menu doesn't actually set the size of your Web page or add any code to your page; Web pages are usually fluid, and can grow or shrink to the size of each visitor's browser window. For techniques that let you exercise greater control over your page presentation, see Chapter 8.

- **The status bar** (see Figure 1-2) provides useful information about your page. It appears at the bottom of the document.
- **The Tag selector** (shown in Figure 1-2) is also extremely useful. It provides a sneak peek at the HTML that, behind the scenes, composes your Web page. It indicates how tags are nested in the document based on what you've selected or where the insertion point is.

  You can also use the Tag selector to select an HTML tag and all the information nested inside it. For instance, clicking the <p> tag selects the paragraph and everything inside it. This feature is very useful when you want to set *properties* (see page 25), add *behaviors* (Chapter 12), or precisely control the application of *styles* (Chapter 4).

  You'll make good use of the Tag selector in the tutorials to come. For experienced Dreamweaver fans, it's one of the program's most popular tools.

Tip: In Design view, clicking the <body> tag in the Tag selector is usually the same as pressing Ctrl+A (⌘-A) or choosing Edit → Select All: It selects everything in the document window. However, if you've clicked inside of a table (Chapter 7), or inside of a <div> tag (see page 313), choosing Edit → Select All only selects the contents of the table cell or <div> tag. In this case, you need to press Ctrl+A (⌘-A) several times to select everything on a page. After selecting everything this way, you can press the Delete key to instantly get rid of everything in your document.

Careful, though: Pressing Ctrl+A (⌘-A) or choosing Edit → Select All in Code view selects all the code. Deleting *this* gives you an empty file–and an invalid Web page.

The Insert Bar

If the document window is your canvas, the Insert bar holds your brushes and paints, as shown in Figure 1-3. While you can add text to a Web page simply by typing in the document window, adding elements like images, horizontal rules, forms, and multimedia elements is simplified by the click-to-add approach of the Insert bar. Want to put a picture on your Web page? Just click the Image icon.

Note: Adding elements to your Web page this way may feel like magic, but the Insert bar is really just a quick way to add code to a page, whether it's HTML, XHTML, JavaScript, or server-side code like PHP (see Part 6 of this book). Clicking the image icon, for instance, simply inserts the <img> tag into the underlying HTML of your page. Of course, Dreamweaver's visual approach hides that messy code and cheerfully displays a picture on the page.

When you first start Dreamweaver, the Insert bar is open. If you ever close it by mistake, you can open it again by choosing Window → Insert or by pressing Ctrl+F2 (⌘-F2). On the other hand, if space is at a premium on your screen, you can close the Insert bar and use the Insert *menu* instead. Its commands duplicate all the objects available from the Insert bar.

Seven sets of objects are available from the Insert bar, each available by clicking the appropriate tab (see Figure 1-3):

- **Common objects.** In addition to images, tables, and email links—which you'll use frequently in everyday Web design—this category of the Insert bar offers access to Dreamweaver's *template* features. Templates let you build basic Web page designs that you can use over and over again in your site, speeding up your production process and facilitating easy updates. See Chapter 18 for details.
- **Layout objects.** The objects in this category help you control the layout of a Web page by organizing a page's contents using *Cascading Style Sheets* or *HTML tables.* In addition, this panel includes Dreamweaver CS3's new *Spry widgets* which let you add sophisticated, interactive page elements such as drop-down navigation menus and animated, collapsible panels, so you can fit more information in less space on a Web page (see Chapter 12).
- **Form objects.** Want to get some input from visitors to your Web site? You can use *forms* to receive their comments, collect credit card information for online

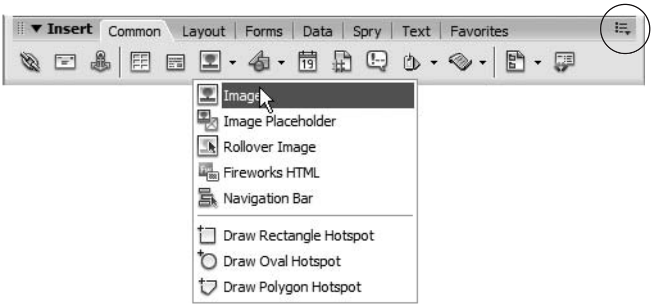


Figure 1-3: *Toolbar buttons are grouped into seven tabs (Common, Layout, and so on). If you preferred the space-saving drop-down menu of Dreamweaver 8, click the panel menu (circled) and select "Show as Menu" To return to the tabbed style, select "Show as Tabs" from the drop-down menu (which appears if you've selected the "Show as Menu" option from the panel manu).*

sales, or gather any other kind of data. The Forms tab lets you add form elements like radio buttons, pull-down menus, and text boxes (see Chapter 12). Dreamweaver CS3 adds sophisticated form validation so you can make sure that visitors input the correct information *before* they submit the form.

- **Data.** Dreamweaver makes connecting your Web pages to databases as easy as clicking a few buttons. (OK, *almost* as easy; see Part 6 for details.) The Data tab (formerly called the Application tab) provides many powerful tools for building dynamic pages: controls that add records to your database, for example, or that update information already in a database. Dreamweaver CS3 also adds several data tools that don't require a complicated database setup. The new Spry dataset feature lets you display interactive data in a table, so visitors can sort the data by column and even change what's displayed on the page by interacting with the date—all without having to reload an additional Web page.

- **Spry.** Spry is a new technology from Adobe that lets you easily add interactive features to your site: from drop-down navigation menus to animated effects to complex displays of data. Basically, Spry is a simple way for Web designers to insert complex JavaScript programming into Web sites. The Spry tab gathers all of the different Spry features available in Dreamweaver CS3. You'll find the same buttons spread throughout the input bar; for example, the Spry tools related to form validation also appear in the Form objects tab, while the Spry dataset buttons are also available from the Data tab.

- **Text objects.** To format type—make it bold or italic, for instance—you can turn to the Text category. Most of the buttons on this tab aren't technically objects; they don't insert new objects onto the page. Instead, they format text already present on the page. For the most part, the Property inspector offers the same formatting options and is a more common tool for formatting text.

Note: Using the Text objects tab can be disorienting. Some "text objects" create incomplete HTML and actually dump you into the raw HTML of the page, leaving the nice visual Design view behind. In general, the Property inspector and Text menu let you do everything in this tab–more quickly and more safely.

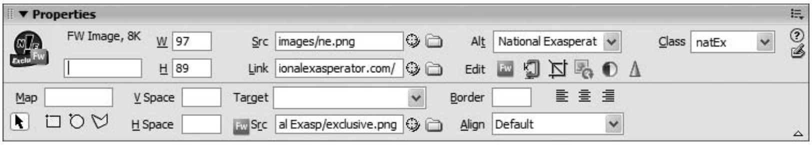
- **Favorites.** Perhaps the most useful category, Favorites can be anything you want it to be. That is, after you've discovered which objects you use the most (like the Image command, if you work with a lot of graphics), you can add them to this personal category. You may find that once you've customized this tab, you'll never again need the other categories in the Insert bar. For instructions on adding objects to your Favorites tab, see the box on page 170.

- **ASP, PHP, JSP, .NET, ColdFusion**. If you're building database-driven Web pages, you'll discover yet another category of objects. The exact name of the category depends on the server model you're using (PHP, Microsoft's Active Server Pages, or Adobe's ColdFusion server, for example), but it always contains frequently used code snippets for the appropriate programming language. See Part 6 for more on working with these technologies.

The Property Inspector

After dropping in an image, table, or anything else from the Insert bar, you can use the Property inspector to fine-tune its appearance and attributes. Suppose, for example, that your boss has decided she wants her picture centered in the middle of the page. After highlighting her picture in the document window, you would then use the Property inspector to change its alignment.

The Property inspector (Figure 1-4) is a chameleon. It's aware of what you're working on in the document window—a table, an image, some text—and displays the appropriate set of properties (that is, options). You'll use the Property inspector extensively in Dreamweaver.



Properties

FW Image, 8K W 97 H 89

Src images/ne.png

Link ionalexasperator.com/

Alt National Exasperat

Edit

Class natEx

Map

V Space

H Space

Target

Border

Src al Exasp/exclusive.png

Align Default

Figure 1-4: *If you don't see the Property inspector, you can open it by choosing Window → Properties, or by pressing Ctrl+F3 (⌘-F3).*

For now, though, here are two essential tips to get you started:

- Double-click any blank gray area in the Property inspector—or striped area in Mac OS X—to hide or show the bottom half of the inspector, where Dreamweaver displays an additional set of advanced options. (It's a good idea to leave the inspector fully expanded most of the time, since you may otherwise miss some useful options.)

- At its heart, the Property inspector is simply a display of the attributes of HTML tags. The *src* (source) attribute of the <img> (image) tag, for instance, tells a Web browser where to look for an image file.

  The best way to make sure you're setting the properties of the correct object is to click its tag in the Tag selector (see page 20).

Panel Groups

So far, this chapter has described the Insert bar, Property inspector, and document window—but those are just the beginning of Dreamweaver's windows. In Dreamweaver CS3, most of the remaining windows—called *panels*—sit in tidy groups on the right edge of your screen.

For example, a panel group named Files harbors panels for working with your Web page files, Web site assets, and code snippets (see Figure 1-5).

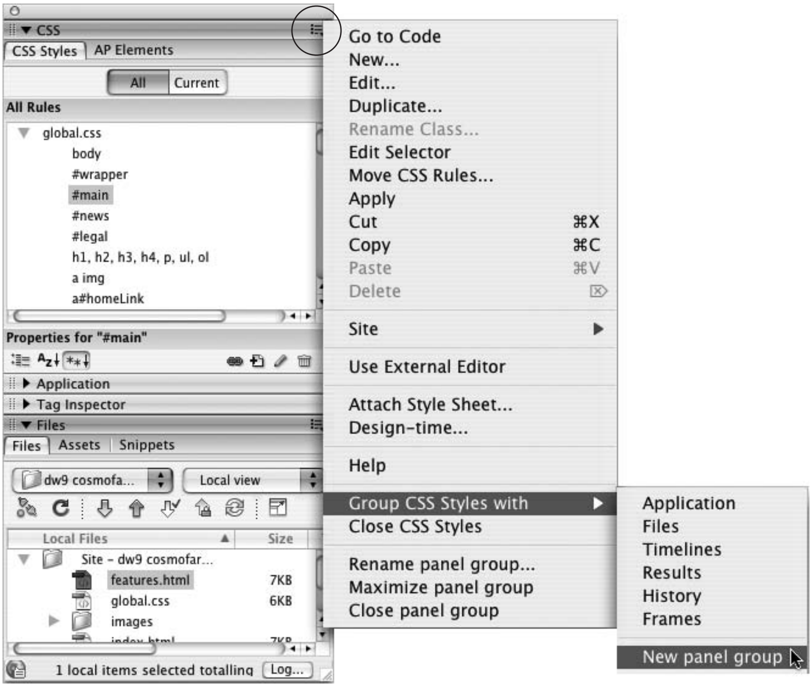


Figure 1-5:
To open a panel, click the arrow next to the panel group name (Application or Files, for example). Clicking a tab brings the corresponding panel forward. Each panel group has its own Context menu icon (circled). Clicking the button reveals a shortcut menu that lets you work with features specific to that panel. This menu also offers generic panel actions, such as moving a panel to another group, creating a new panel group, renaming a group, or completely hiding a group of panels.

The various panels and their uses will come up in relevant sections of this book. But a few tips concerning Dreamweaver's panels are worth noting here:

- You can open a particular panel from the Window menu. For example, to open the Files panel, choose Window → Files.
- Double-click anywhere in a panel group's gray title bar to open that panel group *and* expand it to fill the maximum space available. To give the panel as much space as possible, any other open panels are closed. This is really the best way to open panel groups. Not only are title bars large targets, but most panels contain a lot of information, so you'll want to see as much of them as possible.

- If you want to hide all windows *except* for documents, choose Window → Hide Panels or press F4—a useful trick when you want to maximize the amount of your screen dedicated to showing the actual Web page you're working on. To bring back all of Dreamweaver's administrative windows, press F4 again or choose Window → Show Panels.

Tip: Dreamweaver for Windows includes a button for hiding only the panel groups. See Figure 1-1 for this handy trick.

Workspace Layouts

Dreamweaver CS3 includes a wonderful, time-saving productivity enhancer: Workspace Layouts. This feature lets you save the position and size of Dreamweaver's panels and windows as a "layout," which you can return to by simply selecting the layout's name from Window → Workspace Layout. For example, when you're working on a database-driven Web site, you may like to have the Application panel group and the Snippets panel open, but close the CSS panel. When working on a design-heavy site, on the other hand, you'll probably want the CSS panel open, but could care less about the Tag Inspector. You can create a different layout for each situation and then simply switch between them.

First, you should organize your workspace the way you want it:

- Open the panels you work with most frequently. For example, choose Window → Files to open the Files panel.
- Increase or decrease the height of a panel by dragging the empty space to the right of a panel or panel-group name (see Figure 1-6).

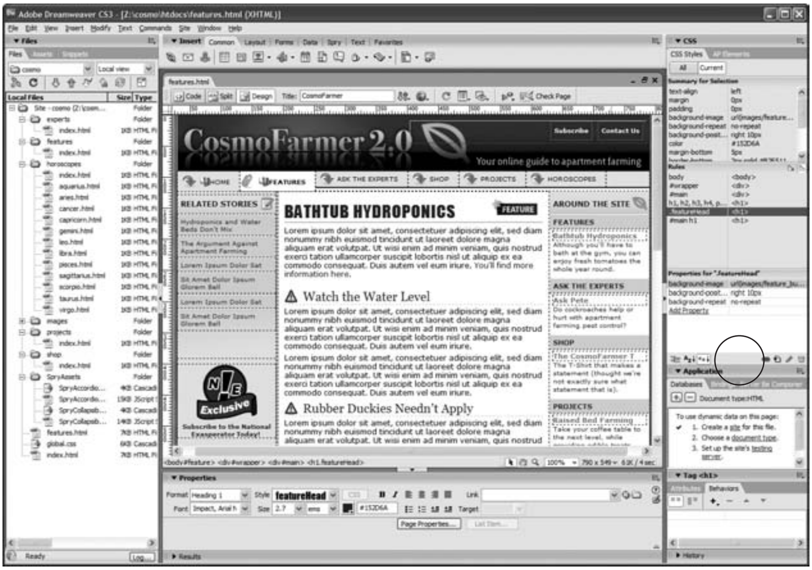


Figure 1-6: *Resizing a panel is as easy as dragging up or down (circled). If you're lucky enough to have a large monitor, it's often helpful to put the Files panel by itself on either the left or right side of the screen.*

- You can move a panel group to another area of your screen by dragging its gripper (see Figure 1-6). This is especially useful if you have a large monitor, since you can place one group of panels on the right edge of the monitor and another group either next to the first or on the left side of the monitor. If you're lucky enough to have two monitors hooked up to your computer, you can even spread the panels across both monitors.
- Open the toolbars you'll want to work with most often (see page 20).
- Choose the Insert bar tab containing the objects you use most frequently. (You can collect your favorite objects onto a single tab, as described on page 170).

To save your layout, select Window → Workspace Layout → Save Current (see Figure 1-7). The Save Workspace Layout dialog box appears; type a name for the layout and click OK. (If you type the same name as a layout you've already saved, Dreamweaver lets you know and gives you the option to replace the old layout with this new layout. This is the only way to update a layout you've previously created.) Dreamweaver saves your new layout.

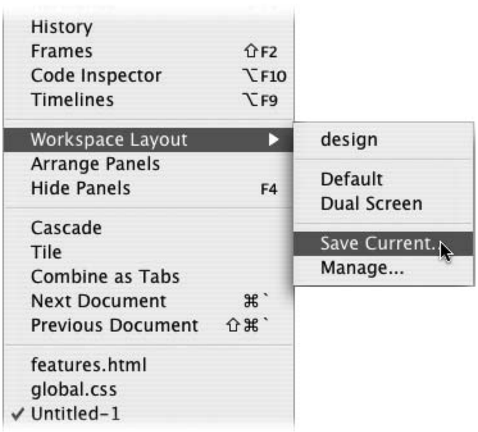


Figure 1-7:
The Mac version of Dreamweaver (shown here) has a default and dual-screen layout. Dual screen layout, which is also available on Windows, puts all the panels onto a second monitor while leaving the first monitor for just Web page documents, the Insert bar, and the Property inspector.

Tip: This feature is also handy if you share your computer with other people. You can create your own Workspace Layout–use your own name when naming the layout–with all the panels and windows exactly where you like them. Then, when you go to use the computer and the bozo before you has rearranged the entire workspace, just select your layout from the Window → Workspace Layouts menu.

To switch to a layout you've already saved, simply select Window → Workspace Layout → The Name of Your Layout (see Figure 1-7). After a brief pause, Dreamweaver switches to the selected layout.

Setting Up a Site

Whenever you build a new Web site or edit an existing one you've created elsewhere, you have to begin by introducing Dreamweaver to it—a process called *defining a site*. This is *the* most important first step when you start using Dreamweaver, whether you plan to whip up a five-page Web site, build a thousand-page online store, or edit the site your sister built for you. At its most basic, defining a site lets Dreamweaver know where you store your Web pages on your computer and makes sure Dreamweaver correctly inserts images and adds links to the pages of your site. In addition, if you want to take advantage of Dreamweaver's many time-saving site-management tools such as the link checker (see page 586), Library items (Chapter 17), Templates (Chapter 18), and FTP tool for moving your Web files to a Web server (Chapter 16), then you *have* to define a site.

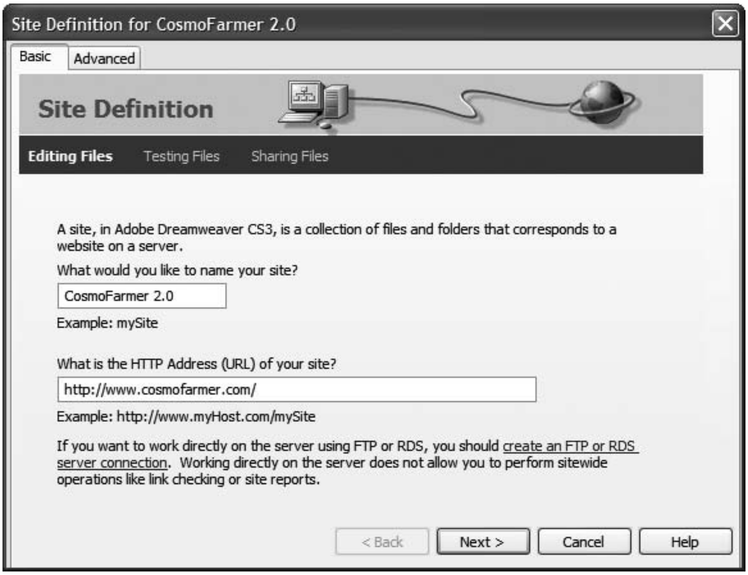
Dreamweaver provides two methods for defining a site: the hold-you-by-the-hand Site Definition wizard, and the advanced "Get out of my way, I know what I'm doing" approach.

The Site Definition Wizard

Dreamweaver's Site Definition wizard steps you through a series of screens, prompting you for information about your Web site setup.

1. **Choose Site → New Site.**

   The Site Definition window appears. To use the wizard, make sure the Basic tab is selected (see Figure 1-8).



Site Definition for CosmoFarmer 2.0

A site, in Adobe Dreamweaver CS3, is a collection of files and folders that corresponds to a website on a server.

What would you like to name your site?

CosmoFarmer 2.0

Example: mySite

What is the HTTP Address (URL) of your site?

http://www.cosmofarmer.com/

Example: http://www.myHost.com/mySite

If you want to work directly on the server using FTP or RDS, you should create an FTP or RDS server connection. Working directly on the server does not allow you to perform sitewide operations like link checking or site reports.

Figure 1-8: *The Basic tab of the Site Definition window takes you step by step through the process of setting up a new site. Each stage of the process–Editing Files, Testing Files, and Sharing Files–is clearly labeled. Depending on the type of site you're building and which Dreamweaver features you plan on using, you'll be taken through a series of simple questions that help you set up your site.*

2. **Type the name of your site in the first field.**

   The name you type here is solely for your own reference, to help you identify the site in Dreamweaver's Files panel. It won't appear on the Web. Dreamweaver also asks for the Web address for your site.

3. **Type the Web address for your Web site. For example, *http://www.cosmofarmer.com/*.**

   This step is optional. If you don't yet have a Web address you can leave this blank. In some cases, you may need to add some more information after the domain name. For example, the address for your Web site might look something like this: *http://www.somecollege.edu/~bob/*. Or you might be responsible for maintaining just part of a larger site—sometimes called a "sub site." Regardless, just type the address you normally type into a Web browser to visit your site. For example, *http://www.mybigcompany.com/marketing/*.

Note: If you're using site-root relative paths for linking to the pages in your site, step 3 above is critical. See page 155 for the gory details.

4. **Click the Next button to proceed to the next screen.**

   In the next step, you'll tell Dreamweaver whether you plan on building regular Web pages or pages that require a special server for creating the dynamic, database-driven Web sites discussed in Part 6 of this book.

5. **Unless you're creating a database-driven site, choose "No, I do not want to use a server technology" and then click Next.**

   For creating basic Web pages, you don't need any server technology. To learn about defining a site for database-driven Web sites like those described in Part 6 of this book, see page 762.

   In the next steps, you'll tell Dreamweaver how you want to work on the files in your site and where you'll store those files.

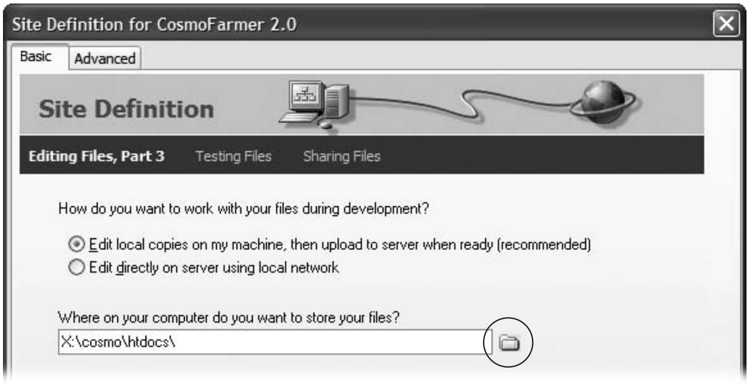
6. **Choose either "Edit local copies on my machine" or "Edit directly on server using local network" (see Figure 1-9).**

   The first option—*Edit local copies*—is the most common. Typically, Web designers have two sets of files: the *local site* on their hard drive and the *remote site* on the Web (see the box on page 33). The local site lets you keep your works in progress on your computer, while the remote site contains the completed pages that the world can view with a Web browser.

   The second option (*Edit directly on server*) isn't a very good idea. Working directly on the live version of the site—the one anyone with a Web browser can see—exposes your half-finished pages, with their typos and missing pictures, to your audience. It's a much better idea to perfect a page on your own computer, and then, when it's finished, move it to the Web server.

7. **Click the folder icon next to the label, "Where on your computer do you want to store your files?"**

   The Choose Local Root Folder window opens, so that you can choose a folder on your hard drive that will serve as your *local site's root folder*. This is the folder



How do you want to work with your files during development?

● Edit local copies on my machine, then upload to server when ready (recommended)

○ Edit directly on server using local network

Where on your computer do you want to store your files?

X:\cosmo\htdocs\

Figure 1-9: *You'll see the folder icon (circled) everywhere in Dreamweaver CS3. It lets you select a folder or file, which you'll do when you create links, add images, and, yes, select a local root folder for your site.*

on your computer where you'll store the HTML documents and graphics, CSS, and other Web files that make up your Web site.

8. **Browse to and select the folder containing your site's files.**

   The Mac and Windows versions of Dreamweaver handle this ritual a bit differently; see Figure 1-10.

   If you were starting a Web site from scratch, you could also create a new empty folder at this point. You would then save your Web pages and graphics into this folder as you build your site.

   For more on root folders and organizing Web sites, see Chapter 14. For now, the fact to burn into your brain is that all the files that will constitute your Web site must live in the folder you select—this is called the *local root folder*. (You can have subfolders with Web files *inside* the local root folder, you just can't have any files *outside* this root folder.)

Tip: Another way to think of the local root folder: It's the folder on your computer in which you'll put your site's home page.

9. **Click Next.**

   Now Dreamweaver asks how you want to connect to your *remote server*—the computer that will dish up the finished Web files to your adoring public.

10. **Choose one of the options from the "How do you connect to your remote server?" menu.**

    To just get started building Web pages, choose None. This is the option you'll use in all of the tutorials in this book. In Chapter 17, you'll learn how to use other options from this menu such as FTP or WebDav to move your files to your Web server using Dreamweaver. Even if you don't select a remote server now, you can always return to the Site Definition window later to tell Dreamweaver where to put your finished Web pages.

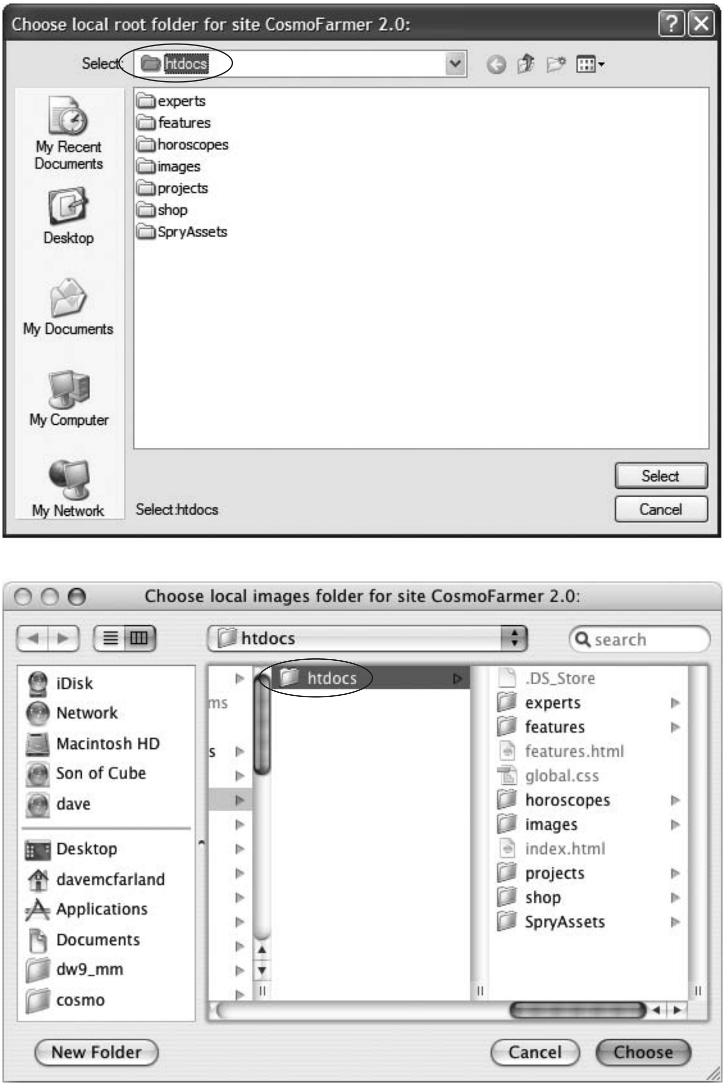


Figure 1-10: *When it comes to selecting a local root folder, the Windows and Mac versions of Dreamweaver differ slightly.*

Top: In Windows, the folder name appears in the Select field at the top of the Choose Local Folder window (circled). Click Select to define it as the local root.

Bottom: On a Mac, highlight a folder in the list in the middle of the window (circled) and then click Choose to set it as the local root folder.

11. **Click Next.**

    A summary of your settings appears (see Figure 1-11).

12. **Click Done.**

    After defining the site, Dreamweaver creates a *site cache* for your Web site. That's a small database that tracks pages, links, images, and other components of your site. The cache helps Dreamweaver's site-management tools avoid breaking links, helps warn you when you're about to delete important files, and allows you to reorganize your site quickly. If you're creating a brand-new site or have a small site with just a few files, you may not even notice this site cache creation happening.

UP TO SPEED

Folders Worth Knowing About

During the tutorial in these pages—and, indeed, everywhere in Dreamweaver—you'll encounter a few terms frequently heard at Web designer luncheons:

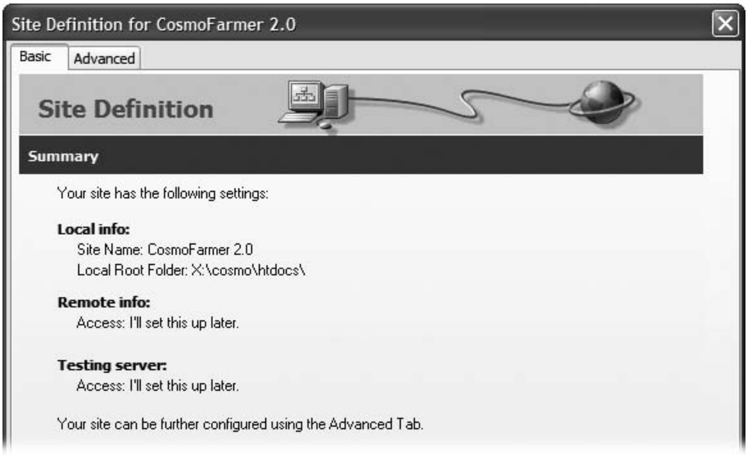
Root folder. The first rule of managing a Web site is that every piece of the site you're working on—Web page (HTML) documents, graphic images, sound files, and so on—must sit in a single folder on your hard drive. That master folder is the *root* folder for your Web site, and because it's sitting on your computer it's called the *local* root folder. The *root* is the master, outer, main folder—think of that folder as the edge of the known universe for that site: Nothing exists outside of the root. Of course, to help organize your site's files, you can include any number of subfolders inside the root folder. (When you've finished creating your Web site, you'll move its files onto a Web server for the world to see. The folder you place your Web files into on a Web server is called the *remote root folder*.)

Local site. The usual routine for creating Web pages goes like this: First you create the page on your own computer—using a program like Dreamweaver—and then you upload it to a computer on the Internet called a Web server, where your handiwork becomes available to the masses. In other words, almost every Web site exists in two places at once. One copy is on the Internet, where everyone can get at it. The other, original copy is on some Web designer's hard drive.

The copy on your own computer is called the *local site*, or the development site. Think of the local site as a sort of staging ground, where you build your site, test it, and modify it. Because the local site isn't on a Web server and can't be accessed by the public, you can freely edit and add to it without affecting the pages your visitors are viewing, meanwhile, on the remote site.

Remote site. When you've added or updated a file, you move it from the local site to the remote site. The *remote*, or live, site is a mirror image of the local site. Because you create it by uploading your local site, it has the same organizational folder structure as the local site and contains the same files. Only polished, fully functional pages go online to the remote site; save the half-finished, typo-ridden drafts for your local site. Chapter 16 explains how to use Dreamweaver's FTP features to define and work with a remote site.

(If you're using Dreamweaver's database features, by the way, you'll encounter yet another term: a *testing server*. You'll find the lowdown on this kind of site, which is used to test database features, on page 754.)



Your site has the following settings:

Local info:
Site Name: CosmoFarmer 2.0
Local Root Folder: X:\cosmo\htdocs\

Remote info:
Access: I'll set this up later.

Testing server:
Access: I'll set this up later.

Your site can be further configured using the Advanced Tab.

Figure 1-11:
After you've finished the Site Definition wizard, Dreamweaver summarizes the settings you selected. Nothing's set in stone, however. If you later decide to connect to a Web server to upload your Web pages or use Dreamweaver's database tools, you can always change your site options as described on page 564.

Defining a site doesn't actually do anything to your computer; it doesn't create a home page or add a folder, for example. It merely prepares Dreamweaver for working on a site.

Tip: Dreamweaver lets you define *multiple* Web sites, a handy feature if you're a Web designer with several clients, or if your company builds and manages more than one site. To define an additional site, choose Site → New Site and repeat the steps starting on page 29. You can then switch from one site to another using the Sites menu in the Files panel (see Figure 15-6 on page 568).

Defining a Site the Fast Way

Although the Site Definition wizard is a nearly foolproof way to define a site, clicking through each of its steps can get tedious. If you want to get started building Web pages (or editing a Web site you've already created) right away, you only need to provide a few details using the Advanced tab of the Site Definition window.

1. **Choose Site → New Site to open the Site Definition window and select the Advanced tab (see Figure 1-12).**

   The number of options that appear in the Advanced view of the Site Definition window may seem overwhelming. But to get started building a Web site, you only need to supply a few pieces of information under the Local Info category of this window. The other categories are for more advanced site setups, which you'll learn about later in this book. For example, the Remote Info category is for setting up Dreamweaver to move files to your Web server and is discussed in Chapter 17, while the Testing Server category is used for the database-driven Web sites detailed in Part 6 of this book.

2. **Make sure Local Info is selected in the Category list, and then type a name for your site in the "Site name" field.**

   The name you type here is solely for your own reference, to help you identify the site in Dreamweaver's files panel; it won't appear on the Web.

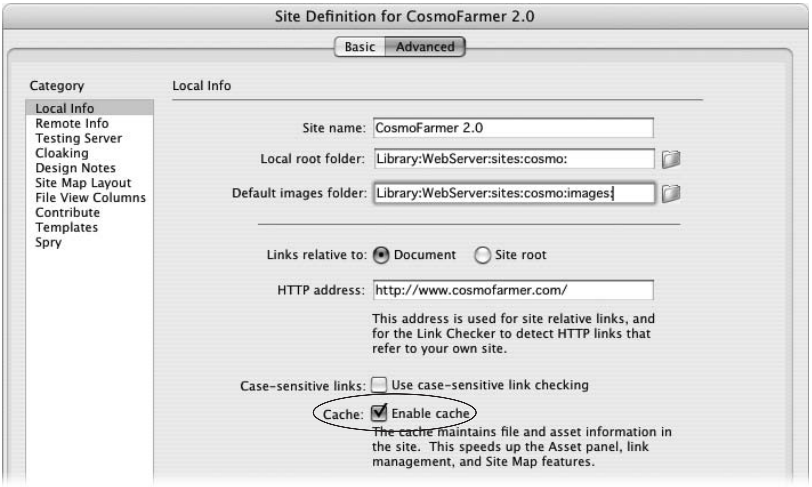
3. **Click the folder icon to the right of the "Local root folder" field.**

   The Choose Local Root Folder window opens, where you can choose a folder on your hard drive that will serve as your *local site's root folder*. This is the folder on your computer where you'll store the HTML documents and graphics, CSS, and other Web files that make up your Web site.

4. **Browse to and select the folder containing your site's files.**

   Figure 1-10 demonstrates the process for Windows and Macs. If you're creating a new site, you can also create a new folder at this point using the New Folder button in this window.

   You can also let Dreamweaver know where you plan on storing the images for the site by selecting a folder for the "Default images folder" field. This is an optional step, but comes in handy if you insert an image from the desktop or another folder outside your local root folder as described on page 562.



Local Info

Site name: CosmoFarmer 2.0

Local root folder: Library:WebServer:sites:cosmo:

Default images folder: Library:WebServer:sites:cosmo:images:

Links relative to: ● Document ○ Site root

HTTP address: http://www.cosmofarmer.com/

This address is used for site relative links, and for the Link Checker to detect HTTP links that refer to your own site.

Case-sensitive links: □ Use case-sensitive link checking

Cache: ☑ Enable cache

The cache maintains file and asset information in the site. This speeds up the Asset panel, link management, and Site Map features.

Figure 1-12: *Make sure the "Enable cache" box (circled) is turned on. This speeds up Dreamweaver's site management features such as link checking. If you have a really large site with thousands of pages and files, then creating the cache can take several minutes, so you might be tempted to disable this feature. Don't. With the cache enabled, Dreamweaver can make sure you don't accidentally delete a page that thousands of other pages link to, or help update links when you move a page to another location in your site.*

Note: Because defining a site is such an important step, you can find a video about the process on this book's Web site at *www.sawmac.com/dwcs3/*.

5. **Type the Web address of your site in the HTTP address field. For example, *http://www.cosmofarmer.com/*.**

   This step is also optional. Just type the address you'd normally type into a Web browser to view your site. If you don't yet have a Web address, then you can leave this blank.

6. **Click OK to finish the process.**

   Dreamweaver creates a site cache as described in step 12 on page 32. Your site's files (if there are any yet) appear in the Files panel. Now you're ready to create Web pages and take advantage of Dreamweaver's powerful site-building tools.

Creating a Web Page

After defining a site, you'll want to start building pages. Just choose File → New or press Ctrl+N (⌘-N on a Mac) to open the New Document window (see Figure 1-13). Even if you've used earlier versions of the program, the New Document window introduced in Dreamweaver CS3 is a little overwhelming. There are so many options it's hard to know where to start.

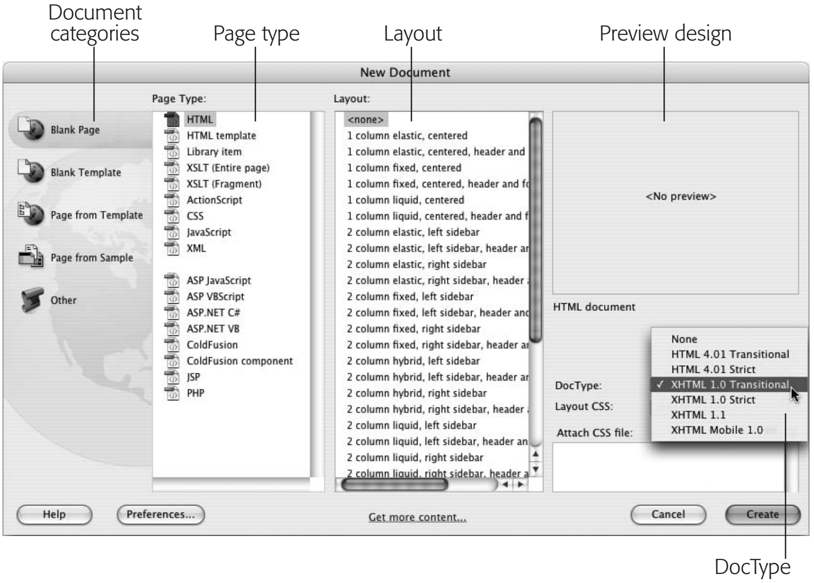

Document categories
Page type
Layout
Preview design
New Document
Page Type:
Layout:
Blank Page
Blank Template
Page from Template
Page from Sample
Other
HTML
HTML template
Library item
XSLT (Entire page)
XSLT (Fragment)
ActionScript
CSS
JavaScript
XML
ASP JavaScript
ASP VBScript
ASP.NET C#
ASP.NET VB
ColdFusion
ColdFusion component
JSP
PHP
<none>
1 column elastic, centered
1 column elastic, centered, header and
1 column fixed, centered
1 column fixed, centered, header and fo
1 column liquid, centered
1 column liquid, centered, header and f
2 column elastic, left sidebar
2 column elastic, left sidebar, header ar
2 column elastic, right sidebar
2 column elastic, right sidebar, header
2 column fixed, left sidebar
2 column fixed, left sidebar, header and
2 column fixed, right sidebar
2 column fixed, right sidebar, header ar
2 column hybrid, left sidebar
2 column hybrid, left sidebar, header ar
2 column hybrid, right sidebar
2 column hybrid, right sidebar, header
2 column liquid, left sidebar
2 column liquid, left sidebar, header an
2 column liquid, right sidebar
2 column liquid, right sidebar, header a
<No preview>
HTML document
DocType:
Layout CSS:
Attach CSS file:
None
HTML 4.01 Transitional
HTML 4.01 Strict
✓ XHTML 1.0 Transitional
XHTML 1.0 Strict
XHTML 1.1
XHTML Mobile 1.0
Help
Preferences...
Get more content...
Cancel
Create
DocType

***Figure 1-13:** The New Document window lets you create nearly every Web document type under the sun. Dreamweaver CS3 also includes many prepackaged designs including lots of advanced page layouts using the latest Web design techniques. If you select one of those designs in the design list, you'll see a preview of the layout in the upper-right corner of the window.*

To create a basic HTML file for a Web page:

1. **Choose Blank Page from the left-hand list of document categories.**

   The Blank Page category lets you create a new empty document—this might be a Web page or something a bit more esoteric like an XML file (see page 477 for more on XML), an external JavaScript file, or one of the several server-driven pages such as PHP or ASP (which are discussed in Part 6).

   Both the Blank Template and "Page from Template" categories relate to Dreamweaver's Template feature discussed in Chapter 19. The "Page from Sample" category lets you choose from several different files with already-created designs—it's best to avoid these. The designs in this category are old and are left over from earlier versions of the program; they generally aren't very attractive and don't use the best techniques for building a Web page. Dreamweaver CS3 does ship with some very useful page layouts which you can access from the Blank Page category. (You'll learn about these designs in Chapter 9.) The last category, Other, lets you create documents for different programming languages like ActionScript or Java—unless you're a Flash or Java programmer, you probably won't ever need these.

2. **Choose HTML from the Page Type list.**

   You can also create other types of documents, most of which you'll learn more about later in this book, such as PHP or ASP for database-driven sites (see Part 6 of this book), XSLT files for processing XML (Chapter 26), templates (Chapter 19), library items (Chapter 18), or CSS files (Chapter 3).

3. **Choose <none> from the layout list.**

   <none> creates a blank document. The other choices ("1 column elastic, centered", "1 column elastic, centered, header and footer", and so on) are predesigned page layouts. These designs (not to be confused with the designs under the "Page from Sample" category) are new in Dreamweaver CS3 and use a technology called Cascading Style Sheets (CSS), which you'll learn much more about in this book. Because CSS-based layout can be tricky, Dreamweaver includes all the code needed to create the most common types of page designs. It's a great new feature which you'll learn more about in Chapter 8.

4. **Select a document type from the DocType menu.**

   Selecting a document type identifies the type of HTML you'll be using on the page. It affects how the HTML code is written and understood by a Web browser. Fortunately, since Dreamweaver writes all of the code for you, you don't need to worry about the subtle differences between the different types.

   XHTML 1.0 Transitional is the normal setting in Dreamweaver, but HTML 4.01 Transitional, HTML 4.01 Strict, and XHTML 1.0 Strict are also fine choices. The transitional doc types let you use a few HTML tags and properties that have been phased out of the strict types. Most notably, transitional doc types can use the "target" property for links—a simple way to force links to open in a new browser window.

   If you don't really understand or care about doc types, just select XHTML 1.0 Transitional. But make sure you avoid None (which can force browsers to display pages in what's called "quirks mode" and makes perfecting designs difficult) and XHTML 1.1 (which requires a special setting on your Web server to work properly.)

Tip: If you don't want to deal with the New Document window every time you create a new page, choose Edit → Preferences in Windows or Dreamweaver → Preferences on Mac. In the Preferences dialog box, click the New Document category and turn off the "Show New Document Dialog on Control-N" checkbox.

While you're at it, you can also specify what kind of file you want Dreamweaver to create whenever you press Ctrl+N (⌘-N). For example, if you usually create plain HTML files, choose HTML. But if you usually create dynamic pages (like the PHP pages described in Part 6), choose a different type of file–PHP, for example.

With these settings, pressing Ctrl+N (⌘-N) will instantly create a new blank document. (Choosing File → New, however, will still open the New Document window.)

5. **Click Create.**

   Dreamweaver opens a new, blank Web page ready for you to save and title (see Figure 1-14).

6. **Choose File → Save.**

   The Save As dialog box appears. You need to save the file somewhere inside the local root folder. You can save it inside of any subfolders within the root folder as well.

7. **Type a name for the file and then click Save.**

   Make sure the name doesn't contain spaces or any characters except letters, numbers, hyphens, and underscores, and that it ends in either .html or .htm.

   Although most operating systems let you save files with long names, spaces, and characters like #, $, and &, some browsers and servers have trouble interpreting anything other than letters and numbers.

   Furthermore, Web servers rely on file extensions like .htm, .html, .gif, and .jpg to know whether a file is a Web page, graphic, or some other type of file. Dreamweaver for Windows automatically adds the extension to your saved document names. But on the Mac—which lets you save files without extensions—make sure the file ends in the suffix .html or .htm when you save a Dreamweaver document.

8. **Click inside the Title box at the top of the document window and type a name for the page (see Figure 1-14).**

   Every new document Dreamweaver creates has the unflattering title Untitled Document. If you do a quick search on Google for "Untitled Document", you'll find (at the time of this writing) 43,900,000 results. Many of those pages were probably created by Dreamweaver. The best way to avoid this unprofessional mistake is to immediately title the document after saving it. The title should be descriptive, indicating the main topic of the page: for example, "Contact Us", "About Our Services", or "Technical Specifications for the Anodyne 3000 Indoor Lawn Mower".

The Dreamweaver Test Drive

Although reading a book is a good way to learn the ins and outs of a program, nothing beats sitting in front of your computer and taking a program through its paces. Many of this book's chapters, therefore, conclude with hands-on training: step-by-step tutorials that take you through the creation of a real, working, professionally designed Web site for the fictional online magazine *CosmoFarmer*.

The rest of this chapter, for example, introduces Dreamweaver by taking you step by step through the process of building a Web page. It shouldn't take more than an hour. When it's over, you'll have learned the basic steps of building any Web page: creating and saving a new document, adding and formatting text, inserting graphics, adding links, and making the program work for you (the finished tutorial is pictured in Figure 1-34).

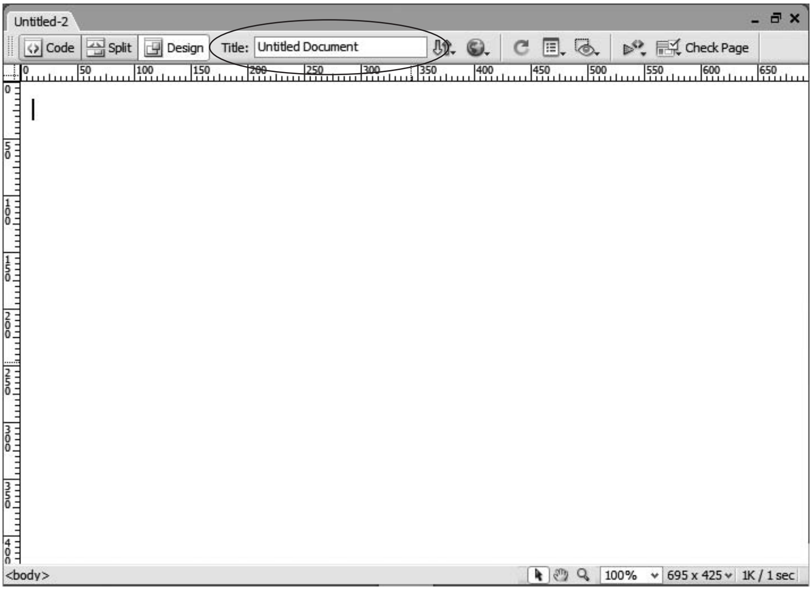


Figure 1-14: *A new blank Web page. Always remember to title the page by clicking inside the Title box at the top of the document window (circled) and entering a descriptive title.*

If you're already using Dreamweaver and want to jump right into the details of the program, feel free to skip this tutorial. (And if you're the type who likes to read first and try second, read Chapters 2–5 and then return to this chapter to practice what you've just learned.)

Note: The tutorial in this chapter requires the example files from this book's Web site, *www.sawmac.com/dwcs3/*. Click the Tutorials link to go to the tutorials page, and then download the files by clicking the download link. The tutorial files are stored as ZIP files, a type of file that compresses a lot of different files into one, smaller file.

Windows folks should download the file and double-click it to open the archive. Click the Extract All Files option, then follow the instructions of the Extraction wizard to unzip the files and place them on your computer. Mac users, just double-click the file to decompress it.

After you've downloaded and decompressed the files, you should have a MM_DWCS3 folder on your computer, containing all of the tutorial files for this book.

Phase 1: Getting Dreamweaver in Shape

Before you get started working in Dreamweaver, you need to make sure the program's all set up to work for you. In the following steps, you'll double-check some key Dreamweaver preference settings, and you'll organize your workspace using the Workspace Layout feature.

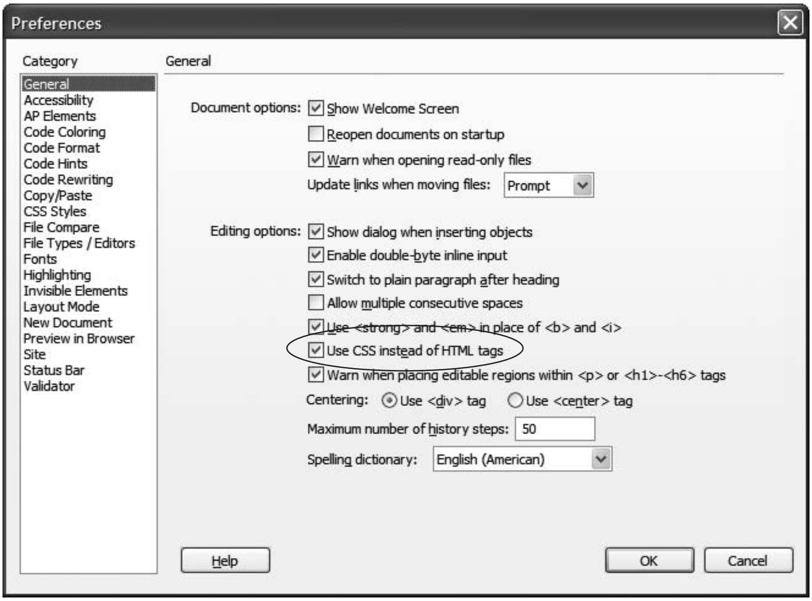
First, make sure the preferences are all set:

1. **If it isn't already open, start Dreamweaver.**

   Hey, you've got to start with the basics, right?

2. **Choose Edit → Preferences (Windows) or Dreamweaver → Preferences (Mac).**

   The Preferences dialog box opens, listing a dizzying array of categories and options (see Figure 1-15).



Preferences

Category

- General
- Accessibility
- AP Elements
- Code Coloring
- Code Format
- Code Hints
- Code Rewriting
- Copy/Paste
- CSS Styles
- File Compare
- File Types / Editors
- Fonts
- Highlighting
- Invisible Elements
- Layout Mode
- New Document
- Preview in Browser
- Site
- Status Bar
- Validator

General

Document options:
☑ Show Welcome Screen
□ Reopen documents on startup
☑ Warn when opening read-only files
Update links when moving files: Prompt

Editing options:
☑ Show dialog when inserting objects
☑ Enable double-byte inline input
☑ Switch to plain paragraph after heading
□ Allow multiple consecutive spaces
☑ Use <strong> and <em> in place of <b> and <i>
☑ Use CSS instead of HTML tags
☑ Warn when placing editable regions within <p> or <h1>-<h6> tags
Centering: ● Use <div> tag ○ Use <center> tag
Maximum number of history steps: 50
Spelling dictionary: English (American)

***Figure 1-15:** Dreamweaver's Preferences dialog box is a smorgasbord of choices that lets you customize the program to work and look the way you want. In this step, you'll make sure Dreamweaver uses Cascading Style Sheets code for formatting your page by turning on the "Use CSS instead of HTML tags" checkbox (circled).*

3. **In the Category list on the left side of the Preferences dialog box, click General. Make sure the checkbox "Use CSS instead of HTML tags" is turned on.**

   The program offers wide support for Cascading Style Sheets, but also still supports outdated HTML tags to add formatting to text, links, and basic properties of a Web page, as described in the note below.

Note: Out of the box, Dreamweaver uses CSS (instead of the outmoded <font> tag) to format text and bypasses old-school HTML attributes to format the <body> tag.

If you do need to support the <font> tag and other outmoded HTML properties–perhaps you have a site that uses the <font> tag religiously and you're not ready to undertake the challenge of converting the entire site to CSS–simply turn off the "Use CSS Instead of HTML tags" checkbox shown in Figure 1-15. But don't do this for new sites; that approach is *deprecated* (considered obsolete) by the W3C, the main Web standards organization. Future browsers may not understand those tags and attributes.

4. **Select the Invisible Elements category in the Preferences dialog box, and then turn on the fourth checkbox from the top, labeled Line Breaks.**

   Sometimes, when pasting text from other programs like Microsoft Word or an e-mail program, separate paragraphs come into Dreamweaver as a single paragraph broken up with invisible characters called *line breaks* (for you HTML-savvy readers, this is the <br> tag). Normally you can't see this character in Dreamweaver's Design view. This setting makes the line break character visible—represented in the document window by a little gold shield—so that you can easily select and remove it.

5. **Click OK.**

   The Preferences dialog box closes. You're ready to get your workspace in order. As noted at the beginning of this chapter, Dreamweaver has many different windows that help you build Web pages. For this tutorial, though, you'll need only three: the Insert bar, the document window, and the Property inspector. But, for good measure (and to give you a bit of practice), you'll open a few panels as well.

6. **Make sure the Property inspector and Insert bar are open (see Figure 1-1).**

   If they aren't, choose Window → Properties, and Window → Insert, respectively (see Figure 1-16).

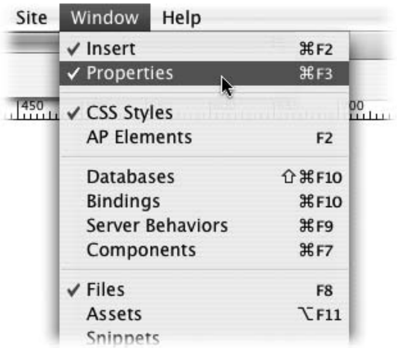


Figure 1-16:
In the Window menu, a checkmark next to the window or panel name lets you know that it's open.

7. **If the CSS styles panel isn't open, choose Window → CSS Styles.**

   This panel lists styles—essentially, formatting instructions for your page—that you've created. You'll use it frequently; it's discussed in greater detail on page 117.

8. **If the Files panel isn't open, choose Window → Files.**

   This is another frequently encountered panel. It lists all the files in your site and provides an easy way to open, delete, and manage your Web pages.

   With the most important windows and panels open, you'll clean up your workspace by eliminating a panel group that you won't use for any of these basic tutorials.

9. **Right-click (Control-click on a Mac) the empty area to the right of the Application group tab (see Figure 1-17) and from the pop-up menu, select "Close panel group".**

   This closes the Application panel, which is used for the advanced, database-driven Web sites described in Part 6 of this book. Your workspace is all set up now. Next, you'll save this layout so you can return to this exact same positioning of panels and windows whenever you like.

Tip: Don't worry if you make a mess of your workspace: You can always revert back to the original setup by choosing Window → Workspace Layout → Designer (Windows) or Window → Workspace Layout → Default (Mac).

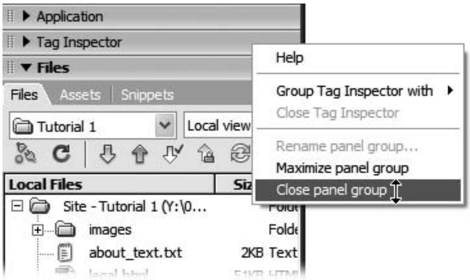


Figure 1-17:
Right-clicking (Control-clicking on a Mac) to the right of the name of a panel group opens a pop-up menu that lets you close or even rename the panel group.

10. **Choose Window → Workspace Layout → Save Current…**

    The Save Workspace Layout window appears, waiting for you to name your new layout.

11. **Type *CosmoFarmer* (or any name you like) and then click OK.**

    You've just created a new workspace layout. To see if it works, you'll switch to Dreamweaver's original layout, see how the screen changes, and then switch back to your new setup.

12. **Choose Window → Workspace Layout → Designer (or Default on a Mac).**

    This returns the workspace to what you saw when you first installed Dreamweaver; notice how the Application panel reappears and the CSS Styles panel is closed.

13. **Choose Window → Workspace Layout → CosmoFarmer (or whatever name you gave in step 11).**

    Voilà! Dreamweaver sets up everything the way you want it. You can create multiple layouts for different Web sites or different types of sites.

Phase 2: Creating a Web Site

As discussed on page 28, whenever you want to use Dreamweaver to create or edit a Web site, your first step is always to show the program where the *root folder* is—the master folder for all your Web site files. You do this by *defining a site,* like so:

1. **Choose Site → New Site.**

    The Site Definition window appears. There's a basic and an advanced method for defining a site. You'll learn the basic method first, so make sure the Basic tab is selected (see Figure 1-8).

2. **Type *Tutorial 1* in the Site Name field.**

The name you type here is solely for your own reference, to help you identify the site in Dreamweaver's Site menu. Dreamweaver also asks for the Web address for your site. You're working on the fictitious CosmoFarmer Web site.

3. **Type *http://www.cosmofarmer.com/* in the HTTP Address field. Click Next.**

   In the next step, you'll tell Dreamweaver whether you plan on building regular Web pages or pages that require a special server for creating the dynamic, database-driven Web sites discussed in Part 6 of this book.

4. **Click "No, I do not want to use a server technology". Click Next.**

   In this tutorial, you'll build a basic Web page.

   In the next steps, you'll tell Dreamweaver how you want to work on the files in your site and where you'll store those files. In this example, you'll use one of the folders you downloaded from this book's Web site (at other times, you'll choose or create a folder of your own).

5. **Click "Edit local copies on my machine".**

   Next, you need to tell Dreamweaver where it can find the tutorial files.

6. **Click the folder icon next to the label, "Where on your computer do you want to store your files?"**

   The Choose Local Root Folder window opens, so that you can choose a folder on your hard drive that will serve as your *local root site folder*. (This is the folder on your computer where you'll store the HTML documents and graphics, CSS, and other Web files that make up your Web site.)

7. **Browse to and select the Chapter01 folder located inside the MM_DWCS3 folder you downloaded earlier.**

   As discussed on page 32, the Mac and Windows versions of Dreamweaver handle the process of selecting a folder a bit differently; see Figure 1-10. At this point, you've given Dreamweaver all the information it needs to successfully work with the tutorial files; you just need to skip through a few more screens and you're ready to get going.

Note: You'll find finished versions of all of the tutorials from this book in the MM_DWCS3 folder. The finished version of this tutorial is located in the Chapter01_finished folder.

8. **Click Next.**

   Dreamweaver asks how you want to connect to your *remote server*—the computer that will dish up the finished Web files to your adoring public.

9. **From the "How do you connect to your remote server?" menu, choose None, and then click Next.**

   Dreamweaver can move your files to a Web server automatically, as you'll learn in Chapter 17.

After clicking Next, you'll see a summary of your settings. If you made a mistake, click Back to return to the appropriate step in the process and make changes.

10. **Click Done.**

    After defining the site, Dreamweaver creates a *site cache* for your Web site (see page 32). Since there are hardly any files in the Chapter01 folder, you may not even notice this happening—it'll go by in the blink of an eye.

Phase 3: Creating and Saving a Web Page

"Enough already! I want to build a Web page," you're probably saying. You'll do just that in this phase of the tutorial:

1. **Choose File → New.**

   The New Document window opens (see Figure 1-13). Creating a blank Web page involves a few clicks.

2. **Select Blank Page from the left-hand list of document categories; in the Page Type list, highlight HTML; and from the designs list choose <none>.**

   You'll do one last thing before finally creating your new Web page: To be truly up to the minute with Web building techniques, you'll also use XHTML to build this page. XHTML, further described on page 9, is the latest incarnation of HTML. The main Web standards organization, the World Wide Web Consortium (W3C), recommends it due to its compatibility with future standards and its cleaner, more logical structure.

3. **Select "XHTML 1.0 Transitional" from the DocType menu in the bottom right of the window.**

   The window should look like Figure 1-13. There are actually two "flavors" of XHTML. The "Transitional" type will keep your pages compatible with older browsers and give you a wider range of HTML tags to work with. If you've grown up with regular HTML and aren't ready to move to XHTML (it really isn't very different—see page 9), select "HTML 4.01 Transitional".

4. **Click Create.**

   Dreamweaver opens a new, blank XHTML page. Even though the underlying code for an XHTML page is different in many ways from that of a plain HTML page, you have nothing to worry about: Dreamweaver manages all that code so you don't have to.

5. **Choose File → Save.**

   The Save As dialog box opens.

   Always save your pages right away. This habit prevents serious headaches if the power goes out as you finish that beautiful—but unsaved—creation.

6. **Save the page as *about.html* in the Chapter01 folder.**

   You could also save the page as *about.htm*; both .html and .htm are valid.

   Make sure you save this page in the correct folder. In Phase 1 (page 39), you defined the Chapter01 folder as the root of the site—the folder that holds all the pages and files for the site. If you save the page in a different folder, Dreamweaver will get confused and its site management features won't work correctly.

7. **If the document-window toolbar isn't already open, choose View → Toolbars → Document to display it.**

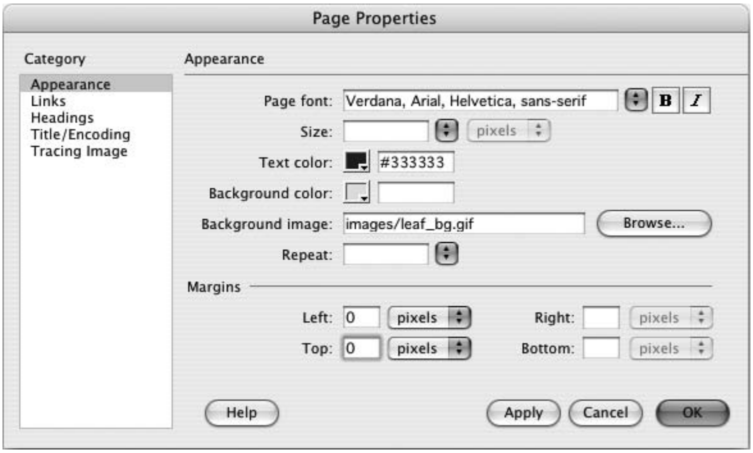
   The toolbar at the top of the document window provides easy access to a variety of tasks you'll perform frequently, such as titling a page, previewing it in a Web browser, and looking at the HTML source code.

8. **In the Title field in the toolbar, select the text "Untitled Document", and then type *About CosmoFarmer.com 2.0*.**

   The Title field lets you set a page's title—the information that appears in the title bar of a Web browser. The page title is also what shows up as the name of your Web page when someone searches the Web using a search engine like Yahoo or Google. In addition, a clear and descriptive title that identifies the main point of the page can also help increase a page's ranking among the major search engines.

9. **On the Property inspector, click the Page Properties button, or choose Modify → Page Properties.**

   The Page Properties dialog box opens (see Figure 1-18), allowing you to define the basic attributes of each Web page you create. There are five categories of settings that let you control properties like background color, link colors, and page margins.



Page Properties

Category: Appearance, Links, Headings, Title/Encoding, Tracing Image

Appearance

Page font: Verdana, Arial, Helvetica, sans-serif

Size: pixels

Text color: #333333

Background color:

Background image: images/leaf_bg.gif

Repeat:

Margins

Left: 0 pixels

Top: 0 pixels

Right: pixels

Bottom: pixels

***Figure 1-18:** The Page Properties dialog box lets you set general properties of Web pages, like the color of text and links. Clicking a color box opens the color selector, where you can choose from the palette or use the eyedropper to sample a color from anywhere in your document window (see the box on page 49).*

10. **From the "Page font" menu, select "Verdana, Arial, Helvetica, sans-serif".**

    This sets a basic font (and three backup fonts, in case your visitor's machine lacks Verdana) that Dreamweaver will automatically use for all text on the page.

    As you'll see later in this tutorial, though, you can always specify a different font for selected text.

    Next, you'll set a basic text color for the page.

11. **Click the small gray box next to the "Text color" label. From the pop-up color palette, choose a color (a dark color like a dark grey works well).**

    Unless you intervene, all Web page text starts out black in Dreamweaver; now, the text on this page will be the color you selected. In the next step, you'll add an image to the background of the page to liven it up.

Tip: Alternatively, you could type a color, like *#333333,* into the box beside the palette square. That's *hexadecimal* notation, which is familiar to HTML coding gurus. Both the palette and the hexadecimal color-specifying field appear fairly often in Dreamweaver (see the box on page 49).

12. **Click the Browse button to the right of the "Background image" field.**

    The Select Image Source window appears (see Figure 1-19). You use this window to navigate to and select a graphic.

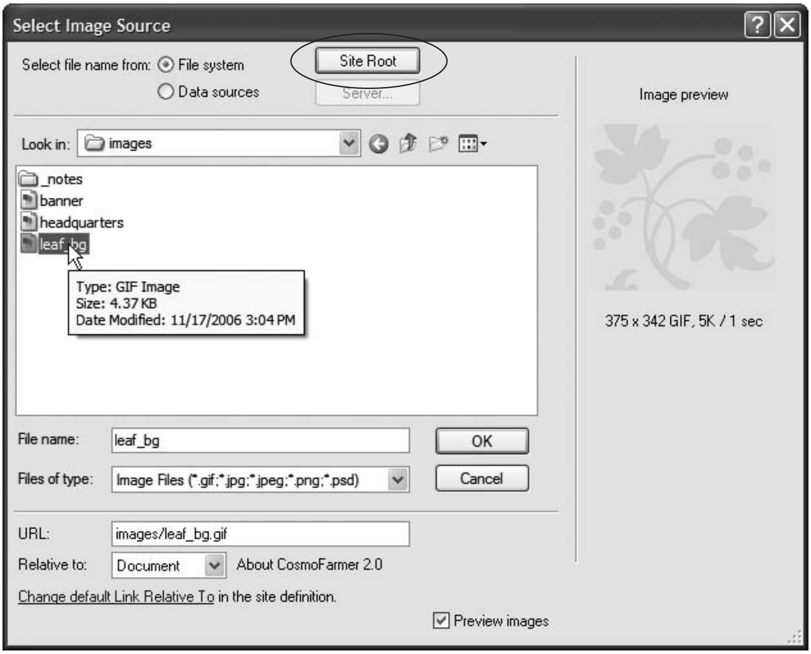
13. **Click the Site Root button at the top of the window (bottom of the window on Macs). Double-click the folder named Images, select the file named *leaf_bg.gif,* and then click the OK (Choose on a Mac) button.**

    In Dreamweaver, you can also just double-click a file to select it *and* close the window you used to select that file. For example, you can accomplish both steps—selecting the *leaf_bg.gif* file *and* clicking the OK button—by just double-clicking the file.

Note to Windows Users: Normally Windows doesn't display a file's extension. So when you navigate to the images folder in step 13 above, you might see *leaf_bg* instead of *leaf_bg.gif*. Because file extensions are an important way people (and Web servers) can identify the different types of files used on a Web site, you may want to display extensions. Here's how: In Windows Explorer, navigate to and select the MM_DWCS3 folder (the tutorials folder). Choose Tools → Folder Options. In the Folder Options window, select the View tab and turn off the "Hide extensions for known file types" checkbox. To apply this setting to all the files on your computer, click the "Apply to All Folders" button and then click OK; to apply it just to the tutorials, click OK.

14. **Type *0* into the Left and Top margin boxes.**

    This removes the little bit of space Web browsers insert between the contents of your Web page and the top and left sides of the browser window. The size of this margin varies from browser to browser, so it's good to set this value yourself (even if you want to insert space on top and to the left of the page) to make sure the page appears consistently across the different browsers.



Select file name from: ● File system ○ Data sources

Look in: images

_notes
banner
headquarters
leaf_bg

Type: GIF Image
Size: 4.37 KB
Date Modified: 11/17/2006 3:04 PM

375 x 342 GIF, 5K / 1 sec

File name: leaf_bg

Files of type: Image Files (*.gif;*.jpg;*.jpeg;*.png;*.psd)

URL: images/leaf_bg.gif

Relative to: Document About CosmoFarmer 2.0

Change default Link Relative To in the site definition.

☑ Preview images

Figure 1-19: *You'll use the Select Image Source window when inserting graphics onto a Web page. The Site Root button (circled) is new in Dreamweaver CS3 and provides a quick way to immediately jump to the local site root–a nifty way to always know where you are when searching for a file. On the Mac, the Site Root button appears at the bottom of the window.*

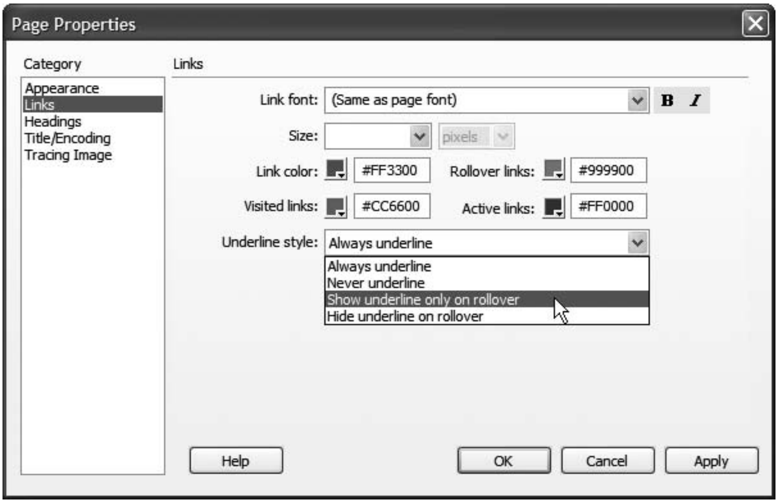
If you like, you can change this setting to make the browser add more space to the top and left side of the page. In fact, you can even add a little extra empty space on the *right* side of a page. (The right margin control is especially useful for languages that read from right to left, like Hebrew.) Note, however, that the *bottom* margin has no effect on the page display.

15. **Click the Links category and add the following properties: in the Links color field, type *#FF3300*; in the "Visited links" field, type *#CC6600*; in the "Rollover links" field, type *#999900*; and in the "Active links" color field, type *#FF0000* (see Figure 1-20).**

These are hexadecimal codes that specify specific Web page colors (see page 49 for more about this notation).

Links come in four varieties: regular, visited, active, and rollover. An *active* link is one you're clicking at this moment. A *visited* link is one you've already been to, as noted in a browser's History list. A *regular* link is a plain-old link, unvisited, untouched. And finally, a *rollover* link indicates how the link looks when someone mouses over it. You can choose different colors for each of these link states.

While it may seem like overkill to have four different colors for links, the regular and visited link colors can provide very useful feedback to Web visitors by indicating which links they've already followed and which remain to be checked out. For its part, the rollover link gives instant feedback, changing color as soon



Page Properties

Category: Links

Link font: (Same as page font)

Size:

Link color: #FF3300

Rollover links: #999900

Visited links: #CC6600

Active links: #FF0000

Underline style: Always underline

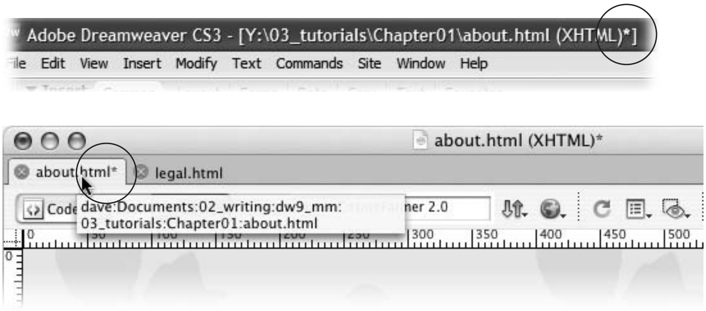
Figure 1-20:
You can set several different properties for links using the Links category of the Page Properties dialog box. You can choose a different font and size for links, as well as specify colors for four different link states. Finally, you can choose whether (or when) links are underlined. Most browsers automatically underline links, but you can override this behavior with the help of this dialog box and Cascading Style Sheets (see page 172).

as a visitor moves the mouse cursor over it. Since the active link color appears for only a split second when someone actually clicks the link, nobody will notice if you never set this color.

Note: Although Dreamweaver uses the term *rollover* link, in the world of Cascading Style Sheets, this is called a *hover* link.

16. **Click OK to close the window and apply these changes to the page.**

You return to your document window. If you see an asterisk next to the file name at the top of the document window, Dreamweaver is trying to tell you that you've made changes to the page since you last saved it (see circled image in Figure 1-21).



Adobe Dreamweaver CS3 - [Y:\03_tutorials\Chapter01\about.html (XHTML)*]

about.html (XHTML)*

dave:Documents:02_writing:dw9_mm:
03_tutorials:Chapter01:about.html

Figure 1-21:
The name of the Web page file appears in the Toolbar and at either the top of the screen (Windows, top) or at the top of the document window (Mac, bottom). An asterisk next to the name (circled) means that you've made changes to the file, but haven't yet saved it–quick, hit Ctrl+S (⌘-S on a Mac)! In addition, on a Mac, if you hover the mouse over a file name on one of the document tabs, you'll see the full path to that file on your computer; this can come in handy when you have 15 index.html pages open at once.

UP TO SPEED

Using Dreamweaver's Color Box

That innocent-looking gray box in the Property inspector, the Modify Page Properties window, and various boxes throughout Dreamweaver is called the *color box*. You can use it to choose a color for the selected Web page element in any of three ways.

First, you can click one of the colors on the pop-up rainbow palette that appears when you click the color box.

Second, you can use the eyedropper cursor that appears when you click the color box. This cursor is "loaded," meaning you can click any spot on your screen–even outside the dialog box–to select a color, a trick that comes in handy when you want to use a color from a graphic in your document. You can even sample a color from another application (from any visible window, Dreamweaver or not): just move the eyedropper over the color and click. (This click may take you out of Dreamweaver. Just return to Dreamweaver, and you'll see that the color you sampled has been applied.)

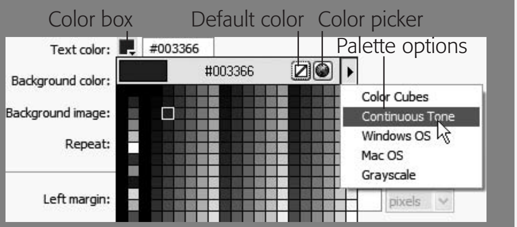
Finally, you can click the Color Picker icon, shown here, to launch the Mac or Windows color-picker dialog box, which lets you choose from millions of possible colors.

If you decide you don't want to add color, or you want to remove a color you've already applied, click the Default Color button. Without a specific color setting, Web browsers will use default colors for the element in question. For instance, text on a Web page is usually black unless you specify otherwise.

Next to the color box in any Dreamweaver dialog box is a blank text field. If you know your Web colors, you can type their *hex* codes into this box, which is sometimes faster and more precise than clicking on the rainbow palette.

In a hex code, a Web color is represented by a six-digit code like this: #FF0000. (Hexadecimal notation is a system computers use for counting. In this system, you count like this: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F. The # tells the computer that the following sequence is a series of hexadecimal numbers–in this case, three pairs of them.) The best way to learn a color's hex value is to choose the color you want by clicking on it in the palette and then looking at the code that Dreamweaver writes in the text box next to it.

The Palette Options menu is of limited use. It lets you select a different set of (very limited) rainbow colors for your palette. The first two choices, for example, contain the outdated Web-safe color palette–a limited collection of 216 colors which display accurately on any computer screen. The Web-safe palette made sense back when graphics cards were expensive and dinosaurs ruled the earth. Today, however, most monitors can show millions of different colors. Likewise, the Grayscale palette offers 256 somber shades of gray (you'll find them useful primarily when building Ingmar Bergman tribute sites). To really exercise your color creativity, use your computer's color-picker and select from the millions of colorful options available to computers today.



Text color: #003366

#003366

17. **Choose File → Save (or press Ctrl+S [⌘-S]).**

Save your work frequently. (This isn't a Web technique as much as a computer-always-crashes-when-you-least-expect-it technique.)

Phase 4: Adding Images and Text

Now you'll add the real meat of your Web page: words and pictures.

1. **On the Common tab of the Insert bar, select Image from the Image menu** (see Figure 1-22).

   Alternatively, choose Insert → Image. Either way, the Select Image Source dialog box opens.

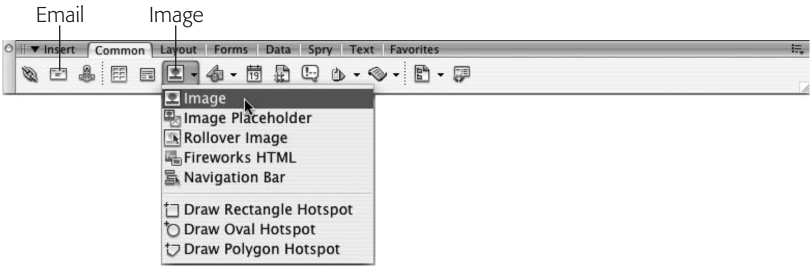


***Figure 1-22:** Some of the buttons on Dreamweaver CS3's Insert bar do double duty as menus (the buttons with the small, black, down-pointing arrows). Once you select an option from the menu (in this case, the Image object), it becomes the button's current setting. If you want to insert the same object again (in this case, an image), you don't need to use the menu–just click the button.*

2. **Browse to the images folder in the Chapter01 folder and double-click the graphics file called *banner.gif*.**

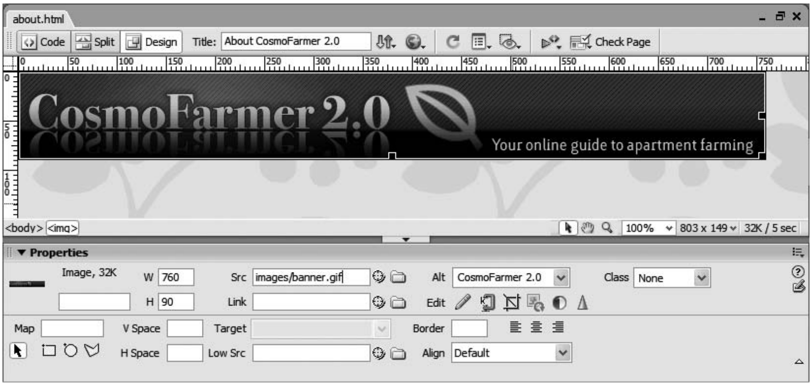
   The Image Tag Accessibility window appears. Fresh out of the box and onto your computer, Dreamweaver CS3 has several accessibility preferences automatically turned on. These preferences are aimed at making your Web pages more accessible to people who use alternative devices for viewing Web sites—for example, people with viewing disabilities who require special Web browser software such as a screen reader, which literally reads the contents of a Web page out loud. Of course, images aren't words, so they can't be spoken. But you can add what's called an *alt* property. This is a text description of the graphic that's useful not only for screen-reading software, but also for people who deliberately *turn off* pictures in their Web browsers so Web pages will load faster.

Note: If you don't see the Image Tag Accessibility window, type Ctrl+U (⌘-U) to open the Preferences panel, select the Accessibility category, and then turn on the Images checkbox and click OK.

3. **In the Alternate Text box, type *CosmoFarmer 2.0*. Click OK to add the image to the page.**

   The banner picture appears at the top of the page, as shown in Figure 1-23. A thin border appears around the image, indicating that it's selected. The Property inspector changes to reflect the properties of the image.

Tip: You can also add or edit the *alt* text in the Property inspector (Figure 1-23).


about.html

Title: About CosmoFarmer 2.0

Properties

Image, 32K

W 760

H 90

Src images/banner.gif

Alt CosmoFarmer 2.0

Class None

Align Default

Figure 1-23: *When you select an image in the document window, the Property inspector reveals its dimensions. In the top-left corner, a small thumbnail image appears, as does the word "Image" (to let you know an image is selected) and the image's file size (in this case, 32 KB). The other image properties are described in Chapter 6.*

4. **Deselect the image by clicking anywhere in the document window, or by pressing the right arrow key.**

   Keep your keyboard's arrow keys in mind—they're a great way to deselect a page element *and* move your cursor into place for adding text or more images.

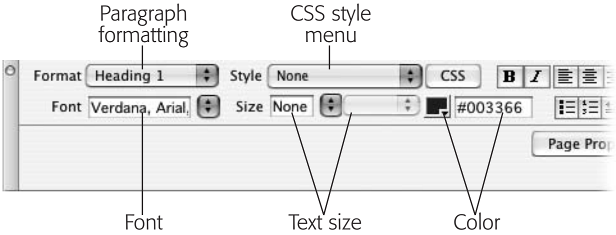
5. **Press Enter to create a new paragraph. Type *About CosmoFarmer 2.0*.**

   Notice that the text is a dark color and uses the Verdana font; these are the properties you set up earlier in the Page Properties dialog box. The Property inspector now displays text-formatting options.

Note: The key called Enter on a Windows keyboard is named Return on most Macintosh keyboards. On the Mac, you can press either Return or Enter.

6. **From the Format menu in the Property inspector, choose Heading 1 (see Figure 1-24).**

   The text you just typed becomes big and bold—the default style for Heading 1. This Format menu offers a number of different paragraph types. Because the text doesn't stand out enough, you'll change its color next.


Format Heading 1

Style None

Font Verdana, Arial,

Size None

#003366

Figure 1-24: *When you're editing text, the Property inspector offers the relevant formatting controls. You'll notice that both the font and color are already set with the font properties you chose in the Page Properties dialog box (steps 9, 10, and 11 on page 45).*

7. **Select the text you just typed.**

   You can do so either by dragging carefully across the entire line or by triple-clicking anywhere inside the line. (Unlike the Format menu, which affects an entire *paragraph* at a time, most options in the Property inspector—like the one you'll use next—apply only to *selected* text.)

8. **Click the color box in the Property inspector and select a dark blue (#003366 works well).**

   Two things happen. First, the color of the text changes to dark blue (it'll actually appear pink until you deselect it). Second, a style name appears in the Style menu on the Property inspector, named Style1 (or Style2, or Style3, depending on whether your independent spirit has led you off to earlier formatting expeditions).

   Meanwhile, Dreamweaver has actually created a new Cascading Style Sheet style and applied it to this heading. The Style menu lets you apply any styles you (or Dreamweaver) create. You'll learn plenty about CSS styles in Chapter 4.

9. **From the Font menu in the Property inspector, select "Georgia, Times New Roman, Times, serif".**

   The text now uses the font Georgia. You just overrode the page-wide setting you chose in step 10 on page 46. In the process, Dreamweaver updated the style Style1 (or whatever it's named) with the new font. Because Style1 isn't a very descriptive name, you'll change it next.

Note: Sometimes when you use the Property inspector to change the look of text that already has a style applied to it, Dreamweaver creates yet another new style. For example, if a paragraph of text is styled with Style1 and you change the font, Dreamweaver sometimes creates a new style (called Style2), and leaves the old style behind. See page 108 for an explanation of this behavior.

10. **From the Style menu in the Property inspector, select Rename.**

    The Rename Style window appears. In this window, you simply select the style you wish to change, and type a new name.

11. **Select the style name (most likely Style1) from the Rename Style menu and type *heading* in the New Name box. Click OK.**

    Dreamweaver renames the style wherever it appears in the page. You'll probably notice a new panel, the Results panel, appear at the bottom of the screen. This panel displays the results of any find-and-replace action—which is what Dreamwaver just did to rename the style.

12. **Click to the right of the heading text to deselect it. Press Enter to create another new paragraph.**

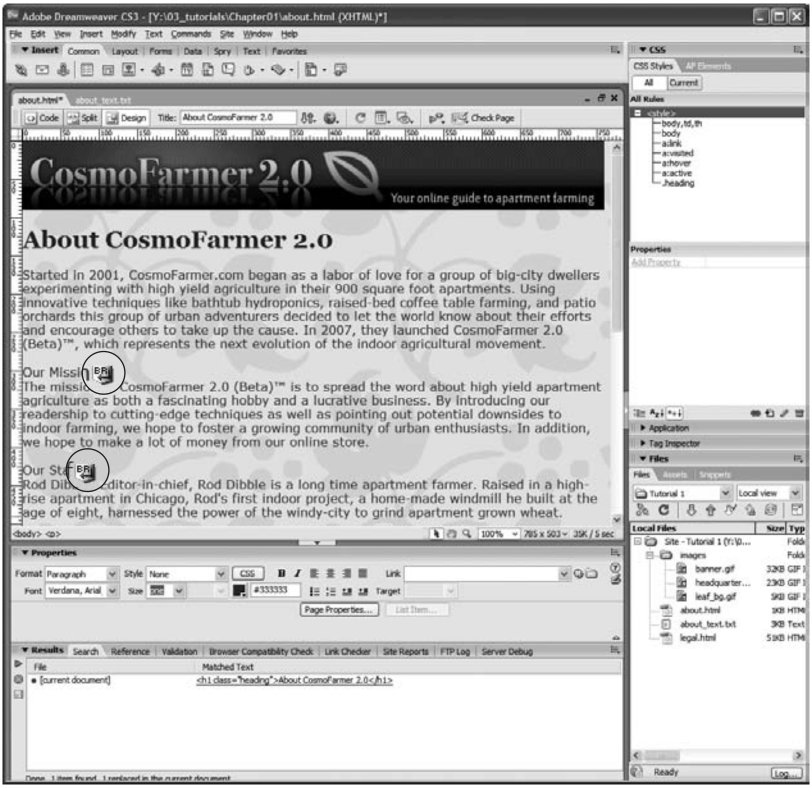
    While you may type a headline now and again, you'll probably get most of your text from word processing documents or e-mails from your clients, boss, or coworkers. To get that text into Dreamweaver, you simply copy it from another document and paste it into your Web page.

13. **Make sure the Files panel is open (Window → Files) and then double-click the file *about_text.txt* to open it.**

    This file is just plain text. No formatting, just words. To get it into your document, you'll copy and paste it.

14. **Click anywhere inside the text and choose Edit → Select All, followed by Edit → Copy. Click the about.html tab to return to your Web page and, finally, choose Edit → Paste.**

    You should see a few gold shields sprinkled among the text (circled in Figure 1-25). If you don't see them, make sure you completed step 4 on page 40. These represent line breaks—spots where text drops to the next line without creating a new paragraph. You'll often see these appear in pasted text. In this case, you need to remove them and then create separate paragraphs.



Adobe Dreamweaver CS3 - [Y:\03_tutorials\Chapter01\about.html (XHTML)*]

CosmoFarmer 2.0

Your online guide to apartment farming

About CosmoFarmer 2.0

Started in 2001, CosmoFarmer.com began as a labor of love for a group of big-city dwellers experimenting with high yield agriculture in their 900 square foot apartments. Using innovative techniques like bathtub hydroponics, raised-bed coffee table farming, and patio orchards this group of urban adventurers decided to let the world know about their efforts and encourage others to take up the cause. In 2007, they launched CosmoFarmer 2.0 (Beta)™, which represents the next evolution of the indoor agricultural movement.

Our Missi

The missi CosmoFarmer 2.0 (Beta)™ is to spread the word about high yield apartment agriculture as both a fascinating hobby and a lucrative business. By introducing our readership to cutting-edge techniques as well as pointing out potential downsides to indoor farming, we hope to foster a growing community of urban enthusiasts. In addition, we hope to make a lot of money from our online store.

Our St

Rod Dib ditor-in-chief, Rod Dibble is a long time apartment farmer. Raised in a high-rise apartment in Chicago, Rod's first indoor project, a home-made windmill he built at the age of eight, harnessed the power of the windy-city to grind apartment grown wheat.

Format: Paragraph; Style: None; Font: Verdana, Arial; #333333

Title: About CosmoFarmer 2.0

[current document] — <h1 class="heading">About CosmoFarmer 2.0</h1>

***Figure 1-25:** Line breaks (circled) often crop up when you copy and paste text from other programs into Dreamweaver. Follow the steps on page 40 to make sure the line breaks are visible in Design view.*

15. **Click one of the gold shields and press the Enter key. Repeat for any other gold shields in the document window.**

    This action deletes the line break (actually the <br> HTML tag) and creates two paragraphs out of one. At this point, the pasted text is just a series of paragraphs. To give it some structure, you'll add headings and a bulleted list.

16. **Triple-click in the text line "Our Mission" to select the paragraph and choose Heading 2 from the format menu in the Property inspector.**

    This changes the paragraph to a headline—making it bigger and bolder. It doesn't match the style of your first header, so you'll apply the style you created earlier.

17. **From the Property inspector's Style menu, select "heading".**

    You'll adjust the look of this heading by italicizing the text.

18. **Click the I (for Italics) button in the Property inspector** (see Figure 1-26)**.**

    This italicizes the text and also creates another new style (Style1, Style2, or something like that). Again, the name doesn't make a lot of sense so you'll change it.

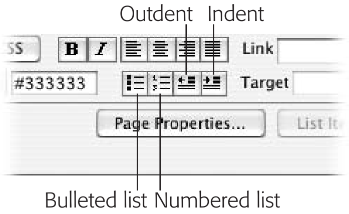


Figure 1-26:
Many of the Property inspector's text formatting options are similar to tools you'd find in a word processing program: B for bold, I for italics, text-alignment options, bulleted and numbered lists, and so on.

19. **Repeat steps 10 and 11 above and rename this style "subhead".**

    Now you just need to apply this new style to the other headlines.

20. **Click anywhere inside the paragraph "Our Staff", choose Heading 2 from the Format menu, and then choose "subhead" from the Style menu. Repeat this step for the paragraph that reads "Our Office."**

    The "Our Staff" section of the page presents a list of staff members. You'll use a bulleted list to organize these names.

21. **Select the three paragraphs under the "Our Staff" headline. For example, drag from the start of the first paragraph down to the end of the third paragraph.**

    You can also drag up starting from the end of the third paragraph. Either way, you've selected all three staff listings.

22. **Click the Bulleted List button on the Property inspector** (see Figure 1-26)**.**

    A bullet appears before each name. To make the names stand out, you'll add a little color and emphasis.

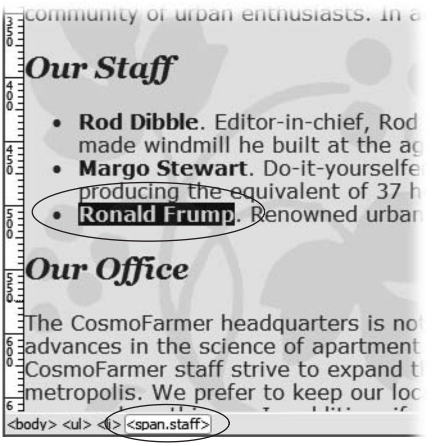
23. **Select the first name, Rod Dibble. Select a color using the color box in the Property inspector (for example, a deep red like #990000), and then click the B button to make the name bold.**

    Again, Dreamweaver creates a new style and, as before, you should give the style a more meaningful name. You'll also apply the style to the two other names in the list.

24. **Repeat steps 10 and 11 above and rename this style "staff". Select the two other names and apply the staff style to them.**

If you still have one of the names selected, look at the Tag selector in the bottom left of the document window. You'll see the currently selected tag highlighted. In this case, it's the <span> tag (see Figure 1-27). You'll learn more about the <span> tag on page 122, but in a nutshell, this tag is used mainly to apply a style to just one part of a complete tag—in this case, just the name, not the entire bulleted item. You'll also notice that Dreamweaver lets you know that a style has been applied to the tag, by adding a period and the style's name after the tag—*span.staff*.

There are a few more design touches to add to the page, but first you should see how the page looks in a real Web browser.



community of urban enthusiasts. In a

Our Staff

- **Rod Dibble**. Editor-in-chief, Rod made windmill he built at the ag
- **Margo Stewart**. Do-it-yourselfe producing the equivalent of 37 h
- **Ronald Frump**. Renowned urban

Our Office

The CosmoFarmer headquarters is no advances in the science of apartment CosmoFarmer staff strive to expand t metropolis. We prefer to keep our loc

Figure 1-27:
When you select anything in Design view (circled, top), Dreamweaver highlights the HTML tag used for that element (circled, bottom) in the Tag selector. You can click on any tag name in the Tag selector to select that tag. In addition, any styles applied to a tag appear with a period after the tag's name–span.staff, for example.

Phase 5: Preview Your Work

Dreamweaver is as close as a Web design program can be to a WYSIWYG application, meaning that for the most part, What You See (in the document window) Is What You'll Get (on the Web).

At least that's how it's supposed to work. But Dreamweaver may display *more* information than you'll see on the Web (including "invisible" objects and table borders) and may display *less* (it sometimes has trouble rendering complex designs).

Furthermore, much to the eternal woe of Web designers, different Web browsers display pages differently. Pages viewed in Internet Explorer don't always look the same in more modern browsers like Firefox or Safari. In some cases, the differences may be subtle (for example, text may be slightly larger or smaller). Or they can be dramatic: Some of the advanced page-layout techniques described in Chapter 9 can look *awful* in older Web browsers (you'll learn how to deal with many of these problems throughout this book).

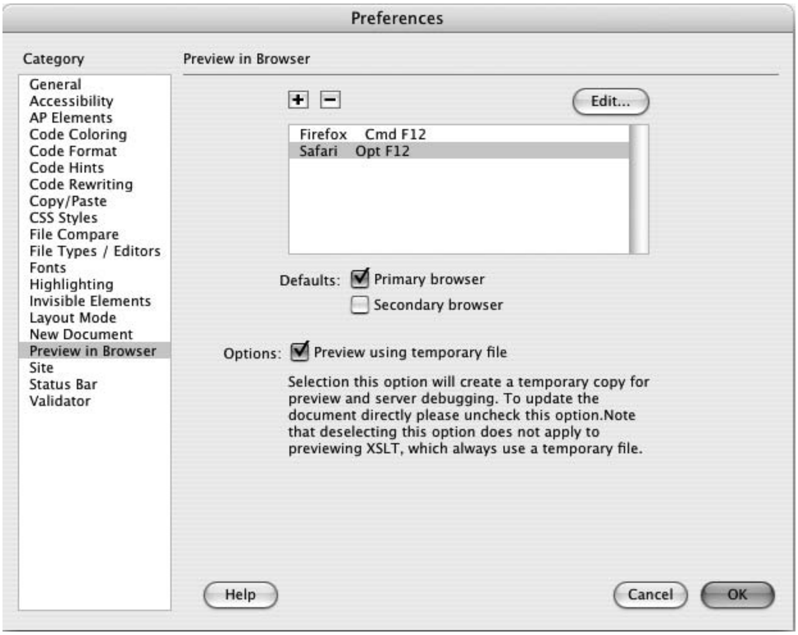
Tip: If you don't happen to have a Windows computer, a Mac, and every browser ever made, you can take advantage of a free service that creates screenshots of your site using a wide range of browsers and operating systems. Check out *www.browsershots.org*.

If you're designing Web pages for use on a company intranet and only have to worry about the one Web browser your IT department has put on everyone's computer, you're lucky. Most of us have to deal with the fact that our sites must withstand scrutiny from a wide range of browsers, so it's a good idea to preview your Web pages using whatever browsers you expect visitors to your Web sites to use. Fortunately, Dreamweaver lets you preview a Web page using any browser you have installed on your computer.

Before you can preview a page, you need to set up your list of browsers in the program's preference window, like this:

1. **Choose File → "Preview in Browser" → Edit Browser List.**

   The "Preview in Browser" preferences window opens (see Figure 1-28). When you install Dreamweaver, it detects which browsers are already installed on your computer; a list of those browsers appears in the browsers list in this window. If you installed a browser after you installed Dreamweaver, then it won't appear in this list, so you'll need to follow steps 2 and 3 next; otherwise, skip to step 4.



Firefox Cmd F12
Safari Opt F12

Defaults: ☑ Primary browser
□ Secondary browser

Options: ☑ Preview using temporary file

Selection this option will create a temporary copy for preview and server debugging. To update the document directly please uncheck this option.Note that deselecting this option does not apply to previewing XSLT, which always use a temporary file.

Figure 1-28: *Dreamweaver can launch a Web browser and load a page in it so you can preview your design. One option—"Preview using temporary file"—comes in handy when working with Cascading Style Sheets, as described inthe Note on page 150.*

2. **Click the + button.**

   The Add Browser or Select Browser window opens.

3. **Click the Browse button. Search your hard drive to find a browser you wish to add to this list.**

   Dreamweaver inserts the browser's default name in the Name field of the Add Browser window. If you wish to change its name for display purposes within Dreamweaver, select it and type a new name. (But don't do this *before* selecting the browser, since Dreamweaver will erase anything you've typed as soon as you select a browser.)

4. **Select the browser you most commonly use in the window's Browser list. Turn on the Primary Browser box. Click OK.**

   You've just designated the browser as your *primary* browser while working in Dreamweaver. You can now preview your pages in this browser with a simple keyboard shortcut: F12 (Option-F12 on a Mac).

   If you like, you can also choose a secondary browser, which you'll be able to launch by pressing the Ctrl+F12 (⌘-F12) key combination.

   Now you're ready to preview your document in a real, bona fide Web browser. Fortunately, Dreamweaver makes it easy.

5. **Press the F12 key (Option F12 on a Mac) or choose Edit → "Preview in Browser" and select a browser from the menu.**

   The F12 key (Option-F12 on Mac) is the most important keyboard shortcut you'll learn. Macintosh fans: Unfortunately, Apple has assigned the F12 key to the Dashboard program, so it takes two keys to preview the page—Option and F12. This keyboard shortcut opens the Web page in your primary browser, letting you preview your work.

   If you're using a Macintosh laptop, you may have to press Option-F12 and the function (fn) key in the lower-left corner of the keyboard.

   You can also use the "Preview in Browser" menu in the document window to preview a page (see Figure 1-29).

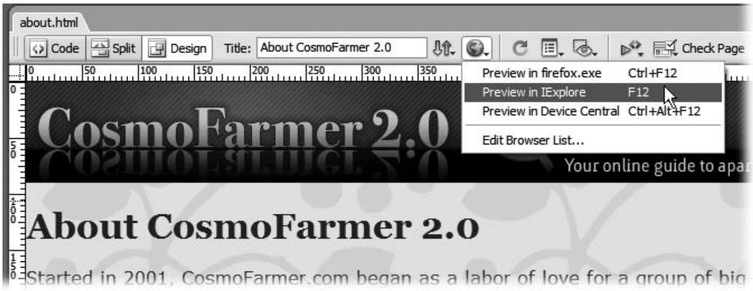

about.html
Code
Split
Design
Title: About CosmoFarmer 2.0
Check Page
Preview in firefox.exe Ctrl+F12
Preview in IExplore F12
Preview in Device Central Ctrl+Alt+F12
Edit Browser List...
CosmoFarmer 2.0
Your online guide to apa
About CosmoFarmer 2.0
Started in 2001, CosmoFarmer.com began as a labor of love for a group of big-

Figure 1-29:
The "Preview in Browser" menu in the document window is another way to preview a page. This menu has the added benefit of letting you select any browser, not just the ones you've assigned keyboard shortcuts to.

6. **When you're done previewing the page, go back to Dreamweaver.**

   Do so using your favorite way to switch programs on your computer—by using the Windows taskbar, or the Dock in Mac OS X.

Phase 6: Finishing the Page

You've covered most of the steps you'll need to finish this Web page. All you need to do now is add a graphic, format the copyright notice, and provide a little more structure to the appearance of the page.

1. **Click just before the "T" in the second to last paragraph, which begins with "The CosmoFarmer headquarters".**

   This places the cursor at the beginning of the paragraph. You'll insert a graphic here.

2. **From the Common tab of the Insert Bar, click the Image button (see Figure 1-22).**

   You can also choose Insert → Image or use the keyboard shortcut Ctrl+Alt+I (⌘-Alt-I).

3. **Browse to the images folder in the Chapter01 folder and double-click the graphics file called *headquarters.gif*.**

   Again, the Image Tag Accessibility window appears. You need to provide a good description for this image.

Note to Windows users: As noted above (page 46) Windows doesn't display a file's extension. So when you navigate to the images folder in step 3 above, you might see *headquarters* instead of *headquarters.gif.*

4. **Type *CosmoFarmer's Secret Headquarters* and press OK.**

   Look at the Property inspector. It displays properties specific to images. You'll learn more about these options in Chapter 6, but now you'll learn a quick way to make text wrap around an image.

5. **Choose Right from the Align pop-up menu in the Property inspector.**

   The image moves to the right edge of the page and text wraps around its left side. (The Left option moves the image to the left, letting text wrap around the image's right side.)

   At the bottom of the page is a copyright notice. It's not really related to the content of the page, so you'll add a line to visually separate the copyright from the rest of the page

Note: Although the left and right options for an image's align property are quick ways to force text to wrap around an image, they aren't valid options for the "strict" versions of HTML or XHTML (see page 37). CSS provides a more flexible technique–known as a *float*–to achieve this same effect. You'll learn about it on page 213.

6. **Click before the letter C in "Copyright 2007" and choose Insert → HTML → Horizontal Rule.**

   A gray line appears above the copyright notice. The copyright appears a little big, so you'll format it next.

Tip: You can also add a line above a paragraph of text using the CSS *border* property. See page 215.

7. **Select all of the text in the paragraph.**

   You can either triple-click inside the paragraph or drag from the beginning of the paragraph text to the end.

8. **In the Property inspector, choose *12* from the Size menu, and select *black* from the color box.**

   The text of the copyright changes to black and shrinks in size. Again, Dreamweaver creates a new generically-named style after you do this.

9. **Repeat steps 10 and 11 on page 52 and rename this style "copyright".**

   The legal department of CosmoFarmer has decided that every page on the site must link to an official corporate statement. You'll add a link for that next.

10. **Select the text "Read our full legal statement" at the bottom of the page.**

    To create a link, you just need to tell Dreamweaver which page you want to link to. There are several ways to do this. Using the Property inspector is the easiest.

11. **In the Property inspector, click the folder icon that appears to the right of the link field (circled in Figure 1-30).**

    The Select File dialog box appears.

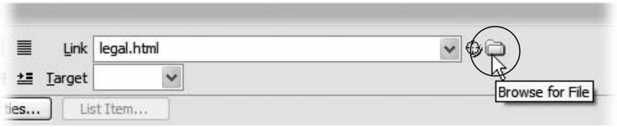


Figure 1-30:
The Link box in the Property inspector lists any link for the selected text. In this example, the link leads to a page named legal.html.

12. **Click the Site Root button (top of the dialog box in Windows; bottom of dialog box on a Mac), and double click the file named *legal.html.***

    The Site Root button jumps you right to the folder containing your site. It's a convenient way to quickly move to your root folder. Double-clicking the file inserts the HTML needed to create a link.

    If you preview the page in a Web browser, it looks alright…well, not really. The text is kind of hard to read against the floral background, the text is too wide if you expand your Web browser on a large monitor, and the left edge of the banner doesn't align with the left edge of the text. To fix these problems, you'll create a new layout element—a box to contain all of the content on the page.

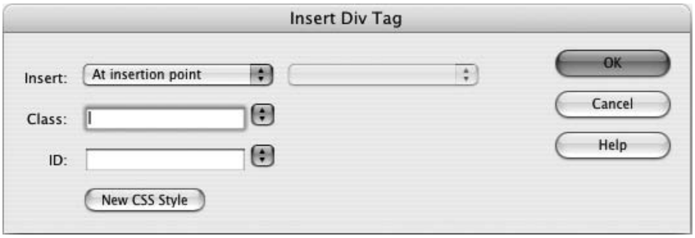
13. **Click anywhere inside the page and choose Edit → Select All or press Ctrl+A (⌘-A on a Mac).**

    The contents of the page are selected. You'll wrap all text and images in a <div> tag to create a kind of container for the page contents.

14. **Choose Insert → Layout Objects → Div Tag.**

The Insert Div Tag window opens (see Figure 1-31). A <div> tag simply provides a way to organize content on a page by grouping related HTML—think of it as a box containing other HTML tags. For example, to create a sidebar of navigation links, news headlines, and Google ads, you would wrap them all in a <div> tag. It's a very important tag when creating CSS-based layouts. You'll read more about the <div> tag on page 313.

Next, you need to create a style to provide the instructions needed to format this new div tag. You've already used the Property inspector to create a style, but that only works for text. To format other tags, you need to use the New CSS Rule window.



Insert Div Tag

Insert: At insertion point

Class:

ID:

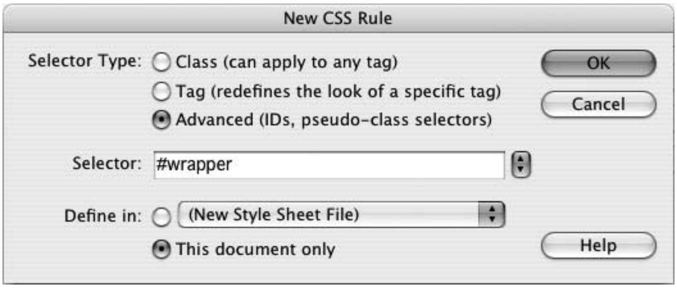
Figure 1-31: *The Insert Div Tag window provides an easy way to divide sections of a Web page into groups of related HTML–like the elements that make up a banner, for example. You'll learn about all the different functions of this window on page 314.*

15. **Click the New CSS Style button.**

The New CSS Rule window appears (a CSS style is technically called a "rule"). This window lets you determine what type of style you're creating, the style's name, and where the style information should be stored. You'll learn all the ins and outs of this window in Chapter 4.

16. **Select the "Advanced" button, type *#wrapper* in the Selector box, and then choose "This document only" from the "Define in" option area (see Figure 1-32). Click OK.**

There's a lot going on in this box, but don't worry about the details at this point. You'll learn everything there is to know about creating styles later in this book. This part of the tutorial is intended to give you a taste of some of a Web designer's daily Web page building duties. So just relax and follow along.



New CSS Rule

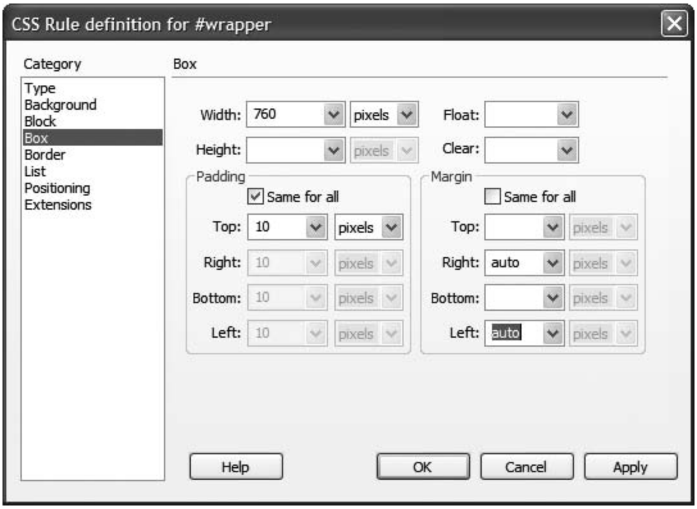
Selector Type: ○ Class (can apply to any tag)
○ Tag (redefines the look of a specific tag)
● Advanced (IDs, pseudo-class selectors)

Selector: #wrapper

Define in: ○ (New Style Sheet File)
● This document only

Figure 1-32: *Creating a new CSS style takes several steps, all beginning with the New CSS Rule window. Page 118 covers all the settings for this window in detail.*

After closing the New CSS Rule window, the "CSS Rule definition" window appears (see Figure 1-33). This is the command center for defining the formatting properties such as text color, font, and size for a style. There are quite a few CSS properties, which Dreamweaver divides into eight categories. First, you'll add a background color for this div.


CSS Rule definition for #wrapper

Category: Box

Width: 760 pixels

Height: pixels

Float:

Clear:

Padding: ☑ Same for all

Top: 10 pixels

Right: 10 pixels

Bottom: 10 pixels

Left: 10 pixels

Margin: □ Same for all

Top: pixels

Right: auto pixels

Bottom: pixels

Left: auto pixels

Figure 1-33:
The "CSS Rule definition" window lets you set over 60 different CSS properties (divided into eight different categories) that control the formatting of everything from text, to images, to entire Web pages.

17. **Select Background from the left-hand list of categories. Click the color box that appears to the right of Background color and then select a white swatch.**

    This will add a white background to the box, ensuring the text will stand out. Next you'll set a specific width for the box, and center it in the middle of the browser window.

18. **Click the Box category and type *760* in the width box.**

    This will make the box 760 pixels wide—the same width as the banner. To make sure the text doesn't butt right up against the edge of the box, you'll add a little space (called *padding*) around the inside of this style.

19. **Type *10* in the Top box under Padding (make sure the "Same for all" checkbox is turned on).**

    This adds 10 pixels of space inside the box, essentially pushing the text and the graphics away from the edges of the box.

20. **Under the Margin settings, uncheck the "Same for All" box, and then select "auto" from both the right and left margin menus.**

    The auto property for the right and left margin is your way of telling a Web browser to automatically supply a left and right margin—in this case, as you'll see in a moment, it has the effect of centering the <div> in the middle of a browser window.

21. **The CSS Rule Definition window should now look like Figure 1-33. Click OK to complete the style.**

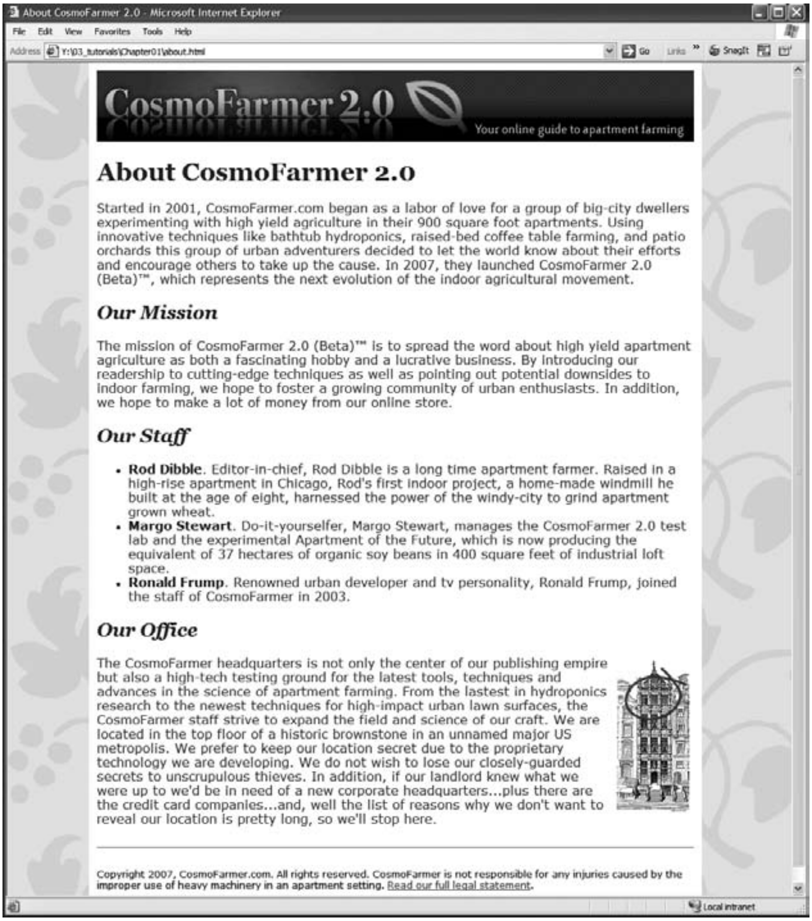
    The Insert Div Tag window reappears and the name of the style you just created—wrapper—appears in a box labeled ID.

22. **In the Insert Div Tag window, click OK.**

    This inserts the new <div> tag and at the same time applies the style you just created. Now it's time to view your handiwork.

23. **Choose File → Save. Press the F12 key (Option-F12 on a Mac) to preview your work in your browser (Figure 1-34).**

    Test the link to make sure it works. Resize your browser and watch how the page content centers itself in the middle of the window.


About CosmoFarmer 2.0 - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Address Y:\03_tutorials\Chapter01\about.html
Go
Links
SnagIt
CosmoFarmer 2.0
Your online guide to apartment farming
Local intranet

About CosmoFarmer 2.0

Started in 2001, CosmoFarmer.com began as a labor of love for a group of big-city dwellers experimenting with high yield agriculture in their 900 square foot apartments. Using innovative techniques like bathtub hydroponics, raised-bed coffee table farming, and patio orchards this group of urban adventurers decided to let the world know about their efforts and encourage others to take up the cause. In 2007, they launched CosmoFarmer 2.0 (Beta)™, which represents the next evolution of the indoor agricultural movement.

Our Mission

The mission of CosmoFarmer 2.0 (Beta)™ is to spread the word about high yield apartment agriculture as both a fascinating hobby and a lucrative business. By introducing our readership to cutting-edge techniques as well as pointing out potential downsides to indoor farming, we hope to foster a growing community of urban enthusiasts. In addition, we hope to make a lot of money from our online store.

Our Staff

- **Rod Dibble**. Editor-in-chief, Rod Dibble is a long time apartment farmer. Raised in a high-rise apartment in Chicago, Rod's first indoor project, a home-made windmill he built at the age of eight, harnessed the power of the windy-city to grind apartment grown wheat.
- **Margo Stewart**. Do-it-yourselfer, Margo Stewart, manages the CosmoFarmer 2.0 test lab and the experimental Apartment of the Future, which is now producing the equivalent of 37 hectares of organic soy beans in 400 square feet of industrial loft space.
- **Ronald Frump**. Renowned urban developer and tv personality, Ronald Frump, joined the staff of CosmoFarmer in 2003.

Our Office

The CosmoFarmer headquarters is not only the center of our publishing empire but also a high-tech testing ground for the latest tools, techniques and advances in the science of apartment farming. From the lastest in hydroponics research to the newest techniques for high-impact urban lawn surfaces, the CosmoFarmer staff strive to expand the field and science of our craft. We are located in the top floor of a historic brownstone in an unnamed major US metropolis. We prefer to keep our location secret due to the proprietary technology we are developing. We do not wish to lose our closely-guarded secrets to unscrupulous thieves. In addition, if our landlord knew what we were up to we'd be in need of a new corporate headquarters...plus there are the credit card companies...and, well the list of reasons why we don't want to reveal our location is pretty long, so we'll stop here.

Copyright 2007, CosmoFarmer.com. All rights reserved. CosmoFarmer is not responsible for any injuries caused by the improper use of heavy machinery in an apartment setting. Read our full legal statement.

Figure 1-34:
The finished tutorial file should look like this. You may notice that the white space above the banner logo is bigger in browsers other than Internet Explorer. (The reason for this–and how to fix it–is explained on page 333.) That's just one of those funny browser inconsistencies that drive Web designers crazy.

Congratulations! You've just built your first Web page in Dreamweaver, complete with graphics, formatted text, and links. If you'd like to compare your work with the finished product, you'll find another folder, Chapter01_finished, in the Tutorials folder.

Much of the work of building Web sites involves using the procedures covered in this tutorial—defining a site, adding links, formatting text, placing graphics, creating styles, and inserting divs. The next few chapters cover these basics in greater depth and introduce other important tools, tips, and techniques for using Dreamweaver to build great Web pages.

CHAPTER

2

Adding Text to Your Web Pages

True, broadband Internet media like streaming video, audio, and high-quality graphics continue to grab the headlines. After all, it's exciting to hear the latest song from your favorite band, see a preview of a yet-to-be released blockbuster, and tune in to YouTube to see the kid down the street embarrass himself in front of a billion Web viewers.

But the Web is primarily woven with *words*. Nintendo Wii reviews, Britney Spears gossip, and countless personal blogs about cats still drive people to the Web. As you build Web pages and Web sites, you'll spend a lot of your time adding and formatting *text*. Understanding how Dreamweaver works with text is vital to getting your message across effectively.

This chapter covers the not-always-simple act of getting text *into* your Dreamweaver documents. In Chapter 3, you can read about formatting this text so that it looks professionally designed.

Adding Text in Dreamweaver

In many ways, Dreamweaver works like a word processing program. When you create a new document, the blinking cursor appears at the top of the page, ready for you to begin typing. When you finish a paragraph, you press Enter or Return to start a new one. Text, as well as anything else you add to a Web page, starts at the top of the page and works its way to the bottom.

Adding Special Characters

Many useful special characters—such as copyright or trademark symbols—don't appear on your keyboard, making them difficult or impossible to type. The Insert bar's Text tab lets you use a variety of symbols and international characters quickly by clicking an icon.

To open the Text tab:

1. **Click the Text tab on the Insert bar.**

   If the Insert bar isn't visible, choose Window → Insert to open it, or use the keyboard shortcut Ctrl+F2 (⌘-F2).

   The palette shown in Figure 2-1 appears. Many of the options let you add common HTML tags like the <b> (bold) and <strong> (strong) tags, most of which you can apply more easily using the Property inspector or keyboard shortcuts, as discussed in the next chapter. This panel also features less frequently used tags like <abbr> (abbreviation) or <dl> (definition list). You can satisfy your curiosity about these tags by using Dreamweaver's HTML reference (see page 394), but their names give you an idea of when you might want to use them.

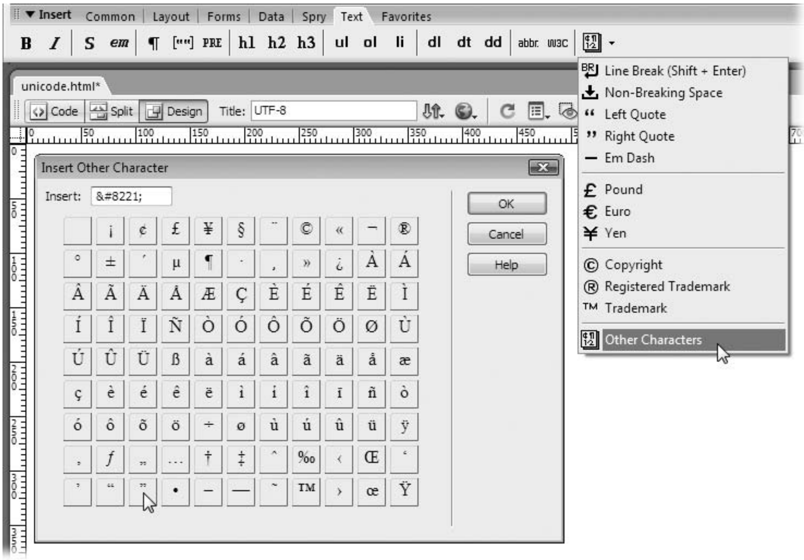
   The last option on the bar is actually a menu that offers a wide range of symbols and international characters. Unlike regular Western characters, such as *a* or *z*, these special characters are represented in HTML by a code name or number. For instance, a trademark symbol (™) is written in HTML as &#8482;.

Tip: If you like card games or just want to add a heart to a Web page without using a graphic, go to Code view and type *&hearts* to get a heart character, *&diams* for a diamond, *&spades* for a spade, or *&clubs* for a club.

2. **From the menu at the right end of the Insert bar, select the symbol you wish to insert (see Figure 2-1).**

   Dreamweaver inserts the appropriate HTML code into your Web page. (Alternatively, you can select the Other Characters option to bring up the wider-ranging Insert Other Character dialog box shown in Figure 2-1.)

Note: If you set the encoding of your Web page to anything other than Western European or Unicode (UTF-8) in the Page Properties window (by choosing Modify → Page Properties and clicking the Title/Encoding category), you can reliably insert only line breaks and nonbreaking spaces. The other special characters available from the Character category of the Objects panel may not work (see the box on page 77 for more about how encoding works).



Insert: ”

Title: UTF-8

***Figure 2-1:** Selecting Other Characters from the Characters menu (right) brings up the Insert Other Character dialog box (left). However, there are even more characters in the Western alphabet than are listed in this dialog box. You can find a table listing these characters and their associated entity names and numbers at www.evolt.org/article/ala/17/21234/.*

Line Breaks

Pressing Enter creates a new paragraph, exactly as in a word processor. Unfortunately, Web browsers automatically insert a blank line's worth of extra space above and below paragraphs—which is a real nuisance if you're trying to create several single-spaced lines of text, like this:

702 A Street
Toadsuck, AR
98789 USA

Here, each part of the address is on its own line, but it's still just a single paragraph (and shares the overall formatting of that paragraph, as you'll learn in the next chapter).

Tip: If you want to *entirely* dispense with the space that browsers insert between paragraphs, don't use line breaks each time. Instead, use CSS to eliminate the top and bottom margins of the <p> tag, as described in the Tip on page 135.

To create this single-spaced effect, you need to insert a *line break* at the insertion point, using one of these techniques:

- From the Characters menu on the Text tab of the Insert bar, select Line Break (the first menu option at top in Figure 2-1).
- Choose Insert → HTML → Special Characters → Line Break.
- Press Shift+Enter.

Note: When you insert a line break in Dreamweaver, you may get no visual hint that it's even there; after all, a regular paragraph break and a line break both create a new line of text.

This is especially likely if you copy text from programs other than Microsoft Word or Excel. Text from other programs–especially email programs–can be loaded with an infuriating number of line breaks. To add to the confusion, a line break may go unnoticed if it occurs at the end of a long line. Your only hope is to make line breaks visible.

To do so, choose Edit → Preferences (or Dreamweaver → Preferences on the Mac), or press Ctrl+U (⌘-U). Click the Invisible Elements category. Make sure the Line Breaks checkbox is turned on. Now you'll see each line break appear as a small gold shield. (If after doing this, you still don't see the line break character, choose View → Visual Aids and make sure the Invisible Elements checkbox is turned on.)

You can select a line break by clicking the shield, and then delete it like any page element. Better yet, select the shield, and then hit Enter or Return, to eliminate the line break *and* create a new paragraph.

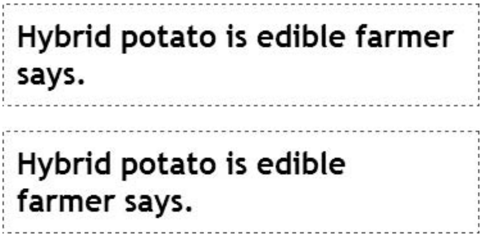
Another way to avoid pasting hidden line breaks is the Paste Special command (see page 72).

Nonbreaking Spaces

Sometimes the line breaks in your text can distort what you're trying to say, as shown in Figure 2-2. In this case, a *nonbreaking space* can save the day. It looks just like a regular space, but it acts as glue that prevents the words on either side from being split apart at the end of a line. For example, adding a nonbreaking space between the words "Farmer" and "Says" in Figure 2-2 ensures that those words won't get split across a line break, and helps clarify the presentation and meaning of this headline.

To insert a nonbreaking space between two words, delete the regular space already between the words (for example, by clicking after the space and pressing the backspace key), and then do one of the following:

- From the Characters menu on the Text tab of the Insert bar, select Non-Breaking Space (the second menu option at top in Figure 2-1).
- Choose Insert → HTML → Special Characters → Non-Breaking Space.
- Press Ctrl+Shift+Space bar (⌘-Shift-Space bar).



Hybrid potato is edible farmer
says.

Hybrid potato is edible
farmer says.

Figure 2-2:
Headlines sometimes split between lines leaving a single word alone on a line (top)–in typography this is known as a "widow." Adding a nonbreaking space (bottom) can prevent widows and clarify a headline's meaning.

Multiple Spaces

You may have noticed that if you type more than one space in a row, Dreamweaver ignores all but the first space. This isn't a glitch in the program; it's standard HTML. Web browsers ignore any spaces following the first one.

Therefore, a line like "Beware   of   llama," with several spaces between each word, would appear on a Web page like this: "Beware of llama." Not only do Web browsers ignore multiple spaces, but they also ignore any spaces that aren't *between* words. So if you hit the Space bar a couple of times to indent the first line of a paragraph, you're wasting your time. A Web browser won't display any of those spaces (Dreamweaver won't display those spaces either).

This feature makes good sense, because it prevents Web pages from being littered with extraneous spaces that many people insert when writing HTML code. (Extra spaces in a page of HTML often make the code easier to read.)

There may be times, however, when you *want* to add more space between words. For example, consider the text navigation bar at the bottom of a Web page, a common Web page element that lists the different sections of a Web site. Visitors can click one of the section titles to jump directly to a different area of the site. For clarity, many designers like to add multiple spaces between the text links, like this:

News   Classifieds   Jobs

Or, you might want to add space at the beginning of the first line of a paragraph to create the kind of indent that's common to paragraphs in some books (but not this one). One simple way to add space is to insert multiple nonbreaking spaces as described on page 68. A Web browser *will* display every nonbreaking space it encounters, so you can add multiple nonbreaking spaces between words, letters, or even at the beginning of paragraphs. There are a few downsides to this technique, though: You have to type a bunch of nonbreaking spaces, which takes work, and adds code to your Web page, making it download a bit slower.

You can enlist *Cascading Style Sheets* (CSS) to add space as well. While you won't get in-depth detail on CSS until Chapter 4, here are a few CSS properties (formatting rules) to tuck in the back of your mind when you need to add space to your text:

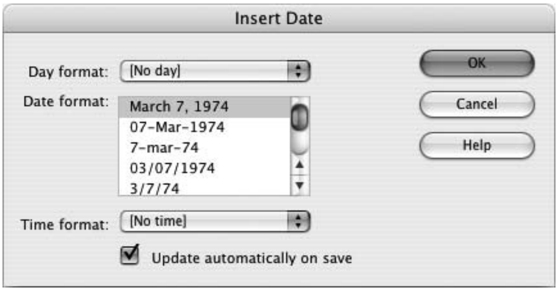
- To indent the first line of a paragraph, use the *text indent* property (page 137).
- To add space between words in a paragraph, use the *word spacing* property (page 136).
- To add space between letters l i k e t h i s, use *letter spacing* (page 136).
- And, if you want to increase the space between text links as in the example above, you can add either left and right *margins* or *padding* to each link (page 322).

Tip: If you often add multiple spaces, Dreamweaver offers a shortcut. Choose Edit → Preferences to open Dreamweaver's Preferences window (on a Mac, choose Dreamweaver → Preferences instead). Click the General category. Then, under "Editing options," turn on "Allow multiple consecutive spaces." Now, whenever you press the Space bar more than once, Dreamweaver inserts *nonbreaking* spaces.

In fact, Dreamweaver is even smarter than that. It inserts a regular space if you press the Space bar just once, a nonbreaking space followed by a regular space if you hit the Space bar twice, and multiple nonbreaking spaces followed by a final *regular* space if you hit the Space bar repeatedly. Since nonbreaking spaces act like glue that keeps words stuck together (see the previous section), the extra regular spaces allow the lines to break normally, if necessary.

Adding a Date to Your Page

The Common tab of the Insert bar offers an icon called Date (it looks like the page of a calendar). Clicking this icon or choosing Insert → Date opens the Insert Date dialog box (Figure 2-3). This dialog box lets you insert today's date, as your computer understands it, onto your Web page in progress. You can also specify whether to include the day of the week and the current time.



Insert Date

Day format: [No day]

Date format: March 7, 1974 / 07-Mar-1974 / 7-mar-74 / 03/07/1974 / 3/7/74

Time format: [No time]

☑ Update automatically on save

Figure 2-3:
When you insert a Date object (a placeholder for the actual date) onto a Web page, you have several additional options: If you want to add the day of the week, choose the format you want from the "Day format" pop-up menu (top). You may also choose to add the current time in hours and minutes–in either military time (22:18) or regular time (10:18 PM)–from the "Time format" pop-up menu (bottom).

Select the format you wish from the Date Format list. There are 13 different formats to choose from, such as March 7, 1974 or 3/7/74.

You may wonder why Dreamweaver includes an insert-date function anyway. How hard is it to type *Thursday, July 12*?

Actually, the real value of the Insert Date feature lies in the "Update automatically on save" checkbox. Choosing this option forces Dreamweaver to *update* the date each time you save the document.

Many designers use this feature to stamp their Web pages with dates that indicate when the contents were last updated. For example, you might type *This page was last revised on*: and then choose Insert → Date and select the "Update automatically on save" option. Now, each time you make a change to the page, Dreamweaver automatically changes the date to reflect when you saved the document. You never again have to worry about it.

Copying and Pasting Text

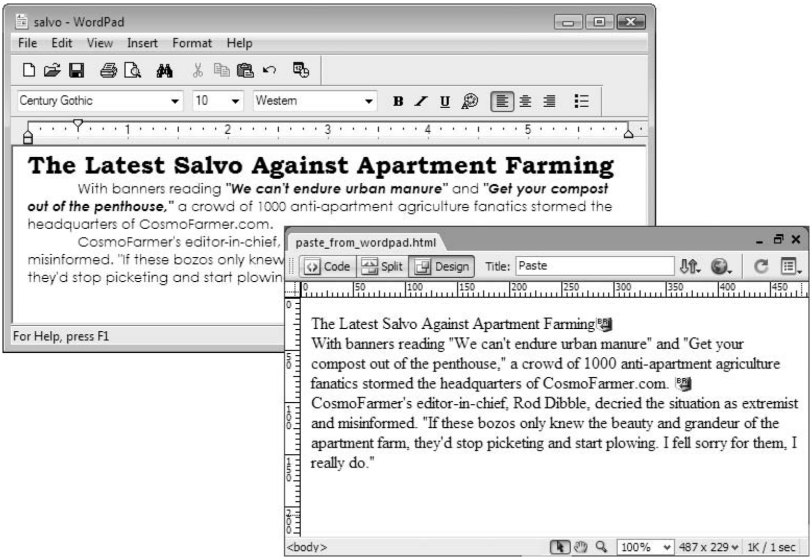
If you're building Web sites as part of a team or for clients, your writers are likely to send you their copy in the form of word processing documents. If the text comes in a Microsoft Word document or Excel spreadsheet, you're lucky. Dreamweaver CS3 includes commands for pasting text from these two types of files. If you're using Windows, you can even import those kinds of files directly into a Web page using File → Import → Word/Excel Document (see page 76).

Simple Copy and Paste

For non–Microsoft-spawned text, you can, of course, still simply copy and paste like generations of Web designers before you.

Open the document in whatever program created it—WordPad, TextEdit, your email program, or whatever. Select the text you want (by dragging through it, for example), or choose Edit → Select All (Ctrl+A [⌘-A]) to highlight all text in the document. Then choose Edit → Copy, or press Ctrl+C (⌘-C), to copy it. Switch to Dreamweaver, click in the document window where you wish the text to go, and then choose Edit → Paste (Ctrl+V [⌘-V]).

This routine pastes the text into place. Unfortunately, you lose all text formatting (font type, size, color, bold, italic, and so on) in the process, as shown in Figure 2-4.



The Latest Salvo Against Apartment Farming

With banners reading "***We can't endure urban manure***" and "***Get your compost out of the penthouse,***" a crowd of 1000 anti-apartment agriculture fanatics stormed the headquarters of CosmoFarmer.com.

CosmoFarmer's editor-in-chief,
misinformed. "If these bozos only knew
they'd stop picketing and start plowin

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Figure 2-4: *Usually when you copy from any program other than a Microsoft Office program (Word, Excel, and so on) as shown at top, and paste into Dreamweaver, as shown at bottom, all formatting is lost, and paragraph breaks are replaced by line breaks. The little icon that appears at the end of the first line at right represents the invisible line break.*

Furthermore, you may find that pasted paragraphs are separated by line break characters, not standard carriage returns. Strangely enough, this means that when you paste in a series of paragraphs, Dreamweaver treats them as though they were one gargantuan paragraph. These line-break characters can pose problems when trying to format what you *think* is a single paragraph. To identify these line breaks, see the note on page 68.

Tip: If you *have* to copy and paste text from other programs, there are two ways to get paragraphs (and not just lines separated by the line-break character) when you paste into Dreamweaver. First, choose Edit → Paste Special, and uncheck the "Retain line breaks" box in the Paste Special window (Figure 2-5). Alternatively, you can just make sure whoever's typing up the original documents inserts an empty paragraph between each paragraph of text. Pressing Enter (or Return) twice at the end of a paragraph inserts an empty paragraph. When you copy and paste, Dreamweaver removes the empty paragraphs *and* pastes the text as regular paragraphs.

Paste Special

Dreamweaver also includes a Paste Special command which supports four different types of paste methods, ranging from plain text to highly formatted HTML. In actual use, however, only the first two are supported for *all* pasting operations. The last two are only available when pasting from Microsoft Word or Excel.

- **Text only.** This option is the most basic of all. Text is pasted without any formatting whatsoever. Even paragraphs and line breaks are ignored, so you end up with essentially one long sentence. Though you won't want this effect often, it can come in handy when you copy a long paragraph of text from an email program that's added unnecessary line breaks at the end of each line of email text.

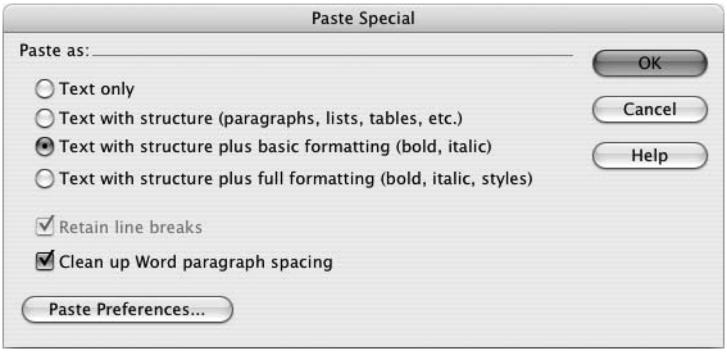
- **Text with structure.** Dreamweaver tries to preserve the structure of the text, including paragraphs, headers, bulleted lists, and so on. This option doesn't keep formatting applied to text, such as bold or italics. Most non–Microsoft Office copied text is pasted using this method. In most cases, however, Dreamweaver ends up preserving only paragraphs and misses bulleted lists and headers.

- **Basic formatting.** When pasting with Basic formatting, Dreamweaver includes the same elements as the "Text with structure" option, but also includes text formatting such as bold, italics, and underlining. This is the method Dreamweaver uses when pasting Microsoft Word or Excel information, as described in the next section.

- **Full formatting.** This option includes everything offered by Basic formatting, but also attempts to paste CSS information that can control the font size and color, paragraph margins, and more. Full formatting is available only when copying and pasting from Word or Excel (see the next section).

Note to Windows Users: You can copy an entire page of HTML from Firefox or Internet Explorer and paste it into Dreamweaver. Click inside a Web page, press Ctrl+A to select the entire page, and then press Ctrl+C to copy the HTML. Then switch to Dreamweaver, click inside an empty page, and press Ctrl+V to paste. All the HTML is copied, and even graphics appear. This text comes in with "full formatting," but note that no style sheets come along for the ride.

You can override Dreamweaver's default behavior and choose a different method for pasting by using the Paste Special command. Choose Edit → Paste Special to open the Paste Special window (see Figure 2-5). Here, you can choose which of the four techniques you wish to use…sort of. You're limited to what Dreamweaver can paste. For non–Microsoft Office products, you can only use the first two options—the others are grayed out—whereas with text copied from Word or Excel, you can choose from any of the four.



Paste Special

Paste as:

○ Text only

○ Text with structure (paragraphs, lists, tables, etc.)

● Text with structure plus basic formatting (bold, italic)

○ Text with structure plus full formatting (bold, italic, styles)

☑ Retain line breaks

☑ Clean up Word paragraph spacing

Figure 2-5:
The Paste Special command lets you paste text copied from other programs. If you want Dreamweaver to apply the same setting each time you use the Paste Special command, click the Paste Preferences button. This opens the Preferences window. Select whatever settings–Basic formatting, for example–that you want Dreamweaver to apply every time you use the Paste Special command.

In general, it's best to use "Text with structure" but turn off the "Retain line breaks" checkbox for text copied from most programs. This maintains paragraph breaks the best and avoids unnecessary line break characters. For Word or Excel information, there are a few options worth considering, as described next.

Pasting Text from Word: The Basic Method

While text from other applications doesn't retain much beyond paragraph formatting when pasted into Dreamweaver, Dreamweaver CS3 includes both basic and advanced methods of copying and pasting Word text.

Frequently, you'll just want to preserve basic formatting like bold or italic text, headlines, and bulleted lists. You won't need (and in most cases, won't want) more extravagant formatting like different fonts, colors, or margin settings. After all, you're the Web designer, and you'll use your own design sense—and Dreamweaver's CSS-based formatting tools—to add beauty to basic text.

Pasting Word text works like any copy/paste action described in the previous section. Just select the text in Word, copy it, switch to Dreamweaver, and then choose Edit → Paste to drop it into a Web page. You don't have to spend a lot of time reformatting the pasted text (see bottom-left image in Figure 2-6), since many basic formatting options are preserved:

- Any paragraphs formatted with Word's built-in Heading styles (Heading 1, Heading 2, and so on) get the HTML heading tags <h1> (or heading 1), <h2>, <title>, and so on.

- Paragraphs remain paragraphs…most of the time. Actually, how Dreamweaver pastes paragraphs depends on both how the paragraphs are formatted in Word and whether the Paste Special window's "Clean up Word paragraph spacing" setting is turned on (see Figure 2-5). If this option is selected (which it is by default), paragraphs you paste from Word appear as one large paragraph with line break characters at the end of each paragraph. Not the best method. To get Dreamweaver to paste each paragraph as a paragraph, choose Edit → Paste Special, turn off the "Clean up Word paragraph spacing" checkbox, and then click OK.

WORKAROUND WORKSHOP

Pasting HTML

Suppose you've copied some HTML code, maybe out of the Source view of an actual Web page in a Web browser, or from a "How to Write HTML" Web site. You'll notice that when you paste it into Dreamweaver, all the HTML tags appear in the document window, complete with brackets (< >) and other assorted messiness.

To get HTML into a page (and make it work like HTML) you have to go into Code view and paste the HTML directly into the page's code. Code view is discussed in depth on page 370.

By the way, you don't have to worry about any of this when copying and pasting *within* Dreamweaver. The regular Copy and Paste commands are smart enough to keep all the formatting–and HTML tags–when copying and pasting within a Dreamweaver document. (If you do want to just paste the text and ignore the Dreamweaver formatting, choose Edit → Paste Special and select the "Text with structure" option [see Figure 2-5].)

Tip: If the Word document you're copying from has an empty line between each paragraph (in other words, an empty paragraph generated by pressing the Enter key twice after each paragraph), then make sure you *do* have the "Clean up Word paragraph spacing" checkbox turned on. This eliminates those empty paragraphs.

- Bold and italic text maintain their look in Dreamweaver. (The actual HTML tags, however, can vary, as described on page 102.)
- Basic alignment options (left, right, and center) remain intact. Justified text, on the other hand, gets pasted as left-aligned text. (You can compensate for this small oversight by using the justified alignment option on the Property inspector, described on page 90.
- Numbered lists come through as numbered lists in Dreamweaver (see page 92) *if* you used Word's automatic numbered-list feature to create them.
- If you use Word's built-in list-bulleting feature, you end up with a proper HTML bulleted list (see page 92). If you create your own bulleted list style in Word, make sure to select the "list" type when creating the style; otherwise, copying and pasting a custom bulleted list might just paste plain paragraphs of text, not a bulleted list.

- Graphics from Word documents get pasted as graphics. In fact, even if the original graphics aren't in a Web-ready format (if they're BMP, TIFF, or PICT files, for example), Dreamweaver converts them to either the GIF or JPEG formats understood by Web browsers. Dreamweaver even copies the files to your local site root *and* links them correctly to the page. (Chapter 6 covers images in depth.)

Note: There are a couple of caveats when pasting from Word. First, you can't copy and paste more than 300 KB worth of text, so you have to transfer really long documents in pieces (or better yet, spread them out among multiple Web pages). And second, this feature works only with versions of Word later than Office 97 (for Windows) or Office 98 (for Mac).

Pasting Text with Word Formatting

If you simply must keep that three-inch-tall, crazy-cartoon-like orange font, you can turn to the Full Formatting option of the Paste Special command. After copying text from Word and returning to Dreamweaver, choose Edit → Paste Special or press Ctrl+Shift+V (⌘-Shift-V). When the Paste Special window appears, choose the "Full Formatting" option and then click OK. (If you want this to be the default setting, so that you always paste the full formatting from Word, turn on the "Use these settings…" checkbox *before* clicking OK in the Paste Special window.)

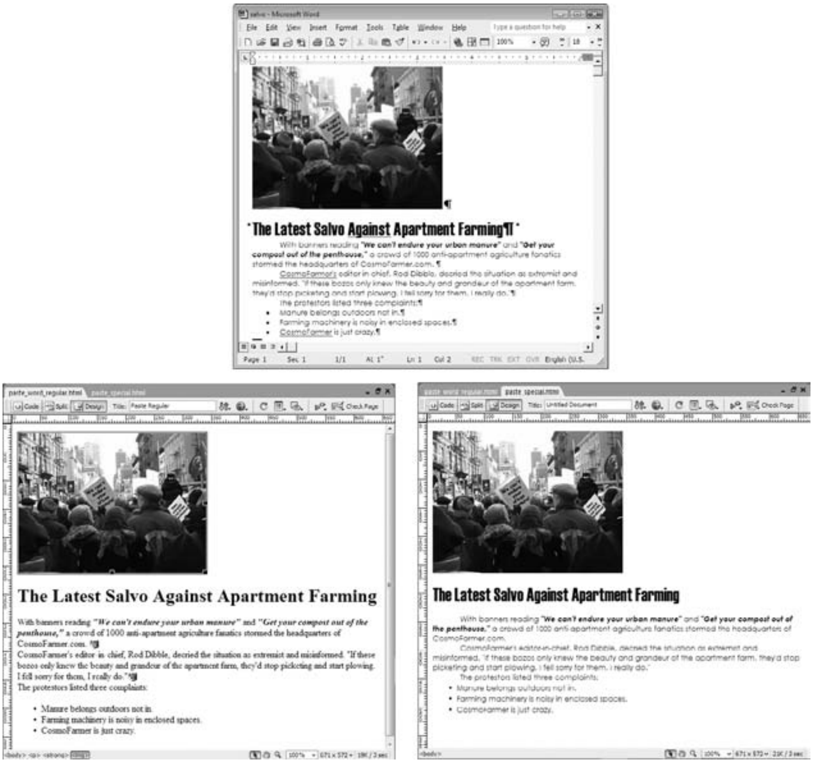
Dreamweaver pastes the text with as much formatting as possible, including margins, fonts, and text colors and sizes (see bottom-right image in Figure 2-6). Behind the scenes, Dreamweaver pastes the text *and* adds Cascading Style Sheet code that attempts to approximate the look of the text in Word.

Unfortunately, all this extra code increases the document's file size and download time and can interfere with future formatting changes. What's worse, most of your visitors won't even be able to *see* some of this formatting—such as uncommon fonts. For these reasons, use this feature with caution.

Pasting Excel Spreadsheet Information

Dreamweaver CS3 also lets you paste information from Microsoft Excel. Options include a basic method—using the standard Ctrl+V (⌘-V) or Edit → Paste—and a format-rich method, using the Full Formatting option of the Paste Special window: choose Edit → Paste Special (or press Ctrl+Shift+V [⌘-Shift-V]), choose Full Formatting from the Paste Special window, and then click OK. Both methods paste spreadsheet information as an HTML table composed of cells, rows, and columns. (See Chapter 7 for more on tables.)

But unlike pasting from Word, the basic Paste command from Excel preserves *no* formatting: it doesn't even hang on to bold and italics. The Full Formatting option, however, preserves advanced formatting like fonts, font sizes, text colors, and cell background colors.



The Latest Salvo Against Apartment Farming¶

With banners reading **"We can't endure your urban manure"** and **"Get your compost out of the penthouse,"** a crowd of 1000 anti-apartment agriculture fanatics stormed the headquarters of CosmoFarmer.com. ¶

CosmoFarmer's editor in chief, Rod Dibble, decried the situation as extremist and misinformed. "If these bozos only knew the beauty and grandeur of the apartment farm, they'd stop picketing and start plowing. I fell sorry for them. I really do."¶

The protestors listed three complaints:¶

- Manure belongs outdoors not in.¶
- Farming machinery is noisy in enclosed spaces.¶
- CosmoFarmer is just crazy.¶

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- Farming machinery is noisy in enclosed spaces.
- CosmoFarmer is just crazy.

The Latest Salvo Against Apartment Farming

With banners reading **"We can't endure your urban manure"** and **"Get your compost out of the penthouse,"** a crowd of 1000 anti-apartment agriculture fanatics stormed the headquarters of CosmoFarmer.com.

CosmoFarmer's editor-in-chief, Rod Dibble, decried the situation as extremist and misinformed. "If these bozos only knew the beauty and grandeur of the apartment farm, they'd stop picketing and start plowing. I fell sorry for them. I really do."

The protestors listed three complaints:

- Manure belongs outdoors not in.
- Farming machinery is noisy in enclosed spaces.
- CosmoFarmer is just crazy.

Figure 2-6:
Dreamweaver CS3 lets you paste Word text (and graphics)–like the contents of the Word file (top)–into a Web page, while preserving basic formatting options like headlines, italics, paragraphs, and bold (bottom left). The Paste Special command lets you preserve more advanced formatting such as fonts, colors, sizes, and margins (bottom right). But this special treatment comes at a price: the file size of the page on the bottom right is about 10 percent larger than the one on the bottom left.

Importing Word and Excel Documents (Windows)

Windows fans can also import material directly from a Word or Excel file into any Dreamweaver document. Just place the cursor where you wish to insert the text or spreadsheet, and then choose File → Import → Word Document (or Excel Document). An Open File dialog box appears; find and double-click the Word or Excel document you wish to import.

Dreamweaver captures the information just as if you'd used Edit → Paste. That is, for Word documents, Dreamweaver carries over basic formatting like bold, italics, headlines, and paragraphs, and imports and converts images. The importing process doesn't create style sheets or apply advanced formatting. For Excel documents, you get just an organized table of data—no formatting.

Selecting Text

After you get text into your Dreamweaver document, you'll undoubtedly need to edit it. You'll delete words and paragraphs, move sentences around, add words, and fix typos.

POWER USERS' CLINIC

Decoding Encoding

In some cases, when you copy a symbol like © from Word and then paste it into Dreamweaver, you'll see *&copy;* in the HTML. Other times you'll see the actual symbol (©). What you get in the HTML depends on the type of *encoding* used on your Web page. Dreamweaver CS3 uses a different method than previous versions of the program. If you don't work with languages other than English, encoding isn't much of an issue; you can work happily without ever worrying about how Dreamweaver encodes HTML for a Web page. But if you commonly need to type characters that don't appear on the standard English keyboard, such as Chinese, Kanji, or simply the accented letters of French or Spanish, Dreamweaver's new encoding method is helpful.

Computers don't think in terms of letters or any of the other symbols we humans normally use to communicate with each other. Computers think in terms of bits and bytes. Every letter or symbol displayed on a Web page is represented by a numeric code. The process of converting a symbol to the proper code is called *encoding.* But since the world is filled with many different symbols—Latin, Chinese, Kanji, Arabic, Cyrillic, Hebrew, and so on—there are many different *encoding schemes* used to accommodate all the different alphabets of the world. Versions of Dreamweaver prior to CS3 used Western Latin encoding, which handles most of the characters used in English and Western European languages. But it doesn't handle all symbols. That's why when you copy a © symbol from Word and paste it into a Web page with Western Latin encoding, you end up with *&copy;* in your HTML instead of the copyright symbol. *&copy;* is called an *entity,* and Web browsers know that when they see that they should display a true copyright symbol.

Dreamweaver CS3 now uses a newer type of encoding when creating a Web page—Unicode. Unicode (which Dreamweaver refers to as *Unicode 4.0 (UTF-8),* or *UTF-8 for short)* accommodates many of the alphabets of the world, so you can mix Kanji with Cyrillic with English on a single Web page, and all of those alphabets will display fine in a Web browser. A page that's encoded with Unicode will also produce slightly different HTML when pasting symbols from other programs. Instead of using entities in the page like *&#8221;* for a curly right quotation mark, you'll see the actual character (") in the HTML of the page. This generally makes HTML much easier to read. However, if you've previously built a site using a different encoding like Japanese (Shift JIS)—yes, that's the actual format name—you may want to stick to that method.

You probably won't ever need to change Dreamweaver's encoding scheme, but if you're updating a site and wish to updgrade to the new Unicode encoding (maybe so you can type © instead of *&copy;* in your HTML) just choose Modify → Page Properties, click the Title/Encoding category, and then select a method from the encoding menu. If you want to change the default encoding for all new documents (for example, if you absolutely must stick with the Shift JIS encoding to match the encoding method of other pages on your site) choose Edit → Preferences (Dreamweaver → Preferences on a Mac), click the New Document category, and then select an option from the Default Encoding menu. Note that if, later on, you switch back to Unicode 4.0 (UTF-8), make sure you select "C (Canonical Decomposition)" from the "Normalization" field, and leave the "Include Unicode Signature" checkbox *turned off* (otherwise the page may not display correctly in current browsers).

Finally, if you use the Insert Special Character menu (page 66), Dreamweaver will always insert an HTML entity (*&reg;*, for example) instead of the actual symbol (™), even when working with a UTF-8 page.

The first step in any of these procedures is learning how to select text, which works much as it does in word processors. You drag across text to highlight it, or just click where you wish the selection to begin and hold down the Shift key as you click at the end of the selection. You can also use shortcuts like these:

- To select a word, double-click it.
- To select a paragraph, triple-click anywhere in it.
- To select a line of text, move your cursor to the left of the line of text until the cursor changes from an I-beam to an arrow, signaling that you've reached the left-margin selection strip. Click once to highlight one line of text, or drag vertically in this selection strip to select multiple lines.
- While pressing Shift, use the left and right arrow keys to select one letter at a time. Use Ctrl+Shift (⌘-Shift) and the left and right arrow keys to select one *word* at a time.
- Ctrl+A (⌘-A) selects everything in the body of the page—text, graphics, and all. (Well, this isn't 100 percent true: If you're using tables or <div> tags (page 313) to organize a page, Ctrl+A may select just the text within a table or <div> tag; clicking the <body> tag in the Tag selector [page 22] is a more sure-fire method of selecting everything on a page.)

Once you've selected text, you can cut, copy, or delete it. To move text to another part of the Web page, or even to another Dreamweaver document, use the Cut, Copy, and Paste commands in the Edit menu. You can also move text around by dragging and dropping it, as shown in Figure 2-7.

Once copied, the text remains on your Clipboard and can be placed again and again (until you copy something else to the Clipboard, of course). When you cut (or copy) and paste *within* Dreamweaver, all the code affecting that text comes along for the ride. If you copy a paragraph that includes bold text, for example, you'll copy the HTML tags both for creating a paragraph and for producing bold text.

GEM IN THE ROUGH

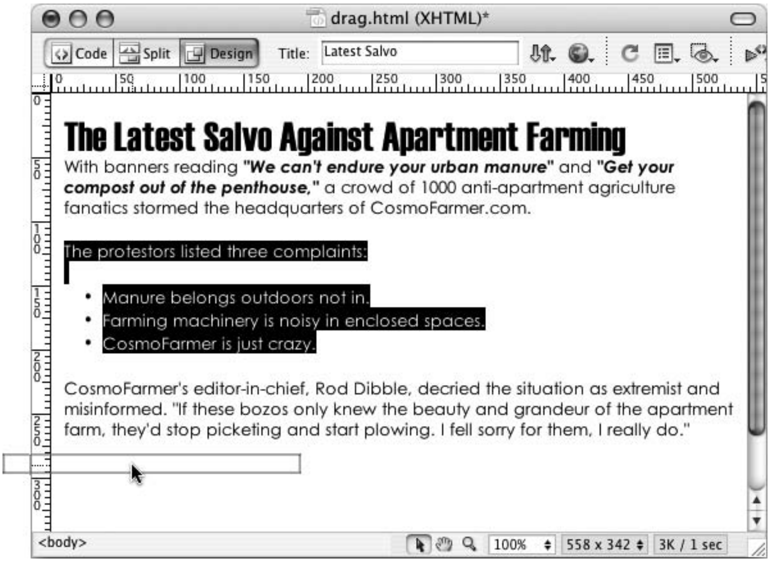
Clean Up Word

From Word, you can save any document as a Web page, essentially turning a Word doc into HTML. The drawback to this method is that Word produces hideous HTML code. One look at it, and you'd think that your cat fell asleep on the keyboard.

The explanation: So you will be able to reopen the document as a Word file when the time comes, Word injects reams of information that adds to the file size of the page. This is a particular problem with the latest versions of Word, which add loads of XML and Cascading Style Sheet information.

Fortunately, Dreamweaver's Clean Up Word HTML command can strip out most of that unnecessary code and produce leaner Web pages. To use it, open the Word HTML file just as you would any other Web page, by choosing File → Open. Once the file is open, choose Commands → Clean Up Word HTML.

The Clean Up Word HTML dialog box opens; Dreamweaver automatically detects whether the HTML was produced by Word 97/98 or a later version of Word, and then applies the appropriate rules for cleaning up the HTML.



The Latest Salvo Against Apartment Farming

With banners reading ***"We can't endure your urban manure"*** and ***"Get your compost out of the penthouse,"*** a crowd of 1000 anti-apartment agriculture fanatics stormed the headquarters of CosmoFarmer.com.

The protestors listed three complaints:

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- Farming machinery is noisy in enclosed spaces.
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Figure 2-7:
You can move a blob of selected text simply by dragging it to another location in the document window. Point to a spot inside your highlighted selection and the cursor changes from an I-beam to an arrow; you can now drag the selection. Let go of the mouse button to drop your selection at the spot indicated by the horizontal bar, as shown here. This technique works with graphics and other objects you've selected in the document window, too. You can even move a copy of the selection by pressing Ctrl (Option on a Mac) as you drag and drop.

Note: Not *all* the formatting necessarily comes along for the ride. With Dreamweaver CS3's support for Cascading Style Sheets, most of your text formatting includes some CSS formatting, and, unfortunately, cutting and pasting text from one document to another does *not* also copy the CSS code. So on some occasions, you may copy text from one document, paste it into another, and find that the formatting disappears. See the Note on page 125 for details on this.

To delete any selection, press Delete or choose Edit → Clear.

Spell Checking

You spend a lot of time perfecting your Web pages, making sure the images look great, that the text is properly formatted, and that everything aligns to make a beautiful visual presentation. But one step is often forgotten, especially given the hyperspeed development process of the Web—making sure your Web pages are free from typos.

Spelling mistakes give an unprofessional impression and imply a lack of attention to detail. Who wants to hire an "illustraightor" or "Web dezyner"? Dreamweaver's spell checking feature can help you.

About Dictionaries

Before you start spell checking, you should make sure that the correct *dictionary* is selected. Dreamweaver comes with 15 dictionaries for 12 different languages, including three English variations and both Iberian and Brazilian Portuguese. When it checks your spelling, the program compares the text in your document against the list of words in one of these dictionaries.

To specify a dictionary, choose Edit → Preferences (Dreamweaver → Preferences in Mac OS X)—or press Ctrl+U (⌘-U)—to open the Preferences dialog box. Select the General category, and then choose a language from the Spelling Dictionary pop-up menu at the bottom of the window.

Performing the Check

Once you've selected a dictionary, open the Web page whose spelling you wish to check. You can check as much or as little text as you like, as follows:

1. **Highlight the text (which can be even a single word).**

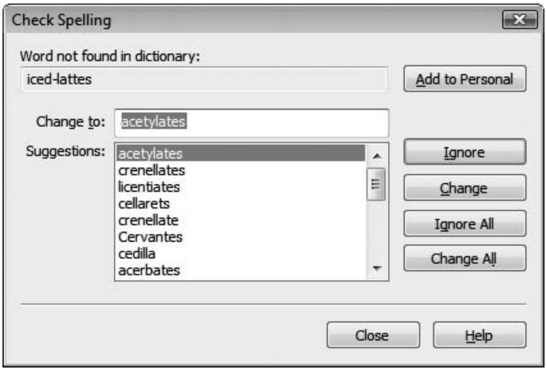
   If you want to check the *entire* document, make sure that nothing is selected in the document window. (One good way to make sure nothing is selected is to click in the middle of a paragraph of text.) Like spell checkers in other programs, you must place the cursor at the beginning of the document to begin spell checking from the top of the page.

Note: Unfortunately, Dreamweaver doesn't offer a site-wide spell-checking feature. You must check each page individually.

2. **Choose Text → Check Spelling (or press Shift+F7).**

   The Check Spelling dialog box opens (see Figure 2-8). If the selected word isn't in Dreamweaver's dictionary, it appears in the top field of the box, along with a list of suggested alternative spellings.

   The first suggestion is listed in the "Change to" field.



Check Spelling

Word not found in dictionary: iced-lattes

Change to: acetylates

Suggestions: acetylates, crenellates, licentiates, cellarets, crenellate, Cervantes, cedilla, acerbates

Figure 2-8:
Dreamweaver's spell-checking feature checks only words in the document window. It can't check the spelling of comments, alt tags, or any text that appears in the head of the document with the exception of the page's title. Nor can you spell check an entire Web site's worth of pages with a single command; you need to check each Web page individually.

3. **If the "Change to" field is correct, click Change.**

   If Dreamweaver has correctly flagged the word as misspelled but the correct spelling isn't in the "Change to" field, double-click the correct spelling in the list. If the correct spelling isn't in the list, type it yourself in the "Change to" box.

Then click the Change button to correct this one instance, or click Change All to replace the misspelled word everywhere it appears in the document.

Dreamweaver makes the change and moves on to the next questionable spelling.

4. **If the word is actually correctly spelled (but not in Dreamweaver's dictionary), click Ignore, Ignore All, or "Add to Personal".**

   If you want Dreamweaver to ignore this word *every* time it appears in the document, rather than just this instance of it, click Ignore All.

   On the other hand, you'll probably use some words that Dreamweaver doesn't have in its dictionaries. You may, for instance, use a client's name throughout your Web pages. If that name isn't in Dreamweaver's dictionary, Dreamweaver will consistently claim that it's a spelling error.

   To teach Dreamweaver the client's name so that the Check Spelling dialog box won't pop up each time you spell check, click "Add to Personal". Dreamweaver will add the word to your personal dictionary, which is a special dictionary file that Dreamweaver also consults when checking your spelling.

   After you click Ignore or Change, Dreamweaver moves on to the next word it doesn't recognize. Begin again from step 3. If you didn't begin the spell check at the beginning of the document, once Dreamweaver reaches the end of the document, it will ask if you wish to continue spell checking from the beginning.

5. **To end spell checking, click Close.**

Undo, Redo, and the History Panel

One of the great consciousness-altering moments of the 20th century was the introduction of the Undo command. After a long day in front of the computer, the ability to undo any action seems quite natural. (Unfortunately, reaching for the Ctrl+Z keys after spilling grape juice on Grandma's antique tablecloth still doesn't work in the real world.)

Fortunately, most steps you take in Dreamweaver can be reversed with either the Undo command or the History panel.

Undo

Like most computer programs these days, Dreamweaver lets you undo the last step you took by pressing Ctrl+Z (⌘-Z), or by choosing Edit → Undo. (This command changes to reflect your most recent action. If you just deleted some text, for example, it says Edit → Undo Delete.) When you're feeling indecisive, you can *redo* the action you just undid by choosing Edit → Redo or by pressing Ctrl+Y (⌘-Y).

You're not limited to a single undo, either. You can undo multiple steps—up to 50 of them, or whatever number you specify in Preferences. Choose Edit → Preferences (on the Mac, it's Dreamweaver → Preferences) to open this dialog box, click

FREQUENTLY ASKED QUESTION

Editing Your Personal Dictionary

Oops! I added a word to my personal dictionary by accident! How do I undo that?

If you click "Add to Personal" accidentally, you'll probably want to fix your mistake–but there's no obvious way to remove words from your Personal dictionary!

Your personal dictionary is a file called Personal Dictionary MX.tlx. For Windows XP, you'll find this file in your application-data folder, usually on the C: drive under Documents and Settings → [your name] → Application Data → Adobe → Common. (Note: The Application Data folder is usually hidden in Windows. If you don't see it, you need to use Folder Options–located in the Control Panel–to reveal hidden folders and files.) Vista users will find the file in C: → [your name] → AppData → Adobe → Roaming → Common (as with Windows XP, the AppData folder is usually hidden, so you need to show all files by going to the Appearance & Personalization section of the Control Panel to make it appear). If you use a Mac, look inside your Home → Library → Application Support → Adobe → Common folder.

Make a backup copy of this file, just in case. Then, open it in Dreamweaver by choosing File → Open and navigating to the .tlx file. Although the file is a text file, the .tlx extension isn't a recognized document type in Dreamweaver. You'll need to select "All files" (NOT "All Documents") from the "Files Of Type" menu (Windows) or Enable pop-up menu (Mac) before you can open the personal dictionary.

Don't touch the first line of the file, which indicates what language the dictionary uses. Each line thereafter lists a word followed by a tab and the letter *i*.

To delete an entry, delete its entire line. You can also add a word by manually typing the word, a tab, and the letter *i*. (Dreamweaver's spell checking engine uses that little *i* for its own purposes.)

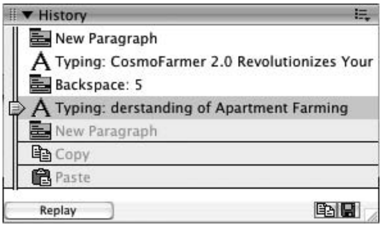
the General category from the Category list, and change the number in the "Maximum Number of History Steps" box. (Note, however, that the more steps Dreamweaver remembers, the more memory the program needs. If you set this number very high or your computer doesn't have a lot of memory, you may find your computer acting sluggish.)

Tip: You can even undo actions *after you have saved* a document (although not after you've closed it). Unlike many programs, Dreamweaver doesn't erase the list of actions you've performed when a page is saved. This means you can feel free to save as often as you want–a wise safeguard against crashes and other mishaps–without losing the ability to undo what you've done.

History Panel

You may wonder why the Preferences setting for the Undo command refers to "History Steps." It's because Dreamweaver creates a *history* for a document as you work on it. Each time you add text, insert a graphic, change the background color of the page, or do anything else to a document, Dreamweaver adds a new step to a list of previous actions.

All of these steps are listed in the History panel (see Figure 2-9). To see it, choose Window → History.



History
New Paragraph
Typing: CosmoFarmer 2.0 Revolutionizes Your
Backspace: 5
Typing: derstanding of Apartment Farming
New Paragraph
Copy
Paste
Replay

Figure 2-9:
The History panel can do a lot more than undo actions. It can also be used for automating many routine tasks that you perform while building your Web pages. To find out how to use this feature, see Chapter 20.

Each row in the panel represents one action or step, and includes a description. For instance, hitting Return or Enter while typing in the document creates a step called New Paragraph. Steps are listed in the order you perform your actions, with the most recent actions at the bottom and earliest action at the top of the list.

But the History panel isn't just a dull document to pore over—it's a living, multiple-step Undo command. Use the History slider on the left-hand side of the History panel to move to any step in the history list. To undo one action, for example, drag the slider up one step. When you do this, you'll notice that the slider's former position step is grayed out. Steps that are dimmed represent future steps, so moving the slider down one step is the equivalent of choosing Edit → Redo.

You can undo or redo multiple steps by moving the slider up or down the list. Alternatively, you can click the track to the left of a step to move the slider to that step.

If you want to eliminate all the history steps for a document—to free up some of your computer's memory, for example—select Clear History from the History panel's context menu. But be careful: this is the one action you can't undo.

CHAPTER

3

Text Formatting

Getting text onto a Web page (Chapter 2) is a good start, but effective communication requires effective design, too. Large, bold headlines help readers scan a page's important topics. Colorful text focuses attention. Bulleted sentences crystallize and summarize ideas. Just as a monotonous, low-key voice puts a crowd to sleep, a vast desert of plain HTML text is sure to turn visitors away from the important message of your site. In fact, text formatting could be the key to making your *Widgets Online 2007 Sale-a-thon* a resounding success instead of an unnoticed disaster.

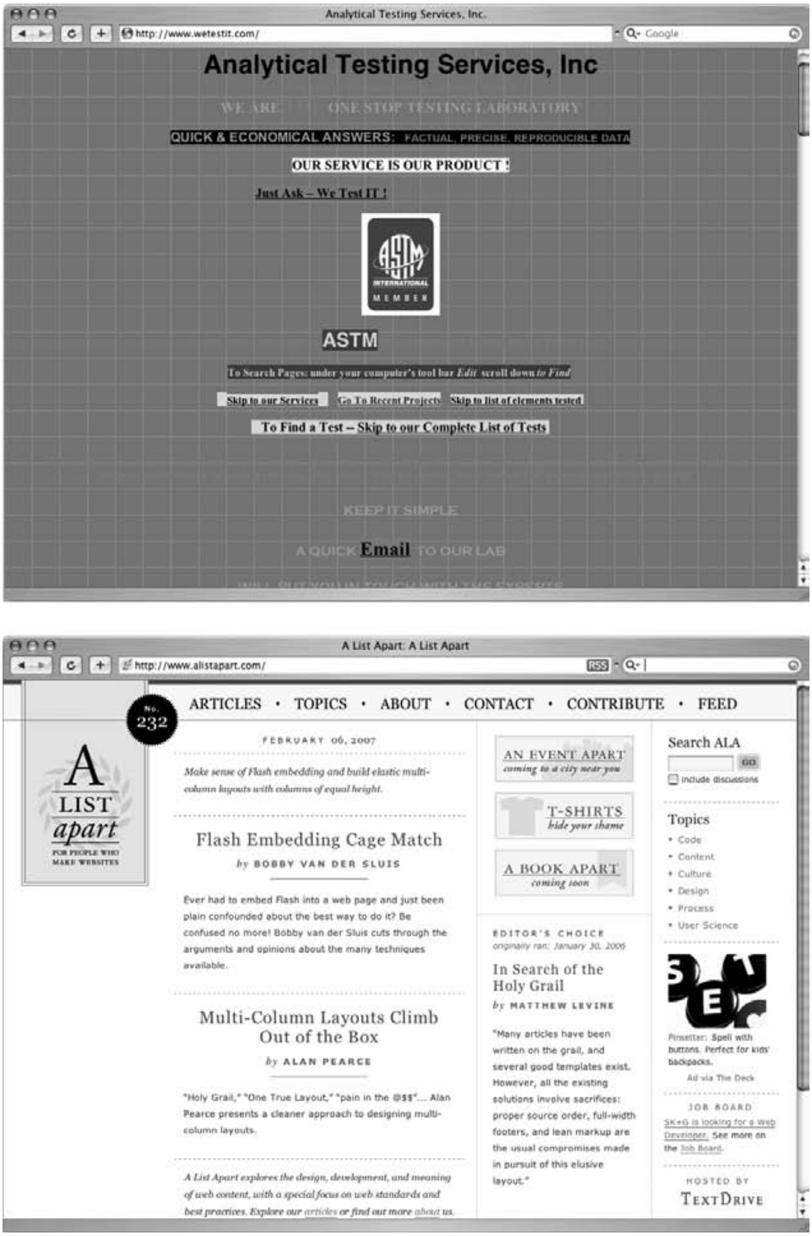
To help you get your point across, Dreamweaver provides the tools you need to format your text in compelling and eye-catching ways. Figure 3-1 shows two model examples of good—and bad—text formatting.

Paragraph Formatting

Just as you use paragraphs to help organize your thoughts into clear, well-structured, and cohesive units when you're writing a paper or letter, you organize content on Web pages into blocks of information within HTML tags (see page 7 for more on tags). The most basic block of information is a simple paragraph, indicated in HTML by a paragraph tag, like this:

```
<p>Hello. This is one paragraph on this Web page. </p>
```

To a Web browser, everything between the opening <p> and closing </p> tags is considered part of the same paragraph. Many Dreamweaver formatting options—headlines, lists, indents, and alignment, for example—can apply only to an entire paragraph at a time, as opposed to individual words. In a word processor, you'd



Analytical Testing Services, Inc.
http://www.wetestit.com/
Google
Analytical Testing Services, Inc
WE ARE ONE STOP TESTING LABORATORY
QUICK & ECONOMICAL ANSWERS: FACTUAL, PRECISE, REPRODUCIBLE DATA
OUR SERVICE IS OUR PRODUCT !
Just Ask – We Test IT !
ASTM INTERNATIONAL MEMBER
ASTM
To Search Pages: under your computer's tool bar Edit scroll down to Find
Skip to our Services
Go To Recent Projects
Skip to list of elements tested
To Find a Test – Skip to our Complete List of Tests
KEEP IT SIMPLE
A QUICK Email TO OUR LAB
A List Apart: A List Apart
http://www.alistapart.com/
RSS
ARTICLES • TOPICS • ABOUT • CONTACT • CONTRIBUTE • FEED
No. 232
A LIST apart
FOR PEOPLE WHO MAKE WEBSITES
FEBRUARY 06, 2007
AN EVENT APART coming to a city near you
T-SHIRTS hide your shame
A BOOK APART coming soon
Search ALA
GO
□ include discussions
Topics
• Code
• Content
• Culture
• Design
• Process
• User Science
EDITOR'S CHOICE
originally ran: January 30, 2006
Ad via The Deck
JOB BOARD
HOSTED BY
TEXTDRIVE

Make sense of Flash embedding and build elastic multi-column layouts with columns of equal height.

Flash Embedding Cage Match

by BOBBY VAN DER SLUIS

Ever had to embed Flash into a web page and just been plain confounded about the best way to do it? Be confused no more! Bobby van der Sluis cuts through the arguments and opinions about the many techniques available.

Multi-Column Layouts Climb Out of the Box

by ALAN PEARCE

"Holy Grail," "One True Layout," "pain in the @$$"... Alan Pearce presents a cleaner approach to designing multi-column layouts.

A List Apart explores the design, development, and meaning of web content, with a special focus on web standards and best practices. Explore our articles or find out more about us.

In Search of the Holy Grail

by MATTHEW LEVINE

"Many articles have been written on the grail, and several good templates exist. However, all the existing solutions involve sacrifices: proper source order, full-width footers, and lean markup are the usual compromises made in pursuit of this elusive layout."

Pinsetter: Spell with buttons. Perfect for kids' backpacks.

SK+G is looking for a Web Developer. See more on the Job Board.

Figure 3-1:
Both these pages use different fonts, colors, and sizes to display text, but the one at bottom uses a consistent arrangement of styles to organize the text and guide the reader through the page. Notice how article titles such as "Flash Embedding Cage Match," with its larger type, draws your eye to it immediately. The author names are all given the same design treatment–uppercase, bold, and small type–creating a consistent look that makes them easy to identify. In the page at top, by contrast, while the name of the Web site is big and bold, the other text on the page shares similar font sizes and types, making it difficult to focus your attention on any one area of the page.

call this kind of formatting *paragraph* formatting; in Web design, it's called *block-level* formatting. Either way the idea is exactly the same: the formatting you apply affects an entire paragraph (that is, a *block* of text, whether that's just one sentence or several sentences) at a time. (*Character-level* formatting, on the other hand, can be applied to individual words or even letters. Bold and italic fall into this category, as described later in this chapter.)

Paragraphs

When you create a new document in Dreamweaver and start typing, the text you type has no paragraph formatting at all, as indicated by the word None in the Format menu at the left side of the Property inspector. (*None* isn't an HTML tag; it just means that your text isn't surrounded by *any* of the paragraph tags used in this menu—<p>, <h1>, and so on.)

When you press Enter or Return, you create a new paragraph, complete with opening and closing <p> tags, as shown earlier, but your newly born paragraph still has no design applied to it. When your Web site visitors look at it, the font and size of your type are determined by their own Web browser preference settings. It may not look anything like the typography you saw in Dreamweaver.

UP TO SPEED

Separating Structure from Presentation

Formatting isn't just about good looks or fancy design. Many formatting options also give structure to a Web page, providing valuable insight into the organization of content on a page.

For example, the Heading 1 (<h1>) tag indicates a headline of the highest level and, therefore, greatest importance; the smaller Heading 2 (<h2>) tag represents a headline of slightly lower importance: a subhead. You'll see this kind of structure in this book. Each section begins with a headline ("Paragraph Formatting," on page 85, for example), and includes subheads that further divide the content into logical blocks of information.

Structure is more about organizing content than making it look pretty. Whether or not the headlines in this book used different colors and fonts, the fundamental organization–chapter title, main headlines, subheads, bulleted lists, numbered step-by-step instructions, and paragraphs of information–would remain the same.

HTML is actually intended to provide structure to a document, rather than making it look good. In fact, for some types of visitors (people who can't see, computer spiders that crawl Web sites for information, search engines, or text-only browsers, for example), how a Web page looks–its presentation–is irrelevant. What matters are the cues that let the visitor know what the content means.

For a while, HTML did double duty, giving structure through tags like <h1>, <ul> (for bulleted lists), and <p> (for a paragraph of information), and providing visual design with tags like <font> (for setting font types, colors, and sizes).

Today, however, the World Wide Web Consortium (W3C, the main organization for determining the current and future standards for the Web), as well as most professional Web designers, consider this approach outmoded. The W3C has officially *deprecated* HTML tags that add design to a page, like the <font> tag, which means that future versions of HTML (and possibly future versions of Web browsers) won't recognize them.

Dreamweaver CS3 takes the same approach. The program comes with old-style, design-oriented HTML tags turned off. (To turn them back on, see the Note on page 40) Instead, to provide visual design to a page, you should use Cascading Style Sheets, just as professional designers do.

CSS provides much more advanced and beautiful design possibilities than HTML ever did. In other words, let HTML provide the structure; let CSS create the presentation. HTML gives order, while CSS makes everything look good

Chapter 4 introduces CSS, and Chapter 8 covers it in depth. In addition, throughout the book, you'll find notes that indicate when you can use CSS instead of HTML to better achieve your design goals.

You can add the Paragraph format to any block of text. Since this formatting option affects all of the text in the block, you don't need to select any text as a first step. Simply click anywhere inside the block of text and do one of the following:

- In the Property inspector (Figure 3-2), choose Paragraph from the Format menu.
- Choose Text → Paragraph Format → Paragraph.
- Press Ctrl+Shift+P (⌘-Shift-P).

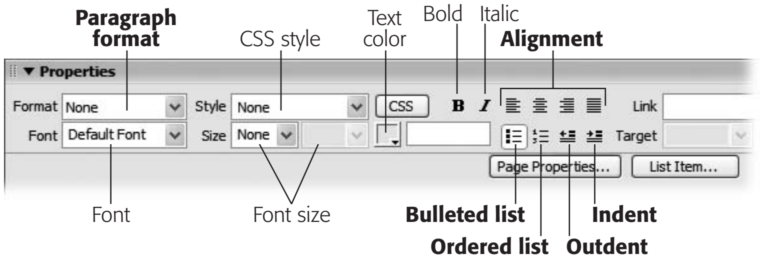


Figure 3-2: *The formatting choices labeled here in bold apply to an entire paragraph. The other options represent inline, or character-level, formatting options; they apply only to the currently selected text.*

Note: Much to the chagrin of Web designers, Web browsers display a line's worth of blank space before and after block-level elements like headings and paragraphs. This visual gap is distracting, but unfortunately, you can't get rid of it with regular HTML.

However, many of the formatting limitations of HTML, including this one, go away when you use Cascading Style Sheets. See page 135 to fix this problem.

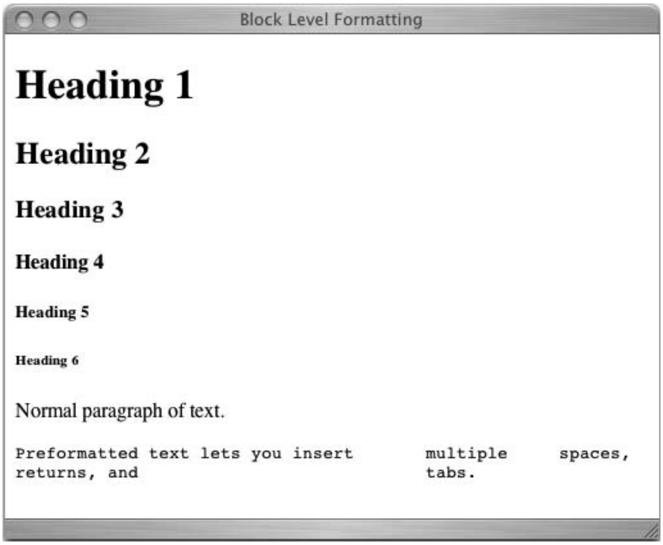
Headlines

Headlines announce information ("The Vote Is In!") and help organize content. Just as this book uses different levels of headings to introduce its topics—from chapter titles all the way down to subsections—the HTML heading tag comes in a variety of sizes used to indicate importance.

Headlines range in size from 1 (most important) to 6 (least important), as shown in Figure 3-3. They provide organization to a document, much like an outline has headings, subheads, and sub-subheads.

To turn a paragraph into a headline, click anywhere inside the line, or block, of text and then do one of the following:

- In the Property inspector, select one of the heading levels (Heading 1 through Heading 6) from the Format menu.
- Choose Text → Paragraph Format → Heading 1 (or Heading 2, Heading 3, and so on).
- Press Ctrl+1 (⌘-1), for the Heading 1 style, Ctrl+2 (⌘-2) for Heading 2, and so on.



Heading 1

Heading 2

Heading 3

Heading 4

Heading 5

Heading 6

Normal paragraph of text.

```
Preformatted text lets you insert       multiple      spaces,
returns, and                             tabs.
```

Figure 3-3:
You can apply any of eight basic paragraph formats to a block of text: Headings 1 through 6, Paragraph, and Preformatted. If you don't add any special modifications to the individual paragraph formats, they vary in size, font, and boldness, as you can see here.

Preformatted Text

Web browsers normally ignore extra spaces, tabs, and other blank space characters in the underlying HTML when displaying a Web page. However, using the Preformatted paragraph format, you can override this behavior. Preformatted paragraphs display *every* text character in a paragraph, including tabs, multiple spaces, and line breaks, so you don't have to resort to multiple nonbreaking space characters (see page 68) to insert more than one space in a row.

The original idea behind the Preformatted format was to display tabular data—as in a spreadsheet—without the use of tables. That's why preformatted paragraphs show up in a *monospaced* font like Courier. In monospaced fonts, each letter of the alphabet, from i to w, is the same width and takes up the same horizontal space on a page, making it easy to align letters in columns. That's also why, when you use this paragraph style, you can use tabs to align text in columns. (When you use any other paragraph format, Web browsers ignore tabs.) These days, however, Dreamweaver's table feature is a much more superior method of creating columns; see Chapter 7.

Nonetheless, the Preformatted format can still be useful—when displaying sample HTML or programming code, for example. You can add the Preformatted format to any block of text. Simply click inside the block of text and then take one of these two steps:

- In the Property inspector, choose Format → Preformatted.
- Choose Text → Paragraph Format → Preformatted Text.

Keep in mind that preformatted text appears exactly as you enter it. Unlike normal paragraph text, lines of preformatted text don't automatically wrap if they're wider than the window. That means if you present your site visitors with a really long line of preformatted text, they'll have to scroll horizontally to see all of it. To end a line of preformatted text and create another, you must press the Enter or Return key to create a manual line break.

Paragraph Alignment

All text in a Web page starts out aligned with the left edge of the page (or, in the case of tables, to the left edge of a table cell). But there are times when you may want to center text in the middle of the page—perhaps an elegantly centered title—or align it to the right side. You can even create nice straight margins on both sides of a paragraph using the justification option.

Tip: Although justified text looks elegant in a book, the limited resolution of computer monitors can make small type that's justified difficult to read.

While there are many ways to align text in Dreamweaver, the Property inspector's word processor–like controls make this a snap (or, rather, a click). To change a paragraph's alignment, click inside a paragraph and do one of the following:

- In the Property inspector, click one of the alignment icons in the upper-right corner (see Figure 3-2).
- Choose Text → Align → Left, Center, Right, or Justify.
- Use one of the following keyboard shortcuts:

  Left: Ctrl+Alt+Shift+L (Shift-Option-⌘-L)

  Centered: Ctrl+Alt+Shift+C (Shift-Option-⌘-C)

  Right: Ctrl+Alt+Shift+R (Shift-Option-⌘-R)

  Justify: Ctrl+Alt+Shift+J (Shift-Option-⌘-J)

After you align a paragraph, the Property inspector displays a depressed button for the alignment option you chose, indicating what kind of alignment you've applied.

Tip: Dreamweaver aligns text by adding code to the selected HTML tag. For example, centering a paragraph of text adds *align="center"* to the <p> tag. You can achieve the same effect with the *Text-Align* CSS property described on page 136.

You can remove an alignment by reapplying the *same* alignment. For instance, if you've right-aligned a paragraph, clicking the right-align button in the Property inspector removes all alignment information and returns that paragraph to its original setting. (This method of resetting the paragraph is a better solution than clicking the left-align button, which adds extra lines of HTML code to do the same thing.)

UP TO SPEED

Keep Your Pages Lean

Many of the things that contribute to slow Web page downloads–congestion on the Internet, for example–are out of your control. But you can do your part by making sure your pages are as compact as possible. For instance, keep the file size of graphics down and eliminate extraneous lines of HTML code. The more HTML you include in a page, the larger the file, and the slower the download.

An example of a situation in which extraneous HTML code is produced is when aligning text to the left. Text on a Web page aligns to the left of a page by default. You'd be pointlessly bloating your Web page, therefore, by specifying left alignment of your text using a paragraph's alignment property. In fact, when you encounter the phrase "by default" describing an HTML property in this book, it's a safe bet that you can get that effect without adding any HTML.

Other ways to keep your pages lean and fast are highlighted throughout this book, but remember this rule of thumb: the less HTML code you create, the faster your Web page downloads, and the happier your audience is. (Page 607 tells you how you can use Dreamweaver to monitor your page's size and download speed.)

Indented Paragraphs

Indenting a paragraph can set it apart from the paragraphs before and after it. It's one way to add a small amount of space on either side of a paragraph, but it's mainly used to present a long quote or passage from a book or other source. In fact, an indented paragraph is called a *blockquote* in HTML.

To indent a paragraph or block-level element like a heading, click it and do one of the following:

- On the Property inspector, click the Indent button (see Figure 3-2).
- Choose Text → Indent.
- Press Ctrl+Alt+] (⌘-Option-]).

Unfortunately, since indenting a paragraph simply nests that paragraph in a basic HTML <blockquote> tag, you don't have any control over how *much* space is added to the margins of the paragraph. Most Web browsers insert about 40 pixels of blank space on the left and right side of a blockquote.

Because blockquotes don't give you precise control, and they're not really meant for simply indenting a paragraph, you should use the indent option for it's intended purpose: to quote passages of text from another source. To control the margins on either side of a paragraph, you have a much more powerful tool, CSS. To properly indent text, see the Tip on page 135.

If you do indent text using a blockquote, you may, at some point, wish to remove it. You can use Dreamweaver to *outdent* it, of course. (Yes, *outdent* is a real word—ever since Microsoft made it up.)

To remove a paragraph's indent formatting—that is, remove a <blockquote> tag—click inside the paragraph and do one of the following:

- On the Property inspector, click the Outdent button (see Figure 3-2).
- Choose Text → Outdent.
- Press Ctrl+Alt+[(Option-[).

You can continue to outdent a paragraph using one of these methods until the paragraph returns to the left edge of the page; at that point, the outdenting commands have no further effect.

Note: The indent and outdent buttons are also handy when working with lists as described in Figure 3-6.

Creating and Formatting Lists

Lists organize the everyday information of our lives: to-do lists, grocery lists, least favorite celebrity lists, and so on. On Web pages, lists are indispensable for presenting groups of items such as links, company services or employees, or a series of instructions.

HTML offers formatting options for three basic categories of lists (see Figure 3-4). The two most common types of lists are *bulleted* (called *unordered lists* in the HTML language) and *numbered* (called *ordered* in HTML). The third and lesser-known list type, a *definition* list, comes in handy for creating glossaries or dictionary-like entries.

Bulleted and Numbered Lists

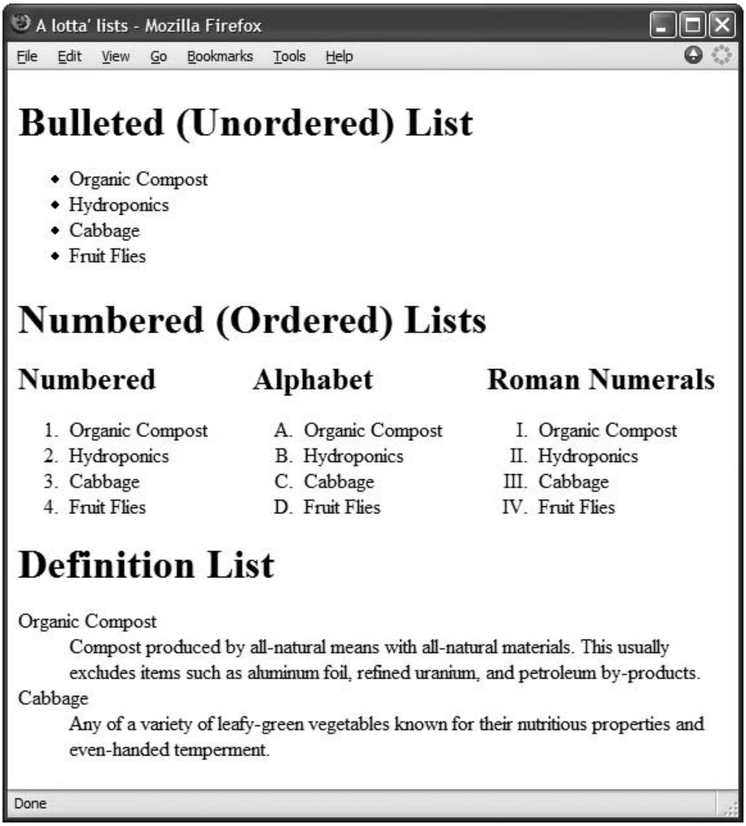
Bulleted and numbered lists share similar formatting. Dreamweaver automatically indents items in either type of list, and automatically precedes each list item by a character—a bullet, number, or letter, for example:

- Unordered or bulleted lists, like this one, are good for groups of items that don't necessarily follow any sequence. They're preceded by a bullet.
- Ordered lists are useful when presenting items that follow a sequence, such as the numbered instructions in the following section. Instead of a bullet, a number or letter precedes each item in an ordered list. Dreamweaver suggests a number (1, 2, 3, and so on), but you can substitute Roman numerals, letters, and other variations.

You can create a list from scratch within Dreamweaver, or add list formatting to text already on a Web page.

Creating a new bulleted or numbered list

When making a new list in Dreamweaver, you start by choosing a list format, and then typing the list items:


A lotta' lists - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
Done

Bulleted (Unordered) List

- Organic Compost
- Hydroponics
- Cabbage
- Fruit Flies

Numbered (Ordered) Lists

Numbered

1. Organic Compost
2. Hydroponics
3. Cabbage
4. Fruit Flies

Alphabet

A. Organic Compost
B. Hydroponics
C. Cabbage
D. Fruit Flies

Roman Numerals

I. Organic Compost
II. Hydroponics
III. Cabbage
IV. Fruit Flies

Definition List

Organic Compost

Compost produced by all-natural means with all-natural materials. This usually excludes items such as aluminum foil, refined uranium, and petroleum by-products.

Cabbage

Any of a variety of leafy-green vegetables known for their nutritious properties and even-handed temperment.

Figure 3-4:
HTML has several predefined list formats, including bulleted lists and definition lists, both of which let you organize information into orderly units. Once you've told Dreamweaver that you intend to create a bulleted or numbered list, it adds the bullets or the numbering for you automatically.

1. **In the document window, click where you wish to start a list.**

   See Chapter 2 for full details on adding text to a Web page.

2. **In the Property inspector, click the Ordered or Unordered List button to apply the list format (see Figure 3-2). (The Unordered option is also known as Bulleted.)**

   Alternatively, you can choose Text → List → Unordered List or Ordered List. Either way, the first bullet or number appears in your document automatically.

3. **Type the first list item and then press Enter or Return. Repeat until you've added all items in the list.**

   The text you type appears (*Organic Compost*, for example, in Figure 3-4) after the bullet or number. When you press Return, a new bullet or number appears, ready for your next item. (If you just want to move to the next line *without* creating a new bullet, insert a line break by pressing Shift+Enter [Shift-Return].)

4. **When you've finished the list, press Enter or Return twice.**

   The double carriage return ends the list and creates a new empty paragraph.

Formatting existing text as a list

You may have several paragraphs of text that you've already typed or pasted in from another program. It's a simple process to change any such group of paragraphs into a list.

1. **Select the text you wish to turn into a list.**

   The easiest way to select text is to drag from the first list item straight down into the last item of the list. Lists are block-level elements; each paragraph, whether it's a headline or regular paragraph, becomes one bulleted or numbered item in the list. In other words, you don't actually need to select all of the text in either the first or last paragraph.

2. **Apply the list format.**

   As when creating a list from scratch as described above, click either the Unordered or Ordered List button in the Property inspector, or choose from the Text → List submenu. The selected paragraphs instantly take on the list formatting, complete with bullets and automatic numbering.

Note: You may sometimes run into this problem: You select what looks like a handful of paragraphs and apply the list format, but only one bullet (or number) appears. This glitch arises when you've used the line break <br> tag to move text down a line in a paragraph. While it's true that using the <br> tag visually separates lines in a paragraph into separate blocks, the text is still part of single paragraph, which will appear as only *one* bulleted or numbered item. The presence of multiple <br> tags can be a real problem when pasting text from other programs. See page 67 for more on the <br> tag and how to get rid of these pesky critters.

Whichever way you started making a list—either by typing from scratch or reformatting existing text—you're not stuck with the results of your early decisions. You can add onto lists, add extra spaces, and even renumber them, as described in the following section.

Reformatting Bulleted and Numbered Lists

HTML tags define lists, just as they define other Web page features. Making changes to an existing list is a matter of changing those tags, using Dreamweaver's menu commands and Property inspector tools.

Note: Web browsers generally display list items stacked directly one on top of the other. If you want to add a little breathing room between each list item, use the CSS *margin* properties, as described on page 322.

Adding new items to a list

Once you've created a list, it's easy to add items. To add an item at the beginning of a list, click before the first character of the first list item, type the item you wish to add, and press Enter or Return. Dreamweaver makes your newly typed item the first in the list, adding a bullet or number accordingly (and renumbering the other list items, if necessary).

To add an item at the middle or end of a list, click at the end of the *previous* list item and press Enter or Return. The insertion point appears after a new bullet or number; type your list item on this new line.

Changing bullets and numbers

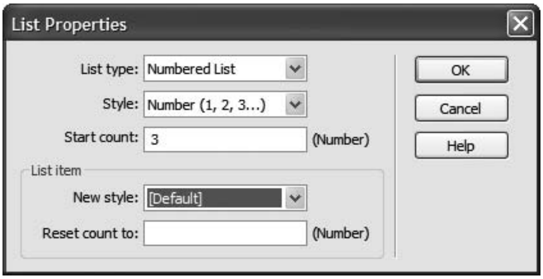
Bulleted and numbered lists aren't limited to just the standard round, black bullet or the numbers 1, 2, and 3. You can choose from two bullet types and a handful of different numbering schemes. Here's how to change these settings:

1. **Click once inside any list item.**

   Strangely enough, you can't change the properties of a list if you've first selected the entire list, an entire single list item, or several list items.

2. **Open the List Properties dialog box (Figure 3-5).**

   To do so, either click the List Item button in the bottom half of the Property inspector or choose Text → List → Properties. (If the list is inside a table cell, your only choice is to use the Text menu. In this situation, the List Item button doesn't appear in the Property inspector.)



List Properties

List type: Numbered List

Style: Number (1, 2, 3...)

Start count: 3 (Number)

List item

New style: [Default]

Reset count to: (Number)

Figure 3-5:
The List Properties dialog box lets you set the type and style of a list. For example, if you select a Numbered List, you can choose from five different styles: Number (1, 2, 3); Roman Small (i, ii, iii); Roman Large (I, II, III); Alphabet Small (a, b, c); and Alphabet Large (A, B, C).

3. **Choose a type from the "List type" pop-up menu.**

   You can turn a numbered list into a bulleted list, or vice versa. You should avoid the two other options in the menu—Directory List and Menu List. These are old list types that won't necessarily work in modern Web browsers.

4. **Choose a bullet or numbering style.**

   Bulleted lists can have three different styles: *default, bullet*, and *square*. In most browsers, the default style is the same as the bullet style (a simple, solid, black circle). As you might guess, the square style uses a solid black square for the bullet character.

   Numbered lists, on the other hand, have a greater variety of style options. Dreamweaver starts you off with a simple numbering scheme (1, 2, 3, and so on), but you can choose from any of five styles for ordered lists, as explained in Figure 3-5.

5. **Set the starting number for the list.**

   You don't have to begin a numbered list at 1, A, or the Roman numeral I. You can start it at another number, if you wish—a trick that can come in handy if, for example, you're creating a Web page to explain how to rebuild a car's engine. As part of each step, say you want to include a photograph. You create a numbered list, type in the directions for step 1, hit Return, and insert an image (as described in Chapter 5). You hit Return again and type in the text for step 2. Unfortunately, the photo, because it's technically an item in an ordered list, now has the number 2 next to it, and your real step 2 is listed as 3!

   If you remove the list formatting from the photo to get rid of the 2, you create one list above it and another below it (as described on page 92). Step 2, *below* the photo, now thinks it's the beginning of a new list—and starts over with the number 1! The solution is to make the list below the photo think it's a *new* list that begins with 2.

   To start the list at something other than 1, type the starting number in the "Start count" field (Figure 3-5). You must enter a number, even if you want the list to use letters. So to begin a list at D instead of A, type *4* in the "Start count" field.

   In fact, you can even change the style of a *single* list item. For instance, you could change the third item in a numeric list from a 3 to the letter C. (Of course, just because you can doesn't mean you should. Dreamweaver is very thorough in supporting the almost overwhelming combination of options available in HTML, but, unless you're building a Dadaist revival site, how often do you want a list that's numbered 1, 2, C, iv, 1?)

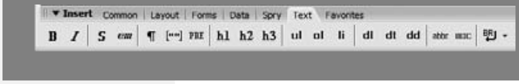
6. **Click OK to apply the changes.**

FREQUENTLY ASKED QUESTION

When Not to Approach the Insert Bar

I like the convenience of the Insert bar. Should I use the Insert bar's Text tab for formatting text?

In a word, no. Unlike most of the other panels in the Insert bar, the Text tab is mainly used when working in Code view (see Chapter 10) or to insert special characters like the copyright symbol, as described on page 66. It contains many of the same formatting options as the Property inspector; the *h1, h2*, and *h3* in this figure, for instance, are the same as Headings 1, 2, and 3 in the Property inspector's format pop-up menu.



However, using some of the options, such as *li*, can generate invalid HTML if not used correctly. Furthermore, despite its usual tidiness, Dreamweaver doesn't clean up code produced this way.

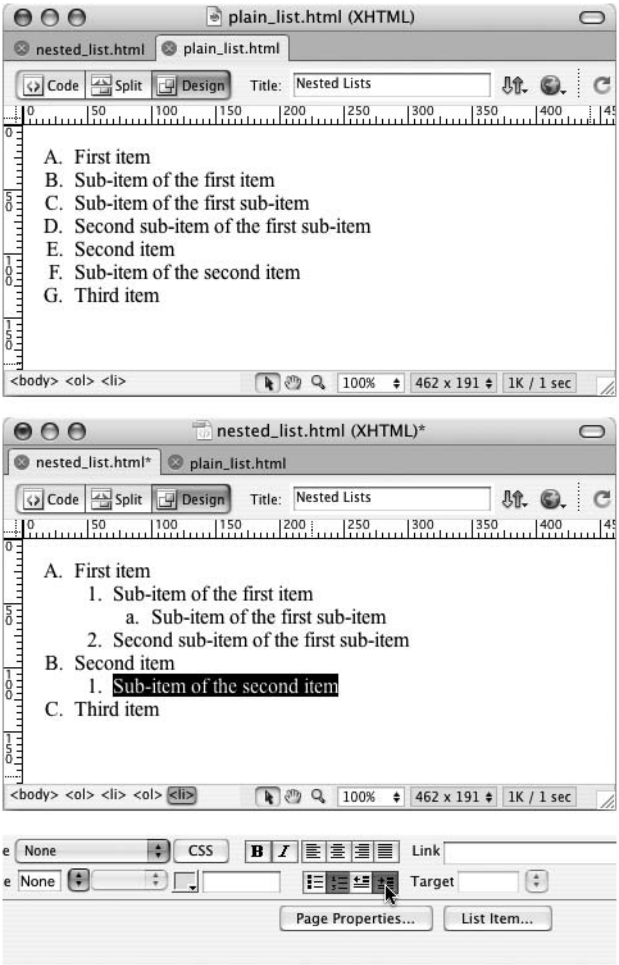
In fact, some of these options, when used in Design view, actually split the document window in two, showing the HTML code on top and Design view on bottom. This arrangement is confusing if you're not accustomed to seeing–or are just uninterested in–the raw HTML code. All major text-formatting options are available from the Property inspector and Text menu. If you stick to these two tools, you can safely avoid the Text tab.

Note: Once again, you can access more advanced formatting options for lists using Cascading Style Sheets. For example, you can use a graphic of your own creation to begin each bulleted list item, instead of choosing from the same boring set of square or circular bullets. See page 138 for the details.

Nested lists

Some complex outlines require multiple *levels* of lists. Legal documents, for instance, may list major clauses with capital letters (A, B, C, and so on) and use roman numerals (i, ii, iii, and so on) for subclauses (see Figure 3-6).

It's easy to create such nested lists in Dreamweaver; Figure 3-6 shows the steps.



A. First item
B. Sub-item of the first item
C. Sub-item of the first sub-item
D. Second sub-item of the first sub-item
E. Second item
F. Sub-item of the second item
G. Third item

A. First item
    1. Sub-item of the first item
        a. Sub-item of the first sub-item
    2. Second sub-item of the first sub-item
B. Second item
    1. Sub-item of the second item
C. Third item

Figure 3-6:
Top: To create a nested list, start with a single list–in this case, a numbered list using capital letters instead of numbers. Select a subtopic and click the Indent button (where the cursor is in the bottom figure) or choose Text → Indent.

Bottom: The item becomes a nested list, indented from the main list and with its own numbering. Notice, too, that the major points have been renumbered–letter E from the first figure is letter B in the second figure–to reflect the new ordering of the list.

Definition Lists

Definition lists can be used to display items in a dictionary or glossary, or whenever you need to present a term and its definition. Each item in a definition list is composed of two parts: a word or term, and a definition.

As you can see in Figure 3-4, definition lists aren't as fancy as they sound. The first item in the list—the word or term—is presented on its own line with no indent, and the second item—the definition—appears directly underneath, indented.

Note: Behind the scenes, Dreamweaver creates an entire definition list using the <dl> tag. Each item in the list is then composed of two tags: <dt> for the definition term or word, and <dd> for the definition itself.

You can't create a definition list using the Property inspector. Instead, start by creating a list of definitions and terms: each term and definition should be in its own paragraph, and the definition should immediately follow the term. Next, highlight the paragraphs that contain the terms and definitions, and then choose Text → List → Definition List.

To turn a definition list *back* to regular paragraphs, select it and choose Text → List → None, or click the Outdent button in the Property inspector.

Removing and Deleting List Items

Dreamweaver lets you take items out of a list in two ways: either by removing the list *formatting* from an item or items (and changing them back into normal paragraphs) or by deleting their text outright.

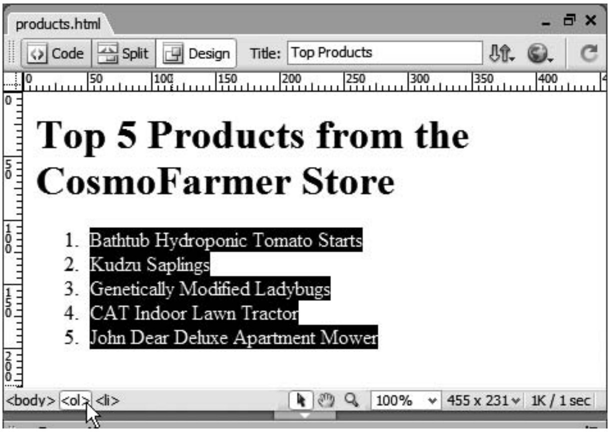
Removing list items

To remove list formatting from one or more list items (or an entire list), highlight the lines in question and then choose Text → List → None (or just click the Outdent button on the Property inspector). You've just removed all list formatting; the text remains on the screen, now formatted as standard paragraphs. (For nested lists, you'll need to click the Outdent button several times.)

If you reformat an item in the middle of a list using this technique, it becomes a regular paragraph. Dreamweaver turns the items above it and below it into separate lists.

Deleting list items

A simple way to delete a list or list item is to use the Tag selector in the status bar of the document window (see Figure 3-7). To delete an entire list, click anywhere inside the list, and then click its tag in the Tag selector—<ul> for a bulleted list or <ol> for a numbered list—and press Delete. You can also, of course, drag through all the text in the list and then press Delete.



Top 5 Products from the CosmoFarmer Store

1. Bathtub Hydroponic Tomato Starts
2. Kudzu Saplings
3. Genetically Modified Ladybugs
4. CAT Indoor Lawn Tractor
5. John Dear Deluxe Apartment Mower

Figure 3-7:
The Tag selector is a great way to quickly and accurately select an HTML tag and its contents. Clicking the <ol> (ordered list) tag, for instance, selects the entire numbered list, as shown here. Clicking the <li> tag selects just one list item.

To delete a single list item, click that item in the document window, click the <li> tag in the Tag selector, and then press Delete.

Tip: You can rearrange a list by dragging a list item to another position within the list. If it's an ordered list (1, 2, 3, and so on), Dreamweaver automatically renumbers the list. For example, if you select an item numbered 4 (or D, if it's an alphabetical list) and drag it to the second position in the list, Dreamweaver changes the item to 2 (or B) and renumbers all items that follow.

However, selecting a list item can be tricky. If you simply drag to select the text, you don't actually select the list item itself, with all its formatting and numbering. To be sure you've selected a list item, click the <li> tag in the Tag selector in the document window's status bar (see Figure 3-7). Now, when you drag the selection to a new position in the list, the number (or bullet) follows. You can also select a list item in this way, copy or cut it, and paste it back into the list in another position.

Character Formatting

The simple formatting applied by a paragraph format isn't much to write home about, much less to advertise on a résumé. Heading 1, for instance, is generally displayed in black and bold using a large Times New Roman font. As mentioned in the box on page 87, this type of paragraph formatting is intended to provide structure, not good looks.

To make your Web pages stand out, you'll want to apply different fonts, colors, sizes, and styles to your text. Unlike paragraph formatting, which applies to an entire HTML paragraph, you can apply character formatting to any selection of text, whether it's a single word, one sentence, an entire paragraph, or your whole Web page.

In general, you apply character formatting just as you would in a word processor: Select the text (using any of the methods described on page 76) and then apply a format using the Property inspector or Text menu.

Up to this point, you've been using HTML only for structuring your Web page with headlines, paragraphs, lists, and so on. When using the Property inspector to apply formatting like fonts, colors, and text sizes, Dreamweaver is working behind the scenes to create Cascading Style Sheets to format text (see page 108 for an explanation). Professional Web designers—who not only want to keep up with technical trends but who also must build functional Web sites that please the vast audience of Web surfers—have already embraced the more sophisticated typographic controls offered by Cascading Style Sheets.

Note: Cascading Style Sheets aren't just for text, either. You can format any HTML element–images, tables, and so on–with the power of CSS. Read all about it in Chapter 8.

Using the instructions in the rest of this chapter, you'll learn how to apply basic CSS-based formatting to text by using the Property inspector and Text menu. (A wider array of additional CSS formatting options is discussed in the next chapter.)

Note: If you don't want to use CSS (perhaps you've built an entire site using the <font> tag and you wish to remain consistent), you can revert to Dreamweaver's old method of formatting text. Press Ctrl+U (⌘-U) to open the Preferences window. Select the General category, turn off the "Use CSS instead of HTML tags" checkbox, and then click OK to close Preferences.

But if you're building a new site, you're better off sticking with CSS, a standard that will last a lot longer than out-of-date HTML tags.

Text Styles

To add emphasis to your words, you can choose from several text styles. You can apply the two most common emphasis effects, bold and italics, from the Property inspector. For less frequently used styles, choose from the Text → Style submenu (see Figure 3-8).

To add bold or italic formatting to text, select the word or words you'd like to make bold or italic, and then click the Bold or Italic button on the Property inspector.

Tip: Use italics with care. While italics are frequently used in printed material to add *emphasis* or when referencing a book title, they can be difficult to read on a computer screen, especially at small type sizes.

As shown in Figure 3-8, HTML offers a host of different text styles, some of which fulfill obscure purposes. For instance, the Code and Variable styles are intended for formatting the display of programming code, while the Sample style represents the output from a computer program—not exactly styles you'll need often in promoting, say, your *Cheeses of the World* mail-order company.

Unless you intend to include content whose meaning is supported by the tag (for example, you include some sample computer code on a page, so you format it with the Code style), you're better off avoiding such styles. But if you think one of them might come in handy, you can find more about these styles from Dreamweaver's built-in HTML reference; see page 394 for details.

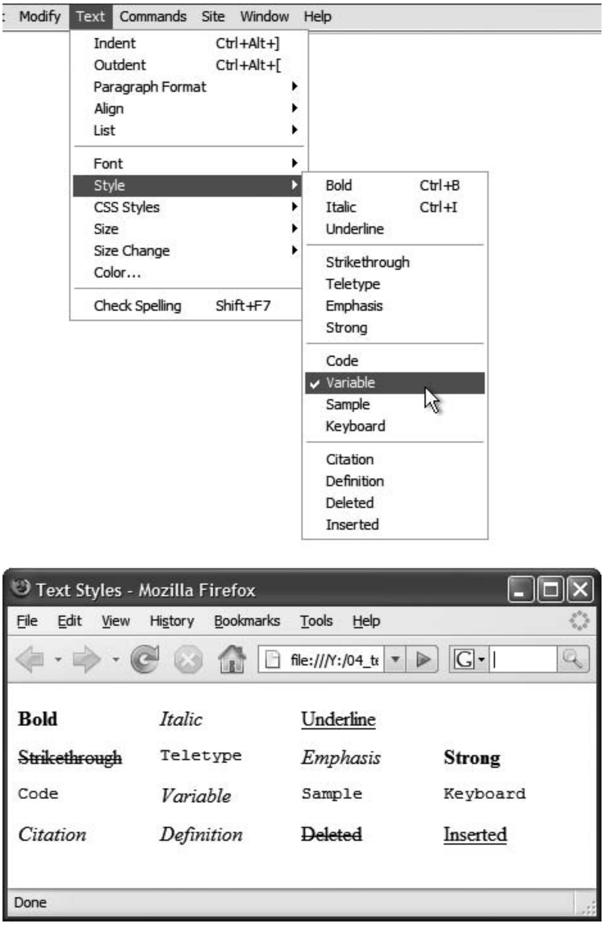


Figure 3-8:
Top: While the Property inspector lets you apply bold and italic styles to text, the Text → Style menu offers a larger selection of text styles. Don't be confused by the term "styles," which, in this case, merely refers to different HTML tags. They're unrelated to Cascading Style Sheet styles and are intended to identify very specific types of text, like citations from a book or magazine.

Bottom: As you can see, the many style options are usually displayed in bold, italics, the browser's monospaced font (usually Courier), or some combination of the three. But don't worry about how they look "out of the box"–as you'll learn in Chapter 8, by applying CSS you can make any of those tags appear anyway you wish.

In particular, avoid the underline and strikethrough styles: both have been deprecated (see page 87) in the HTML 4 standard and may produce no effect in future browser versions. (You can, however, turn to Cascading Styles Sheets' text-formatting abilities to put lines through and under any text you'd like. See page 134 for more.)

Fonts

Formatting fonts for the Web is very much like using fonts in a word processor. Sadly, it carries some of the same drawbacks. For example, if you create some beautiful document in Microsoft Word, using fancy fonts you just bought from a small font company in Nome, Alaska, you're in for a rude surprise when you email the document to your boss. He won't see anything resembling what the memo looked like on *your* screen. Because he doesn't own the same fonts, he'll see some default font on his computer—Times, perhaps. Fonts show up in a distributed document only if each recipient happens to have the same fonts installed.

UP TO SPEED

When Bold and Italic Are Neither

You may be confused by the HTML code that Dreamweaver produces when making text bold or italic. Instead of using the <b> tag—the traditional HTML code for bold—Dreamweaver uses the <strong> tag. And instead of <i> for italics, clicking the I button on the Property inspector gets you <em>, or the emphasis tag. That's because Adobe decided to follow industry practices rather than stick to an old tradition.

For most purposes, <strong> and <em> behave identically to <b> and <i>. They look the same—bolded or italicized—in most browsers. However, when encountered by screen readers (software or equipment that reads Web pages aloud for the benefit of the visually impaired), the <strong> tag triggers a loud, strong voice. The <em> tag also brings an emphasis to the voice of screen readers, though with less strength than the <strong> tag.

Since most Web browsers simply treat the <strong> tag like the <b> tag, and the <em> tag like the <i> tag, you'll probably never notice the difference. However, if you prefer the simple <b> and <i> tags, choose Edit → Preferences. Select the General category and turn off the checkbox labeled "Use <strong> and <em> in place of <b> and <i>."

On the Web, you're in the same predicament. You're free, as a Web designer, to specify any font you want in a Web page, but it won't show up on a viewer's computer unless she's installed the same font on her system. Otherwise, your visitor's Web browser will show your text in a default font, which is usually some version of Times or Courier.

There are several solutions to this dilemma. One is to use Flash text, described on page 235, or to convert your text into graphic images. Another is to specify the font you'd *like* to use; if your viewer's computer has the specified font installed, that's what she'll see. You can specify secondary or tertiary font choices if the preferred font isn't available. In fact, Dreamweaver offers prepackaged lists of such "first choice, second choice, third choice" fonts, as you'll find out in the following section.

Applying font formatting

Dreamweaver's approach to font formatting is straightforward:

1. **Select the text whose font you want to change.**

   As in a word processor, you can also click anywhere in your Web page and then choose a font for text that you're *about* to type. (If you're pasting text from another program, paste first and then select the text and apply a font.)

2. **From the Property inspector or the Text menu, select the font.**

   Choose a font from the Font pop-up menu in the Property inspector, or choose Text → Font and select a font from the submenu.

You'll soon discover that Dreamweaver's font menus aren't quite what you're used to. When you apply a font to text, you have to choose a little *list* of fonts like "Arial, Helvetica, sans-serif." You can't just choose a single font, such as Helvetica.

UP TO SPEED

Knowing Your Font Types

You can find literally tens of thousands of different fonts to express your every thought: from bookish, staid, and classical typefaces to rounded, cartoonish squiggles.

Most fonts are divided into two categories: serif and sans-serif. Serif fonts are often used for long passages of text, as it's widely believed that serifs–small decorative strokes ("hands" and "feet") at the end of a letter's main strokes–gently lead the eye from letter to letter, making text easier to read. Examples of serif fonts are Times, Times New Roman, Georgia, and Minion, the font in the main body paragraphs of this book.

Sans-serif fonts, on the other hand, are often used for headlines, thanks to their clean and simple appearance. Examples of sans-serif fonts include Arial, Helvetica, Verdana, and Formata, which you're reading now. Some people believe that you should use only sans-serif fonts on Web pages because they think the delicate decorative strokes of serif fonts don't display well on the coarse resolution of a computer screen. This is an aesthetic judgment, so you should feel free to pick the fonts you think look best.

That's because, as noted on page 101, in order for your viewer's computer to display a font correctly on a Web page, it must have the same font installed. If the font's not there, the browser simply replaces the font specified in the Web page with the browser's default font.

To gain some control over the font-picking process, you can specify a list of fonts that look similar to your first-choice font (Arial, for example). Your visitor's Web browser checks if the first font in the list is installed on the computer. If it is, that's what your visitor sees when viewing your Web page.

But if the first font isn't installed, the browser looks down the list until it finds a font that is. Different operating systems use different fonts, so these lists include one font that's common on Windows and another, similar-looking font that's common on the Mac. Arial, for instance, is found on all Windows machines, while Helvetica is a similar font for Macs.

That's it. You've just applied one of Dreamweaver's preinstalled fonts. If you'd like a greater degree of control of what fonts your page displays, read on.

Creating custom font lists

Dreamweaver comes with six preset "first choice, second choice, third choice" font lists, which incorporate fonts that are standard on both Windows and Macs. But you can easily stray from the pack and create your own font lists for use in your Web pages. If you proceed with the custom approach, make sure you know what fonts your visitors have—easily done if you're designing a corporate intranet and know what computers are used in your company—and always specify one font that you *know* is installed. In this way, your page may not look exactly as you intended, but it'll at least be readable.

POWER USERS' CLINIC

Font Convergence

While Mac and Windows used to come with very different sets of preinstalled fonts, there's been some convergence in the past few years. These days, you can count on the average Mac or PC having the following fonts: Arial, Arial Black, Arial Narrow, Comic Sans MS, Courier, Courier New, Georgia, Times New Roman, Trebuchet MS, Verdana, and Webdings.

If your audience includes people running Unix or Linux, all bets are off. In that case, stick to these three fonts: Helvetica (make sure to also specify Arial for Windows owners), Times (Times New Roman for Windows), and Courier (Courier New for Windows).

You can find a concise comparison that lists fonts friendly to both Windows and Macs at *www.ampsoft.net/webdesign-l/WindowsMacFonts.html*.

To jump-start your adventures, here are a few font combinations that work relatively well for both Mac and Windows visitors:

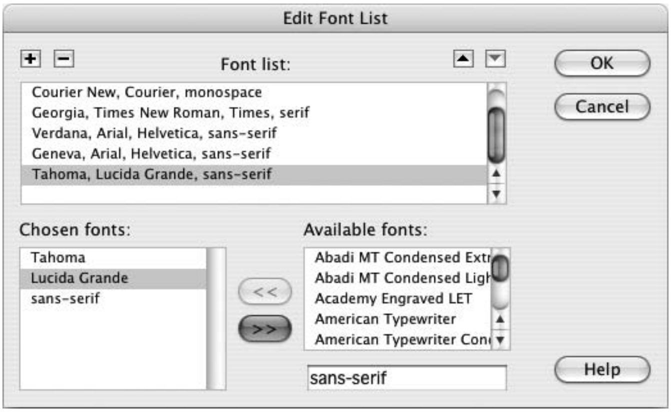
- Tahoma, Lucida Grande, Arial, sans-serif
- Lucida Console, American Typewriter, monospace
- Marker Felt Wide, Comic Sans MS, fantasy
- Century Gothic, Gill Sans, Arial, sans-serif

Here's how you create a new "first choice, second choice, third choice" font list.

Note: Technically, you can specify any number of fallback fonts in one of these lists, not just first, second, and third choices. Your list can specify only a single font, or a long list arranged in order of preference.

1. **Open the Edit Font List dialog box.**

   Choose Edit Font List from the Property inspector's Font menu, or choose Text → Font → Edit Font List. Either way, the Edit Font List dialog box appears (Figure 3-9).



Font list:
Courier New, Courier, monospace
Georgia, Times New Roman, Times, serif
Verdana, Arial, Helvetica, sans-serif
Geneva, Arial, Helvetica, sans-serif
Tahoma, Lucida Grande, sans-serif

Chosen fonts:
Tahoma
Lucida Grande
sans-serif

Available fonts:
Abadi MT Condensed Extr
Abadi MT Condensed Ligh
Academy Engraved LET
American Typewriter
American Typewriter Con

sans-serif

Figure 3-9:
Not only can you create your own font lists, but you can also edit, remove, or reorder the current lists in this dialog box. When you click a list in the "Font list" menu, the "first choice, second choice, third choice" fonts appear in the lower-left corner. To remove a font from that list, click the font name and then click the >> button. To add a font to the list, select a font in the "Available fonts" menu and click the << button. Finally, to reorder the font lists as they appear in the Property inspector or Text → Font menu, click the arrow keys near the upper-right corner of the dialog box.

2. **Select a first-choice font from the list of "Available fonts," or type in the font name.**

   All fonts on your computer are listed in the "Available fonts" menu. Simply click to select the font you wish to add.

Alternatively, you can type a font's name into the box that appears directly below the list of available fonts—a handy trick if you want to include a font that isn't installed on your computer (a Windows font when you're working on a Mac, for example).

3. **Add the font you've just specified to your new, custom font list by clicking the << button (or just double-clicking the font name).**

   Your first-choice font appears in the "Chosen fonts" list.

4. **Repeat steps 2 and 3 for each font you wish to include in your custom list.**

   The order in which you add the fonts is the order they appear in the list. These become the "first choice, second choice, third choice" fonts.

   Unfortunately, there's no way to change the order of the fonts once you've added them. So if you accidentally put the fonts in the wrong order, you must delete the list by clicking the minus (–) button (at the upper-left corner of the dialog box) and start over.

5. **Add a generic font family.**

   This last step isn't strictly necessary, but it's a good idea. If your Web page visitor is some kind of anti-font radical whose PC doesn't have *any* of the fonts you've chosen, his browser will substitute the generic font family you specify here.

   Generic fonts are listed at the bottom of the list of "Available fonts" and include "cursive," "fantasy," "monospace," "sans-serif," and "serif." On most systems, the monospaced font is Courier, the serif font is Times, and the sans-serif font is Arial or Helvetica. Select a generic font that's similar in appearance to the fonts in your list. For instance, choose "sans-serif" if your list consists of sans-serif fonts like Helvetica or Arial; choose "serif" if you specified fonts like Times or Georgia; or choose "monospace" for a font like Courier.

6. **Click OK.**

   Your new font package appears in the Property inspector's Font menu, ready to apply.

Font Size

Varying the sizes of fonts on a Web page is one way to direct a viewer's attention. Large type screams "Read Me!"—excellent for attention-grabbing headlines—while small type fades into the background—perfect for necessary but unexciting legal mumbo jumbo like copyright notices.

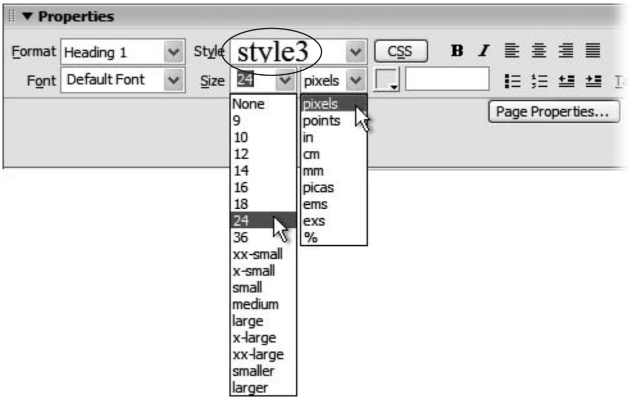
Note: You may notice two submenus under the Text menu (see Figure 3-8): Size and Size Change. These submenus are used to apply the old-style <font> tag *size* property, which was limited to only seven sizes (1 through 7). Unless you purposely turn off the CSS option (see the Note on page 40), these submenus are grayed out, making these properties inaccessible.

Unless you specifically define its size, text in a regular paragraph appears at the default size specified by your visitor's Web browser: in most browsers today that size is 16 pixels. However, not only can people change that default size (much to the eternal frustration of Web designers), but different operating systems have also been known to display text at different sizes. In other words, you can't really trust that text will appear the same size for all the different viewers of your site.

Dreamweaver has replaced the old <font> tag method of sizing text with CSS, which offers a much wider range of sizes. To specify a text size, first select the text, and then use the Property inspector's Size menu to select a font size (see Figure 3-10). The choices available from the Size menu break down into four groups:

- The *None* option removes any size information that you may have applied to the text. The text returns to its default size.
- The numeric choices—*9 through 36*—indicate how tall you wish to make the text, in pixels. Nine-pixel-tall text is nearly unreadable, while 36 pixels makes a bold statement. One benefit of pixel sizes is that text appears nearly the same across different browsers and different operating systems, overcoming the problems mentioned above.
- The options *xx-small* through *xx-large* indicate fixed sizes, replacing the sizes 1 through 7 used with the old HTML <font> tag. The *medium* size is usually the same as the default size.
- The last two choices—*smaller* and *larger*—are relative sizes, meaning that they shrink or enlarge the selected text based on the default size. These choices come in handy when you've defined a base font size for the entire page using the Page Properties window (see Figure 1-18 on page 45).

  Suppose the default size of text on a page is 12 pixels. If you apply a "larger" size to a selection of text, it will get bigger (the exact amount varies by Web browser). If, later, you change the base size to 14 pixels (in Page Properties), all of that "larger" text will also increase proportionally.



Format: Heading 1
Style: style3
Font: Default Font
Size: 24 pixels

Figure 3-10:
You can set a dizzying array of font sizes using the Property inspector. Dreamweaver generates CSS styles when formatting text using the Property inspector. In this case, the style is unimaginatively named style3 (circled).

To change the size of text, simply select it and choose a new size from the Property inspector (Figure 3-10). If you applied a number (that is, a pixel value), you have an additional option: if you don't like any of the sizes listed, you can type any number you wish. In fact, unlike HTML, CSS can handle humongous text—hundreds of pixels tall, if that's what you're into.

You're not limited to pixels, either. The Units pop-up menu (to the right of the Size menu, shown in Figure 3-10) lets you specify pixels, points, inches, centimeters, millimeters, picas, ems, percentages, or exes (an *ex* is the width of the letter X in the current font). Most of these measurement systems aren't intended for onscreen display. The most popular options are:

- *Pixels* are great for ensuring that text looks the same size across different browsers and operating systems. The downside, however, is that Internet Explorer 6 and earlier for Windows doesn't let Web surfers adjust the pixel size. So people who can't see well, or whose monitors are set to very high resolutions, are stuck with your choice of pixel size. Make it too small, and they won't be able to read your text. (Fortunately, as Internet Explorer 7 becomes more popular, this becomes less of an issue.)

- *Ems* are a relative measurement, meaning that the actual point size varies.

  One em is equal to the default font size. So suppose a Web browser's default font size is 14 pixels tall. In that case, 1 em would mean 14 pixels tall, 2 ems would be twice that (28 pixels), and 1.5 ems would be 21 pixels.

  The advantage of ems is that they allow your Web visitors to control the size of onscreen text. If it's too small, they can increase the base font size. (In Internet Explorer, you make this adjustment by choosing an option from the View → Text Size menu [View → Make Text Bigger on Safari on the Mac].) Any text measured in ems then changes according to the Web browser's new setting.

  You can use pixels and ems together. You could, for instance, set the base font size on your page to 16 pixels and then use ems for other parts of the page. For example, you could set headlines to 2 ems, making them 32 pixels tall. If you later thought the overall text size of the page was too small or too large, you could simply change the base font size for the page, and the headlines and all other text would resize proportionally.

  Many Web experts advocate the use of ems, because they allow visitors to decide how big text should appear, thus making the site more widely accessible. Many designers, on the other hand, don't like the fact that other people can radically change the design of a page by simply changing a browser setting.

- *Percentages* (%) are another relative size measurement. When applied to text size, they're functionally equivalent to ems. If you're more comfortable with the notion of percentages than the typography-inspired ems, use percentage values instead.

The other measurement options, like inches and millimeters, don't make as much sense as pixels, ems, and percentages, because there's no consistent way to measure them on monitors. For example, Windows is set to 96 pixels to the inch, whereas Mac OS X is set to 72 pixels per inch—but even these settings can be changed, so there's no reliable way to measure an "inch" on a computer screen.

Font Color

Most color formatting in Dreamweaver, whether it's for text or for a table cell, makes use of Dreamweaver's *color box*. For more information on applying color in Dreamweaver and using the color box, see page 49.

To set the color of text, first select it and then take your pick:

- In the Property inspector, click the color well and select a color.
- In the Property inspector, click the Font Color field and type in the *hexadecimal number* (see page 49) of the color you want. (Clearly, this is the option for hard-core HTML geeks. After all, surely you've memorized the hex number of that light shade of blue you always use—#6699FF, isn't it?)

Remember, as part of the properties for a Web page, you can choose a default color for all text on the page—see page 45. Setting this default color provides a useful shortcut for when you want all or most of the text on a page to be a color other than black.

Character Formatting Behind the Scenes

Dreamweaver creates Cascading Style Sheets for most of the character formatting choices you make in the Property inspector. For example, if you select a paragraph of text and then apply a color to it, Dreamweaver creates a CSS style and applies it to the paragraph. You'll learn a lot more about Cascading Style Sheets in the next chapter, but until then, here are the basics.

A CSS style is a set of instructions telling a Web browser how to display things on a Web page. When you use the Property inspector to change the font, color, or size of text, Dreamweaver creates a new style and places the code for it in the <head> of the document. The new style's name now appears in the Property inspector's CSS Style menu (Figure 3-10) with an unimaginative name like *style1, style2, style3*, and so on. Because these names don't mean much, you should rename them to something more descriptive such as *mainHeadline, bodyText*, and so on. (Renaming styles is discussed on page 110.)

Note: If you already know a thing or two about CSS, you may want to note that Dreamweaver creates these styles using a *class selector*.

Depending on how you select the text, one of two other things happens:

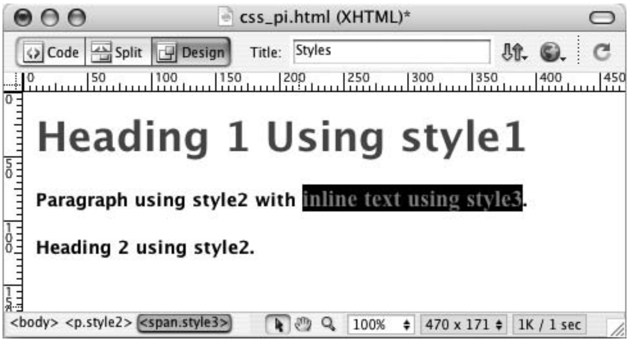
- If you select an entire paragraph, Dreamweaver adds an HTML attribute called *class* to the paragraph. This attribute ties the new CSS style to the paragraph of text and informs the Web browser to apply the style to this particular paragraph.

  For example, if you add a dark-blue color to the first paragraph of text on a page, Dreamweaver creates a new style called, say, *style1*. The HTML looks like this: <p class="style1">. All text in the paragraph becomes dark blue, and this new style's name appears in the Property inspector.

  The same process takes place when you style other block-level elements, such as headlines.

- If you select just a few words of a paragraph and then apply some character formatting, Dreamweaver behaves slightly differently. It still creates a new style (*style2*, say), which still appears in the Property inspector. But it also injects an HTML tag called *span*. The <span> tag might look like this: <span class="style2"> [your text here] </span>. This tag wraps around the text you selected, so that the style affects only the text inside the span. (See page 122 for more on *spans.*)

A good way to determine which method Dreamweaver used is to look at the Tag selector (Figure 3-11). If you see something like <p.style4>, then the paragraph as a whole is in *style4*. If you see <span.style6>, then Dreamweaver applied the style to just a portion of the paragraph, headline, or block-level element.



Heading 1 Using style1

Paragraph using style2 with inline text using style3.

Heading 2 using style2.

<body> <p.style2> <span.style3>

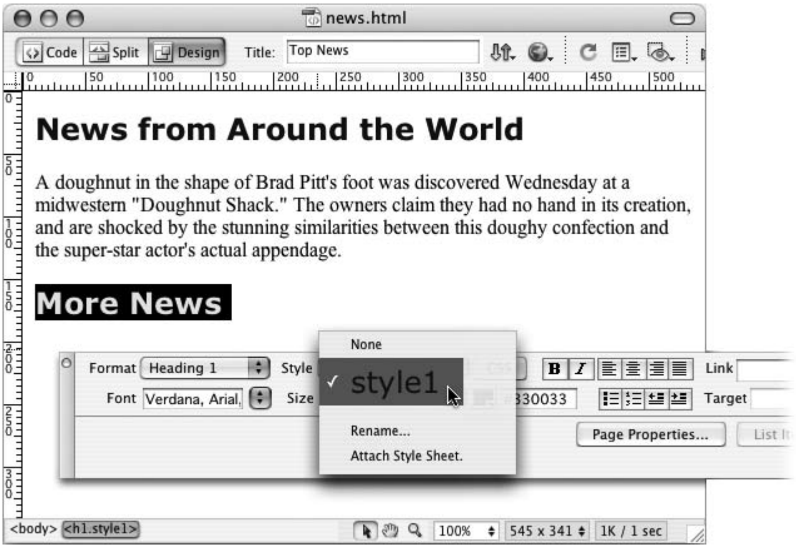
Figure 3-11:
You can apply a style to any text. In this case, style2 is applied to both the middle paragraph (<p> tag) and the bottom headline (<h2> tag). When you apply a style to only part of a paragraph, the <span> tag is used. The Tag selector (at bottom) can help you identify and select these (and other) tags.

Character Formatting Styles

Once you've formatted text just the way you want it, you needn't repeat the same steps for formatting other text on a page. Since Dreamweaver has already created a style containing your formatting choices, you can reuse it freely throughout your document via the Property inspector.

Applying styles

To format an entire paragraph, either select the paragraph or click anywhere inside it, and then choose from the Property inspector's Style menu (Figure 3-12). To format just a few words, select the text and then choose a style name from the Style menu; in this case, Dreamweaver formats just the selected text (wrapping it in a <span> tag as described above).



News from Around the World

A doughnut in the shape of Brad Pitt's foot was discovered Wednesday at a midwestern "Doughnut Shack." The owners claim they had no hand in its creation, and are shocked by the stunning similarities between this doughy confection and the super-star actor's actual appendage.

More News

Figure 3-12: *In this example, you can apply style1, a style that Dreamweaver created when you formatted the top headline, to the bottom headline. You can change the uninformative style names–style1, style2–using the Rename option in the Style menu, as described below.*

Removing styles

Removing a style is just as easy. Click anywhere inside the styled text or, using the Tag selector, select the paragraph, headline, or range of text whose style you wish to remove, and then select None from the Property inspector's Style menu. This action removes the *class* property (or eliminates the <span> tag) used to apply the style. Note that the style itself—that is, the code placed in the <head> of the Web page—remains. (To remove that code, see page 126.)

Tip: To reuse styles you've created on *other* Web pages, consider exporting them as an external CSS style sheet. See page 294 for details.

Renaming styles

Because Dreamweaver uses generic names—*style1, style2*, and so on—for the styles you create using the Property inspector, it's a good idea to rename them using more descriptive titles. For example, if you create a style for formatting a copyright notice, *copyright* is a more descriptive name than *style16*.

To rename a style, choose Rename from the Styles menu in the Property inspector (see Figure 3-12). The Rename Style window opens. From the top menu, select the style you wish to rename, type the new name, and then click the OK button. Behind the scenes, Dreamweaver searches the Web page for the old name and replaces it with the new name. (That's why you'll see the Search Results panel pop open after renaming a style this way.)

You need to keep a few things in mind when renaming a style. Style renaming is described in greater detail on page 127, but in a nutshell:

- Use only letters and numbers in the name.
- Don't use spaces or any punctuation marks like !, *, &, and so on.
- Always begin the name with a letter: header2005 is good, but 2005header is not.

Editing styles

Editing styles is trickier, and you may find yourself running into some of Dreamweaver's strange antics pretty quickly.

Suppose you've selected a paragraph and applied Arial, Helvetica, sans-serif as the font; colored it red; and changed its size to 36 pixels. Dreamweaver creates a new style—say, *style1*. You decide you don't like the red color, so you immediately change it to a deep orange. Dreamweaver (as you'd expect) updates the *style1* style with a deep orange color. So far, so good.

But now suppose that you apply this style to another headline on the page. Now there are two headlines with the identical *style1* style. However, you've again decided the color is wrong (man, are you picky!). So you select the second headline and change the color to a lovely chartreuse.

Several strange things happen: First, the Property inspector's Style menu now reads *style2*, or something similar like *style3* or *style4*. Second, the first headline *doesn't change color*.

Instead of updating the original style, Dreamweaver created yet another style and applied it to the paragraph (replacing the previously applied style). This approach may seem crazy, but it happened because Dreamweaver had no idea what you wanted. Did you intend to change the color of just that one headline for special emphasis? Or were you trying to change the color of the whole style?

In any case, Dreamweaver's behavior may seem erratic, and it's certainly not helping you edit the style. You have two choices if you want to update the style. First, make sure that *no other text* on the page uses the style. You can then change the color, typeface, and size using the Property inspector, causing Dreamweaver to update the style. Once you're done—really done—then you can use that style elsewhere on the page.

A better choice, if you wish to edit the style itself, is to use Dreamweaver's CSS tools and *not* the Property inspector, as discussed in the next chapter on page 124.

Using the Property inspector to format text is quick, easy, and sometimes quirky: it's great for a single, one-off, "gotta get it done now" type of Web page. But, because editing these styles is tricky, and because the more you use the Property inspector to format text, the more styles (*style3, style5, style1001*, and so on) are added to your page, the Property inspector isn't the best method for formatting an entire Web site. You'll generally want more consistency over your style names and how they're used throughout your site. You'll also want to tap into many more formatting options and harness advanced CSS features that aren't available from the Property inspector. For this, you'll need to learn how to use the CSS Styles panel and Dreamweaver's other CSS tools, as described in the next chapter.

CHAPTER

4

Introducing Cascading Style Sheets

What you see on a Web page when you use garden-variety HTML tags like <h1>, <p>, and <ul>, pales in comparison to the text and styling on display in, say, a print magazine. If Web designers had only HTML to make their sites look great, the Web would forever be the ugly duckling of the media world. HTML doesn't hold a candle to the typographic and layout control you get when creating a document in even the most basic word processing program.

Fortunately for us designers, we can change the ho-hum appearance of HTML using a technology called Cascading Style Sheets. Cascading Style Sheets (CSS) are a way of making HTML look beautiful. If you think of HTML as the basic structure of a house (the foundation, walls, and rooms), then CSS is the house's interior decoration (the paint, carpeting, and the color, style, and placement of furniture). CSS gives you much greater control over the layout and design of your Web pages. Using them, you can add margins to paragraphs (just as in a word processor), colorful and stylish borders to images, and even dynamic rollover effects to text links. Best of all, Dreamweaver's streamlined approach lets you combine many of these design properties into powerful *style sheets* with just a few mouse clicks.

CSS is a large topic. It's also the heart of today's cutting edge Web design. So instead of dedicating just a single chapter to the topic, this book provides instruction in the fine art of using CSS in nearly every chapter. In this chapter, you'll learn the basics of CSS, and how to use Dreamweaver CS3's powerful CSS tools. In the next few chapters you'll learn how CSS can improve the look of common Web page elements like links, images, and tables. Once you're comfortable with the basics, you'll find in-depth information on CSS—the kind of information that really makes your head ache—in Chapter 8. And, in Chapter 9, you'll learn how to harness the power of CSS to fully control the layout of a Web page.

Cascading Style Sheet Basics

If you've used styles in word processing programs like Microsoft Word or page layout programs like Adobe InDesign, CSS will feel familiar. A *style* is simply a rule describing how to format a particular piece of HTML. (A *style sheet* is a set of these styles.)

You can create a single style, for example, that formats text with the font Arial, colored red, and with a left margin of 50 pixels. You can also create styles specifically for working with images; for instance, a style can align an image along the right edge of a Web page, surround the image with a colorful border, and place a 50-pixel margin between the image and the surrounding text.

Once you've created a style, you can apply it to text, images, or other elements on a page. For example, you could select a paragraph of text, and then apply a style to instantly change the text's size, color, and font. You can also create styles for specific tags, so that all <h1> tags in your site, for example, are displayed in the same style, no matter where they appear.

You've already encountered CSS in the tutorial in the first chapter, and the previous chapter discussed how to use the Property inspector to apply basic formatting to text. The Property inspector's text formatting choices are the most basic way to create a CSS style. But there are a lot more powerful uses of Cascading Style Sheets, and you'll learn about many of these in the following pages.

Why Use CSS?

Although HTML alone provides basic formatting options for text, images, tables, and other Web page elements, Cascading Style Sheets have many advantages that make them a superior choice for most formatting tasks. In fact, the World Wide Web Consortium (W3C), the organization responsible for defining standards for the Web, has already *phased out* the <font> tag from the current HTML standard in favor of CSS. (For a list of other obsolete tags, see *www.codehelp.co.uk/html/deprecated.html.*)

But even if the threat of obsolescence doesn't motivate you to use CSS, consider this: Style sheets offer far more formatting choices than HTML. With CSS, you can format paragraphs as they appear in a book or newspaper (the first line indented and no space between each paragraph, for example), and control the leading (the space between lines of type in a paragraph). When you use CSS to add a background image to a page, you get to decide how (and whether) it tiles (repeats). HTML can't even begin to do any of these things.

Even better, CSS styles take up much less space than HTML's formatting options, such as the much-hated <font> tag. You can usually save a lot of kilobytes on text-heavy Web pages using CSS while maintaining a high level of formatting control. As a result, your pages look great *and* load faster.

Style sheets also make updating your site easier. You can collect all of your styles into a separate file that's linked to every page in your site. When you edit a style in

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Getting to Know (and Love) CSS

Cascading Style Sheets are an exciting–and complex–addition to your Web building toolkit, worthy of entire books and Web sites. For example:

- For an excellent tutorial on CSS, visit W3 Schools' CSS tutorials at *www.w3schools.com/css/*.
- If you want to get help and learn more about CSS, the CSS-Discuss mailing list (*www.css-discuss.org*) gives you access to a great community of CSS enthusiasts. Just be prepared for an overflowing inbox, and be aware of the etiquette spelled out on the list's home page.
- You'll also find a helpful collection of wisdom generated on the CSS-Discuss Wiki at *http://css-discuss.incutio.com*. This site provides insider tips, tricks, and resources for solving many common CSS problems.
- For the ultimate source of information, turn to the World Wide Web Consortium's Web site: *www.w3.org/Style/CSS*. The W3C is the body responsible for many of the standards that drive the Web–including HTML and CSS. (Beware: This site is the ultimate authority on the matter, and reads like a college physics textbook.)
- For a great list of CSS-related sites, visit the Information and Technology Systems and Services Web site at the University of Minnesota, Duluth: *www.d.umn.edu/itss/support/Training/Online/webdesign/css.html*.
- If you just love to curl up by the fireplace with a good computer book, try *CSS: The Missing Manual* by David McFarland (hey, that name rings a bell). It's written in the same style as this book, with in-depth coverage of CSS and step-by-step tutorials that guide you through every facet of this complicated technology.
- Finally, you don't have to look any further than your own desktop for the ultimate reference to each CSS property. Dreamweaver's built-in Reference window provides instant access to concise information on Cascading Style Sheets (see page 394).

the style sheet file (called an external style sheet), that change immediately ripples through your site, *wherever* that style is used. You can thus completely change the appearance of a site by simply editing a single style sheet file.

Cascading Style Sheets may sound like a cure-all for HTML's anemic formatting powers, but they're tricky to use. For example, CSS support varies from browser to browser, so you need to test your pages thoroughly in a wide variety of browsers. Even modern browsers—like Internet Explorer 6 for Windows, Firefox, Opera, and Safari—have their share of weird CSS behavior.

Fortunately, Dreamweaver CS3 is better than ever at displaying complex CSS-based designs, so you can develop your general design in Dreamweaver, and then use the preview feature to fine-tune your designs for different browsers. (The new "Check Browser Compatibility" tool described on page 129 is also a big help in troubleshooting CSS problems.)

Internal vs. External Style Sheets

Each new style you create gets added to a style sheet that's stored either in the Web page itself (in which case it's an *internal style sheet*), or in another file called an *external style sheet*.

Note: You may hear the term "embedded style sheet." It's the same thing as an internal style sheet.

Internal style sheets appear in the <head> portion of a Web page, and contain styles that apply only to that page. An internal style sheet is a good choice when you have a very specific formatting task for a single page. For example, perhaps you want to create styles to format the text and table of a chart that appears only on a single page.

Tip: It's often easier, when creating a new design, to add styles to an internal style sheet. Once you're satisfied with the design, you can then export the styles to an external style sheet–for use by all your site's pages–as described on page 294.

An external style sheet, on the other hand, contains only styles—no HTML—and can be linked to numerous pages. In fact, it can be linked to every page on your Web site to provide a uniform, sitewide style. For instance, you can put a headline style in an external style sheet and link that sheet to every page in the site. Every headline on every page then shares the same look—instant design consistency! Even better, when the boss (or the interior decorator in you) calls up and asks you to change the color of the headlines, you need to edit only a single file—the external style sheet—to update hundreds or even thousands of Web pages.

You can create both types of style sheets easily in Dreamweaver, and you aren't limited to choosing one or the other. A single Web page can have both an external (for styles that apply to the whole site) and an internal style sheet (for page-specific formatting). You can even attach multiple external style sheets to a single page.

Types of Styles

Styles come in several different flavors. The two most common are *class* and *tag* styles.

A *class style* is one that you create, name, and attach manually to text or an HTML tag. Class styles work much like styles in word processing and page-layout programs. If you want the name of your company to be displayed in bold and red wherever it appears in the text of a Web page, you can create a class style named *Company* with boldface and red text-color formatting. You would then select your company's name on the page, and apply this style.

You may actually already be using class styles without even knowing it. The Property inspector's basic text-formatting controls, discussed in Chapter 3, generate basic class styles whenever you use them. See page xx for more details.

The other major type of CSS style is called a *tag style*, and applies globally to an individual HTML tag, as opposed to individual selections. Suppose you wanted to display every Heading 1 paragraph in the Arial font. Instead of creating a class style and applying it to every Heading 1 on the page, you could create an HTML tag style for the <h1> *tag*. In effect, you redefine the tag so that it's displayed in Arial.

The main benefit of redefining an HTML tag in this way is that you don't have to apply the style by hand. Since the new style says that *all* <h1> tags must use Arial, wherever a Web browser encounters an <h1> tag, it displays the text in Arial, the specified font.

These HTML tag styles are the easiest way to format a page. For one thing, there's no need to select the tag and apply the style; the page needs only to contain an instance of the tag—<h1>, for example—that you've redefined.

Nevertheless, there are times when only a class style will do, such as when you want to format just a few words in a paragraph. Simply redefining the <p> tag won't do the trick, since that would affect the entire paragraph. Instead, you have to create a class style and apply it to just the words you wish to style. In addition, class styles are handy when you want to format just one instance of a tag differently from others. If you want to format the introductory paragraph on a page differently from all other paragraphs on the page, you'd create a class style and apply it to that first paragraph.

Note: In addition to classes and tag styles, other types of styles provide added control for particular situations. Dreamweaver considers these advanced styles, and you can read about them starting on page 283.

Creating Styles

You begin most CSS-related tasks in the CSS Styles panel, which is Dreamweaver's command center for creating and managing styles (see Figure 4-1). To open it, choose Window → CSS Styles (or press Shift+F11).

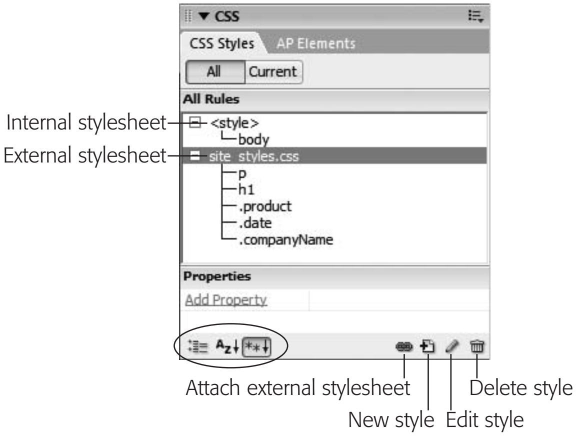
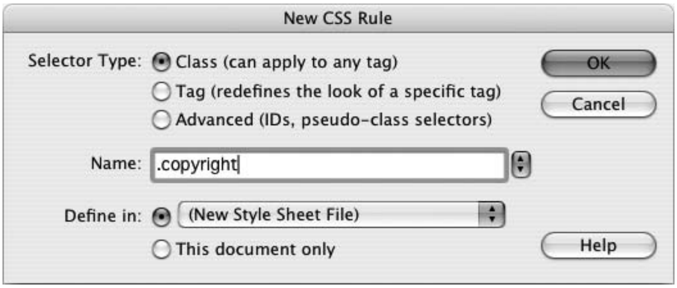


Figure 4-1:
With the "All" button selected, the CSS Styles panel lists the names of all styles available to the current page, including those in both external and internal style sheets. Here, one external style sheet–site_styles.css–contains five styles. The first two are tag styles (notice that the names match various HTML tags), while the next three are class styles (note the period at the beginning). There's also one tag style defined in an internal style sheet–the one listed below "<style>." Click the minus (–) icon (arrow on Mac) to the left of the style sheet to collapse the list of styles, hiding them from view. The "Properties" list in the bottom half of the panel lets you edit a style as described on page 289; the three buttons at the bottom left of the panel (circled) control how the Properties list is displayed.

Phase 1: Set Up the CSS Type

To create a new style, click the new style button on the CSS Styles panel (see Figure 4-1); right-click anywhere in the CSS Styles panel, and then select New from the menu that appears. Or choose Text → CSS Styles → New. The New CSS Rule dialog box appears (Figure 4-2), where you begin the process of creating your new style. (In the technical language of CSS, a style is actually called a *rule*, but for simplicity's sake this book just uses the term *style.* After all, *Cascading Rule Sheets* doesn't have much of a ring to it.) Here's a quick tour of your choices:



New CSS Rule

Selector Type: ● Class (can apply to any tag)
○ Tag (redefines the look of a specific tag)
○ Advanced (IDs, pseudo-class selectors)

Name: .copyright

Define in: ● (New Style Sheet File)
○ This document only

Figure 4-2:
In the New CSS Rule dialog box, you choose a type of style and give it a name. The label next to the naming box changes depending on the type of style you choose. In this example, since Class is selected, the Name label appears; if you choose the Tag option, it changes to Tag (or Selector, if you're using the Advanced option).

- **Selector Type.** Click the appropriate radio button for the kind of style you're creating: *Class* (to create your own style from scratch) or *Tag* (to create an HTML tag style that Dreamweaver automatically applies to each occurrence of the tag). See the previous section (page 116) for a discussion of these two types.

  The third type offered here, Advanced, lets you create advanced style types such as IDs, pseudo-classes, and descendent selectors. (You'll learn about these types in various parts of the book; you can find a detailed discussion of them starting on page 283.)

- **Name**. If you clicked the Class button, type a name for the new style. All class styles begin with a period, according to standard Cascading Style Sheet convention.

  Another Class style name rule: A letter must follow the period. After that, you can use any combination of letters and numbers, but avoid unusual characters and spaces. For example, *.logo*, *.main_content*, *.column2* all work fine. Dreamweaver lets you know if you use any invalid characters for the name.

  If you chose Tag instead, then, from the Tag pop-up menu (which appears when you turn on the Tag radio button), select the HTML tag you want to redefine.

Tip: If you're an HTML guru, you may find it faster to skip the Tag pop-up menu and just type the tag (minus the brackets) in the Name box. For example, if you want to create a style for all unordered (bulleted) lists, type *ul*.

If you clicked the Advanced button, Dreamweaver lets you type any valid CSS selector type in the Selector field (you'll learn about selectors on page 283). You'll use this feature for some advanced CSS tricks, but you can also use it just to create a tag or class style.

- **Define in**. Click "This document only" if you want the styles to apply only to the current Web page (creating an *internal* style sheet, as described on page 115). To create a new *external* style sheet, choose New Style Sheet File from the "Define in" pop-up menu. This option not only creates a new external CSS file (which you can save anywhere in your site folder), but also adds the necessary code in the current document to link it to that file.

  If you've previously linked this document to an external style sheet (see page xx), that style sheet's name appears in the pop-up menu, indicating that Dreamweaver is going to store the new style in this style sheet file.

Note: If you create a bunch of internal styles in a particular page, and later realize you'd like to turn them into an external style sheet that you can use in other pages, you're in luck. Dreamweaver CS3 introduces many new tools for managing your style sheets. You'll learn how to use them starting on page 291.

If you indicated that you want to create an external style sheet, clicking OK makes a Save Style Sheet As dialog box appear. Navigate to your site's folder, and then type a name for the new external CSS file. Just as HTML files end in .html, CSS files end in .css.

Note: If you'll be using this style sheet for all your site's pages, you may want to save it in your site's root folder, or in a folder specifically dedicated to style sheets, and give it a general name like *site_styles.css* or *global.css*. (You don't have to type the .css file name extension, by the way. In this case, Dreamweaver adds it.)

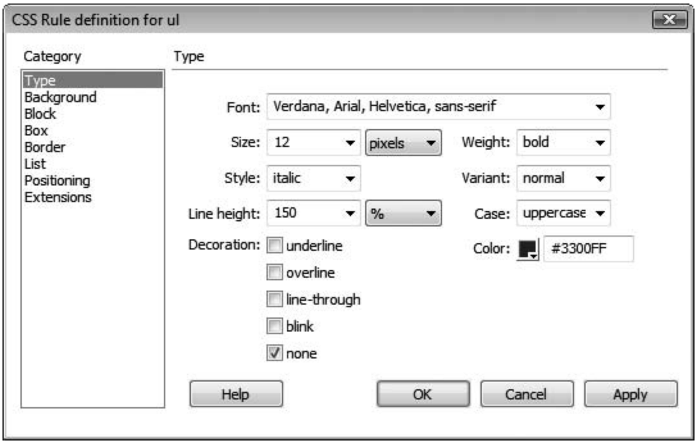
No matter what "Define in" option you selected, clicking OK eventually brings you to the CSS Rule Definition window.

Phase 2: Defining the Style

The CSS Rule Definition window provides access to all of the formatting options available to you and your Web page text and graphics (see Figure 4-3). You'll learn about each of the different properties throughout this book.

Once you've defined the style, click OK at the bottom of the Rule Definition window. Dreamweaver adds the style to the specified style sheet, and displays it in the CSS Styles panel (Figure 4-1).

The real trick to creating a style is mastering all of the different properties available, such as borders, margins, and background colors, and *then* learning which ones work reliably in the different browsers.



CSS Rule definition for ul

Category: Type, Background, Block, Box, Border, List, Positioning, Extensions

Type

Font: Verdana, Arial, Helvetica, sans-serif

Size: 12 pixels

Weight: bold

Style: italic

Variant: normal

Line height: 150 %

Case: uppercase

Decoration: □ underline □ overline □ line-through □ blink ☑ none

Color: #3300FF

Figure 4-3: *For ultimate formatting control, Dreamweaver lets you set dozens of different Cascading Style Sheet properties from the CSS Rule Definition window. You'll learn about these options throughout this book. For example, the Type properties are discussed on page 132.*

Using Styles

Once you've created styles, applying them is easy. In fact, if you created HTML tag styles, you don't need to do anything to apply them, because their selectors (see the box to the right) automatically dictate which tags they affect.

Linking to an External Style Sheet

Whenever you create an external style sheet, Dreamweaver automatically links it to the current document. To use its styles in a different Web page, however, you must *attach* it to the page.

To do so, open the Web page to which you wish to add the style sheet. Then, on the CSS Styles panel, click the Attach External Style Sheet button (see Figure 4-1). (If the CSS Styles panel isn't open, choose Window → CSS Styles or press Shift-F11.)

Tip: You can also use the Property inspector to attach a style sheet. Just select "Attach Style Sheet…" from the Style menu.

The Attach External Style Sheet window appears (see Figure 4-4). Click Browse. In the Select Style Sheet File dialog box that appears, navigate to and double-click the CSS (.css) file you wish to attach to the document. If the style sheet you select is outside the current site—for example, you've selected a style sheet you like from another one of your Web sites—Dreamweaver offers to copy the style sheet file into your site's root folder; click Yes.

The Attach External Style Sheet window provides two other options: how to attach the style sheet, and what type of "media" you want the styles to apply to. The "media" setting is optional and dictates when the styles from the style sheet are applied (for example, you can apply a different set of styles when a page is printed vs. when it displays on a computer monitor.) You'll find in-depth information on media types and how to use them on page 301.

POWER USERS' CLINIC

Anatomy of a Style

Dreamweaver automatically handles the details of adding the proper CSS code to your pages, but if you're looking for a way to impress your neighbors, here's the behind-the-scenes scoop on how it works.

When you create an internal style sheet, Dreamweaver adds a pair of <style> tags to the head of the page (and a pair of HTML comment tags that hide the CSS from very old browsers). The opening <style> tag tells a Web browser that the following information isn't HTML–it's CSS code. When the Web browser encounters the closing </style> tag, it knows the CSS style information has ended.

Within the <style> tag, you'll see one or more styles (reminder: in CSS-speak, styles are also called "rules"). An HTML tag style for the Heading 1 tag (<h1>), for example, might look like this:

```
h1 {
font-size: 24px;
color: #003399;
}
```

The first part–h1–is called a *selector* (in CSS-speak) and indicates what the style applies to. In this case, wherever the <h1> (Heading 1) tag appears in the Web page's code, this style applies.

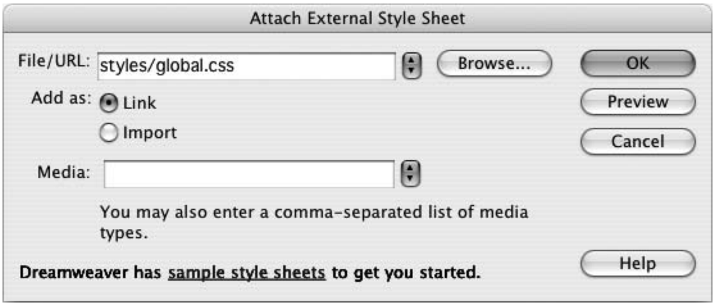
In Dreamweaver, you can also look at the raw style information of an external style sheet in several ways: Open the .css file as you would a Web page (choose File → Open or double-click its name in the Files panel), or right-click (Control-click) on the style's name in the CSS Styles panel, and then then, from the pop-up menu, choose "Go to code"; if you've changed Dreamweaver's preferences, double-clicking a style's name can also open the CSS file.

The information between the braces–{ }–states what formatting the browser should apply. The code above contains two formatting instructions for the <h1> tag. Each one's called a *declaration* and is composed of a *property* and a *value*. For instance, *font-size: 24px* is one declaration, with a property of *font-size* and a value of *24px*. In other words, this rule tells a Web browser that text inside an <h1> tag should be 24 pixels tall. The second declaration in the code makes the text of all <h1> tags show up in the color #003399.

A class style looks just like an HTML tag, except that instead of a tag, the selector is a name you've supplied, preceded by a dot, like this:

```
.company {
font-size: 24px;
color: #003399;
}
```

Styles stored in an external style sheet look exactly the same; the only difference is that external style sheets don't include the <style> tags and shouldn't include any HTML code. You can open a page in Code view (choose View → Code) and edit an internal style sheet, just as you would the HTML of the page (see Chapter 10).



File/URL: styles/global.css

Add as: ● Link ○ Import

Media:

You may also enter a comma-separated list of media types.

Dreamweaver has sample style sheets to get you started.

Figure 4-4: *Adding styles from an external style sheet is as simple as browsing for the file, and then clicking OK. Choosing a media type is optional.*

When attaching an external style sheet, you can either "link" it or "import" it. These two choices are nearly identical; they're simply two different methods of attaching an external style sheet to a Web page. To save you one extra click, just go with Dreamweaver's suggestion: link.

Tip: You can preview the effect of the style sheet on your page by clicking the Preview button in the Attach External Style Sheet window.

After choosing your options, click OK, and Dreamweaver adds the necessary HTML code to the head of the Web page, and automatically formats any tags in the document according to the style sheet's HTML tag styles. You'll see the formatting changes take place in the document window immediately after attaching the external style sheet.

If the style sheet contains *class* styles, on the other hand, you won't see their formatting effects until you apply them to an element on the page, as described next.

Applying a Class Style

You can apply class styles to any selection in the document window, whether it's a word, an image, or an entire paragraph. (You can apply any class style to any element, although doing so doesn't always make sense. If you format a graphic with a style that specifies bold, red Courier type, it won't look any different.)

Suppose your company's name appears in a paragraph of text on a Web page that includes (either in an internal style sheet or in a linked, external style sheet) a class style named *.company*. To format that text using the class style, you select the company name in the document window, and then apply the style, as described below.

Similarly, to format larger selections, such as an entire paragraph, you'd select the paragraph, and then apply the class style. In fact, you can apply a class style to *any* HTML tag, such as the <p> (paragraph), <td> (table cell), or <body> tags.

To apply a class style to text, start out by selecting some words. Then, from the Style menu in the Property inspector, select the style name (Figure 4-5). To style an entire paragraph, you need only to place the cursor anywhere inside the paragraph (or heading) before using the Property inspector.

To apply a class style to an object like an image, start by selecting the object (as always, the Tag selector at the bottom of the document window is a great way to select a tag). Then use the Class pop-up menu at the top right of the Property inspector to select the style name.

You can also apply a class style by selecting whatever element you wish to style, choosing Text → CSS Styles, and then selecting the style from the submenu. Or you can right-click (Control-click) the style's name in the CSS Styles panel, and then, from the pop-up menu, choose "Apply". Finally, you can also apply a class from the document window's Tag selector, as shown in Figure 4-6.

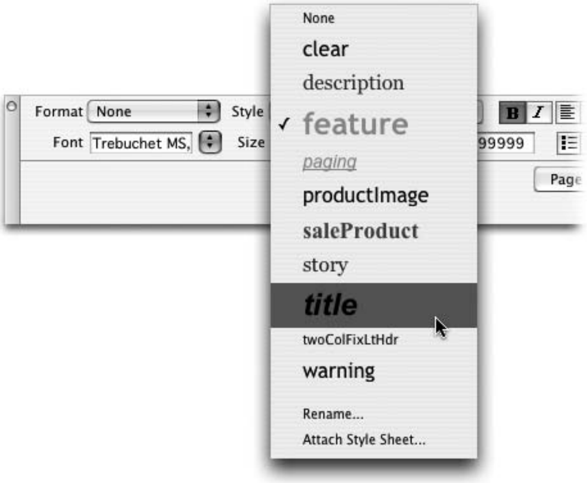


Figure 4-5:
The Property inspector provides the easiest method of applying a class style. Depending on what you've selected on the page (text, an image, or some other HTML tag) you'll encounter one of two different menus–the Style menu appears (as shown here) when text is selected, while the Class menu appears in the top, right of the Property inspector when an image, table, or other non-text HTML tag is selected. Either way, it's the same menu with the same options, and you use it to select the name of a style to apply to whatever you've selected in the document window. You can also remove a style by selecting None from the menu.

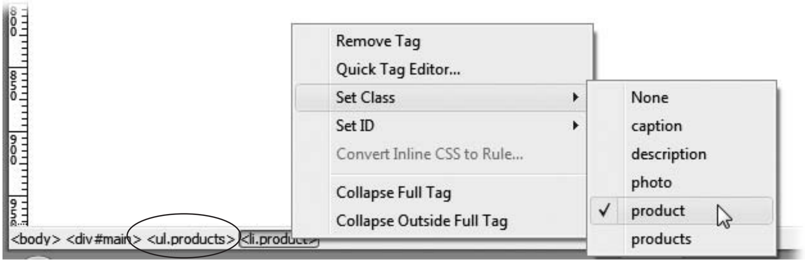


Figure 4-6:
You can apply a class style directly to a tag using the document window's Tag selector at the bottom of the window. Just right-click (Control-click) the tag you wish to format, and then select the class style from the Set Class submenu. In addition, the Tag selector lets you know if a tag has a class style applied to it. If so, the style's name is added at the end of the tag. For example, in this figure, a class style named .products has been applied to a bulleted list (the <ul> tag) on the page (circled).

When you apply a class style (*.company*, for example) to a tag, Dreamweaver adds a special *class* property to the page's code, like this: <p class="company">. On the other hand, if you apply a class to a selection that isn't a tag—like a single word that you've double-clicked—Dreamweaver wraps the selection within a <span> tag like this: <span class="company">CosmoFarmer</span>. This tag, in other words, applies a style to a *span* of text that can't be identified by a single tag.

As you can see, it doesn't take much code to add a style to a Web page. A single application of a CSS style may add only 15 characters to your document (<p class="company">). When you compare that compact instruction with the equivalent HTML code required to produce the same formatted text (such as <font size="5" face="Georgia, Times New Roman, Times, serif" color="#999933">CosmoFarmer</font>), class styles look downright petite

Un-Applying a Class Style

To remove a style from an object on a Web page, simply select the element, and then, from the Property inspector's Style menu, select None (see Figure 4-5). You can also choose Text → CSS Styles → None to remove a style from any selection (even nontext elements like images or tables).

Tip: If you've applied a class style to a selection of text, you don't actually have to select all the text to remove the style. Just click anywhere inside it, and then select None from the Property inspector's Style menu (or choose Text → CSS Styles → None). Dreamweaver is smart enough to realize you want to remove the style applied to the text. (If you applied the style to a tag, Dreamweaver removes the Class property. If you applied the style using the <span> tag, Dreamweaver removes the span tag.)

You can't, however, remove *tag* styles from HTML tags. For example, suppose you've redefined the <h1> tag using the steps outlined on page 117. If your page has three Heading 1 (<h1>) paragraphs, and you want the third heading to have a different style from the other two, you can't simply "remove" the <h1> style from the third paragraph. Instead, what you need to do is create a new *class* style with all of the formatting options you want for that third heading and apply it directly to the <h1> tag (by the magic of CSS, the class formatting options override any existing tag style options—see page 296 for more on this sleight of hand).

Manipulating Styles

As with anything in Dreamweaver, styles are easy enough to edit, delete, or duplicate; all you need is a map of the terrain.

Editing Styles

While building a Web site, you continually refine your designs. That chartreuse color you assigned to the background of your pages may have looked great at 2 a.m., but it loses something in the light of day.

Fortunately, one of CSS's greatest selling points is how easy it makes updating the formatting on a Web site.

Tip: Although this section focuses mainly on how to style your text, you also use CSS styles to add background colors, background images, borders, and accurately position elements on page. The next few chapters will show you how to style links, images, tables, forms, and other page elements with CSS.

FREQUENTLY ASKED QUESTION

When Formatting Disappears

Sometimes when I copy text from one Web page and paste it into another Web page, all of the formatting disappears. What's going on?

When you use Cascading Style Sheets, keep in mind that the actual style information is stored either in the <head> of the Web page (for internal style sheets) or in a separate CSS file (an external style sheet). If a page includes an internal style sheet, then when you copy text, graphics, or other page elements, Dreamweaver copies those elements and any class style definitions used by that content. When you paste the HTML into another page, the styles are written into the <head> of that page. This feature can save you some time, but won't solve all of your woes. It doesn't, for example, copy any tag styles you've *created,* or most advanced styles you may create (see page 283 for more on advanced styles). So if you copy and paste some text–say, an <h1> tag styled with an h1 tag style–the <h1> tag and its contents paste into another page, but not the tag style.

In addition, if a page uses an external style sheet, then when you copy and paste text, the styles themselves don't go along for the ride. If you copy a paragraph that has a class style applied to it, and paste it into another document, the code in the paragraph is pasted (<p class="company"> for instance), but the actual "company" style, with all its formatting properties, isn't.

The best solution is to use a common external style sheet for all pages on your site. That way, when you copy and paste HTML, all the pages share the same styles and formatting. So in the example above, if you copy a paragraph that includes a class style–class="company"–into another page that shares the same style sheet, the paragraphs look the same on both pages.

Dreamweaver provides many ways to edit styles:

- Select a style in the CSS Styles panel (Figure 4-1), and then click the Edit Style button to open the Rule Definition window (Figure 4-3). (This is the same window you used when first creating the style.) Make your changes, and then click OK to return to the document window. Dreamweaver reformats the page to reflect any changes you made to styles used in the current document.
- Double-clicking the name of a style in the CSS panel also opens the Rule Definition window. Actually, depending on a preference setting—or a setting someone else may have tweaked while using your computer—double-clicking a style in the CSS panel may display the—eeck!—raw CSS code in Code view. To change this behavior, open the Preferences window (Ctrl+U [⌘-U]), click the CSS Styles category, and then select the "Edit using CSS dialog" button.
- Right-click (Control-click) the name of a style in the CSS Styles panel, and then choose Edit from the shortcut menu, which also opens the Rule Definition window. Make your changes to the style, and then click OK to return to the document window.

Note: The properties pane in the CSS Styles panel offers yet another, faster method of editing a style. This advanced technique requires a bit of CSS savvy and is discussed on page 108.

FREQUENTLY ASKED QUESTION

When Undo Won't Do

Sometimes when I edit a style–say, to change the font color–I can undo that change. But sometimes, I'm unable to undo changes I've made to a style. What gives?

You can undo only changes made to a document you're currently working on. So say you've added an internal style sheet (see page 115) to a document. If you edit one of those styles, Dreamweaver lets you undo those changes. Because the styles in an internal style sheet are a part of the Web page you're working on, choosing Edit → Undo undoes the last change you've made to that style.

However, if you're using an external style sheet (see page 115), you're actually working on two *different* files at the same time–the Web page you're building, and the style sheet file in which you add, delete, or edit styles. So if you're designing a Web page, and edit a style contained in the external style sheet, you're actually making a change to the style sheet file. In this case, choosing Edit → Undo will undo only the last change made to the *Web page*. If you want to undo the change you made to the external style sheet, you have to switch over to that file (click the tab for the CSS file in the document window (see Figure 1-1), and then choose Edit → Undo).

There's one additional wrinkle to this already confusing situation. Normally, when you're working on a Web page and you add or edit a style in an external style sheet, Dreamweaver opens the style sheet file in the background (you'll see a tab appear for that file in the document window.) Dreamweaver does this so you *can* undo any changes you make to the styles in that file.

However, there's a preference setting that turns this feature off. When that happens, any edits you make to an external style sheet while working on a Web page are immediately made to the style sheet file. And since Dreamweaver doesn't open that file, you can't undo those changes.

To make sure that problem doesn't happen, open the Preferences window by choosing Edit → Preferences (Dreamweaver → Preferences on the Mac). Select the CSS Styles category, and make sure the "Open CSS files when modified" checkbox is turned on.

Deleting a Style

At some point, you may find you've created a style that you don't need after all. Maybe you redefined the HTML <code> tag, and realize you haven't even used the tag in your site. There's no need to keep it around, taking up precious space in the style sheet.

To delete a style, make sure the CSS Styles panel is open (Window → CSS Styles), and the All button is highlighted (see Figure 4-1). Click the name of the style you wish to delete, and then press your keyboard's delete key (you can also click the Trash can icon at the bottom of the panel). You can also remove all the styles in an internal style sheet (as well as the style sheet itself) by selecting the style sheet—indicated by "<style>" in the CSS Styles panel (see Figure 4-1)—and pressing Delete (or clicking the Trash can icon). If you "trash" an *external* style sheet, however, you merely unlink it from the current document without actually deleting the .css file.

Unfortunately, deleting a class style *doesn't* delete any references to the style in your site's pages. For example, if you've created a style called .company and applied it throughout your site, and you then delete that style from the style sheet, Dreamweaver doesn't remove the <span> tags or class properties that refer to the style. Your pages are still littered with orphaned code like this—<span class="company">CosmoFarmer</span>—even though the text loses the styling. (See how to solve this problem using Dreamweaver's powerful Find and Replace tool on page 718.)

Renaming a Class Style

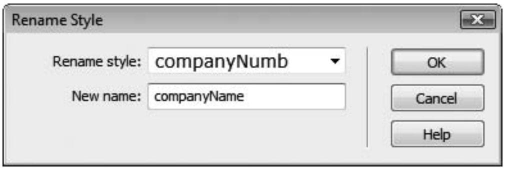
You can rename a style by selecting it in the CSS Styles panel, pausing a second, and then clicking the name again. This makes the name editable, at which point you can type a new name in its place. Alternatively, you could open the .css file in Code view, and then edit the name. However, just changing the name doesn't do much good if you've already applied a class style throughout your site. The *old* name still appears in each place you used it.

What you really need to do is rename the style, and *then* perform a find-and-replace operation to change the name wherever it appears in your site. Dreamweaver includes a handy tool to simplify this process.

To rename a class style:

1. **In the Style menu (or Class menu) on the Property inspector (Figure 4-5), choose Rename.**

   The Rename Style window appears (Figure 4-7).



Rename style: companyNumb

New name: companyName

Figure 4-7:
The Rename Style tool is a fast and easy way to change the name of a class style even if you've already used the style hundreds of times throughout your site.

2. **From the top menu, choose the name of the style you wish to rename.**

   This menu lists all class styles available on the current page, including external and internal styles.

3. **Type the new style name in the "New name" box.**

   You must follow the same rules for naming class styles described on page 118. But, just as when creating a new class, you don't need to precede the name with a period—Dreamweaver takes care of that.

4. **Click OK.**

   If the style whose name you're changing is an internal style, Dreamweaver makes the change. Your job is complete.

   However, if the style belongs to an external style sheet, Dreamweaver warns you that other pages on the site may also use this style. To successfully rename the style, Dreamweaver must use its "Find and Replace" tool to search the site and update all pages that use the old style name. In that case, continue to step 5.

5. **If you get cold feet, click Cancel to call off the name change, or click Yes to open the "Find and Replace" window, where you should click Replace All.**

   One last warning appears, reminding you that this action can't be undone.

Note: If you click No in the warning box that appears after step 4, Dreamweaver still renames the style in the external style sheet, but doesn't update your pages.

6. **Click Yes.**

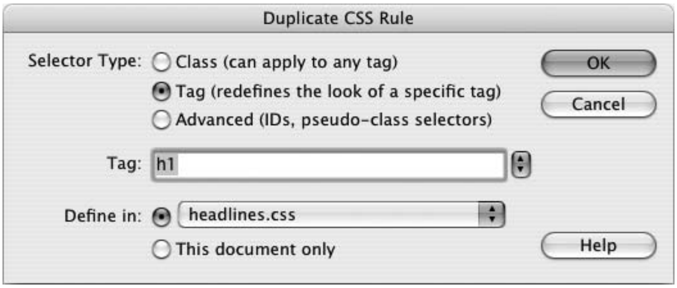
   Dreamweaver goes through each page of your site, dutifully updating the name of the style in each place it appears. This hidden gem is a great tool, and particularly useful if you use the Property inspector to set font colors, types, and sizes. In that case, you can use this feature to rename the nondescriptive class names—Style1, Style2, and so on—with which Dreamweaver starts you off. (The tutorial for Chapter 1 takes you through the steps of renaming styles Dreamweaver creates when you use the Property inspector to format text. See step 10 on page 52.)

Duplicating a Style

Dreamweaver makes it easy to duplicate a CSS style, which is handy when you've created, say, an HTML tag style, and then decide you'd rather make it a class style. Or you may want to use the formatting options from one style as a starting-off point for a new style. Either way, you start by duplicating an existing style.

You can duplicate a style in two ways. The easiest method is to open the CSS Styles panel (Window → CSS Styles), right-click (Control-click) the name of the style you wish to duplicate, and then choose Duplicate from the shortcut menu.

The Duplicate CSS Rule window appears (Figure 4-8), where you can give the duplicated style a new name, reassign its Type setting, use the "Define in" menu to move it from an internal to an external style sheet, and so on.



Duplicate CSS Rule

Selector Type: ○ Class (can apply to any tag)
● Tag (redefines the look of a specific tag)
○ Advanced (IDs, pseudo-class selectors)

Tag: h1

Define in: ● headlines.css
○ This document only

Figure 4-8:
The Duplicate CSS Style dialog box looks and acts just like the New CSS Rule box (Figure 4-2). You can select a new style type, name it, and then add it to an external or internal style sheet. The only difference is that the duplicated style retains all the original style's CSS properties.

When you click OK, Dreamweaver adds the duplicate style to the page or external style sheet. You can then edit the new style just as you would any other, as described on page 124.

Checking Browser Compatibility

As if learning Dreamweaver, HTML, and CSS weren't big enough challenges, Web designers also have to contend with the fact that not all browsers display CSS in the same way. What looks great in Firefox may look terrible in Internet Explorer 6—and vice versa. Unfortunately, a lot of CSS display problems aren't the fault of the Web designer or CSS, but are caused by bugs in the browsers. This sad fact of browser life usually forces Web designers to spend lots of time testing Web pages in different browsers to identify and fix problems.

Fortunately for us, Dreamweaver CS3 introduces a new tool to help diagnose CSS problems, and advise you on the best way to fix them, saving you many hours of testing and troubleshooting. The Check Browser Compatibility tool scans a page's HTML and CSS, and determines if it's likely that one or more browsers will have trouble displaying your page. It actually checks two things: whether you've included any CSS properties or values that one or more browsers don't understand, and whether the particular combination of HTML and CSS you're using might trip up a particular browser.

For example, the *blink* value of the CSS Decoration property (page 134) isn't supported by Internet Explorer or Safari. If you place that value in a style on a page, and then use the Check Browser Compatibility tool, Dreamweaver lets you know those browsers won't do anything with the blink setting. These types of errors are straightforward: You either change the property (or remove it) so that the style works in all browsers, or live with the fact that the specified browser will ignore the particular style instruction.

The second type of problem is more nebulous. Dreamweaver also warns you of potential browser problems that might arise because of the way you've used HTML and CSS. The warning Dreamweaver gives in this case is not as clear-cut as, "*That* browser doesn't understand *that* CSS property;" it's more like, "That browser *does* understand that CSS property, but in this one instance, the browser may get it horribly wrong, and mess up your Web page."

For example, Internet Explorer knows what a bulleted list is; it also knows what the CSS *display* property is (see page 137). In most cases, Internet Explorer has no problem displaying both bulleted lists and items styled with a "block" value for the display property. But, in one case—when a link inside a list item has a display value of *block*—the list items appear with a mysterious extra space below them. The result: an unattractive white space between an otherwise orderly stack of navigation buttons…but this happens *only* with Internet Explorer. These are the types of obscure problems that make Web designers consider a new career.

Fortunately, the Check Browser Compatibility tool is aware of many of the most common, hair-pulling, browser bugs and can save you lots of time by letting you know when a page might have a problem. To use the tool:

1. **Open a Web page that you'd like to test.**

   You can open any Web page; if the page has an external style sheet, Dreamweaver checks that as well. You can even open an external style sheet (.css) file and run this command on it to identify CSS properties and values that might not be understood by some browsers.

2. **Choose File → Check Browser Compatibility.**

Alternatively, you can choose Check Browser Compatibility from the Check Page menu at the top right of the document window (see Figure 4-9). In either case, Dreamweaver analyses the HTML and CSS for the page, and spits out the results in the Browser Compatibility tab of the Results panel (see Figure 4-9).

Each issue that Dreamweaver discovers is displayed with an icon indicating the severity of the problem, the line number in the HTML code where the potential problem occurs, and a short description of the issue.

An icon in the far left column of the results panel indicates the type of issue and its likelihood of causing a browser problem. An *!* mark indicates an error—a problem with the CSS such as a property or value that's either invalid or isn't understood by a particular browser. Problems identified by a red pie graph are warnings, and they represent the likelihood of encountering a problem in a particular browser: A single slice means that yes, the page has something that might cause difficulty for a particular browser, but then again the browser may display the page just fine. You'll see this icon for an issue that's rare or crops up only when a very particular set of HTML and CSS are in place (and Jupiter's rising while Mars descends).

A fully red circle indicates that it's very likely you'll see a problem in the specific browser. For example, the Internet Explorer problem related to links, lists, and the display property mentioned previously is nearly a sure thing. If you've set up your CSS and HTML in that way, you *will* see that problem in Internet Explorer.

You should always test any page that shows an error or warning, even if Dreamweaver thinks the problem is only slightly likely to occur.

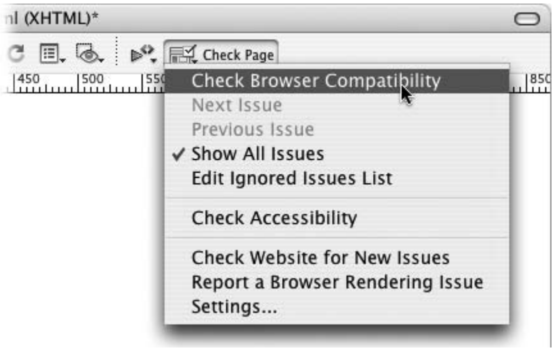
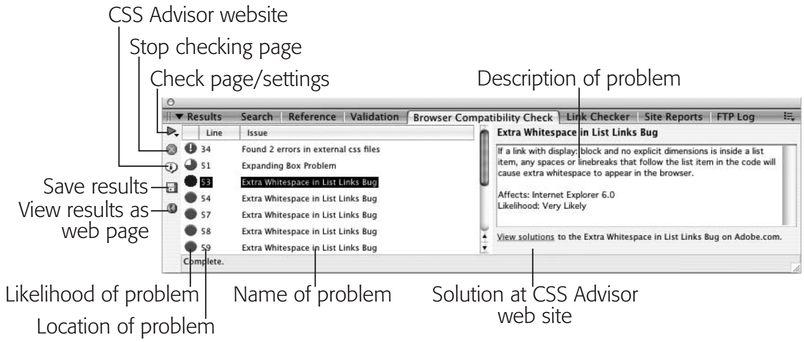


Figure 4-9:
The Check Page menu lets you examine a page and see how compatible the page's HTML and CSS are with a variety of Web browsers. To change the browsers Dreamweaver uses for its analysis, select the Settings option. A window listing the most common browsers appears, from which you specify the earliest version of the browser you wish to check against. For example, if you don't worry about Internet Explorer 5 any longer, choose 6 from the menu. Now Dreamweaver will check only for problems that occur in version 6 or later.

3. **Select an issue in the Results panel (Figure 4-10).**

After selecting an issue in the Results panel, a detailed explanation of the problem appears in the right side of the panel; in addition, you see a list of which browsers this problem may affect, and the likelihood that the problem will crop up. In Figure 4-10, the issue "Extra Whitespace in List Links Bug" is selected. You can see what causes it and see that it affects Internet Explorer 6 (alas, this bug can also crop up in IE 7).



Line	Issue
34	Found 2 errors in external css files
51	Expanding Box Problem
53	Extra Whitespace in List Links Bug
54	Extra Whitespace in List Links Bug
57	Extra Whitespace in List Links Bug
58	Extra Whitespace in List Links Bug
59	Extra Whitespace in List Links Bug

Complete.

Extra Whitespace in List Links Bug

If a link with display: block and no explicit dimensions is inside a list item, any spaces or linebreaks that follow the list item in the code will cause extra whitespace to appear in the browser.

Affects: Internet Explorer 6.0
Likelihood: Very Likely

View solutions to the Extra Whitespace in List Links Bug on Adobe.com.

Figure 4-10:
Don't bother with the "Save Results" button in the left edge of the Results panel. Clicking this button creates a hard to read and not so useful XML file that lists the same information you find in the Results panel. (That said, perhaps this file could come in handy if you want to report back to your pet robot about how your day went.)

4. **Fix the problem.**

   Dreamweaver just identifies the problem, it doesn't fix it. However, Adobe hasn't left you in the lurch. When you select a problem in the Results panel, a link ("View solutions") appears at the bottom right of the panel (see Figure 4-10). Clicking that link launches a Web browser, and opens a page on Adobe's CSS Advisor site. This Web site is an ever-evolving catalog of CSS browser problems and recommended solutions. Dreamweaver's Results panel integrates with this site, so the link on the panel takes you to a page that addresses the very problem you're trying to solve. Nice.

   In most cases the solution to an issue involves adding an additional style or editing an already created style. You shouldn't try to make too much sense out of the solutions—many don't make any technical sense. For example, the solution for the "Extra White Space in List Links" bug is to create two styles (both of which target the link tag inside the affected list), and apply two different display properties (see page 137): the first style uses the *inline-block* value, and the second applies the *block* value. It's not logical, but it does knock some sense into IE. Most of the solutions are the results of countless hours of trial and error by exasperated and industrious Web designers. Just be thankful the answers to these problems are just a click away.

Text Formatting with CSS

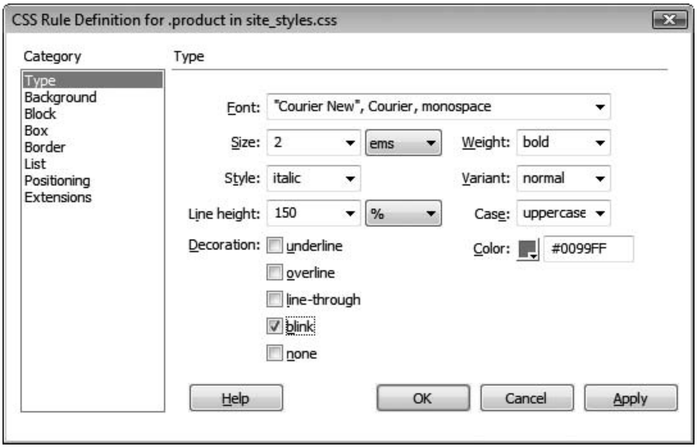
One of the best uses for Cascading Style Sheets is to convert the drab appearance of HTML text into lavishly designed prose. Or, if you like a somber, corporate style, CSS can help with that too. Whatever your design inclination, you can improve the look of your Web text using CSS.

Dreamweaver divides the many CSS properties into eight categories (see Figure 4-3). The most commonly used properties for text are stored in the Type and Block categories, while the List category offers several options for formatting bulleted and numbered lists.

Note: You can apply nearly every CSS property to text. For example, you can use the border property to underline text, and the margin property to remove space between paragraphs. Those properties and others not listed in the Type or Block categories are introduced later in this book (don't want to blow your circuits too quickly). For now, you'll learn the most type-centric properties.

Type Properties

As the name implies, the Type category of the Rule Definition window lets you set formatting options that affect text (see Figure 4-11). Here are the settings you can adjust:



CSS Rule Definition for .product in site_styles.css

Type

Font: "Courier New", Courier, monospace

Size: 2 ems

Weight: bold

Style: italic

Variant: normal

Line height: 150 %

Case: uppercase

Decoration: □ underline □ overline □ line-through ☑ blink □ none

Color: #0099FF

Figure 4-11:
You'll visit the Type category frequently while creating CSS styles. You can set many different properties for formatting text; it's the most common use of CSS. Rest assured that, unlike some other CSS properties, type settings work well in all browsers that understand Cascading Style Sheets.

- **Font**. You choose a font for the style from the Font menu. As when using the Property inspector to select a font (see page 102), you choose from *groups* of fonts rather than the specific one you have your heart set on. Dreamweaver also lets you create your own "first-choice, second-choice…" font choices from this menu, exactly as described on page 103.

- **Size**. Unlike HTML, where font size is defined using a number from 1 to 7, CSS offers a dizzying array of size choices —everything from the screen-dependent pixel to picas, points, and more. Most of these aren't relevant to designing pages that display on a computer screen. After all, a monitor doesn't really understand the concept of an inch—even if your display is set to 72 dots per inch, 72 dots may occupy a half inch, an inch, or more depending on the screen's resolution (which you can change from 800×600 to 1600×1200 on the *same* monitor). The same goes for centimeters and millimeters. The bottom line? Skip 'em. In general, as described on page 107, stick to pixels, ems, and percentages.

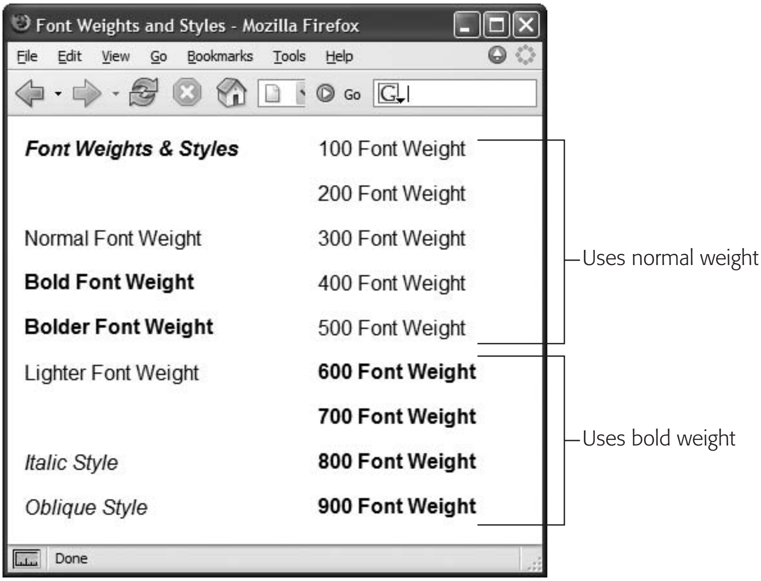
Pixel values are useful for dictating exact sizes on the screen; many Web designers adore pixel values because they make text display consistently between different browsers and operating systems. However, people with Internet Explorer 6 and earlier on Windows can't increase or decrease the size of text sized in pixels (a real pain, if your vision isn't the best).

Note: This isn't entirely true. You can tweak Internet Explorer to allow resizing of pixel-sized text, but you have to change some of the default settings of the browser. That's something most people would never do.

An alternative to pixels are ems or percentages, which are both relative measurements based on the default text size of the browser viewing the page. Ems and percentages are functionally the same for text, so you can use either one and get the same results: 100% is the same as 1em; 90% is the same as .9em; 150% is 1.5em; and so on. Since most browsers display basic text as 16 pixels tall, a font size of 100% (or 1em) would make text 16 pixels tall. However, since an em is a relative measurement, if some visitor changed his default font size to 20 pixels, any text sized to 1 em would appear 20 pixels tall in his browser.

Note: As you get more advanced with CSS, you'll probably run into some weird problems with em or percentage text sizes due to an advanced concept known as the *cascade.* The gruesome details begin on page 296.

- **Weight**. Weight refers to the thickness of the font. The Weight menu offers 13 different choices. Normal and bold are the most common, and they work in all browsers that understand CSS. See Figure 4-12 for details.



Font Weights & Styles	100 Font Weight
	200 Font Weight
Normal Font Weight	300 Font Weight
Bold Font Weight	400 Font Weight
Bolder Font Weight	500 Font Weight
Lighter Font Weight	**600 Font Weight**
	700 Font Weight
Italic Style	**800 Font Weight**
Oblique Style	**900 Font Weight**

Figure 4-12:
CSS was designed so that each of the nine numeric weight values between 100 and 900 would tweak the thickness of fonts that have many different weights (ultrathin, thin, light, extra bold, and so on). 400 is normal; 700 is the same as bold. However, given the limitations of today's browsers, you'll notice no difference between the values 100 and 500 (top text in right column). Similarly, choosing any of the values from 600 to 900 just gets you bold text (bottom text in right column). You're better off keeping things simple and choosing either "normal" or "bold" when picking a font weight.

- **Style**. In this peculiar instance, Style means italic, oblique, or normal. Technically, italic is a custom-designed, emphatic version of a typeface, *like this*. Oblique, on the other hand, is just a computerized adaptation of a normal font, in which each letter is inclined a certain number of degrees to the right. In practical application, there's no visible difference between italic and oblique in Web browsers.

- **Variant**. This pop-up menu simply lets you specify small-caps type, if you like—a slightly formal, fancy-looking type style much favored by attorneys' offices.

- **Line Height**. Line height, otherwise known as *leading* (pronounced "LED-ing"), refers to the space between lines of text in a paragraph (see Figure 4-13). To create more space between lines, set the line height greater than the font size. (If you type a number without a % sign, Dreamweaver assumes you're specifying a line height in pixels. You can change the units of measurement using the pop-up menu to the right of the Line Height field.)

Note: A good approach for line height is to type in a percentage measurement, such as *120%*, which is relative to the size of the text (see page 107); if your text is 10 pixels tall, the space from the base of one line of text to the next is 12 pixels (120% of 10). Now, if you change the size of the text, the *relative* space between lines remains the same.

"Normal," the default setting (top paragraph in Figure 4-13), uses a line height that's slightly larger than the height of the text. You don't get access to the pop-up menu of measurement units (pixels, points, %, and so on) unless you choose "value" from this menu.

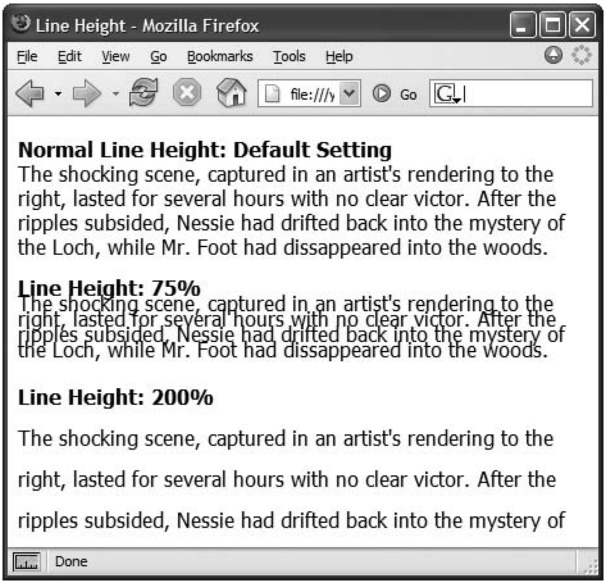
- **Case**. From this menu, you can automatically capitalize text. To capitalize the first letter of each word, choose "capitalize." The "uppercase" option gives you all-capitals typing, while "lowercase" makes all letters lowercase. The factory setting is "none," which has no effect on the text.

- **Decoration**. This strange assortment of five checkboxes lets you dress up your text, mostly in unattractive ways. "Underline," "overline," and "line-through" add horizontal lines below, above, or directly through the affected text, respectively. Turning on "blink" makes affected text blink on and off (but only in a few browsers); unless you want to appear on one of those "worst Web site of the week" lists, avoid it. You can apply any number of decorative types per style, except with "none," which, obviously, you can't choose along with any of the other options.

- **Color**. Set the color of the style's text using Dreamweaver's color box, which is described on page 49.

Block Properties

The Block Properties panel is a hodgepodge of CSS settings that affect how letters and words are displayed (see Figure 4-14).



Line Height - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
file:///
Go
Done

Normal Line Height: Default Setting

The shocking scene, captured in an artist's rendering to the right, lasted for several hours with no clear victor. After the ripples subsided, Nessie had drifted back into the mystery of the Loch, while Mr. Foot had dissappeared into the woods.

Line Height: 75%

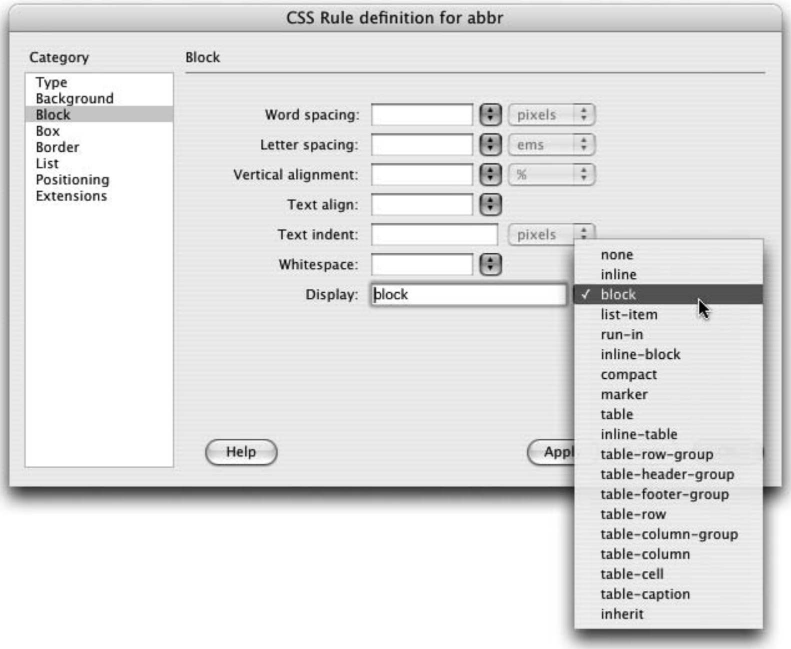
The shocking scene, captured in an artist's rendering to the right, lasted for several hours with no clear victor. After the ripples subsided, Nessie had drifted back into the mystery of the Loch, while Mr. Foot had dissappeared into the woods.

Line Height: 200%

The shocking scene, captured in an artist's rendering to the right, lasted for several hours with no clear victor. After the ripples subsided, Nessie had drifted back into the mystery of

Figure 4-13:
Control the space between lines with the Line Height property (which you'll find in the CSS Rule Definition dialog box). In this example, each paragraph's text is set in 16-pixel Tahoma. With CSS, you can make lines bump into each other by setting a low line-height value (middle paragraph), or spread them far apart by using a larger value (bottom paragraph).

Tip: To completely remove the space between paragraphs, set the Top and Bottom margin for paragraphs to 0 in the CSS Rule Definition window's Box category. This setting also helps to remove space that appears before and after headlines. To indent paragraphs, set the Left and Right margin properties.



CSS Rule definition for abbr

Category: Type, Background, Block, Box, Border, List, Positioning, Extensions

Block

Word spacing: pixels
Letter spacing: ems
Vertical alignment: %
Text align:
Text indent: pixels
Whitespace:
Display: block

Figure 4-14:
The Block category is an eclectic mix consisting mostly of text properties. However, you can use the Display property on images, tables, and any other selection or HTML tag. Although the list is long, most of these options, alas, don't work in today's browsers.

Despite this category's name, these properties don't just apply to block-level elements (paragraphs, headlines, and so on). You can apply a style with these properties to even a single word or two. (The one exception is the Text Align property, which can apply only to paragraphs and other block-level elements.) Here are your choices:

- **Word spacing.** This property helps you clean up text by adding or removing space *between* words. The default value, "normal," leaves a normal, single space between words. If you want words in a sentence to be spaced   apart   like   this, then type a value of about 10 pixels. (Choose Value from the first pop-up menu, then the units you want from the second one.) The bigger the number, the larger the gap between words. You can also *remove* space between words by using a negative number—a great choice when you want to make your pages difficult to read.

- **Letter spacing.** This property works just like word spacing, but governs the space between *letters*. To add space l i k e t h i s, type a value of about 5 pixels. The result can make long passages of text hard to read, but a little space between letters can add a dramatic flair to short headlines and movie titles.

- **Vertical alignment.** With this property, you can change the vertical placement of an object—such as an image or text—relative to other items around it. For example, you could move text above or below surrounding text to format a trademark, copyright symbol, or footnote reference. The options—"sub" and "super"—can be used in this situation to create subscript and superscript styles. If you wanted to add the trademark symbol to, say, *CosmoFarmer*™, then you'd select the letters TM and set the vertical alignment to "super". In addition, for more accurate control, you can type a value (like 10%) to raise an object above its normal baseline, or a negative value (like -10% or -5 pixels) to move an object down.

  Vertical alignment also works with graphics, and designers often use the options top, bottom, and middle with HTML table cells to place content within a cell (see page 258 for details on how that works).

Note: The "sub" and "super" alignment options don't change text size. If you want to create true subscript or superscript (for chemical symbols, trademark or copyright symbols, and so on), you should also use a smaller font size in the style; 75% works great.

- **Text align**. This property controls the alignment of a block-level element like a paragraph or table. You can choose from among the usual suspects—"left," "center," "right," or even "justify." (Like the text in this paragraph, justified text has both the left and right edges of the text aligned.)

  Use the "justify" option with care, however. Because Web browsers don't have the advanced controls that page-layout software does, they usually do an awful job of justifying text on a computer screen. The results are often difficult to read, and ugly.

- **Text indent.** This useful option lets you indent the first line of a paragraph. If you enter 15 pixels, each paragraph gets an attractive first-line indent, exactly as in a real word processor.

  You can also use a *negative* number, which makes the first line extend past the *left* margin of the paragraph, creating a hanging indent (or *outdent*)—a nice effect for bulleted lists or glossary pages.

- **Whitespace.** This property controls how the browser displays extra white space (spaces, tabs, returns, and so on). Web browsers normally ignore extra spaces in the HTML of a page, reducing them to a single space character between words and other elements (see page 68). The "pre" option functions just like the HTML <pre> tag: Extra white space (like tabs, multiple spaces, and carriage returns) *in the HTML code* appear in the document window (see page 89 for more on this option). The "nowrap" option prevents lines from breaking (and wrapping to the next line) when they reach the end of the browser window.

- **Display** defines how a Web browser should display a particular element like a paragraph or a link. You may be overwhelmed by the range of choices for this property—and you may be underwhelmed when you find out that most of these options aren't supported by most browsers.

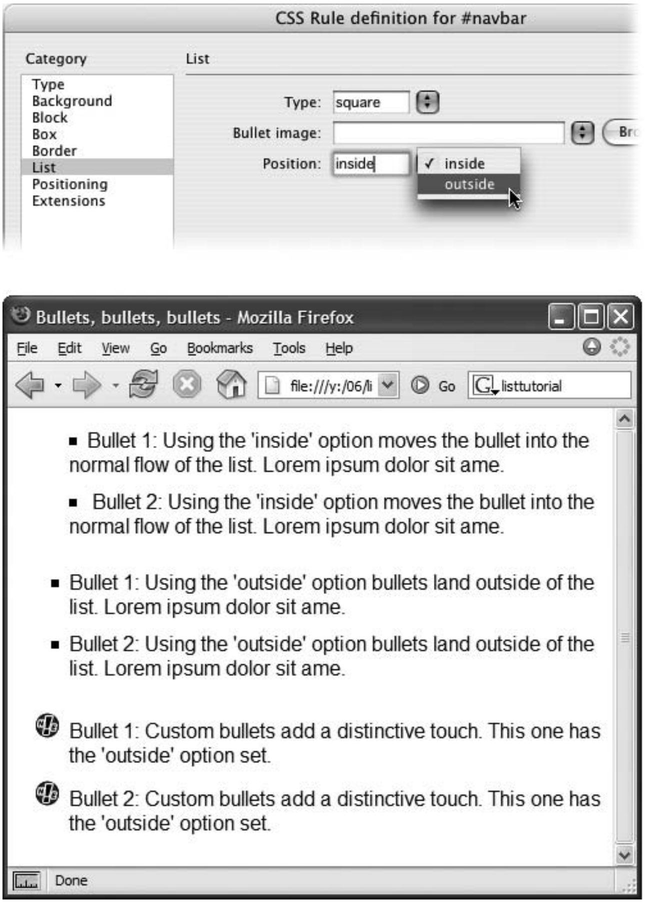
  The only three options that work reliably across browsers are "none," "inline," and "block." The "block" option treats any item styled with this property as a block—separated from other content by space above and below it. Paragraphs and headings normally appear this way. But you can apply this value to a link (which normally appears inside a block-level element like a paragraph) to turn it into its own block. Normally, you have to click directly on the text or image inside a link to jump to the linked page. But when you set a link's display to "block," its entire width—even areas where no text appears—are clickable.

  The "inline" option treats the item as though it's part of the current block or paragraph, so that any item styled with this property (like a picture) flows together with other items around it, as if it were part of the same paragraph. People frequently use this property to take a bulleted list of links and turn it into a horizontal navigation bar. The new Spry Menu bar, discussed on page 175, uses this technique to create a horizontal menu. For a good tutorial on this topic, visit *http://css.maxdesign.com.au/listutorial/horizontal_introduction.htm*.

  The "none" option is the most fun: It *turns off* the display of an item. In other words, any text or item styled with this option doesn't appear on the page. You can use JavaScript programming to switch this property on and off, making items seem to appear and disappear. In fact, Dreamweaver's Change Property behavior provides one simple way to do this (see page 536).

List Properties

To exercise greater control over bulleted and numbered lists, use the CSS options on the List panel of the CSS Rule Definition window (see Figure 4-15).



CSS Rule definition for #navbar

Category: Type, Background, Block, Box, Border, List, Positioning, Extensions

List

Type: square

Bullet image:

Position: inside

Bullets, bullets, bullets - Mozilla Firefox

- Bullet 1: Using the 'inside' option moves the bullet into the normal flow of the list. Lorem ipsum dolor sit ame.
- Bullet 2: Using the 'inside' option moves the bullet into the normal flow of the list. Lorem ipsum dolor sit ame.

- Bullet 1: Using the 'outside' option bullets land outside of the list. Lorem ipsum dolor sit ame.
- Bullet 2: Using the 'outside' option bullets land outside of the list. Lorem ipsum dolor sit ame.

- Bullet 1: Custom bullets add a distinctive touch. This one has the 'outside' option set.
- Bullet 2: Custom bullets add a distinctive touch. This one has the 'outside' option set.

Figure 4-15:
Top: Take control of your bulleted and numbered lists using the CSS Rule Definition window's List panel. With Cascading Style Sheets, you can even supply your own graphic bullets.

Bottom: A bullet-crazed Web page, for illustration purposes. Parading down the screen, you can see "inside" bullets, "outside" bullets, and bullets made from graphics.

- **Type.** Select the type of bullet you'd like to use in front of a list item. Options include: "disc," "circle," "square," "decimal" (1., 2., 3.), "lower-roman" (i, ii, iii), "upper-roman" (I, II, III), "lower-alpha" (a, b, c), "upper-alpha" (A, B, C), and "none" (no bullet at all).

- **Bullet image.** For the ultimate control of your bullet icon, skip the boring options preprogrammed into a Web browser (like disc, circle, square, or decimal) and supply your own. Click the Browse button, and then select a graphics file from your site folder. Make sure the graphic is appropriate bullet material—in other words, small.

Tip: The Background Image property (see page 217) is a more versatile solution to adding bullet images to a list. Since you can accurately position a background image, you can easily tweak the placement of your bullets. Here's how to do it: Create a style for the <li> tag (or a class style that you apply to each <li> tag); make sure you set the List property type to "none" (this hides the bullet); set the background image to your graphical bullet; and play with the background position values (page 219). Playing with the padding values (page 322) helps position the text relative to the image.

- **Position**. This property controls how the bullet is placed relative to the list item's text. The "outside" option places the bullet outside the margin of the text, exactly the way bulleted lists normally appear on a Web page. "Inside," on the other hand, displays the bullet within the text margin, so that the left edge of the *bullet* aligns with the left margin; Figure 4-15 should make the effect clearer.

Tip: If you want to adjust the amount of space Web browsers normally use to indent lists, set the left padding property (see page 322) to 0, and set the left margin (see page 322) to the amount of indent you'd like. Sometimes you want no indent at all–for example, if you're creating a list of links that should look like buttons, not bulleted items–set both the left padding and left margin to 0 (while you're at it, set the bullet type to "none" as described above).

Cascading Style Sheets Tutorial

In this tutorial, you'll practice the basic techniques required to create and edit styles. Make sure you grasp the fundamentals covered in this tutorial: you'll be building lots of style sheets in the other tutorials throughout this book using these same methods. For this tutorial, you'll create an external style sheet for formatting pages on the CosmoFarmer Web site.

Note: Before getting started, download the tutorial files from *www.sawmac.com/dwcs3/*. See the Note on page 39 for more details.

Setting Up

Once you've downloaded the tutorial files and opened Dreamweaver, define a new site as described on page 28: Name the site *Introducing CSS,* and then select the Chapter04 folder (inside the MM_DWCS3 folder). (In a nutshell: choose Site → New Site. In the Site Definition window, click the Advanced tab, type *CSS Tutorial* into the Site Name field, click the folder icon next to the Local Root Folder field, navigate to and select the Chapter04 folder, and then click Choose or Select. Finally, click OK.)

To ensure that your files preview correctly, you need to make sure that a particular Dreamweaver preference is set:

1. **Press Ctrl+U (⌘-U) to open the Preferences window.**

   Alternatively, you can use Edit → Preferences (Dreamweaver → Preferences on Mac).

2. **Select the CSS Styles category, and make sure the "Open CSS files when modified" checkbox is turned on.**

   When this setting is turned on and you edit a CSS style in an external style sheet, Dreamweaver opens the CSS file. You can undo any changes you make to that style sheet.

3. **Make sure the "Edit using CSS dialog" button is selected.**

   This option makes sure the friendly and easy-to-use Rule Definition window appears whenever you double-click a style listed in the Styles panel, making it easy for non-CSS experts to edit and update styles.

4. **Click OK to close the window.**

   Now you're ready to create a style sheet.

Creating an External Style Sheet

In this example, you'll create a collection of styles for the feature stories on the *CosmoFarmer* Web site.

1. **Choose File → Open; click the Site Root button (at the lower left of the open file window).**

   The Site Root button, new in Dreamweaver CS3, is a handy tool. It automatically takes you to the local root folder for the site you're currently working on, saving you the effort of having to manually navigate to that folder.

2. **Double-click the file named *confessions.html*.**

   The Web page contains a feature story from the *CosmoFarmer* site. The page's text is plain, boring-looking HTML, so you'll use CSS to spiff it up.

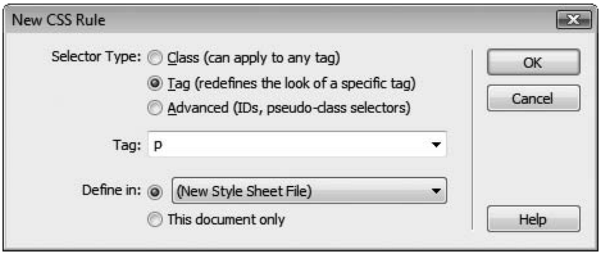
   To start, you'll create a style for basic paragraphs and create an external style sheet at the same time.

3. **If the CSS Styles panel isn't already open, choose Window → CSS Styles.**

   The CSS Styles panel opens. Windows users can use the keyboard shortcut, Shift+F11, to open the panel. (Mac people, you aren't out of luck. You can define any keyboard shortcut you'd like to open this panel. See page 733 for details.)

4. **At the bottom of the CSS Styles panel, click the New Style (+) button (see Figure 4-1).**

   The New CSS Rule window opens (see Figure 4-16). You'll first pick the type of style you wish to create.



New CSS Rule

Selector Type: ○ Class (can apply to any tag)
● Tag (redefines the look of a specific tag)
○ Advanced (IDs, pseudo-class selectors)

Tag: p

Define in: ● (New Style Sheet File)
○ This document only

Figure 4-16:
If you've already attached an external style sheet to a page, you can select its name from the "Define in" menu. That way, Dreamweaver adds the new style to that file. Your other option, which is what you're doing at this point in the tutorial, is to create the new style sheet when you first create a style.

5. **Click the Tag button.**

   This lets you create a style for a particular HTML tag—in this case, the <p> tag. In other words, you're going to create a formatting rule that applies automatically to every basic paragraph.

6. **Type *p* into the Tag box, or choose "p" from the menu.**

   Next you'll choose where you'll store the CSS code for this new style—in this case, in an external style sheet.

7. **In the "Define in" section of the New CSS Rule window, click the New Style Sheet File button as pictured in Figure 4-16. Click OK.**

   The Save Style Sheet File As dialog box appears. You're about to create the file—an external style sheet—that stores the styles for this page.

8. **Type *feature.css* in the File Name box (the Save As field on the Mac), and then click Save to save the file.**

   Cascading Style Sheet files always end in .css; that's how Web servers and browsers can tell what kind of file they are.

   Having created the external style sheet, you can now create the first style, as suggested by the sudden appearance of the CSS Rule Definition window. You'll choose a font, set a size, and assign a color to the <p> tag.

9. **From the Font menu, choose "Verdana, Arial, Helvetica, sans-serif"; in the Size box, type *10*; and, next to the Color field, click the color selection box and choose a dark gray color (#333333 works well.)**

   Next, you'll add a little *leading* (space between lines of text) to the paragraph to make the page easier to read.

10. **In the "Line height" box, type *125*, and then, from the menu to the right, select "%."**

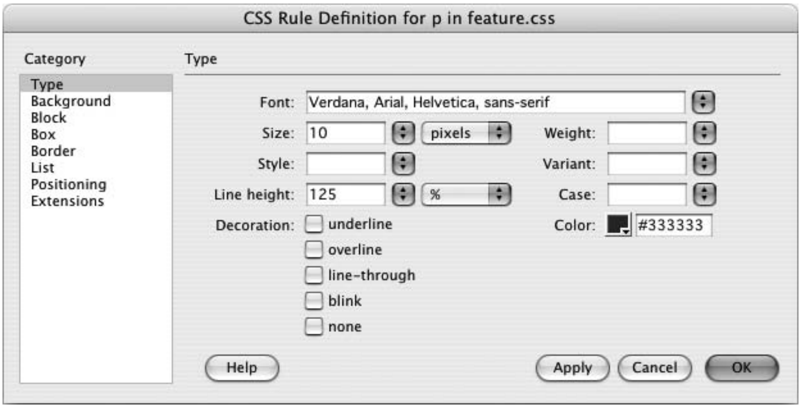
    The CSS Rule Definition window should look like Figure 4-17. Percentages are just one of the many different methods CSS can use to define the size of type, leading, margins, and borders.

11. **Click Apply.**

    You can preview the look of a tag style without closing the CSS Rule Definition window—just drag the window out of the way.

12. **Click OK.**

    The CSS Rule Definition window closes, and the paragraphs of text on the page are now formatted according to the style you just created. (If you think the text looks a bit small, you're right. You'll fix that when you learn how to edit styles later in this tutorial.) As you may have noticed, you didn't have to select the text to apply this style. Since it's an HTML tag style, it's applied *automatically* wherever the tag appears on the page.



CSS Rule Definition for p in feature.css

Category: Type

Font: Verdana, Arial, Helvetica, sans-serif

Size: 10 pixels

Line height: 125 %

Color: #333333

Figure 4-17: *You can set the CSS equivalents of HTML text formatting options from the Type category of the CSS Rule Definition window. (If storm cloud gray doesn't do anything for you, click the color box and choose a color you prefer.)*

Look at the CSS Styles panel. Notice that the new style sheet, *feature.css*, appears (make sure the All button is selected). Click the + (arrow on the Mac) to the right of *feature.css* to expand the list. There's the p tag style you just created.

Now, you'll create a style for the subheads of the story, which are <h2> tags.

13. **On the CSS Styles panel, click the New Style button.**

 The New CSS Rule window opens. The Tag button is already selected, and the menu in the "Define in" option lists the new external Style Sheet—*feature.css*. In other words, Dreamweaver will add the new style to this external style sheet. All you need to do now is identify which tag you want to redefine.

14. **In the Tag box, type *h2*, or choose "h2" from the menu, and then click OK.**

 The CSS Rule Definition Window appears.

15. **From the Font menu, choose "Georgia, Times New Roman, Times, serif"; in the Size box, type *22*.**

 Time for a little color and other formatting.

16. **In the Color box, type #D60000; from the Weight menu select "normal".**

 Click Apply to preview the new headline style. Although the bright red headlines stand out, you'll add a bit of sophistication with a border line.

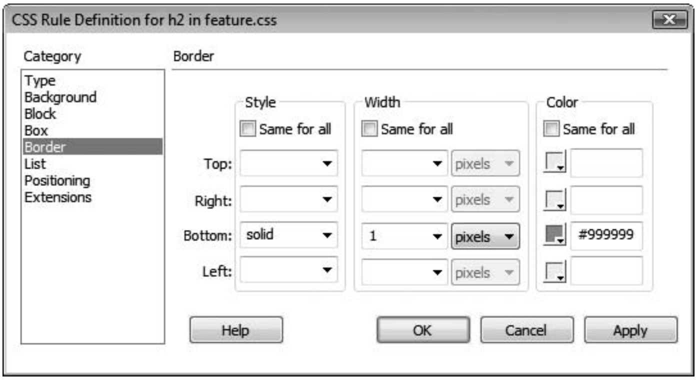
17. **In the category list, click Border.**

 The CSS Rule Definition window now displays all the properties used to put a border around a style. You can control each border individually, or use the same line style for all four edges. In this case, you'll add a line to just the bottom of the headline.

18. **Click to turn off all three "Same for all" checkboxes. For the Bottom border, choose "solid" from the Style menu, type *1* in the Width box, and type *#999999* in the color box.**

 The window should now look like Figure 4-18.

Note: When typing a hex color value for a CSS property (for example, #999999), don't forget the # symbol. Without it, the color doesn't appear.



CSS Rule Definition for h2 in feature.css

Category: Border

	Style	Width		Color	
	□ Same for all	□ Same for all		□ Same for all	
Top:			pixels		
Right:			pixels		
Bottom:	solid	1	pixels	■	#999999
Left:			pixels		

Figure 4-18: *Use the Border properties to add rules to any or all of the four edges of an object. You can emphasize a headline by underlining it, or give an image a stylish border around its edges.*

19. **Click OK.**

    The window closes, and the three subheads appear with their new formatting. Now, you'll explore more text formatting properties to improve the look of the top headline. But first, make sure you save your work.

20. **Choose File → Save All.**

    The Save All command can be a real lifesaver when working with external style sheets. Even though you're looking at and working on the Web page (*confessions.html*), each time you add a style, Dreamweaver updates the external style sheet file (*feature.css*). So most of the work you've done so far in this tutorial has caused Dreamweaver to update the *feature.css* file. Unfortunately, the regular keyboard shortcut to save a file, Ctrl+S (⌘-S), saves only changes to the Web page (the file currently visible to you). Make sure you visit the Save All command frequently, otherwise if Dreamweaver or your computer crashes, you could lose all the changes you've made to an external style sheet. (You can even set your own keyboard command for the Save All command. See page 733 for details.)

Using CSS Text Properties

So far, the text formatting you've used is run-of-the-mill stuff: font, size, color (although the underline for the heading 2 *was* pretty exciting). In this section of the tutorial, you'll tap into more powerful CSS properties that add design elements that you could never create with HTML alone. The first step is creating a new style.

1. **On the CSS Styles panel, click the New Style button.**

   The New CSS Rule window opens.

2. **Make sure the Tag button is selected, and the "Define In" option lists the *feature.css* file. In the Tag box, type *h1*, or choose "h1" from the menu, and then click OK.**

   The CSS Rule Definition Window appears. You'll start by adding a new option to the list of fonts Dreamweaver offers.

3. **From the Font menu, choose Edit Font List.**

   The Edit Font List window appears (see Figure 4-19). You're now going to create your own custom list of fonts (for a full description of this process, see page 103).

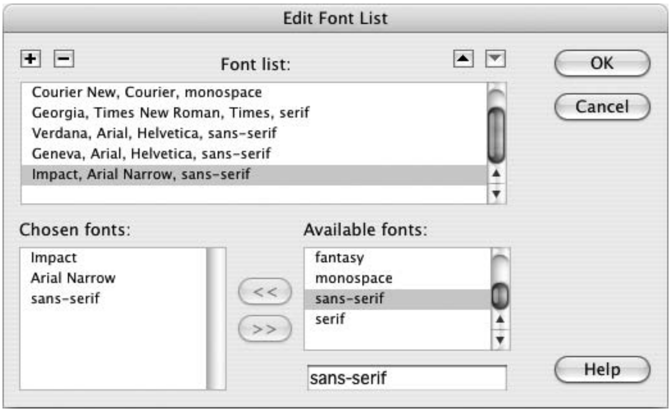
4. **Scroll down the list of available fonts in the lower right of the window, until you see Impact listed. Select Impact, and then click the << button.**

   Impact is added to the list of "Chosen fonts." Impact is a bold, headline font that you'll find on nearly all Windows and Mac systems. But because it might not be available to everyone, you'll add a couple more options (see page 101 for the reasoning behind this font choice setup).

Note: If you don't have the Impact font installed, just type *Impact* in the box to the left of the Help button, and then click the << button.

5. **Locate Arial Narrow in the list of fonts and press the << button; scroll to the bottom of the font list, select "sans-serif," and then press the << button one last time.**

   The Edit Font List should look like Figure 4-19.



Font list:
- Courier New, Courier, monospace
- Georgia, Times New Roman, Times, serif
- Verdana, Arial, Helvetica, sans-serif
- Geneva, Arial, Helvetica, sans-serif
- Impact, Arial Narrow, sans-serif

Chosen fonts:
- Impact
- Arial Narrow
- sans-serif

Available fonts:
- fantasy
- monospace
- sans-serif
- serif

sans-serif

Figure 4-19:
You can easily make your own set of custom fonts for your Web pages. Just be aware that the fonts will show up only when a visitor who views your site also has the same fonts installed on her computer (see page 101 for details).

6. **Click OK to close the window, and then select your newly created font set from the Font menu in the Rule Definition window.**

   First you'll make some basic text changes.

7. **Type *28* in the Size box, and *#152D6A* in the Color box; choose Uppercase from the Case menu; choose Normal from the Weight menu.**

   The headline is now entirely uppercased (usually a bad choice for text, but this setting can have a lot of impact for short headlines). Setting the Weight to normal removes the bold usually applied to headlines. Because Impact is already a bold font, leaving it bold doesn't do anything. (There's a bug in the Safari Web browser as well that prevents the Impact font from even appearing when bold is also applied.)

   Press the Apply button and look at the headline "Confessions of an Apartment Farmer" if you want to see how this style is shaping up.

8. **In the Rule Definition window, select the Block category. Type *5* in the "Word spacing" box, and select *pixels* from the menu to the right; type *1* in the "Letter spacing" box, and select *pixels* from the menu.**

   Adding space between the words and letters in this headline gives it a more sophisticated look. While Dreamweaver CS3 does display letter spacing in Design view, it doesn't display word spacing. So you'll need to preview the page to see the real effect.

   To finish off this style, you'll add a line under the headline just like the heading 2 style you created earlier.

9. **Repeat steps 17 and 18 on page 142, but make the border 2 pixels wide, and make its color #B2F511.**

10. **Click OK to finish this style, and then press F12 (Option-F12) to preview the page.**

    Dreamweaver reminds you that you need to save the CSS file as well; click the Yes button, and you'll finally see the new design in your Web browser.

Editing a Style

The paragraph text is a tad too small, so you'll edit the <p> tag style you just created to make the text bigger:

1. **Return to Dreamweaver. At the top of the CSS Styles panel, make sure the All button is selected.**

   This displays all the style sheets attached to this page (in this case, just *feature.css*).

2. **If it isn't already, expand the list of styles in the *feature.css* Style Sheet by clicking the + icon (arrow on the Mac) to the left of "feature.css."**

   This lists all of the styles you've added to the external style sheet.

3. **In the list, double-click "p".**

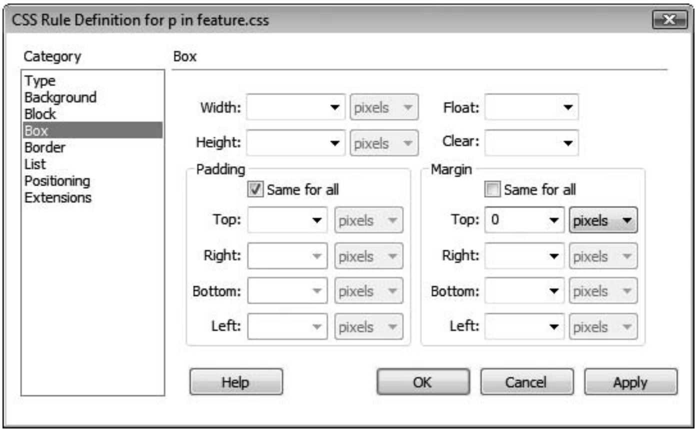
   This reopens the Define Rule window—the same window you used when you first created the style.

4. **In the "Size" row, replace *10* with *13*, and then press the Apply button.**

   The font size of the paragraph increases to 13 pixels. Another problem with this design is the large gap between the subheads and the paragraphs following them. The heading 2 paragraphs ("A Green Thumb in the Big City," for example) introduce the paragraph that follows. Removing the gap that appears between the heading and the following paragraph would visually tie the two together better. To make this change, you must first remove the margin above each paragraph.

5. **Select Box in the left hand list of CSS categories. Turn off the "Same for all" checkbox in the Margin area; type *0* in the Top box.**

   The window should now look like Figure 4-20. This action should remove any space that appears above paragraph tags.



CSS Rule Definition for p in feature.css

Category: Box

Padding: ☑ Same for all

Margin: □ Same for all

Top: 0 pixels

Figure 4-20: *To remove space that appears above a paragraph, a headline, or other block of text, set the top margin to 0. Changing the bottom margin value affects how much space appears below a paragraph.*

6. **Click OK to close the Rule Definition window and finish editing the style.**

   The space between the headlines and the paragraphs hasn't changed a bit. What gives? Paragraphs and headlines have space both above *and* below. The space you're seeing is actually the *bottom* margin of the h2 tag.

   Top and bottom margins have a peculiar feature: They don't add up like 1+1=2. In other words, the bottom margin of the heading 2 isn't added to the top margin of the paragraph in order to calculate the total space between the two blocks of text. Instead, a Web browser uses the margin with the *largest* value to determine the space between paragraphs (a lot of text layout programs, including word processors, share this property).

   For example, say the h2 tag has a bottom margin of 12 pixels, while the paragraph following has a top margin of 10 pixels. The total space between the two isn't 22 pixels (10+12)—it's 12 pixels (the value of the larger margin). So, if you remove the top margin of the paragraph, the gap between the two blocks of text is still 12 pixels (the h2's bottom margin). That's exactly what's happening here, so you need to modify the h2 style's bottom margin to close the gap.

7. **In the CSS Styles Panel, double-click the h2 style.**

   The Rule Definition window for the h2 style appears. As with the p tag style, you must go to the Box category to adjust margins.

8. **Click the Box category in the left hand list of CSS categories. Turn off the "Same for all" checkbox in the Margin area and type *5* in the "bottom" box.**

   Removing the whole margin will make the h2 and paragraph seem too close together. 5 pixels is a good amount.

9. **Click OK; choose File → Save All.**

   You can remove space between the lead headline and the paragraph that follows by repeating steps 7–9 for the h1 tag style.

Creating a Class Style

Now you'll create a style to format the copyright notice at the bottom of the page. It's inside a regular paragraph (<p> tag), so it's getting all its formatting from the p tag style. Here's an instance where you'd like to style a single paragraph, without affecting the other paragraphs on the page. A class style is perfect for this kind of specific styling task.

1. **On the CSS Styles panel, click the New CSS Style button** (+).

   The New CSS Rule window opens. This time, you'll create a class style rather than an HTML tag style.

2. **Click the Class radio button. In the Name box, type *.copyright* (with a period before it).**

   Class styles always begin with a period.

   Since you want to add the style to the external style sheet, you don't need to do anything else in this dialog box; Dreamweaver already proposes storing it there.

Note: Some beginners think that whenever you create a new style, you also need to create a new external *Style Sheet*. On the contrary, you can–and should–store more than one style in a single external style sheet. In fact, if you're creating a set of styles for an entire site, put them all in the same external style sheet.

3. **Click OK.**

   The CSS Rule Definition window appears. You'll add a few new properties to make this style look different from the rest of the text on the page.

4. **In the size box, type *11*; from the Weight menu, choose "bold"; and in the Color box, type *#666666*.**

   The smaller text and lighter gray color make the copyright less prominent on the page; the bold setting makes it stand out from the other paragraphs. Finally, you'll add a line above the copyright to separate it from the page.

5. **In the category list, click Border.**

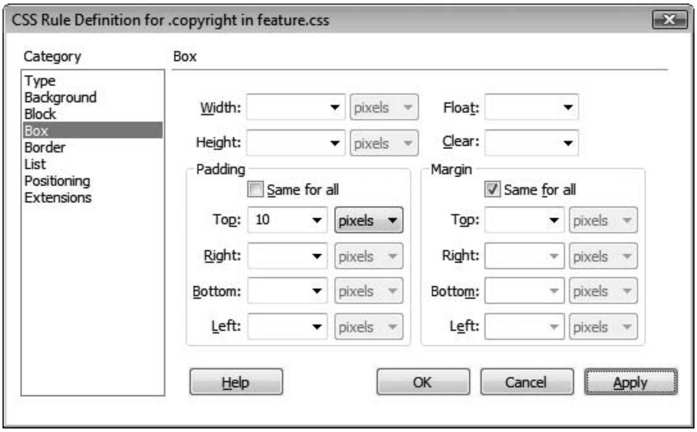
   The CSS Rule Definition window now displays all the properties used to put a border around a style. In this case, you'll add a line above the copyright notice.

6. **Click to turn off all three "Same for all" checkboxes. For the Top border, choose "dashed" from the Style menu, type *1* in the Width box, and type *#999999* in the color box.**

   There are several different styles of borderlines, including dashed (see page 215 for the different types of borders). Lastly, you'll add a little space between the border and the text.

7. **Click the Box category in the left hand list of CSS categories. Uncheck the "Same for all" box in the Padding area, and then type *10* in the Top box.**

   The window should look like Figure 4-21. While margins control the space between elements (like the gap between paragraphs), *padding* controls the space from the content to the content's border. In other words, adding padding pushes a border further away from the text (or other content) you're styling. You'll learn more about padding on page 216.



CSS Rule Definition for .copyright in feature.css

Category: Box

Padding: □ Same for all

Top: 10 pixels

Margin: ☑ Same for all

Figure 4-21: *The difference between padding and margin is subtle, but important. Both properties add space around the content that's being styled. And if you don't have a background color, image, or border, both properties pretty much act the same. However, when you do have a background color, image, or border, padding adds space between the content and the edge of the backgrounds and borders. Margins add space outside of the border and background.*

8. **Click OK.**

   The Rule Definition window closes, but this time, nothing's changed in the document window. Unlike HTML tag styles, class styles don't show up anywhere until you apply them by hand.

9. **Scroll to the bottom of the page, and select the last paragraph with the copyright notice.**

   This action sets you up for applying the style. You can also just click anywhere inside the paragraph (without selecting any text) to apply a class style to it.

10. **From the Property inspector's Style menu, choose "copyright" (see Figure 4-22).**

    Boom—the copyright notice suddenly changes size, color, and grows a line above it. Magic. You may also notice that the copyright still uses the same font as the other paragraphs. In fact, it has "inherited" that font type from the p tag style—you'll learn about inheritance, an advanced CSS concept, on page 294.

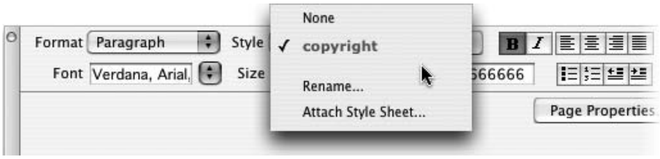


Figure 4-22: *The Style menu in the Property inspector lists all class styles. It also displays the style name using the style's text formatting–in this case, bold, gray text. Notice that only class styles are listed; tag styles don't appear in this menu, since you don't apply them manually.*

Attaching an External Style Sheet

Now that you've created these styles, you may be wondering how you can use them on other pages—after all, that's the beauty of external style sheets. Once created, it's a simple process to add a style sheet to other pages in the site.

1. **Choose File → Save All; close the *confessions.html* Web page.**

   You'll need to open a new Web page to attach the external style sheet.

2. **Choose File → Open. In the Chapter04 folder, double-click the file *spice.html*.**

   This is another story for the *CosmoFarmer* Web site. It has no formatting yet, so you'll attach the external style sheet you just created.

3. **On the CSS Styles panel, click the Attach External Style Sheet button (see Figure 4-1).**

   The Link External Style Sheet window appears.

4. **Click the Browse button.**

   The Select Style Sheet dialog box appears.

5. **Navigate to the Chapter04 folder (or click the Site Root button), and then select the *feature.css* file.**

   Don't forget the Site Root button. It appears on every window in which you need to save, open, or select a file. It's a great shortcut to make sure you're working in the correct folder for your site.

6. **Click OK (Choose on Macs) to insert the path to the Link External Style Sheet window.**

   You can ignore the other settings in the Attach External Style Sheet window for now (they're described on page 303).

7. **Click OK to attach the style sheet to the page.**

   Dreamweaver instantly formats the headlines and main text of the story. Pretty cool—and very efficient. You need to apply the *.copyright* class style only to the last paragraph on the page.

8. **Scroll to the bottom of the page, and then click anywhere inside the paragraph with the copyright notice.**

   Next you'll add a style to the tag.

9. **From the Style menu on the Property inspector, select "copyright" (see Figure 4-22).**

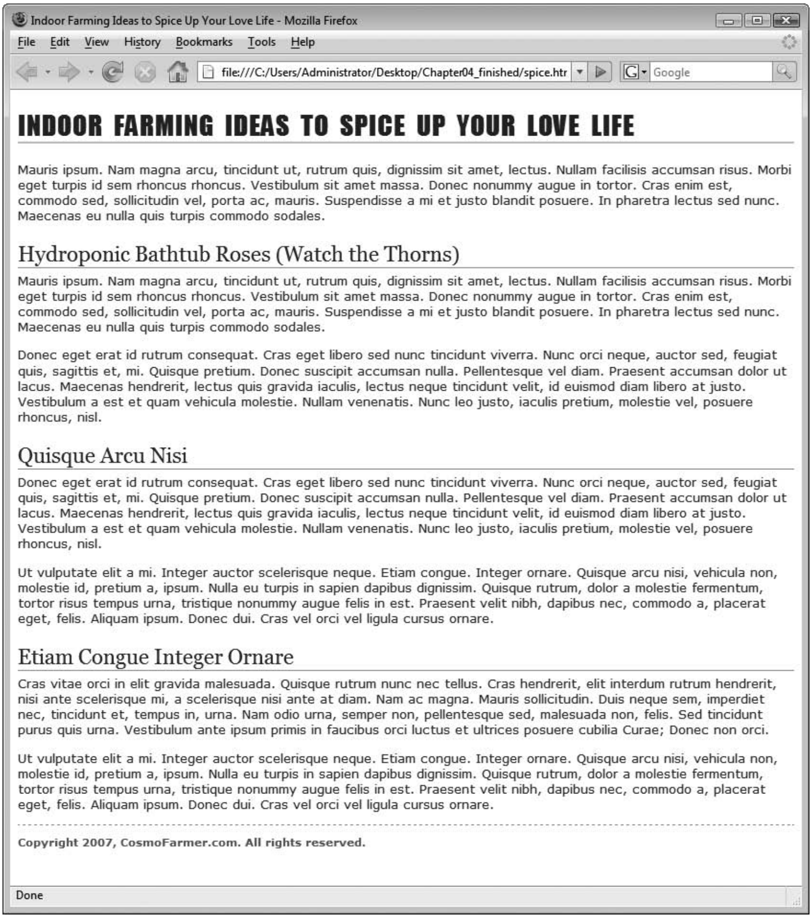
   This page is done. Time to view it.

10. **Press F12 (Option-F12 on Mac) to preview the page.**

    Dreamweaver probably prompts you to save your files; go ahead and do that. The finished page should look something like Figure 4-23. If you'd like to compare your finished product to the professionally completed version, you'll find those pages in the Chapter04_finished folder in the tutorials folder.

Note: You may need to hit your browser's refresh button to see the most recent changes you made to the style sheet. This is one problem related to designing with external style sheets–they're often *cached* by a Web browser (see page 607). Normally that's a good thing–it means visitors to your site have to wait only once for the file to download. But when you're in the midst of a design, frantically switching back and forth between Dreamweaver and a Web browser preview, the browser might retrieve the older version of the external style sheet that's saved in its cache, rather than the newly updated file on your computer.

You can work around this problem: Open the Preferences window (Edit → Preferences [Dreamweaver → Preferences on Mac]); select the "Preview in Browser" category, and then turn on the "Preview using temporary file" box. Now, when you preview the page, Dreamweaver actually makes a temporary file on your computer that incorporates both the CSS and HTML of the page. This defeats a browser's cache so that now you're seeing the very latest changes. This setting has the added benefit of stopping Dreamweaver's annoying "You must save your file before previewing" dialog box each time you preview a page.


Indoor Farming Ideas to Spice Up Your Love Life - Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///C:/Users/Administrator/Desktop/Chapter04_finished/spice.htr
Google
Done

INDOOR FARMING IDEAS TO SPICE UP YOUR LOVE LIFE

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Hydroponic Bathtub Roses (Watch the Thorns)

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Donec eget erat id rutrum consequat. Cras eget libero sed nunc tincidunt viverra. Nunc orci neque, auctor sed, feugiat quis, sagittis et, mi. Quisque pretium. Donec suscipit accumsan nulla. Pellentesque vel diam. Praesent accumsan dolor ut lacus. Maecenas hendrerit, lectus quis gravida iaculis, lectus neque tincidunt velit, id euismod diam libero at justo. Vestibulum a est et quam vehicula molestie. Nullam venenatis. Nunc leo justo, iaculis pretium, molestie vel, posuere rhoncus, nisl.

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Etiam Congue Integer Ornare

Cras vitae orci in elit gravida malesuada. Quisque rutrum nunc nec tellus. Cras hendrerit, elit interdum rutrum hendrerit, nisi ante scelerisque mi, a scelerisque nisi ante at diam. Nam ac magna. Mauris sollicitudin. Duis neque sem, imperdiet nec, tincidunt et, tempus in, urna. Nam odio urna, semper non, pellentesque sed, malesuada non, felis. Sed tincidunt purus quis urna. Vestibulum ante ipsum primis in faucibus orci luctus et ultrices posuere cubilia Curae; Donec non orci.

Ut vulputate elit a mi. Integer auctor scelerisque neque. Etiam congue. Integer ornare. Quisque arcu nisi, vehicula non, molestie id, pretium a, ipsum. Nulla eu turpis in sapien dapibus dignissim. Quisque rutrum, dolor a molestie fermentum, tortor risus tempus urna, tristique nonummy augue felis in est. Praesent velit nibh, dapibus nec, commodo a, placerat eget, felis. Aliquam ipsum. Donec dui. Cras vel orci vel ligula cursus ornare.

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Figure 4-23:
CSS offers a lot of design tools to produce beautiful typography for your Web pages. In addition, an external style sheet makes it fast and easy to consistently add style to hundreds of pages without much work.

CHAPTER

5

Links

The humble hyperlink may not raise eyebrows anymore, but the notion that you can navigate a whole sea of information, jumping from one island of content to another with a simple click, is a very recent and powerful invention. Interested in a particular band? Go to Google.com, type in the band's name, *click* to go to its Web site, *click* to go to the page that lists its upcoming gigs, *click* to go to the Web site for the club where the band is currently playing, and *click* to buy tickets.

Although links are a basic part of building pages, and although Dreamweaver—for the most part—shields you from their complexities, they can be tricky to understand. The following section provides a brief overview of links, including some of the technical distinctions between the different types. The rest of the chapter helps turn you into a link-crafting maestro, with sections on formatting the appearance of your links and on creating a navigation menu.

Note: If you already understand links, or are just eager to start using Dreamweaver, jump to "Adding a Link" on page 159.

Understanding Links

A link is a snippet of code that gives a Web browser directions for how to get from one page to another on the Web. What makes links powerful is that the distance covered by those directions doesn't matter. A link can just as easily lead to another page on the same site as to a page on a Web server halfway around the globe.

Behind the scenes, a simple HTML tag called the anchor (<a>) tag makes each and every link work. Links come in three different flavors: *absolute, document-relative*, and *root-relative*. See page 157 for some examples of each link type in practice.

Absolute Links

When people want to mail you a letter, they ask for your address. Suppose it's 123 Main St., New York, NY 12001. No matter where in the country your friends are, if they write *123 Main St., New York, NY 12001* on an envelope and mail it, their letters will get to you. That's because your address is unique—just like an absolute link.

Similarly, every Web page has a unique address, called a *URL* (most people pronounce it "you are el"), or Uniform Resource Locator. If you open a Web browser and type *http://www.sawmac.com/dwcs3/index.html* into the address bar, the home page for this book opens.

This URL is an *absolute link*—it's the complete, unique address for a single page. Absolute links always begin with *http://*, and you'll use them any time you link to a Web page *outside of your own site*. An absolute link always leads to the same page, whether the link to it is on a page in the current site or an entirely different site.

The bottom line: use absolute links when you want to link to a page on another Web site.

Document-Relative Links

Suppose you, the resident of 123 Main Street, drop in on a couple who just moved into the neighborhood. After letting them know about all the great restaurants nearby, you tell them about a party you're having at your place.

When they ask you where you live, you could say, "I live at 123 Main St., New York, NY 12001," but your neighbors would probably think you needed a little psychiatric help. Instead, you'd say something like, "Just go across the street and turn left. I'm the second house on the right." Of course, you can't use these instructions as your mailing address, because they only make sense from your neighbor's house.

When you want to create a link from one Web page to another within the same Web site, you can use similar shorthand: a *document-relative link*. In essence, a document-relative link—like the directions you give your neighbor—simply tells the browser where to find the linked page *relative* to the current page. If two pages are in the same folder, for instance, the path is as simple as "Go to that page over there." In this case, the link is simply the name of the file you wish to link to: *index.html*, for example. You can leave off all that *http://* and *www.sawmac.com* business, because you're already there.

Document-relative links can be finicky, however, because they're completely dependent on the location of the page containing the link. If you move the page to another part of the site—filing it in a different folder, for example—the link won't work. That's why working with document-relative links has traditionally been one of the most troublesome chores for Web designers, even though this kind of link is ideal for linking from one page to another in the same site.

Fortunately, Dreamweaver makes working with document-relative links so easy, you may forget what all the fuss is about. Whenever you save a page in a different folder—a maneuver that would normally shatter all document-relative links on the page—Dreamweaver quietly *rewrites* the links so they still work. Even better, using the program's site management tools, you can cavalierly reorganize your Web site, moving files and folders without harming the delicate connections between your site's files. Dreamweaver's site management features are discussed in depth in Part 4.

Root-Relative Links

Root-relative links describe how to get from one page to another within the same site, just like document-relative links. However, in this case, the path is described relative to the site's *root folder*—the folder that contains the home page and other pages, folders, and files that make up your site. (For a detailed description of the root folder and structuring a Web site, see Chapter 15.)

Imagine you work in a big office building. You need to get to a co-worker's office in the same building for a meeting, so you call her for directions. She may not know the precise directions from your office to hers, but she can tell you how to get from the building's entrance to her office. Since you both know where the building's front door is, these directions work well. In fact, she can give the same directions to anyone else in the building, and since they know where the entrance is, they'll be able to find her office, too. Think of the office building as your site, and its front door as the *root* of your site. Root-relative links always begins with a slash (/). This slash is a stand-in character for the root folder—the front door—of the site. The same root-relative link always leads to the same page, no matter where it is on your Web site.

UP TO SPEED

Parts of a URL

Each chunk of a URL helps a Web browser locate the proper Web page. Take the following URL, for instance: *http://www.sawmac.com/dwcs3/index.html*.

- **http://.** This portion specifies the *protocol*, the method the Web browser must use to communicate with the Web server. *HTTP* stands for *hypertext transfer protocol.* HTTP specifies a connection to a Web page, as opposed to protocols like *ftp* (for transferring files) and *mailto* (for email addresses).
- **www.sawmac.com.** This specifies the computer that's dishing out the Web site in question–that is, it's the address of the Web *server*. The www part identifies a Web site within the *domain* sawmac.com. It's possible to have multiple Web sites in a single domain, such as *news.sawmac.com, secret.sawmac.com*, and so on.
- **/dwcs3/.** This is the name of a folder (also called a directory) on the Web server.
- **index.html.** This is the name of the actual document or file that the Web browser is supposed to open–the Web page itself. These are the HTML documents that Dreamweaver creates.

If you use Dreamweaver for all of your Web page development, you probably won't need root-relative links, but they can come in handy. For example, suppose you're asked to create a new page for an existing Web site. Your client gives you text, some graphics, and a list of the other pages on the site that this page needs to link to. The problem is, your client doesn't know where on the site the new page needs to go, and his Webmaster won't return your calls.

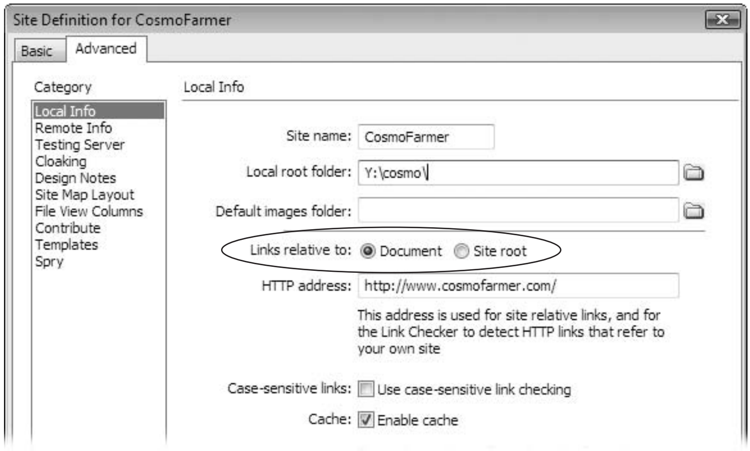
Fortunately, you can use root-relative links to solve this dilemma. Since these links work no matter where the page is on your site, you could complete the page and let the client put it where it belongs—the links will still work.

But there's one major drawback to using root-relative links in Dreamweaver: They don't work when you test them on your own computer. If you view a Web page sitting on your computer's hard drive, clicking a root-relative link in a Web browser either doesn't work, or produces only a "File not found" error. Such links work only after the files that contain them are moved to a Web server. Web servers understand root-relative links, but your personal computer doesn't. One solution to this problem is to install a Web server on your computer and put your site files inside it. This is the approach you take when building the dynamic sites discussed in Part 6 of this book.

Note: There's one exception to the "root relative links don't preview correctly" dilemma. Dreamweaver provides two ways of previewing a Web page: *with* a temporary file or *without* one. The temporary-file option has a couple of advantages: You can preview a page without having to save it first, and you can preview–on your local computer–any root-relative links you've created. To turn this feature on, open Preferences (Edit → Preferences or, on a Mac, Dreamweaver → Preferences), click the "Preview in Browser" category, and turn on the Preview Using Temporary File checkbox. Behind the scenes, Dreamweaver secretly rewrites root-relative links as *document relative* links whenever it creates a temporary file. If you see files in your site with weird names like TMP2zlc3mvs10.htm, those are the temporary files Dreamweaver creates. Feel free to delete them.

Unless you have a specific reason to use root-relative links (like your IT department says you have to), it's best to stick to document-relative links for your pages, but keep this discussion in mind. You'll see later that Dreamweaver's site management features use root-relative paths to track your site's files behind the scenes.

Note: Older versions of Dreamweaver also had trouble with root-relative links if the site wasn't located in the Web server root folder. For example, say your buddy gives you space on his Web server. He says you can put your site in a folder called *my_friend*, so your URL is *www.my_buddy.com/my_friend/*. In this case, your Web pages don't sit at the root of the site–they're in a folder *inside* the root. So a root-relative link to your home page would be */my_friend/index.html*. Before version 8 (the predecessor to CS3), Dreamweaver would write this file path as */index.html*. Dreamweaver 8 solved this problem, but only if you told it the correct URL of your site–*http://www.my_buddy/my_friend/*–in either the first screen of the New Site wizard (see step 3 on page 30), or in the HTTP address box on the Advanced tab of the New Site window (see Figure 5-1).



Site Definition for CosmoFarmer

Basic | Advanced

Category: Local Info, Remote Info, Testing Server, Cloaking, Design Notes, Site Map Layout, File View Columns, Contribute, Templates, Spry

Local Info

Site name: CosmoFarmer

Local root folder: Y:\cosmo\

Default images folder:

Links relative to: ● Document ○ Site root

HTTP address: http://www.cosmofarmer.com/

This address is used for site relative links, and for the Link Checker to detect HTTP links that refer to your own site

Case-sensitive links: □ Use case-sensitive link checking

Cache: ☑ Enable cache

Figure 5-1:
When defining a site in Dreamweaver, you can identify the URL of the site you're working on—its actual address on the Internet—using the HTTP address box. You can also tell Dreamweaver which type of link—document-relative or site root-relative—it should use when creating a link to another page on your site (circled). You can always return to this window if you want to change this option: Choose Site → Manage Sites, select your site, and then click Edit.

Link Types in Action

Figure 5-2 shows a Web site as it appears on a hard drive: folders filled with HTML documents and graphics. Here's a closer look at some links you might find on those pages, and how they might work.

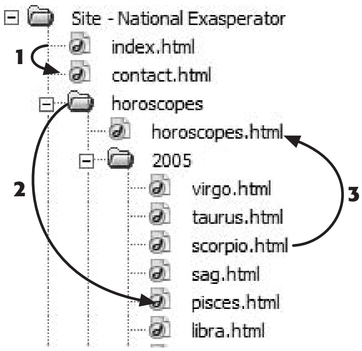


Figure 5-2:
Here are a few examples of links for a fictitious Web site located at www.nationalexasperator.com. The three lines show the connections between the page you're linking from (where each line starts) and the page you're linking to (where each arrow ends).

Link from the Home page (index.html) to the Contact Us page (contact.html)

The home page document is usually called *index.html* or *index.htm*. (The exact name depends on the configuration of your Web server. Contact your Web host, or the person in charge of your Web server, to confirm the file name you need to use for your Web server.) You could create the link from it to the *contact.html* page—identified by the number 1 in Figure 5-2—using any of the three link types:

- **Absolute:** *http://www.nationalexasperator.com/contact.html*. What it means: Go to the Web site at *www.nationalexasperator.com* and download the page *contact.html*.

- **Document-Relative:** *contact.html*. What it means: Look in the same folder as the current page and download the page *contact.html*.
- **Root-Relative:** */contact.html*. What it means: Go to the top-level folder of this site and download *contact.html*.

Tip: If you can write an absolute URL, you can easily create a root-relative URL. Simply strip off the *http://* and the Web server name. In the example above, erasing the *http://www.nationalexasperator.com* in the absolute address leaves */contact.html*–the root-relative path.

Link from the Horoscopes page to the Pisces page

Now imagine you're building a Web page and you wish to link it to another page that's inside a subfolder on your site. Here's how you'd use each of the three link types to open a document that's nested in a subfolder (called 2005, in this case), as identified by the number 2 in Figure 5-2:

- **Absolute:** *http://www.nationalexasperator.com/horoscopes/2005/pisces.html*. What it means: Go to the Web site at *www.nationalexasperator.com*, look in the folder *horoscopes*, then in the folder *2005*, and download the page *pisces.html*.
- **Document-relative:** *2005/pisces.html*. What it means: From the current page, look in the folder *2005* and download the page *pisces.html*.
- **Root-relative:** */horoscopes/2005/pisces.html*. What it means: Go to the top-level folder of this site, look in the folder *horoscopes*, then in the folder *2005*, and download the page *pisces.html*.

Link from the Scorpio page to the Horoscopes page

Now suppose you're building a Web page that's in a deeply nested folder, and you want it to link to a document that's *outside* of its folder, like the link labeled 3 in Figure 5-2:

- **Absolute:** *http://www.nationalexasperator.com/horoscopes/horoscopes.html*. What it means: Go to the Web site at *www.nationalexasperator.com*, look in the folder *horoscopes*, and download the page *horoscopes.html*.
- **Document-Relative:** *../horoscopes.html*. What it means: Go up one level—outside of the current folder—and download the page *horoscopes.html*. In links, a slash / represents a folder or directory. The two dots (..) mean, "Go up one level," into the folder that *contains* the current folder. So to link to a page that's up two levels—for example, to link from the *scorpio.html* page to the home page (*index.html*)—you would use ../ twice, like this: *../../index.html*.
- **Root-Relative:** */horoscopes/horoscopes.html*. What it means: Go to the top-level folder of this site, look in the folder *horoscopes*, and download the page *horoscopes.html*.

Executive Summary

In short: Use absolute URLs to link *outside* your site, use document-relative links for links *within your site*, and avoid using root-relative links altogether.

Adding a Link

If all that talk of links got you confused, don't worry. Links *are* confusing, and that's one of the best reasons to use Dreamweaver. If you can navigate to a document on your own computer or anywhere on the Web, you can create a link to it in Dreamweaver, even if you don't know the first thing about URLs and don't intend to learn the details of how they're configured.

Browsing for a File

To create a link from one page to another on your own Web site, use the Property inspector's "Browse for File" button (see Figure 5-3) or its keyboard shortcut, as described in the following steps.

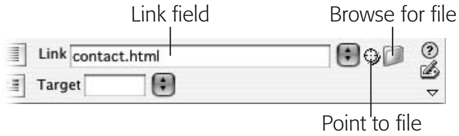


Figure 5-3:
The Property inspector provides three ways to add links on a Web page.

To browse for a file in Dreamweaver, you use the same type of dialog box that you use to open or save a file, making "Browse for File" the easiest way to add a link. (To link to a page on *another* Web site, you'll need to type the Web address into the Property inspector. Turn to page 163 for instructions.)

1. **In the document window, select the text or image you want to use for the link.**

   You can select a single word, a sentence, or an entire paragraph. When this process is over, the selected words will show up blue and underlined (depending on your visitors' Web browser settings), like billions of links before them.

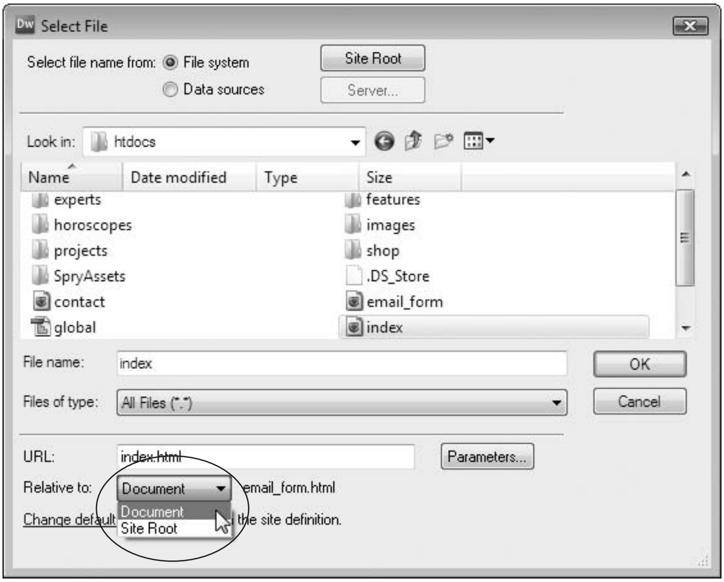
   In addition, you can turn a picture into a link—a great trick for adding attractive navigation buttons.

2. **In the Property inspector, click the folder icon—that's the "Browse for File" button.**

   Or, choose Modify → Make Link, or press Ctrl+L (⌘-L). In any case, the Select File dialog box opens (see Figure 5-4 for Windows, Figure 5-5 for Mac).

3. **Navigate to and select the file you want the link to open.**

   The file should be a Web page that's part of your Web site. In other words, it should be in the local root folder (see the box on page 33), or in a folder therein.



Select file name from: ● File system ○ Data sources

Look in: htdocs

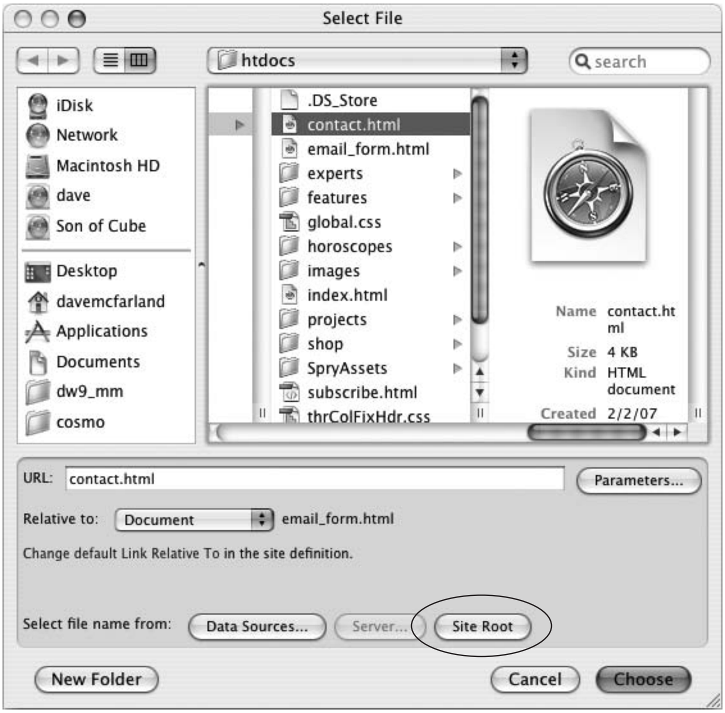
File name: index

Files of type: All Files (*.*)

URL: index.html

Relative to: Document email_form.html

Figure 5-4:
In Windows, the Select File dialog box lets you browse your computer to select the file you wish to link to. From the "Relative to" pop-up menu (circled), you can choose what type of link to create: Document- or Site Root–relative. You tell Dreamweaver which type of link to use in the Site Definition window, as described on page 562. If you find that your links aren't working when you preview your pages, odds are you have the Site Root option set, or you've been selecting Site Root from the "Relative to" pop-up menu.



URL: contact.html

Relative to: Document email_form.html

Change default Link Relative To in the site definition.

Name contact.html
Size 4 KB
Kind HTML document
Created 2/2/07

Figure 5-5:
Every file in a Web site needs to be somewhere inside what's called a local root folder (see the box on page 33). This master folder holds everything on the site, including other folders with other files. Because it's so central to your Web files, Dreamweaver CS3 adds a "Site Root" button (circled) to every window that requires selecting or saving a file. (This example shows what you see on a Mac; on Windows computers, the button's at the top of the window as shown in Figure 5-4.) Click this button and you jump straight to your site's root (which lets you know where you are on your hard drive), making it easy to navigate to the file you need.

If you try to link to a file *outside* the root folder, Dreamweaver alerts you to this problem and offers to copy the file to the root folder. Accept the offer. Remember: To a Web site, the root folder is like the edges of the known universe—nothing exists outside it.

4. **Make sure the correct type of link—Document or Site Root—is selected from the "Relative to" menu.**

   As noted earlier in this chapter, document-relative links are the best choice. Root-relative links (which is actually short for *Site Root–relative links*) don't work when you preview the Web site on your own computer. (They do, however, work once you move them to your Web server.)

Tip: You can skip step 4: Just set the type of link you want in the Site Definition window, and then forget about it. Dreamweaver always uses the link type you specified here. See Figure 5-1 for details.

5. **Click OK (Windows) or Choose (Mac) to apply the link.**

   The text or image now links to another Web page. If you haven't yet saved the other Web page into your site, Dreamweaver doesn't know how to write the document-relative link. Instead, it displays a dialog box saying that it will assign a temporary path for the link until you save the page—see the box on page 169.

After you apply a link, linked text appears underlined and colored (using the color defined by the Page Properties window, which is shown in Figure 1-18). Images have a blue borderline around them. If you want to take the link for a spin, press F12 (Option-F12 on a Mac) to preview the page in your browser, where you can click the link.

Tip: To get rid of the ugly blue border around linked images, create a CSS style for the <img> tag (see page 117) and set its border style to "none" (see page 215). The tutorial at the end of this chapter has an example of this on page 187.

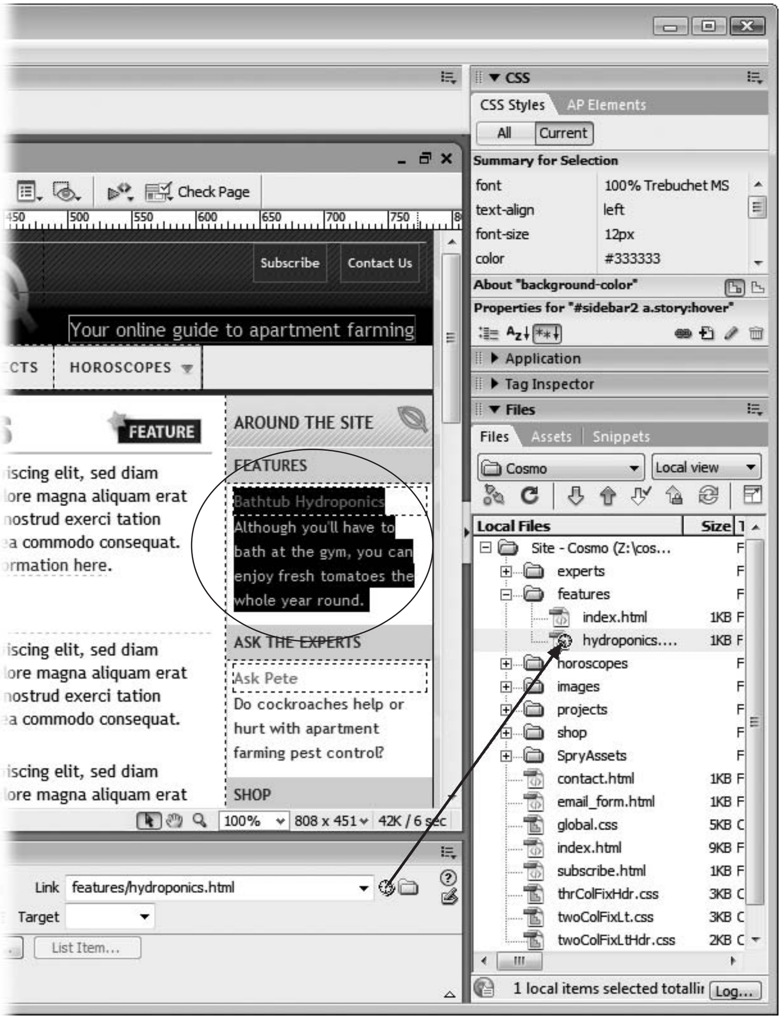
Using the Point-to-File Tool

You can also create links in Dreamweaver by dragging from the Property inspector to the Files panel (shown in Figure 5-6). If your site involves a lot of links, learning to use the Point-to-File tool will save you time and energy.

To use this trick effectively, position your document window and Files window side by side, as shown in Figure 5-6.

1. **In the document window, select the text or image you want to turn into a link.**

   Make sure that both the Property inspector and Files window are open. To open the Property inspector, choose Window → Properties. To open the Files window, choose Window → Files. (Before using the Files window, you need to create a local site, as described on page 28.)



Summary for Selection

font	100% Trebuchet MS
text-align	left
font-size	12px
color	#333333

About "background-color"

Properties for "#sidebar2 a.story:hover"

Local Files	Size
Site - Cosmo (Z:\cos...	
experts	
features	
index.html	1KB
hydroponics....	1KB
horoscopes	
images	
projects	
shop	
SpryAssets	
contact.html	1KB
email_form.html	1KB
global.css	5KB
index.html	9KB
subscribe.html	1KB
thrColFixHdr.css	3KB
twoColFixLt.css	3KB
twoColFixLtHdr.css	2KB

100% 808 x 451 42K / 6 sec

Link features/hydroponics.html

Target

Figure 5-6: *In this figure, a paragraph of text (circled) is selected in the document window. To link to another page, drag from the Point-to-File icon (labeled in the Property inspector) to a Web page in the Files panel (right). In this example, Dreamweaver creates a link to the Web page called hydroponics.html inside the features folder. You could also Shift-drag from the selected text to the page hydroponics.html in the Files panel to create the same link.*

2. **Drag the Point-to-File icon from the Property inspector onto a Web page in the Files window (see Figure 5-6).**

   Or you can Shift-drag the selected text or image in the document window to any Web page in the Files panel, bypassing the Property inspector altogether.

3. **After dragging over the correct Web page, release the mouse button.**

   The selected text or image in your Web page turns into a link to the file you just pointed to.

Tip: You can also drag a file from the Files panel into the Link box (in the Property inspector) to link to it.

Typing (or Pasting) the URL or Path

If you need to link to another Web site, or you feel comfortable with how document-relative links work, you can also simply type the URL or path to the page into the Property inspector. Note that this manual insertion technique and the hyperlink object tool discussed next are the *only* ways to add links to pages outside the current Web site.

1. **In the document window, select the text or image you want to make into a link.**

2. **In the Property inspector, type the URL or path to the file into the Link field (see Figure 5-3).**

   If the link leads to another Web site, type an absolute URL—that is, a complete Web address, starting with *http://*.

Tip: An easier approach is to copy a complete URL–including the *http://*–from the address bar in your browser window and paste it into the Link field.

   To link to another page on your own site, type a document-relative link (see page 157 for some examples). Letting Dreamweaver write the correct path using the browsing or point-to-file techniques described above is a good way to avoid typos. But typing the path can come in handy when, say, you want to create a link to a page you haven't yet created.

Tip: If you're adding an absolute link to a Web site without specifying a Web page, add a final forward slash (/) to the address. For example, to link to Yahoo, type *http://www.yahoo.com/*. The final slash tells the Web server that you're requesting the default page (home page) at Yahoo.com.

Although leaving out the slash works, too (*http://www.yahoo.com*), the server has to do a little extra work to figure out which page to send back, resulting in a slight and unnecessary delay.

Also include the final slash when you provide a link to the default page inside a folder on a site, like this: *http://www.sawmac.com/dwcs3/*.

FREQUENTLY ASKED QUESTION

Targeting Links

What's the Target menu in the Property inspector for?

The Target menu has nothing to do with the accuracy of your links, nor with shooting ranges. It deals with how the destination page appears when you click a link.

The new page can appear (a) right in the browser window, just the way most links work; (b) in a new browser window (choose the *_blank* option); or (c) in a different *frame* on the same page (for details about this increasingly obsolete technology, see the online-only chapter about frames, located at *www.sawmac.com/missing/dw8/appc.pdf*).

_blank is pretty much the only option used these days, but be careful if your pages use the "Strict" forms of HTML 4.01 and XHTML 1.0 (see page 37): The Target attribute is not valid code for those types of documents.

3. **Press Enter (Return) to apply the link.**

   The text or image now links to another Web page.

Using the Hyperlink Object

Dreamweaver provides yet another way to add a link. The Hyperlink object on the Common tab of the Insert bar (Figure 5-7) lets you insert a link with many optional properties. It's only real benefit is that it lets you add text and a link in one step (instead of adding text to the page, selecting it, and *then* applying a link). It also makes it easy to add a "title" property; browsers display link titles as small pop-up tooltips, so this is one way to provide additional information about a link to site visitors. Unfortunately, this tool only works with text (not graphics) and some of the optional properties don't work in all browsers.

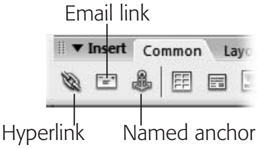
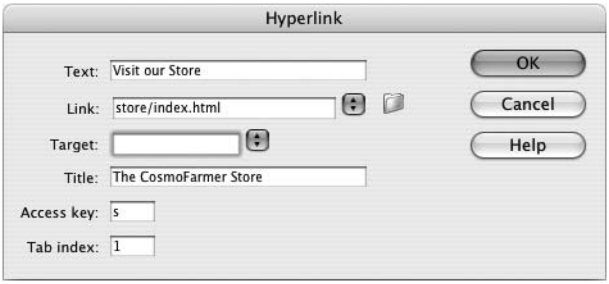


Figure 5-7:
The Common tab of the Insert bar includes three link-related objects: the Hyperlink (for adding links), the Email link (for adding links for email addresses), and the Named anchor (for adding links within a page).

If you're still interested, here's how it works. Start by clicking on the page where you wish to insert a link. Then:

1. **Choose Insert → Hyperlink or click the chain icon on the Insert bar.**

   The Hyperlink dialog box opens (see Figure 5-8). If you want to apply a link to text already on the page, select it first, then choose Insert → Hyperlink.



Text: Visit our Store

Link: store/index.html

Target:

Title: The CosmoFarmer Store

Access key: s

Tab index: 1

Figure 5-8:
To apply the optional properties in this dialog box to an image or existing text, you have a couple of options. You can go into Code view (as described in Chapter 10) and hand edit the HTML, but it's easier to use the Tag inspector to access all the properties available to a particular link. (For details, see page 386.)

2. **In the Text box, type the text you want to appear on the page.**

   Whatever you type here is what you'll see on the page, and what your audience will click to follow the link. If you previously selected some text on the page, it shows up in the Text box automatically.

3. **Click the folder icon and search for the page you want to link to.**

   Alternatively, you can type a URL in the Link box.

4. **Set the target for the link.**

   If you want the link to open in the same window—like most links—don't select anything. To make the page open in a new window, select the *_blank* option (see page 163 for more on targeting a link).

   The last three options are more interesting.

5. **Type a title for the page you're linking to.**

   This property is optional. Most Web browsers display this property in a small tooltip window when you move your mouse over the link.

6. **Type a key in the "Access key" box.**

   An *access key* lets you trigger a link from your keyboard. Internet Explorer, Netscape 6 and later, Safari, and Firefox understand this property in conjunction with the Alt key (Control key on a Mac). For example, if you type *h* in the "Access key" box, then a visitor to your page can press Alt+H (Control-H) to mouselessly open that link. Of course, unless people who visit your site are psychic, it's a good idea to provide instructions by adding the access key information next to the link itself: Home Page (Alt+H).

7. **In the "Tab index" box, type a number for the tab order.**

   In most newer browsers (Internet Explorer, Firefox, Safari, and Opera, to name a few), you can press the Tab key (Option-Tab in Safari) to step through the links on a page (and boxes on a form). This feature not only provides useful keyboard control of your Web browser, but it's also important for people who can't use a mouse due to disabilities.

   Normally when you press Tab, Web browsers highlight links in the order in which they appear in the page's HTML. The Tab index, by contrast, lets *you* control the order in which links light up as visitors tab through them. For example, you can make your main navigation buttons the first things that are highlighted when someone presses Tab, even if they aren't the first links on the page.

   For the first link in order, type *1* here. Number other links in the order you want the Tab key to follow. If you aren't concerned about the order of a particular link, leave this option blank or type *0*. The Web browser will highlight that link after the visitor has tabbed through all links that *do* have a Tab index.

Adding an Email Link

If you want to invite your site visitors to email you, then an *email link* is the perfect solution. When someone clicks an email link, her email program launches automatically, and a new message opens with your email address already in the To field. She can then just type her message and send it off.

An email link looks like this: *mailto:plants@cosmofarmer.com*. The first part (*mailto*) indicates the type of link, while the second part (*plants@cosmofarmer.com*) specifies the email address.

EXTENSION ALERT

QuickLink Is Quick Work

Dreamweaver makes it easy to add innovative commands and tools–including those written by independent, non-Adobe programmers–to your copy of the program. You can read a lot more about these add-on programs, called *extensions*, in Chapter 21.

When you're working with links, one extension that really comes in handy is called QuickLink. Created by renowned Dreamweaver guru Tom Muck, this extension instantly turns text into either a *mailto* or an *absolute* URL. You can find QuickLink at *www.tom-muck/extensions/*.

Once you've installed this extension, here's how it works: Suppose you paste the text, "You can download the free PDF viewer at www.adobe.com." To turn *www.adobe.com* into a real link, you can either select the text and then go to the Property inspector and type *http://www.adobe.com/*, or–with QuickLink–simply select the text and choose Commands → QuickLink. QuickLink writes the proper code in the Property inspector, including the initial (and mandatory) *http://*, even if those characters were missing from the original text. (Note that this extension has one small bug: After you install it, the QuickLink command will appear *twice* in the Commands menu. Either option works.)

QuickLink also converts email addresses to proper *mailto* links: Just select the email address (*missing@sawmac.com, say*), apply the QuickLink command, and watch as the extension automatically inserts the correct code (*mailto*: *missing@sawmac.com*) into your page.

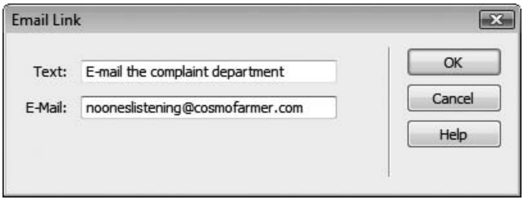
For even faster action, create a keyboard shortcut for this command; Shift+Ctrl+L is a good one. (See page 733 for more on keyboard shortcuts.)

Note: Email links work only if the person who clicks the link has an email program set up and running on his computer. If someone visits your site from a computer at the public library, for example, he might not be able to send email. If this drawback troubles you, you can also collect information using a *form* (as discussed in Chapter 11), a feedback method that has neither the limitations nor the easy setup of an email link.

You can create an email link much the way you'd create any other Dreamweaver link: by selecting some text or an image and typing the mailto address, as shown above, into the Link field in the Property inspector. To simplify this process, Dreamweaver has a quick method of inserting an email link:

1. **On the Common tab of the Insert bar, click the Email link icon, which looks like an envelope (see Figure 5-7).**

   Alternatively, choose Insert → Email link. Either way, if you've already typed the text (*Email me!*) on your Web page, select it first. The Email Link dialog box opens (see Figure 5-9).



Text: E-mail the complaint department

E-Mail: nooneslistening@cosmofarmer.com

Figure 5-9:
The Email Link dialog box lets you specify the text that appears on the Web page and the email address for a mailto link. You can also select some text you've already added to the document and click the Email Link icon on the Objects panel. The text you selected appears in the Text field in this dialog box.

2. **In the Text field, type the text that you want to appear on the Web page.**

   This text can indicate the link's purpose, like *Email the Webmaster*. (If you select text in the document first, it automatically appears in the Text field.)

3. **Type an email address into the E-Mail field.**

   This is the address that appears in your visitors' email program when they click the link. (You don't have to type *mailto*:—Dreamweaver adds it automatically.)

4. **Click OK.**

   Dreamweaver adds the text to the page, complete with a mailto link.

Note: Some people don't add email links to their Web sites because they're afraid of spammers' automated programs that search the Web and collect email addresses. There are some tricks to fool these "spambots," but spammers have figured most of them out. The fact is, spammers can attack even "Contact Us" Web forms. If you're absolutely obsessed with never being spammed, then leave your email address off your site. However, many businesses rely on people contacting them for more information, and the harder you make it for a legitimate visitor to contact you, the fewer legitimate contacts you'll receive–after all, you wouldn't have much of a freelance design business if you never provided a way for someone to contact you. Your best bet is to let the spam come, but add a spam filter to your email program to separate the wheat from the chaff.

Linking Within a Web Page

Clicking a link usually loads a Web page into the browser window. But what if you want to link not only to a Web page, but to a specific *spot* on the page? See Figure 5-10 for an example.

Introducing the *named-anchor link*, a special type of link that's designed to autoscroll to a particular spot on a particular page.

Phase 1: Creating a Named Anchor

Creating a named-anchor link is a two-step process: First you add and name an anchor on the page that you're linking to, thus identifying the destination for the link; then you add a link that goes to that named anchor. For instance, in the Table of Contents page example shown in Figure 5-10, you would place a named anchor at the beginning of each chapter section.

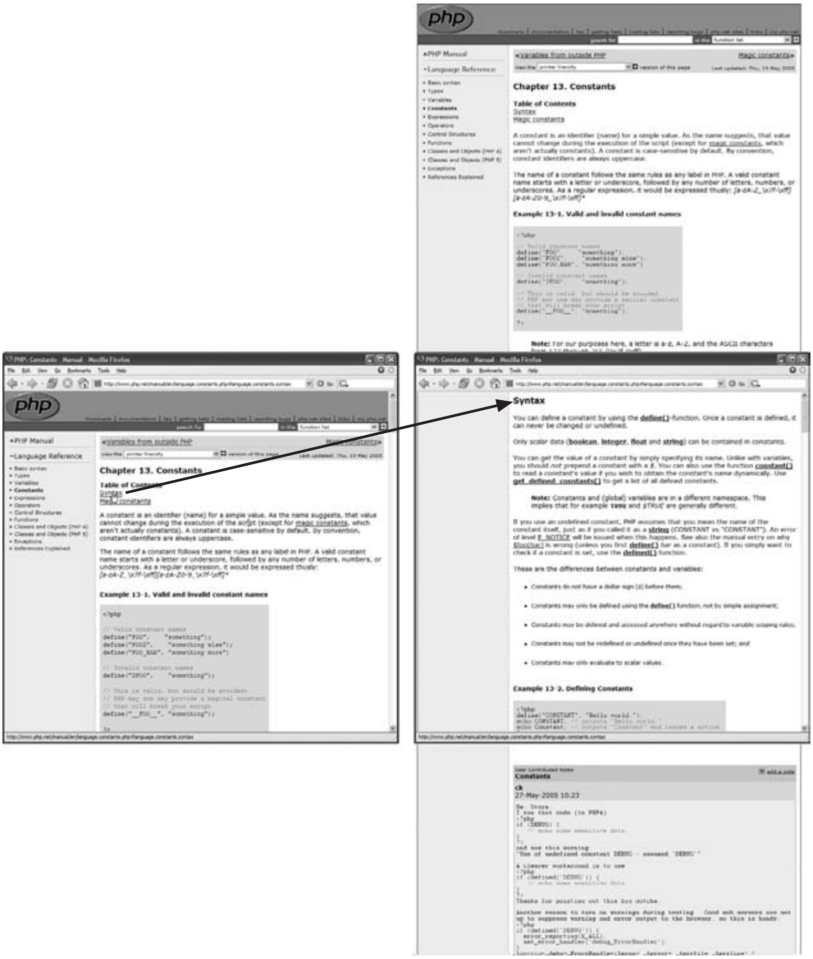
To create a named anchor:

1. **In the document window, click where you want to insert the named anchor.**

   The named anchor is the place where you want the link to jump to.

2. **Insert a named anchor.**

   You can do so using any of three methods: Choose Insert → Named Anchor; press Ctrl+Alt+A (⌘-Option-A); or, from the Insert bar, select the Common tab and click the Named Anchor icon (see Figure 5-7).



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Chapter 13. Constants

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Syntax
Magic constants

A constant is an identifier (name) for a simple value. As the name suggests, that value cannot change during the execution of the script (except for magic constants, which aren't actually constants). A constant is case-sensitive by default. By convention, constant identifiers are always uppercase.

The name of a constant follows the same rules as any label in PHP. A valid constant name starts with a letter or underscore, followed by any number of letters, numbers, or underscores. As a regular expression, it would be expressed thusly: [a-zA-Z_\x7f-\xff][a-zA-Z0-9_\x7f-\xff]*

Example 13-1. Valid and invalid constant names

```
<?php

// Valid constant names
define("FOO",     "something");
define("FOO2",    "something else");
define("FOO_BAR", "something more");

// Invalid constant names
define("2FOO",    "something");

// This is valid, but should be avoided:
// PHP may one day provide a magical constant
// that will break your script
define("__FOO__", "something");

?>
```

Note: For our purposes here, a letter is a-z, A-Z, and the ASCII characters from 127 through 255 (0x7f-0xff).

PHP: Constants - Manual - Mozilla Firefox

Syntax

You can define a constant by using the define()-function. Once a constant is defined, it can never be changed or undefined.

Only scalar data (boolean, integer, float and string) can be contained in constants.

You can get the value of a constant by simply specifying its name. Unlike with variables, you should *not* prepend a constant with a $. You can also use the function constant() to read a constant's value if you wish to obtain the constant's name dynamically. Use get_defined_constants() to get a list of all defined constants.

Note: Constants and (global) variables are in a different namespace. This implies that for example TRUE and $TRUE are generally different.

If you use an undefined constant, PHP assumes that you mean the name of the constant itself, just as if you called it as a string (CONSTANT vs. "CONSTANT"). An error of level E_NOTICE will be issued when this happens. See also the manual entry on why $foo[bar] is wrong (unless you first define() bar as a constant). If you simply want to check if a constant is set, use the defined() function.

These are the differences between constants and variables:

- Constants do not have a dollar sign ($) before them;
- Constants may only be defined using the define() function, not by simple assignment;
- Constants may be defined and accessed anywhere without regard to variable scoping rules;
- Constants may not be redefined or undefined once they have been set; and
- Constants may only evaluate to scalar values.

Example 13-2. Defining Constants

```
<?php
define("CONSTANT", "Hello world.");
echo CONSTANT; // outputs "Hello world."
echo Constant; // outputs "Constant" and issues a notice.
```

User Contributed Notes
Constants

ck
27-May-2005 10:23

Figure 5-10: Some pages have information that you'd prefer not to break up into several different Web pages. To make it easy for visitors to jump to a location farther down on the page, you might have a list of contents for that page, which, when clicked (left), jumps down the page to the appropriate section (right).

3. **Type the name of the anchor in the Insert Named Anchor dialog box.**

   Each anchor on a page should have a unique name, something short and easy to remember. No spaces or punctuation marks are allowed. If you violate any of these rules, Dreamweaver will remind you with an error message and strip out the offending characters.

4. **Click OK to insert the named anchor.**

   You'll see a gold shield with an anchor on it at the point where you created the anchor. Click this icon to show the name of the anchor in the Property inspector. (If you don't see it, see page 171 for details on hiding and showing anchors.)

The Named Anchor icon (the gold shield) is the key to removing or editing the anchor later: just click the icon and press Delete to get rid of it, or click it and change its name in the Property inspector. (Deleting the name in the Property inspector deletes the anchor from the page.)

FREQUENTLY ASKED QUESTION

The Mysterious Triple Slashes

Why do my links start with file:///?

Links that begin with *file:///* (*file:///D:/missingmanual/book_site/cosmo/subscribe.html*, for example) aren't valid links on the Web. Rather, they're temporary addresses that Dreamweaver creates as placeholders for links to be rewritten later. (A *file:///* path tells Dreamweaver where to look for the file on your computer.) You'll spot these addresses when you add document-relative links to a page that hasn't been saved, or when working with files that are outside of your site's local root folder.

Suppose you're working on a Web page that will contain your company's legal mumbo-jumbo, but you haven't yet saved it. After adding a document-relative link to your home page, you notice that the path displayed in the Property inspector's Link field begins with *file:///*. Since your legal page hasn't yet been saved and therefore doesn't yet have a folder location, Dreamweaver can't create a link telling a browser how to get from it to the home page. So Dreamweaver creates a temporary link, which helps it keep track of which page to link to. Once you save the page somewhere in the site, Dreamweaver rewrites the link in proper document-relative format, and the *file:///* disappears.

Likewise, when you work with files that are outside of the local root folder, Dreamweaver can't write a proper link. (Any folder outside of the local root folder isn't part of the Web site, and there's no way to write a correct link from nowhere to somewhere.) So, if you save a page *outside* of the local root folder, Dreamweaver writes all document-relative links on that page as file paths beginning with *file:///*. To avoid this invalid link problem, always save your Web pages *inside* the local root folder or in a folder inside of the local root folder. To learn more about root folders and Web sites, see Chapter 15.

When you *link to* a page–or add an image (Chapter 6)–that's stored outside of the local root folder, Dreamweaver has the same problem. However, in this instance, Dreamweaver gives you the option of copying the out-of-bounds file to a location of your choosing within the root folder.

Phase 2: Linking to an Anchor

Creating a link to a named anchor isn't all that different from linking to a Web page. Once you've created and named an anchor, you can link to it from within the same Web page, or from a different page.

To link to an anchor on the same page:

1. **In the document window, select the text or image you want to make into a link.**

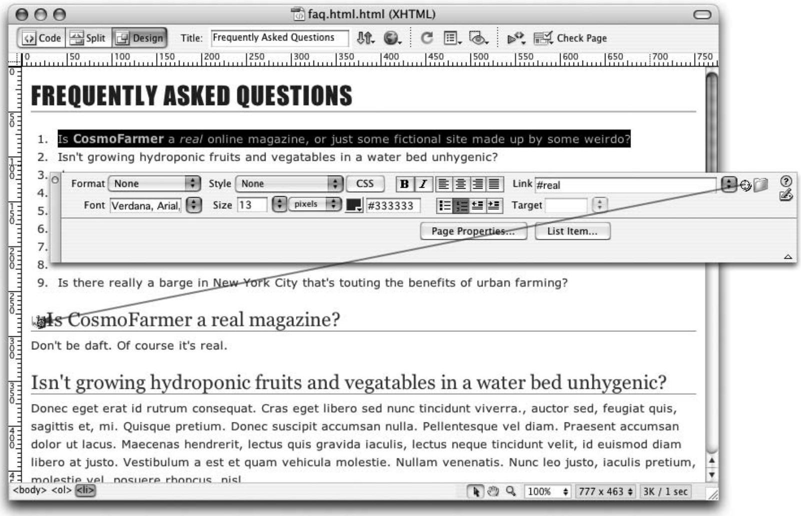
   For example, drag across some text, or highlight a graphic.

2. **In the Property inspector's Link field, type #, followed by the anchor name. (Alternatively, use the Point-to-File icon, as shown in Figure 5-11.)**

   The # sign indicates that the link goes to a named anchor. In other words, if you wish to link to an anchor named *directions*, the link would be *#directions*.

You can also link from one Web page to a particular location on another Web page in your site. The process is the same as linking to an anchor on the same page, except that you have to specify both the path to the Web page and the name of the anchor:

1. **In the document window, select the text or image you want to turn into a link. In the Link field of the Property inspector, type or choose the URL or path of the page you wish to link to.**



Title: Frequently Asked Questions

FREQUENTLY ASKED QUESTIONS

1. Is **CosmoFarmer** a *real* online magazine, or just some fictional site made up by some weirdo?
2. Isn't growing hydroponic fruits and vegatables in a water bed unhygenic?
3.
4.
5.
6.
7.
8.
9. Is there really a barge in New York City that's touting the benefits of urban farming?

Format None Style None Link #real

Font Verdana, Arial, Size 13 pixels #333333 Target

Is CosmoFarmer a real magazine?

Don't be daft. Of course it's real.

Isn't growing hydroponic fruits and vegatables in a water bed unhygenic?

Donec eget erat id rutrum consequat. Cras eget libero sed nunc tincidunt viverra., auctor sed, feugiat quis, sagittis et, mi. Quisque pretium. Donec suscipit accumsan nulla. Pellentesque vel diam. Praesent accumsan dolor ut lacus. Maecenas hendrerit, lectus quis gravida iaculis, lectus neque tincidunt velit, id euismod diam libero at justo. Vestibulum a est et quam vehicula molestie. Nullam venenatis. Nunc leo justo, iaculis pretium, molestie vel, posuere rhoncus, nisl.

<body> <ol> <li> 100% 777 x 463 3K / 1 sec

Figure 5-11:
You can use the Property inspector's Point-to-File icon to link to a named anchor on a page. Simply select some text or an image in an open page, and then drag the Point-to-File icon to an anchor on any other open document to set the link. If you can't see the shield icons that mark anchors, see opposite page for instructions on how to make them visible.

FREQUENTLY ASKED QUESTION

Adding Objects to the Favorites Tab

Help! I'm tired of wading through so many tabs to find all my favorite Dreamweaver objects. How can I see all of my most used objects in one place?

Dreamweaver includes a marvelous productivity tool: the Favorites tab. It lets you collect your most used objects into a single place, without any interference from HTML tags and objects you never use. Maybe you use the Email link object on the Insert bar all the time, but never touch the Named anchor object.

To add objects to the Favorites tab, right-click (Control-click) anywhere on the Insert bar. From the shortcut menu, choose Customize Favorites to open the Customize Favorite Objects window. All of the objects available in all of the Insert bar categories appear in the left-hand list. Select an object and click the << button to add it to your Favorites. (You can view the objects for just one category by selecting the category from the "Available objects" menu.) Repeat with other objects, if you like.

To rearrange the order of the toolbar buttons, click one and then click the up or down arrow to move it left or right on the toolbar. (Buttons at the top of the list appear on the left side of the Insert bar.) You can even use the Add Separator button to insert a thin gray line between buttons on the Insert bar–to separate one group of similar objects (graphic-related objects, say) from another (such as form objects). Unfortunately, you can't group Favorite objects into submenus. Each item you add is a single button on the Insert bar.

To delete a button or separator from the list, select it and then click the Trash icon. Click OK to close the window and create your new list of Favorite objects, which are now available under the Favorites tab of the Insert bar.

After you've created your Favorites tab, you can always add more objects (or delete ones you no longer need) by right-clicking (Control-clicking) the Insert bar and choosing Customize Favorites from the shortcut menu.

You can use any of the methods described above: browsing, point-to-file, or typing the path. Unfortunately, if you browse to select the linked file, Dreamweaver doesn't display any anchors on that page, so you need to perform one extra step.

2. **Click at the end of the URL or path. Type # followed by the anchor name.**

   The Link field should look something like this: *contact.html#directions*.

Tip: You can link to any tag that has an ID applied to it, just as you'd link to a named anchor. For example, say you have a headline with an ID of "compost" applied to it, like this: <h1 id="compost">. You could link to that headline using the link of #compost. (You'll learn about IDs on page 284.)

Viewing and Hiding Anchors

A named anchor isn't visible in a Web browser; it appears in Dreamweaver as an anchor-on-a-gold-shield icon. Like other invisible elements—line breaks, for instance—you can hide named anchors in Dreamweaver by choosing View → Visual Aids → Invisible Elements, or choosing Visual Aids → Invisible Elements from the Visual Aids menu in the toolbar (see Figure 9-12 on page 324). (If anchors still don't appear, visit the Preferences window, pictured in Figure 1-15, and in the Invisible Elements category, make sure the Anchor box is turned on.)

FREQUENTLY ASKED QUESTION

Anchors Away

When I click a link to an anchor, the Web browser is supposed to go to the page and display the anchor at the top of the browser window. But sometimes the anchor appears in the middle of the browser. What's that about?

Web browsers can't scroll beyond the bottom of a Web page, so an anchor near the bottom of a page sometimes can't move to the top of the browser window. If one of your own Web pages exhibits this problem, the fix is simple: create a style for the <body> tag and add *bottom padding* (page 332). This adds space between the bottom of the page and the last bit of content on the page, so the browser can scroll the page all the way to the anchor.

Modifying a Link

At some point, you may need to change or edit a link. Perhaps the URL you were linking to has changed, or you simply no longer need that link.

Changing a Link's Destination

As you'll read in Part 4, Dreamweaver provides some amazing tools for automatically updating your links so that your site stays in working order, even if you move files around your site. But even Dreamweaver isn't smart enough to know when a page on someone *else's* Web site has been moved or deleted. And you may decide you simply need to change a link so that it points to a different page on your own site. In both of these cases, you'll need to change the links on your Web pages by hand:

1. **Select the text link or picture link.**

   The existing link path appears in the Link field in the Property inspector.

2. **Use any of the techniques described on page 159 for specifying the link's target.**

   For example, click the "Browse for File" button in the Property inspector and locate a different Web page in your site. The destination of the link changes to the new URL, path, or anchor.

Removing a Link

Sometimes, you want to stop a link from linking—when the Web page you were linking to no longer exists, for example. You want the text or image on your Web page to stay the same, but you want to remove the disabled link. In that case, just select the link text or image and then use one of these tactics:

- Choose Modify → Remove Link, or press Ctrl+Shift+L (⌘-Shift-L).
- Delete the text in the Link field of the Property inspector and press the Enter or Return key.

The text or image remains on your Web page, but it no longer links to anything. If it's a text link, the color changes from your site's link color to the normal text color for the page.

Of course, if you're feeling particularly destructive, you can also delete the link text or image itself; doing so also gets rid of the link.

Styling Links

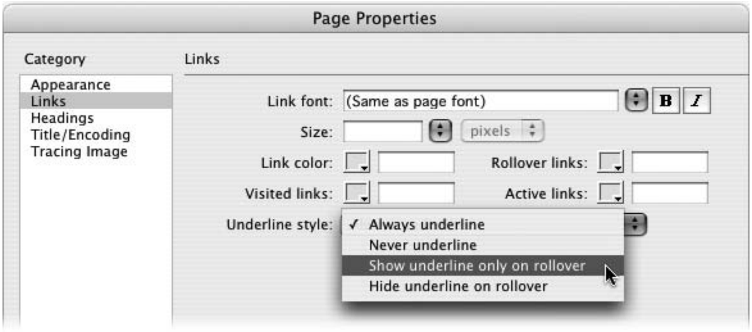
You can control the basic look of links from the Links category of the Page Properties window (Figure 5-12). To open it, choose Modify → Page Properties, press Ctrl+J (⌘-J), or click the Page Properties button in the Property inspector (this button's only visible when either nothing is selected on the page or text is selected.)

The top set of options—font, size, bold, italic—set basic formatting for every link on the page. The next group of options set the color of links under specific conditions. Web browsers keep track of how a visitor interacts with links on a page: for example, whether he's moving his mouse over the link. Each link can be in one of four different modes (called *states*): a plain unvisited link is just called a *link*; a link to a page the visitor has already been to (this is determined by the browser's pages-viewed history) is called a *visited* link; a link that the mouse is currently over is technically called a *hover* state (but Dreamweaver refers to it as a *rollover* link); and a link that's in the process of being clicked is known as an *active* link.

Each of these states provides useful information to a visitor, and you can style each one individually. In most Web browsers, a plain link normally appears blue until you visit the page it links to—then that link turns purple. This helpful color coding lets a visitor quickly determine whether to follow a link: "Hey, there's a page I haven't seen," or, "Been there, done that."

The rollover (or hover) link is particularly useful in instructing visitors that they can click the link, and it also provides a lot of creative design potential. For example, you can completely change the look of a link when a visitor mouses over it, including changing the color, adding a background image (page 217), or changing its background color (page 217). Finally, an *active* link is for that fleeting moment between when a visitor clicks a link and releases the mouse button. It happens so fast that it's usually not worth spending too much time formatting the active link state.

The Page Properties (Figure 5-12) window lets you change the color for each of these different link states. In addition, the "Underline style" menu lets you control whether a line always appears beneath a link (this is normally how Web browsers display text links); never appears beneath links; only appears when you move your mouse over a link; or appears normally but disappears when the mouse is moved over the link. Since Web surfers are accustomed to thinking of underlined text as a big "CLICK ME" sign, think twice before removing underlines from links. Without some clear indication that the text is a link, visitors may never see (or click) the links on your page.



Page Properties

Category: Links

Link font: (Same as page font)

Size: pixels

Underline style: ✓ Always underline

Figure 5-12:
The Page Properties window lets you set basic properties for a Web page, including the font, color, and size of links. This window is mainly a shortcut for creating CSS styles.

One problem with using the Page Properties window to set link properties is that those settings only apply to the current page. To share the same settings with other pages, you'd have to visit the Page Properties window on each of those pages. Fortunately, there's a better method: an external style sheet (see page 115 if you don't know what an external style sheet is). In fact, the Page Properties window actually creates CSS styles to format links; it's just that Dreamweaver creates those styles in the page itself using an internal style sheet (page 115). If you use the Page Properties window for one page, you can export those styles or even drag them into an external style sheet. (These style management techniques are discussed on page 291). Another method is to bypass the Page Properties window altogether and create CSS link styles from scratch—a method you'll learn about in the next section.

CSS and Links

Using the CSS Styles panel to create styles for your links gives you access to many more formatting options besides font, color, and size. In fact, nearly every CSS property can be applied to links. For example, all of the text options discussed on page 132—font size, weight, variant, letter spacing, and so on—can be used to format a link. In addition, you can add a border (page 215) and a background color (page xx) to a link to make it look like a button.

To format the general look of all links, create a tag style (page 116) for the <a> tag (the tag used to create links) using the instructions starting on page 117. Alternatively, you might want a different look for a particular link (for example, you might want that "Buy Now!" link to be bigger and bolder than other links on the page). In that case, you can create a class style (page 116) and apply it directly to that link.

To control how a link looks for the different states (link, visited, hover, and active), you need to dip a little deeper into the CSS pool and use what's called a *pseudo-class*. As you've read, a selector is merely the part of a style that instructs a browser where to apply a style—*h1* is the selector for formatting every Heading 1 paragraph, for example. When you select Advanced in the New CSS Rule menu, Dreamweaver lets you select one of four *pseudo-classes,* each of which refer to a different type of link, as shown in Figure 5-13. These four options (a:link, a:visited, a:hover, and a:active) correspond to the types of links in the Page Properties window.

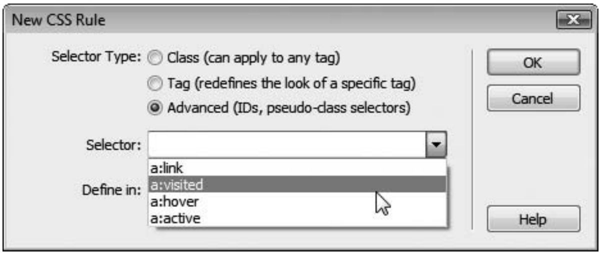

New CSS Rule
Selector Type: ○ Class (can apply to any tag)
○ Tag (redefines the look of a specific tag)
● Advanced (IDs, pseudo-class selectors)
Selector:
a:link
a:visited
a:hover
a:active
Define in:
OK
Cancel
Help

Figure 5-13: *Dreamweaver includes four advanced selector types in the Selector menu, which control how a link looks under different conditions. To make sure the style applies to links throughout your site, make sure you save it in an external style sheet as described on page 119.*

To use a pseudo-class, click the Advanced button in the New CSS Rule menu, and then choose the appropriate selector from the Selector drop-down menu. For example, to format how a link looks when the mouse moves over it, choose a:hover. You don't have to set all four pseudo-classes: If you're not interested in how your links look during the nano-second it's being clicked, then skip the a: active option. If you want to set more than one of these pseudo-classes, you must create them in the order that they appear in the menu. (A helpful mnemonic for remembering this rule is LoVe HAte—that is, :link comes before :visited, which comes before :hover, which comes before :active.)

Note: Firefox and Safari understand an additional pseudo-class related to links: a:focus. This selector applies when a visitor uses their keyboard to navigate to different links on a page. Pressing the Tab key highlights a link on a page. Each time you press the Tab key you jump to the next link–when a link is highlighted in this way it's given "focus." So if you want links to look different (at least in Firefox and Safari) when someone presses the Tab key to access them, use the a:focus selector.

Using these styles, you can make your link text appear red and underscored before it's clicked, twice as large when the mouse moves over it, purple boldface when clicked, and pale pink after it's been visited. (Granted, you might never be hired to do Martha Stewart's Web site, but you get the point.)

Note that these link pseudo-classes have one drawback: setting them affects *all* links on a page. In that respect, they're like tag styles.

If you want to apply a style to only certain links on a page, here's what to do: create a new style (click the + button in the Styles panel, for example); click the Advanced radio button in the New CSS Rule window (Figure 5-13); and then, in the Selector box, type a class name followed by a colon and the appropriate link state. For example, to create a style that changes the look of a "Buy Now!" link, you could create a style called *.buyNow:link*; to make that link look different when someone mouses over it, the style would be named *.buyNow:hover*.

After naming the style (and saving it into an external style sheet), you then follow the steps on page 119 to create the look for that style (choose a font, select a color, and so on). After the style's created, simply apply the class to the specific link (or links) you wish to style, using any of the techniques described on page 122.

Tip: Descendent selectors provide a more efficient–but more complex–way of formatting specific links differently than others. This advanced CSS concept is discussed on page 285.

Creating a Navigation Menu

Every Web site should have a set of navigational links which let visitors quickly jump to the site's main areas. On a shopping site, those links might point to the categories of products for sale—books, DVDs, CDs, electronics, and so on. For a corporate intranet, links to human resources, office policies, company events, and each corporate department might be important. Whatever the site, a Web designer should strive to get visitors where they want to go using the shortest route possible.

Dreamweaver CS3 introduces a powerful and easy navigation building tool—the Spry Menu Bar. With it, you can put all of your site's most important links into a compact horizontal or vertical menu (see Figure 5-14). Each menu button can even support two levels of pop-up submenus, so a visitor can quickly jump to a page buried deep within your site's structure.

The Spry Menu Bar is just one of the many new "Spry" tools introduced in Dreamweaver CS3. You'll learn a lot more about what Adobe calls the "Spry Framework" in Chapter 12, but in a nutshell, Spry is a collection of advanced JavaScript programming that lets you add lots of dynamic effects to your Web pages. (If you're familiar with the old Dreamweaver Behaviors, Spry is like those—on steroids.)

Note: Dreamweaver MX 2004 introduced a similar tool, called the pop-up menu behavior for creating pop-up navigation menus. Unfortunately, it was hard to use and the menus it created didn't always work. That tool is "deprecated" in Dreamweaver CS3–which is really just a polite way of saying it isn't any good, so Adobe is retiring it. If you used the pop-up menu behavior in the past, ditch it and use the Spry Menu Bar.

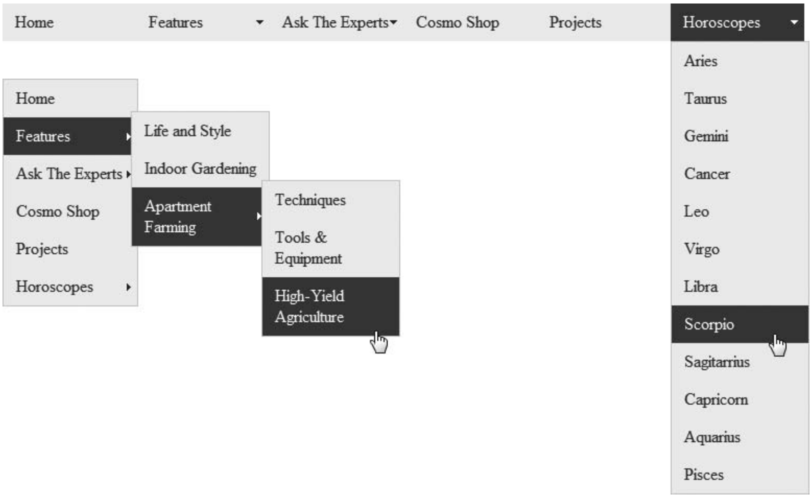


Figure 5-14: *Dreamweaver CS3's new Spry Menu Bar object lets you quickly add either a horizontal (top) or vertical (bottom) menu to your Web site. Pop-up submenus let you cram loads of links into a small space. The menu can hold up to three levels of links. However, navigating the rat maze to reach a link in a sub-submenu is sometimes a tiring test of hand-mouse coordination.*

Adding a Menu

The first step in inserting a Spry menu is deciding where on the page you wish to place the menu. A horizontal menu bar, with buttons sitting side by side, sits near the top of the page, either at the very top or below the area dedicated to the logo (often called the "banner"). A vertical menu bar, whose buttons are stacked one on top of the next, is usually positioned at the left edge of the page, below the banner area. To add a Spry menu:

1. **In the document window, click where you want to insert the menu.**

   When you learn more about Web page layout in Chapter 9, you'll discover that most elements on a page—like graphics, paragraphs, and menus—go inside of <div> tags which are used to lay out areas of the page. (If you've built sites in the past, you may have used HTML tables to lay out Web pages. If you're still using tables, you'd insert the menu in a table cell.)

2. **Click the Insert Spry menu button on the Layout tab of the Insert Bar (circled in Figure 5-15).**

   The same button is on the Spry tab of the Insert Bar, and you can also choose Insert → Spry → Spry Menu Bar. In any case, the Spry Menu Bar window appears asking whether you want a horizontal or vertical menu bar.

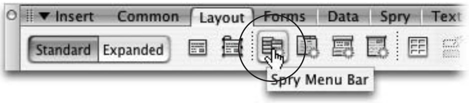


Figure 5-15: *The Insert Spry menu button appears in the Insert Bar on both the Layout tab (pictured here) and the Spry tab.*

3. **Depending on the type of menu you want, choose either the Horizontal or Vertical button and click OK.**

   Dreamweaver inserts a "starter" menu containing a few links and pop-up menus (Figure 5-16). You can change and add links using the Property inspector, as described next.

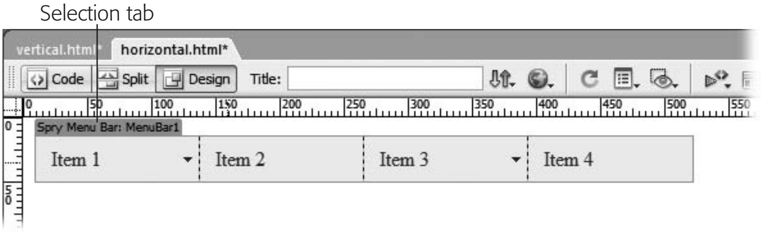


Figure 5-16: *The Spry menu tab and the blue outline around the menu only appear when you move your mouse over the menu, or click anywhere inside it. Click the blue Selection tab to select the menu for editing.*

Adding, Editing, and Removing Links

The starter Spry menu that Dreamweaver inserts onto your page isn't very useful (unless you coincidentally have four sections on your site named Item 1, Item 2, Item 3, and Item 4). To make the menu your own you need to relabel the buttons Dreamweaver supplies and link them to pages on your site; you can also add more buttons and assign links to each of them. To edit the Spry menu, select it by clicking the blue Spry Selection tab (see Figure 5-16). Once selected, the menu's labels and links appear in the Property inspector (Figure 5-17).

A Spry menu supports up to three levels of menus. The main navigation buttons always appear on the page; each of those main buttons can have its own pop-up menu, which only appears when a visitor mouses over the particular button. Each button on the second level of menus (the pop-up menu), can have another pop-up menu. Dreamweaver represents each of these three menu levels with a column in the Property inspector, and each column has its own set of widgets for adding, deleting, and moving menu buttons.

Note: The pop-up menu feature of a Spry menu depends on JavaScript. While most people surfing the Web use browsers with JavaScript turned on, some people either purposefully turn off JavaScript or use a browser that doesn't understand it. That means it's possible that someone visiting your site might *never* see the options in the pop-up menus. Because of this slightly irksome fact, always make sure the buttons on the main navigation menu link to a page that also provides links to the pages listed in the pop-up menus. If you don't, some people won't be able to visit some pages on your site.

To edit one of the main navigation buttons on a Spry menu, select the button's label (for example, Item 1) in the left-hand column of the Property inspector (see Figure 5-17); in the Text box, change the label to the text you want to appear on the nav button ("Home" or "About Us," for example). Then add a link by using the "Browse for File" button or typing the URL in the Link box (see page 159 for more on setting links). You can leave the Title and Target boxes empty (see pages 164 and 163 for descriptions of these properties).

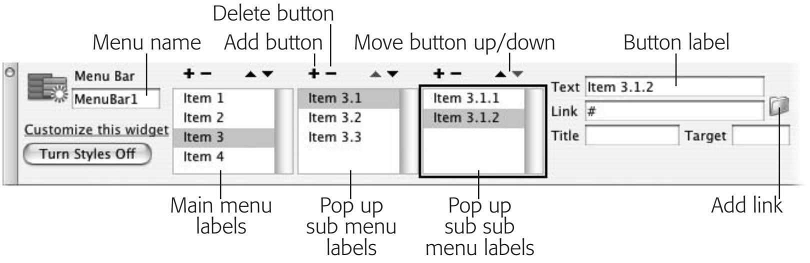


Figure 5-17: *Dreamweaver provides a generic name for each Spry menu it inserts–like MenuBar1. There's no harm in leaving that name (you'll never see it on the page), but feel free to change it to something more descriptive like mainNavigation. The only requirement is that you use only letters and numbers, and no spaces or punctuation (the naming rules are the same as for class styles, as described on page 118).*

To add a button to the main menu, click the + button above the left-hand column. Dreamweaver inserts a new "Untitled Item" in the list of links. Change the button's label in the text box, and then set a link using either method discussed in the previous paragraph.

To delete a button on the main nav bar, click its name in the left-hand column, and then click the – (minus) button at the top of the column. You can also rearrange the order of the buttons by selecting a name from the list and pressing the up or down arrow (on a vertical menu bar the up arrow moves the button to the left, while the down arrow moves the button to the right).

Adding, editing, and arranging submenus is a similar process: First, select the Spry menu (click the blue menu tab [Figure 5-16]); and then, in the Property inspector, select the item you wish to add a submenu button to. For example, in Figure 5-17, to add another button to the pop-up menu that appears when a visitor mouses over the "Item 3" button, select Item 3 from the left-hand column, and then click the + button in the *middle* column. Once the pop-up menu is highlighted, you can delete and rearrange buttons on that menu using the minus and up and down arrow buttons at the top of that menu's column. To work with a sub-submenu (the third level of menus), first select an item from the left-hand column, and then click an item in the middle column.

Note: You can also edit a Spry menu's text and links in the document window. The main nav buttons are always visible, so you can click inside one to edit the text or change the link as described on page 171. To see a pop-up menu in the document window, select the Spry menu; in the Property inspector, select a menu item that has a pop-up menu; and then select one button in the pop-up menu list. That pop-up menu will now appear in the document window. In fact, the pop-up menu won't *disappear* (potentially covering other content on your page) until you select one of the main nav buttons from the left-hand column in the Property inspector.

POWER USERS' CLINIC

Spry Menus Behind the Scenes

A Spry menu might look like a fancy navigation bar made up of colorful buttons and interactive pop-up menus, but under the hood it's just a simple bulleted list of links. The stylish look and dynamic behavior are supplied by some pretty clever CSS (to make the cool looking buttons) and JavaScript (to make the pop-up menus pop).

Since the HTML behind a menu is so simple, it can be easier to edit a Spry menu without the fancy CSS applied. To do this, select the Spry menu by clicking its blue tab (Figure 5-16); then, in the Property inspector, click the Turn Styles Off button (Figure 5-17). Bam! You have an ugly bulleted list, just like the ones you learned about in Chapter 3. In fact, you can use the same techniques described on page 92 to add, edit, and delete bulleted items. The text you add to each bulleted item is what will appear on the navigation bar button: Select this text and add a link as described on page 159.

The main navigation buttons are represented by the primary set of bullets (the ones furthest to the left). The pop-up menus are just nested lists as described on page 97. Take this simple list:

```
* Home
* Our Services
     * Consultation
     * Garden Planning
          * Basic Apartment Plan
          * Deluxe Apartment Plan
* Contact Us
```

This list would produce a navigation bar with three buttons labeled "Home", "Our Services", and "Contact Us". Moving the mouse over the "Our Services" button would open a pop-up menu with two other buttons labeled "Consultation" and "Garden Planning". In other words, the bullets labeled "Consultation" and "Garden Planning" are a nested list inside the bulleted item named "Our Services," while the two bullet items "Basic Apartment Plan" and "Deluxe Apartment Plan" are a nested list inside the "Garden Planning" bulleted item.

If you decide to take this quick and dirty approach to editing a Spry menu, keep one thing in mind: Dreamweaver expects any bulleted item containing a nested list (a pop-up menu) to have a special CSS class applied to it: *MenuBarItemSubmenu*. In the example above, both the "Our Services" and "Garden Planning" list items would need this style applied to it. To apply this style, just click inside the bulleted item (the one containing the nested list), and use the Style menu in the Property inspector to apply the *MenuBarItemSubmenu* style (turn to page 122 for a refresher on applying class styles).

When Dreamweaver inserts a Spry menu, it also adds a bunch of files to your site. Dreamweaver places those files in a folder named SpryAssets in your site's local root folder (a message listing the names of the files appears as soon as you save a page after inserting a menu). These files control the look and functionality of the menu: Dreamweaver adds one CSS file, one JavaScript file, and some image files for the arrows used to identify buttons with submenus. When you eventually move your Web pages to a Web server, make sure you upload these files as well.

Tip: After adding a Spry object to a Web page, Dreamweaver creates a folder named *SpryAssets* to store the files that make the Spry object look and function correctly. If you don't like the name SpryAssets, or you'd like to store those files in a different folder on your site, choose Site → Manage Sites to open the Manage Sites window; select your site from the list, and then click the Edit button. Doing so opens the Site Definition window (the one you used when you first defined the site). Click the Advanced Tab, select Spry from the left-hand list of categories, and then click the Folder icon to locate another folder on the site. If you select a new folder after you've already inserted a Spry object into a page, just drag the files from the SpryAssets folder to the new folder in the Files panel (the one you just told Dreamweaver to use for all Spry files). (See page 572 for more information on moving files using the Files panel). You can then safely delete the empty SpryAssets folder from your site.

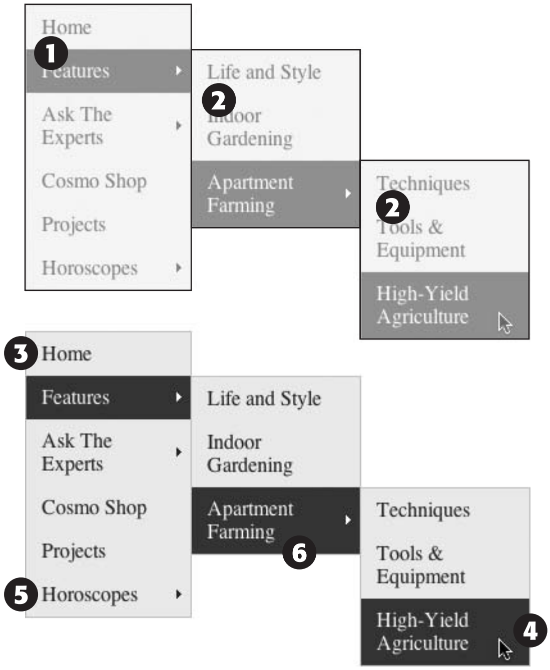
Changing the Look of the Menu

The "direct from the manufacturer" look of Spry menus leaves something to be desired. The battleship gray buttons and vibrant, "Hey, look at me, I'm purple!" rollovers aren't the most pleasing combination. Because all the menu formatting is accomplished with a collection of CSS styles, the power to improve the look of Spry menus is within your reach. Unfortunately, decoding the tangle of CSS used to format these menus requires a guidebook. Basically, the process involves identifying the name of the CSS style responsible for the formatting you want to change, then editing that style using the basic techniques you learned on page 124, or using one of the advanced methods discussed on page 289.

For example, if you want to change the font used for a menu, open the CSS Styles panel (Window → CSS Styles) and double-click the *ul.MenuBarVertical a* (if you're working on a vertical menu) or *ul.MenuBarHorizontal a* (for a horizontal menu) style. This opens the Style Definition window for that style. You can then change the menu's font (see page 132).

Note: The strange style names used for Spry menus (*ul.MenuBarVertical a*, for example) are called *descendent selectors*. They're an advanced type of CSS selector used to pinpoint very specific elements contained in a particular part of the page. You can read about them on page 285. But for now, here's the ultra-quick cheat sheet for descendent selectors: Read them from right to left. The element on the far right is the element that will ultimately be styled. In this example, it's the <a> tag used for the links in the navigation bar. The "ul.MenuBarVertical" part specifies an unordered list that also has a class of MenuBarVertical applied to it. So running that selector through the universal translator produces this instruction: "Format every <a> tag that appears inside of a bulleted list with the class MenuBarVertical." In other words only the links inside the Spry Menu Bar are affected by this style.

There are two different types of menu buttons on a Spry menu: a regular menu item, and a submenu item (see Figure 5-18). A regular menu item is a button that doesn't have a pop-up menu attached; it's just a simple button that the visitor clicks to go to a new page. A submenu button is any button that produces a pop-up menu when a visitor mouses over it. In addition, these two button types each have two looks: the button as it sits on the page, and the button when the mouse is moved over it (a rollover).



1 *Overall menu bar*
ul.MenuBarVertical

2 *Sub menu bar*
ul.MenuBarVertical ul

3 *Basic menu button*
ul.MenuBarVertical a

4 *Mouse over menu button*
ul.MenuBarVertical a.MenuBarItemHover
ul.MenuBarVertical a:hover (*for Internet Explorer 6*)

5 *Sub menu button*
ul.MenuBarVertical a.MenuBarItemSubmenu

6 *Mouse over sub menu button*
ul.MenuBarVertical a.MenuBarItemSubmenuHover

Figure 5-18:
It takes quite a few CSS styles to make Dreamweaver's Spry menu look good. Labeled here are the main styles for formatting the unordered lists that make up the overall menu (top) and the individual buttons (bottom). Sometimes you want to change the look of an entire menu and not just a single menu button. For example, you might want to add a border around all four edges of the main menu. In this case, edit the ul.MenuBarVertical style (or ul.MenuBarHorizontal for a horizontal menu). A pop-up menu's overall look and placement is controlled by the ul.MenuBarVertical ul or ul.MenuBarHorizontal ul style.

Formatting regular menu buttons

You can define the look of a regular menu button, and at the same time set the basic look for all buttons by editing the *ul.MenuBarHorizontal a* style (for a horizontal menu) or *ul.MenuBarVertical a* style (for a vertical menu). Just double-click the style's name in the CSS Styles panel to edit the style.

You can set any of the CSS text properties discussed on page 132, such as selecting a font, specifying a font size, and picking a font color. All text settings (except color) will be shared with the other types of buttons—the font color changes when the mouse rolls over any button.

In addition, the background color of both regular buttons and submenu buttons is controlled by this style. To change it, edit the appropriate style (for example, *ul.MenuBarVertical a* for a vertical menu) and change the background color option found under the Background category of the Rule Definition window (see page 217 for more on background colors).

You can also add border lines to the buttons—for example, a line separating each button—by setting the border properties for this style (see page 215 for more on CSS borders). Set the *padding* (see page 322) to control the space between the text on a button and the edge of the button. To make the text appear close to the edges of the button, decrease the padding; to place empty space around the text, increase the padding.

Formatting rollover menu buttons

Visitors get instant feedback when they interact with a Spry menu on a Web page. Moving the mouse over a menu button changes the color of the button and its text, letting visitors know "Hey, I'm a link, click me!" The rollover buttons Dreamweaver creates have a purple background and white text, but you can change those settings by editing either the "*ul.MenuBarVertical a.MenuBarItemHover*" or "*ul.MenuBarHorizontal a.MenuBarItemHover*" style (depending on whether you've inserted a vertical or horizontal menu). In addition, to make sure the rollovers work in Internet Explorer 6 for Windows, you must edit either the style "*ul. MenuBarVertical a:hover,*" or "*ul.MenuBarHorizontal a:hover.*"

Locate a style in the CSS Styles panel, and double-click it to open the style for editing. The Dreamweaver-created style only changes the text color and the background color, but you're free to change any CSS property. For example, if you added border lines between buttons in the menu bar, you could alter the color of those border lines for the rollover button. Or, you could make text appear bold when its button is hovered over.

Note: The name of the style used for rollover menu buttons is actually a combination of three different selectors and is so long that its full name doesn't even fit in the CSS Styles panel: "*ul.MenuBarHorizontal a.MenuBarItemHover, ul.MenuBarHorizontal a.MenuBarItemSubmenuHover, ul.MenuBarHorizontal a.MenuBarSubmenuVisible*" (the name will be slightly different for a vertical menu). This peculiar style is called a *group selector*. It's an efficient way to apply similar formatting rules to multiple elements on a page (see page 288 for an explanation of group selectors).

Formatting submenu buttons

Submenu buttons (the buttons that produce a pop-up menu when moused over) look nearly identical to other menu buttons. In fact, the two styles mentioned above that control a menu in its normal and rollover states define the basic formatting for submenu buttons. The only visible difference is the small arrow that appears on the right edge of a submenu button (see Figure 5-18). The arrow visually indicates the presence of a pop-up menu; it's a kind of "there's more this way" icon.

You can replace the graphics Dreamweaver uses for submenus: they're named *SpryMenuBarDown.gif, SpryMenuBarDownHover.gif, SpryMenuBarRight.gif,* and *SpryMenuBarRightHover.gif.* (The two "down" arrow graphics are only used for horizontal menu bars.) Create your own arrow graphics (in GIF format) with the same names and replace the original graphic files, which are located in the SpryAssets folder (unless you changed the name and location as described in the tip on page 180). The graphics should be small enough to be visible in the menu buttons—the ones that Dreamweaver supplies are 4×7 pixels (right arrow) and 7×4 pixels (down arrow)—and there should be versions for both the normal and rollover states of the submenu button.

Tip: You can *permanently* replace the arrow graphics supplied with Dreamweaver so that your own graphics are inserted each time you add a Spry menu. Just replace Dreamweaver's graphics with your own in the Dreamweaver configuration folder: In Windows this is located at C:\Program Files\Adobe\Adobe Dreamweaver CS3\configuration\Shared\Spry\Widgets\MenuBar; on Macs you'll find these images in Applications → Adobe Dreamweaver CS3 → configuration → Shared → Spry → Widgets → MenuBar. Make sure that your graphic files have the exact same names as those supplied by Dreamweaver.

If you want to further customize the submenu button appearance (for example, to change the font just for submenu buttons) edit either the "*ul.MenuBarVertical a.MenuBarItemSubmenu*" or "*ul.MenuBarHorizontal a.MenuBarItemSubmenu*" style. The rollover state for submenu buttons in vertical menus is controlled by the "*ul.MenuBarVertical a.MenuBarItemSubmenuHover*" style and, in horizontal menus, by the "*ul.MenuBarHorizontal a.MenuBarItemSubmenuHover*" style.

Changing the width of menus and buttons

Spry menu buttons have preset widths. The main navigation menu buttons are each 8ems wide, while the buttons on pop-up menus are 8.2ems (see page 107 for information on ems). If your navigation buttons have a lot of text on them, 8 ems may be too narrow to fit everything in. Or, 8 ems may be too much space if the menu text is small and made up of short words like "Home," "About," and "Contact." You can adjust the width of buttons and menus by opening the appropriate CSS Style (discussed next) and adjusting the style's *width* property. For example, double-click the style name in the CSS Styles panel, and then change the *width* property located in either the Box or Positioning categories of the CSS Rule Definition window (the CSS Properties Pane provides an even quicker method, as discussed in Figure 5-19).

- **Main menu width.** The overall width of the menu is set by the *ul.MenuBarVertical* style. (Setting the width of a horizontal menu has no effect, since the width of a horizontal menu is determined by the number of buttons on the menu.) For a vertical menu bar, use the same width value for the menu as you do for the button width (discussed next).

- **Main menu button width.** The width of the buttons that appear on the main Spry menu are determined by the *ul.MenuBarVertical li* style or *ul.MenuBarHorizontal li* style. You may want the button to be just as wide as the text inside it—in other words, have the buttons be different widths based on the amount of text on the button's label. For this effect, set the width of this style to *auto*. Variable width buttons look good for horizontal menus, but not for vertical menus, where the staggered right edges of the stacked column of buttons looks uneven and distracting.
- **Pop-up menu width.** Control the overall width of pop-up menus with the *ul. MenuBarVertical ul* or *ul.MenuBarHorizontal ul* style. The width you set for this style should match the width for the pop-up menu buttons, covered next.
- **Pop-up menu button width**. The *ul.MenuBarVertical ul li* and *ul.MenuBarHorizontal ul li* styles control the width of pop-up menu buttons on the vertical and horizontal menu, respectively. Dreamweaver's normal setting is 8.2ems, but you can adjust this to create wider or narrower buttons.

Positioning pop-up menus

The pop-up menus on vertical menu bars overlap the button that opened them (see Figure 5-14). This stacking appearance gives a 3-D look to the menu, as if the pop-up menu really were popping out of the page. However, you may want the pop-up menu to appear directly next to the menu button that opened it, or to make the pop-up menu overlap even more dramatically.

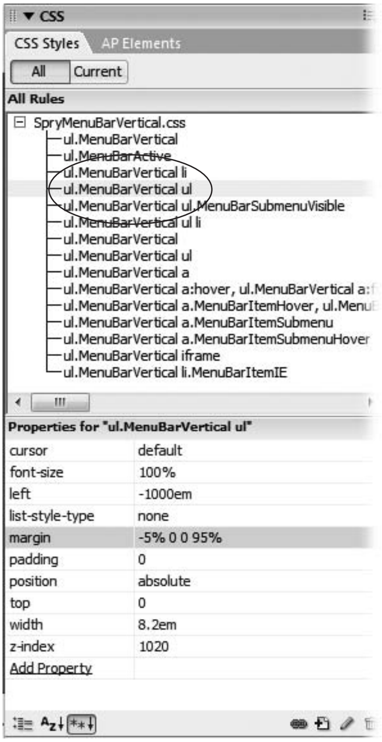
To change the position of a pop-up menu, edit the *ul.MenuBarVertical ul* (or *ul. MenuBarHorizontal ul*) style (see Figure 5-19). The CSS *margin* property controls the placement of the menu. For a vertical menu, the pop-up menu has a –5% top margin; this places the top of the pop-up menu a little *above* the submenu button that triggers it. The left margin is set to 95%, which moves the pop-up menu to the far right of the submenu button. To make the pop-up menu appear directly to the right and aligned with the top of the submenu button, change the top margin to 0 and the left margin to 100%. To make the pop-up menu overlap even more, you could change –5% to –10% for the top margin, and 95% to 85% for the left margin.

A horizontal menu's pop-up menu appears directly below the submenu button that triggers it. Its margin setting is 0. If you wished to make that menu overlap the submenu button, you could change the top margin to –5% and the left margin to 5%.

Note: The look of sub-submenus for the horizontal menu bar is controlled by a style named *ul. MenuBarHorizontal ul ul.*

Removing a Spry menu

To get rid of a Spry menu, just select it (for example, click the blue tab shown in Figure 5-16), and then press the delete key. In addition to removing the HTML for the menu, Dreamweaver will also—as long as there are no other Spry menus on the page—remove the menu's linked external style sheet and JavaScript file.



SpryMenuBarVertical.css
- ul.MenuBarVertical
- ul.MenuBarActive
- ul.MenuBarVertical li
- ul.MenuBarVertical ul
- ul.MenuBarVertical ul.MenuBarSubmenuVisible
- ul.MenuBarVertical ul li
- ul.MenuBarVertical
- ul.MenuBarVertical ul
- ul.MenuBarVertical a
- ul.MenuBarVertical a:hover, ul.MenuBarVertical a:f
- ul.MenuBarVertical a.MenuBarItemHover, ul.MenuI
- ul.MenuBarVertical a.MenuBarItemSubmenu
- ul.MenuBarVertical a.MenuBarItemSubmenuHover
- ul.MenuBarVertical iframe
- ul.MenuBarVertical li.MenuBarItemIE

Properties for "ul.MenuBarVertical ul"

cursor	default
font-size	100%
left	-1000em
list-style-type	none
margin	-5% 0 0 95%
padding	0
position	absolute
top	0
width	8.2em
z-index	1020
Add Property	

Figure 5-19:
Dreamweaver's CSS style sheet for Spry menus lists the pop-up menu style, ul.MenuBarVertical ul in this case, twice. The first one listed (circled) controls the positioning of the pop-up menu. Double-clicking the style lets you edit its properties using the Rule Definition window. For a really quick edit like changing the positioning of a pop-up menu by adjusting its margin property, you can use the Properties pane of the CSS Styles panel (pictured in the bottom half of this image.) Just select the current value for the property and type in a new value. For example, in this image, clicking the "-5% 0 0 95%" value (which represent the top, right, bottom, and left margin values, respectively) to the right of the word "margin" lets you type in a new value: 0 0 0 100%, say. Editing with the Properties Pane is discussed in detail on page 289.

Link Tutorial

In this tutorial, you'll put the lessons from this chapter to use. You'll learn how to link to other pages on your site, link to another site on the Web, and use Dreamweaver CS3's new Spry Menu Bar to create a great looking navigation bar—complete with fancy JavaScript-driven pop-up menus. The completed page will look like Figure 5-29.

Note: You'll need to download the tutorial files from *www.sawmac.com/dwcs3/* to complete this tutorial. See the note on page 39 for more details.

Linking to Other Pages and Web Sites

Once you've downloaded the tutorial files and opened Dreamweaver, define a new site as described on page 28: Name the site *Site Navigation* and select the Chapter05 folder (inside the MM_DWCS3 folder). In a nutshell: choose Site → New Site. In the Site Definition window, click the Advanced tab, type *Site Navigation* into the Site Name field, click the folder icon next to the Local Root Folder field, navigate to and select the Chapter05 folder, and then click Choose or Select. Finally, click OK.

Once again, you'll be working on a page from CosmoFarmer.com.

1. **Choose File → Open, and then, in the bottom left of the open file window, click the Site Root button.**

   The Site Root button, new in Dreamweaver CS3, is a handy tool. It automatically takes you to the local root folder for the site you're currently working on, saving you the effort of manually navigating to that folder.

2. **Double-click the file named *confessions.html*.**

   This is the file you worked on last chapter, with a few added touches: a banner and a sidebar. (You'll learn how to create this kind of layout in Chapter 9.)

   The left sidebar has a list of related stories. You'll link the text in this sidebar to other pages on the Web site.

3. **Select the text *Bathtub Hydroponics* in the left sidebar.**

   For example, click at the beginning and drag until you've selected the two words; or triple-click anywhere on the line.

4. **In the Property inspector, click the Browse for File button to the right of the Link box (see Figure 5-3).**

   The Select File window opens.

5. **Double-click the folder named *features* to view the files inside it; select the file named *hydroponics.html* and then click OK (Choose on a Mac).**

   That's it? Yup. You've just created a link. Now, you'll learn an even faster way.

6. **Make sure the Files panel is open (Window → Files); in the document window, select the next paragraph in the left sidebar (the one beginning with "Spice up your love life").**

   Again, triple-clicking is the fastest way to select the text. Now, you'll use the Point-to-File tool to link to a file in the Files panel.

7. **In the Property inspector drag the small Point-to-File icon (see Figure 5-6) into the Files panel; move the mouse over the features folder (if that folder is closed, pause until it springs open and you can see all of the files inside it); move over the file *spice.html* and release the mouse button.**

   The link is added to your page. Note that if you wanted to link the same text to a page on another Web site, then you couldn't use either of the last two methods. Instead, you'd need to type an absolute URL, as you'll see in the next two steps.

8. **In the left sidebar, select the "Exclusive" button image and the "Subscribe to the National Exasperator" text.**

   Either click to the left of the graphic and drag down, or click at the end of the paragraph of text and drag up until both the image and text are highlighted.

9. **In the Link box in the Property inspector, type *http://www.nationalexasperator.com/* and press the Enter or Return key.**

   Now both the text and image are linked to the National Exasperator Web site. Unfortunately the blue links don't fit in with the CosmoFarmer color palette, and the image now has a big blue outline around it. You'll remedy that in the next section.

Formatting Links

You can change the look of links using a little CSS. First, you'll remove the blue border from around the National Exasperator image.

1. **Make sure the CSS Styles panel is open (Window → CSS Styles); click the + button at the bottom of the panel.**

   The New CSS Rule window opens. (For a refresher on creating CSS styles, see page 117.)

2. **Select the Tag radio button; type *img* in the Tag box (or choose *img* from the menu); and make sure the "Define in" menu lists *feature.css*. Click OK to create the style.**

   The CSS Rule Definition window opens. The blue line around the image is a border that's being applied to the graphic with the link (it's the equivalent to the blue underline used for text links). To remove it you just turn off borders for this style.

3. **Select Border in the left hand list of CSS categories; in the "Top" Style menu, select "none."**

   Make sure the "Same for all" checkbox is turned on (this will remove the border from all four sides).

4. **Click OK.**

   The blue border around the image disappears. Now it's time to change the look of the links.

5. **Create a new tag style for the <a> tag.**

   You should be getting used to this routine by now but here's a recap: Click the + button at the bottom of the CSS Style panel, choose the Tag radio button, type *a* in the Tag field (or select *a* from the menu), and then click OK. The New CSS Rule Definition window appears.

6. **For the Color property, choose a dark gray color (#333333, for example), then click OK.**

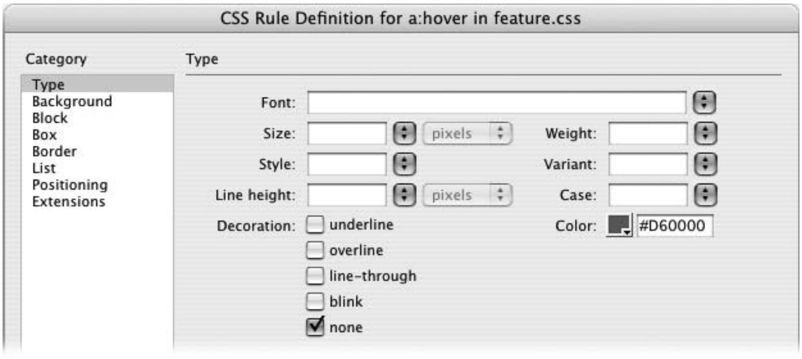
   The links in the sidebar lose their bright blue color in favor of a color more in keeping with the dignified nature of CosmoFarmer.com. You'll now change how the links look when a mouse hovers over them.

7. **Click the + button in the CSS Styles panel; in the New CSS Rule window, select Advanced, and then select *a:hover* from the pull-down menu. Click OK.**

   Again, the CSS Rule Definition window appears.

8. **From the Type category of the CSS Rule Definition window, type *#D60000* in the Color field, and turn on the "none" checkbox in the Decoration area.**

   The window should look like Figure 5-20. To see how this rollover style works, you'll need to save it and preview the page.



CSS Rule Definition for a:hover in feature.css

Category: Type, Background, Block, Box, Border, List, Positioning, Extensions

Type

Font:

Size: pixels

Weight:

Style:

Variant:

Line height: pixels

Case:

Decoration: □ underline □ overline □ line-through □ blink ☑ none

Color: #D60000

Figure 5-20: *To completely remove an underline from a link, set the CSS Decoration property to "none". You can create a look similar to an underline (but with a lot more design choices) by turning this underline off, and then using the CSS border property to create a dotted, dashed, or different color underline.*

9. **Click OK to save the style; press F12 (⌘-F12) to preview the page.**

   The page is starting to come together. Move your mouse over one of the sidebar links and watch the underline disappear and the color change to red. (If you don't see a color change when mousing over, you may need to reload the style sheet. Press your browser's reload button [see page 150 for why].)

Note: When you preview an unsaved page, or a page that uses an external style sheet that's opened and unsaved, Dreamweaver will pop-up an annoying "save these files" window. You must click Yes to see the newest version of the page. If you're getting tired of this window, you can use the "Preview using temporary file" feature. It's described on page 150.

Adding a Navigation Bar

One of the exciting additions to Dreamweaver CS3 is the Spry Menu Bar. This sophisticated combination of HTML, CSS, and JavaScript lets you create slick-looking navigation bars with rollover effects and drop-down menus. Since the Dreamweaver engineers have done all the complex programming for you, you just have to insert, modify, and format the menu to make it fit perfectly into your Web site design.

1. **Return to Dreamweaver and make sure the file *confessions.html* is open; click inside the light gray area directly below the banner (circled in Figure 5-21).**

You'll be inserting a horizontal menu bar that spans most of the page's width. Placing it near the top of the page, below the banner, makes it easy for site visitors to find and use.

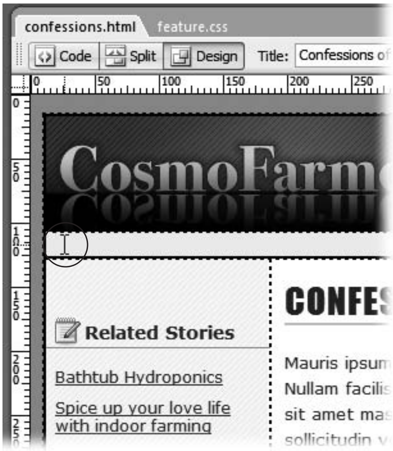


Figure 5-21:
You'll find most horizontal navigation bars either at the top of pages or directly below the banner (which is the case here).

2. **Choose Insert → Spry → Spry Menu Bar.**

   Alternatively, you could click the Spry Menu Bar button on the Layout tab of the Insert bar (Figure 5-15). Either way, the Spry Menu Bar window appears.

3. **Choose the Horizontal option and click OK.**

   A gray menu appears at the top of the page with four buttons: Item 1, Item 2, Item 3, and Item 4 (see Figure 5-22).

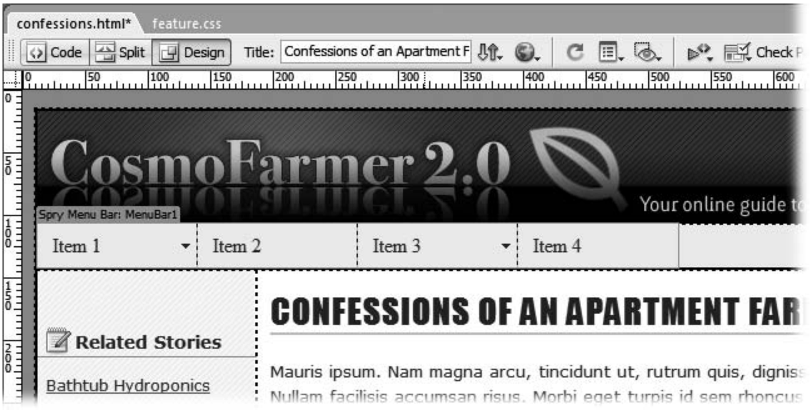

confessions.html*
feature.css
Code
Split
Design
Title: Confessions of an Apartment F
Check P
CosmoFarmer 2.0
Your online guide t
Spry Menu Bar: MenuBar1
Item 1
Item 2
Item 3
Item 4
CONFESSIONS OF AN APARTMENT FAR
Related Stories
Bathtub Hydroponics
Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, digniss
Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus

Figure 5-22:
The Spry Menu Bar starts life with four plain-looking buttons. Item 1 and Item 3 each have a down-pointing arrow icon, indicating that a pop-up menu will appear if you mouse over either of them.

4. **Choose File → Save.**

   A window appears letting you know that Dreamweaver just added six new files to your site. Click OK to dismiss this window. Dreamweaver places these files inside a new folder named SpryAssets. (You can see that folder listed in the Files panel as well.)

   The next step is to change the button labels, add new buttons, and create links.

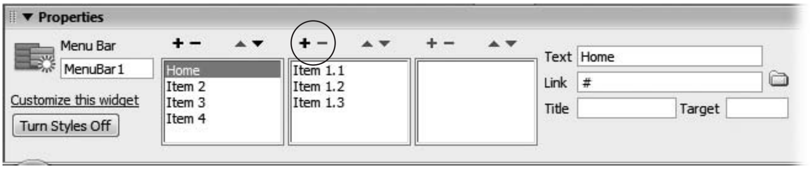
5. **In the document window, click the blue Spry Menu Bar tab, which appears just above the new menu** (**see Figure 5-22**).

   If you don't see that tab, move your mouse over the menu until it appears. However, the blue tab still might not appear if the "show invisible elements" setting is turned off: Choose View → Visual Aids and make sure that the Invisible Elements option is checked and that the Hide All option is *not* checked.

   The Property inspector changes to display the properties for the menu bar.

6. **In the Property inspector, select Item 1 from the left column of button labels; type *Home* in the Text box** (**see Figure 5-23**), **and then press Enter or Return.**

   Notice in the document window that the first button now says "Home". Now you'll add a link.



Home
Item 2
Item 3
Item 4

Item 1.1
Item 1.2
Item 1.3

Text: Home
Link: #
Title:
Target:

Figure 5-23: *Use the + and – buttons at the top of each column to add or remove buttons from a menu.*

7. **Click the "Browse for File" button** (**the folder icon**) **to the right of the Link box.**

   This is the same process you followed earlier to add a link to one of the sidebar paragraphs.

8. **In the Select File window, click the Site Root button** (**top of window for Windows, bottom right on Macs**)**; select the *index.html* file; click OK** (**Select on Macs**).

   You've labeled your first button and created the first link on this menu bar. Unfortunately, Dreamweaver has added a pop-up menu to this button with three additional buttons. Since the Home button isn't really a "section" of the site with additional pages, you don't need that submenu.

9. **In the middle column in the Property inspector, select item 1.1 and press the –** (**minus**) **button at the top of that column** (**circled in Figure 5-23**).

   Dreamweaver removes the top button from the list. If you look in the document window, you'll see the pop-up menu. When you select an item inside one of the submenu columns in the Property inspector, Dreamweaver temporarily displays the pop-up menu. This provides a great way to preview what the pop-up menu will look like in action.

Note: If the Property inspector no longer shows the properties for the Spry Menu Bar, just click the bar's blue tab in the document window to select it.

10. **Repeat step 9 for Item 1.2 and Item 1.3.**

    After removing Item 1.3, notice that the down-pointing arrow on the Home button in the document window disappears. Because there's no longer a pop-up menu associated with this link, Dreamweaver removes the arrow graphic. Now, you'll add another button.

11. **Repeat steps 6–8 for Item 2: Change its label to *Features* and link to the *index.html* file located inside the features folder.**

    It's common to place Web pages for a particular section of the site into a folder just for that section. For example, all feature articles might go inside a folder named *features*. In this case, the main page for the section is usually stored in that folder and named *index.html*. The reasoning behind that is discussed in detail starting on page 560. But for this tutorial, just keep in mind that although you'll be instructed to link to an *index.html* page several times, each time you'll be linking to a *different* file inside a different folder on the site.

12. **Repeat steps 6–8 for Item 3: Change its label to *Ask the Experts*, and then link to the *index.html* file located inside the experts folder.**

    This button also has a pop-up menu, but instead of deleting it, you'll just change the pop-up menu buttons to match the CosmoFarmer site.

13. **Select Item 3.1 in the middle column in the Property inspector; change its label to *Pete* and link it to the *pete.html* file inside the experts folder.**

    This button has its own pop-up menu (a sub-submenu). But you don't need it here.

14. **Select and delete Item 3.1.1 and Item 3.1.2 from the right column in the Property inspector.**

    Use the same technique described in Step 9 (just select the item and then click the minus button at the top of its column).

15. **Repeat step 13 for Item 3.2 and Item 3.3: Label one *Dave* and link it to *dave.html* inside the experts folder; label the other *Nan* and link it to the *nan.html* file in the experts folder.**

    The menu's coming together. You just need to add a few more buttons and a couple of pop-up menus.

16. **Repeat steps 6–8 for Item 4: Change its label to *Cosmo Shop* and link to the *index.html* file located inside the shop folder.**

    This button requires a pop-up menu, but Dreamwaver hasn't supplied one. You'll have to create the buttons for it yourself.

17. **Make sure Cosmo Shop is selected in the left column in the Property inspector; click the + button in the middle column to add a new button for a pop-up menu.**

    This adds a new pop-up menu and button. You just need to label and link it.

18. **Type *Plants* in the Text field, and add a link to the file *plants.html* inside the shop folder.**

    Now you'll create a pop-up menu for this button (in other words, a sub-submenu).

19. **In the far right column of the Property inspector, click the + button.**

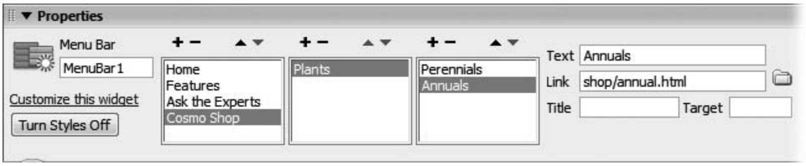
    Dreamweaver adds "Untitled Item" to this column, creating another pop-up menu. Time to label and link.

20. **Repeat step 18: Use *Perennials* for the label and link to the *perennial.html* file inside the shop folder.**

    By now you should be nearly an expert at adding, editing, and linking buttons and pop-up menus. Just a few more buttons to go.

21. **Repeat steps 19 and 20. Label the new button *Annuals* and link it to *annual.html* in the shop folder.**

    This adds one more button (thankfully the last one) to the sub-submenu. The Property inspector should now look like Figure 5-24.



Menu Bar: MenuBar1

Home
Features
Ask the Experts
Cosmo Shop

Plants

Perennials
Annuals

Text: Annuals
Link: shop/annual.html
Title:
Target:

Figure 5-24: *The highlighted items in the left and middle columns indicate which buttons a visitor would have to roll over in order to see the options in the right-hand column.*

22. **Click the + button in the middle column to add another button to the Cosmo Shop pop-up menu. Label it *Seeds* and link to *seeds.html* in the shop folder.**

    One more button in this pop-up menu.

23. **Repeat step 22: Name the button *Pest Control* and link to *pests.html* in the shop folder.**

    Lastly, you'll add one final button to the main navigation bar.

24. **Click the + button in the left-hand column: Name the new button *Projects* and link to the *index.html* file in the projects folder.**

    You're done! Thankfully, once a navigation bar is complete, you can re-use it throughout your site, so you don't have to go through this laborious procedure for each page of your site. (Dreamweaver's Template feature can make the process even easier, as described in Chapter 19.)

There's one more step if you plan on previewing this page using either Internet Explorer 6 or 7 for Windows.

25. **Choose Commands → "Insert Mark of the Web".**

This option probably sounds like some Adobe programmer's idea of a practical joke. Unfortunately it's not. Most versions of Internet Explorer 6 and 7 won't let you preview the cool pop-up menus without this step. For security reasons, IE won't let you preview any JavaScript effects (the pop-up menu, for example) on a page you open directly off your hard drive. Inserting the "Mark of the Web" (the cult conspiracy theories are already flying) stops IE from interfering with JavaScript. The whole story on this bizarre command is on page 231.

Note that if you put this Web page on an actual Web server, then Internet Explorer won't have any problem with the JavaScript and the "Mark of the Web" isn't necessary. To remove the "mark," choose Commands → Remove Mark of the Web.

And if you're just testing on Firefox, Safari, or Opera, then you can skip this step.

Note: You may need to completely close Internet Explorer and preview the "marked" Web page to make sure the pop-up menus work.

26. **Save the file and press F12 (Option-F12 on a Mac) to preview the page.**

Take the navigation bar for a spin: Move your mouse over the menu and watch the buttons change and the pop-up menus pop. Don't forget to mouse over the Cosmo Shop and Plants button to see the sub-submenu in action.

Now that you've got a fully functioning nav bar, it's time to make it match the CosmoFarmer look.

Styling the Menu Bar

The basic look of a Spry menu probably won't fit the design of your site, so learning to edit the CSS that Dreamweaver supplies when it inserts a Spry menu is an important skill. In this part of the tutorial, you'll edit the look of the buttons and pop-up menus, as well as replace the premade arrow graphics with custom images.

Let's start with the basic look of the buttons.

1. **Make sure the CSS Styles panel is open (Window → CSS Styles) and the All button at the top of that panel is highlighted.**

When you inserted the menu bar, Dreamweaver attached an external style sheet named *SpryMenuBarHorizontal.css* to the page. This style sheet contains all the styles you need to modify the look of the menu.

2. **Click the + button (arrow icon) to the left of *SpryMenuBarHorizontal.css*.**

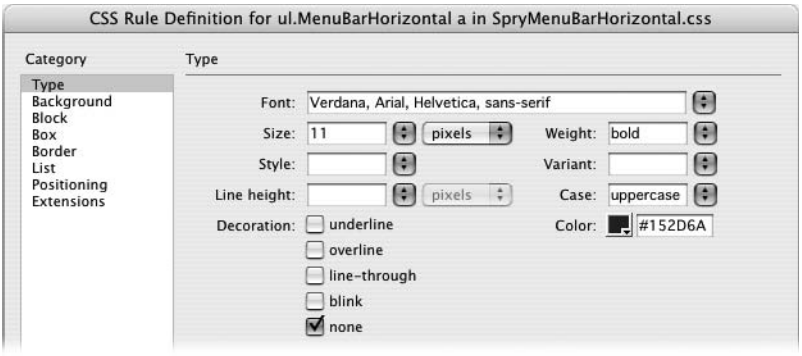
The list expands to display all of the styles for this style sheet. While you're at it, hide the list of styles in the *feature.css* style sheet by clicking the – (minus) button to its left.

3. **Double-click the style *ul.MenuBarHorizontal a* in the CSS Styles panel.**

   The CSS Rule Definition window opens, displaying the current settings for this style. First, some basic type changes.

4. **Select "Verdana, Arial, Helvetica, sans-serif" from the font menu; type *11* in the size menu; choose "bold" from the weight menu; choose "uppercase" from the case menu; and change the color to #152D6A.**

   The window should look like Figure 5-25. Next, you'll add some border lines to visually separate the buttons from each other.



CSS Rule Definition for ul.MenuBarHorizontal a in SpryMenuBarHorizontal.css

Category: Type, Background, Block, Box, Border, List, Positioning, Extensions

Type

Font: Verdana, Arial, Helvetica, sans-serif

Size: 11 pixels Weight: bold

Style: Variant:

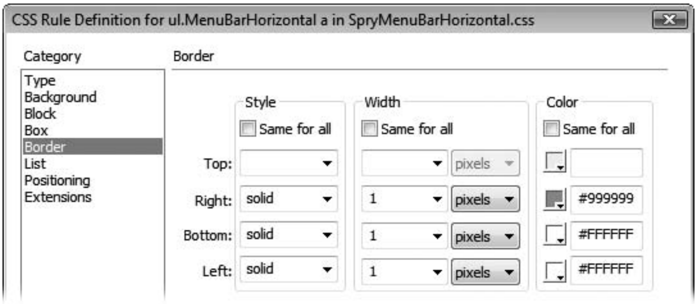
Line height: pixels Case: uppercase

Decoration: □ underline □ overline □ line-through □ blink ☑ none Color: #152D6A

***Figure 5-25:** Changing the text properties for the ul.MenuBarHorizontal a style will define most of the basic styles for all menu buttons. Only the color property is different for rollover links. Make sure you don't uncheck the "none" option under Decoration, or a line will appear underneath the text in each button.*

5. **Click the Border category; turn off all three "Same for all" checkboxes; for the right border, select "solid" from the Style menu, type *1* in the Width menu, and set the color to #999999. For both the left and bottom border, select "solid" from the Style menu, type *1* in the Width menu, and set the color to white (#FFFFFF).**

   The window should now look like Figure 5-26.



CSS Rule Definition for ul.MenuBarHorizontal a in SpryMenuBarHorizontal.css

Category: Type, Background, Block, Box, Border, List, Positioning, Extensions

Border

	Style	Width		Color
	□ Same for all	□ Same for all		□ Same for all
Top:			pixels	
Right:	solid	1	pixels	#999999
Bottom:	solid	1	pixels	#FFFFFF
Left:	solid	1	pixels	#FFFFFF

***Figure 5-26:** To visually separate one button from the next on a navigation bar, use the CSS Border property. A 3-D effect can be achieved by setting the right border to a dark color and the left border to a lighter color. That way, when two buttons meet, the viewer sees a shadow/highlight effect.*

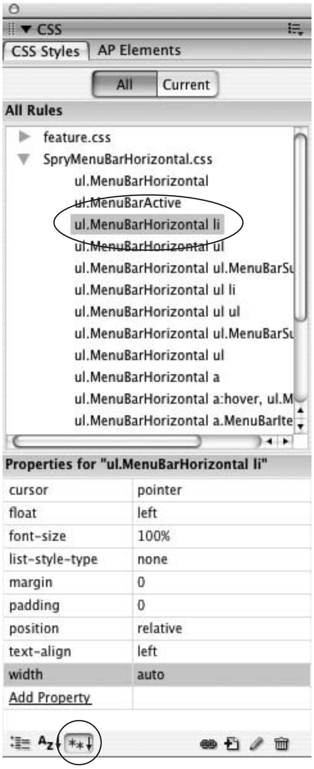
6. **Click OK to finish editing the style.**

   The text on the buttons looks pretty good, but the differing amount of text on each means that some buttons have lots of extra space, while the "Ask the

Experts" button is split over two lines. It would be great if each button were just as wide as the text on it. To do that, you need to edit another style.

7. **In the CSS Styles Panel, select the *ul.MenuBarHorizontal li* style (circled in Figure 5-27).**

   Don't double-click the style name. For a quick edit to an already defined property, you can use the Properties pane in the CSS Styles panel. Notice that the style currently has a fixed width of 8em. You'll change that.


CSS
CSS Styles
AP Elements
All
Current
All Rules
feature.css
SpryMenuBarHorizontal.css
ul.MenuBarHorizontal
ul.MenuBarActive
ul.MenuBarHorizontal li
ul.MenuBarHorizontal ul
ul.MenuBarHorizontal ul.MenuBarSu
ul.MenuBarHorizontal ul li
ul.MenuBarHorizontal ul ul
ul.MenuBarHorizontal ul.MenuBarSu
ul.MenuBarHorizontal ul
ul.MenuBarHorizontal a
ul.MenuBarHorizontal a:hover, ul.M
ul.MenuBarHorizontal a.MenuBarIte

Properties for "ul.MenuBarHorizontal li"

cursor	pointer
float	left
font-size	100%
list-style-type	none
margin	0
padding	0
position	relative
text-align	left
width	auto
Add Property	

Figure 5-27: *When you select a style name in the Styles panel, all of its properties appear in the Properties pane in the bottom half of the panel. To see only the properties that are currently set for the style, make sure the "set properties" button (bottom circle) is pressed. Click any value (for example, "auto" in the width field here) to type a new value for a CSS property.*

8. **Click 8em to the right of "width" in the Properties pane, and select "auto" from the first pull-down menu (or just type the word *auto*).**

   The CSS Properties pane should look like Figure 5-27. The "auto" setting merely instructs the button to automatically determine the width of each button based on its contents. Notice in the document window that the buttons are all different widths: Buttons with more text are wider than buttons with less text. However, the arrow graphics in the submenu buttons ("Ask the Experts" and "Cosmo Shop") overlap the text. You'll fix that next.

9. **In the CSS Styles panel, double-click the style "*ul.MenuBarHorizontal a.MenuBarItemSubmenu*".**

   You may need to expand the width of the Styles panel to see the full name of the styles: In Windows, grab the gray bar separating the document window and panel groups and drag it to the left; on a Mac, use the resize window gripper in the lower-right corner of the panel groups. Also, make sure you select "*ul.MenuBarHorizontal a.MenuBarItemSubmenu*"—quite a few styles have similar names.

   To add empty space for the arrow graphic, you need to add some padding to the right edge of this style.

10. **In the CSS Style Definition window, select the Box category; in the Padding area, turn off the "Same for all" checkbox, then type *25* in the Right padding box. Click OK to finish editing the style.**

    Look at the navigation bar in the document window and notice that the arrows no longer overlap text. Now it's time to style the look of the rollover buttons.

11. **In the CSS Styles panel, select the style "*ul.MenuBarHorizontal a.MenuBarItemHover*".**

    Actually, it's a much longer group of styles named "*ul.MenuBarHorizontal a.MenuBarItemHover, ul.MenuBarHorizontal a.MenuBarItemSubmenuHover, ul.MenuBarHorizontal a.MenuBarSubmenuVisible*", but you'll probably only be able to see the first part. Notice that, in the Properties pane, a background color and text color are set; you'll change these.

12. **In the Properties pane, click the color box to the right of "background-color" and select a white color swatch; click the #FFF value next to the color property and type *#D60000*.**

    The style you just changed won't affect Internet Explorer 6; there's another style you have to change to get a rollover effect in that browser.

13. **In the Styles panel, select *ul.MenuBarHorizontal a:hover* and repeat step 12.**

    Again, the actual style name is a bit longer and includes an additional selector: "*ul.MenuBarHorizontal a:hover, ul.MenuBarHorizontal a:focus*".

    Now it's time to take the menu for a spin.

14. **Choose File → Save All and then press F12 (Option-F12).**

    Move your mouse over the buttons and check out the pop-up menus. The navigation bar is nearly done. There are just two more things that need fixing: The pop-up menus have an extra little border on their right edges, and the down arrow graphics disappear when you mouse over a submenu button.

15. **Go back to Dreamweaver and the *confessions.html* page. In the CSS Styles panel, double-click the second *ul.MenuBarHorizontal ul* style.**

Note that the style is listed twice in the Styles panel. The first one sets the width and other positioning properties for the pop-up menu. The second one controls the pop-up menu's borders.

16. **In the CSS Rule Definition window, select the Border category and turn off all three "Same for all" checkboxes; erase the style, width, and color values for the Right border. Click OK to close the window and finish editing the style.**

    To remove a value from a CSS property, simply select and delete it—don't type *0* or anything else, just leave the value box empty. (If you don't see any values for the border property, then you're editing the wrong style—see step 15).

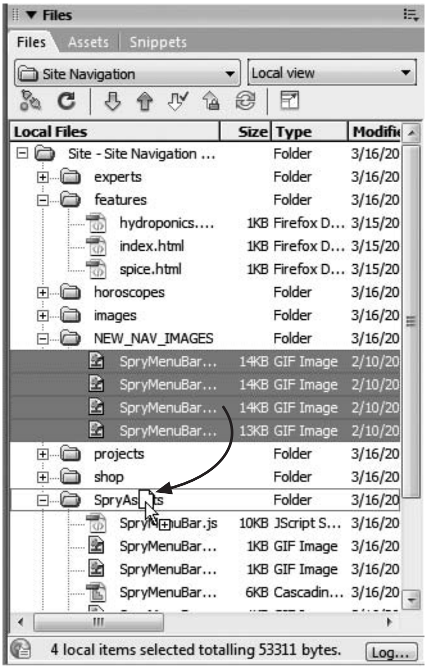
    Finally, you'll replace Dreamweaver's default arrow graphics.

17. **Open the Files panel (Window → Files) and then expand the folder named NEW_NAV_IMAGES so you can see the four files inside that folder.**

    To expand the folder click the + (arrow on a Mac) button. The four image files in this folder are named exactly the same as the ones Dreamweaver supplies. You can just drag these into the SpryAssets folder to replace the old ones.

18. **Click one of the image files in the NEW_NAV_IMAGES folder to select it; then hold down the control key (⌘ key) and click each of the remaining three files. Once selected, drag them into the SpryAssets folder** (see Figure 5-28).

    Dreamweaver will let you know that you're about to replace some existing files; that's what you want to do, so click the "Yes to All" button.



Local Files	Size	Type	Modifi
Site - Site Navigation ...		Folder	3/16/20
experts		Folder	3/16/20
features		Folder	3/16/20
hydroponics....	1KB	Firefox D...	3/15/20
index.html	1KB	Firefox D...	3/15/20
spice.html	1KB	Firefox D...	3/15/20
horoscopes		Folder	3/16/20
images		Folder	3/16/20
NEW_NAV_IMAGES		Folder	3/16/20
SpryMenuBar...	14KB	GIF Image	2/10/20
SpryMenuBar...	14KB	GIF Image	2/10/20
SpryMenuBar...	14KB	GIF Image	2/10/20
SpryMenuBar...	13KB	GIF Image	2/10/20
projects		Folder	3/16/20
shop		Folder	3/16/20
SpryAs ts		Folder	3/16/20
Spry uBar.js	10KB	JScript S...	3/16/20
SpryMenuBar...	1KB	GIF Image	3/16/20
SpryMenuBar...	1KB	GIF Image	3/16/20
SpryMenuBar...	6KB	Cascadin...	3/16/20

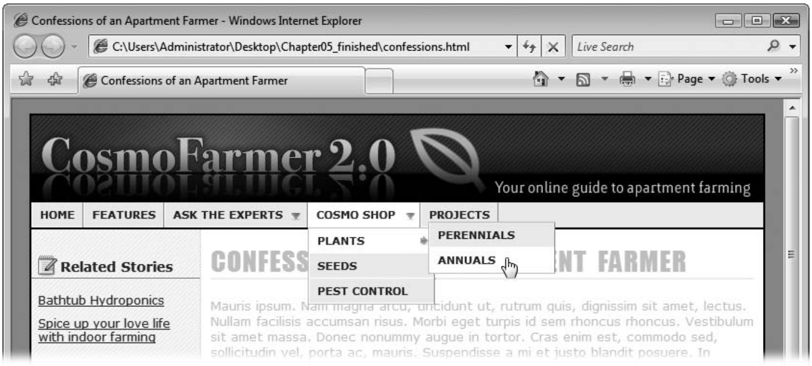
4 local items selected totalling 53311 bytes.

Figure 5-28:
The Files panel offers more than just a list of files in a Web site. It also lets your rearrange, rename, and create Web page files. You'll learn how to get the most out of this useful tool on page 567.

19. **Press the F12 (Option-F12) key to preview the finished product.**

Move your mouse over the buttons. It should look like Figure 5-29. (You may need to press your browser's reload button to make it load the new graphics.)

You'll also find a completed version of this tutorial in the Chapter_05_finished folder that accompanies the downloaded tutorial files.


Confessions of an Apartment Farmer - Windows Internet Explorer
C:\Users\Administrator\Desktop\Chapter05_finished\confessions.html
Live Search
Confessions of an Apartment Farmer
Page
Tools
CosmoFarmer 2.0
Your online guide to apartment farming
HOME
FEATURES
ASK THE EXPERTS
COSMO SHOP
PROJECTS
PLANTS
SEEDS
PEST CONTROL
PERENNIALS
ANNUALS
Related Stories
Bathtub Hydroponics
Spice up your love life with indoor farming
CONFESS
NT FARMER

Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus rhoncus. Vestibulum sit amet massa. Donec nonummy augue in tortor. Cras enim est, commodo sed, sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo blandit posuere. In

Figure 5-29:
Adding a Spry menu may take quite a few steps, but it delivers a high-quality dynamic navigation bar and saves you countless hours of JavaScript programming and browser testing.

CHAPTER
6

Images

Nobody believes that a picture is worth a thousand words more than today's Web designers, as evidenced by the highly visual nature of the Internet. In fact, it's not difficult these days to stumble onto a home page composed almost entirely of graphics (see Figure 6-1).

Even if you don't want to go that far, understanding how to use graphics effectively is invaluable. Whether you want to plop a simple photo onto your page, cover it with clickable "hotspots," or design an interactive set of buttons that light up when the cursor passes over them, Dreamweaver makes the job easy.

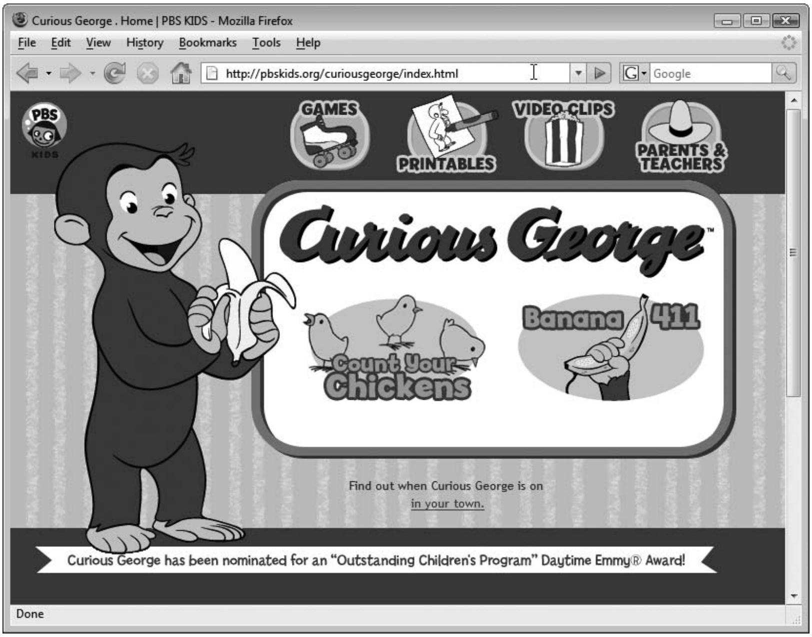
Adding Images

If you were writing out the HTML instructions for your Web page by hand, you'd insert an image into a Web page using the image tag: <img>. The primary *property* of an image is called the *source* (Src) property, which is the URL or path to the graphics file. For example, the HTML snippet <img src="images/george.jpg"> tells a browser to display a graphic file named *george.jpg*, which you can find in the *images* folder.

Dreamweaver does all of this coding for you automatically when you insert a picture into your fledgling Web page:

1. **Save the Web page that will contain the image.**

   To insert an image, Dreamweaver must determine the path from your Web page to that image, which could be anywhere on your hard drive. As with links (see page 169), saving the page before you proceed lets Dreamweaver correctly determine the path from the page you just saved to the image.


Curious George . Home | PBS KIDS - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://pbskids.org/curiousgeorge/index.html
Google
PBS KIDS
GAMES
PRINTABLES
VIDEO CLIPS
PARENTS & TEACHERS
Curious George™
Count Your Chickens
Banana 411
Done

Find out when Curious George is on in your town.

Curious George has been nominated for an "Outstanding Children's Program" Daytime Emmy® Award!

Figure 6-1: *Some Web sites rely almost exclusively on graphics for both looks and function. The home page for the Curious George Web site at http://pbskids.org, for instance, uses graphics not just for pictures of the main character, but also for the page's background and navigation buttons.*

2. **In the document window, click where you want to insert the image.**

   You can choose the beginning or end of a paragraph, or within a cell in a table (see Chapter 7) or a <div> tag (see page 313). To set a graphic apart from other text, press Enter (Return), creating a blank line, before inserting it.

3. **Choose Insert → Image.**

   Alternatively, from the Insert bar, you can select Image (see Figure 6-2). Or, if you're a keyboard nut, press Ctrl+Alt+I (⌘-Option-I).

   In any case, the Select Image Source dialog box opens. This box is identical to the Select File window that appears when adding a link to a page (see Figure 5-4). The only difference is a Preview Images checkbox—turning it on shows a thumbnail of any selected image in the Preview window.

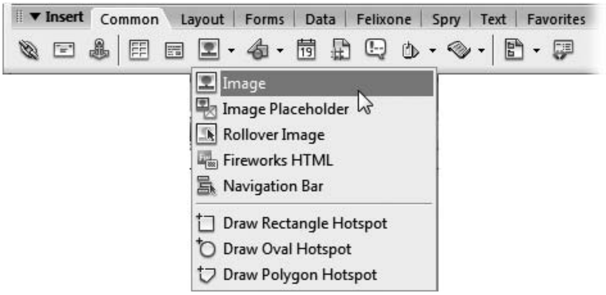


Figure 6-2: *The Image menu on the Insert bar's Common tab provides tools for adding graphics to your pages.*

4. **Browse to and select the graphics file you wish to add to the page.**

   The file must be in one of the formats that work on the Web: GIF, JPEG, or PNG.

   The file should be stored somewhere in the local root folder of your site (see page 33) or in one of its subfolders. If it isn't, Dreamweaver can't add the correct path to your Web page.

Note: The primary file format for Fireworks, Adobe's Web-friendly image-editing program, is PNG (just as Photoshop's format is PSD). However, a native Fireworks file contains additional data used by the program to keep track of fonts, layers, and other information. That extra data significantly increases file size. So always make sure you use the Export command from within Fireworks to properly compress the image into a GIF, JPEG, or PNG (without all the extra Firework info) file.

   That's why, if you select a graphic for insertion that's not already in your site folder, Dreamweaver offers to add a *copy* of it there. If you choose Yes, a Copy File As dialog box opens, so that you can save the file in your local root folder, renaming it if you wish. If you choose No, Dreamweaver uses a file-relative path (beginning with *file:///*) for the image's Src property (see page 199). But clicking No is a bad idea: while it allows the graphic to be displayed while you work with Dreamweaver on your computer, the graphic doesn't appear once you move the document to the Web (see the box on page 169).

Tip: Dreamweaver CS3 now lets you choose a Photoshop file when inserting an image. Dreamweaver doesn't insert the PSD file itself, but it opens a window letting you save a new GIF, JPEG, or PNG file with Web-appropriate optimization settings. Page 204 has the full story on this new feature.

5. **Click OK (Windows) or Choose (Mac).**

   Depending on the accessibility preference settings you've chosen, either the image appears on your Web page, or an "Image Tag Accessibility Attributes" window appears (see the box on page 211).

Tip: Dreamweaver also permits several drag-and-drop techniques for quickly adding images to your pages.

Make sure you've defined a site as described on page 28. Then open the Files window (press F8). You can drag any graphics file from that window right into an open Dreamweaver document. You can also drag graphics in from the Assets panel, as described on page 575.

Dreamweaver even lets you drag a graphic from your desktop onto a page. If you do this, Dreamweaver dutifully informs you that you must copy the file into your site folder (and provides a dialog box that lets you specify *which* folder), so that the image will show up properly on the Web page. (You can even define a default images folder for a site, so that when you drag an image onto a page, Dreamweaver automatically copies it into the correct folder; see page 562.)

Finally, Dreamweaver CS3 lets you drag and drop Photoshop files into a Dreamweaver document.

UP TO SPEED

GIFs, JPEGs, and PNGs: The Graphics of the Web

Computer graphics come in hundreds of different file formats. The assorted acronyms can be mind-numbing: TIFF, PICT, BMP, EPS, Amiga IFF, and so on.

Fortunately, graphics on the Web are a bit simpler. There are only three graphics formats, each of which provide good *compression*; through clever computer manipulation, compression reduces the graphic's file size so it can travel more rapidly across the Internet. Which you choose depends on the image you wish to add to your page.

GIF (Graphics Interchange Format) files provide good compression for images that have areas of solid color: logos, text, simple banners, and so on. GIFs also offer single-color transparency, meaning that you can make one color in the graphic disappear, permitting the background of a Web page to show through part of the image. In addition, GIFs can include simple animations.

A GIF image can contain a maximum of only 256 shades, however, generally making photos look blotchy. That radiant sunset photo you took with your digital camera won't look so good as a GIF. (If you don't need to animate an image, the PNG8 format discussed below is a better choice than GIF.)

JPEG (Joint Photographic Experts Group) graphics, on the other hand, pick up where GIFs leave off. JPEG graphics can contain millions of different colors, making them ideal for photos. Not only do JPEGs do a better job on photos, they also compress multicolored images much better than GIFs, because the JPEG compression algorithm considers how the human eye perceives different adjacent color values. When your graphics software saves a JPEG file, it runs a complex color analysis to lower the amount of data required to accurately represent the image. On the downside, JPEG compression makes text, and large areas of solid color, look blotchy.

Finally, the **PNG** (Portable Network Graphics) includes the best features of GIFs and JPEGs, but you need to know which version of PNG to use for which situation. PNG8 is basically a replacement for GIF. Like GIF, it supports 256 colors and basic one-color transparency. However, PNG8 usually compresses images to a slightly smaller file size than GIF, so PNG8 images download a tiny bit faster than the same image saved in the GIF format.

PNG24 and PNG32 offer the expanded color palette of JPEG images, without any loss of quality. This means that photos saved as PNG24 or PNG32 tend to be higher quality than JPEGs. But before you jump on the PNG bandwagon, JPEG images do offer very good quality and a *much* smaller file size than either PNG24 or PNG32. In general, JPEG is a better choice for photos and other images that include lots of colors.

Finally PNG32 offers one feature that no other format does: 256 levels of transparency (also called *alpha* transparency), which means that you could actually see the background of a Web page through a drop shadow on a graphic, or even make a graphic that has 50% opacity (meaning you can see through it) to create a ghostly see-through effect. Unfortunately, Internet Explorer 6 for Windows doesn't support PNG32's 256 levels of transparency—instead of seeing through the transparent areas, IE6 replaces the transparent areas with a hideous blue background. (There are several JavaScript based techniques—see *www.scriptingmagic.com/Topics/IE Specific/PNG Transparency/*, for example—that can help IE 6 display PNG transparency correctly.) Fortunately, the increasingly popular Internet Explorer 7 does support PNG transparency, as do Firefox, Safari, and Opera.

Adding an Image Placeholder

It's not uncommon to find yourself working on a Web site without all the pieces of the puzzle. You may start building a page, even when your client has yet to give you all the text she wants on the page. Or you may find that a photograph hasn't been shot, but you want to get the page ready for it. Other times, you may be responsible for building the Web pages while another designer is creating the banners and navigation buttons.

To help out in these kinds of situations, Dreamweaver includes the Image Placeholder button. It lets you insert a placeholder—called an *FPO* (For Placement Only) image in publishing—so that you can stake out space on the page for a graphic that isn't ready yet. This way, you can lay out the basic structure of the page without having to wait for all the graphics to arrive in their final form.

To insert a placeholder, do one of the following:

- Choose Insert → Image Placeholder.
- On the Insert bar's Common tab, select the Image Placeholder icon from the Image menu (see Figure 6-2).

In the window that appears (see Figure 6-3), type a width and height for the image, which determines how much space the placeholder will take up on the page. This should match the dimensions you have planned for the final image. The Name and "Alternate text" fields are optional. (If you fill them out, they'll appear in the Name and Alt boxes of the image's Property inspector, as discussed next.)

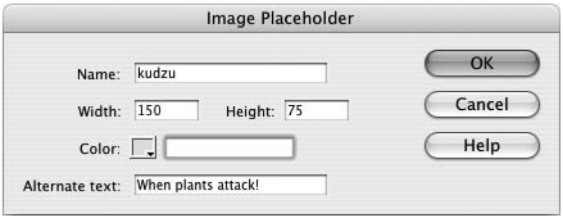


Image Placeholder

Name: kudzu

Width: 150 Height: 75

Color:

Alternate text: When plants attack!

Figure 6-3:
The values you type for Name, Width, Height, and "Alternate text" appear in the Property inspector after you insert an image placeholder. The Color option just lets you choose a color for the placeholder.

The Color box lets you specify a color for the placeholder—presumably to make the placeholder more colorful than the default gray color. Avoid this option: It inserts inline CSS code that isn't removed when you replace this placeholder with a real graphic, adding unnecessary code to the page. What's worse, if the image you eventually use has any transparency areas, the color defined here will show through the graphic!

Warning: Dreamweaver takes the name you provide for a placeholder image and uses it as an ID attribute to the <img> tag. IDs are used for both JavaScript and CSS, as described on page 284. If the name you provide for the image placeholder is the same as an ID name for a CSS style you created, you can run into some weird display problems. So either make sure the name you give the placeholder isn't used as an ID for another element on the page, or just leave the name field empty when you insert the placeholder.

Of course, using a placeholder doesn't do you any good if you don't eventually replace it with a real image. Once you've got the image that should finally appear on the page, just double-click the placeholder on the Web page. The Select Image Source window appears. Follow steps 4 through 5 on page 201 to insert the new image.

If you also own Fireworks, Adobe's Web graphics companion program, there's an added benefit to the image placeholder. When an image placeholder is selected in the document window, the Property inspector includes a button called Create. Clicking this button launches Fireworks and opens a new, blank graphics document set to the exact dimensions you specified earlier. You can then create your graphic in Fireworks. After you save the file, Fireworks exports it to whatever folder you specify, and then automatically inserts it into your document—replacing the placeholder.

Inserting an Image from Photoshop

Since Adobe (the maker of Photoshop) bought Macromedia (the maker of Dreamweaver), it was only a matter of time before these two powerful programs were brought together. Dreamweaver CS3 adds tools to streamline the process of getting images back and forth between Photoshop and Dreamweaver. There are two primary methods of adding a Photoshop document to a Web page: Insert a PSD file (Photoshop's native format), or copy an image from Photoshop, and then paste it into a Dreamweaver document.

Method 1: Using the Insert Image Object

One way to insert a Photoshop file into a Web page is to use the same steps described on page 199 for inserting GIF, JPEGs, or PNGs: Use the Image button on the Insert bar (Figure 6-2), or choose Insert → Image. From the Select Image Source window, choose a Photoshop document (a .psd file), and then click the OK (Choose on Mac) button. Instead of just inserting the image, however, Dreamweaver opens an Image Preview window that lets you choose how to optimize the graphic (see Figure 6-4).

Although Dreamweaver gives you lots of options, the decision-making process can be boiled down to three steps:

1. **From the Format menu (circled in Figure 6-4), choose the graphic format.**

   You get to choose from among the three Web graphic formats: GIF, JPEG, and PNG (see the box on page 202). In general, you'll want to choose PNG8 for images with solid colors and text, like logos; use JPEG for photos. Steer clear of the "Animated GIF" option; it has absolutely no effect. You can't import animated images using the Image Preview window; instead you need to export an animated GIF from the program in which it was created (like Fireworks or Photoshop).

Note: The Image Preview window doesn't preserve alpha transparency (see the box on page 202) even if you've selected the PNG32 option. To save an image in the PNG32 format *and* preserve 256-levels of transparency, choose "Save for the Web" in Photoshop and save the image as a PNG-24 (that's what Photoshop calls PNG32). You can also export a PNG32 file from Fireworks, by choosing the PNG32 option in Firework's Optimize window, and then exporting the image as a PNG file.

2. **Set your image's optimization settings.**

   The exact optimization choices depend on the graphic format you selected in step 1. Settings for each format are discussed in the sections that follow. Make your choices using the menus and buttons on the window's left side.

The preview window in the right half of the Image Preview shows what the final, optimized graphic will look like; you can even compare different optimization settings (see Figure 6-4.) The preview window also displays information about the final optimized graphic, such as its file type, the quality or kind of compression used, the number of colors supported, the final size of the file, and how long the file will take to download over a 56K dialup modem. Figure 6-4 shows how the image will look when saved as a JPEG (top preview image) and as a GIF (bottom preview image). The JPEG version has a quality of 60 (see page 206 for a discussion of this property), supports millions of colors, and is 9.27 K in size. The GIF version, on the other hand, is 19.04 K.

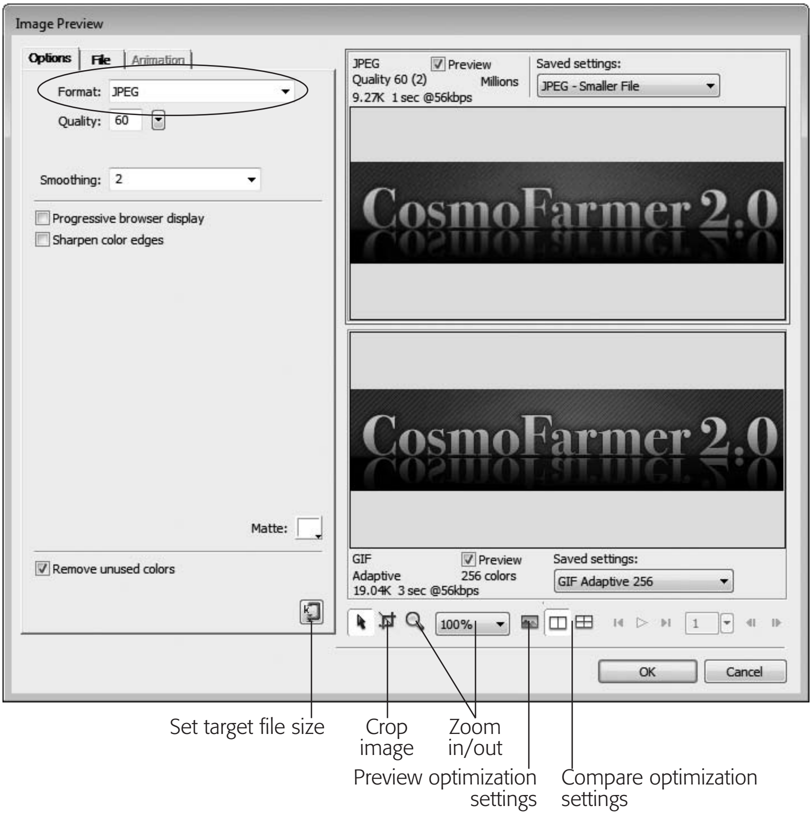


Image Preview

Options | File | Animation

Format: JPEG

Quality: 60

Smoothing: 2

□ Progressive browser display

□ Sharpen color edges

Matte:

☑ Remove unused colors

JPEG ☑ Preview Saved settings:
Quality 60 (2) Millions JPEG - Smaller File
9.27K 1 sec @56kbps

GIF ☑ Preview Saved settings:
Adaptive 256 colors GIF Adaptive 256
19.04K 3 sec @56kbps

100%

OK Cancel

Figure 6-4: *Picking the proper optimization for any particular image is usually just a matter of trial and error, so you'll often want to see how an image looks and compresses as a JPEG and a PNG before deciding which format to choose. You can compare different file types and optimization settings side-by-side by clicking either the "two-up" or "four-up" buttons at the bottom of the window. Two-up lets you compare two different optimization settings, while the four-up shows four previews. This is a great way to answer a question like "Would this graphic look better and be smaller as a JPEG, GIF, or PNG8?"*

3. **Click OK, and then name and save the file into your Web site.**

Dreamweaver saves the new image file and places it into your page—at this point it's just a regular GIF, JPEG, or PNG file, and you can modify it like any other image (see page 208).

JPEG optimization options

Dreamweaver doesn't give you many choices for optimizing JPEG images. Basically, you can select a quality level which affects both how good the image looks and the size of the graphics file: the higher the quality, the larger the file; the worse the quality, the smaller the file. The Quality setting runs from 1 (low quality/small file) to 100 (high quality/large file). 80 is the normal choice for very good quality and fairly manageable file size; 60 is also a good choice, when you want to keep file size on the slim side. The exact setting depends on what the image looks like, so you should just preview different quality settings until you're satisfied both with how the image looks and the file size.

For most images, turning on the "Progressive browser display" and "Remove unused colors" checkboxes trims down the file size without harming the image. In fact, progressive browser display lets the image appear on the page before the entire graphic file is downloaded, giving the appearance that your site is loading more quickly.

The Smoothing pull-down menu makes the image look out of focus, but does decrease file size. Turning on the "Sharpen color edges" checkbox can make an image look more in focus, but usually at a significantly higher file size. You might want to experiment with these options on different images, but you'll most probably skip these two settings.

GIF and PNG8 optimization options

GIF and PNG8 files have identical optimization settings; in most cases, you'll get a smaller file size from a PNG8 file than a GIF. The size of a GIF and PNG8 file is mainly controlled by the number of colors in it—the size of its *palette*. Fewer colors means a smaller file size. Most of the settings available for GIF and PNG8 images control the number and type of colors used (see Figure 6-5).

For optimal compression settings with a GIF or PNG8 image, follow these two steps:

1. **From the Palette menu, select Adaptive.**

   Since both these image types are limited to just 256 colors, this menu determines which colors your image will use. There are a lot of options here, but you can ignore all but "Adaptive." Adaptive merely means that Dreamweaver will pick the best 256 colors from the image file itself. (The other options select colors from palettes that aren't necessarily contained inside the image file. This used to be important when people had monitors that displayed only 256 colors—back when Duran Duran ruled the air waves; but today, these other palettes will most likely distort the look of the original image.)

Tip: To convert a color image into a black and white GIF or PNG8 file, choose Grayscale from the Palette menu.

2. **From the "Maximum Number of Colors" menu, choose the number of colors to use (Figure 6-5).**

   This menu lets you select from 2 to 256 different colors (256 is the maximum for a GIF or PNG 8 image). If the original Photoshop image starts out with only 64 colors, choosing 256 won't add colors or quality to the image. However, you can often choose a *lower* number, eliminating colors from the graphic, and reduce the file size significantly without overly harming the quality of the final image. Again, each image is different, so you should use trial and error to see the minimum colors you need while still maintaining maximum image quality.

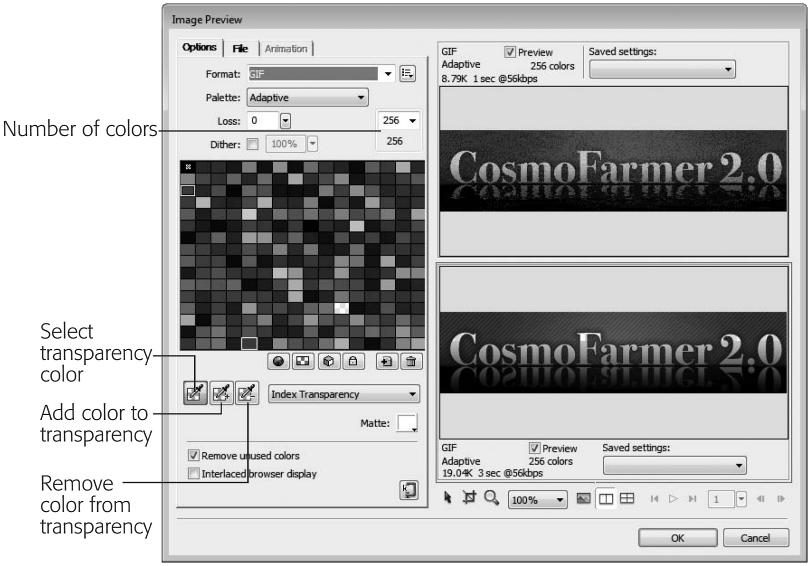


Image Preview

Options | File | Animation

Format: GIF

Palette: Adaptive

Loss: 0 256

Dither: □ 100% 256

Index Transparency

Matte:

☑ Remove unused colors

□ Interlaced browser display

GIF ☑ Preview Saved settings:
Adaptive 256 colors
8.79K 1 sec @56kbps

GIF ☑ Preview Saved settings:
Adaptive 256 colors
19.04K 3 sec @56kbps

100%

OK Cancel

Number of colors
Select transparency color
Add color to transparency
Remove color from transparency
CosmoFarmer 2.0
CosmoFarmer 2.0

***Figure 6-5:** The transparency tools for GIF and PNG8 images let you select one or more colors as "transparent"–that is, those colors disappear from the image and the background of the page shows through. Just select Index Transparency from the Transparency menu; click the Select Transparency Color tool; then, on the preview image, click the color you wish to disappear. To add additional colors, use the same process with the "Add Color to Transparency" tool.*

The Loss option (top-left corner) also decreases file size at the cost of image quality. In general, increasing the "loss" setting makes an image look spotted and windswept, so, unless you're going for a special effect, use a low loss setting or none at all. The Dither option is intended to make up for lost colors—for example, when you choose 32 from the "Maximum Number of Colors" menu, but the image is a vibrant sunset with millions of colors. Skip this setting: It makes images look blotchy and really increases a file's size. If you have an image with millions of colors, then save it as a JPEG file, not a GIF or PNG8.

PNG optimization options

If you're saving a file in the PNG8 format, you have the same options as GIF images (see previous section). If you choose PNG24 or PNG32, your choices are simple…well, actually, you don't have any choices. Just click OK in the Image Preview window, and then save the file. But as mentioned in the box on page 202, while PNG24 and PNG32 can offer higher image quality than JPEGs, they usually produce significantly larger file sizes.

Method 2: Copying and Pasting from Photoshop

You can also copy and paste a selection (a layer, an entire image, or a "slice" created with the Web-oriented slicing tool) from Photoshop, and paste it into a Dreamweaver Web page. When you do this, the Image Preview window appears—the same window you use when inserting a Photoshop document. Follow the same steps described on page 204 for optimizing and saving the pasted image.

Tip: To select all the layers in a Photoshop document, first select the entire image (Select → All), and then choose Edit → Copy Merged. This copies all layers for that selection to the clipboard. If you want to copy just a portion of the entire image, use the Marquee tool to make a rectangular selection, and then choose Edit → Copy Merged.

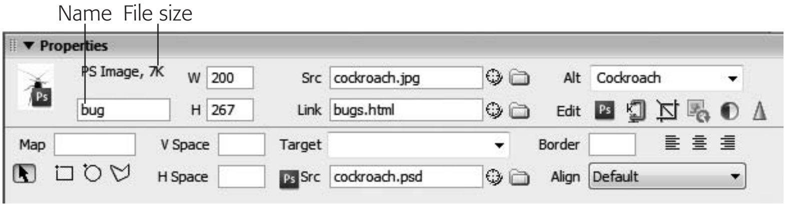
Copying and pasting is also a very useful technique for updating an image you've edited in Photoshop, as described on page 224.

Note: You can also copy graphics from other programs (like Fireworks and Web browsers) and paste them into Dreamweaver CS3.

Modifying an Image

After inserting a graphic, you can work on it in several ways: Attach a link to the image, align it on the page, or add a border and margin to it, to name a few. Dreamweaver also includes some basic tools that let you crop, resize, optimize, sharpen, and adjust contrast and brightness (see page 219).

As with most objects on a Web page, you set image properties using the Property inspector (see Figure 6-6).



PS Image, 7K
Name: bug
W 200
H 267
Src cockroach.jpg
Link bugs.html
Alt Cockroach
V Space
H Space
Target
Border
Src cockroach.psd
Align Default

Figure 6-6: *The Property inspector shows the selected graphic's dimensions, source, alignment, border, and margins. A thumbnail version appears in the upper-left corner–in this case, bearing the logo of Photoshop, which created it.*

Naming an Image

Just to the right of an image's thumbnail on the Property inspector is a small field where you can type a name for that image (see Figure 6-6). Most of the time, you'll leave this field blank.

However, if you plan to add interactive effects to it—like the rollover effect discussed on page 229—using Dreamweaver behaviors (see Chapter 13) or your own JavaScript programming, you *must* name your picture. Whatever name you choose should use only letters and numbers—no spaces or other punctuation. Furthermore, every graphic's name must be unique on the page. This rule is what allows JavaScript to "talk" to a specific image.

When you add a name, Dreamweaver adds both a Name property and an ID property to the image tag. The name tag is still used by most browsers, but the ID tag is the standard way that JavaScript identifies an object on a page. (IDs are also used by Cascading Style Sheets, as described on page 284.)

Note: JavaScript uses the image name or ID that you type in the Image Placeholder box for its own reference; no one actually sees this name in a Web browser. In other words, this box isn't the place to give your graphic a text label that shows up when your reader has graphics turned off. For that purpose, read on.

Adding a Text Description to an Image

Not everyone who visits your Web site gets to see those stunning photos of your last summer vacation. Some people deliberately turn off graphics when they surf, enjoying the Web without the wait, since graphics-free Web pages appear almost instantly. Other people have vision impairments that prevent them from enjoying the Web's visual aspects. They rely on special software that reads Web page text aloud, including any labels you've given your graphics.

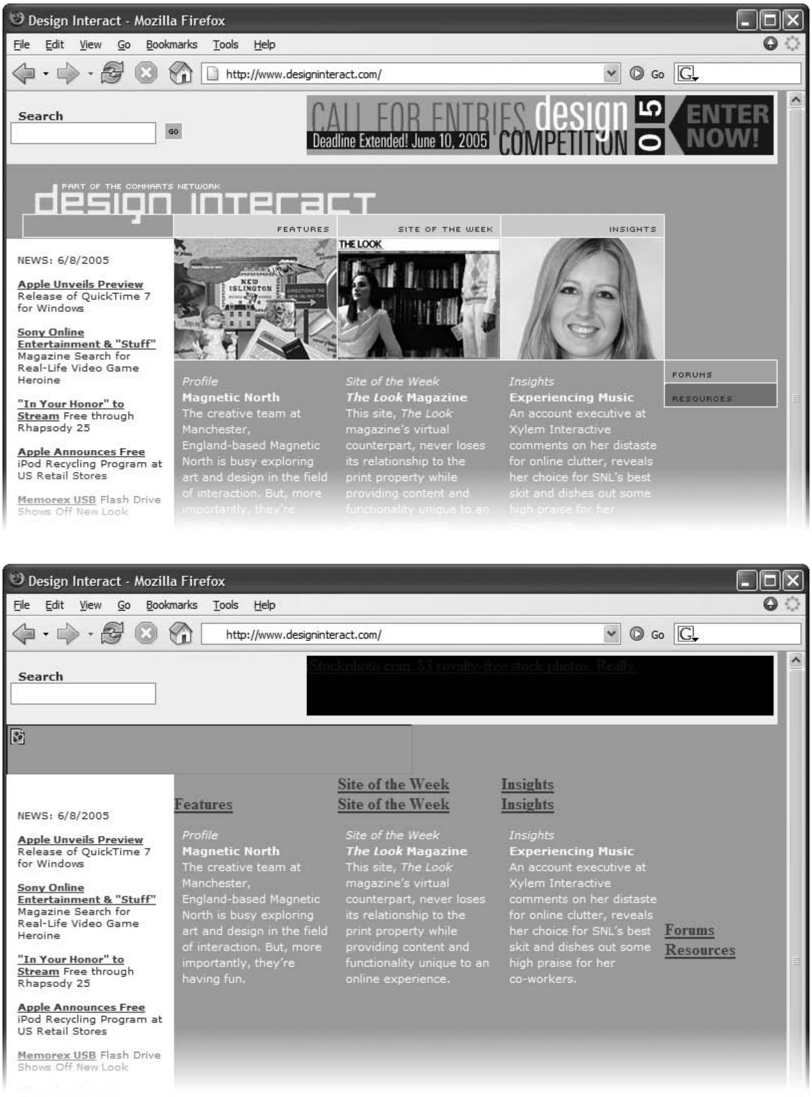
To assist Web surfers in both situations, make a habit of setting the image's Alt property. Short for *alternative text*, the Alt property is a text description that Web browsers use as a stand-in for the image (see Figure 6-7).

Note: Dreamweaver normally reminds you to add an Alt property each time you add an image to a page, but this setting can get turned off. See the box on page 211.

To add a text description to an image, type it in the Property inspector's Alt field. If you're naming graphics that will be navigation buttons, you could just use the same text that appears on the button, such as *Home* or *Products*. For images that carry greater meaning—such as a photo of the product itself—you might use a more detailed description: "Photo of Sasquatch relaxing at his lodge in the Adirondacks."

Note: In some cases, however, a description is more of a distraction than a help. For example, you might insert an image of an intricate swirling line to act as a visual divider between two paragraphs. The image doesn't actually convey any meaningful information; it's just for decoration.

In this instance, you can use the pop-up menu that appears to the right of the Alt field. This menu lets you choose one option: <empty>. Use the <empty> Alt property for any images that don't add meaning to the page, like decorative elements. This trick will help your pages meet accessibility requirements without adding distracting and unnecessary descriptions.


Design Interact - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://www.designinteract.com/
Go
Search
GO
CALL FOR ENTRIES design 05 COMPETITION
Deadline Extended! June 10, 2005
ENTER NOW!
PART OF THE COMMARTS NETWORK
design interact
FEATURES
SITE OF THE WEEK
INSIGHTS
THE LOOK
FORUMS
RESOURCES

NEWS: 6/8/2005

Apple Unveils Preview Release of QuickTime 7 for Windows

Sony Online Entertainment & "Stuff" Magazine Search for Real-Life Video Game Heroine

"In Your Honor" to Stream Free through Rhapsody 25

Apple Announces Free iPod Recycling Program at US Retail Stores

Memorex USB Flash Drive Shows Off New Look

Profile
Magnetic North
The creative team at Manchester, England-based Magnetic North is busy exploring art and design in the field of interaction. But, more importantly, they're

Site of the Week
***The Look* Magazine**
This site, *The Look* magazine's virtual counterpart, never loses its relationship to the print property while providing content and functionality unique to an

Insights
Experiencing Music
An account executive at Xylem Interactive comments on her distaste for online clutter, reveals her choice for SNL's best skit and dishes out some high praise for her

Design Interact - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://www.designinteract.com/
Go
Search
Stockphoto.com: $3 royalty-free stock photos. Really.
Features
Site of the Week
Site of the Week
Insights
Insights
Forums
Resources

NEWS: 6/8/2005

Apple Unveils Preview Release of QuickTime 7 for Windows

Sony Online Entertainment & "Stuff" Magazine Search for Real-Life Video Game Heroine

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The creative team at Manchester, England-based Magnetic North is busy exploring art and design in the field of interaction. But, more importantly, they're having fun.

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***The Look* Magazine**
This site, *The Look* magazine's virtual counterpart, never loses its relationship to the print property while providing content and functionality unique to an online experience.

Insights
Experiencing Music
An account executive at Xylem Interactive comments on her distaste for online clutter, reveals her choice for SNL's best skit and dishes out some high praise for her co-workers.

Figure 6-7:
The Alt property is an important aid for people who are surfing but can't see the graphics on your Web page.

Top: Graphics denote the different sections of this site, such as Features, Site of the Week, and Insights.

Bottom: With graphics turned off, that information is still available, thanks to the Alt text property. In contrast, graphics that don't use the Alt property simply disappear or display the generic label IMAGE. In the case of an important identifying graphic like the site logo (the "design interact" banner in the top figure), a missing Alt property leaves visitors wondering where they are.

Changing the Size of an Image

The Width and Height properties of a graphic do more than determine its screen size; they also help Web browsers load the graphic quickly and efficiently. Since the HTML of a Web page downloads before any graphics do, a Web browser displays the text on the page first, and then adds the images as they arrive. If width and height attributes are missing, the browser doesn't know how much space on the page to give each image, so it has to redraw the page after each image is downloaded. The stuttering appearance of this redrawing is disconcerting, makes Web pages appear slowly, and shatters your reputation as a cool, competent Web designer.

POWER USERS' CLINIC

Making Accessible Web Sites

Many people using the Web have disabilities that make reading, seeing, hearing, or using a mouse difficult. Visually impaired people, for example, may be unable to benefit from images on the screen, even though they have software that can read a Web page's text aloud.

Dreamweaver includes a number of features for making your Web sites more accessible. That's good news if you're building a Web site for the federal government or one of the many states that support Section 508 of the Workforce Investment Act. This law requires Web sites built for or funded by the government to offer equal or equivalent access to everyone. Throughout this book, you'll find tips for using Dreamweaver's accessibility features, and on page 604, you'll learn how to use a tool to find out if your site complies with recognized accessibility standards.

The Alt property described on page 209 is an important first step for assisting visually impaired Web surfers. For complex images, such as a graph that plots changes in utility rates over time, you can also supply a more detailed description on a separate Web page. The *Longdesc* (long description) property of an image lets you specify a link to a page containing a text description of the image. Some Web browsers understand this property, allowing visually impaired visitors to jump to a page with a text description that screen-reading software can read aloud.

While you can't find the *Longdesc* property in the Property inspector, you can turn on an accessibility option in Dreamweaver that lets you add it every time you insert a graphic. Choose Edit → Preferences (Dreamweaver → Preferences on the Mac) to open the Preferences window, and select the Accessibility category. Turn on the Images checkbox.

Now whenever you insert a graphic, the window shown below appears, so that you can quickly set the Alt text, and select an HTML page containing a long description. (You can also use the Tag inspector described on page 386 to add a Longdesc property to a graphic you've already inserted into a page.)

Note that you're *not required* by Section 508 to use the long description property when inserting images. It's merely recommended if the image is particularly complex or includes information that can't be explained in the Alt property–for example, graphs or images that include a lot of text information. For an overview of Web accessibility and helpful tips on making accessible sites, visit *www.w3.org/WAI/gettingstarted/*.

Fortunately, you don't have to worry about specifying the picture's dimensions yourself: Whenever Dreamweaver inserts an image into a Web page, it automatically calculates its width and height and enters those values into the Property inspector's W and H fields (see Figure 6-6).

Note: This cool feature works only in Design view. If you use the Insert Image command to add an image while working in Code view, Dreamweaver adds only the <img> tag with the proper reference to the graphic file; it leaves out the Width and Height properties. In this case, selecting the <img> tag and clicking the recycling symbol icon in the Property inspector adds the proper dimensions (see the box on page 212).

You can, if you like, shrink a graphic by typing smaller values into the W and H fields, but doing so doesn't do anything to speed up the download time. You'll make the picture *appear* smaller, but the Web browser still has to download the entire graphics file. To make your graphic smaller both in appearance and file size,

WORKAROUND WORKSHOP

Watch Those Resize Handles!

After you insert an image in the document window, a thin black border appears around it, indicating that it's selected. Three small black squares–the resize handles–appear on the right edge, bottom edge, and lower-right corner, as circled in the illustration.

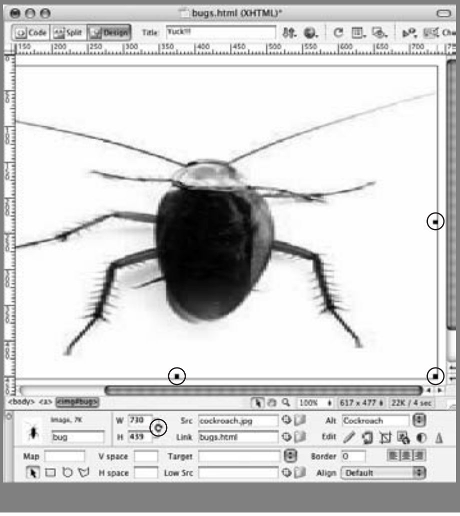
Dragging these handles changes the graphic's width and height–or, rather, the Width and Height properties in the Property inspector. Pressing Shift while dragging the corner handle keeps the proportions of the image the same. The graphic file itself remains unchanged.

However, dragging one of these handles to make the picture appear bigger is almost always unsuccessful, resulting in distortion and ugly pixellation.

But those pesky resize handles are far too easy to accidentally grab and drag. In fact, sometimes you may resize a graphic and not even know it. Perhaps you accidentally dragged the left resize handle a few pixels, making the graphic wider, but not enough to notice.

Fortunately, the Property inspector does provides some subtle feedback to let you know if your graphic is distorted. A boldfaced number in the W or H field tells you that the Width or Height property now differs from the actual dimensions of the graphic.

Clicking the letter W or H in the Property inspector *resets* the Width or Height property back to that of the original graphic file, undoing your little slip of the mouse. Clicking the recycling-symbol icon (also circled) resets both properties.



Title: Yuck!!!

bug

W 730

H 439

Src cockroach.jpg

Link bugs.html

Alt Cockroach

Border 0

Align Default

shrink it in an image-editing program like Fireworks, or Photoshop, or use the Resample Image tool described on page 221. Not only do you get an image that's exactly the size you want, but you also trim a few bytes off its file size, and maybe even save a second or two in download time.

On the other hand, setting width and height values that are *larger* than the actual dimensions of the graphic merely distorts the image by stretching it, creating an undesirable pixellated effect. If you want a larger image without distortion or pixellation, start with a larger original image. To do so, return to your digital camera or stock photo CD, or recreate the graphic at a larger size in Photoshop or Fireworks.

Some Properties to Avoid

You'll notice that the Property inspector includes a few other properties (see Figure 6-6) that seem intriguing and possibly useful—Align, V Space, H Space, and Border. These properties affect how an image is positioned inside a block of text (or next to another image), and the size of the margins and borders around an image. However, they should be avoided. Not only are these properties so Web-Design-Circa-1999, but they're on the way out and unsupported in the strict versions of HTML and XHTML. In addition, they offer very anemic design control. For example, you can't easily control the color of the border around the image, nor can you specify different margins for both the right *and* left or bottom *and* top edges of an image.

Fortunately, you'll find that Cascading Style Sheets once again come to the rescue, as discussed next.

Note: If you're not obsessed with building a Web site that meets the latest HTML/XHTML standards, the left and right option from the Align menu are useful. These choices move an image to either the left or right side of the page (or table cell, or <div>) and force other content like text to wrap around it. You can achieve the same effect with the CSS float property as described below.

Controlling Images with CSS

Cascading Style Sheets aren't just for stylizing text. You can also use the design power of CSS to add borders to an image, force text to wrap around an image, and even add images to the background of other elements. For example, the CSS *background-image* property lets you place an image in the background of a Web page, or add a graphical background to a link.

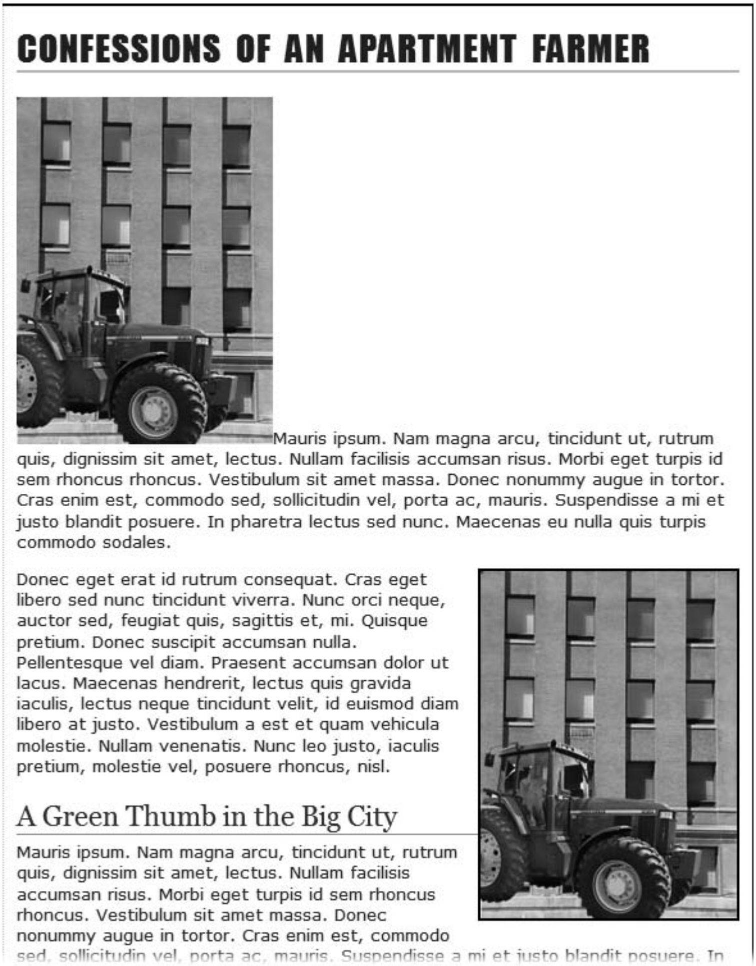
In general, you probably don't need to create a tag style (see page 116) for the <img> tag. That type of style applies across a site, and affects every image. And while you may want a bright red, 10-pixel border around each thumbnail in a photo gallery, you probably don't want that border around the site's logo or the graphical navigation buttons on that same page. You're more likely to create class styles that you manually apply to certain graphics. In this case, create a class style with the proper border setting, and then apply that class to each gallery image (an even more efficient method is to use a *descendent selector* as described on page 285).

Wrapping Text Around an Image

When you add an image to a page, you might initially be staring at a bunch of empty white space surrounding the image (see Figure 6-8, top). Not only does this waste precious screen real estate, it's usually unattractive. Fortunately, using the CSS *float* property, you can wrap text around images (see Figure 6-8, bottom).

To do so, you set the *float* property in the CSS Rule Definition window's Box category (see Figure 6-9). An element can be floated *left* or *right*. If you want an image to appear at the right side of the page and have text flow around its left and bottom edges, choose "right" from the Float menu. The Float property behaves just like the right and left alignment options for images (see the Note below).

Note: The Float property has many uses, from positioning images on the right or left side of the page, to creating thumbnail photo galleries, to laying out entire Web pages. You'll learn about using the float property for layout in Chapter 9. For an excellent introduction and set of tutorials on the float property in general, visit *http://css.maxdesign.com.au/floatutorial/*; book lovers should pick up *CSS: The Missing Manual* for in-depth discussion, tutorials, and practical tips on using floats.



CONFESSIONS OF AN APARTMENT FARMER

Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus rhoncus. Vestibulum sit amet massa. Donec nonummy augue in tortor. Cras enim est, commodo sed, sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo blandit posuere. In pharetra lectus sed nunc. Maecenas eu nulla quis turpis commodo sodales.

Donec eget erat id rutrum consequat. Cras eget libero sed nunc tincidunt viverra. Nunc orci neque, auctor sed, feugiat quis, sagittis et, mi. Quisque pretium. Donec suscipit accumsan nulla. Pellentesque vel diam. Praesent accumsan dolor ut lacus. Maecenas hendrerit, lectus quis gravida iaculis, lectus neque tincidunt velit, id euismod diam libero at justo. Vestibulum a est et quam vehicula molestie. Nullam venenatis. Nunc leo justo, iaculis pretium, molestie vel, posuere rhoncus, nisl.

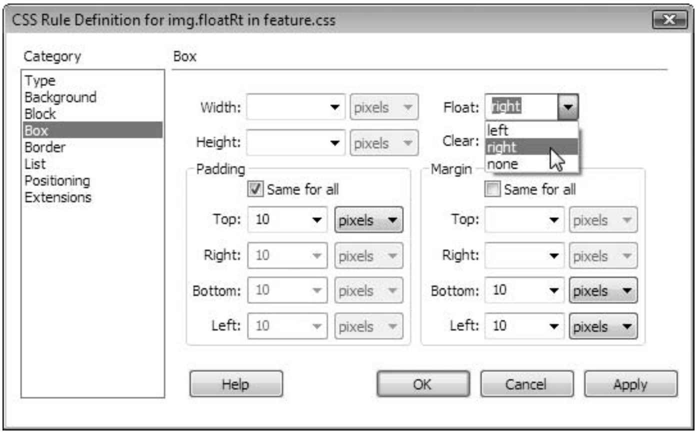
A Green Thumb in the Big City

Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus rhoncus. Vestibulum sit amet massa. Donec nonummy augue in tortor. Cras enim est, commodo sed, sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo blandit posuere. In

Figure 6-8:
Placing an image on the same line as text (top photo) creates unsightly open space, which can be put to better use. By floating an image to the right (bottom photo) or left, you force content that follows the floated element to wrap around it.

One thing to keep in mind with floats: The floated element must appear *before* anything that you wish to wrap around it. Say you have a paragraph of text that you'd like to wrap around a right-floated image. The image needs to be inserted before the text (a good spot is before the first letter in the paragraph). If you float an image to the right, but place the image after the text, the image moves to the right, but the paragraph of text remains above the image.

You'll also frequently use the margin property with floats (see Figure 6-9). The margin is the outermost space surrounding an element. It lets you add space between one element and another. So for a right-floated image it's usually a good idea to add a little *left, bottom* and *top* margin. This creates a bit of breathing room between the image and anything else that wraps around it; omitting a left margin on a right-floated image can cause text to butt right up against the image. You can use any of the measurement values—pixels, percentages, and so on—that CSS supports for a margin.



CSS Rule Definition for img.floatRt in feature.css

Category: Box

Width: pixels Float: right

Height: pixels Clear:

Padding: ☑ Same for all
Top: 10 pixels
Right: 10 pixels
Bottom: 10 pixels
Left: 10 pixels

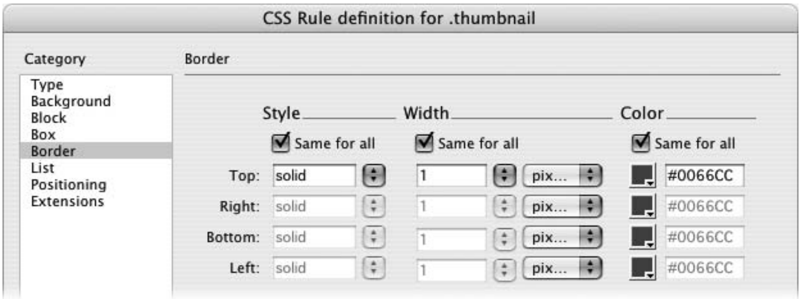
Margin: □ Same for all
Top: pixels
Right: pixels
Bottom: 10 pixels
Left: 10 pixels

Figure 6-9:
The Box category contains some of the most used CSS properties: the Float property for aligning images and other page elements to the left or right; the Margin property for adding or removing space between elements (like adding space between the edge of a right floated image and the text that's wrapping around the image); and the Padding property for adding space between content and any borders around the element.

Adding Borders

As you saw in the tutorial for Chapter 4, you can add a border to any element on a page—a paragraph, or even a single word. But borders can really add to the impact of a photo on a Web page, by adding a polished "frame-like" appearance; and borders can help unify a page full of thumbnail images.

The border is controlled, logically enough, from the CSS Rule Definition window's Border category (see Figure 6-10). You can control each *side* of the border independently with its own width and color settings by specifying the three main border properties:



CSS Rule definition for .thumbnail

Category: Border

Style: ☑ Same for all
Width: ☑ Same for all
Color: ☑ Same for all

Top: solid 1 pix... #0066CC
Right: solid 1 pix... #0066CC
Bottom: solid 1 pix... #0066CC
Left: solid 1 pix... #0066CC

Figure 6-10:
Add colorful and stylish borders to paragraphs, images, tables, and links with the CSS Border properties. Turning on only the bottom border for a paragraph is a great way to add a horizontal rule between paragraphs. While HTML's Horizontal Rule object also does this, only CSS lets you control the rule's color.

- **Style.** This menu lets you specify the type of line used for the border. Dreamweaver gives you more options than a frame shop: "none" (the default choice), "dotted," "dashed," "solid," "double," "groove," "ridge," "inset," and "outset" (see Figure 6-11). You can use a different style for each edge, or select a style from the top menu and turn on the "Same for all" box to apply the same style to all four borders. (In Internet Explorer there's no visual difference between 1 pixel dotted borders and 1 pixel dashed borders.)

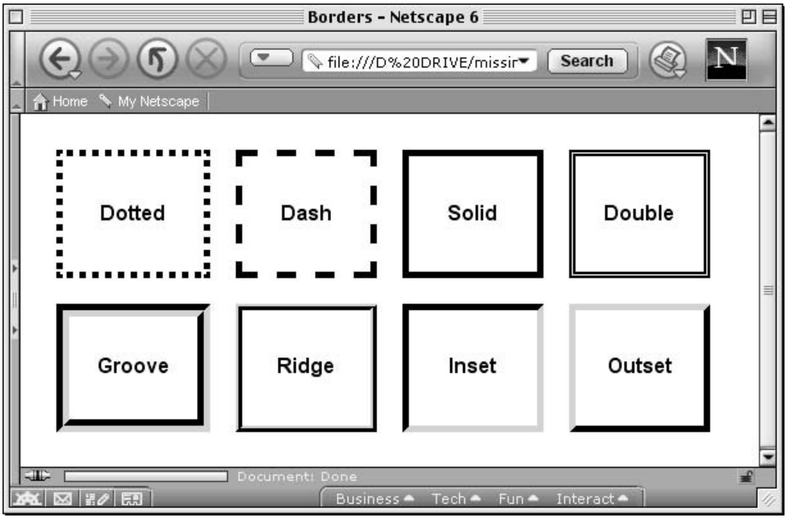


Figure 6-11: *CSS provides eight different border styles. Some, like double, ridge, and groove, look good only with a thick border (more than 1 pixel).*

Note: You have to select a style from the pop-up menu to see the borders. If you leave this option blank or select "none," you don't see the borders even if you set the width and color.

- **Border Widths.** You can set the border separately around each side of a styled object. Choose one of the preset widths—"thin," "medium," "thick," or "auto"—or, if you choose "(value)" from the pop-up menu, you can type a value into the Width box, and then select a unit of measurement from the pop-up menu to the right. Again, you can choose from a wide range of types: pixels, percentage, inches, and so on (see page 107 for more on CSS measurement types). If you want to eliminate the border on one side, type *0* into the appropriate box (or choose *None* from the Style menu).
- **Border Colors.** You can color each of the four borders individually using the ubiquitous Dreamweaver color box (page 49). If you don't assign any colors, but do assign border *widths*, the borders match the color of the surrounding text.

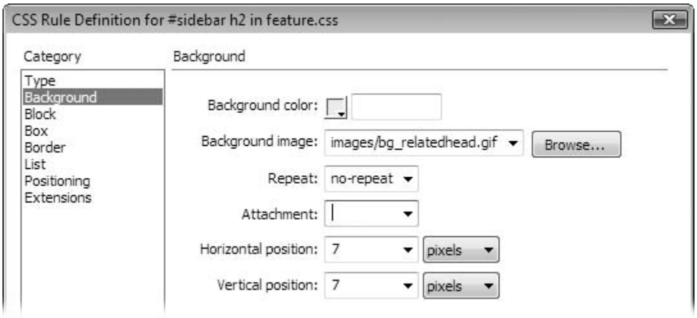
If you use borders to "frame" an image, you can also use the *padding* property to add space between the image and the border—this simulates the appearance of the cardboard mat used in professionally framed photographs. Padding is the gap that separates the style's content—such as a paragraph of text or an image—and its border.

You can control padding settings from the CSS Style Definition window's Box category (see Figure 6-9). If you put a 1-pixel border around an image and want to add 10 pixels of space between the image and the border, type *10* into the Top padding box, and then, from the pop-up menu, choose "pixels". Turn off the "Same for all" box if you wish to set the padding around each edge separately; then, type values into each of the four boxes.

Background Images

Inserting an image into a page as described on page 199 isn't the only way to add graphical beauty to a Web page. CSS also provides a method of adding a background image to any style. In this way you can put a graphic in the background of a page, enhance a headline with an icon, or add your own custom graphics to links (in fact, the arrow icons used for the Spry Menu Bar discussed in page 175 are images placed into a link's background).

You control background images by setting the following properties in the CSS Rule Definition window's Background category (see Figure 6-12):



CSS Rule Definition for #sidebar h2 in feature.css

Background color:

Background image: images/bg_relatedhead.gif

Repeat: no-repeat

Attachment:

Horizontal position: 7 pixels

Vertical position: 7 pixels

Figure 6-12:
The CSS Background category lets you specify a background color and image for a style. While you won't frequently apply a background color to an image (after all, the image would usually cover up anything behind it), it can come in handy when used with the padding property (see page 322): In this way you can create a customized "mat" color.

Background image

Add a background image to the style by clicking the Browse button, and then selecting an image from your site. You can also type an absolute URL, starting with *http://*, to use an image off the Web.

To fill your entire page background with some repeating graphic, you could either redefine the <body> tag using this property, or create a class style with a Background Image property, and then apply it to the <body> tag as described on page 122.

You can even control how the image tiles (repeats) and where it's placed on the page (see the following sections). Furthermore, you can add background images to any *individual* element on your page: paragraphs, tables, layers, and so on.

Background images appear above any background color, so you can (and often will) combine the two. For example, you may want to position an interesting graphic on top of a colorful background.

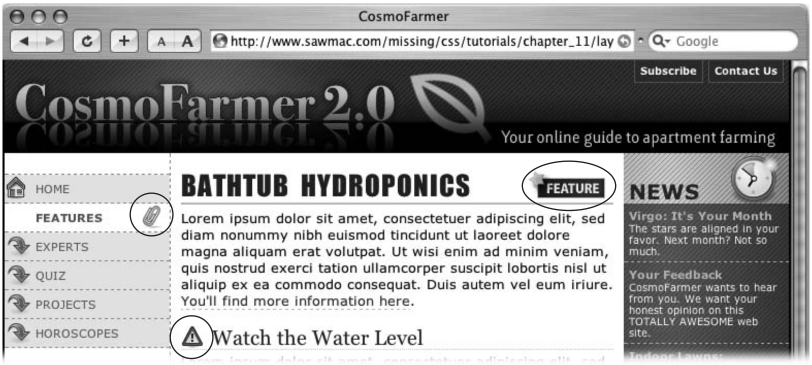
Tip: One common byte-saving technique is to create an image that looks like a button, and then use it for the background image of navigation links on a page. The links themselves include text–"Home," "About Us," and so on–but the background of each link looks like a graphical button. This technique's main benefit is that you don't need to create separate graphics for each button.

Background repeat

Background images—for example, the background of a page—normally fill the available space by tiling (that is, repeating over and over again) across and down. A small image of a carrot added to the background of a page appears as a field of carrots—one next to another, row after row.

But with CSS, you can control *how* the background image repeats. You can select from the following options:

- *repeat* tiles the image horizontally and vertically. This is how browsers normally display a background image.
- *repeat-x* and *repeat-y* display a horizontal and vertical band of images, respectively. So if you'd like to have a single row of images appear at the top of a page, use the repeat-x option; it's a good way to add a graphical background to a banner. *repeat-y*, on the other hand, is great for a graphical sidebar that appears down the left edge of a page.
- *no-repeat* displays the image one time only (see the examples in Figure 6-13).



Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure. You'll find more information here.

Watch the Water Level

Virgo: It's Your Month
The stars are aligned in your favor. Next month? Not so much.

Your Feedback
CosmoFarmer wants to hear from you. We want your honest opinion on this TOTALLY AWESOME web site.

Figure 6-13: *Background images aren't just for the body of a Web page. You can apply styles that include background images to any selection, including links, headlines, and paragraphs of text. The circled graphics in this image are just a few examples on this Web page of background images.*

Background attachment

By default, the background image on a page scrolls with the rest of the page, so that as you scroll down to read a long Web page, the image scrolls along with the text.

But using CSS, you can lock the image in place by choosing "fixed" from the Attachment menu. Say you added your company's logo to the background of a page, and set the Repeat property (described above) to "no-repeat." The logo now appears only once in the upper-left corner of the page. If you use the "fixed" option for this property, when a visitor scrolls the page, the logo remains fixed in the upper-left corner. (Choosing "scroll" from the Attachment menu means, of course, that the background image scrolls with the page.)

Horizontal and vertical position

Using these controls, you can specify a position for the affected text or other Web page element. The Horizontal Position options are: "left," "center," and "right." You can also choose "(value)," type an exact number in the box, and then select a unit of measurement from the menu to the right. Similarly, the Vertical Position options include "top," "center," and "bottom," or you can enter a specific value.

These positioning options refer to the position of the styled object. Suppose you created a class style that included a background image with Horizontal and Vertical Position both set to *center*. Then say you applied that class style to a paragraph. The background image would appear in the center of that *paragraph*, not in the center of the Web page.

Likewise, if you set the horizontal position of the image to 10 pixels and the vertical position to 20 pixels, the image would start 10 pixels from the left edge of the paragraph and 20 pixels from the top edge.

And if you wanted to place an image in the exact center of the page, you'd choose "center" from both the Horizontal and Vertical Position menus, set the Repeat property to "no-repeat," and then apply the style to the page's <body> tag.

Editing Graphics

Nothing's ever perfect, especially when you're building a Web site. Corrections are par for the course—not just to a Web page, but to the pictures on it, as well. Perhaps a picture is a tad too dark, or you'd like to crop out the rowdy co-worker being escorted out by security from your company's holiday party photo.

In the hands of less capable software, you'd face quite a tedious switching-and-opening task each time you wanted to edit a graphic. You'd have to open Photoshop, Fireworks, or whatever graphics program you prefer; choose File → Open; navigate to your Web site folder; find the graphic that needs touching up (if you can even remember its name); and then open it to make your changes.

Dreamweaver includes tools for performing many basic editing tasks. For more complex work, like changing the text on a button from "Now Firing" to "Now Hiring," you need to switch to a different program. However, Dreamweaver is considerate of your time; it lets you access your favorite graphics program with just a couple of clicks.

The Built-In Editing Tools

Dreamweaver includes four tools for cropping, resizing, sharpening, and adjusting the brightness and contrast of images (see Figure 6-14). Suppose your boss emails you his portrait with instructions to put it on his "Meet the boss" page. Unfortunately, it's too big and too dark. Rather than launch a separate image-editing program, you can simply add the photo to the page and make the corrections within Dreamweaver.

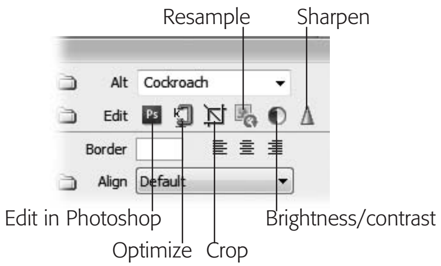


Figure 6-14:
The Property inspector includes tools for editing images directly inside Dreamweaver.

But first, a warning: All these tools change the *original* GIF, PNG, or JPEG image in your site folder. If you shrink a graphic, and then later change your mind, you may be out of luck. It's a good idea, therefore, to make backups of all of your images before you use these tools.

EASTER EGG HUNT

Meet the Geeks Behind Dreamweaver

Want to see pictures of the engineers behind Dreamweaver? OK, maybe you don't, but you *can*, if you want, find these little snapshots hidden away in the Property inspector. Select an image in the document window. Then, simply Ctrl+double-click (or ⌘-double-click) the thumbnail of the graphic in the left side of the Property inspector.

A picture of one of Dreamweaver's programmers appears, along with his name. Ctrl (⌘) double-click the thumbnail repeatedly to cycle through the names and pictures of other members of the Dreamweaver team.

Furthermore, remember that if you use that same file on other pages, your modifications appear on those pages, too. For instance, if you decide you want to shrink your company logo to a smaller size on one page, you may find that *every* page on your site now has the smaller logo! What's worse, on the other pages, the image's width and height settings don't change, so on those pages, that logo looks unnaturally pixellated. If you want to change a graphic on only one page, make a copy of it first, insert the *copy* on the page you wish to change, and then modify just that image file. That way, the rest of your site keeps the original graphic.

Of course, if you discover right away that you've made a change you don't want, you can choose Edit → Undo or press Ctrl+Z (⌘-Z). Until you close the page, you can continue to undo multiple image changes.

Cropping an image

Dreamweaver's Crop tool can remove extraneous or distracting parts of an image. (You can use it to focus on a face, or to get rid of those teenagers making faces in the corner.)

To do so, select the graphic you wish to crop, and then, on the Property inspector, click the Crop tool (see Figure 6-14). (Alternatively, choose Modify → Image → Crop.)

A rectangular box with eight handles appears inside the image; anything outside the box is cropped out. So just move this box (by dragging it), and resize it (by dragging the handles), until you've got just what you want inside the box.

When you're done, double-click inside the box, or click the Property inspector's Crop tool again. Dreamweaver crops the image, discarding the graphic's unwanted areas.

To undo a crop you don't like, simply press Ctrl+Z (⌘-Z). In fact, you can back out before you've used the Crop tool at all; clicking anywhere on the page outside the image makes the cropping box go away.

Resampling an image

If a photo is just too big to fit on a Web page, you could select the image, and then use one of the resize handles to alter its dimensions (see page 212). Unfortunately, graphics that you shrink this way give you the worst of both worlds: They look muddier than they were before, yet they still retain all the slow-downloading data of the larger image.

You can, however, use this resizing technique in conjunction with the Image Resample tool to resize the actual graphic file. You'll end up with a trimmed-down file with its appearance intact.

To use the Resample tool, select an image on a page, and then resize it using the resize handles (see page 212). (Shift-drag to prevent distortion.) When you're done, click the Resample button on the Property inspector (Figure 6-14). Dreamweaver resizes the image file.

You can even make an image *larger* than the original using this technique. The end result isn't perfect—even Dreamweaver can't create image information that was never there—but the program does its best to prevent the image from looking too pixellated. You won't want to enlarge images this way often, but in a pinch, it's a quick way to make a photo just a little bit larger.

Dreamweaver changes the graphic, altering the width and height of the actual file. If you change your mind about resampling the image, your only option is the old undo command, Ctrl+Z (⌘-Z).

Brightness and contrast

If an image on a page is too light, dark, or washed out, you can use Dreamweaver's Brightness/Contrast dialog box to fix it.

First, select the picture, and then, on the Property inspector, click the Brightness/ Contrast icon (Figure 6-14) to open the Brightness/Contrast dialog box (Figure 6-15). Move the Brightness slider to the right to lighten the image (great for underexposed interior shots), or to the left to darken the image. The Contrast control works in the same way: right to increase contrast (making dark colors darker and light colors lighter); left to decrease contrast (moving all colors toward gray).

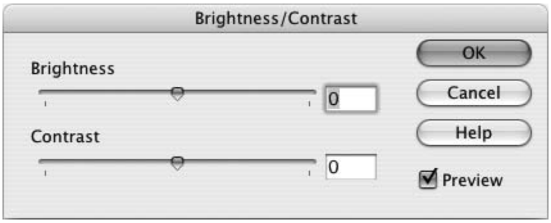


Figure 6-15:
If you've ever used image-editing software like Fireworks or Photoshop, this dialog box should look familiar. Make sure the Preview checkbox is turned on so that you can see your changes right in the document window before you click OK.

You'll often use the Brightness and Contrast sliders in conjunction. Brightening (lightening) an image also has a fading effect. By increasing contrast, you can restore some punch to a brightened image.

As with the other image-editing controls, if you're unhappy with the changes you've made, choose Edit → Undo or press Ctrl+Z (⌘-Z) to return the image to its previous glory.

Sharpening images

Sometimes graphics, even those from some scanners and digital cameras, look a little fuzzy, especially if you've resampled the image (page 221). Dreamweaver's Sharpen tool on the Property inspector helps restore clarity and make such images "pop." It works like similar tools in graphic-editing programs: it increases the contrast between an image's pixels to create the illusion of sharper, more focused graphics. (Insert your own Sharper Image joke here.)

To use this tool, select the graphic, and then, on the Property inspector, click the Sharpen icon(Figure 6-14). The Sharpen window appears, as shown in Figure 6-16. Move the slider to the right to increase the amount of sharpening, or type a number in the box (10 is maximum sharpening; 0 is no change). You probably won't use the maximum setting unless you're going for a special effect, since it tends to highlight "noise" in the image, creating an unappealing halo effect around pixels. Once you've selected a level of sharpening that you like, click OK.

If you're unhappy with the results, just press Ctrl+Z (⌘-Z), or choose Edit → Undo.

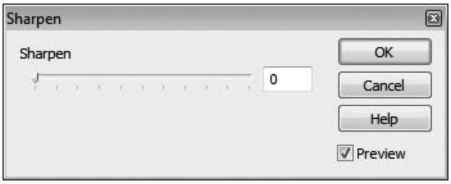


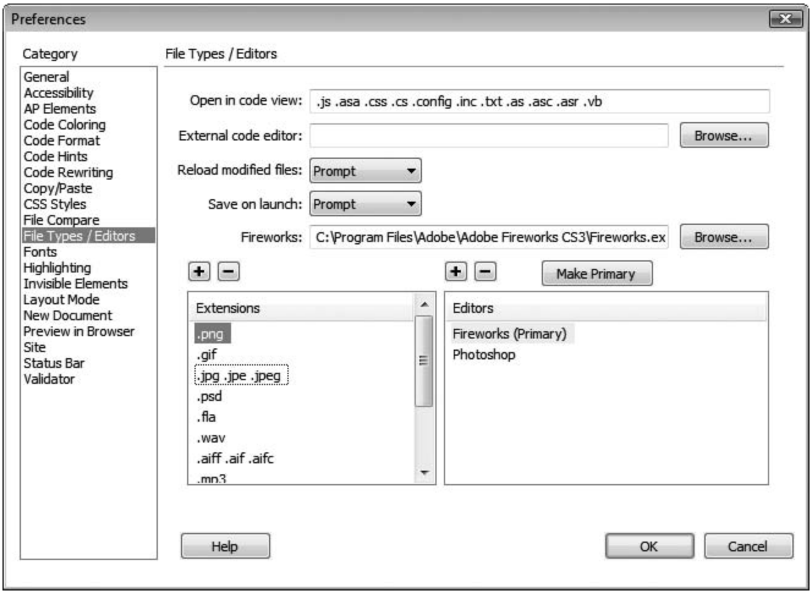
Figure 6-16:
The Sharpen box can make fuzzy pictures "pop." Make sure the Preview checkbox is turned on so you can see the effect on the image as you move the slider.

Setting Up an External Editor

When you double-click an image file in the Files panel, your favorite image-editing program launches and opens the file, ready for you to edit. But before you can take advantage of this time-saving feature, you need to tell Dreamweaver which graphics program you want to use.

1. **Choose Edit → Preferences (Dreamweaver → Preferences on the Mac).**

   The Preferences dialog box opens, as shown in Figure 6-17.



Preferences

Category

General
Accessibility
AP Elements
Code Coloring
Code Format
Code Hints
Code Rewriting
Copy/Paste
CSS Styles
File Compare
File Types / Editors
Fonts
Highlighting
Invisible Elements
Layout Mode
New Document
Preview in Browser
Site
Status Bar
Validator

File Types / Editors

Open in code view: .js .asa .css .cs .config .inc .txt .as .asc .asr .vb

External code editor: Browse...

Reload modified files: Prompt

Save on launch: Prompt

Fireworks: C:\Program Files\Adobe\Adobe Fireworks CS3\Fireworks.ex Browse...

Extensions
.png
.gif
.jpg .jpe .jpeg
.psd
.fla
.wav
.aiff .aif .aifc
.mp3

Editors
Fireworks (Primary)
Photoshop

Figure 6-17:
You can select external image-editing programs to use with various types of Web files–including graphics formats such as GIFs, JPEGs, and PNGs. Make your selection in the Preferences dialog box's File Types/Editors category.

2. **In the left pane, click File Types/Editors.**

   The Preferences box now displays your current settings for the editing programs you prefer for editing different types of files. Two columns appear in the bottom half of the box: Extensions and Editors.

3. **From the Extensions list, select a graphic extension.**

   Three types of graphic files are listed: GIFs, JPEGs, and PNGs. You can choose a different editing program for each type of file, if you like. You can add filename extensions for file types not shown by clicking the + button above the Extensions list.

4. **Click the + button above the Editors list.**

   The Select External Editor dialog box opens.

5. **On your hard drive, find the program you wish to assign as an editor for the selected type of graphics file.**

   It can be Photoshop, Photoshop Elements, Fireworks, or whatever.

6. **If you wish to make this program the primary program for editing this type of file, click Make Primary.**

   This *primary* editor is the one Dreamweaver opens when you choose to edit the graphic. (You can define other, less frequently used editors, as well. See the Tip at the end of this list.)

7. **Repeat steps 3–6 for each type of graphics file you work with.**

   Dreamweaver treats GIFs, JPEGs, and PNGs as separate file types, so you need to assign an editor to each. Of course, most people choose the same program for all three file types.

8. **Click OK to close the Preferences dialog box.**

   From now on, whenever you need to touch up a graphic on your Web page, just select it, and then click Edit on the Property inspector (see Figure 6-6). Alternatively, you can simply double-click the file in the Files panel, or Ctrl-double-click (⌘-double-click) the image on the page. In any case, your graphic now opens in the graphics program that you set as your primary editor in step 4.

   Now you can edit the graphic and save changes to it. When you return to Dreamweaver, the modified image appears on the page. (If you're a Photoshop or Fireworks fan, you're in even better shape; read on.)

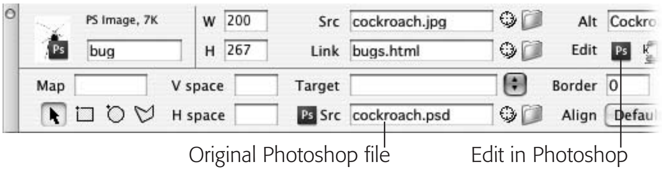
Tip: You aren't limited to just one external editor. For instance, if there's a Fireworks feature you need, even though Photoshop is your primary editor, you can still jump to Fireworks directly from Dreamweaver.

The trick is to right-click (Control-click) the image you want to edit, whether it's in the document window or the Site Files window. Choose the Edit With menu. If you've added the other image editor to your preferences (Figure 6-17), that editor is listed in the submenu. Otherwise, select Browse from the contextual menu, and then choose the editing program you want to use in the resulting dialog box. That program opens automatically, with the graphic you clicked open and ready to be edited.

Editing Images with Photoshop

Since Adobe makes Photoshop (the pre-eminent graphics program) as well as Dreamweaver, it makes sense that the two programs should work together. In fact, the latest version of Dreamweaver makes editing an image created and imported from Photoshop a breeze.

When you add an image from Photoshop using either the Insert → Image or copy and paste method (see page 208), Dreamweaver keeps track of the original Photoshop document used to create the imported image (unfortunately, only with Photoshop CS3, not earlier versions). The path to the original PSD (Photoshop) file is listed in the Property inspector (see Figure 6-18). Clicking the "Edit in Photoshop" button in the Property inspector launches Photoshop and opens the original PSD file. At this point, you can make any edits you want to the Photoshop document.



PS Image, 7K
bug
W 200
H 267
Src cockroach.jpg
Link bugs.html
Alt Cockro
Edit Ps
Map
V space
Target
Border 0
H space
Ps Src cockroach.psd
Align Defau

Original Photoshop file

Edit in Photoshop

Figure 6-18:
The Property inspector displays special logos to indicate the origin of an image. In this case, the Photoshop logo (upper-left corner) and the path to a .psd file indicate that you're looking at a Photoshop file. If you insert an image that you exported from Fireworks, the Fireworks logo and an "Edit in Fireworks" button appear.

Unfortunately, the process of getting the edited image back *into* Dreamweaver is a bit clunky. There's no "I'm done, export this image back to Dreamweaver" button; instead you need to copy the revised image and paste it back into Dreamweaver: Copy the image (or portion of the image you wish to use) in Photoshop (see the Tip on page 208); then return to Dreamweaver, select the image you're replacing in Design view, and then choose Edit → Paste. Dreamweaver quickly replaces the old image with the new image. You don't have to revisit the Image Preview window (see page 205); Dreamweaver remembers the optimization settings, including the file name, you set when you first inserted the image.

Tip: You may want to use different bits of one Photoshop document on a page. You might create a single-page mockup that includes icons, photos and graphical navigation buttons. Use the Photoshop Slice tool to identify each individual graphic element; then use the Select Slice tool to select a slice. Choosing Edit → Copy then copies just that slice.

Editing Images with Fireworks

Fireworks was Dreamweaver's original companion graphics program (before Adobe, the maker of Photoshop, bought both Fireworks and Dreamweaver). Fireworks is a powerful image-editing program made specifically to create and optimize Web graphics. It has a long history of working well with Dreamweaver.

Dreamweaver treats Fireworks images much as it does Photoshop images, as described in the previous section: When you export a GIF or JPEG graphic from Fireworks and save it somewhere in your Web site, Fireworks creates a folder called _notes in the same folder. This folder contains small files whose names end in .mno—for Macromedia Note. The .mno file contains a note with the location of the original Fireworks file. By reading this .mno file, Dreamweaver is able to find the original Fireworks PNG file on your computer.

When Dreamweaver opens a Web page, it checks for this folder and any notes that are associated with the graphics on the page. When you select an image created with Fireworks, Dreamweaver displays this information in the Property inspector (just like in Figure 6-18, but with a Fireworks instead of a Photoshop logo).

To edit a Fireworks graphic, just click it in the document window, and then click the "Edit in Fireworks" button in the Property inspector. Or, if you're in a hurry, just Ctrl (⌘-) double-click the image; or right-click (Control-click) it and then choose Edit With Fireworks from the contextual menu. Either way, Dreamweaver launches Fireworks. (You may be prompted to choose whether or not to open the exported GIF or JPEG's source file, depending on how you've set up your Fireworks preferences.)

In Fireworks, make any changes you wish to the image. When you're finished, click Done. Fireworks exports the image, closes the file, and returns you to Dreamweaver. The updated graphic appears on your page.

Optimizing an Image

You can optimize an image—compress its file size for faster download—by clicking the Optimize image button in the Property inspector (see Figure 6-14). After clicking the button, the Image Preview window appears. This is the same window with all the same controls that appears when importing a Photoshop file (see Figure 6-4). While this feature does leave you with a smaller image file, you should usually avoid it. That's because when you optimize a GIF, JPEG or PNG image, you're compressing an already compressed file. Applying additional optimization to an image usually degrades the quality.

In addition, you shouldn't convert a JPEG file into a GIF, or vice versa. The image almost always ends up looking worse. If you have a JPEG file that you think should be a GIF instead (see page 202 for some guidelines), or you simply want to see if you can shave a few more bytes from a file by optimizing it again, it's best to return to the original Photoshop, Fireworks, or Illustrator file, if available, and use that program's export or "Save for Web" feature to generate a new GIF, JPEG, or PNG file. (Alternatively, use either of the techniques described on page 224 and page 225 for editing Photoshop and Fireworks files.)

If you decide to ignore this warning (or you don't have the original image and really need to optimize the image further), then follow the directions on page 204. Once you've made your optimization changes, click the OK button in the Preview Image window. The image is optimized again. You can choose Edit → Undo to back out of the change.

Image Maps

As Chapter 5 makes clear, you can easily turn a graphic into a clickable link. You can also add *multiple* links to a single image.

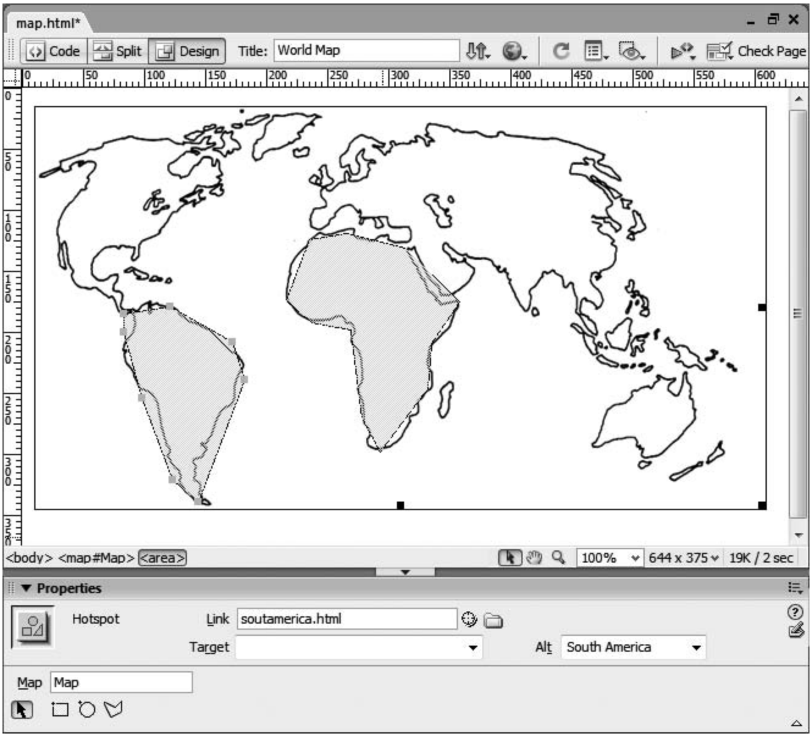
Suppose your company has offices all over the country, and you want to provide an easy way for your visitors to locate the nearest state office. One approach would be simply to list all the state names, and link them to separate pages for each state. But that's boring! Instead, you could use a map of the United States—one image—and turn each state's outline into a hotspot that's linked to an appropriate page, listing all the offices in that state.

The array of invisible link buttons (called *hotspots*) responsible for this magic is called an *image map*. An image map contains one or more hotspots, each leading somewhere else.

Here's how to create an image map:

1. **Select the graphic you wish to make into an image map.**

   The Property inspector displays that image's properties and, in the lower-left corner, the image map tools, shown at the bottom in Figure 6-19. (These appear in the lower half of the Property inspector, which appears only if the Property inspector is fully expanded, as described on page 25.)



Title: World Map

Hotspot

Link soutamerica.html

Target

Alt South America

Map Map

Figure 6-19: *Each link on an image map is called a hotspot. (Shown here are hotspots around South America and Africa.) When you select a hotspot, the Property inspector displays its Link, Target, and Alt properties. The lower half of the inspector displays the name of the map, as well as tools for selecting and drawing additional hotspots.*

2. **In the Property inspector's Map field, type a name for the map.**

   The name should contain only letters and numbers, and can't begin with a number. If you don't give the map a name, Dreamweaver automatically assigns the map the ingenious name *Map*. If you create additional image maps, Dreamweaver calls them *Map2*, *Map3*, and so on.

3. **Select one of the image map tools.**

   Choose the rectangle tool, the circle tool, or the polygon tool, depending on the shape you have in mind for your hotspot. For instance, in the image in Figure 6-19, the polygon tool was used to draw each of the oddly shaped hotspots.

Note: If you have the image accessibility preference setting turned on (page 211), you get a window reminding you to add an Alt property to the hotspot you're about to draw. Each hotspot can have its own Alt description.

4. **Draw the hotspot.**

   To use the rectangle and circle tools, click directly on your picture; drag diagonally to form a rectangle or circle. To make a perfect square, press Shift while dragging with the rectangle tool. (The circle tool always creates a perfect circle.)

To draw an irregularly shaped hotspot using the polygon tool, click once to define one corner of the hotspot. Continue clicking until you've defined each corner of the hotspot. Dreamweaver automatically joins the corners to close the shape.

Dreamweaver fills the inside of the hotspot with a light blue tint to make it easy to see. (Your Web visitors won't see the blue highlighting.)

If you need to adjust the hotspot you've just drawn, click the arrow tool on the Property inspector. You can drag the light blue square handles of your hotspot to reshape or resize the area, or drag inside the hotspot to move the whole thing. If you change your mind about the hotspot, press Delete to get rid of it altogether.

Note: After you draw a hotspot, the drawing tool is still active so that you can draw additional hotspots. Click the arrow tool in the Property inspector to deselect the hotspot drawing tool.

5. **Add a link to the hotspot.**

   After you draw a hotspot, that same hotspot is selected; its properties appear in the Property inspector (see Figure 6-19). Use any of the techniques discussed on page 159 to link this hotspot to another Web page or anchor.

6. **If necessary, set the Target property.**

   Most of the options in the Target pop-up menu are useful only when you're working with frames, as discussed on page 163, and in the online chapter about frames, which you can find at *www.sawmac.com/missing/dw8/appc.pdf*. The "_blank" option, however, is useful any time: It forces your visitor's Web browser to load the linked page into a *new* browser window. The original page remains open, underneath the new window.

7. **Set the hotspot's Alt property.**

   By typing a label into the Alt box in the Property inspector, you provide a written name for this portion of the graphic. As noted on page 209, *alt* tags are extremely important to people who surf the Web with graphics turned off, or who use text-to-speech reading software.

8. **Repeat steps 2–7 for each hotspot you wish to add to an image.**

   As you work, you can see the light blue hotspots filling in your image map.

Editing a Hotspot's Properties

As noted in step 4, you can change a hotspot's shape by dragging its tiny square handles. But you can also change its other properties—like which Web page it links to.

To do so, click to select the image map. Using the black arrow tool—the hotspot selection tool—on the Property inspector's far left side (see Figure 6-19), click the hotspot you wish to edit. Then use the Property inspector controls to edit the Link, Target, and Alt properties.

If you're having a fit of frustration, you can also press Delete or Backspace to delete the hotspot altogether.

Rollover Images

Rollover images are common interactive elements on the Web. People frequently use them for navigation buttons (see Figure 6-20), but you can use them anytime you wish to dramatically swap one image for another. Say you've placed a photo of a product you're selling on a Web page. The photo links to a page that describes the product, and lets the visitor purchase it. To add emphasis to the image, you could add a rollover image so that when the visitor moves his mouse over the photo, *another* image—for example, the same image but with "Buy Now!" or "Learn more" printed across it—appears. You've almost certainly seen rollovers in action, when your mouse moves over a button on some Web page, and the image lights up, or glows, or turns into a frog.

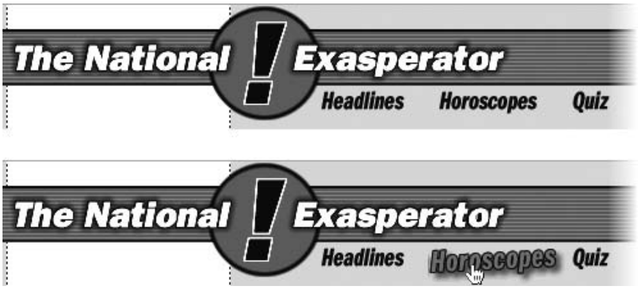


Figure 6-20:
Rollover graphics appear frequently in navigation bars. Before your cursor touches a rollover button (top), it just sits there blankly. But when your cursor arrives, the button changes appearance (bottom) to indicate that the graphic has a functional purpose–in this case, "I'm a link. Click me."

This simple change in appearance is a powerful way to inform a visitor that the graphic is more than just a pretty picture—it's a button that actually does something. Rollovers usually announce that the image is a link. (Though you can use them for other creative effects, as described on page 526.)

Behind the scenes, you create a rollover by preparing *two different* graphics—"before" and "after." One graphic appears when the Web page first loads, and the other appears when your visitor's mouse moves over the first. If the cursor then rolls away without clicking, the original image pops back into place.

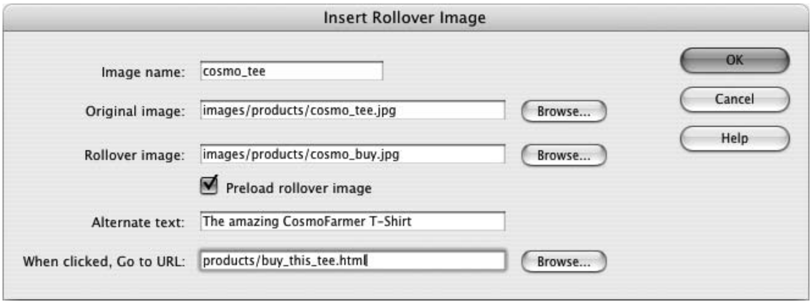
You achieve this dynamic effect by using *JavaScript*, a programming language that most Web browsers use to add interactivity to Web pages. Fortunately, you don't need to be a programmer to take advantage of this powerful technology. Dreamweaver's many prewritten JavaScript programs, called *behaviors*, let you add rollover images and other interactivity to your pages. (You can find more about behaviors in Chapter 13.)

To insert a rollover image, start by using a graphics program to prepare the "before" and "after" button images. Unless you're going for a bizarre distortion effect, both images should be exactly the same size. Store them somewhere in your Web site folder.

Then, in the document window, click where you want to insert the rollover image. If you're building a navigation bar, you might place several images (the buttons) side by side.

Choose Insert → Image Objects → Rollover Image (or click the Rollover Image button on the Insert bar's Common tab). Either way, the Insert Rollover Image dialog box appears (see Figure 6-21). Fill in the blanks like this:

- **Image name.** Type a name for the graphic, if you like. JavaScript requires *some* name for the rollover effect. If you leave this blank, Dreamweaver gives the image an unimaginative name—like Image2—when you insert a rollover. However, if you plan to later add additional interactive effects (Chapter 13), you may want to change it to something more descriptive, to make it easier to identify the graphic.



Insert Rollover Image

Image name: cosmo_tee

Original image: images/products/cosmo_tee.jpg

Rollover image: images/products/cosmo_buy.jpg

☑ Preload rollover image

Alternate text: The amazing CosmoFarmer T-Shirt

When clicked, Go to URL: products/buy_this_tee.html

Figure 6-21: *This box lets you specify the name, link, and image files to use for the rollover effect. "Preload rollover image" forces the browser to download the rollover image file along with the rest of the page, avoiding a delay when the mouse moves over the rollover image.*

- **Original image.** When you click the top Browse button, a dialog box appears, prompting you to choose the graphic you want to use as the "before" button—the one that first appears when the Web page loads. (See step 4 on page 201 for more on choosing graphics.)
- **Rollover image.** When you click the second Browse button, Dreamweaver prompts you to choose the "after" graphic image—the one that appears when your visitor's mouse rolls over the first one.
- **Alternate text.** You can give a text description for a rollover button just as you would for any graphic, as described on page 209.
- **When clicked, go to URL.** Rollover images are most commonly used for navigation elements that, when clicked, take the surfer to another Web page. In this box, you specify what happens when your visitor actually falls for the animated bait and *clicks* the rollover button. Click the Browse button to select a Web page from your site (see page 159 if you're not sure how to set a link), or, if you wish to link to another Web site, type an absolute URL (see page 154) beginning with *http://*.

When you click OK, you return to your document window, where only the "before" button image appears. You can select and modify it just as you would any image. In fact, it's just a regular image with a link and a Dreamweaver behavior attached.

To see your rollover in action, preview it in a Web browser by pressing the F12 key (Option-F12 on a Mac) or using the File → "Preview in Browser" command.

Tip: If you're previewing a page with rollover images in Internet Explorer for Windows, you may have trouble previewing your rollover images. If, when previewing your page, you see a yellow banner with the ominous statement that begins "To help protect your security…," you'll notice that the rollover image doesn't appear until you click the yellow banner and jump through a couple of hoops. Fortunately, this glitch affects only pages viewed locally–off your hard drive–and doesn't affect any of the thousands of visitors who come to your live site on the Internet. But if this still drives you crazy, Dreamweaver provides a simple solution: Choose Commands → "Insert Mark of the Web". Selecting this adds a little code to your page, which stops Internet Explorer from butting into your rollover business. When you're ready to move the page to the Web, you can remove this extra code by choosing Commands → "Remove Mark of the Web".

You can achieve the same effect, with a little more effort, using Dreamweaver's Swap Image behavior, discussed on page 526. In fact, this versatile behavior lets you create multiple, simultaneous image swaps where several images change at the same time.

Flash Buttons

While adding graphic rollovers to a Web page is a breeze, Dreamweaver's *Flash button* feature is even easier. Without any additional image-editing or animation software, you can bring your pages to life with interactive buttons that include animation and sound.

Flash buttons are predesigned buttons to which you can add your own labels and links. They can do much more than just change from a "before" look to an "after" look. For example, they may have *three* different looks (a third being a "pushed down" look that shows up when the button is clicked; see Figure 6-22). They may also play a sound or trigger a little animation.

You can download additional button styles from the Adobe Exchange, Adobe's one-stop source for Dreamweaver add-ons. See page 738.

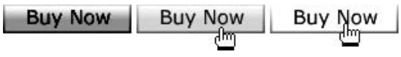


Figure 6-22:
When the button is just sitting on the page, it's in its "up" state (left); when the mouse rolls over it, you see its "over" state (middle). A Flash button usually changes appearance when clicked, showing the "down" state (right).

A Warning About Flash

It's important to understand, however, that Flash buttons (and Flash text, as discussed on page 235) are based on Adobe's Flash Web-animation technology. Flash is the standard format for Web animation, thanks to its small file size, crisp graphics, and interactive effects. But Flash files (called Flash movies) require special software to view; they won't work on your Web page unless each of your Web site visitors has installed the Flash plug-in.

Most Macintosh and Windows browsers now come with the Flash plug-in already installed, and Macromedia even offers versions for Linux and Solaris. (Adobe says that over 98 percent of Web browsers worldwide have at least the Flash 3 plug-in installed—which is fortunate, since Dreamweaver's Flash buttons work with version 3 and above of the Flash plug-in.)

Note: When previewing a page with a Flash movie in it using Internet Explorer for Windows, you may encounter the same difficulties previewing your page as you do with rollover images. The problem and the fix are described in the Tip on page 231.

However, to add more confusion to the situation, some new and popular browsers like Firefox don't have the Flash plug-in installed, so surfers have to make the trip to Adobe.com and download and install the plug-in to see your Flash content.

The point is that if you want to ensure that *everyone*, regardless of computer type, can savor your Web site to the same degree (without having to scurry off to another Web site to download the Flash plug-in), steer clear of Flash buttons. Furthermore, Flash movies can pose problems for disabled Web surfers, who can't see (or hear) any text in a Flash button, and some search engines that can't follow links embedded in Flash buttons, so the pages in your site may not all get added to a search engine's index.

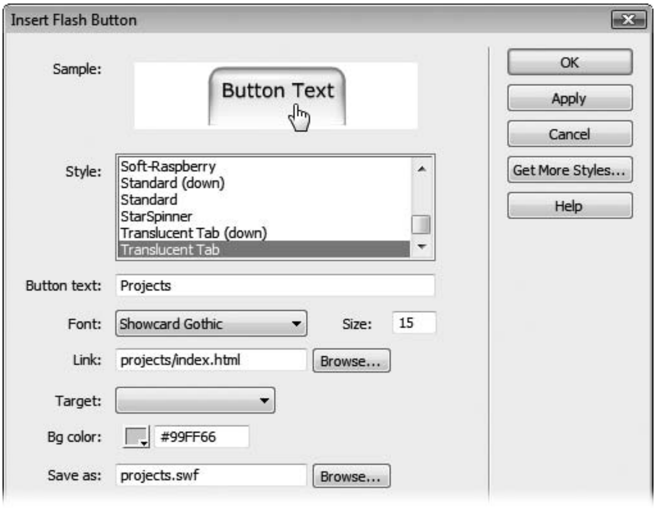
There's another problem with Flash buttons, text, and Flash movies in general that you should keep in mind—especially if you use the Spry Menu Bar discussed in the previous chapter. Flash movies can appear on top of pop-up menus and any HTML that's positioned on a Web page using CSS absolute positioning (see page 335 for more on this). This means if you add one of Dreamweaver CS3's fancy new Spry navigation menus, and place a Flash button, text, or movie below it, any pop-up menus might not work correctly. If a pop-up menu opens over a Flash movie, the movie shows through, as if it were actually floating on top the page and over the menu. You can't click links on the pop-up menu which are obscured by the Flash movie, which is a real usability bummer.

Adding a Flash Button to a Web Page

If you're undaunted by the fact that not everyone may be able to enjoy Flash buttons (they're kind of fun, after all), you're ready to proceed.

When you add a Flash button to a Web page, Dreamweaver creates and inserts a Flash movie file, ending in the extension .swf, into your Web page. You can preview the button within Dreamweaver and edit it at any time.

You perform most of the work in a single dialog box (Figure 6-23), which appears when you choose Insert → Media → Flash Button. You can also click the Flash Button object in the Insert bar's Media menu (Figure 6-24). Now you can choose the correct settings for the lively button you're about to create.



Sample:

Style: Soft-Raspberry, Standard (down), Standard, StarSpinner, Translucent Tab (down), Translucent Tab

Button text: Projects

Font: Showcard Gothic Size: 15

Link: projects/index.html

Target:

Bg color: #99FF66

Save as: projects.swf

Figure 6-23:
The Insert Flash Button window lets you select a style, set text, and add links and formatting to a Flash button. You can also go onto the Web and collect more button styles by clicking the Get More Styles button. When you do, your Web browser launches and opens the Adobe Exchange Web site. To find additional styles, from the Browse Extensions pop-up menu, choose Flash Media. See page 738 for more detail on using Adobe Exchange.

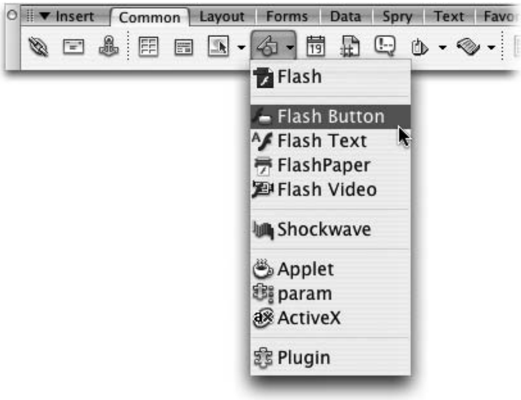


Figure 6-24:
The Flash button and Flash text icons appear in the Insert bar's Common tab, in the Media menu.

- **Style.** When you click a style name, an interactive sample appears at the top of the window. Try pointing to each sample as well as clicking it (and holding down your mouse button) to see all of its different looks. Stop when you find one you like.

- **Button text.** Most button styles have space for a short piece of text that appears as a label, right on the button. Into this box, type something informative about the button's function (Buy Now!) or its link (Home). Buttons have limited space; Dreamweaver ignores letters that don't fit on the button.

- **Font, Size.** You can select a font from the Font menu, and specify a size (in points) in the Size field. You can use any TrueType font you have installed on your computer; unfortunately, Flash buttons can't handle PostScript fonts.

- **Link.** If you want your button to link to another page when clicked, you can add either an absolute link or a document-relative link (see page 154). In the Link field, type an absolute link starting with *http://*. Alternatively, you can click the Browse button, and then select a page from your site to create a document-relative link.

  One thing to keep in mind about document-relative links in Flash buttons: The link information is embedded inside the Flash file. As a result, if you save the page you're working on to a different folder, the link may not work any more.

  That's why, if you hope to create one set of Flash navigation buttons and use them over and over on all the pages of your site, you should either keep all of your Web pages and Flash buttons in a single folder (a bit of an organizational mess if you've got a lot of Web pages, however), or use absolute links. Absolute links work regardless of the location of the Flash button file or the Web page the button is on. (*Site root–relative links* [see page 155] don't work at all in Flash movies.)

Note: Dreamweaver doesn't always update links in a Flash button when you move or rename the page to which the button links. Sometimes you can use Dreamweaver's Link Checker (see page 586) to find the broken links, but this doesn't always work. Your best bet, if you move the Flash button, is to edit the button as described below, and then reattach the link to the appropriate page.

- **Target.** If you want the linked page to open into a new browser window when clicked (leaving the current page in the current window), select the "_blank" option. The other choices on the Target menu are useful when working with frames, as described in the online chapter about frames, which you can find at *www.sawmac.com/missing/dw8/appc.pdf*.

- **Bg color.** Use this pop-up palette to choose a background color for your button.

  Flash buttons can't be transparent and, like all Web page graphics, must be only square or rectangular. In other words, if your Flash button is rounded (as most are), some areas around its corners obscure your Web page's background. What you're specifying here is a color for these exposed corner areas.

  By default, a Flash button's background is white, but if you plan to use a button on a page with a different colored background, set the button to match the page's own background color.

- **Save as.** Dreamweaver automatically gives the button a file name—something like *button1.swf*—but you can change the name, if you like, by typing it into this box.

  Flash button files must end in the extension *.swf* (the file extension used by Flash movies), even on a Macintosh.

  In some browsers, document-relative links don't work in Flash movies unless the Flash movie is in the same folder as the Web page that displays the Flash movie. Because of this, Dreamweaver doesn't let you save your movie into any folder besides the one that contains the page to which you're adding your Flash movie.

When you click OK, Dreamweaver creates the Flash movie, and saves it in the location you specified. Dreamweaver also inserts the movie into the Web page, with all the appropriate properties set in that page's HTML.

Editing Flash Buttons

Once you've added a button to a Web page, you can edit it by double-clicking it (or by selecting it in the document window, and then, in the Property inspector, clicking Edit). The Insert Flash Button dialog box (see Figure 6-23) reappears. Make any changes you wish to the button, and then click OK.

And since Flash buttons are simply Flash movies, you can change any of the *movie* properties—such as height, width, or background color—using the Property inspector (see Chapter 14 for more on using Flash movies in Web pages).

Previewing Flash Buttons

You can see the button in action by previewing the page in a Web browser by pressing F12 (Option-F12). Or, if you just want to see the different looks for the button, you can preview the button without leaving Dreamweaver. The following procedure may sound a little peculiar, but only until you remember that a Flash button is actually a little movie. Select the button, and then, on the Property inspector, click Play. The Flash button is now "playing." You can move your mouse over it, click it, and so on, savoring its animated smarts. To stop the button, click Stop in the Property inspector. (You can't double-click the button to edit it when it's playing.)

Flash Text

As noted in Chapter 3, Web browsers simply don't offer a lot of font choices. Even though it's possible to specify *any* font for your text, unless your visitors have the same font installed on their systems, they won't see the font you intended.

For this reason, Web designers either stick to the handful of fonts that are commonly installed on Windows and Macintosh computers, or they render type *as graphics* and insert them in the page. This workaround has its own downsides, of course: Graphics take longer to download, and you can't edit the text once you've frozen it into a picture.

In an effort to give designers greater choices, Dreamweaver offers Flash text. Based on Adobe's successful Flash technology, Flash text is a text-only Flash movie on your Web page that maintains the shape and quality of any TrueType font you have installed on your computer. It offers a number of benefits:

- Your visitors see exactly the same fonts you used when you created the Web page, even if they don't have the same fonts on their machines.
- The resulting Flash file is usually much smaller and of higher quality than the same text rendered as a graphics file.

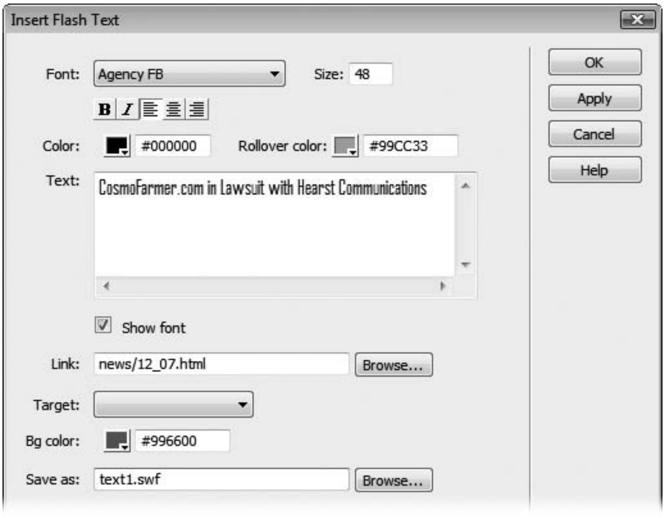
- Since Flash uses *vectors*—mathematical formulas—to describe an image's shape and color, you can resize Flash text without degrading its quality.

Unfortunately, Flash text has a downside, too: Like Flash buttons, Flash text requires the Flash plug-in. As discussed on page 231, some visitors may not be able to enjoy your handiwork.

Tip: For a method that works even when the Flash plug-in isn't installed (and also works with screen readers used by visually impaired Web surfers), check out a technique called sIFR 2.0 at *www.mikeindustries.com/sifr/*. Unfortunately, it's not integrated with Dreamweaver (meaning you'll have a little extra learning to do to get it working).

Adding Flash Text to a Web Page

Inserting Flash text is a combination of adding text and creating a Flash movie. Because you have so many choices, working with Flash text takes longer than most Dreamweaver processes, although it's no harder. Once again, it all happens in a single dialog box (Figure 6-25).



Insert Flash Text

Font: Agency FB Size: 48

Color: #000000 Rollover color: #99CC33

Text: CosmoFarmer.com in Lawsuit with Hearst Communications

☑ Show font

Link: news/12_07.html

Target:

Bg color: #996600

Save as: text1.swf

Figure 6-25:
The Flash text tool creates small text-only Flash movies that you can include on your Web pages. As with Flash buttons (see page 231), you can make the Flash text link to another Web page when clicked, either in your site or elsewhere on the Web.

To create Flash text, choose Insert → Media → Flash Text (or click the Flash Text icon on the Insert bar's Media menu [Figure 6-24]). Now choose your settings.

- **Font, Size.** You can select any TrueType font you have installed on your computer. As noted earlier, Flash text doesn't work with PostScript fonts. Type a font size, measured in points, in the Size field.

  Unlike text in a Web page, which, thanks to CSS, you can specify using pixels, ems, percentages and so on (see page 107), Flash text uses the traditional typographic units of measurement, *points*. A size of 24 points is good for headlines, but you can specify a much larger one if you like.

- **B, I, alignment.** Using the tools just below the Font menu, you specify type-style attributes. For example, you can apply bold or italics by clicking the B or I buttons. You can also set the alignment of the text—left, right, or centered—by clicking one of the three alignment buttons. The alignment you choose doesn't affect how the text is aligned on your Web page; it determines how the text is aligned *inside* the finished Flash movie. You don't see any effect if your text is just a single line.

- **Color.** Use this pop-up palette to choose a color for your text. (See page 49 for details on using the Dreamweaver color picker.)

- **Rollover color.** Flash text can have one basic dynamic effect: It can change color when a viewer moves her mouse over it. This effect is particularly useful if you wish to use the text as a link, because rollover effects are commonly used to indicate links. Use the "Rollover color" pop-up palette to specify the color the text becomes when the cursor points to it. If you don't want any rollover effect, leave this option blank.

- **Text.** The Text field displays your words in whatever font you've chosen. (If you turn off Show Font, on the other hand, you see only some generic font as you edit the text, but the software may feel more responsive as you edit.)

  As you type, you must manually enter a line break—by pressing Enter (Return)—wherever you want a line of text to end and a new line to begin. If you don't, Dreamweaver creates a wide (perhaps very wide, depending on how much text you have) Flash text movie. That's one reason it's usually better to use Flash text for short pieces of text like headlines or links.

- **Link.** You can use Flash text as a navigational element by attaching a link to it. In conjunction with a rollover color, you can use this feature to create simple dynamic navigation. In other words, if your Flash text says *Home*, you can set it up so that it's a button link back to your home page. (The same caveats about links and Flash buttons, discussed on page 234, apply to links and Flash text.)

- **Target.** If you decide to turn your Flash text into a link, you can choose a *target* for that link using the Target pop-up menu, if appropriate. As noted earlier, select the "_blank" option if you want the link to produce a new browser window when clicked. Otherwise, use this pop-up menu only when working with frames, as described in the online chapter about frames, which you can find at *www.sawmac.com/missing/dw8/appc.pdf*.

- **Bg color.** The Flash text you're creating is a rectangular text block, but the spaces between your lettering and the edge of the block aren't transparent; in fact, they start out white. The result—a bunch of white rectangles—looks pretty goofy if the background of your Web page is, say, fuchsia.

  To make it look like the Flash lettering is sitting directly on your Web page's background (without the white rectangles), choose the background color that matches your Web page's background.

- **Save as.** Type a name for your Flash text movie here. The Flash text tool stores the Flash movie in your site folder, within the folder that contains the Web page it's on. If you wish to save it in some other folder (such as an Images folder), click the Browse button, and navigate to it. If you've added a link to the text, however, save the Flash text movie in the same place as the Web page. If you don't, the link may not work in all browsers.
- **Apply.** The Apply button creates the Flash file and shows you the text on the Web page, while leaving the dialog box open. The advantage here is that you can make adjustments before exiting the dialog box.

When you click OK, Dreamweaver creates a Flash file and inserts it on your Web page.

Editing Flash text

To edit Flash text you've created, open the Insert Flash Text dialog box using any of these procedures:

- In the document window, double-click the Flash text block.
- Select the Flash text, and then, in the Property inspector, click the Edit button.
- Right-click (Control-click) the Flash text, and then, from the contextual menu, choose Edit.

Once the dialog box is open, you can make any changes you wish to the settings or text.

Resizing Flash text

You can freely resize Flash text in the document window, without ever worrying that it won't look good at one point size or another. Just select the Flash text block, and then use either of these techniques:

- Type new dimensions into the Property inspector's Width and Height fields. You can set the size using either pixels or percentages.
- Drag one of the square handles on the edges of the Flash object. To avoid distorting the text as you resize the Flash object, Shift-drag the lower-right handle.

You can always return the Flash object to its original size by clicking the Reset Size button on the Property inspector.

Tutorial: Inserting and Formatting Graphics

In this tutorial, you'll learn how to insert a photo, add a rollover image, and apply CSS to improve the look of a Web page.

Note: You'll need to download the tutorial files from *www.sawmac.com/dwcs3/* to complete this tutorial. See the note on page 39 for more details.

Once you've downloaded the tutorial files and opened Dreamweaver, define a new site as described on page 28: Name the site *Images*, and then select the Chapter06 folder (inside the MM_DWCS3 folder). (In a nutshell: choose Site → New Site. In the Site Definition window, click the Advanced tab, type *Images* into the Site Name field, click the folder icon next to the Local Root Folder field, navigate to and select the Chapter06 folder, and then click Choose or Select. Finally, click OK.)

Adding a Photo

Once again, you'll be working on a page from CosmoFarmer.com.

1. **Choose File → Open; click the Site Root button (bottom left of the open file window).**

   You'll start where you left off from last chapter's tutorial.

2. **Double-click the file named *confessions.html*. Click directly before the letter M in the first paragraph, after the headline "Confessions of an Apartment Farmer." (In other words, place the insertion point before the words "Mauris ipsum".)**

   You'll add a photo to help illustrate this article.

3. **Choose Insert → Image. In the Select Image Source window, navigate to the images folder, and then select the file *apartment_farming.jpg*. Click OK or Choose to insert the image.**

   If the Image Tag Accessibility window appears, type Apartment Tractor in the alternate text box, and then click OK.

   A big photo appears on the page (see Figure 6-26). Unfortunately, all the story's text appears below the image, leaving a large and unattractive white space to the image's right. To fix this, you'll create a style to move the photo to the right side of the page, and allow text to wrap around it.

4. **Make sure the CSS Styles panel is open (Window → CSS Styles); click the Create New Style button (the + button) in the panel's bottom right.**

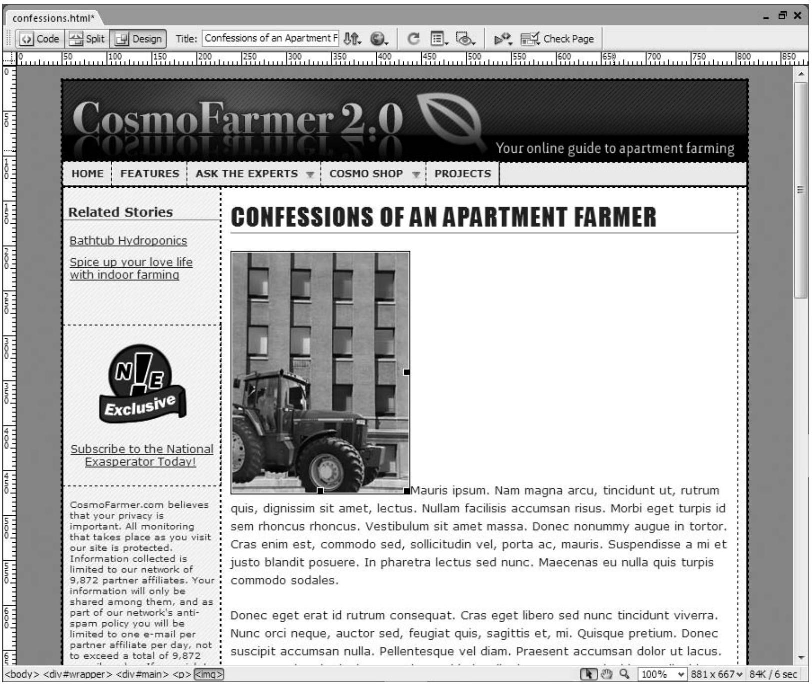
   The New CSS Rule window appears. You'll create a class style to apply to the image, and store the CSS information into an already attached external style sheet.

5. **Select the Class button; type *.photoRight* in the name box; make sure *feature.css* is selected in the Define In menu, and then click OK.**

   Class names should be descriptive; in this case, photoRight is a good name to identify a style that aligns a photo to the right.

   The CSS Rule Definition window appears. Time to add a decorative border.

6. **Select Border from the left hand list of categories; choose "solid" from the top Style menu; type *1* in the Width box; select black (or any color you'd like) from the Color box.**



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CONFESSIONS OF AN APARTMENT FARMER

Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus rhoncus. Vestibulum sit amet massa. Donec nonummy augue in tortor. Cras enim est, commodo sed, sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo blandit posuere. In pharetra lectus sed nunc. Maecenas eu nulla quis turpis commodo sodales.

Donec eget erat id rutrum consequat. Cras eget libero sed nunc tincidunt viverra. Nunc orci neque, auctor sed, feugiat quis, sagittis et, mi. Quisque pretium. Donec suscipit accumsan nulla. Pellentesque vel diam. Praesent accumsan dolor ut lacus.

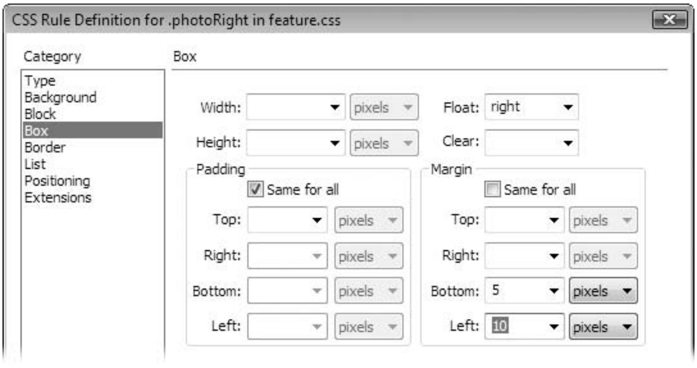
<body> <div#wrapper> <div#main> <p> <img>

Figure 6-26:
An image is called an "inline" element in HTML—this just means it can sit right next to letters on a line of text. In other words, an image acts sort of like a really, really tall letter. Unfortunately, that phenomenon usually leaves large areas of white space on the page.

Leave all three "Same for all" checkboxes turned on to make sure the border is applied to all four sides of the photo. Next, you'll move the photo to the right and force the text to wrap around it.

7. **Click the Box category; select Right from the Float menu; uncheck the "Same for all" box for the Margin settings, type *5* in the Bottom margin box, and *10* in the Left margin box.**

   The window should look like Figure 6-27. Now it's time to finish and apply the style.



Box

Float: right

Padding: ☑ Same for all

Margin: □ Same for all

Bottom: 5 pixels

Left: 10 pixels

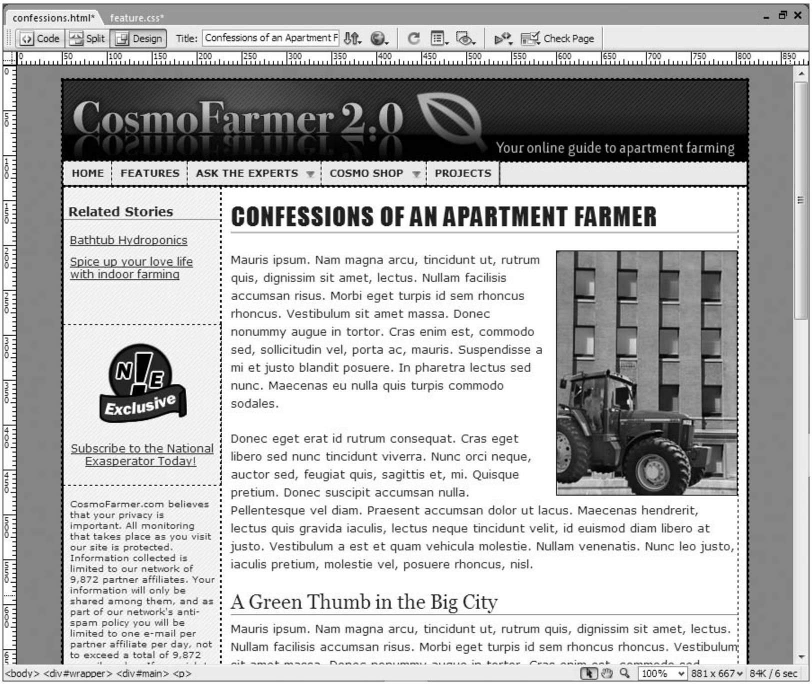
Figure 6-27:
When you float an image to the right (or left), it's a good idea to add some margin to the side of the image around which text will wrap. This adds white space between the text and graphic, making the design feel less cramped and cluttered.

8. **Click OK to finish the style.**

   Because you just created a class style, it's formatting power won't take affect until you've applied it to the image.

9. **Select the photo on the page, and then, from the Property inspector's Class menu, choose *photoRight*.**

   The newly inserted image moves to the right, the text wraps around it, and a border appears (see Figure 6-28).



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Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus rhoncus. Vestibulum sit amet massa. Donec nonummy augue in tortor. Cras enim est, commodo sed, sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo blandit posuere. In pharetra lectus sed nunc. Maecenas eu nulla quis turpis commodo sodales.

Donec eget erat id rutrum consequat. Cras eget libero sed nunc tincidunt viverra. Nunc orci neque, auctor sed, feugiat quis, sagittis et, mi. Quisque pretium. Donec suscipit accumsan nulla.
Pellentesque vel diam. Praesent accumsan dolor ut lacus. Maecenas hendrerit, lectus quis gravida iaculis, lectus neque tincidunt velit, id euismod diam libero at justo. Vestibulum a est et quam vehicula molestie. Nullam venenatis. Nunc leo justo, iaculis pretium, molestie vel, posuere rhoncus, nisl.

A Green Thumb in the Big City

Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus rhoncus. Vestibulum

Figure 6-28:
A floated image, like the tractor pictured here, adds a professional, magazine-like quality to a Web page.

Inserting a Rollover Image

The National Exasperator logo in the left sidebar of the page is actually a link to the National Exasperator site. Because the entire point of that image is to encourage people to subscribe, the creative marketer inside you realizes that an eye-catching rollover effect is called for.

1. **Select the bright red "exclusive" graphic on the left of the Web page. Hit Delete to remove the image.**

   Now the cursor is blinking in the empty space above the text, "Subscribe to the National Exasperator Today!" You'll insert a rollover image here.

2. **Choose Insert → Image Objects → Rollover Image.**

The Insert Rollover Image window appears (see Figure 6-29).

3. **In the name box, type *nationalex*.**

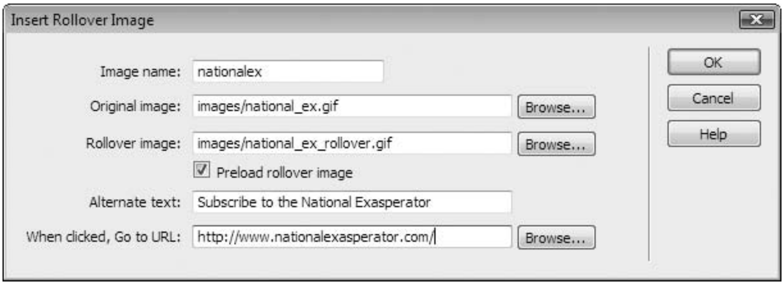
   The name you give here won't appear anywhere on the page. It's just an internal name—a way for the JavaScript programming that triggers the image rollover to identify and "talk" to this graphic.

4. **Click the first Browse button, and then double-click the *national_ex.gif* file in the images folder; click the second Browse button, and then double-click the *national_ex_rollover.gif* file.**

   You've just selected the two files used for the rollover effect—the first appears when the page loads, and the second when a visitor moves her mouse over the image. In order for the rollover to work, you need to supply a link (and while you're at it, some alt text is a good idea, too).

5. **Type *Subscribe to the National Exasperator* in the Alternate text box, and type *http://www.nationalexasperator.com/* in the "When clicked, Go to URL" box.**

   The window should now look like Figure 6-29. Everything's in place, so time to finish the rollover and test it.



Insert Rollover Image

Image name: nationalex

Original image: images/national_ex.gif

Rollover image: images/national_ex_rollover.gif

☑ Preload rollover image

Alternate text: Subscribe to the National Exasperator

When clicked, Go to URL: http://www.nationalexasperator.com/

Figure 6-29: *In one window, you can set up everything you need to add dynamic rollover images to a page. Dreamweaver handles all the messy JavaScript programming that makes the whole thing work.*

6. **Click OK to insert the image. Save, and then preview the page (press F12 [Option-F12]).**

   In your Web browser, move your mouse over the National Exasperator logo, and watch the graphic change.

Using Background Images

The HTML <img> tag isn't the only way to add an image to a Web page. You can also use the CSS *background-image* property to give any HTML tag a graphical backdrop. People often use this technique for adding an interesting pattern, design, or image to a Web page.

1. **Make sure the CSS Styles panel is open (Window → CSS Styles), and that the All button at the top of the panel is selected.**

The All button lets you view all the styles attached to a page. In this case, there are two external style sheets—*feature.css* and *SpryMenuBarHorizontal.css*. You're going to edit an already existing style in the *feature.css* file.

2. **If you can't see any styles listed under *feature.css* in the Styles panel, click the + (flippy triangle on Mac) to the left of *feature.css* to expand the list. At the top of the list, double-click the style named *body*.**

   The CSS Rule Definition window opens.

3. **Click the Background category; change the background color to black.**

   The background color was originally a light gray. However, the new image you're about to place in the background of this page fades to black at its bottom. To make the rest of the page match that fading color, you need to make the background black.

4. **Click the Browse button, navigate to the images folder, and then double-click the *bg-image.gif* file.**

   This particular image is a repeating pattern that fades to black at the bottom. You can actually preview its appearance before finishing the style.

5. **Click the Apply button.**

   The image is applied to the page without closing the Rule Definition window (depending on the size of your monitor, you may need to move this window a bit to see the effect on the page). Normally, background images tile, left to right and top to bottom. In this case, on a long Web page, the graphic pattern, which fades from light to black, repeats at the bottom of the page, creating a distracting appearance. Fortunately, with CSS you control how an image is tiled. Here you just want the image to tile from left to right and not top to bottom.

6. **From the Repeat menu, choose Repeat-X.**

   The window should now look like Figure 6-30. The Repeat-X option tiles the graphic *only* from left to right; it doesn't tile the image from top to bottom.

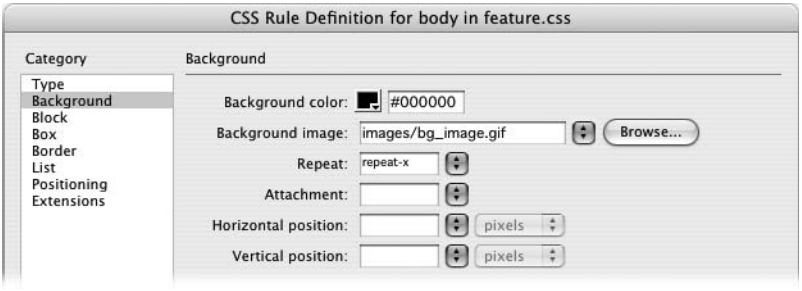
7. **Click OK to close the window, and finish editing the style.**

   If you preview the page in a Web browser now, you'll see the pattern span the entire width of the browser window (try expanding the browser window to its maximum width), and then fade to blackness about half-way down the page. The black color is the background of the page.

   You're not limited to adding an image to the background of a page. You can add background images to nearly any HTML tag. In the next part of this tutorial, you'll add a decorative graphic to the first headline in the left sidebar.

8. **In the CSS Styles panel, double-click the style named *#sidebar h2*.**

   The CSS Rule Definition window opens. *#sidebar h2* is an example of an advanced type of style called a *descendent selector*. You'll learn about these on page 285, but briefly, this particular style formats any h2 tag that appears inside



CSS Rule Definition for body in feature.css

Background

Background color: #000000

Background image: images/bg_image.gif

Repeat: repeat-x

Attachment:

Horizontal position:

Vertical position:

Figure 6-30: *You'll often choose both a background color and a background image, especially when you choose any option but "Repeat" from the Repeat menu. Although the background image covers the background color, if the image doesn't fill the entire space, the background color appears where the image ends. In this case, the background image just repeats from left to right, and when the content on the page is taller than the height of the background image, the black color appears.*

another tag that has an ID value of *sidebar*. On this page, all the content in the left sidebar is contained within a HTML <div> tag.

9. **In the CSS Rule Definition window, select the *Background* category; click the Browse button, navigate to the *images* folder, and then double-click the file *bg_relatedhead.gif*.**

   The image is a simple icon of a pencil on a pad of paper. It should appear only once at the left side of the headline; because the normal behavior of a background image is to repeat indefinitely, you need to make sure the graphic appears only once.

10. **From the Repeat menu, choose no-repeat.**

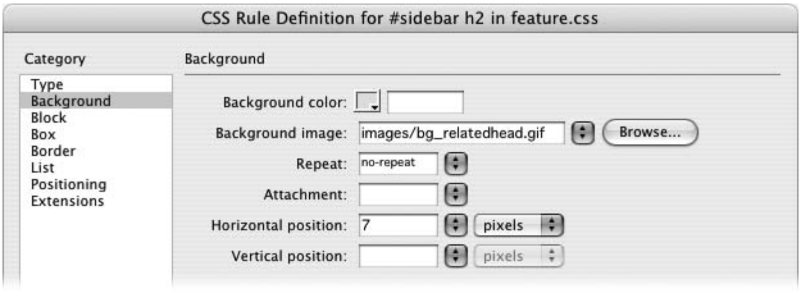
    Normally a background image is placed in the top left corner of whatever the image is added to—for example, the top left corner of the Web page, or in this case, the top left corner of the *h2* tag. For precise placement of the background image, you can specify both a horizontal and vertical position. Here, you'll position the image 7 pixels from the left edge of the sidebar so it aligns with the rest of the text in the sidebar.

11. **In the Horizontal Position box, type *7*.**

    The window should look like Figure 6-31.

12. **Click the Apply button to see the effect.**

    The Apply button lets you see how the style is shaping up. If you look at the "Related Stories" heading in the left sidebar, you see that the text overlaps the image. In addition, because the graphic is taller than the text, the bottom part of the image is clipped off. You can fix both these problems by adding a little padding.



CSS Rule Definition for #sidebar h2 in feature.css

Background

Background color:

Background image: images/bg_relatedhead.gif

Repeat: no-repeat

Attachment:

Horizontal position: 7 pixels

Vertical position: pixels

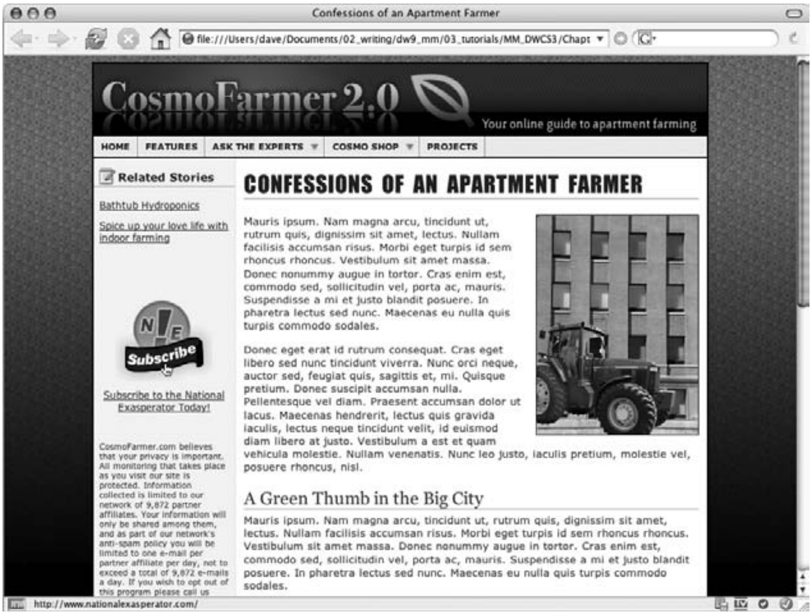
***Figure 6-31:** Selecting no-repeat from the Repeat menu displays the image just once in the background instead of tiling it. The Horizontal and Vertical position options work well for this situation, since they let you accurately place that single image.*

13. **Click the Box category; under the Padding area, type *3* in the Top box, type *3* in the bottom box, and then change the left padding to 30.**

    Padding is the space between the content inside a tag (like the text in the heading) and the outer edge of the tag. (See Figure 9-11 on page 323 for a visual of how this works.) It lets you add space between a borderline and text; and, here, the padding makes room for the background image. (Padding settings don't affect background images.)

14. **Click OK to finish the style, and then preview the page in a Web browser.**

    Your finished design should look like Figure 6-32. You'll find a completed version of this tutorial in the Chapter_06_finished folder that accompanies the downloaded tutorial files.



Confessions of an Apartment Farmer

file:///Users/dave/Documents/02_writing/dw9_mm/03_tutorials/MM_DWCS3/Chapt

CosmoFarmer 2.0

Your online guide to apartment farming

CONFESSIONS OF AN APARTMENT FARMER

Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus rhoncus. Vestibulum sit amet massa. Donec nonummy augue in tortor. Cras enim est, commodo sed, sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo blandit posuere. In pharetra lectus sed nunc. Maecenas eu nulla quis turpis commodo sodales.

Donec eget erat id rutrum consequat. Cras eget libero sed nunc tincidunt viverra. Nunc orci neque, auctor sed, feugiat quis, sagittis et, mi. Quisque pretium. Donec suscipit accumsan nulla. Pellentesque vel diam. Praesent accumsan dolor ut lacus. Maecenas hendrerit, lectus quis gravida iaculis, lectus neque tincidunt velit, id euismod diam libero at justo. Vestibulum a est et quam vehicula molestie. Nullam venenatis. Nunc leo justo, iaculis pretium, molestie vel, posuere rhoncus, nisl.

A Green Thumb in the Big City

Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus rhoncus. Vestibulum sit amet massa. Donec nonummy augue in tortor. Cras enim est, commodo sed, sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo blandit posuere. In pharetra lectus sed nunc. Maecenas eu nulla quis turpis commodo sodales.

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http://www.nationalexasperator.com/

***Figure 6-32:** Photos, icons, and other graphic elements add visual interest to any Web page, while rollover images (the "Subscribe" button in the left column) add interactivity and a sense of fun.*

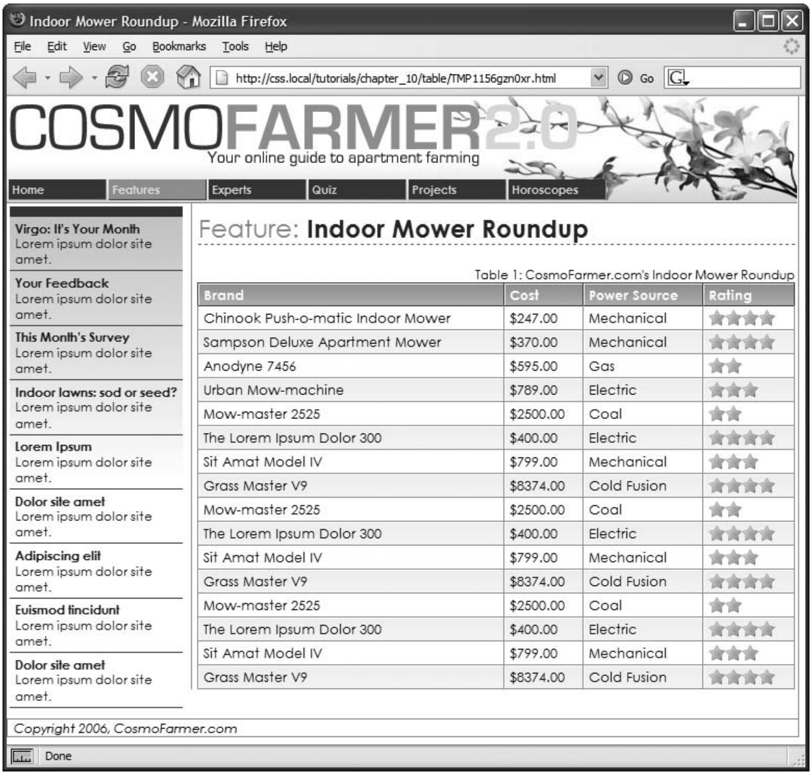
CHAPTER
7

Tables

The HTML <table> tag has had a somewhat infamous existence in the world of Web design. It was originally intended to present scientific research in a spreadsheet-like manner. But as the Web grew, graphic designers got into the game of Web design. They wanted to recreate the types of layouts seen in magazines, books, and newspapers (in other words, they wanted to make good-looking Web sites). The most reliable tool at the time was the <table> tag, which designers morphed into a method for creating columns, sidebars, and, in general, precisely positioning elements on a page.

The wheel has turned again. Today, with nearly everyone on the planet using advanced Web browsers like Internet Explorer 6 and 7, Firefox, Safari, and Opera, a newer method—CSS-based layout—is now the most common technique for professional Web design. Table-based layout is an aging dinosaur that produces pages heavy with code (meaning they download slower), are hard to update, and are hostile to search engines and alternative browsers such as screen readers, mobile phones, and text-only Web browsers.

This chapter shows you how to use tables for their intended purpose: displaying data and other information that's best presented in rows and columns (see Figure 7-1). If you're a long-time Web designer who still uses tables for page layout, you can still use Dreamweaver and the instructions in this chapter to continue that technique. However, you're better off in the long run making the switch to CSS-based layout. Dreamweaver CS3's advanced CSS tools and its new CSS Layouts can make building these types of pages much simpler. You'll learn all about CSS layout in Chapter 9.


Indoor Mower Roundup - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://css.local/tutorials/chapter_10/table/TMP1156gzn0xr.html
Go
COSMOFARMER 2.0
Your online guide to apartment farming
Home
Features
Experts
Quiz
Projects
Horoscopes
Done

Virgo: It's Your Month
Lorem ipsum dolor site amet.

Your Feedback
Lorem ipsum dolor site amet.

This Month's Survey
Lorem ipsum dolor site amet.

Indoor lawns: sod or seed?
Lorem ipsum dolor site amet.

Lorem Ipsum
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Dolor site amet
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Dolor site amet
Lorem ipsum dolor site amet.

Feature: **Indoor Mower Roundup**

Table 1: CosmoFarmer.com's Indoor Mower Roundup

Brand	Cost	Power Source	Rating
Chinook Push-o-matic Indoor Mower	$247.00	Mechanical	★★★★
Sampson Deluxe Apartment Mower	$370.00	Mechanical	★★★★
Anodyne 7456	$595.00	Gas	★★
Urban Mow-machine	$789.00	Electric	★★★
Mow-master 2525	$2500.00	Coal	★★
The Lorem Ipsum Dolor 300	$400.00	Electric	★★★★
Sit Amat Model IV	$799.00	Mechanical	★★★
Grass Master V9	$8374.00	Cold Fusion	★★★★
Mow-master 2525	$2500.00	Coal	★★
The Lorem Ipsum Dolor 300	$400.00	Electric	★★★★
Sit Amat Model IV	$799.00	Mechanical	★★★
Grass Master V9	$8374.00	Cold Fusion	★★★★
Mow-master 2525	$2500.00	Coal	★★
The Lorem Ipsum Dolor 300	$400.00	Electric	★★★★
Sit Amat Model IV	$799.00	Mechanical	★★★
Grass Master V9	$8374.00	Cold Fusion	★★★★

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Figure 7-1:
You can do all your page layout and design with CSS, and use tables for what they're intended–displaying rows and columns of information. The list of products in the center of this page is nestled inside a basic <table> tag, while the rest of the page is laid out using CSS.

Note to Dreamweaver 8 veterans: Like the Web design industry in general, Dreamweaver CS3 is also moving away from supporting table-based layout. Table-based "Layout mode" is no longer available from the Insert bar. You can still use it, but you have to choose View → Table Mode → Layout Mode to get to this feature.

Table Basics

A table is a grid of rows and columns that intersect to form *cells*, as shown in Figure 7-2. If you've used a spreadsheet before, an HTML table should feel familiar. A row usually represents a collection of data for a single item. In Figure 7-1, each row holds data for one particular mower. A column represents data of a particular type. The first column contains the name of each mower, while the second column displays a mower's cost. A cell, then, holds one piece of data for a particular row: like the exact price of the Chinook Push-O-Matic Lawn Mower.

Two different types of cells exist, each represented by a different HTML tag. A table cell that contains data—$247.00, for instance—is created with the <td> or *table data* tag. Browsers display text inside a <td> aligned to the left edge of the

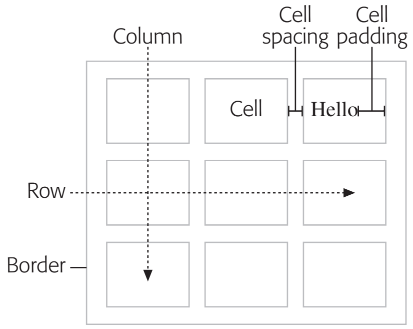


Figure 7-2:
Rows, columns, and cells make up a table. Cell spacing specifies how many pixels of space appear between cells. Cell padding, on the other hand, provides a space between the four sides of the cell and the cell's content.

cell. A cell that holds a label announcing the type of information in a row or column is called a <th> or *table head* tag. Text inside a <th> tag appears centered and in boldface. In Figure 7-1, all the cells in the table's top row are table headers, since they identify what type of data appears in the cells below: Brand, Cost, and so on.

Inserting a Table

One of the main problems with an HTML table is that it takes a lot of HTML code to make one. Not only is this one reason why CSS is a better page layout method, it's also a good reason to use Dreamweaver to create a table. If you've ever hand-coded an HTML table, you know what a tangled mess of code it requires: One typo in your HTML can sink your whole page. Fortunately, Dreamweaver makes creating an HTML table a simple process.

1. **Place the insertion point in the document window where you'd like to insert a table.**

   You can add a table anywhere you can add graphics or text. You can even add a table inside *another* table, by clicking inside a table cell.

2. **Choose Insert → Table.**

   You can also click the Table button on the Insert bar. It appears under both the Common tab and the Layout tab. You can also press Ctrl+Alt+T (⌘-Option-T). Either way, the Table dialog box opens (see Figure 7-3).

3. **Using the Rows and Columns fields, specify how many rows and columns you want in your table.**

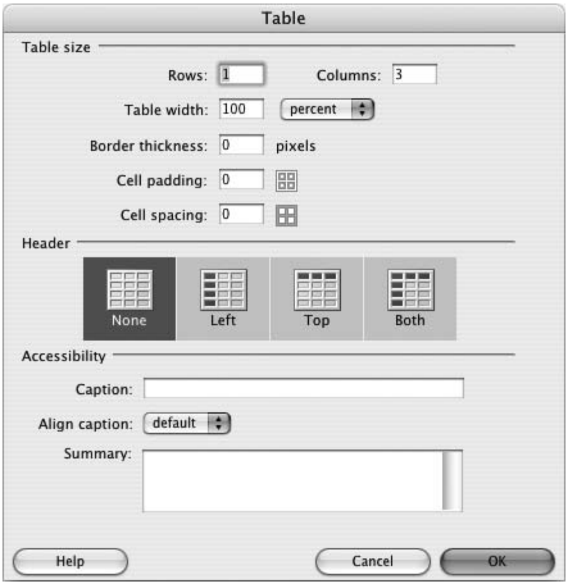
   Don't fret too much over your estimate, since you can always add or remove rows or columns later.

4. **Type the amount of cell padding, in pixels, you want for the table.**

   Cell padding is the margin inside the cell—the space from the edge of a cell to its contents (see Figure 7-2). Unfortunately, this property applies to *every* cell in a table (it also applies equally to all four sides of the cell). You can't add this space to an individual cell in a table, or have different amounts of padding (for example, 10 pixels of space on the left side of the cell, but only 5 pixels at the top) unless you use the CSS *padding* property as described on page 322. People often either type 0 or leave this box empty, and then use the CSS *padding* property to control padding on individual table cells (via the <td> and <th> tags).

5. **Type the amount of cell spacing, in pixels, you want for the table.**

   Cell spacing specifies how many pixels of space separate one cell from another (see Figure 7-2). Again, this property applies to every cell in a table, but, unlike padding, there's no effective CSS equivalent. So if you do wish to insert space between each cell, then you should add a value here (you can change this later, as described on page 254). Type *0* to remove any space between cells. (Note that leaving these fields empty isn't the same as setting them to zero; see Figure 7-3.)



Table

Table size

Rows: 1 Columns: 3

Table width: 100 percent

Border thickness: 0 pixels

Cell padding: 0

Cell spacing: 0

Header

[✓ None] Left Top Both

Accessibility

Caption:

Align caption: default

Summary:

Figure 7-3:
The Table dialog box lets you control a table's appearance. Leaving the Cell Padding and Cell Spacing fields empty isn't the same as setting them to 0. If these properties are empty, most Web browsers insert 1 pixel of cell padding and 2 pixels of cell spacing. If you notice unwanted gaps between cells in a table or between content in a table and the cell's edges, empty settings here are the likeliest culprit. To truly leave zero space, set Cell Padding and Cell Spacing to 0. (Dreamweaver remembers the settings you use. When you use the Insert Table dialog box again, it starts with the same settings you entered previously.)

6. **Using the "Table width" field, specify how wide you want the table to be (in units that you specify using the pop-up menu).**

   Tables can have either a specified, fixed minimum width, or they can take up a specified percentage of the space available on the page. To set a fixed width, choose Pixels as the unit of measurement, and then, in the "Table width" field, type a pixel amount. Fixed-width tables remain the same size regardless of the browser window's size.

   Percentage widths let tables grow or shrink relative to the space available. In other words, if you place a 100% wide table on a blank Web page, the table stretches all the way across your visitor's browser window, no matter how wide or narrow it is. But the percentage isn't always based on the overall browser window width. If you place a table *inside* another object—either another table cell, or a <div> tag (see page 313)—that has a set width, Dreamweaver calculates the percentage based on that object. Say you have a sidebar on a page, and the sidebar is 300 pixels wide; if you insert an 80% wide table inside the sidebar, then the table takes up 80 percent of 300 pixels, or 240 pixels.

Note: Sometimes Internet Explorer 6 for Windows treats 100 percent as a little bigger than 100 percent. This confounding behavior can cause 100% wide tables in CSS layouts to not fit (usually forcing the table to jump down below most of the page design). Using a slightly smaller percentage like 99% or 98% usually fixes this glitch.

7. **In the "Border thickness" box, type a number, in pixels, for the border.**

   If you don't want a border, type *0*. Dreamweaver uses dotted lines to help you identify rows, columns, and cells whose border is 0. (The dotted lines won't appear on the finished Web page.) Again, CSS offers a much better method of adding borders (see page 215).

8. **Using the buttons in the middle of the dialog box, select a Header option.**

   The Header property inserts the <th> tag to create the cells in the top row or left-hand column. <th> is a table header tag; it indicates that a cell is a *headline* for a column or row of data, and identifies the kind of content that appears in the cells below the column headline or to the right of the row headline. A table that displays a company's yearly sales figures, broken down by region, might have a top row of headers for each year ("2005," "2006," "2007"), while the left column would have table headers identifying each region ("Northwest," "West," "South," and so on).

   The only visible change you get with a <th> tag is that Web browsers display header cell text in bold type and center aligned. However, this option also makes the table more accessible by telling screen readers (used by the visually impaired) that the cell serves as a header for the information in the column. (You can always change the look of these cells using CSS; just create a style for the <th> tag as described on page 117).

9. **In the bottom section of the Table dialog box, add any Accessibility settings you wish to use.**

   In the Caption box, type information identifying the table; it appears above (centered, left, or right) or below the table, depending on what you select in the "Align caption" menu. Use the Summary box when you want to explain a particularly complex data table. This information doesn't show up in a browser window; it's intended to clarify the contents of a table to search engines and screen readers. Basic data tables (just simple rows and columns) don't need a summary; search engines and screen readers can understand them just fine. It's only when you create a complex table with merged cells (see page 264) and multiple levels of headers that you might want to fill out the summary.

For more information on these options and to get a complete rundown on table accessibility, visit *www.w3.org/TR/WCAG10-HTML-TECHS/#tables*.

10. **Click OK to insert the table.**

Once you've added a table to a page, you can begin filling the table's cells. A cell works like a small document window; you can click inside it and add text, images, and links using the techniques you've already learned. You can even insert a table inside a cell (a common technique in the bad old days of table-based layout).

To move the insertion point from one cell to the next, press Tab. When you reach the last cell in a row, the Tab key moves the insertion point to the first cell in the row below. And if the insertion point is in the last *cell* of the last row, pressing Tab creates a new row at the bottom of the table.

Shift+Tab moves the cursor in the *opposite* direction—from the current cell to a cell to the left.

Selecting Parts of a Table

Tables and their cells have independent properties. For example, a table and a cell can have different alignment properties. But before you can change any of these properties, you must first *select* the tables, rows, columns, or cells you want to affect.

Selecting a Table

You can select a table in the document window in a number of ways:

- Click the upper-left corner of the table, or anywhere on the bottom edge. (Be careful using the latter technique, however. It's easy to accidentally *drag* the border, adding a height property to the table in the process—an attribute that isn't valid HTML.)
- Click anywhere inside the table, and then select the <table> tag in the document window's status bar (see page 22 to learn about the Tag selector).
- Click anywhere inside the table, and then choose Modify → Table → Select Table.
- Right-click (Control-click) inside a table, and then, from the contextual menu, choose Table → Select Table.
- If the insertion point is in any cell inside the table, pressing Ctrl+A (⌘-A) twice selects the table.

Once selected, a table appears with a thick black border and three tiny, square resize handles—at the right edge, bottom edge, and lower-right corner.

Selecting Rows or Columns

You can also select an entire row or column of cells by doing one of the following:

- Move the cursor to the left edge of a row or the top edge of a column. When it changes to a right- or down-pointing arrow, click, as explained in Figure 7-4.

- Click a cell at either end of a row, or the first or last cell of a column, and then drag across the cells in the row or column to select them.
- Click any cell in the row you wish to select, and then click the <tr> tag in the Tag selector. (The <tr> tag is how HTML indicates a table row.) This method doesn't work for columns.

When a cell is selected, it has a dark border around it. When multiple cells are selected, each has a dark border (see Figure 7-4).

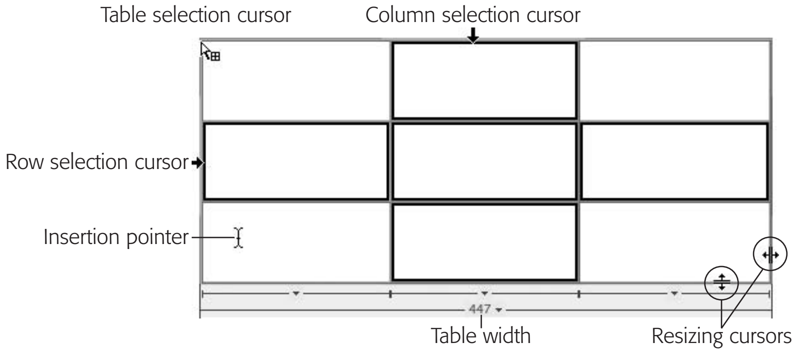


Figure 7-4: *When you're working with tables, the cursor can take on many different roles. The Table selection cursor lets you select the entire table. When the cursor turns into an arrow (pointing either down or to the right), you can click to select a column or row of cells. The insertion-point cursor lets you click to insert content into a cell. When you pass the cursor over a resize handle, it becomes a resize icon, which you can drag to resize rows, columns, or the entire table.*

Selecting Cells

To select one or more cells:

- Drag over adjoining cells. A solid black border appears around a cell when it's selected.
- To select several cells that aren't necessarily adjacent, Ctrl-click (⌘-click) them one at a time. (You can also Ctrl-click [⌘-click] an already selected cell to deselect it.)
- Click a cell, and then Shift-click another cell. Your two clicks form diagonally opposite corners of an imaginary rectangle; Dreamweaver highlights all cells within it.
- Use the Tag selector (see page 22) to select a cell. Click inside the cell you wish to select, and then click the <td> tag in the Tag selector.
- If the insertion point is inside the cell you wish to select, press Ctrl+A (⌘-A).

Expanded Table Mode

If you remove all padding, cell spacing, and borders from a table, it can be difficult to select tables and individual cells. This phenomenon is especially true if you nest tables within table cells (a common table-layout technique). To help you out in this situation, Dreamweaver offers an Expanded Table mode. Clicking the Expanded button on the Layout tab of the Insert bar adds visible borders to every table and cell, and increases onscreen cell padding. Expanded Table mode never changes the actual page code; it merely affects how the page is displayed in Design view. The guideline borders and extra spacing that appear in Design view don't appear in a Web browser.

If you simply use tables to display data, you'll probably never need Expanded Table mode, but if you have to edit old Web pages built with complicated table layouts, Expanded mode is a big help.

To return to Standard view, click the Standard button on the Layout panel.

Formatting Tables

When you first insert a table, you set the number of rows and columns, as well as the table's cell padding, cell spacing, width, and borders. You're not stuck, however, with the properties you first give the table; you can change any or all of these properties, and set a few additional ones, using the Property inspector.

When you select a table, the Property inspector changes to reflect that table's settings (see Figure 7-5). You can adjust the table by entering different values for height, width, rows, columns, and so on in the appropriate fields.

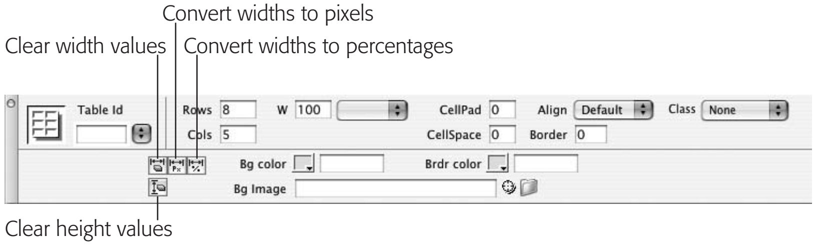


Table Id
Rows 8 W 100 CellPad 0 Align Default Class None
Cols 5 CellSpace 0 Border 0
Bg color Brdr color
Bg Image

Figure 7-5: *When you select a table, you can do everything in the Property inspector from adjusting its basic structure to fine-tuning its appearance. Dreamweaver includes two menus–Table Id and Class–which let you apply a CSS ID selector (see page 284) or a class style (page 116) to a table.*

In addition, the Property inspector lets you set alignment options, and add colors or a background image, as described next.

Aligning Tables

In the normal flow of a Web page, a table acts like a paragraph, header, or any other HTML block-level element. It's aligned to the left of the page, with other elements placed either above it or below it.

But you can make several useful changes to the way a table interacts with the text and other elements around it. After selecting the table, use one of the three alignment options in the pop-up menu at the right of the Property inspector:

- The Left and Right options align the table with the left or right page margins. Anything you then add to the page—including paragraphs, images, or other tables—wraps around the right or left side of the table. You can also apply the CSS Float property to a table (just as with images) to achieve the same effect (see page 213).
- The Center option makes the table sit in the center of the page, interrupting the flow of the elements around it. Nothing wraps around the table.

Note: Some of the properties Dreamweaver lets you adjust to make tables look better aren't "valid" for some of the different HTML "document types" Dreamweaver can create. As you read on page 37, Dreamweaver can create HTML 4.01 Transitional, XHTML 1.0 Transitional, and several other types of HTML documents. In general, HTML 4.01 Transitional and XHTML 1.0 Transitional are commonly used document types–XHTML 1.0 Transitional is the "out of box" setting in Dreamweaver. However, the more "strict" types, like HTML 4.01 Strict and XHTML 1.0 Strict, don't support some table properties–the *align* property discussed above, for example. This discrepancy is more a technicality than a design nuisance; most Web browsers still display the alignment you select, even when used with these types of documents. The newer and recommended method is to use CSS properties to accomplish the same display goals; for example, using CSS to set the left and right margins of a table to "auto" centers the table on the page (see page 332), while applying a CSS Left Float and Right Float to a table is the same as the Left and Right align options. See page 593 for more on "valid" HTML.

Clearing Height and Width Values

Four tools hide behind the obscure-looking buttons in the Property inspector's bottom half (see Figure 7-5).

- Clicking the Clear Height Values button removes the height properties of the table and each cell. Doing so doesn't set the heights to zero; it simply deletes the property altogether.
- Clicking the Clear Width Values button accomplishes the same purpose for the width properties of a table and its cells (see "Setting Cell Dimensions" on page 260).

When creating complex table designs, it's easy to get yourself into a situation where width and height measurements conflict and produce unreliable results. For example, it's possible to set one cell to 300 pixels wide, and later set another cell *in the same column* to 400 pixels wide. Since a Web browser can't do both (how can one column be both 300 *and* 400 pixels wide?), you might not get the results you want.

In tables with many cells, these kinds of problems are tough to ferret out. That's when you'll find these timesaving tools handy. You can delete the width and height measurements and start from scratch (see "Tips for Surviving Table Making" on page 260).

Two additional buttons let you convert pixel-based table widths to percentage measurements, and vice versa. In other words, if a table is 600 pixels wide and you click the "Convert Widths to Percentages" button, then Dreamweaver assigns percentages to the table and each cell whose width is specified using pixels.

These percentages depend on how much of the document window your table takes up when you click the button. If the document window is 1200 pixels wide, that 600-pixel-wide table changes to a 50-percent width. Because you'll rarely do this, don't waste your brain cells memorizing such tools. (See page 257 for more information.)

Decorating a Table

The Property inspector lets you specify border colors, background colors, and background images for tables and table cells. Don't do it! Although it's tempting to use these conveniently placed options, avoid these properties if you want to build valid Web pages. Both border color and background images aren't valid XHTML Transitional code (the default document type Dreamweaver uses). In addition, neither HTML 4.01 Strict nor XHTML 1.0 Strict supports those properties or the background-color property.

Note: You're probably wondering, if formatting options like border color should be avoided, why are they available on the Property Inspector? The simple answer is that they were once useful, and they've always been in Dreamweaver. Software companies are reluctant to remove features from their programs; but hopefully next go-round Adobe will remove these less than useful options.

Fortunately, you can better handle all three of these options (with even more design control) using CSS. Use the *border* property (page 215) to specify table and cell borders, the *background-image* property (page 217) to add images to the backgrounds of cells and tables, and the *background-color* property (page 217) to add a splash of color to your tables.

Note: You'll find examples of how to use CSS to add background images, colors, and borders to a table in the tutorial. In addition, you'll learn how to use the very valuable *border-collapse* property on page 278.

Resizing a Table

While you define the width of a table when you first insert it, you can always change your mind later. To do so, first select the table, and then take either of these steps:

- Type a value into the W (width) box on the Property inspector, and then choose a unit of measurement, either pixels or percentages, from the pop-up menu.

- Drag one of the resize handles on the right edge. (Avoid the handle in the right corner of the table—this adds an invalid *height* property to the table tag. If you do add a *height* property this way, you can easily remove it using the "Clear Height Values" button in the Property inspector—see Figure 7-5.)

In theory, you can also convert a table from a fixed unit of measurement, such as pixels, to the stretchy, percentage-style width setting—or vice versa—using the two "Convert table width" buttons at the bottom of the Property inspector (see Figure 7-5). What these buttons do depends on the size of the current document window in Dreamweaver. For example, suppose the document window is 700 pixels wide, and you've inserted a table that's 100 percent wide. Clicking the "Convert Widths to Pixels" button sets the table's width to around 700 pixels (the exact value depends on the margins of the page). However, if your document window were 500 pixels wide, clicking the same button would produce a fixed-width table around 500 pixels wide.

Note: The HTML <table> tag doesn't officially have a Height property. Dreamweaver, however, adds a Height property if you drag the bottom of the table to resize it. Most Web browsers understand this Height property and obey your wishes. But since it's not standard code, there's no guarantee that newer browsers will support this maneuver.

You have several alternatives: First, you could decide not to worry about height. After all, it's difficult to control the height of a table precisely, especially if there's text in it. Since text sizes appear differently on different operating systems and browsers, the table may grow taller if the text is larger, no matter where you set the height. Or you could use the CSS *height* property (page 320) to set a height for a table. Finally, you can always insert a transparent graphic in a table cell to pop it up to the height you want. (See "The contents take priority" on page 261.)

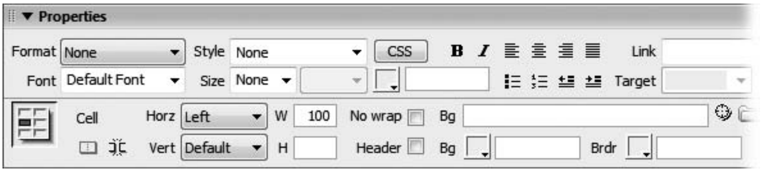
The "Convert Width to Percentages" buttons take the opposite tack. They set the width or height of a table and its cells to percentages based on the amount of the document window's width and height they cover at the moment. The bigger the window, the smaller the percentage.

Because the effects of these buttons depends upon the document window's size, you'll find yourself rarely, if ever, using these two tools.

Modifying Cell and Row Properties

Cells have their own properties, separate from the properties of the table itself. So do table *rows*—but not columns (see the box on page 259).

When you click inside a cell, the top half of the Property inspector displays the cell's text formatting properties; the bottom half shows the properties for that particular cell (see Figure 7-6).



Properties

Format None | Style None | CSS | Link

Font Default Font | Size None | Target

Cell | Horz Left | W 100 | No wrap □ | Bg

Vert Default | H | Header □ | Bg | Brdr

Figure 7-6: *The Property inspector displays the properties of a cell. If you select an entire row of cells, or select <tr> in the Tag selector, however, the background color, image, and border color properties apply to the <tr> tag. Still, when a row is selected, the Width, Height, No Wrap, or Header options affect the individual cells in the row.*

Alignment Properties

At the outset, a cell's contents hug the left wall of the cell and float halfway between the top and bottom of the cell. After selecting a row, a cell, or several cells, you can change these alignments using the Property inspector. For example, the Horz (Horizontal) menu in the Property inspector (see Figure 7-6) offers Left, Center, Right, and Default alignment options. (Default produces the same effect as Left without adding any extra HTML code.)

Note that these options are distinct from the *paragraph* alignment options discussed in Chapter 3. In fact, you can mix and match the two. Suppose you have a table cell containing four paragraphs. You want all but one paragraph to be center aligned; you want the last paragraph to be right aligned. To do so, you could set the alignment of the *cell* to Center, and then select just the last paragraph and set its alignment to Right. The paragraph's alignment overrides the alignment applied by the cell.

You can set the vertical alignment property in the same manner. Select the cells, and then use one of the five options available in the Property inspector's Vert (Vertical) menu: Default (the same as Middle), Top, Middle, Bottom, or Baseline.

Note: The CSS *text-align* property (located in the Block category of the CSS Rule Definition window) provides the same effect as Horizontal cell alignment; the *vertical-align* property (called "Vertical alignment" in the Block category of the CSS Rule Definition window) is the CSS replacement for a cell's vertical alignment.

(Skip the Baseline option; although it's supposed to align the bottom of the first line of text in the cell to the baseline of text in all the other cells in the row, only Internet Explorer actually gets this setting right.)

Table Header

The Table Header option lets you convert a <td> tag to a <th> tag, which is useful when you want to turn, say, the row at the top of a table into a header. It's a similar scheme to the column or row headers available in the Table dialog box, described on page 249.

POWER USERS' CLINIC

The Dawn of Columns

As far as the standard HTML language is concerned, there really isn't any such entity as a column. Tables are created with the <table> tag, rows with the <tr> tag, and cells with the <td> tag–but there's no column tag. Dreamweaver calculates the columns based on the number of cells in a row. If there are 7 rows in a table, each with 4 cells, then the table has 4 columns. In other words, the number of cells in each row determines the number of columns.

But times are changing. Two new tags introduced in HTML 4–the <colgroup> and <col> tags–let you control various attributes of columns in a table. At present, not all Web browsers understand these tags, and Dreamweaver provides no easy way to add them. You can find out more about them, however, in Dreamweaver's built-in HTML reference (see page 394).

You'll usually use this option for tables that include actual tabular data, like a spreadsheet, to indicate the meaning of the data that appears in the other cells in a row or column. For example, you may have a table containing data from different years; each cell in the top row could identify the year of the data in the cells below it.

While Dreamweaver lets you change a single cell into a header, you'll most likely apply this to a row of cells or the left column of cells.

A Property to Forget

The No Wrap option is of such little value that you'll probably go your entire Web career without using it.

But for the sake of thoroughness—and in case you actually find a use for it—here's a description. The No Wrap property prevents a Web browser from wrapping a line of text within a cell onto multiple lines. The browser widens the cell instead, so that it can include the line without line breaks. The result is almost never useful or attractive. Furthermore, if you specify a width for the cell, this property doesn't work at all!

FREQUENTLY ASKED QUESTION

Suddenly Jumbo Cells

When I added some text to a cell, it suddenly got much wider than the other cells in the row. What gives?

It isn't Dreamweaver's fault. This is how HTML works.

Web browsers (and Dreamweaver) display cells to match the content inside. For example, say you add a three-column table to a page. In the first cell of the first row, you type in two words, you leave the second cell empty, and add a 125-pixel wide image in the third cell of that row. Since the image is the biggest item, its cell is wider than the other two. The middle cell, with nothing in it, is given the least amount of space.

Usually, you don't want a Web browser making these kinds of decisions. By specifying a width for a cell (page 260), you can force a Web browser to display a cell with the dimension you want, but keep in mind that there are exceptions to this rule; see "The contents take priority" on page 261.

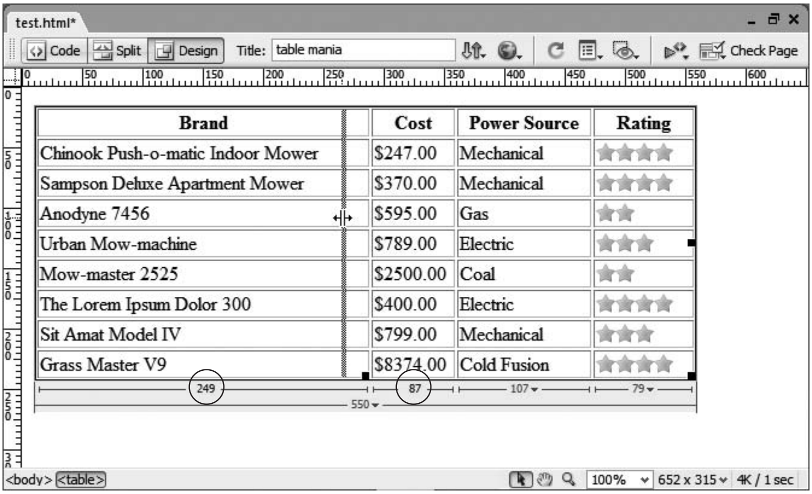
Cell Decoration

Cells needn't be drab. As with tables, you can give individual cells background colors, or even background graphics. However, just as with tables (page 256), you should avoid the decorative table cell options available in the Property inspector. Instead, use CSS—the *background-color* property (page 217) to add a color to a cell, the *background-image* property (page 217) to add a graphic to the background of a cell, and the *border* property (page 215) to add color borders around cells.

Setting Cell Dimensions

Specifying the width or height of a particular cell is simple: Select one or more cells, and then type a value in the Property inspector's W (width) or H (height) field. This value can be in either pixels or percentage. For instance, if you want a particular cell to be 50 pixels wide, type *50*. For a cell that you want to be 50 percent of the total table width, type *50%*. Read "Tips for Surviving Table Making" below for details on the tricky business of controlling cell and table dimensions.

You can also resize a column or row of cells by dragging a cell border. As your cursor approaches the cell's border, it changes shape to indicate that you can begin dragging. Dreamweaver also provides an interactive display of cell widths (circled in Figure 7-7) when you use this method. This helpful feature lets you know exactly what width your cells are at all times, so you can drag a cell to the exact width you're seeking.



Brand		Cost	Power Source	Rating
Chinook Push-o-matic Indoor Mower		$247.00	Mechanical	★★★★
Sampson Deluxe Apartment Mower		$370.00	Mechanical	★★★★
Anodyne 7456		$595.00	Gas	★★
Urban Mow-machine		$789.00	Electric	★★★
Mow-master 2525		$2500.00	Coal	★★
The Lorem Ipsum Dolor 300		$400.00	Electric	★★★★
Sit Amat Model IV		$799.00	Mechanical	★★★
Grass Master V9		$8374.00	Cold Fusion	★★★★

Figure 7-7: *As you drag the border between cells, Dreamweaver shows you the changing widths of the two adjacent cells in real time. The width values change to blue and update themselves as you move your mouse.*

Tips for Surviving Table Making

Nothing is more confounding than trying to get your tables laid out exactly as you want them. Many beginning Web designers throw their hands up in despair when working with tables, which often seem to have minds of their own. Layout mode eliminates many of the hassles associated with using tables for page layout, but here are a few problems that often confuse designers—and some tips to make working with tables more straightforward.

The contents take priority

Say you've created a 300-pixel-wide table and set each cell in the first row to 100 pixels wide. You insert a larger graphic into the first cell, and suddenly—Kablooie! Even though you set each cell to 100 pixels wide, as shown in Figure 7-8, the column with the graphic is much wider than the other two.

That's because a cell can't be smaller than the largest piece of content inside it. In this case, although you told the cell to be 100 pixels wide, the image is 120 pixels wide, which forces the first column to grow (and the others to shrink) accordingly.

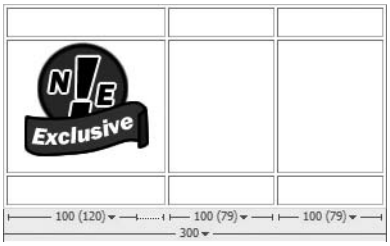


Figure 7-8:
Because a Web browser can't shrink the image or hide part of it, the cell has to grow to fit it. That first column of cells is now 120 pixels wide; the other two columns must shrink in order to keep the table 300 pixels wide. The numbers at the bottom of each cell indicate its width as set in the HTML—100—and the actual width as displayed in Dreamweaver in parentheses (120, 79, and 79).

There's no such thing as column width—only cell width

To set the width of a column of cells, you have to set the width of only *one* cell in that column. Say you have a table with three rows and three columns. You need to set only the width for the top row of cells; you can (and should) leave the cell widths for the remaining cells in the two bottom rows empty. (You can do this with any row of cells, not just the top row.)

This principle can save a lot of time and, because it reduces the amount of code on a Web page, makes your pages load and appear faster. For consistency, it's a good idea to pick either the first or last row of a table for width-setting.

The same holds true for the height of a row. You need only to set the height of a single cell to define the height for its entire row.

Fortunately, Dreamweaver is smart. When you resize one or more cells, it adds width and height values only where they're needed, without filling every cell with needless height and width values.

Do the math

Calculators are really useful when you're building tables. Although you *could* create a 400-pixel-wide table with three 700-pixel-wide columns, the results you'd get on the screen could be unpredictable (700 + 700 + 700 ≠ 400).

As it turns out, Web browsers' loyalty is to *table* width first, and then column widths. If you make the widths of your columns add up to the width of your table, you'll save yourself a lot of headaches.

You'll need to account for a few other factors if you add borders, cell padding, and cell spacing. For example, say you create a 500-pixel-wide table with two columns and 10 pixels of padding. If you want the first column to be 100 pixels wide, you would set the width value to 80 pixels: 10 pixels left padding + 80 pixels of cell space + 10 pixels of right padding = 100 pixels total width.

WORKAROUND WORKSHOP

Beware the Resize Handles

Dreamweaver provides several techniques for resizing tables and cells while in Standard view. Unfortunately, the easiest method—dragging a cell or table border—is also the easiest to do by mistake. Because moving the cursor over any border turns it into the Resize tool, almost every Dreamweaver practitioner drags a border accidentally at least once, overwriting carefully calculated table and cell widths and heights.

On occasions like these, don't forget the undo feature, Ctrl+Z (⌘-Z). And if all is lost, you can always clear the widths and heights of every cell in a table (using the Property inspector's buttons) and start over by typing new cell dimensions (see Figure 7-5).

Adding and Removing Cells

Even after inserting a table into a Web page, you can add and subtract rows and columns from your table. The text or images in the columns move right or down to accommodate their new next-door neighbor.

Adding One Row or Column

To add a single row to the table, you can use any of these approaches:

- Click inside a cell. On the Insert bar's Layout tab, click the Insert Row Above button (see Figure 7-9) to add a row above the current row. Click the Insert Row Below button to add a row below the current row.
- Click inside a cell. Choose Modify → Table → Insert Row, or press Ctrl+M (⌘-M), to insert a new row of cells above the current row. Alternatively, you can right-click (Control-click) a cell, and then, from the shortcut menu, choose Table → Insert Row.
- To add a new row at the end of a table, click inside the last cell in the table, and then press Tab.

The new rows inherit all the properties (except width) of the row you originally clicked.

To add a single *column* of cells:

- Click inside a cell. On the Insert bar's Layout tab, click the "Insert Column to the Left" button (see Figure 7-9) to add a column to the left of the current column. Click the “Insert Column to the Right” button to add a column to the right of the current column.

- Click inside a cell, and then choose Modify → Table → Insert Column.
- Click inside a cell, and then press Ctrl+Shift+A (⌘-Shift-A).
- Right-click (Control-click) a cell, and then, from the shortcut menu that appears, choose Table → Insert Column.

In each case, a new column appears to the left of the current column.

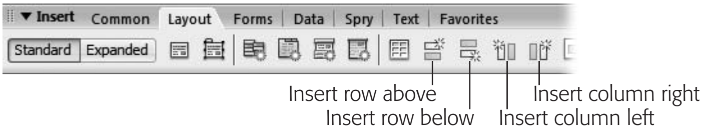


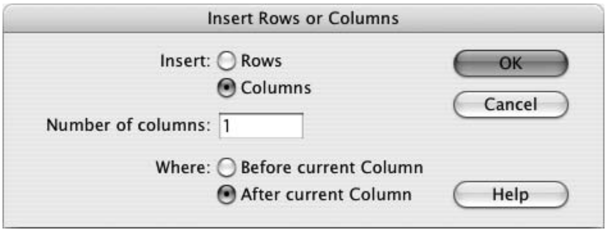
Figure 7-9:
Dreamweaver CS3 adds four new buttons to the Layout tab that make adding rows and columns fast and easy.

Adding Multiple Rows or Columns

When you need to expand your table more rapidly, you can use a special dialog box that lets you add many rows or columns at once.

1. **Click inside a cell. Choose Modify → Table → “Insert Rows or Columns”.**

   The “Insert Rows or Columns” dialog box appears (see Figure 7-10).


Insert Rows or Columns

Insert: ○ Rows
● Columns

Number of columns: 1

Where: ○ Before current Column
● After current Column

Figure 7-10:
The “Insert Rows or Columns” dialog box lets you add multiple rows or columns to a table. The wording of the options changes depending on whether you’re inserting rows or columns.

2. **Click either Rows or Columns. Type the number of rows or columns you wish to add.**

   Windows users can also click the tiny up and down arrow buttons next to the “Number of rows” (or columns) field.

3. **Indicate where you wish the new rows or columns to appear, relative to the cell you selected, by clicking Above or Below (for rows) or Before or After (for columns). Click OK to insert them.**

Using the dialog box gives you the advantage of choosing whether you want the new row or column to come *before* or *after* the selected information in your table, as shown in Figure 7-10.

Deleting Rows and Columns

To delete a row from your table, you can use one of the following techniques.

Tip: When you remove a row or column, Dreamweaver also eliminates everything inside. So before you start hacking away, it's a good idea to save a copy of the page with the table.

- Select the row (see page 252); press Delete to delete all of the cells—and everything in them—for the selected row.
- Click a cell. Choose Modify → Table → Delete Row, or use the keyboard shortcut Ctrl+Shift+M (⌘-Shift-M).
- Right-click (Control-click) inside a cell, and then, from the shortcut menu, choose Table → Delete Row.

Deleting a column is equally straightforward.

- Select the column (page 252), and then press Delete. You've just eliminated all the selected cells and everything in them.
- Click a cell, and then choose Modify → Table → Delete Column, or use the keyboard shortcut Ctrl+Shift+Hyphen (⌘-Shift-Hyphen).
- Right-click (Control-click) inside a cell, and then choose Table → Delete Column from the shortcut menu.

Note: Dreamweaver doesn't let you delete a row if one of its cells is *merged* with a cell in another row. Nor can you delete a column if it contains a cell that's merged with a cell in an adjacent *column*. (Merged cells are discussed in the next section.)

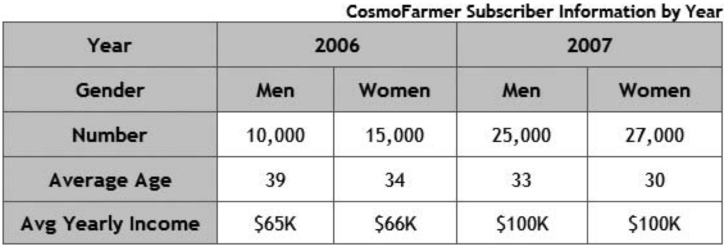
Deleting a column in this way is actually quite a feat. Since there's no column tag in HTML, Dreamweaver, behind the scenes, has to select individual cells in multiple rows—a task you wouldn't wish on your worst enemy if you had to do it by editing the raw HTML code.

Merging and Splitting Cells

Cells are very basic creatures with some severe limitations. For example, all of the cells in a row share the same height. A cell can't be taller than the cell next to it, which can pose some serious design problems. In table-based design, designers solved this problem by combining multiple cells to form, for example, one wide banner area that spans three table columns.

Note: If you're still using tables for page layout, be careful when merging cells; as a technique for managing a page layout, merged cells can be big trouble. For more information, go to *www.apptools.com/rants/spans.php*. (P.S. You really don't have to use tables for layout anymore. Turn to Chapter 9 and learn how to use CSS for page layout.)

But even when using tables for data, there are times when you need to combine multiple cells. In Figure 7-11, data for a single year—like 2006—is broken down into two demographic groups—men and women. Since the data in the two sets of "men" and "women" columns pertain to particular years, two table cells are merged to identify the first year, 2006, and two additional cells are merged for the year 2007. In such situations, Dreamweaver provides several ways of persuading cells to work well together. The trick is to *merge* cells—combine their area—to create a larger cell that spans two or more rows or columns.



CosmoFarmer Subscriber Information by Year

Year	2006		2007	
Gender	Men	Women	Men	Women
Number	10,000	15,000	25,000	27,000
Average Age	39	34	33	30
Avg Yearly Income	$65K	$66K	$100K	$100K

Figure 7-11:
You can create larger cells that span multiple rows and columns by merging adjacent cells. This is one way to represent multiple related rows or columns of information with a single table header.

To merge cells, start by selecting the cells you wish to merge, using any of the methods described on page 253. (You can only merge cells that form a rectangle or square. You can't, for instance, select three cells in a column, and only one in the adjacent row, to create an L shape. Nor can you merge cells that aren't adjacent; in other words, you can't merge a cell in one corner of the table with a cell in the opposite corner.)

Then, on the Property inspector, click the Merge Cells button (Figure 7-12), or choose Modify → Table → Merge Cells.

Tip: Better yet, use this undocumented keyboard shortcut: the M key. Just select two or more cells, and then press M. It's much easier than the keyboard shortcut listed in the online help: Ctrl+Alt+M (⌘-Option-M).

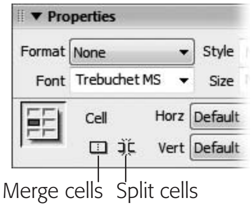


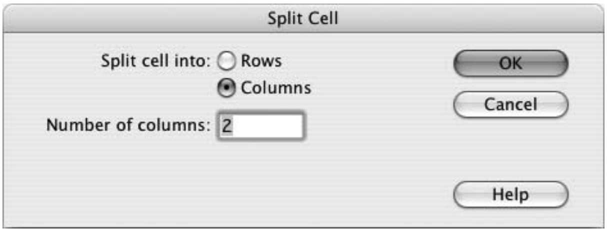
Figure 7-12:
The Merge Cells button is active only when you've selected multiple cells. The Split Cells button appears only when you select a single cell, or you've clicked inside a cell.

Dreamweaver joins the selected cells, forming a single new super cell.

You may also find yourself in the opposite situation: You have one cell that you want to *divide* into multiple cells. To split a cell, click, or select, a single cell. In the

Property inspector, click the Split Cells button. (Once again, you can trigger this command in several alternative ways. You can choose Modify → Table → Split Cell. And if you prefer keyboard shortcuts, you can press Ctrl+Alt+S [⌘-Option-S]. You can even right-click [Control-click] the selected cell, and then, from the contextual menu, choose Table → Split Cell.)

When the Split Cell dialog box opens (see Figure 7-13), click one of the buttons to indicate whether you want to split the cell into rows or columns. Then type the number of rows or columns you wish to create; click OK.



Split Cell

Split cell into: ○ Rows ● Columns

Number of columns: 2

Figure 7-13:
The Split Cell dialog box lets you divide a single cell into multiple cells. You can choose whether to divide the cell into rows (multiple cells on top of one another) or columns (multiple cells side by side).

If you split a cell into columns, everything in the cell winds up in the left column, with the new, empty column or columns to the left. When you split a cell into rows, the contents end up in the top row.

Tabular Data

Since tables are meant to display data, Dreamweaver provides useful tools to import and work with data.

Tip: You can directly import Excel files into Dreamweaver for Windows, which converts the data into a well-organized table. See page 75.

Importing Data into a Table

Say your boss emails you your company's yearly sales information, which includes data on sales, profits, and expenses organized by quarter. She asks you to get this up on the Web for a board meeting she's having in half an hour.

This assignment could require a fair amount of work: building a table and then copying and pasting the correct information into each cell of the table, one at a time. Dreamweaver makes your task much easier, because you can create a table and import data into the table's rows and columns, all in one pass.

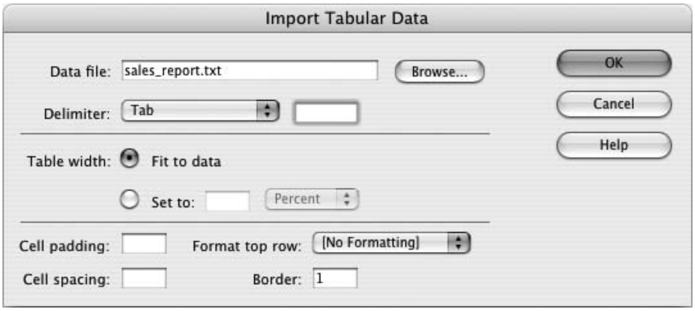
For this to work, the table data you want to display must begin life in a *delimited* format—a task that most spreadsheet programs, including Excel, or database programs, such as Access or FileMaker Pro, can do easily. (In most programs, you can do this by choosing File → Export or File → Save As; then choose a tab-delimited or comma-separated text file format.)

In a delimited file, each line of text represents one table row. Each line is divided into smaller units using a special character called a delimiter—most often a tab, but possibly a comma or colon. Each unit represents a single cell in the row. In a colon-delimited file, for example, the line *Sales:$1,000,000:$2,000,000:$567,000: $12,500* would be converted by Dreamweaver into a row of five cells, with the first cell containing the word *Sales*.

Once you've saved your boss's spreadsheet as a delimited file, you're ready to import it into a Dreamweaver table:

1. **Choose File → Import → Tabular Data.**

   The Import Tabular Data dialog box appears (Figure 7-14).



Import Tabular Data

Data file: sales_report.txt

Delimiter: Tab

Table width: ● Fit to data

○ Set to: Percent

Cell padding:

Format top row: [No Formatting]

Cell spacing:

Border: 1

Figure 7-14: *The Import Tabular Data dialog box lets you select a text file of data to import, and choose formatting options for the table.*

2. **Click Browse. In the Insert Tabular Data dialog box, find and open the delimited text file you wish to import.**

   A delimited file is no longer a spreadsheet, but a plain text file. Navigate to and double-click the file in the dialog box.

3. **From the pop-up menu, select the delimiter that was used to separate the data in the text file.**

   The choices are Tab, Comma, Colon, Semicolon, or Other. If you select Other, an additional field appears, where you can type the character you used as the delimiter.

4. **Select a table width.**

   Choose "Fit to data" if you want the table to fit itself to the information you're importing—an excellent idea when you aren't completely sure how much information the file contains. (You can always modify the table, if necessary, after importing the data.)

   On the other hand, if your Web page needs a table of a certain size, you can specify it by selecting the Set button, and then typing a value in the field next to it. Select pixel or percentage value (see page 250).

5. **Set Cell padding, Cell spacing, and Border, if you like.**

   See page 249 for details.

6. **Select a formatting option for the top row of data.**

   If the first line in the text file has column headings—Quarter 1 Sales, Quarter 2 Sales, and so on—Dreamweaver lets you choose Bold, Italic, or Bold Italic to set this header row apart from the rest of the table. Unfortunately, this option doesn't turn the cells in this first row into table header (<th>) tags, which is what they should be. It's best to choose no formatting, manually select the cells, and then turn them into table header (<th>) tags as described on page 258.

7. **Click OK to import the data and create the table.**

Note: Adobe removed the much-beloved Format Table command in Dreamweaver CS3. If you miss it, don't. Although it was a fast way to create colorful data tables, it also dipped into a vat of increasingly outdated HTML.

Sorting Data in a Table

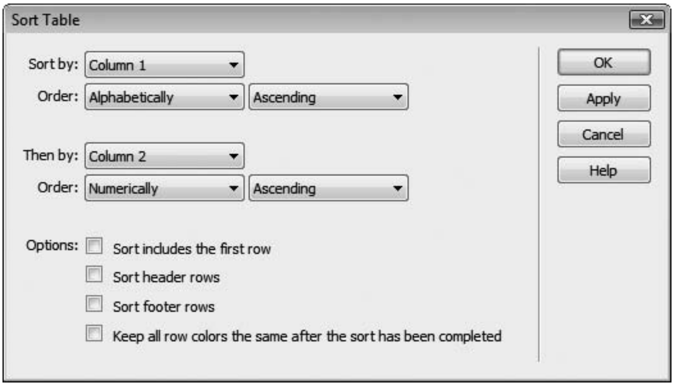
If you have a table that lists employee names, you probably want to present that list in alphabetical order—or alphabetically *and* by department. Dreamweaver's Sort Table command takes a lot of the drudgery out of this task.

1. **Select the table you wish to sort.**

   See page 252 for some table-selection techniques.

2. **Choose Commands → Sort Table.**

   The Sort Table dialog box appears (Figure 7-15).



Sort Table

Sort by: Column 1

Order: Alphabetically | Ascending

Then by: Column 2

Order: Numerically | Ascending

Options:
□ Sort includes the first row
□ Sort header rows
□ Sort footer rows
□ Keep all row colors the same after the sort has been completed

Figure 7-15:
The Sort Table command works well with Dreamweaver's Import Tabular Data feature. Imagine you're given a text file listing all your company's employees. You import the data into a table, but realize that the names aren't in any particular order.

3. **Using the "Sort by" pop-up menu, choose the column by which you wish to sort.**

   You can choose any column in the table. Suppose you have a table listing a bunch of products. Each row has the product name, number, and price. If you want to see the products listed from least to most expensive, you could sort by the column with the product prices.

Note: The new Spry Data XML Data Set tools let you create a table that can be sorted *interactively* by the visitor viewing the Web page. This cool new tool is covered on page 476.

4. **Use the next two pop-up menus to specify how you want the data sorted.**

   Data can be sorted alphabetically or numerically. To order the product list by price, from the Order pop-up menu, choose Numerically. However, if you're sorting a Name column, choose Alphabetically.

   Use the second pop-up menu to specify whether you want an Ascending sort (A–Z, 1–100) or Descending (Z–A, 100–1).

5. **If you like, choose an additional column to sort by, using the "Then by" pop-up menu.**

   This secondary sort can come in handy when several cells in the *first* sorting column have the same value. If several items in your product list are all priced at $100, a sort by price would place them consecutively in the table; you could then specify a secondary sort that would place the products in alphabetical order within each price group. In this way, all the products would be listed from least to most expensive, *and* products that are the same price would be listed alphabetically within their group.

6. **If the first row of the table contains data to be sorted, turn on "Sort includes the first row."**

   If, however, the first row of the table contains *headings* for each column, don't turn on this box.

7. **Choose whether to sort header rows and footer rows as well.**

   The Sort Header Row option isn't referring to cells that have the "header" property set (see page 258). This option, and the next one, refer to the <thead> (table header) and <tfoot> (table footer) tags, which are intended to let you turn one or more rows into repeating headers and footers for long tables. Since Dreamweaver doesn't insert these tags for you, you'll most likely never use these options.

8. **Choose whether to keep row colors with the sorted row.**

   One way to visually organize a table is to add color to alternate rows. This every-other-row pattern helps readers to stay focused on one row of information at a time. However, if you sort a table that you had formatted in this way, you'd wind up with some crazy pattern of colored and uncolored rows.

The bottom line: If you've applied colors to your rows, and you'd like to keep those colors in the same order, leave this checkbox off.

9. **Click Apply to see the effect of the sort without closing the dialog box.**

   If the table meets with your satisfaction, click OK to sort the table and return to the document window. (Clicking Cancel, however, doesn't then undo the sort. If you want to return the table to its previous sort order, choose Edit → Undo Sort Table after closing the sort window.)

Exporting Table Data

Getting data out of a table in Dreamweaver is simple. Just select the table, and then choose File → Export → Table. In the Export Table dialog box that appears, select the type of delimiter (tab, comma, space, colon, or semicolon) and the operating system where the file will be used (Mac, Windows, or Unix), and then click OK. Give the file a name and save it on your computer. You can then import this delimited file into your spreadsheet or database program.

Tables Tutorial

In this tutorial, you'll create a data table to display ratings information on products. In addition, you'll use some Cascading Style Sheet magic to make the table look great (see Figure 7-25).

Note: You'll need to download the tutorial files from *www.sawmac.com/dwcs3/* to complete this tutorial. See the Note on page 39 for more details.

Once you've downloaded the tutorial files and opened Dreamweaver, define a new site as described on page 28: Name the site *Tables,* and select the Chapter07 folder (inside the MM_DWCS3 folder). (In a nutshell: choose Site → New Site. In the Site Definition window, click the Advanced tab, type *Tables* into the Site Name field, click the folder icon next to the Local Root Folder field, navigate to and select the Chapter07 folder, and then click Choose or Select. Finally, click OK.)

Adding a Table and Data

Once again, you'll be working on a page from CosmoFarmer.com.

1. **Choose File → Open; click the Site Root button (bottom left of the open file window).**

   You'll be working on a page similar to the ones you've been building so far.

2. **Double-click the file named *table.html.* Click in the empty space between the headlines "Indoor Mower Ratings" and "The Ratings Explained."**

   You'll insert a table into this space.

3. **Choose Insert → Table.**

   You can also click the table button on the Insert bar's Common Tab. Either way, the Table window appears (see Figure 7-16). You need to define the table's basic characteristics.

4. **Type *3* in the Rows box; type *3* in the Columns box.**

   You'll start with a basic 3x3 table, but as the tutorial progresses, you'll add additional rows and columns. Time to set the width, spacing, and padding properties.

5. **In the Table width box, type *99*, and select "percent" from the pull-down menu. Type *0* in the Border thickness, Cell padding, and Cell spacing boxes.**

   Setting the width to 99% size means the table will fill most of the width of the main content area—the part of the page where the headline currently sits (although 100% works in most browsers, Internet Explorer 6 is a little buggy. 100% forces the table to drop below the left sidebar in that browser). Setting the other three properties here to 0 is common. You have greater control of borders and cell padding using CSS.

6. **In the window's Header section, select the "Top" option.**

   The header setting indicates which cells should be marked as "table headers"—these cells contain labels that describe what kind of information is in the column cells below (when "top" is selected), or the kind of information in the cells of a row (when "left" is selected). Now that you've picked "Top," the top row of cells will hold labels like "Brand," "Cost," and "Rating."

   To let people know the purpose of the table, you'll also add a caption.

7. **Type *Table 1: CosmoFarmer's Indoor Mower Roundup* in the Caption box; choose Top for the "Align caption" menu.**

   The window should now look like Figure 7-16.

8. **Click OK.**

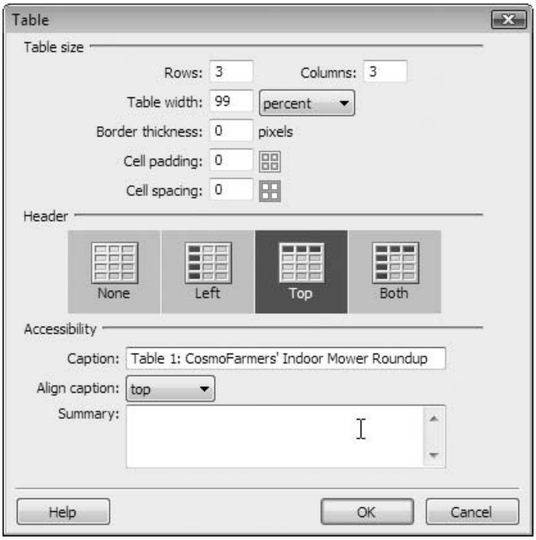
   A new table appears on the page, with the caption centered above the table. Next, you'll add some headers to the table

9. **Click the first table cell in the top-left corner of the table, and then type *Brand*.**

   The word appears bold and centered in the cell. That's how table header cells normally appear. You'll be able to change that look in a moment. Now add two more labels.

10. **Press Tab to jump to the next cell to the right, and then type *Cost*. Press Tab again, and then type *Rating*.**

    Now it's time to add some actual data.



Table

Table size

Rows: 3 Columns: 3

Table width: 99 percent

Border thickness: 0 pixels

Cell padding: 0

Cell spacing: 0

Header

Accessibility

Caption: Table 1: CosmoFarmers' Indoor Mower Roundup

Align caption: top

Summary:

Figure 7-16:
Inserting a table into a Web page is just a matter of making a few choices in the Table dialog box. Any text you type into the Summary box doesn't appear in the Web browser window, so you probably won't use this option frequently. It's intended to explain a particularly complicated table to non-visual Web browsers (like Google's spidering software or a screen reader used by the visually impaired.)

11. **Press Tab, and then type *Chinook Push-o-matic Indoor Mower* in the first cell of the second row; press Tab again, and then type *$247.00*.**

    Table cells aren't limited to text; you can put anything—including images—inside them.

12. **Press Tab to jump to the last cell in the second table row; choose Insert → Image.**

    The Select Image Source window appears. You used this dialog box frequently in the previous chapter to add graphics to a page.

13. **Navigate to the Images folder, and then double-click the file named *4star.gif*. If the Image Tag Accessibility window appears, type *4 stars* in the Alternate Text box. Click OK.**

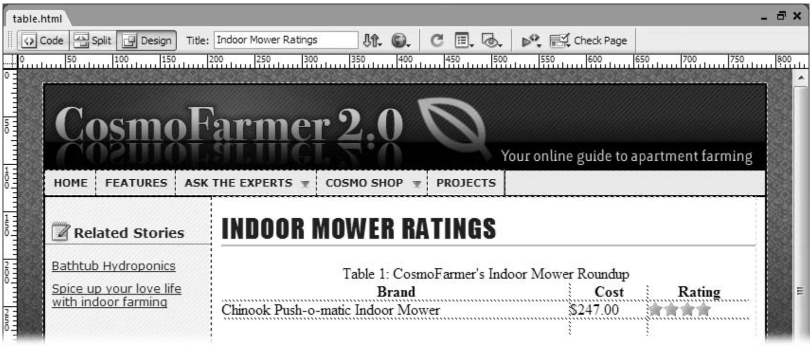
    A graphic of four stars—representing this product's rating—appears. If the Image Tag Accessibility window doesn't appear (see page 211 for an explanation), just type *4 stars* in the Property inspector's Alt box.

    The page should now look like Figure 7-17. Now it's just a matter of adding the rest of the data.

14. **Click just to the right of the four-star graphic (still inside the table cell, though).**

    Doing so deselects the image and puts the cursor in the same table cell. Another technique is to press the right arrow key: This action also moves the cursor just to the right of the image.

15. **Press Tab to move to the first cell of the last row. Follow steps 11–13 using the following information: *Sampson Deluxe Apartment Mower*, *$370.00,* and the graphic file *4star.gif*.**



INDOOR MOWER RATINGS

Table 1: CosmoFarmer's Indoor Mower Roundup

Brand	Cost	Rating
Chinook Push-o-matic Indoor Mower	$247.00	★★★★

Figure 7-17: *When you set borders, cell padding, and cell spacing to 0, Dreamweaver represents the edges of the table and cells with dotted lines. These don't show up when the page is viewed in a Web browser.*

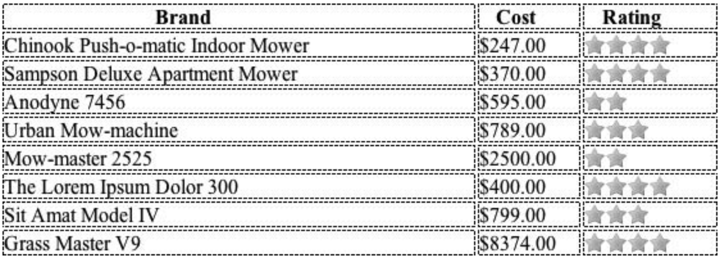
At this point, you've filled up the entire table—there aren't any more rows for information. No problem; it's easy to add more.

16. **Repeat step 14 to place the insertion point to the right of the four-star graphic you just inserted, and then press the Tab key.**

When you've reached the last cell in a table, pressing the Tab key creates another row of cells. Just a little more typing to go.

17. **Using the same techniques as above (steps 11–15), create the table pictured in Figure 7-18.**

You'll need to use a couple of different graphics—*3star.gif* and *2star.gif*—to complete this assignment. They're located in the images folder. (You don't need to complete the entire table if you don't want. If you've learned the technique and your fingers are tired, just add as many rows as you'd like.)



Brand	Cost	Rating
Chinook Push-o-matic Indoor Mower	$247.00	★★★★
Sampson Deluxe Apartment Mower	$370.00	★★★★
Anodyne 7456	$595.00	★★
Urban Mow-machine	$789.00	★★★
Mow-master 2525	$2500.00	★★
The Lorem Ipsum Dolor 300	$400.00	★★★★
Sit Amat Model IV	$799.00	★★★
Grass Master V9	$8374.00	★★★★

Figure 7-18: *Inputting data like this by hand gets the job done, but can be tedious and time-consuming. If you've already got the data in a spreadsheet or a text file, you can probably use Dreamweaver's Import Tabular Data tool, described on page 266, to save your data-entering tendons.*

Modifying the Table

Just as you type the last row of information, the CosmoFarmer editorial department calls and says they need an additional column of information added to the table. Normally this would be a challenging and time-consuming task, but Dreamweaver makes the process easy.

1. **Click any cell in the second column.**

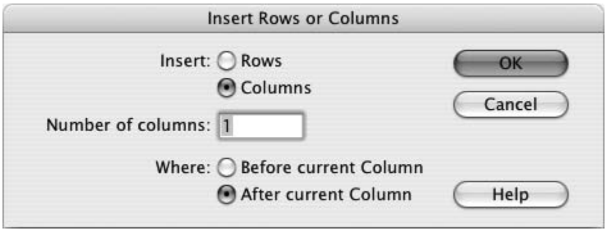
   For example, click the cell with the word "Cost." You'll now add a column to the table.

2. **Choose Modify → Table → "Insert Rows or Columns".**

   The "Insert Rows or Columns" window appears (Figure 7-19).

3. **Select the Columns and "After current Column" radio buttons (the window should look like Figure 7-19). Click OK.**

   You could also use the Layout Tab's "Insert Column to the Right" button (see Figure 7-9). Dreamweaver inserts a thin column between Cost and Rating. This column identifies the type of power source each mower uses.



Insert Rows or Columns

Insert: ○ Rows
● Columns

Number of columns: 1

Where: ○ Before current Column
● After current Column

Figure 7-19:
You can insert multiple rows or columns into an already created table.

4. **Click the top cell of the new column, and then type *Power Source*.**

   This is a <th> (table header) tag, so it's bold and centered. The actual data goes in the cells below.

5. **Click the cell below Power Source, and then type *Mechanical*.**

   You can also press Tab four times to jump from the table header to this cell.

6. **Fill out the remaining cells in the column using the information listed in Figure 7-21.**

   And that's pretty much all there is to building a data table. Of course, making it look good is another story. For that, you'll turn to CSS.

Formatting the Table

Tables, like everything HTML, are drab by themselves. To make data really stand out, you need to turn to the power of Cascading Style Sheets. In this section you'll format the basic font attributes of the table, style the caption, make the table headers stand out, and add lines around the cells.

1. **Make sure the CSS Styles panel is open (Window → CSS Styles); in the bottom right of the panel, click the Create New Style button (the + button).**

   The New CSS Rule window appears. You'll create a class style that you'll apply to the table tag and store the CSS information into an already attached external style sheet. (For a recap on creating styles, turn to page 117.)

2. **Select the Class button; type *.ratings* in the Name box; make sure *feature.css* is selected in the Define In menu, and then click OK.**

   The CSS Rule Definition window appears. Instead of creating a tag style named *table*, you're creating a class. Tag styles apply globally to every instance of the HTML tag. If this site still had some tables used for layout purposes, a table tag style would probably ruin their look; in addition, by using a class style, you have the flexibility to create different designs for different types of data tables.

3. **Choose "Verdana, Arial, Helvetica, sans-serif" from the Font menu, and then, in the Size box, type *13*. Click OK.**

   This class style doesn't take effect until you apply it.

4. **Click the bottom border of the table to select it (or use any of the techniques described on page 252). From the Property inspector's Class menu, choose *ratings*.**

   Notice how the font changes for the caption, table headers, and regular table cells. Even though you applied these font settings to the <table> tag, the other tags inside it (<caption>, <td>, <th>) use the *same* settings. This step demonstrates a useful CSS concept known as *inheritance* (you'll learn about inheritance in the next chapter on page 294).

   The caption at the top of the table is a bit too prominent, and doesn't look good centered.

5. **Click the Create New Style button. In the CSS Rule Definition window, select the Advanced button, type *.ratings caption* in the Selector box; make sure *feature.css* is selected in the Define In menu, and then click OK.**

   You've just created an advanced type of CSS selector, known as a *descendent selector* (you'll learn about this selector type in the next chapter). In essence, it redefines the look of the <caption> tag, but only when it appears inside another tag (the <table> tag in this case) that has the class *ratings* applied to it.

   You can apply any of the type properties you learned about in Chapter 4. In this case, you'll apply a new font and make the text italic.

6. **In the Type Category, choose "Georgia, Times New Roman, Times, serif" from the Font menu, and then, from the Style menu, choose *italic*.**

   The centered caption draws too much attention; it'll look better off to the right.

7. **Click the Block category, and then, from the "Text align" menu, choose *right*.**

   The *text-align* property lets you align paragraphs of text to the left, right, center, or *both* left and right (called *justified*). See page 136 for more on this property.

   The caption also appears a bit too close to the top row of headers. To add a bit of space, you can adjust the *bottom-padding* property.

8. **Click the Box category; under Padding, turn off the "Same for all" checkbox; in the Bottom padding box, type *10*. Click OK to complete the style.**

   Normally you use "Add a bottom margin" to add space between the bottom of an element (the caption in this case) and an element beneath it. However, Internet Explorer doesn't add space below a caption if you use the bottom margin setting; fortunately, bottom padding works for all browsers.

   The table headers don't really command enough attention. You'll make them stand out by using a background graphic and increasing the space inside each cell.

9. **Click the Create New Style button. In the CSS Rule Definition window, select the Advanced button, and then, in the Selector box, type *.ratings th*; make sure *feature.css* is selected in the Define In menu, and then click OK.**

   Here's another descendent selector: this time defining the look of every <th> tag inside another tag with a class of *ratings*. You'll make the text white on a dark background.

10. **In the Type category, use the color box to select white for the Color.**

    The text will be white against a dark background. You'll use a graphic for the background.

11. **Click the Background category; set the Background color to #152D6A; click the Browse button, and then, in the images folder, select the file *bg_th.gif*.**

    Why add a background color, when you're already using a background image? Remember that in the last step, you made the text white. If you don't also specify a dark background color, the column headers might be invisible. For example, if for some reason the graphic doesn't appear (the visitor has turned off graphics, or the image doesn't download properly), then the table headers appear as white text on a white background. However, by setting a dark background color too, you're covered. If the image doesn't download, then the text is still readable—white text on a dark blue background.

    Currently, the column headers are centered in their cells. To match the appearance of the other cells, you'll align them to the left.

12. **Click the Block category, and then, from the "Text align" menu, choose *left*.**

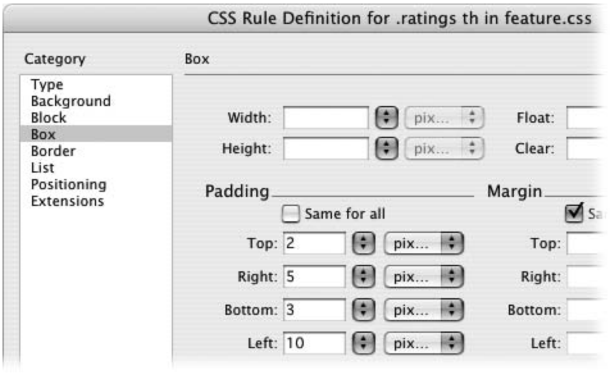
    You could also set the horizontal alignment of each table header cell to "left": select each cell, and then use the Property inspector (see page 258). But not only is that more work, it also adds extra HTML code to your page. The CSS method is easier and makes for faster-loading Web pages.

    If you click the Apply button now, you see how this style is shaping up. The text is a bit cramped inside each cell. To add some breathing room between the edges of each cell and the text inside, you'll use the CSS padding property.

Note: If you accidentally press the OK button before completing the style, just double-click the style's name in the CSS Styles panel to re-open the Style Definition window (see page 119 for detailed instructions).

13. **Click the Box category; turn off the "Same for all" checkbox under the Padding category; type *2* in the Top box; *5* in the Right box; *3* in the Bottom box; *10* in the Left box.**

The window should look like Figure 7-20. One last touch: a border to separate each table header cell.



CSS Rule Definition for .ratings th in feature.css

Category: Box

Padding: □ Same for all

Top: 2 pix...

Right: 5 pix...

Bottom: 3 pix...

Left: 10 pix...

Margin: ☑ Sa

Figure 7-20: *The CSS padding property has a lot of benefits over a table's cell padding property. Not only does it eliminate unnecessary HTML for every table on your site, it also lets you precisely control the amount of space around each of a cell's four sides.*

14. **Click the Border category; turn off all three "Same for all" checkboxes; for the right border, choose *solid* for the style, type *1* in the width box and make the color grey—#999999. Click the OK button to complete the style.**

This action adds just a single line on the right side of each table header cell—a simple divider. Now you'll format the regular table cells.

15. **Click the Create New Style button. In the CSS Rule Definition window, select the Advanced button, type *.ratings td* in the Selector box; make sure *feature.css* is selected in the Define In menu, and then click OK.**

You should be getting the hang of these descendent selectors by now. You'll add padding and border lines to clearly indicate each cell.

16. **Click the Box category; turn off the "Same for all" checkbox under the Padding category; type *2* in the Top box; *2* in the Right box; *2* in the Bottom box; *10* in the Left box.**

Time to add some borders.

17. **Click the Border category; leave the "Same for all" checkboxes turned on; choose *solid* for the style, type *1* in the Width box, and make the color grey—#999999. Click OK to complete the style.**

If you preview the page in a Web browser (F12 [Option-F12]), you'll notice that where two cells touch, the borders are a bit thick (see Figure 7-21). Because you've added a border around all four sides of each cell, the border is twice as thick and looks a little chunky where two cells meet. You could edit the style and add a border to only some sides of the cell (like the left and bottom sides) so that the borders don't double up, but CSS give you an easier way.

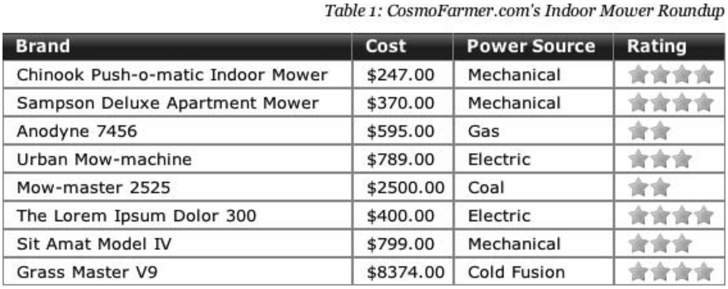


Table 1: CosmoFarmer.com's Indoor Mower Roundup

Brand	Cost	Power Source	Rating
Chinook Push-o-matic Indoor Mower	$247.00	Mechanical	★★★★
Sampson Deluxe Apartment Mower	$370.00	Mechanical	★★★★
Anodyne 7456	$595.00	Gas	★★
Urban Mow-machine	$789.00	Electric	★★★
Mow-master 2525	$2500.00	Coal	★★
The Lorem Ipsum Dolor 300	$400.00	Electric	★★★★
Sit Amat Model IV	$799.00	Mechanical	★★★
Grass Master V9	$8374.00	Cold Fusion	★★★★

Figure 7-21:
Adding a border to table cells creates a slightly chunky double-border where cells touch each other. Fortunately, with a little-known CSS property you can overcome that aesthetic nuisance.

Final Improvements

To finish this tutorial, you'll get rid of the double-border problem, and make the table rows easier to read by coloring every other row.

1. **Make sure the CSS Styles panel is open (Window → CSS Styles), and that the All button at the top of the panel is selected.**

   The All button lets you view all the styles attached to a page. In this case, there are two external style sheets—*feature.css* and *SpryMenuBarHorizontal.css*. You're going to edit an already existing style in the *feature.css* file.

2. **If you can't see any styles listed under *feature.css* in the Styles panel, click the + (flippy triangle on Mac) to the left of *feature.css* to expand the list. Locate the style named *.ratings*, and then select it.**

   Don't double-click the style name—that opens the CSS Rule Definition window again. You're about to add a CSS property that Dreamweaver doesn't make available in that window. Instead, you need to use another technique for adding properties to a style—the Properties pane.

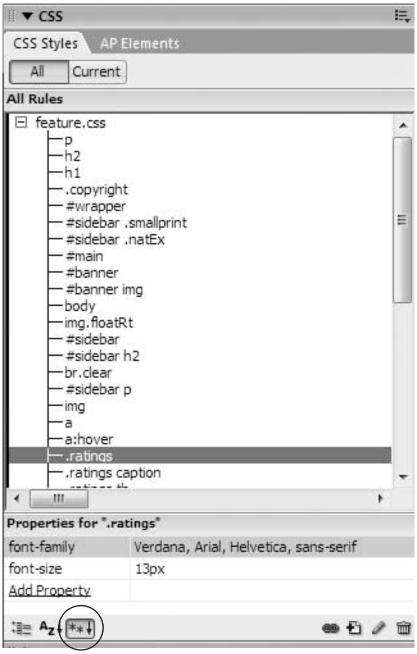
   The Properties pane is located at the bottom of the CSS styles panel. It should look like Figure 7-22. (If your Properties pane only has one property listed—font 13px Verdana, Helvetica, sans-serif—Dreamweaver is using CSS shorthand properties [see page 332.] This doesn't affect the performance of your CSS, just the way it's written. You control this setting from the Preferences window's CSS Style category.)

3. **Click the Add Property link, and then, in the box, type *border-collapse*.**

   Border-collapse is a special CSS property that forces adjoining cells to "collapse" onto each other: Essentially it removes space between cells and prevents this double-border problem.

4. **From the menu to the right of the *border-collapse* property you just added, select *collapse* (see Figure 7-23).**

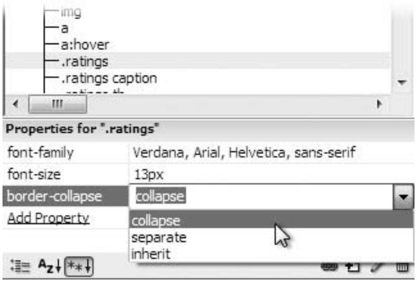
   That removes the double-border between adjacent cells (you don't see this effect in Dreamweaver's Design view; only when you preview the page in a Web browser). Now you'll highlight alternating table rows. This technique makes tables easier to scan, since your eye can easily identify all the cells in a row. To do this, you'll create a new class style.



Properties for ".ratings"

font-family	Verdana, Arial, Helvetica, sans-serif
font-size	13px
Add Property	

Figure 7-22:
When you select a style in the "All" view of the CSS Styles panel, the properties for that style appear in the Properties pane below. In this case, the style .ratings is selected and its two properties (font-family and font-size) appear. You can add more properties by clicking the Add Property link. There are actually three different views to the Properties pane, but it's most useful to see just the currently set properties. Click the "Show only set properties" button (circled) for this view. (The Properties pane is discussed in depth on page 289.)



Properties for ".ratings"

font-family	Verdana, Arial, Helvetica, sans-serif
font-size	13px
border-collapse	collapse
Add Property	

Figure 7-23:
The border-collapse property is an official CSS property, even though it doesn't appear in Dreamweaver's CSS Rule Definition window. You can, however, add it by hand using the Properties pane.

5. **Click the Create New Style button. In the CSS Rule Definition window, select the class button, and then type *.alternate* in the Tag box; make sure *feature.css* is selected in the Define In menu, and then click OK.**

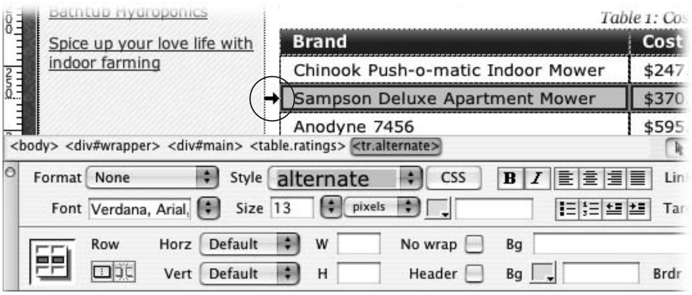
   All you need to do now is define a background color.

6. **In the CSS Rule Definition window, select the Background category; set the background color to #EEEEEE. Click OK to complete the style.**

   Now you'll apply this to every other row.

7. **Move your mouse just to the left of the cell with the text "Sampson Deluxe Apartment Mower." When the mouse pointer changes to a right-pointing arrow, click to select the row of cells (see Figure 7-24).**

   The row is selected; now just apply the class style.



Bathtub Hydroponics
Spice up your love life with indoor farming
Table 1: Co
Brand
Cost
Chinook Push-o-matic Indoor Mower
$247
Sampson Deluxe Apartment Mower
$370
Anodyne 7456
$595

<body> <div#wrapper> <div#main> <table.ratings> <tr.alternate>

Format: None
Style: alternate
Font: Verdana, Arial,
Size: 13 pixels
Row
Horz: Default
Vert: Default
W
H
No wrap □
Header □
Bg
Bg
Brdr

Figure 7-24: *When the cursor changes to a right pointing arrow (circled), click to select the table row. You can achieve the same thing by clicking inside any cell inside the row you wish to select, and then, at the bottom of the document window, clicking the <tr> tag listed in the Tag selector.*

8. **From the Property Inspector's Style menu, select *alternate*.**

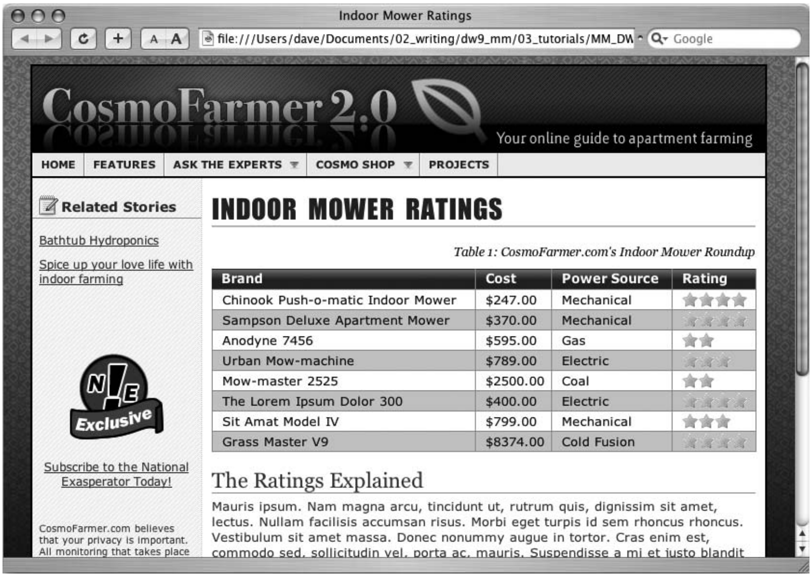
   Every cell background in the row changes to gray. Now for the rest of the table.

9. **Repeat steps 7 and 8 for the remaining alternating rows in the table.**

   Use Figure 7-25 for reference.

10. **Press the F12 (Option-F12) key to preview your hard work in a Web browser.**

    The complete page should look like Figure 7-25. You'll find a completed version of this tutorial in the Chapter_07_finished folder that accompanies the downloaded tutorial files.



Indoor Mower Ratings

file:///Users/dave/Documents/02_writing/dw9_mm/03_tutorials/MM_DW

Google
CosmoFarmer 2.0
Your online guide to apartment farming
HOME
FEATURES
ASK THE EXPERTS
COSMO SHOP
PROJECTS
Related Stories
Bathtub Hydroponics
Spice up your love life with indoor farming
N!E Exclusive
Subscribe to the National Exasperator Today!

CosmoFarmer.com believes that your privacy is important. All monitoring that takes place

INDOOR MOWER RATINGS

Table 1: CosmoFarmer.com's Indoor Mower Roundup

Brand	Cost	Power Source	Rating
Chinook Push-o-matic Indoor Mower	$247.00	Mechanical	★★★★
Sampson Deluxe Apartment Mower	$370.00	Mechanical	★★★★
Anodyne 7456	$595.00	Gas	★★
Urban Mow-machine	$789.00	Electric	★★★
Mow-master 2525	$2500.00	Coal	★★
The Lorem Ipsum Dolor 300	$400.00	Electric	★★★★
Sit Amat Model IV	$799.00	Mechanical	★★★
Grass Master V9	$8374.00	Cold Fusion	★★★★

The Ratings Explained

Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus rhoncus. Vestibulum sit amet massa. Donec nonummy augue in tortor. Cras enim est, commodo sed, sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo blandit

Figure 7-25: *With Dreamweaver and a little CSS, you can make elegant HTML tables.*

2

Part Two: Building a Better Web Page

Chapter 8: Advanced CSS

Chapter 9: Page Layout

Chapter 10: Under the Hood: HTML

CHAPTER
8

Advanced CSS

Chapter 4 introduced the basics of Cascading Style Sheets. In other chapters, you learned how to use CSS to style links, navigation bars, text, and tables. You can go a long way in Web design with just those basic techniques (many people do). However, to really become a Web design expert, there are a handful of advanced CSS concepts you should grasp. Fortunately, Dreamweaver also includes tools to help you with these concepts so you can work more efficiently and avoid those head-scratching "Why the heck does my design look like that?!" moments.

Tip: This chapter will definitely help you on your journey from CSS novice to master. But keep in mind that it's the rare mortal who understands everything about CSS from reading a single chapter. A book that's dedicated to CSS, like *CSS: The Missing Manual,* can be a valuable time-saver in the long run. Honest, that's less a marketing pitch than a genuine learning suggestion.

Advanced Styles

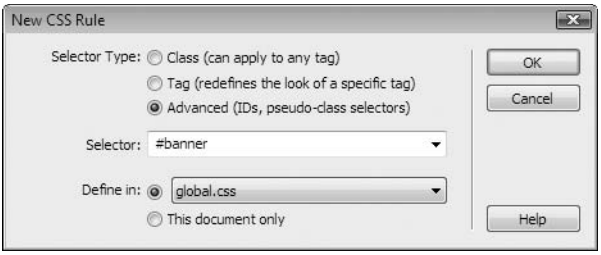
Tag and class styles are easy to learn and use. But they aren't the only ones available. CSS offers many other style types with various functions and purposes, but Dreamweaver lumps them together under the term *advanced styles*. To be technically accurate, tag and class styles aren't really styles per se. In CSS lingo, they're known as different types of *selectors*.

A CSS selector is an instruction that tells a Web browser *what* it should apply the CSS formatting rules to. For example, a tag selector tells a browser to apply the formatting to *any* instance of a particular tag on the page. Thus, an *h1* tag style applies to *all* <h1> tags on a page. A class selector, on the other hand, applies only when the browser encounters the class name attached to an element on a page.

Note: For a detailed discussion of selectors, visit *http://css.maxdesign.com.au/selectutorial/*.

There are a variety of selectors in the CSS arsenal (a few of the most common and useful are mentioned below), but in Dreamweaver, you go about creating all of them the same way: Start by creating a CSS style, following the instructions on page 117. But when you get to the New CSS Rule window (Figure 8-1), instead of selecting the Tag or Class selector type, choose the Advanced option.

You've already encountered the Advanced option a few times in the tutorials (step 5 on page 275, for example). You've also seen how you can use the four "pseudo-class" styles listed in the advanced selector drop-down menu (such as *a:link*) to style the four different link states (link, visited, hover, and active, as described on page 174). With the exception of the four options in the drop-down menu, you must type the selector name of any advanced selector in the Selector box (see Figure 8-1). As described in the following sections, you'll need to use a different syntax (naming protocol) for each type of advanced selector. (The rest of the process for creating the style works just like creating a tag or class style, and the process of editing or deleting these styles is also identical.)



New CSS Rule

Selector Type: ○ Class (can apply to any tag)
○ Tag (redefines the look of a specific tag)
● Advanced (IDs, pseudo-class selectors)

Selector: #banner

Define in: ● global.css
○ This document only

Figure 8-1:
The Advanced selector option lets you type any valid CSS selector in the Selector box. You can even create class and tag styles. For a new class, just type the name of the class preceded by a period, like this: .copyright. To create a tag style, just type the tag name without brackets: p for the <p> or paragraph tag, for instance.

IDs

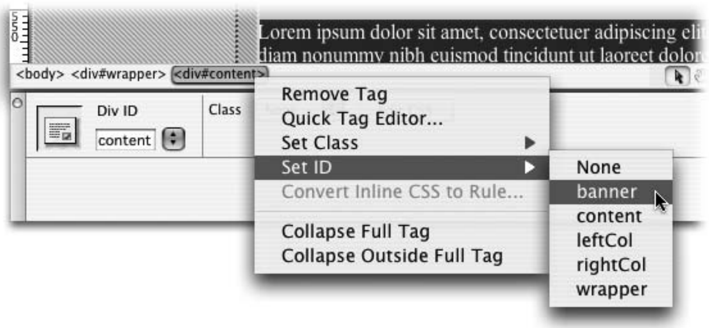
An *ID* is a type of selector that lets you format a *unique* item on a page. Use ID styles to identify an object (or an area of a page) that appears only once—like a Web site's logo, copyright notice, main navigation bar, or a banner. Designers frequently use IDs when creating CSS-based layouts like those presented in the next chapter.

An ID style is very similar to a class style, in that you supply the style's name and apply the style manually. However, while class styles begin with a period (*.company*, for example), ID styles must begin with the # symbol (*#banner,* for example).

Also, while you can apply a class many times on a page, you can apply an ID to only one tag per page. (It's okay to use multiple IDs on a single page, as long as each ID name is different.)

Note: IDs are frequently assigned to a <div> tag. The <div> tag, which indicates a logical division of a page, is often used to group related chunks of HTML. For example, the logo, tagline, and navigation bar that make up a banner at the top of a Web page might be wrapped in a <div> tag with an ID applied. Flip to page 313 for everything you need to know about divs.

To create an ID style, choose the Advanced option in the New CSS Rule window (see Figure 8-1), type the # symbol, and then the style name—*#banner*, say. Applying IDs to the element you want to style can be a little tricky. There are a few tags—like <div> and <table>—that, when selected, provide an "ID" menu in the Property inspector; just select the ID you wish to apply to that tag from that menu. But most other tags don't let you set the ID using the Property inspector. With those tags, the easiest method is to use the Tag selector to apply an ID, as shown in Figure 8-2.



Lorem ipsum dolor sit amet, consectetuer adipiscing eli
diam nonummy nibh euismod tincidunt ut laoreet dolor

Figure 8-2:
You can use the shortcut menu on the Tag selector to apply an ID to a tag. Simply right-click (Control-click) a tag, choose Set ID, and then select the ID name from the menu. Be careful, though: You're only supposed to apply an ID once per page. Unfortunately, the Set ID menu lists all IDs–even ones that have already been applied to another tag on that page.

Whenever you apply an ID to a tag, Dreamweaver adds a bit of HTML code to your page. For instance, an ID style named *#copyright* applied to a paragraph would look like this in the HTML: <p id="copyright"> (this is just like the "class" property that's added when you use class styles, as described on page 122).

Note: You need to use the # symbol only when you create and name the style, not when you apply it. For example, in the New CSS Rule window (see Figure 8-1) you'd name the selector *#copyright.* But when the ID is applied to an HTML tag (which is what Dreamweaver takes care of behind the scenes), the # is left off: <p id="copyright">. The *id* property in the HTML is enough to let a Web browser know you're referring to an ID style.

Descendent Selectors

Tag styles have their drawbacks. While a tag style for the <p> tag makes simple work of formatting every paragraph on a page, it's also indiscriminate. You may not *want* every paragraph to look the same.

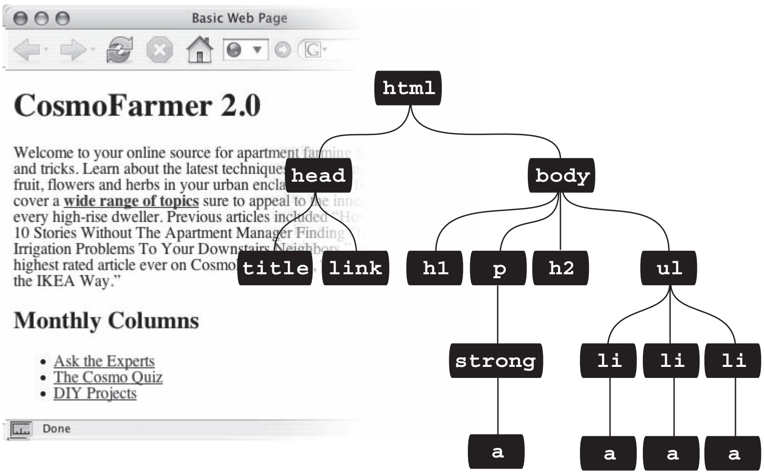
Suppose you want to divide a Web page into different sections—a sidebar and a main content area—using smaller size text for the sidebar's paragraphs and headings. You *could* create two class styles—such as *sidebarText* and *mainText*—and then apply them to the appropriate paragraphs in the respective parts of your design (<p class="sidebarText"> for sidebar paragraphs and <p class="mainText"> for body text). But who has that kind of time?

What you really need is a "smart" tag style, one that can adapt to its surroundings like a chameleon, and use the appropriate formatting depending on where it is on the page. Fortunately, CSS offers just such a style—*descendent selectors*.

Note: Descendent selectors were called "contextual selectors" in the original CSS standards. In the most recent incarnations of these rules, the name has been changed to confuse the innocent.

Essentially, you'll use descendent selectors to format a whole bunch of tags in a similar manner (just like tag selectors)—but only when they're in a particular part of a Web page. In effect, it's like saying, "Hey, you <a> tags in the navigation bar, listen up. I've got some formatting for you. All you other <a> tags, just move along; there's nothing to see here." In other words, a descendent selector lets you format a tag based on its relationship to other tags. To understand how it works, you need to delve a little more deeply into HTML.

Think of the HTML that forms any Web page as a kind of "family tree" (see Figure 8-3). The first HTML tag you use on a page—the <html> tag—is like the grandpappy of all other tags. In essence, if a tag is *inside* another tag, it's a *descendent* of that tag. In Figure 8-3, the text "wide range of topics" is bolded in the long paragraph of text. That's achieved by applying a <strong> tag to that text. Because that bolded text is inside the paragraph, that particular <strong> tag is a descendent of that paragraph.


Basic Web Page

CosmoFarmer 2.0

Welcome to your online source for apartment farming
and tricks. Learn about the latest technique
fruit, flowers and herbs in your urban encla
cover a **wide range of topics** sure to appeal to the inne
every high-rise dweller. Previous articles included "Ho
10 Stories Without The Apartment Manager Finding
Irrigation Problems To Your Downstairs Neighbors
highest rated article ever on Cosmo
the IKEA Way."

Monthly Columns

- Ask the Experts
- The Cosmo Quiz
- DIY Projects

Done

Figure 8-3:
The simple tree diagram (right) represents the structure of the Web page pictured on the left. Every tag on a Web page is a descendent of the <html> tag, since <html> wraps around all other tags on a page. A tag can descend from multiple tags. For instance, the first <a> tag listed in this diagram is a descendent of the <strong>, <p>, <body>, and <html> tags.

Note: The tutorial in the previous chapter includes an example of the power of descendent selectors. See step 5 on page 275.

Descendent selectors let you take advantage of the HTML family tree by formatting tags differently when they appear inside certain other tags or styles. For example, say you have an <h1> tag on your Web page, and you want to emphasize a word within that heading by using the <strong> tag. The trouble is, most browsers display both heading tags and the <strong> tag in bold, so anyone viewing the page can't see any difference between the emphasized word and the other words in the headline. Creating a tag selector to change the <strong> tag's color and make it stand out from the headline isn't much of a solution: you end up changing the color of *every* <strong> tag on the page, like it or not. A descendent selector lets you do what you really want: change the color of the <strong> tag *only when* it appears inside of an <h1> tag.

Creating descendent selectors isn't much more difficult than creating any other type of style. You follow the same process as described on page 117 for creating a style—but in the New CSS Rule window, select the Advanced option. You then type the descendent selector's name in the Selector box. Figuring out how to name the selector is the tricky part.

You name a descendent selector by tacking together a series of selectors (separated by spaces) that identify the location in the family tree of the element you want to style. The most distant ancestor is on the far left and the element you wish to style is on the far right. Consider the example of the bolded word inside the headline discussed above. To style that bolded text (but leave any other bold text as it is), the descendent selector is *h1 strong*. Strong is the actual tag you're formatting, but only when it's inside an h1 tag.

Figure 8-3 shows another example. There are four links (<a> tags) on the page. Three of the links are inside bulleted list items (that's the <li> tag). If you wanted to create a style that would only apply to those three links and leave the fourth link untouched, you would create a descendent selector like this: *li a*. Again, the actual tag you wish to format—the link—appears on the far right, while the tag that wraps around the link—the <li> tag—appears to the left.

A descendent selector can contain more than just two elements as well. The following are all valid selectors for the <a> tags inside the bulleted lists in Figure 8-3.

- ul li a
- body li a
- html li a
- html body ul li a

These four selectors—all of which do the same thing—demonstrate that you don't have to describe the entire lineage of the tag you want to format. For instance, in the second example—*body li a*—*ul* isn't needed. This selector works as long as there's an <a> tag that's a descendent (somewhere up the line) of an <li> tag (which is also a descendent of the <body> tag). This selector can just as easily apply to an <a> that's inside of an <em> tag, that's inside of a <strong> tag, that's inside a <li> tag, and so on.

Note: One reason you might make a descendent selector longer by tacking on additional selectors is if you've written several different rules that simultaneously format a tag. The more selectors that appear in a style name, the more powerful that style is and the more likely it is to override any conflicts with other styles. More on this concept on page 296.

You're not limited to just using tag styles, either. You can build complex descendent selectors by combining different types of selectors. Suppose you want your links to appear in yellow only when they're in introductory paragraphs (which you've designated with a class style named *intro*). The following selector does the trick: *.intro a*. This descendent selector will format any link (a) that's inside any other tag that has the *intro* class applied to it.

This is a very common approach when working with the CSS-based layouts discussed in the next chapter. For instance, you'll frequently want paragraphs in the main content area of the page to look different than paragraphs in sidebars (for example, the sidebar paragraphs might use a different font and a smaller font size). Each section of a CSS layout is usually wrapped inside a <div> tag that has an ID style applied to it. For example, the main content area might be wrapped in a div that has an ID style named *#mainContent* applied to it. To format just the paragraphs inside that area, the descendent selector you'd use would be *#mainContent p* (don't leave out the # symbol).

Tip: When working with descendent selectors, it helps to read the selector name *backward*. Take, for example, the selector *.mainStory td li*. The *li* means "This style applies to the <li> tag"; the *td* means "But only when it's inside a <td> tag"; and *.mainStory* means "And only when that <td> tag is inside another tag that has the class mainStory applied to it."

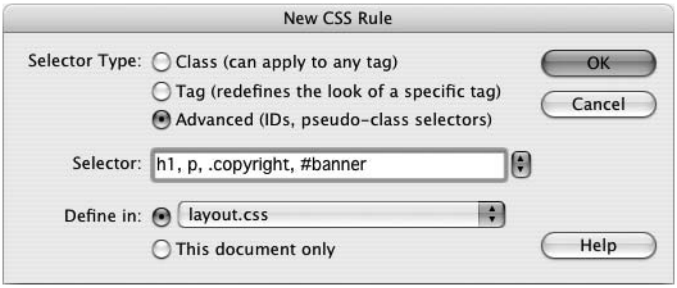
Likewise, if you wanted to define the look of bulleted lists wherever they appear inside a tag with an ID named *#banner*, you'd type *#banner ul* in the Selector box.

After you name the descendent selector, click OK in the New CSS Rule window. You're ready to start adding the CSS properties that define the formatting of your descendent selector style. In other words, proceed as you normally would when creating *any* type of style (see page 117 for a refresher).

Styling Groups of Tags

Sometimes you need a quick way to apply the same formatting to several different elements. Say you'd like all the headers on a page to share the same color and font. Creating a separate style for each header—*h1, h2, h3, h4, h5, h6*—is way too much work, and if you later want to change the color of all of the headers, you have six different styles to update. A better approach is to use a *group* selector. Group selectors let you apply a style to multiple selectors at the same time.

To create a style that applies to several different elements at once, follow the steps on page 117 to create a new style, and then choose the Advanced option in the New CSS Rule window (see Figure 8-4). In the Selector box, write a list of selectors separated by commas. To style all of the heading tags with the same formatting options, you'd create the following selector: *h1, h2, h3, h4, h5, h6*.


New CSS Rule

Selector Type: ○ Class (can apply to any tag)
○ Tag (redefines the look of a specific tag)
● Advanced (IDs, pseudo-class selectors)

Selector: h1, p, .copyright, #banner

Define in: ● layout.css
○ This document only

Figure 8-4: *Group selectors aren't limited to tag styles. You can use any valid selector (or combination of selector types) in a group selector. For example, the selector listed here applies to the <h1> tag, the <p> tag, any tag styled with the .copyright class, and the tag with the #banner ID.*

Note: At times you may want a bunch of page elements to share *some*—but not all—of the same formatting properties. Suppose you want to use the same font for several tags, but apply different font colors to each of those tags. You can create a single style using a group selector with the shared formatting options, and separate styles with unique formatting for each individual tag.

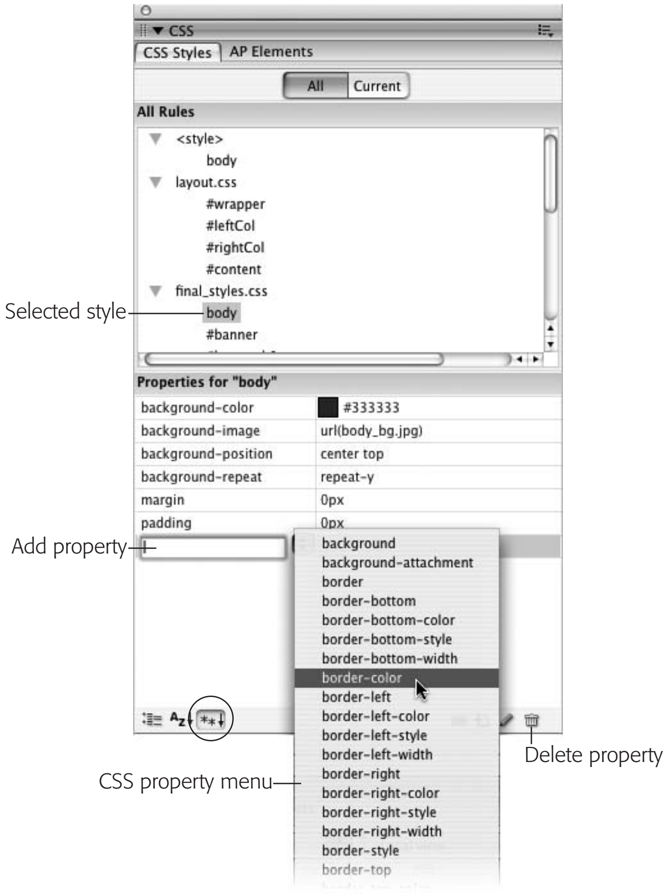
Fast Style Editing

The CSS Rule Definition window (Figure 4-3) can be a rather tedious way of editing CSS properties. It's easy to use, but the categories and menus may slow down experienced CSS jockeys. Fortunately, Dreamweaver offers the Properties pane (Figure 8-5) for fast CSS editing. This pane displays a selected style's currently defined properties, as well as a list of other not-yet-set CSS properties.

Start by selecting the style you wish to edit in the CSS Styles panel. The Properties pane (found in the bottom third of the Styles panel) displays CSS properties in one of three different views: a "set properties" view, which displays only the properties that have been defined for the selected style (Figure 8-5); a Category view, which groups the different CSS properties into the same seven categories used in the Rule Definition window (Figure 8-6, left); and a List view, which provides an alphabetical listing of *all* CSS properties (Figure 8-6, right). Clicking the view buttons at the bottom-left corner of the CSS Styles panel switches between these three displays (see the circled buttons in Figures 8-5 and 8-6).

Property names are listed on the left, and their values are on the right. Figure 8-5 shows an example of a style for the <body> tag, which lists 6 properties (such as background-color and margin) and their corresponding settings (#333333, 0px, and so on).

To add a new property, click the "Add Property" link below the list of properties on the Properties pane, and then select the property name from the pop-up menu. You set (and can edit) the value of a particular property in the space to the right of the property name. Most of the time, you don't have to type in the value. Dreamweaver provides the tools you're likely to need for each property: the ubiquitous color box (see page 49) for any property that requires a color, like font color; a pop-up menu for properties that have a limited list of possible values, like "repeat-y" for the *background-repeat* property shown in Figure 8-5; and the familiar "Browse for File" folder icon for properties that require a path to a file.



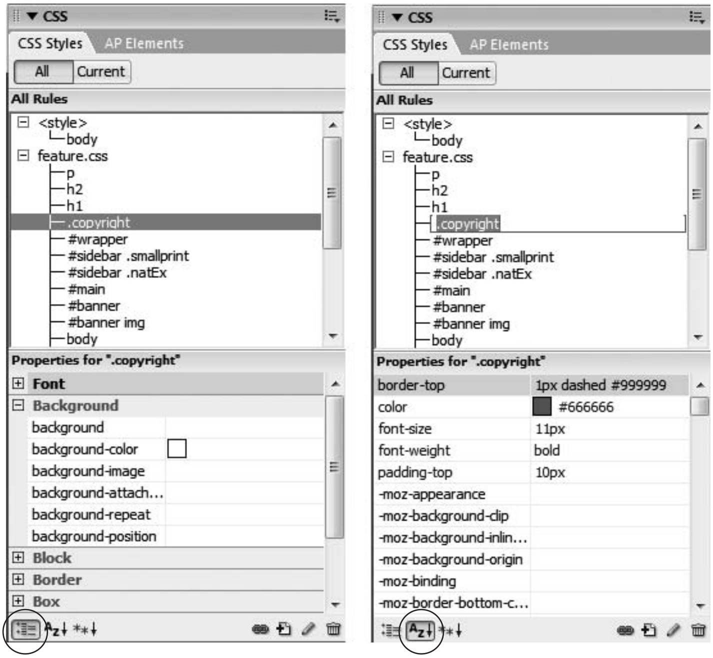
background-color	#333333
background-image	url(body_bg.jpg)
background-position	center top
background-repeat	repeat-y
margin	0px
padding	0px

Figure 8-5:
The "set properties" view of the Properties pane, shown here, provides a clear view of a particular style's properties. You can quickly see which CSS properties are used by the style, delete or edit them, and easily add a new property by clicking the Add Property link (hidden behind the pop-up menu) and selecting the new property's name from the property menu.

Some other properties, however, require you to know enough CSS to enter them manually, in the correct format. That's what makes the Properties pane a good advanced option for experienced CSS gurus. (If your goal is to become one, Dreamweaver includes a built-in CSS reference so you can sharpen your knowledge of this powerful but slightly daunting technology, as discussed on page 394).

But even those not so experienced with CSS should find the Properties pane helpful. First, it's the best way to get a bird's-eye view of a style's properties. Second, for really basic editing such as changing the colors used in a style or assigning it a different font, the Properties pane is as fast as it gets.

To remove a property from a style, just delete its value in the right column. Dreamweaver not only removes the value from the style sheet, but the property name as well. In addition, you can right-click (Control-click) a property name and then select "delete" from the pop-up menu, or simply click a property name and either press the Delete key or click the Trash can icon to banish it from your style sheet (see Figure 8-5).



Properties for ".copyright"

border-top	1px dashed #999999
color	#666666
font-size	11px
font-weight	bold
padding-top	10px
-moz-appearance	
-moz-background-clip	
-moz-background-inlin...	
-moz-background-origin	
-moz-binding	
-moz-border-bottom-c...	

Figure 8-6:
The Properties pane's two other views are a holdover from Dreamweaver MX 2004's Rule inspector, and aren't as streamlined or as easy to use as the "set properties" view pictured in Figure 8-5. Add new properties in these views by simply typing a value in the empty box to the right of the property name–in the left view, in the empty box to the right of "background," for example.

Moving and Managing Styles

In the old days, when CSS support in Web browsers was new, Web designers would create just a handful of styles to format headlines and text. Keeping track of a site's styles back then wasn't too hard. Today, with great CSS support in Web browsers and CSS-based layout becoming the norm, it's not uncommon to create a style sheet with hundreds of styles.

You might want to take a really long, complicated style sheet and split it up into several smaller, easier to read external style sheets. One common Web design practice is to store styles that serve a related function in a separate style sheet—for example, all the styles related to formatting forms in one style sheet, styles for text in another, and styles for page layout in yet another. You can then link each of the external style sheets to your site's pages as described on page 120.

Even if you don't have enough styles to warrant multiple style sheets, it's still useful to organize the styles *within* a style sheet. To keep track of their CSS, Web designers frequently group related styles together in a style sheet; for example, all of the styles for basic layout in one section of the style sheet, basic tag selectors in another section, and specific styles for text, images, and other content grouped according to the part of the page where they're used (sidebar, banner, and so on). By grouping related styles, it's a lot easier to find any particular style when it comes time to edit it.

Before Dreamweaver CS3, moving the code for a style within a style sheet or moving styles into another style sheet required going into Code view and literally cutting and pasting CSS code. Fortunately, Dreamweaver CS3 introduces a simple and logical way to move styles within a style sheet and to move styles from one style sheet to another.

- **To move a style from one place to another in the same style sheet**, drag the style in the CSS Styles panel (see Figure 8-7, left). The order the styles are listed in the CSS Styles panel represents their order in the actual CSS code—so dragging one style below another repositions the CSS code in the style sheet. (Order is important in CSS for reasons you'll learn more about starting on page 296; in a nutshell, styles listed lower in a style sheet are given greater priority in case of conflicts.) You can select and move more than one style at a time by Ctrl-clicking (⌘-clicking) each style you wish to select and then dragging the highlighted group of styles (Ctrl-click [⌘-click] a selected style to deselect it). Select a range of styles by clicking one style and then Shift-clicking another style: every style between the two is also selected.

Note: You will only see the list of styles in a style sheet (and be able to rearrange those styles) when the All button (circled in left image of Figure 8-7) is selected in the CSS Styles panel.

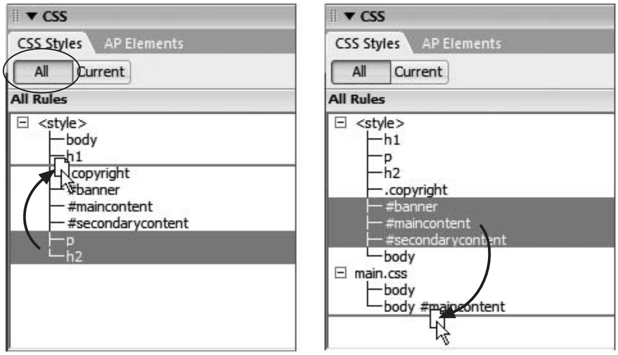
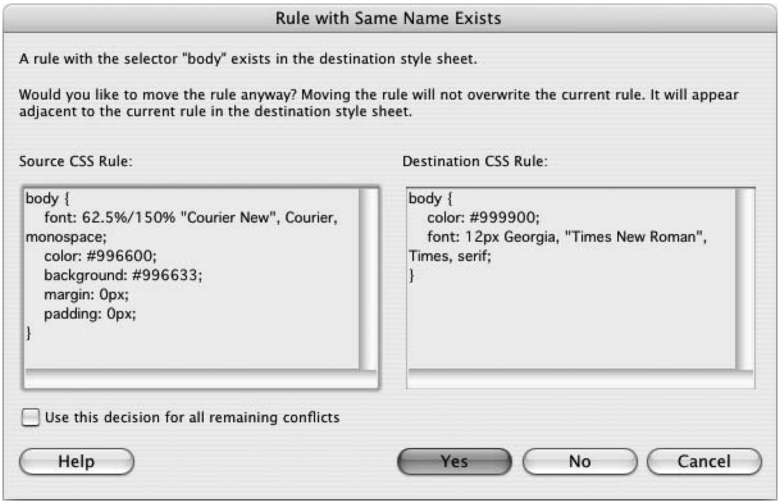


Figure 8-7:
In the CSS Styles panel you can drag styles to different locations within a style sheet (left). In this case, dragging the styles below the h1 style groups all the basic tag selectors (body, h1, p, and h2) together. You can also drag styles between style sheets to move a style from one style sheet to another. In the Styles panel on the right, three ID styles are being moved from an internal style sheet to a CSS file named main.css.

- **To move one or more styles between two style sheets,** drag the style from one style sheet to another in the CSS Styles panel. This works both for moving a style from an internal style sheet to an external style sheet and for moving a style from one external style sheet to another. Say you've created an internal style sheet (page 115) for the current page and also attached an external style sheet (page 115) to the same page. Dragging a style from the internal style sheet (represented by <style> in the CSS Styles panel) to the external style sheet (represented by the file name—*main.css*, for example) moves the style *out* of the internal style sheet and *into* the external style sheet (Figure 8-7, right). Dreamweaver then deletes the CSS code for the style from the first style sheet. You can also use this method to move a style between two attached external style sheets as well.

If you drag a style into another style sheet and the destination style sheet already contains a style with the same name, you can run into some confusion. For example, say you've got a tag style for the <body> tag defined in an internal style sheet; in addition, you've got an external style sheet attached to the same page and it also has a body tag style (perhaps with different properties). If you drag the body tag style from one style sheet into another, you're suddenly trying to add the same named style a second time. When this happens, Dreamweaver informs you of the potential problem (see Figure 8-8).



Rule with Same Name Exists

A rule with the selector "body" exists in the destination style sheet.

Would you like to move the rule anyway? Moving the rule will not overwrite the current rule. It will appear adjacent to the current rule in the destination style sheet.

Source CSS Rule:

```
body {
   font: 62.5%/150% "Courier New", Courier,
monospace;
   color: #996600;
   background: #996633;
   margin: 0px;
   padding: 0px;
}
```

Destination CSS Rule:

```
body {
   color: #999900;
   font: 12px Georgia, "Times New Roman",
Times, serif;
}
```

☐ Use this decision for all remaining conflicts

Figure 8-8:
When dragging a style from one style sheet to another, it's possible that a style by the same name already exists in the destination style sheet. When that happens, this dialog box appears, letting you either cancel the move or move the style anyway. To help you figure out what to do, Dreamweaver lists the properties in both the style you're trying to move and the one that's present in the style sheet you're dragging into. You can use this information to determine which of the two styles you wish to keep, or to note which properties from each style are most important.

Note: Unfortunately, Dreamweaver CS3 doesn't provide a way to reorder the sequence of internal and external style sheets on a page. They're attached to the page in the order in which you add them. For example, if you attached an external style sheet to a Web page and then created an internal style sheet, the internal style sheet's code appears after the link to the external style sheet. This can have some serious effects on how the cascade works (see page 296). To change the order of the style sheets in the HTML, you have to go to Code view (see page 370) and cut and paste the code.

You have two choices at this point. You can decide not to move the style; click the No button (the Cancel button has the same effect) and the window closes and no styles are moved. Or, click the Yes button and Dreamweaver moves the style to the style sheet. It doesn't replace the old style; nor does it try to merge the properties from the two styles into a single style with the same name. Instead, it just places the new style along with the old style in the same style sheet—in other words, you end up with one style sheet containing two separate styles with the same name. Even though this is perfectly valid CSS, it's very confusing to have the same style twice in one style sheet. You should delete one of the styles, and, if necessary, edit the remaining style to match any properties from the deleted style.

Note: Dreamweaver says that it will place a style adjacent to the style with the same name when moving like-named styles (see Figure 8-8), but it doesn't. Dreamweaver places the moved style wherever you drop it in the list of styles in the destination style sheet.

- You can also **move one or more styles into an external style sheet** that's not attached to the current page. As discussed on page 116, external style sheets are the most efficient way of styling a Web site's collection of pages. However, it's often easier to use an internal style sheet when you're first starting a design. This way, as you tweak your CSS, you only have to edit the one file (the Web page with the internal style sheet) instead of two (the Web page *and* the external CSS file). But once you've completed the design, it's best to move the styles from the internal style sheet to an external style sheet. Prior to Dreamweaver CS3 this was a multi-step process. Now, it's as easy as a right-click (Ctrl-click).

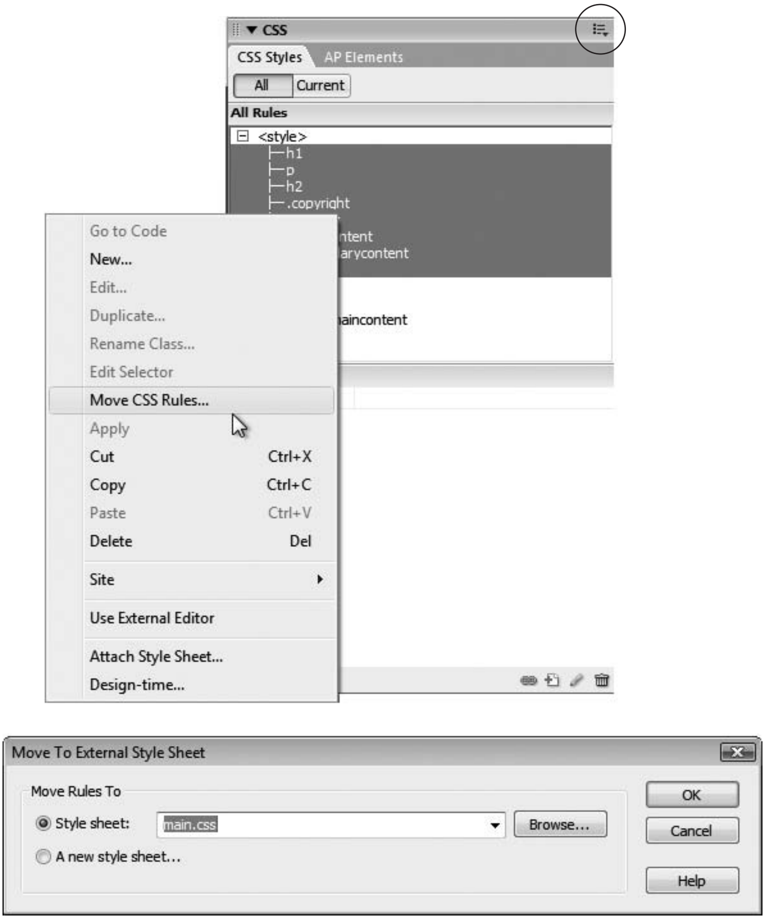
  In the CSS Styles panel, select the styles you wish to move to an external style sheet (Ctrl-click [⌘-click] each style name to select it). Right-click (Ctrl-click) the selected styles and choose "Move CSS Rules" (see Figure 8-9, top). The "Move to External Style Sheet" window opens (Figure 8-9, bottom). You can then either add the rules to an existing external style sheet by clicking the browse button and selecting an external CSS file in the site, or turn on the "A new style sheet…" radio button to create a new CSS file and move the styles there. When you click OK, the styles are either moved to an existing CSS file, or a dialog box appears letting you name and save a new CSS file. Either way, Dreamweaver removes the styles from the internal style sheet and places them into an external style sheet; even better, if the external CSS file isn't already attached to the current page, Dreamweaver attaches it for you, which lets you skip the manual process of attaching the style sheet, described on page 120.

More about CSS

As you begin to pile more and more styles onto your pages, you may notice that a page might not look exactly as you expect. A paragraph of text might be green even though you didn't create a style for a green paragraph. Or you've styled a particular paragraph to appear with green text, but it refuses to change color. Most peculiar behaviors like these occur when multiple styles collide. The rules governing these interactions can be complex, but they boil down to two main concepts: *inheritance* and *the cascade*.

Inheritance

Imagine that you've created a new style by redefining the paragraph tag (<p>). This style uses Arial font, is red, and is 24 pixels tall. Then you select a single word in a paragraph and apply bold formatting to it. When you use the Property inspector's bold button to do this, Dreamweaver wraps that word in a pair of <strong> HTML tags.



◉ Style sheet: main.css

Figure 8-9:
Moving internal styles to an external style sheet is a two-step process. First, select the styles you wish to move and right-click to select "Move CSS Rules", and then tell Dreamweaver which style sheet to move the style to. You can also access the "Move CSS Rules" option from the Option menu on the CSS Styles panel (circled). This technique is also a good way to take one really long external style sheet file and move related styles into several, smaller CSS files.

When a browser loads the page, it formats all paragraphs in red Arial text, with a font size of 24 pixels, because that's how you defined the <p> tag. But what happens when the browser suddenly encounters the <strong> tag? Since you didn't redefine the <strong> tag in red, Arial, 24 pixels, the browser scratches its little silicon head: Should the browser just resort to the *default* font, size, and color when it gets to the <strong> tag?

No, of course not. The bolded word should look just like the rest of the paragraph—Arial, red, 24 pixels—but be bold, *too*. And indeed, that's how CSS works: The <strong> tag *inherits* the formatting of the surrounding <p> tag.

Just as human babies inherit traits like eye color from their biological parents, nested HTML tags inherit the properties of tags that surround them. A tag that's nested inside another tag—such as that <strong> tag inside the <p> tag—is called a *child*, while the enclosing tag is called the *parent*.

Note: As you read on page 285, a tag inside another tag is also called a *descendent*, while a tag that surrounds another tag is called an *ancestor*.

Inheritance passes from parent to child and ancestor to descendent. So in this example, the <p> tag (the parent) passes on the Arial font, red color, and 24 pixel size to the <strong> tag (the child). But just as children have their own unique qualities, the <strong> tag adds its own quality—boldness—to the properties it inherits from its parent.

Note: Inheritance applies to all styles, not just HTML tag styles. For example, if you apply a class style, to the <body> tag, then all tags inside the body–paragraphs, images, and so on–inherit the properties of the class style.

Inheritance comes in quite handy at times. Say you want to display *all* text on a page (paragraphs, headings, unordered lists, and links) using the Verdana font. You could dedicate yourself to a lengthy tagging extravaganza and redefine *every* HTML tag used to format text—<h1>, <h2>, <p>, <a>, <ul>, and so on—or create a class style and then manually apply it to all text on the page.

However, a better and faster technique is to take advantage of inheritance. Every Web page contains a <body> tag, which contains all the elements of your page. The <body> tag, therefore, is an ancestor of *all* the HTML you see in a page—images, paragraphs, headings, and so on. To quickly format all text, you could create an HTML tag style for the <body> tag using Verdana, or create a class style using that font and apply it to the <body> tag. Every bit of text inside the body—all children—then inherit the Verdana font property.

Note: Actually, not all CSS properties are inherited. For the most part, these are logical exclusions. For example, say you created a border around an unordered list to visually set it off in its own box. If the border property were inherited, then all the elements *inside* the unordered list–like list items, links, or bolded words–would each have their own box drawn around them as well. Use Dreamweaver's built-in CSS Reference to see which properties *aren't* inherited (see page 394).

The Cascade

At times, styles can conflict. Let's say you redefine the <h1> tag in an external style sheet, so that all <h1> tags show up in red, Arial font. But now you attach this external style sheet to a Web page that already has an *internal* style sheet whose <h1> tag style has been set to Times, 24 pixels.

When a Web browser has to display any of this Heading 1 formatted text, it runs into a little dilemma. The page has two different styles—two sets of formatting rules—for the *same tag*. To make matters even more confusing, suppose one particular <h1> tag has a class named *.highlight* applied to it. The *.highlight* class style sets the font family to Trebuchet MS and makes all of the text uppercase. So which style does the browser choose: the style from the internal style sheet, the style from the external style sheet, or the class style?

The answer is all of them. The browser merges the three styles into a sort of hybrid, following these rules:

- **Properties that don't conflict are applied as usual.** In the previous example, the red color property exists only in the external style, while only the internal style specifies a font *size*. And the class is the only style to specify uppercase text. So far, the browser knows that, for this page, text inside <h1> tags should be red, 24 pixels tall, and uppercase.
- **When properties *do* conflict, the Web browser uses the property from the style with the greatest *specificity*.** Specificity is just CSS jargon meaning the style with the most authority. The type of selector is one way to affect specificity: ID selectors are considered more specific than class styles, which are more specific than tag styles. In general, this means that properties from an ID style override properties from a class style, and properties from a class style override any conflicts with a tag style. For an amusing—but accurate—description of specificity, read this article: *www.stuffandnonsense.co.uk/archives/css_specificity_wars.html*. Make sure you print out the accompanying Star Wars-themed chart which visually explains specificity by equating class selectors with Darth Vader, and IDs with the Dark Emperor himself: *www.stuffandnonsense.co.uk/archives/images/specificitywars-05v2.jpg*. May the force be with you.
- **If two styles with the same specificity conflict**—like the h1 style in the external style sheet and the h1 style in the internal style sheet in this example—**the browser chooses the properties from the styles that were added to the page *last*.** Say you first created an internal style sheet (at which point Dreamweaver inserted the appropriate HTML and CSS code into the Web page) and *then* attached an external style sheet. That means the link to the external style sheet appears *after* the internal style sheet in the Web page. In that case, a style from the external style sheet with the same name as a style from the internal style sheet wins out in the case of any conflicts. Similarly, if you attach the external style sheet first and then create the internal style sheet, the internal style sheet wins.

To summarize this example, then: the Web browser determines that text inside an <h1> tag on this Web page should be Trebuchet MS and uppercase (from the class style), red (from the h1 style in the external style sheet), and 24 pixels (the h1 style in the internal style sheet).

Note: Descendent selectors, which include combinations of tag, class, and ID names–such as *#banner h1*, *.main p*, or *h1 b*–have even more force since the specificity adds up. Say you create a *p* tag style with a bright-red text color, and a descendent selector, *.sidebar p*, with purple text. Any paragraphs inside another element (like a table cell) that use the *.sidebar* style are purple–*not* red. Fortunately, Dreamweaver's very useful CSS Styles panel can decipher this confusing jumble of conflicting styles for you (see page 298).

Inherited properties, however, have no specificity, so when child elements inherit properties from parent elements (as described on page 294), any style applied directly to the child element will overrule properties from the parent element—no matter what the specificity of the parent tag's style. Suppose you create an ID style named *#homepage* with the following properties: purple text and the Arial font. If you apply the *#homepage* id to the <body> tag, then the child elements (anything within the <body> tag) inherit those properties. If you then redefine the paragraph tag so that paragraph text is green, paragraph text inherits the Arial font from the body, but ignores the purple color in favor of the green. Even though an ID style like *#homepage* has greater authority than a simple *p* tag selector, the inherited properties don't beat out properties applied specifically to the paragraph through the p tag style.

Note: In the CSS version of "rock, paper, scissors," HTML text formatting beats CSS formatting. So if you add new, improved CSS styles to old Web pages that include out-of-date HTML formatting, your CSS styles won't work. To eliminate this conflict, remove the <font> tag from the page's code using Dreamweaver's "Search and Replace" tool (see page 718) or the Clean Up HTML/XHTML command (page 597).

To learn more than you probably ever wanted to know about the cascade, visit the following Web pages:

- *www.blooberry.com/indexdot/css/topics/cascade.htm*
- *www.w3.org/TR/REC-CSS2/cascade.html#cascade*

Note: For a really in-depth but super-illuminating explanation of confusing CSS concepts check out *CSS: The Missing Manual*. In that book, you'll find chapters dedicated to both inheritance and the cascade.

The Other Side of the CSS Styles Panel

If you haven't yet set this book aside in hopes that the swelling in your brain will subside, you've probably absorbed the notion that the application of style properties is quite complex. With all this inheritance and cascading going on, it's very easy for styles to collide in hard-to-predict ways. To help you discern how styles interact and ferret out possible style conflicts, Dreamweaver CS3 includes another view for the CSS Styles panel (see Figure 8-10). By clicking the Current button, the panel switches to Current Selection mode, which provides insight into how a selected item on a page—such as an image, a paragraph, a table, or a div tag—is affected by the page's styles.

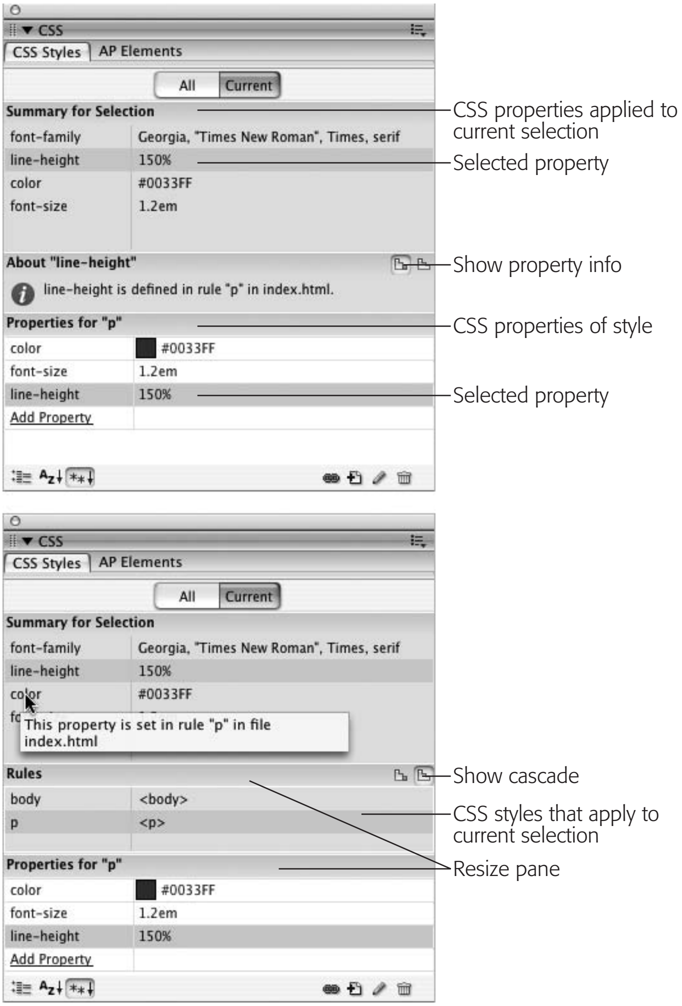
Tip: You can also switch the CSS Styles panel into Current Selection mode by selecting text on a page, and then clicking the CSS button on the Property inspector. Doing so also opens the CSS panel, if it's closed–a nice shortcut. If the button's "grayed out," then the CSS panel is already open in this mode.

Current Selection mode is really an incredible tool that's invaluable in diagnosing weird CSS behavior associated with inheritance and cascading. But like any incredible tool, it requires a good user's manual to learn how it works. The panel crams in a lot of information; here's a quick overview of what it provides:

- **A summary of style properties for the currently selected item is in the "Summary for Selection" pane.** Remember that whole thing about how parents pass on attributes to child tags, and how as styles cascade through a page, they accumulate (which means, for example, it's possible to have an <h1> tag formatted by multiple styles from multiple style sheets)? The "Summary for Selection" pane is like the grand total at the bottom of a spreadsheet. It tells you, in essence, what the selected element—a paragraph, a picture, and so on—looks like when a Web browser tallies up all of the styles and displays the page. For serious CSS fans, this pane is almost worth the entire price of Dreamweaver.
- **The origin of a particular property is displayed in the About pane** (Figure 8-10, top). If a headline is orange, but you never created an <h1> tag with an orange color, you can find out which style from which style sheet is passing its hideous orangeness to the heading. You can get the same information by mousing over any property listed in the Summary section; in addition, when the About pane is visible you can't see the much more useful Rules pane, discussed next. So you're better off skipping this pane.
- **A list of styles that apply to the current selection appears in the Rules pane** (Figure 8-10, bottom). Since any element can be on the receiving end of countless CSS properties handed down by parent tags, it's helpful to see a list of all the styles contributing to the current appearance of the selected object on the page.
- **The order of the cascade is in the Rules pane** (Figure 8-10, bottom). Not only are styles that apply to the current selection listed here, they're also listed in a particular order, with the most general style at the top and the most specific ones at the bottom. This means that when the same property exists in two (or more) styles, the style listed last (farthest down the list) wins.

A few examples can help demonstrate how to read the CSS Style panel when it's in Current Selection mode. Figure 8-10 shows the CSS properties affecting a selection of text (in this case, a paragraph) on a Web page. The "Summary for Selection" pane lets you know that if you viewed this page in a Web browser, this paragraph would be displayed using the Georgia typeface, with a 150% line height (space between each line of text), in bright blue (#0033FF), and at a font size of 1.2 ems. When you select a property from the "Summary for Selection" pane and then click the Show Property Information button (Figure 8-10, top), the About pane displays where the property comes from—in this case, that the property belongs to the <p> tag style, which is defined in the internal style sheet of the file *index.html*.

You've seen the bottom part of this pane before. It's the Properties pane, and it's used to delete, add, and edit the properties of a style (see page 289). Simply click in the area to the right of the property's name to change its value, or click the Add Property link to select a new property for the style. Notice that in this example, the Properties pane contains fewer properties than the summary view. That's because it only displays properties of a single style (the <p> tag style), while the Summary view shows all properties inherited by the current selection.



Summary for Selection

font-family	Georgia, "Times New Roman", Times, serif
line-height	150%
color	#0033FF
font-size	1.2em

About "line-height"

line-height is defined in rule "p" in index.html.

Properties for "p"

color	#0033FF
font-size	1.2em
line-height	150%
Add Property	

Summary for Selection

font-family	Georgia, "Times New Roman", Times, serif
line-height	150%
color	#0033FF

This property is set in rule "p" in file index.html

Rules

body	<body>
p	<p>

Properties for "p"

color	#0033FF
font-size	1.2em
line-height	150%
Add Property	

CSS properties applied to current selection

Selected property

Show property info

CSS properties of style

Selected property

Show cascade

CSS styles that apply to current selection

Resize pane

Figure 8-10:
The two views of the Styles panel–Property Information (top) and Cascade (bottom)–are mostly the same. Both show a summary of properties that apply to the current selection, and both display, at bottom, the Property list pane (see page 289) used to edit those properties. Property Information view shows where a selected property "comes from"–that is, which style and which style sheets were used in defining a property. Cascade view, however, is by far the more useful option. You can get the same information as in Property Information view simply by mousing over a CSS property in the Summary pane. For example, in the bottom image, hovering the mouse over the color property opens a pop-up tooltip that explains that this particular color is set in a p tag style that's defined in the index.html's internal style sheet. In addition, Cascade view lists all styles that apply to the currently selected tag: in this case, a body tag style and p tag style.

Note: Sometimes one or more of the three panes are too small for you to see all the information displayed. You can use the gray bars containing the panes' names as handles and drag them up or down to reveal more or less of each pane.

Clicking the Show Cascade button (Figure 8-10, bottom) reveals a list of all styles that affect the current selection. In this case, you can see that two tag styles—one for the body tag and one for the p tag—contribute to styling the selected paragraph of text. In addition, as mentioned above, the order in which the styles are listed is important. The lower the name appears in the list, the more "specific" that style is—in other words, when several styles contain the same property, the property belonging to the style *lower* on the list wins out. (See page 296 for more on conflicts caused by cascading styles.)

Clicking a style name in the Rules pane reveals that style's properties in the Properties pane below. This pane not only lists the style's properties but also crosses out any properties that don't apply to the selected tag. A property doesn't apply to a selection for one of two reasons: either because the property is overridden by a more specific style, or because that property isn't inherited by the selected tag.

For example, Figure 8-11 shows that four styles affect the formatting of a single headline: three tag styles (<body>, <h2>, and <h2>) and one class style (.highlight). In the left-hand image, the color and font-size properties for the h2 style are crossed out—meaning those properties don't apply to the current selection. The font-family property, on the other hand, isn't crossed out, indicating that the current selection is displayed using the font Trebuchet MS. Because that h2 appears near the top of the list of styles in the Rules pane, you can determine that that style is less "specific" (less powerful) than styles listed later. The style that appears last on the list—*.highlight* in this example —is most "specific" and its properties override conflicts from any other style. Selecting *.highlight* in the rules pane (Figure 8-11, bottom right) demonstrates that, yes indeed, its font size and color properties "win" in the battle of cascading style properties.

Tip: If you mouse over a property that's crossed out in the Properties pane, Dreamweaver pops up a tooltip explaining why a browser won't apply that property. If the property is crossed out because it's overruled by a more specific style, Dreamweaver also tells you which style won out.

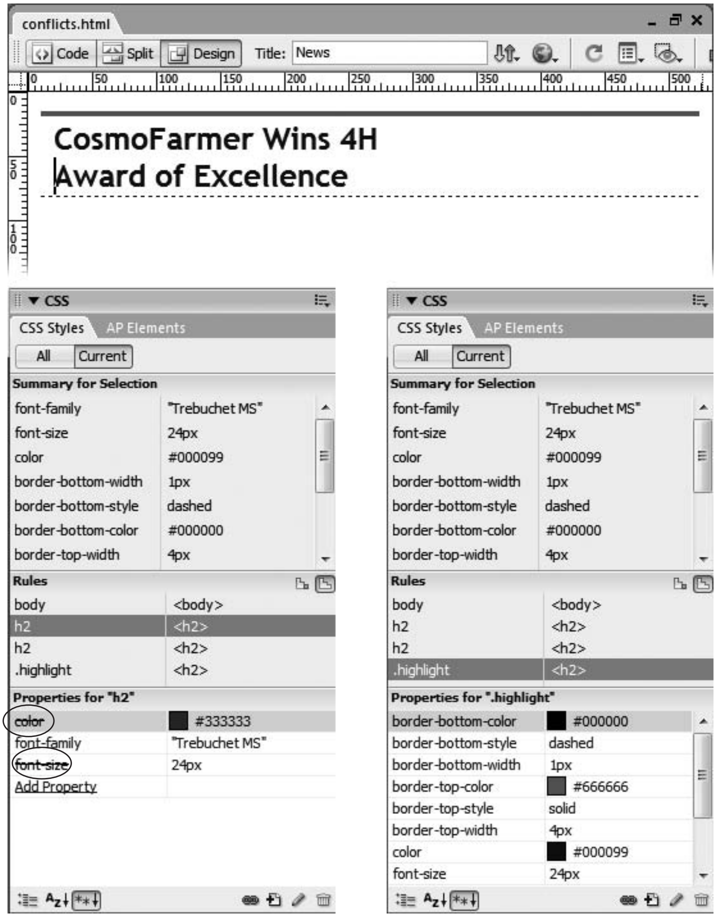
If your Web pages are elegantly simple and use only a couple of styles, you may not find much need for this aspect of the CSS Styles panel. But as you become more proficient (and adventurous) with CSS, you'll find that this panel is a great way to untangle masses of colliding and conflicting styles.

Tip: One way to make a style more "powerful"–so that its properties override properties from conflicting styles–is to use a descendent selector (see the note on page 288). For example a *body p* descendent selector has more authority than just a plain *p* tag style, even though both styles target the exact same tags. You can quickly rename a style or create a more longwinded and powerful descendent selector using the CSS Styles panel: Select the name of the style in the CSS Styles panel (use the "All" view); click the style name a second time to edit it.

Styling for Print

You may be surprised to see a section on print design in a book dedicated to creating beautiful onscreen presentations. However, it's common to see people print out Web pages: printed directions to get to a concert, a list of product names and ratings to review while walking the aisles of a store, or a longwinded Web treatise that's easier to read on paper while reclining in a favorite chair.

Unfortunately, some Web pages just don't print well. Sometimes the banner's too big to fit on one sheet, so it spans two printed pages; or the heavy use of ads wastes toner when printed. And some CSS-based layouts simply print as jumbled messes.



Title: News

CosmoFarmer Wins 4H Award of Excellence

Summary for Selection

font-family	"Trebuchet MS"
font-size	24px
color	#000099
border-bottom-width	1px
border-bottom-style	dashed
border-bottom-color	#000000
border-top-width	4px

Rules

body	<body>
h2	<h2>
h2	<h2>
.highlight	<h2>

Properties for "h2"

~~color~~	■ #333333
font-family	"Trebuchet MS"
~~font-size~~	24px
Add Property	

Properties for ".highlight"

border-bottom-color	■ #000000
border-bottom-style	dashed
border-bottom-width	1px
border-top-color	■ #666666
border-top-style	solid
border-top-width	4px
color	■ #000099
font-size	24px

Figure 8-11:
Selecting the Current view of the CSS Styles panel lets you easily view all the properties that apply to the currently selected item–in this example it's the headline (an <h2> tag) pictured at top. A line (circled in the left corner of the panel below) strikes out properties from a style that don't apply to the headline. In this case, the font-size and color in the first <h2> style is overridden by the same properties in the more specific .highlight class style (bottom right).

Fortunately, CSS has an answer: *printer style sheets*. The creators of CSS realized that Web pages might be presented in different ways, such as printed on paper. In fact, they went so far as to define a large group of potential "media types" so that Web designers could customize the display of a page for different output devices including teletype machines, Braille readers, and more.

Basically, by specifying a media type, you can attach an external style sheet that's *only* applied when the page is output to a particular style of device. For instance, you could have a style sheet that only works when the Web page is viewed on a monitor, and another that only applies when the page is printed. In this way you can tweak the styles so the page looks better when printed, without affecting the page's appearance onscreen. Figure 8-12 shows the concept in action.

The basic process involves creating an external style sheet that contains styles for the particular media type, and then attaching the style sheet to a Web page and assigning the appropriate media type.

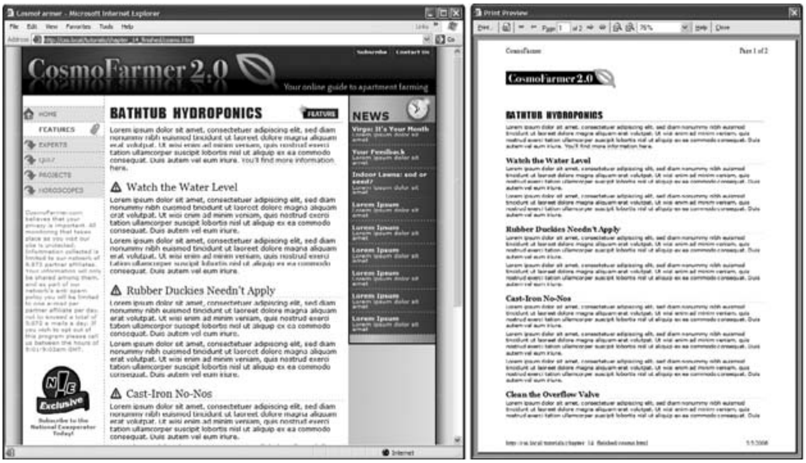
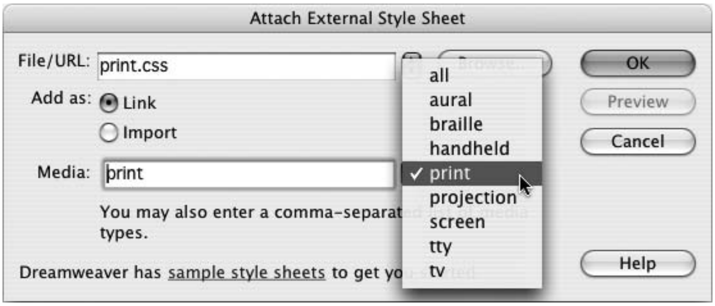


Figure 8-12: *When printing a Web page, you really don't need navigation links or information that's not related to the topic at hand (left). Use a print style sheet to eliminate unnecessary content and format the page so it prints well (right).*

Attaching an external style sheet is discussed on page 120, but in a nutshell you simply click the Attach External Style Sheet button on the CSS Styles panel (see Figure 4-1). Doing so opens the Attach External Style Sheet window (see Figure 8-13). Click the browse button and locate the proper CSS file, select the media type from the Media menu, and then click OK.


Attach External Style Sheet

File/URL: print.css

Add as: ● Link ○ Import

Media: print

You may also enter a comma-separat[ed list of media] types.

Dreamweaver has sample style sheets to get yo[u started].

Figure 8-13: *When attaching an external style sheet, you can indicate that the style sheet should be used only when the Web page is printed (print), when it's viewed on a monitor (screen), or at all times for all media (all). Leaving this option blank is the same as selecting "all".*

Tip: If you attach an external style sheet and select one of the media type options, Dreamweaver displays the media type name on the CSS Styles panel. For example, if you attach an external style sheet file named *print.css* and specify the print media type, then "print.css (print)" appears in the CSS Style Panel.

Although Dreamweaver lists many different media types (aural, Braille, handheld, and so on), only three options are widely supported: *print*, *screen*, and *all*. "Print" specifies that the styles only apply when the page is printed; "screen" indicates a style sheet that only takes effect when the page is viewed on a monitor; and "all" is the same as not selecting anything—the style sheet applies when printed, viewed on a monitor, felt on a Braille reader, and so on. This option comes in handy when you want to create a style sheet that defines the basic look of your Web site—such as the font, line height, and text alignment—and applies both when printed and viewed on the screen. You can then create two additional style sheets (one for onscreen and one for print) that tweak that basic design for presentation on a monitor and on a piece of paper.

Note: Dreamweaver CS3 doesn't provide a way to create a new external style sheet *and* define its media type at the same time. So to create and use a new printer-only style sheet, you need to follow the steps on page 117 to create the external style sheet, then unlink that style sheet from the page (page 126) and then reattach the external style sheet and select the print option from the Media menu. Alternatively, you could just create a CSS style sheet file by choosing File → New and selecting CSS from the Blank Page category of the New Document window; save the file (don't forget the .css extensions), and then add styles to the file using the same methods you use when adding styles to a Web page (see page 117). You can then attach this style sheet to a Web page and specify a media type as described on page 303.

Previewing Media Styles in Dreamweaver

Dreamweaver is mainly used to create Web pages that people view onscreen. Because of that, the program normally shows only styles that are attached when either no media type is selected or when the "all" or "screen" type is specified. So how can you see what the printed version will look like when designing a print style sheet? Dreamweaver CS3 sports a fancy toolbar just for this purpose: the Style Rendering toolbar (Figure 8-14). To turn it on, choose View → Toolbars → Style Rendering, or right-click (Control-click) on either the Insert bar or the document toolbar, and then choose Style Rendering.

Each button in the toolbar lets you view the page as it will look on screen, in print, or through one of the other media types. Click the Screen button to see how Dreamweaver (and a Web browser) normally display the page. Click the Print button and any styles attached using the "print" and "all" media types appear; in other words, when designing the page for print, click the Print button.

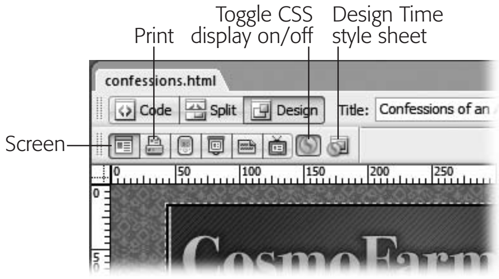


Figure 8-14:
The Style Rendering toolbar lets you show styles that match the media type you selected when you attached the style sheet to the page. The toolbar also includes buttons to attach a Design Time style sheet (see the box on page 307) and to completely hide all styles. This last option is particularly good when creating complex CSS-based designs, which can sometimes make selecting and editing HTML difficult. Click the "toggle CSS display" button to temporarily hide the styles and just display the simple, unadorned HTML.

Note: If your CSS styles don't seem to have any affect on a page, you either have the wrong media type selected in the Style Rendering toolbar, or you might have turned off the display of CSS by clicking the Toggle CSS Display button (see Figure 8-14). Click the Toggle CSS Display again to display the CSS-styled page.

Tips for Printer Style Sheets

A printer style sheet can redefine the look of any element of a page when it's printed. You can change fonts, adjust type size, increase leading (space) between lines of text, and so on. You can use any CSS property you want and modify any style to your liking, but there are a few common tasks that most printer style sheets perform.

- **Override properties from another style sheet.** If you've attached an external style sheet with the "all" media type or you didn't specify any type at all, the printed page will use styles from that style sheet. The print style sheet may need to override some of the settings present in those style sheets. The best way to do this is to simply create styles with names that match the style you wish to override. For example, if a style sheet attached to the page has a *p* tag style that specifies the font size as 12 pixels, you can create another *p* tag style in the print style sheet that changes the font size to 12 points.

  Another solution to this problem is to simply create two separate style sheets—one for print and one for screen—and attach each with its respective media type. This way there won't be any overlap between styles in the two style sheets.

- **Text size and color.** For screen display, you'll use either pixels, ems, or percentages to size text (see page 107). Unfortunately, these measurement units don't make a lot sense to an inkjet printer. If you've used Microsoft Word, you probably know the measurement of choice for printed text is points. If you don't like the size of type when a page is printed, redefine font sizes using a printer-friendly size (see page 105 for information on sizing text). In addition, while bright yellow type on a black background may look cool onscreen, black type on white paper is the easiest to read. If you colored your text, it may print out as a shade of gray on a black and white printer. Setting text to black in a print style sheet can help your visitors' weary eyes.

- **Hide unnecessary page elements.** Some parts of a Web page don't really need to print. Why, for example, do you need to see the site's navigation bar or a sidebar of links on a printed page? After all, you can't click them! Fortunately, CSS provides a property that will let you completely hide unwanted page elements. Just create a style that applies to the part of the page you wish to hide—for instance, with CSS-based layouts you typically divide sections of a page into separate <div> tags, each with its own unique ID. Say the site's navigation is contained inside a tag that has an ID named *#navbar* applied to it. To hide the nav bar, create an advanced style named *#navbar* in your print style sheet. In the CSS Rule Definition window (see Figure 4-3), click the Block category and then choose "None" from the Display property menu. (See Figure 8-12 for an example of this technique in action.)

- **Adjust margins and widths.** To make a design look more elegant, you might increase the margins around the edges of a page. But this extra space only wastes paper when printed. Remove any margins you've applied to the body tag. In addition, if you hide parts of a page when printing, it's possible that the remaining page elements won't fill the printed page. In this case, add a style to the print style sheet that changes the widths of the printed elements. For example, if you have a two-column design—a sidebar with links and other site-specific info, and a main column filled with all the useful info that should appear on a printed page—and you hide one column (the sidebar), you'd then set the width of the remaining column to 100% and remove any margins on its left and right side. That way, the printed information will fill the entire width of the page.

- **Take advantage of *!important*.** As mentioned earlier, sometimes the printer style sheet needs to override certain CSS properties from another style sheet. Thanks to the Cascade (page 296) a style must have greater "specificity" to overrule conflicts with another style. If you're trying to override, say, the font color used for a descendent selector named *body #wrapper #maincontent p*, then you have to add the same longwinded style name to your print style sheet. Fortunately, CSS provides a simpler method: the *!important* directive. Adding *!important* to a property in a CSS style lets that property overrule any conflicting property values from other styles, even if those other styles are more specific.

  Unfortunately, Dreamweaver doesn't give you a way to easily add this option. You have to manually edit the style sheet in Code view. Say you want the text of all paragraph tags to print black. Create a p tag style in the print style sheet and set the color property to black. Then open the print style sheet in Code view and add *!important* after the color value and before the semicolon character. Here's what that would look like in Code view:

  ```
  p {
  color: #000000 !important;
  }
  ```

  This style in the print style sheet will now override any color settings for any paragraph tags in a competing style sheet—even a much more specific style.

GEM IN THE ROUGH

A Time to Design

A Dreamweaver feature called *Design Time style sheets* lets you quickly try different CSS style sheets while developing your Web page. You can hide the (external) style sheets you've attached to a Web page and substitute new ones.

Design Time style sheets come in handy when working on HTML that, later on, you intend to make part of a complete Web page. Dreamweaver Library items are a good example; this feature (discussed in Chapter 18) lets you create a chunk of HTML that can be used by any number of pages on your site. When you update the Library item, every page that uses it is updated. A time-saving feature, for sure, but since a Library item is only *part* of a page, it doesn't include the <head> portion needed to either store styles or attach an external style sheet. So when designing a Library item, you're working in the dark (or at least, without any style). But by using Design Time style sheets, you can access all the styles in an external style sheet and even preview the effects directly in Design view.

You'll also turn to this feature when working with Dreamweaver's server-side XML tools (see Chapter 26), which let you add an "XSLT fragment" to a complete Web page–essentially letting you convert XML (like you'd find in an RSS news feed) into a chunk of HTML. But to accurately design these components, you'll need to use Design Time style sheets.

You can apply a Design Time style sheet by clicking the Design Time style sheet button in the Style Rendering toolbar (see Figure 8-14) or by choosing Text → CSS Styles → Design Time; the Design Time Style Sheets window appears. Click the top + button to select an external style sheet to display in Dreamweaver. Note that clicking this button doesn't attach the style sheet to the page; it merely selects a .css file to use when viewing the page inside Dreamweaver.

To properly view your page with this new style sheet, you may need to get an attached external style sheet out of the way. To do that, use the bottom + button to add it to the Hide list.

Design Time style sheets apply only when you're working in Dreamweaver. They have no effect on how the page looks in an actual Web browser. That's both the good news and the bad news. Although Dreamweaver lets you apply class styles that you take from a Design Time style sheet to your Web page, it doesn't actually attach the external style sheet to the appropriate page. For example, if you use a Design Time style sheet to help design a Library item, Dreamweaver doesn't guarantee that the Web page using the Library item has the style sheet attached to it. You have to attach it yourself, or else your visitors will never see your intended result.

CHAPTER

9

Page Layout

For much of the Web's short life, designers have used the HTML <table> tag to control the positioning of elements on a page—to create columns, sidebars, banners, and so on. Unfortunately, since the <table> tag was intended to display information in a spreadsheet-like format, bending it to a Web designer's will often resulted in complex HTML that downloaded slowly, displayed sluggishly, and was very difficult to modify.

But now that CSS-friendly Web browsers like Internet Explorer 6 and 7, Firefox, Safari, and Opera rule the Web, designers can safely rely on a much better (though often frustrating) method: Cascading Style Sheets. That's right; not only is CSS great for formatting text, navigation bars, images, and other bits of a Web page, it also has all the tools needed to create sophisticated designs, like the ones shown in Figure 9-1.

CSS provides two methods for laying out a Web page—*absolute positioning* and *floats.* Absolute positioning lets you position an element anywhere on the page with pixel level accuracy—or so the theory goes. This kind of total control is exciting, but actually very difficult to achieve. That's why the vast majority of Web pages use float-based layouts.

Dreamweaver can produce both types of layouts and includes a starter set of 32 CSS Layouts (only two use Absolute Positioning). These CSS Layouts are new in Dreamweaver CS3 and provide Web designers with the files for building the most commonly used page layouts. Theses layout files aren't complete Web page designs as much as a basic scaffolding that you can modify to match your own design sensibility. Best of all, the complex part of getting the designs to work in all current Web browsers has been done for you.

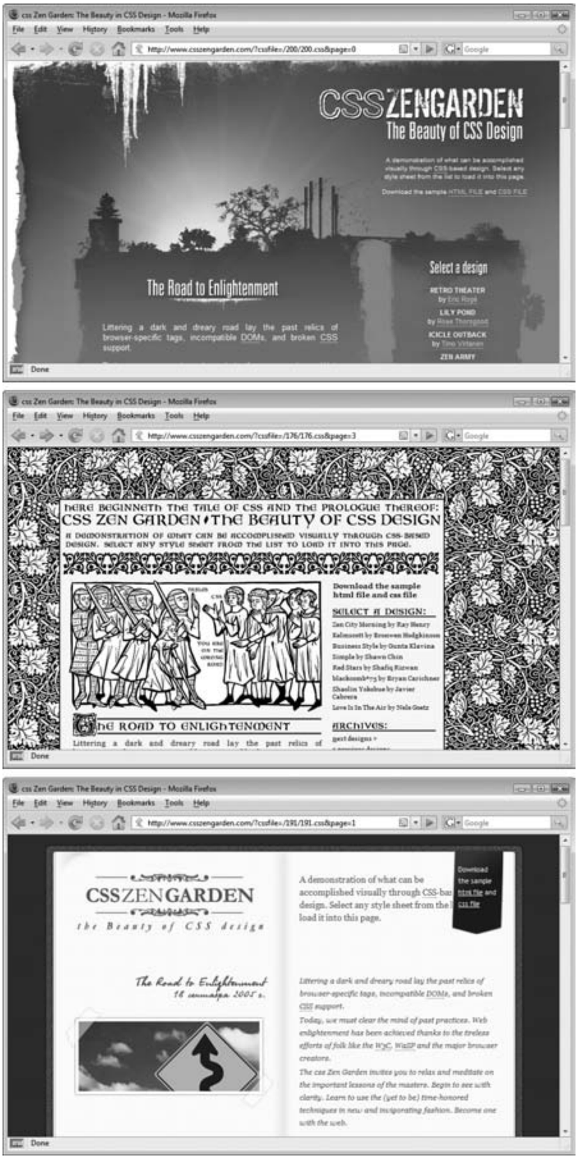

CSSZENGARDEN
The Beauty of CSS Design
The Road to Enlightenment
Select a design
CSS ZEN GARDEN : THE BEAUTY OF CSS DESIGN
THE ROAD TO ENLIGHTENMENT
CSSZENGARDEN
the Beauty of CSS design
The Road to Enlightenment

Figure 9-1:
CSS Zen Garden (www.csszengarden.com) is the original (and still best) showcase for CSS layout. It has caused many a Web designer to bow down and proclaim, "I'm not worthy. I'm not worthy." The site is interesting not only for the great design work it showcases, but because each page includes the same content, but is formatted in radically different ways using CSS. The exact same HTML is shared by these three pages–only the external style sheet and graphics used in the style sheet differ. Making drastic visual changes to a table-based layout requires a lot of tinkering with the underlying HTML. CSS, by contrast, lets you redesign sites without rewriting any HTML.

Note: CSS Layout is one of those complex topics that is sometimes better learned by doing instead of reading. To get a taste of how CSS Layout works, try the tutorial on page 351 first, then flip back to the beginning of this chapter for all the messy details.

This chapter introduces the basic concepts behind float-based layouts—what they are, how they work, and how to create one; it also provides instructions for modifying Dreamweaver's CSS designs. In addition, you'll learn about absolute positioning, and how to use it for placing selected elements where you want them on a Web page.

Types of Web Page Layouts

Being a Web designer means dealing with the unknown. What kind of browsers do your visitors use? Do they have the latest Flash Player plug-in installed? But perhaps the biggest issue designers face is creating attractive designs for different display sizes. Monitors vary in size and resolution: from petite 15-inch 640 × 480 pixel displays to 30-inch monstrosities displaying, oh, about 5,000,000 × 4,300,000 pixels.

Float-based layouts offer three basic approaches to this problem, two of which power most of the best-looking sites you see today: *fixed width* or *liquid* (also called *fluid layouts)*. A fixed width gives you the most control over how your design looks, but can inconvenience some of your visitors. Folks with really small monitors have to scroll to the right to see everything, and those with large monitors have wasted space that could be showing more of your excellent content. Liquid designs make controlling the design of the page more challenging for you, but make the most effective use of the browser window. There's also a third type, elastic design, which combines some advantages of both.

- **Fixed Width.** Many designers prefer the consistency of a set width, like the page shown in Figure 9-2, top. Regardless of the browser window's width, the page content's width remains the same. In some cases, the design clings to the left edge of the browser window, or, more often, it's centered in the middle. With the fixed-width approach, you don't have to worry about what happens to your design on a very wide (or small) monitor.

  Many fixed-width designs are about 760 pixels wide—a good size for 800 × 600 screens (since you need to leave a little room for scroll bars and other parts of the browser's "chrome"). For the past few years, the prevailing wisdom has been that you can count on most visitors having a minimum screen resolution of 800 × 600. However, more and more sites (especially ones aimed at a more tech-savvy crowd) are about 950 pixels wide, on the assumption that visitors have at least 1024 × 768 monitors.

Note: For examples of fixed-width designs aimed at larger monitors, visit *www.alistapart.com*, *www.espn.com*, or *www.nytimes.com*.

- **Liquid.** Sometimes it's easier to roll with the tide instead of fighting it. A liquid design adjusts to fit the browser's width—whatever it may be. Your page gets wider or narrower as your visitor resizes the window (Figure 9-2, middle). While this type of design makes the best use of the available browser window real estate, it's more work to make sure your design looks good at different window sizes. On very large monitors, these types of designs can look ridiculously wide.

- **Elastic.** An elastic design is really just a fixed-width design with a twist—type size flexibility. With this kind of design, you define the page's width using em values. An *em* changes size when the browser's font size changes, so the design's width is ultimately based on the browser's base font size (see page 107). If a visitor increases the size of the browser's display font (by pressing Ctrl-+ in Firefox, for example), the page's width grows as well.

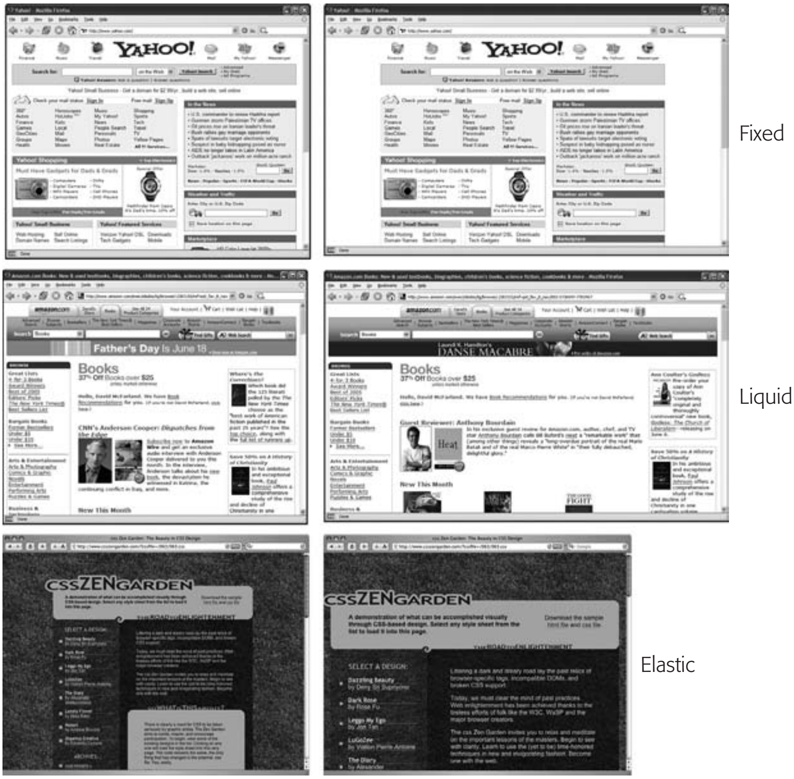


Figure 9-2:
CSS gives you several ways to deal with the uncertain widths of Web browser windows and browser font sizes. You could simply ignore the fact that your site's visitors have different resolution monitors and force a single, unchanging width for your page (top). Or you could create a liquid design that flows to fill whatever width window the page encounters (middle). An elastic design (bottom) changes width only when the font size–not the window width–changes.

Figure 9-2, bottom, shows an elastic page with the browser's normal font size (left) and several font sizes larger (right). Increasing the font size widens all page elements as well. Elastic designs keep everything on your page in the same relative proportions, and make sure that when someone with poor vision has to pump up the text size, the columns holding the text grow as well.

Float Layout Basics

Float-based layouts take advantage of the CSS *float* property to position elements side by side, and create columns on a Web page. As you read on page 213, you can float an image to make text wrap around a photograph. But it's also a powerful layout tool to move a bunch of related page elements (like a list of links that should appear in a left-hand column) into position horizontally on a page. In essence, the *float* property moves a page element to the left or the right. Any HTML that appears *below* the floated element moves up on the page, and wraps around the side of the float.

Float is a CSS property, available when you create a CSS style (see page 117 for instructions on creating a style). It's listed in the CSS Rule Definition window's Box category (see Figure 9-3). Choose the "left" option, and the styled element floats to the left, choose the "right" option and the element moves to the right. If you want to position a sidebar on the left side of a page, then you float it to the left.

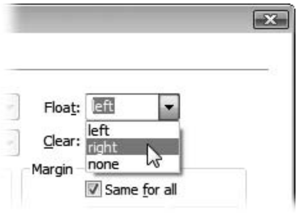


Figure 9-3:
There are just three options when you want to float an element: left, right, and none. You might never need the "none" option–it simply positions an element like a normal, unfloated element. Since this is the regular behavior of any element, you'd need this option only if you wanted to turn off a float applied by another style (see page 296 for more on how multiple styles can affect the same element).

The Mighty <div> Tag

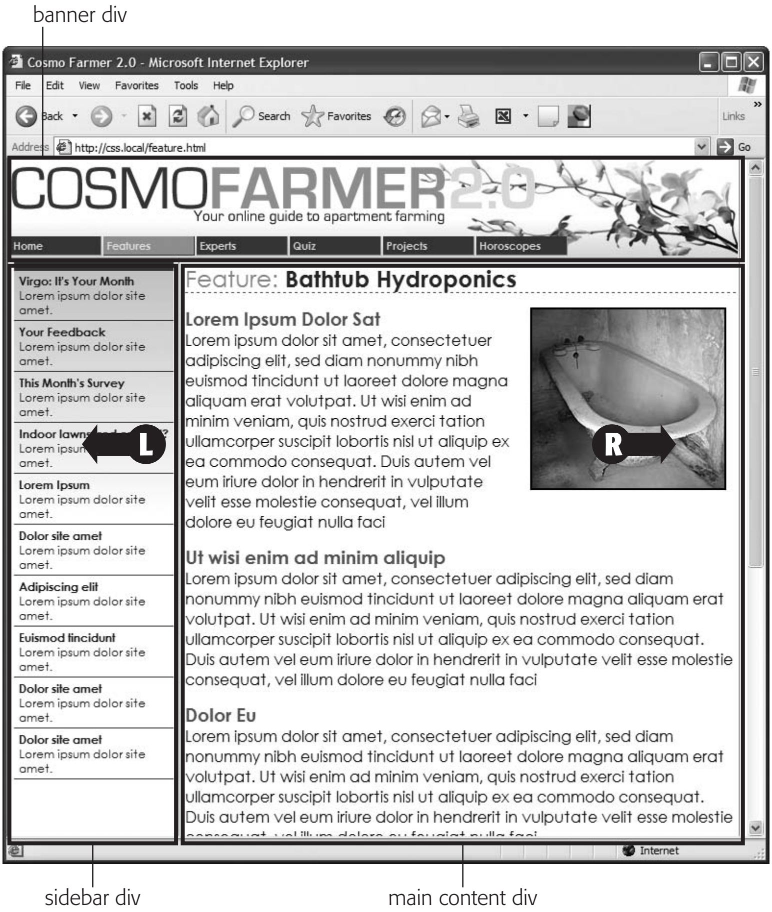
Whether you're using tables or CSS, Web page layout involves putting chunks of content into different regions of the page. With CSS, the most common element for organizing content is the <div> tag. The <div> tag is an HTML element that has no inherent formatting properties (besides the fact that browsers treat the tag as a block with a line break before and after it); you use it to mark a logical grouping of elements, or a *division,* on the page.

You'll typically wrap a <div> tag around a chunk of HTML that belongs together. For example, the elements comprising the logo and navigation bar in Figure 9-4 occupy the top of the page, so it makes sense to wrap a <div> tag around them. At the very least, you would include <div> tags for all the major regions of your page, such as the banner, main content area, sidebar, footer, and so on. But it's also possible to wrap a <div> tag around one or more *other* divs. People often wrap the HTML inside the <body> tag in a <div>. This tag, then, wraps around all the other divs on the page: You can set some basic page properties by applying CSS to this *wrapper* <div>. You can set an overall width for the page's content, for example, set left and right margins, or center all of the page's content in the middle of the screen.

Note: If you're a long time <table> tag jockey, you need to develop a new mindset when you begin to use CSS for layout. First, forget about rows and columns (a notion that's important when working with tables). With CSS, there are no column spans or row spans, and the grid-like structure of a table is nowhere to be found. You can, however, think of a <div> tag as a table cell. As with table cells, a <div> tag is the logical place to put content that you want to position in one area of the page. In addition, as you'll see, CSS designs often nest a div inside another div, much like you'd nest tables within tables to get certain effects–but, fortunately, the CSS method uses a *lot* less HTML code.

Once you've got your <div> tags in place, you add either a class or ID style to each one, which becomes your handle for styling each <div> separately. For parts of the page that appear only once and form the basic building blocks of the page, designers usually use an ID (see page 284). For example, the <div> tag for a page's banner area might look like this: *<div id="banner">*. Recall that you can use an ID only once per page, so if you have an element that appears multiple times, use a class instead. If you have several divs that position photos and their captions, you can create a style like this: *<div class="photoBox">*.

Tip: If you select a <div> tag in the document window, the Property inspector provides two menus: one to apply an ID to the div, and another to apply a class style to the div.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Your online guide to apartment farming
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Your Feedback
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This Month's Survey
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Feature: **Bathtub Hydroponics**

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Figure 9-4:
You can use the float property to lay out a Web page with multiple columns. On this page, a block of content is floated to the left edge. The sidebar has a set width, but the main content doesn't, which makes this design a liquid layout (page 311). The main section of the page simply expands to fill the width of the browser window. In the upper right, the bathtub photo is floated to the right.

The Insert Div Tag Tool

Because grouping parts of a page using <div> tags is such an important part of CSS layout, Dreamweaver includes a tool to simplify the process. The Insert Div Tag tool lets you wrap a <div> tag around a selection of page content, or simply drop an empty div onto a page for you to fill with images, links, paragraphs of text, or whatever.

To use this tool, either select the content you wish to wrap with a div (for example, click at the beginning of the selection and drag to the end of the selection) or click on the page where you wish to insert an empty <div> tag. Then click the Insert Div Tag button on the Layout tab of the Insert bar (see Figure 9-5). That button is also listed under the Common tab, and you can also insert a div by choosing Insert → Layout Objects → Div Tag. In either case, the Insert Div Tag window appears (Figure 9-6).

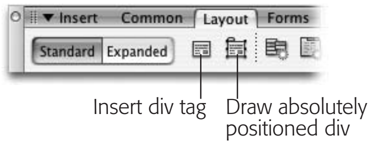


Figure 9-5:
The Layout tab of the Insert bar contains buttons for adding both <div> tags and absolutely positioned divs (see page 337).

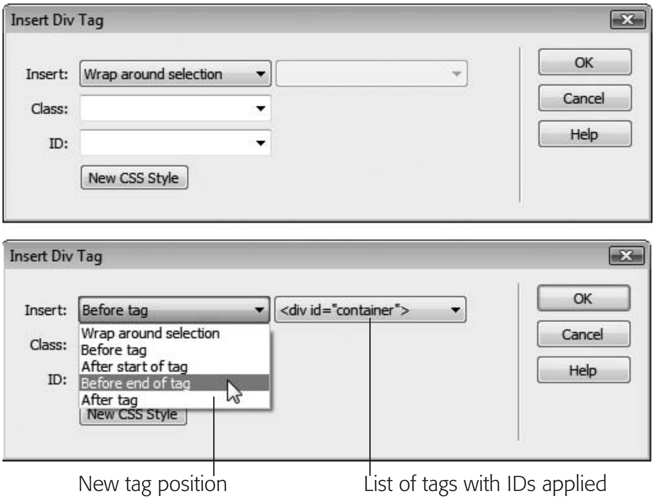


Figure 9-6:
The Insert Div Tag tool can help you precisely place the div in relation to other tags on the page (see your choices listed in the Insert's left-hand menu). The right-hand Insert menu lets you choose the tag the new div will be placed in relation to. That menu lists only tags that have an ID applied to them, or the <body> tag for the "after start of tag" and "before end of tag" options. Suppose you want to insert a <div> tag to display a footer at the bottom of a page. Because you know the footer will go last on the page, you click the Insert Div Tag button, select "Before end of tag" from the Insert's left menu, and <body> from the right menu. The <div> tag then appears at the very end of the page's content, just before the closing </body> tag.

If you click OK, Dreamweaver either wraps the selected content in a <div> tag, or just drops a new <div> tag onto the page with the text "Content for New Div Tag Goes Here" (of course, you'll replace that text with your own content). But usually you'll take an additional step: applying either a class or ID to the div. You can do this in a couple of ways:

- **Choose a class from the Class menu or choose an ID from the ID menu.** The Class menu on the Insert Div Tag window lists all the class styles available to the current page. You'd usually select a class if you're inserting a div tag that's formatted the same as other divs on the page. You might use a div tag to position an image and a caption on a page, or to create a pull-quote in the middle of an article; if you had multiple instances of photos with captions, you could create a class style (like .figure) to format each photo-caption pair. You could then select a photo and caption on the page, use the Insert Div Tag tool, and then select the class name (.figure in this example) from the class menu. You could repeat this procedure multiple times on a single page.

  The ID menu on the Insert Div Tag window behaves a bit differently. Since you can only use an ID once per page (see page 284 for the reason) the ID menu lists only IDs that exist in your style sheet, but which haven't yet been applied to any tags. Say you created an ID style named #banner that you plan on applying to a <div> tag to define the banner area of your page. You could select the banner content (like the site logo and navigation bar), and then click the Insert Div Tag button. At this point, you'd select #banner from the ID menu. If you then inserted a second div on the page using the Insert Div Tag tool, #banner would no longer appear in the ID menu.

- **Create a class or ID.** If you haven't yet created a style to apply to the new div tag, you can click the New CSS Style button (see Figure 9-6). This button opens the familiar New Style Rule window, so you can create a new style. The process is the same as creating any style, as described on page 117. Once you've completed the style, you'll return to the Insert Div Tag window, and the name of the style you just created appears in the appropriate box. (In other words, if you created a class style, the name of the new class appears in the Class box; similarly, a new ID name appears in the ID box.)

After you apply a class or ID, and then click the OK button, Dreamweaver inserts the new <div> tag complete with the appropriate HTML to apply the style: for example, <div id="banner">. In addition, Dreamweaver takes any styling you created for the class or ID and applies it to the div. In the case of CSS layout, that could mean sizing the div and positioning it on the page, as well as adding a background color, changing the size of text, or any of the other effects possible with CSS. You can add new content inside the div, edit what's there, or completely delete the contents of the div.

Note: CSS-based layout is a big topic, worthy of a book or two by itself. For more in-depth coverage of CSS layout, including solutions to common float problems, pick up a copy of *CSS: The Missing Manual*.

A Simple Example

To get a better idea of how using a div to help with page layout actually works, look at the basic process for creating the layout shown in Figure 9-4. This design has a banner (logo and navigation bar), a left-hand sidebar (list of story titles and links), and the main story. Figure 9-7 shows the order in which the HTML appears in the page: The banner elements come first, the sidebar links second, and the main story (headlines, paragraphs, photo and so on) appear last. (Remember, what you're seeing in Figure 9-7 demonstrates the power and the beauty of the HTML/CSS tango: Your HTML file contains your structured chunks of content, while your CSS controls how that content gets displayed.) Viewed in a Web browser, without any CSS styling, these different HTML sections would all appear stacked one on top of the other.

Note: You don't have to use this particular technique to get started with CSS layout. Dreamweaver CS3 ships with 32 premade layout designs called "CSS Layouts." You can read about these starting on page 324.

To create a two-column design, you could follow these easy steps:

1. **Select the contents of the banner, and click the Insert bar's Insert Div Tag button (Figure 9-5).**

   For example, click before the logo image and drag to select the navigation bar. With this HTML selected, you can then wrap it in a <div> tag.

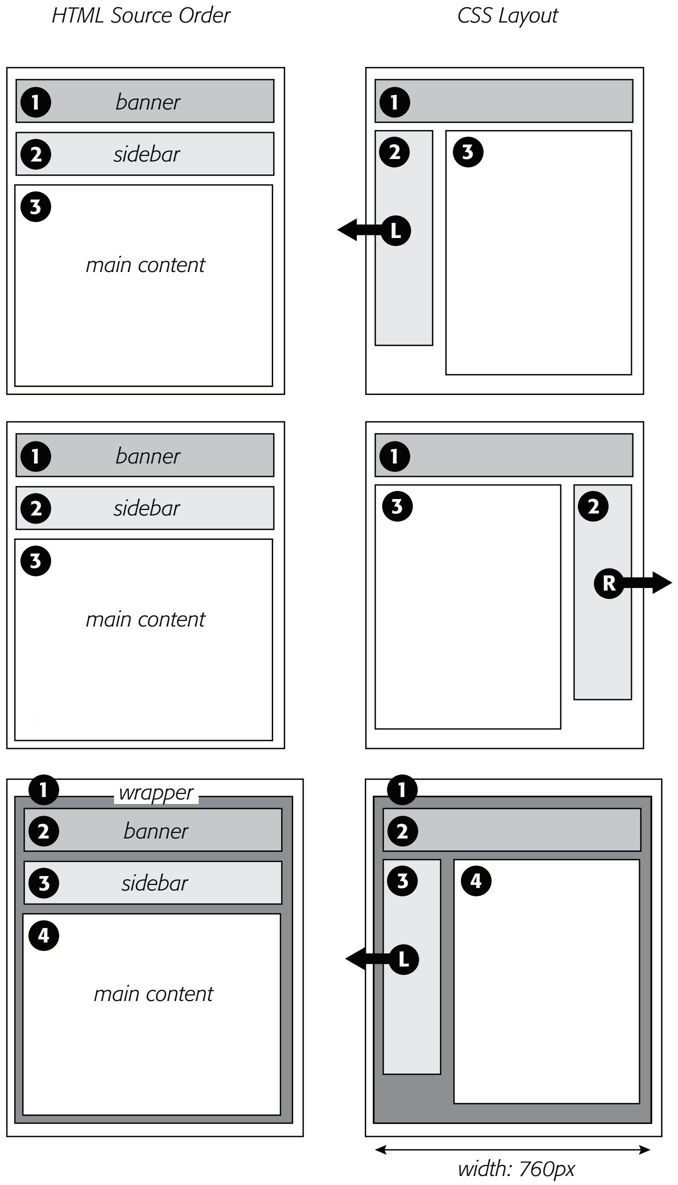


Figure 9-7:
Creating a two-column layout is a simple matter of floating a <div> tag to the left (top). To make a sidebar move from the left to right side of the page (middle), just change the sidebar's CSS float property to right. You don't need to make any other changes to your CSS or HTML. Converting it into a fixed-width layout is a snap. Simply wrap all the tags within the page's body inside another <div> (<div id="wrapper">, for example). Then, create a style for that new container element that has a set width, such as 760 pixels (bottom). That width setting constrains everything inside the container box.

2. **In the ID box, add an ID name.**

   You can add the name in several ways, depending upon whether you want to create an ID style immediately, have already created an ID, or want to create the style later on.

- **To create an ID style, click the New CSS Style button.** The process at this point is the same as creating any new style, as described on page 117. You could create a class style, but for the main sections of a page, Web designers usually create an ID. In this case, the name of the style might be *#banner*. You can set any CSS properties you'd like for the banner: You can add a border around all four sides, color the background of the banner, or even set a width for it.

Note: When you create an ID style using the New CSS Rule box, the ID's name must begin with a # symbol, like this: *#banner.* However, when identifying the ID in the Insert Div Tag window, you omit the # symbol. In the ID box, you'd just type *banner*. The same applies to class styles.

- **Select an ID name from the ID menu.** The Web page may already have an external style sheet attached, which contains all of the necessary styles for the layout. Just select the ID name for the div you're inserting (for example, *banner*).
- **Type a name in the ID box.** If you don't want to create a style, you could just type *banner* in the ID box, and create the style later.

While providing an ID isn't absolutely necessary, it's generally considered good form to identify each area of a page with an ID.

3. **Click OK to close the Insert Div Tag window.**

   Dreamweaver wraps the selected HTML with a <div> tag, and (if you created a new style) formats the banner region.

4. **Select the contents of the sidebar, and then, in the Insert bar, click the Insert Div Tag button. Click the New CSS Style button, and create a new ID style named #storyLinks (or whatever you'd like to name the ID).**

   This style formats and positions the left sidebar. We're finally getting to the "float" part of this design.

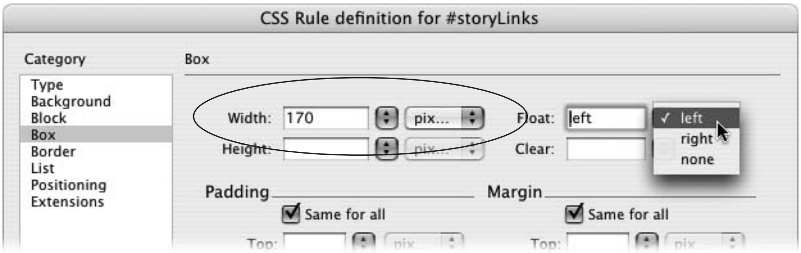
5. **In the Style Definition window, click the Box category, and then, from the float menu, select Left (see Figure 9-8).**

   When you work with floats, the source order (the order in which you add HTML to a file) is important. The HTML for the floated element must appear *before* the HTML for the element that wraps around it.

   Figure 9-7 shows three two-column layouts. The diagrams on the left show the page's HTML source order: a <div> for the banner, followed by a <div> for the sidebar and, lastly, a <div> for the main content. On the right, you see the actual page layout. The sidebar comes *before* the main content in the HTML, so it can float either left (top, bottom) or right (middle). The main text area then moves up the page and wraps around the floated element.

6. **Type a value in the Width box (circled in Figure 9-8).**

   Unless you're floating an image with a predefined width, you should always give your floats a width. In this way, you create a set size for the floated element, letting the browser make room for other content to wrap into position.



CSS Rule definition for #storyLinks

Category: Box

Width: 170 pix...

Float: left

☑ Same for all

☑ Same for all

***Figure 9-8:** Whenever you float an element (other than an image), always set a width as well. The width constrains the floated element so that other content has room to move next to it.*

The width could be a fixed size like, say, *170px* or *10em*. You can also use percentages for a flexible design that's based on the width of the browser window (see page 107 for more about the pros and cons of the different measurement units). If the sidebar is 20% wide and the browser window is 700 pixels wide, the sidebar will be 140 pixels wide. But if your visitor stretches the window to 1000 pixels wide, then the sidebar grows to 200 pixels. Fixed-width sidebars are easier to design for, since you don't have to consider all the different widths the sidebar might stretch to.

Note: If the overall page design is a fixed width (as described on page 314), percentage width values for the sidebar are based on the fixed width containing element. The width isn't based on the window size, and doesn't change when the browser window changes size.

7. **Complete the style, and then insert the div.**

   At this point you can continue to style the sidebar: You could add a background color, set a font family, that, thanks to inheritance (see page 294), will apply to all of the text inside the div, and so on. When you're done, just click the OK button in the Style Definition window; you return to the Insert Div Tag window with the ID box filled out with your freshly created style's name. Click OK to insert the div, and then watch the sidebar float.

   Now it's time to style the main column.

8. **Follow the same steps for the main content div: Select the page elements that form that main content on the page, click the Insert Div Tag button, and then create a new ID style for the page's main content region.**

   In this instance, you don't need to float anything. You merely have to add a left margin to the main content so that it won't try to wrap *underneath* the sidebar. If the sidebar is shorter than the other content on the page, the text from the main column wraps underneath the sidebar. It's much like how the main text interacts with the right-floated photo in Figure 9-4. If the main content wrapped underneath the sidebar, the appearance of two side-by-side columns would be ruined. Adding a left margin that's equal to or greater than the width of the sidebar indents the main content of the page, creating the illusion of a second column.

By the way, it's usually a good idea to make the left margin a little bigger than the width of the sidebar: This action creates some empty space—a white gutter—between the two elements. So if the sidebar is 170 pixels wide, adding a left margin of 185 pixels for the main content div adds 15 pixels of space between the two columns. If you use percentages to set the width of the sidebar, use a slightly larger percentage value for the left margin.

In addition, avoid setting a width for the main content div. It's not necessary, since browsers simply expand it to fit the available space. Even if you want a fixed-width design, you don't need to set a width for the main content div, as described in Figure 9-7.

Expanding the two-column design into a three-column design isn't difficult either (Figure 9-9). First, add another <div> between the two columns, and float it to the right. Then add a right margin to the middle column, so that if the text in the middle column runs longer than the new right sidebar, it won't wrap underneath the sidebar.

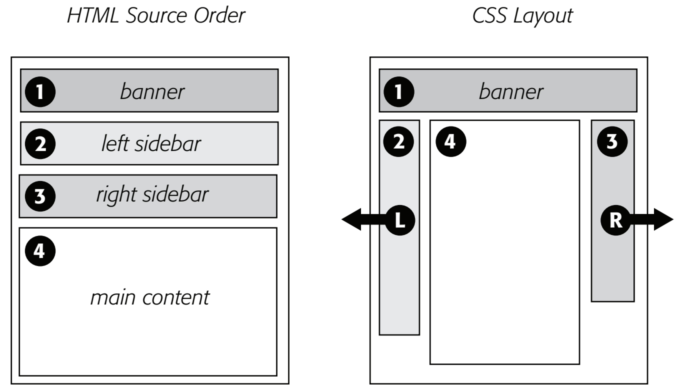
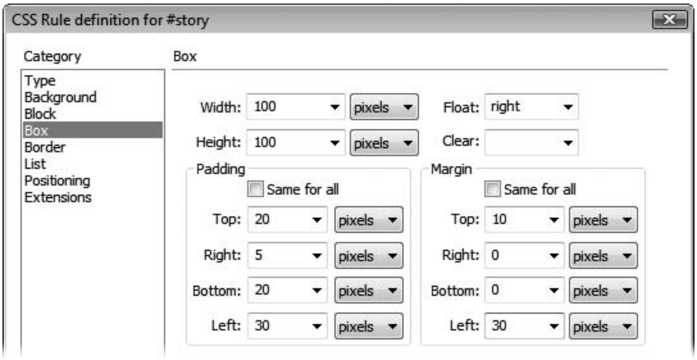


Figure 9-9:
A three-column design uses the same concepts used to create a two-column design. In this case, you float both the left and right sidebars, and add both left and right margins to the center column. The left-hand diagram shows the order of the HTML, the right side shows what the Web page looks like.

Understanding the Box Model

It's no coincide that the float property is located under the "Box" category of the Style Definition window (Figure 9-10). To fully understand CSS layouts and how to make the most of using floats, you also need to understand the other CSS properties located within this category: width, height, padding, margin, and clear.

- **Width and height.** You can specify the width and height for any styled object using these properties. If you want a paragraph to be 100 pixels wide, create a class style with the Width property set to 100 pixels, and then apply it to the paragraph. You'll often use the Width property in conjunction with the Float property (see the following paragraph) to do things like create a box with a set width that floats to either the left or right side of the page—a common format for pull-quotes, message boxes, and sidebars.



CSS Rule definition for #story

Width: 100 pixels
Height: 100 pixels
Float: right
Clear:

Padding
□ Same for all
Top: 20 pixels
Right: 5 pixels
Bottom: 20 pixels
Left: 30 pixels

Margin
□ Same for all
Top: 10 pixels
Right: 0 pixels
Bottom: 0 pixels
Left: 30 pixels

Figure 9-10:
Use the Box category to define the dimensions of a style, to position an object on the page, and to add space between the styled object and other objects around it.

Be careful with the height property. Many designers turn to this property to provide precise control over page elements. Unfortunately, height is tricky to control. If you've set a specific height for a sidebar that contains text, and you later add more text, you can end up with text spilling outside the sidebar—this can also happen if a visitor increases the text size in his browser. Because Internet Explorer 6 (and earlier versions) handles these instructions differently than other browsers, you can end up with inconsistent and strange results in different browsers. In other words, set the height of an object only if you're *sure* the content inside will never get taller.

- **Float.** If you want to move an object to the left or right side of a page and have other content wrap around it, use the Float property. Of course, that's been most of the point of this chapter, so you probably understand this property by now. However, there's one important point to keep in mind: Floating an object doesn't necessarily move it to the side of the page or the browser window. A floated object merely goes to the left or right edge of what's called its "containing block." If you float a div to the left of the page to create a sidebar, and then insert an image into the sidebar and float that image right, the image goes to the right edge of the sidebar, *not* the right edge of the page. In addition, if you float multiple elements, they can often end up sitting beside each other—this technique is used to create four-column layouts, where each column is floated next to the other.

- **Clear.** Clear *prevents* an element from wrapping around any object with a right or left Float property. This property can come in handy when you want to force an element to appear *below* a floated object instead of wrapping around it. The classic example with float layouts is a page's footer (the area at the bottom of the page usually containing contact information and a copyright notice). If a page has a particularly long left-floated sidebar, the footer can move up the page and wrap around the sidebar. In this case, the bottom of the sidebar is at the bottom of the page, and the footer is somewhere in the middle. To fix this problem, simply create a style for the footer that includes a value of *both* for the clear property. This style forces the footer to drop below both left-floated and right-floated elements. (If you merely want something to drop below a left-floated element, but still wrap around anything floated right, choose the *left* option; to clear a right-floated element, choose *right*.) In other words, if you ever see page content appear next to a floated element instead of underneath it, use the *clear* property on that content to make it go beneath the float.

- **Padding.** Padding is the gap that separates the content of the styled tag—such as a paragraph of text or an image—and its border (see page 215). If you put a 1-pixel border around an image and want to add 10 pixels of space between the image and the border, type *10* into the top padding box, and then choose "pixels" from the pop-up menu. Turn off the "Same for all" box if you wish to set the padding around each edge separately; then, type values into each of the four boxes.

Warning: Unfortunately, Internet Explorer 5 for Windows doesn't handle the "Box" model correctly. If you set the padding or borders of a style, Internet Explorer displays the element smaller than other browsers, ruining your Web page's layout. Although IE 5 isn't that popular anymore (thank goodness), you can find more information on this problem and a clever workaround. Visit *http://css-discuss.incutio.com/?page=BoxModelHack*.

- **Margin.** The margin is the outermost space surrounding an element (Figure 9-11). It surrounds the border and padding properties of the style, and lets you add space between elements. Use any of the values—pixels, percentages, and so on—that CSS supports.

Padding, margins, borders, and the content inside the styled tag make up what's called the CSS Box Model, as described in Figure 9-11. Margins and padding are invisible. They also have similar effects: 5 pixels of left padding adds 5 pixels of space to the left edge of a style; the same happens when you add a 5-pixel left margin. Most people use margins to put space between elements (for example, between the right edge of one column and left edge of an adjacent column), and padding to put space between an element's border and its content (like moving text within a column away from a borderline surrounding the column). Because you can't see padding or margins (just the empty space they make), it's often difficult to know if the gap between, say, the banner at the top of your page and the main area of content is caused by the style applied to the banner or the main area. You also can't always tell if any extra space is caused by a padding or a margin setting. Dreamweaver includes a helpful diagnostic tool (see Figure 9-12) that lets you clearly see these invisible properties.

When you select a <div> tag that has margin or padding properties set, Dreamweaver draws a box around that div, and adds slanting lines to indicate the space occupied by margins and padding (Figure 9-12 shows this box and lines in action).

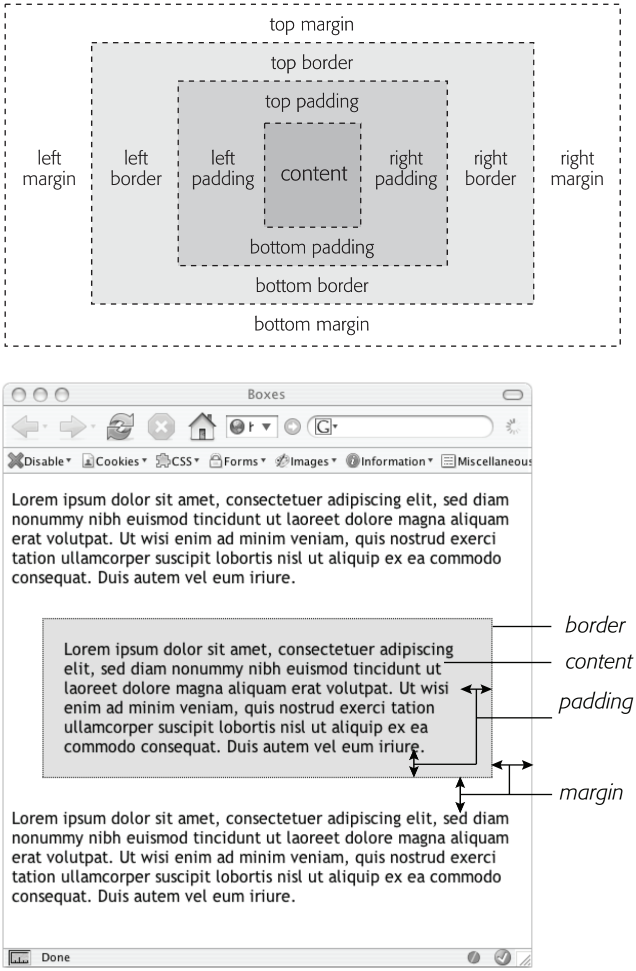


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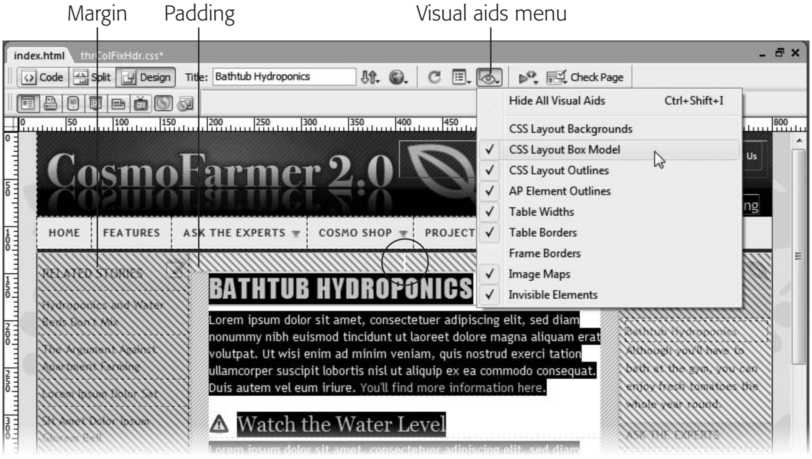
Figure 9-11:
In the CSS Box Model, every style is composed of multiple boxes, one inside the other. Each box controls certain display properties of the style. The outermost box of a style is called the margin. It controls the space between the border of the style and any other objects around the styled object, such as images, paragraphs, or tables; padding is the space between the border and the content itself (the innermost box). The area within the border, which includes the content and padding, may also have a background color. Actually, the background color is drawn underneath the border, so if you assign a dashed or dotted border, the background color appears in the gaps between the dots or dashes.

Margins appear outside padding, and are represented by lines that slant *downward* from left to right; padding appears inside the margin, and is represented by lines that go *upward* from left to right. In Figure 9-12, the area that contains the main story is enclosed in a <div> tag with an ID style named *mainContent* applied to it. When that div is selected (the tag selector in the lower-left corner of the document window is great for this), Dreamweaver highlights the margins and padding values that are defined in that ID style. As you can see, there's a considerable amount of margin on both the left and rights edges, and a smaller amount of padding (20 pixels) applied to both the left and right edges.

If you find these visual aids confusing, you can turn them off via the Visual Aids menu in the document window (see Figure 9-12), or by choosing View → Visual Aids → Layout Box Model. These same steps turn the margin and padding visual aids back on.



Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure. You'll find more information here.

Figure 9-12: *In addition to displaying the space occupied by margins and padding, the CSS Layout Box Model's visual aids indicate the vertical and horizontal center point (circled in this figure) of the <div> tag.*

Dreamweaver's CSS Layouts

You'll find yourself contending with many details when building CSS-based layouts. You need to understand the intricacies of the CSS Box Model, as well as the sometimes bizarre behavior of floats. In addition, different browsers handle CSS in different ways, which sometimes means a design that looks great in Firefox completely falls apart in Internet Explorer 6. Fortunately, Dreamweaver is ready to give you a helping hand. Leading the way, Dreamweaver CS3 introduces 32 new "CSS Layouts" to get you started.

CSS Layouts aren't finished Web page designs. They don't have graphics, fancy text, drop-down menus or any whiz bang features. They're simply basic designs that are intended to lay the foundation for your design talents. Each layout is a simple HTML file and a (not quite so simple) style sheet. Each design works in all current browsers and each design's hand-crafted CSS code irons out the many wrinkles presented by troublesome browsers (most notably Internet Explorer 6). In other words, instead of spending a day stretching and sizing your own canvas, a Dreamweaver CSS layout is like going to the art store and buying a ready-made and primed canvas so you can get busy painting.

Creating a new CSS layout page takes just a few steps:

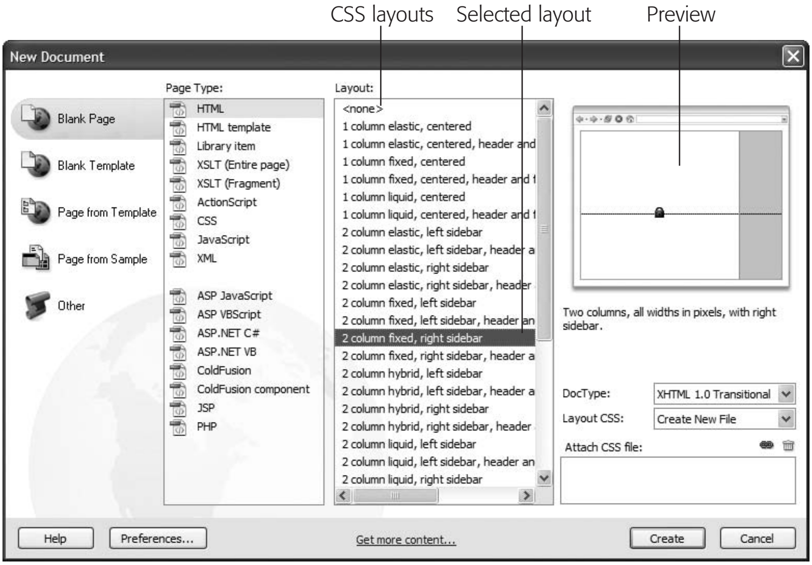
1. **Choose File → New.**

   This is the same first step you take when creating any new Web page. The New Document window appears (Figure 9-13). You can also use the Ctrl+N (⌘-N) keyboard shortcut to open this window (however, it's possible to disable this keyboard shortcut as described on page 37; you might want to do that if you'd rather skip this clunky window whenever you just want a new, blank Web page).

2. **Choose Blank Page from the left column, and the type of page you wish to create in the Page Type column.**

   Usually, you'll select HTML from the page type category, since most of the time you'll be creating regular Web pages. However, if you're creating one of the database-driven pages described in Part 6 of this book, choose one of the page types listed in the bottom half of this column (PHP, ColdFusion, and so on).

Note: The documents listed in the Page From Sample category in the left column of the New Document window (see Figure 9-13) are holdovers from previous versions of Dreamweaver. In most cases, these examples use old Web design techniques (such as tables for layout, or frames) and are best avoided.


CSS layouts
Selected layout
Preview
New Document
Blank Page
Blank Template
Page from Template
Page from Sample
Other
Page Type:
HTML
HTML template
Library item
XSLT (Entire page)
XSLT (Fragment)
ActionScript
CSS
JavaScript
XML
ASP JavaScript
ASP VBScript
ASP.NET C#
ASP.NET VB
ColdFusion
ColdFusion component
JSP
PHP
Layout:
<none>
1 column elastic, centered
1 column elastic, centered, header and
1 column fixed, centered
1 column fixed, centered, header and f
1 column liquid, centered
1 column liquid, centered, header and f
2 column elastic, left sidebar
2 column elastic, left sidebar, header a
2 column elastic, right sidebar
2 column elastic, right sidebar, header
2 column fixed, left sidebar
2 column fixed, left sidebar, header an
2 column fixed, right sidebar
2 column fixed, right sidebar, header a
2 column hybrid, left sidebar
2 column hybrid, left sidebar, header a
2 column hybrid, right sidebar
2 column hybrid, right sidebar, header
2 column liquid, left sidebar
2 column liquid, left sidebar, header an
2 column liquid, right sidebar
Attach CSS file:
Help
Preferences...
Get more content...
Create
Cancel

Two columns, all widths in pixels, with right sidebar.

DocType: XHTML 1.0 Transitional

Layout CSS: Create New File

Figure 9-13: *This dialog box lists Dreamweaver's different types of ready-made CSS Layouts. For example, "2 column fixed, right sidebar" indicates a design with 2 columns: the main content column on the left, and a thinner sidebar (for supplementary info like links) on the right. The design also sports a fixed width and has no header or footer. A preview of the selected layout appears in the top right of the window; a short description below the preview provides more detail on how the layout works.*

3. **From the Layout column, select a page layout.**

   This is where the fun begins. As you've read before, choose <none> here to create an empty Web page. The other options, however, let you choose one of 32 different CSS-based layouts. Basically, you decide how many columns you want (1, 2 or 3), whether there should be a header and footer on the page (like a banner at the top or a copyright notice at the bottom), and the type of Web page layout (fixed width, liquid, or elastic).

   This last choice relates to the kinds of Web page layouts discussed on page 324. For example, a fixed width design maintains a constant overall width no matter what the width of the visitor's browser window. Dreamweaver refers to some layouts as "hybrid"—meaning that the different columns use different width types. For the layouts Dreamweaver supplies, this means the main column is "liquid" (it resizes as the browser window resizes), while any sidebars are "elastic" (meaning the sidebars change width only when a visitor changes the font size of her browser). A preview in the top right of the New Document window contains a set of visual codes to help you understand how the different layouts behave, as explained in Figure 9-14.

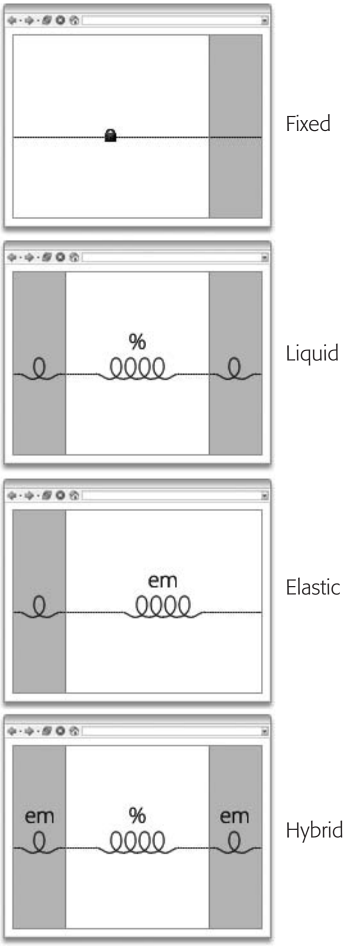


Figure 9-14:
The layout preview displayed in the New Document window visually identifies the type of CSS layout you've selected. A small lock icon indicates a design that's "fixed" (top): The width of each column is set using pixel values, and doesn't change when the browser window is resized. The % symbol indicates a liquid design (second from top): Column widths are defined using percentage values that change based on the width of the browser; a wider browser window means wider columns. These designs fill the entire width of the browser. The word em in the preview window identifies an elastic layout, where column widths are defined with ems (second from bottom). Elastic designs are very much like fixed width designs: Their widths don't change when you resize the browser window. However, if a visitor changes the size of his browser's font size, the width of each column changes (columns get wider if the font size is increased, thinner if the font size is decreased). With a hybrid design (bottom), the center column is liquid, but the sidebars remain a set width, defined in ems.

4. **Choose a DocType from the DocType menu.**

Here's where you decide which type of HTML/XHTML you wish to use for the page. It's the same option you faced when creating a new, blank Web page, as described on page 35. You're safe going with the default option of XHTML 1.0 Transitional.

5. **From the Layout CSS menu, select where to store the layout's CSS code.**

   Each Dreamweaver CSS Layout requires its own style sheet containing all of the styles you need to make the layout work. When creating a new page from a CSS layout, you have several options for where to store that style sheet. The "Add to Head" option creates an internal style sheet in the HTML file that Dreamweaver's about to create. Most of the time, you don't want this option, since external style sheets are more efficient (see page 115 for an explanation).

   You can also store the CSS layout styles in a new, external style sheet. Choose Create New File to let Dreamweaver create a new external CSS file and store the necessary CSS rules there.

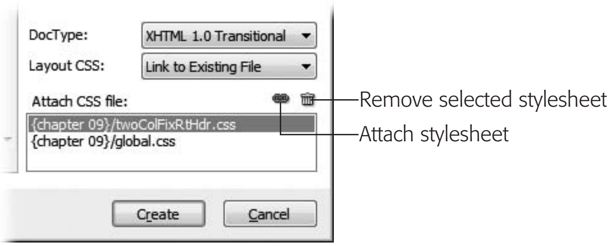
   The "Link to Existing File" option sidesteps the entire process of creating new CSS styles. This option assumes you already have the appropriate styles defined in another external style sheet. Choose this option if you've previously created a Web page using the same type of CSS layout. Say you've earlier created a two-column fixed layout using a Dreamweaver CSS Layout. At that time, you saved the necessary styles into an external style sheet, and saved that style sheet to your site. Now, you want to create a *new* two-column fixed layout page, so you follow steps 1-4 above. At this point, an external style sheet with the styles you need already exists, so you can choose "Link to Existing File", and then proceed to step 6 to link the external style sheet already on your site.

   Keep in mind, however, that each CSS Layout has its *own* style sheet. So if you create a two-column fixed layout page, and then you want to create a three-column liquid layout page, you can't just link to the style sheet Dreamweaver created for the two-column layout. In other words, whenever you create a new *type* of CSS layout (two-column fixed, three-column liquid, and so on), choose the Create New File option, so Dreamweaver can create the appropriate styles in a new external style sheet.

Tip: You don't need to go through these steps each time you want to create a new page using a CSS layout you've used before. Suppose you want to build a site that's got 40 Web pages and each Web page has a two-column fixed layout. Instead of going through the New Document dialog box (and the steps listed here) for *each* of those pages, just use the New Document dialog box once to create the initial page, and then choose File → Save As, to save a copy of that design for the next two-column page you wish to create. Better yet, use Dreamweaver's Template tool described in Chapter 19 to manage pages with the same layout.

6. **Click the "Attach Style Sheet" button to attach any external style sheets to the page (see Figure 9-15).**

   This is an optional step, but if you've already got an external style sheet that you're using to format the pages of your site, now's the time to link to it. In addition, if you chose "Link to Existing File" in the previous step, you have to link to the external style sheet containing the styles to create the particular layout type. The process of linking to the external style sheet is the same as with any Web page, as described on page 120.



DocType: XHTML 1.0 Transitional

Layout CSS: Link to Existing File

Attach CSS file:

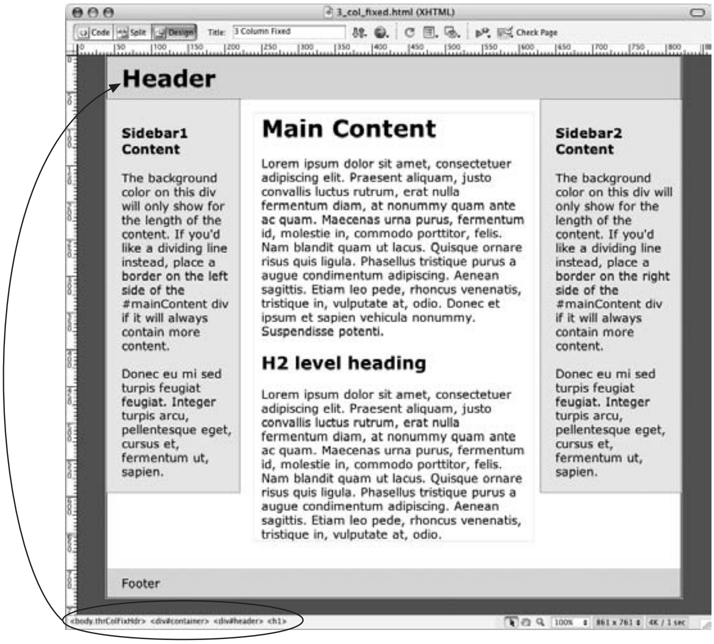
{chapter 09}/twoColFixRtHdr.css
{chapter 09}/global.css

Figure 9-15:
You can attach more than one external style sheet when creating a CSS based layout page: You might have one that defines the basic look of headlines, text, images, and other elements on your site, another that controls the layout of columns, and a third "printer" style sheet to dictate how the page will look when printed (see page 301).

7. **Click the Create button to bring your new Web page to life.**

   If you selected the Create New File option in step 5, Dreamweaver now asks you to name the new style sheet, and select where in the site you wish to save it (this is just like when you create a new external style sheet, as described on page 117). Dreamweaver suggests names for the CSS files for each of its layouts—such as *twoColFixRtHdr.css* for a two column, fixed design with a right sidebar and a header and footer. You can change the name if you like, but the name Dreamweaver suggests is descriptive.

   After all of that, you end up with a page with basic structure, and some "dummy" text to fill in the different areas of the page (see Figure 9-16). Don't forget to save and then title the page (see page 38 if that's news to you).



3_col_fixed.html (XHTML)

Title: 3 Column Fixed

Header

Sidebar1 Content

The background color on this div will only show for the length of the content. If you'd like a dividing line instead, place a border on the left side of the #mainContent div if it will always contain more content.

Donec eu mi sed turpis feugiat feugiat. Integer turpis arcu, pellentesque eget, cursus et, fermentum ut, sapien.

Main Content

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Praesent aliquam, justo convallis luctus rutrum, erat nulla fermentum diam, at nonummy quam ante ac quam. Maecenas urna purus, fermentum id, molestie in, commodo porttitor, felis. Nam blandit quam ut lacus. Quisque ornare risus quis ligula. Phasellus tristique purus a augue condimentum adipiscing. Aenean sagittis. Etiam leo pede, rhoncus venenatis, tristique in, vulputate at, odio. Donec et ipsum et sapien vehicula nonummy. Suspendisse potenti.

H2 level heading

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Praesent aliquam, justo convallis luctus rutrum, erat nulla fermentum diam, at nonummy quam ante ac quam. Maecenas urna purus, fermentum id, molestie in, commodo porttitor, felis. Nam blandit quam ut lacus. Quisque ornare risus quis ligula. Phasellus tristique purus a augue condimentum adipiscing. Aenean sagittis. Etiam leo pede, rhoncus venenatis, tristique in, vulputate at, odio.

Sidebar2 Content

The background color on this div will only show for the length of the content. If you'd like a dividing line instead, place a border on the right side of the #mainContent div if it will always contain more content.

Donec eu mi sed turpis feugiat feugiat. Integer turpis arcu, pellentesque eget, cursus et, fermentum ut, sapien.

Footer

<body.thrColFixHdr> <div#container> <div#header> <h1>

<body.thrColFixHdr> <div#container> <div#header> <h1>

Figure 9-16:
It doesn't look like much, but a CSS Layout page has the basic scaffolding in place: the necessary <div> tags to organize the page, and CSS styles to position those divs on the page. Click inside any area of the page, and the tag selector (circled) shows you the structure of the HTML at that point. In this case, after clicking inside the heading at the top of the page, the tag selector shows which tags wrap around the current selection. You read this info from right (the tag where the insertion point is) to left (the <body> tag that contains everything you see inside the Document window). For this three-column design, the <h1> tag is inside a div with an ID of header (that's what the <div#header> means), which is itself inside a div with an ID of container. Finally, the body tag has a class named thrColFixHdr applied to it: <body.thrColFixHdr>.

The Structure of Dreamweaver's CSS Layouts

Dreamweaver's CSS Layouts are made up of a handful of page elements: Some pages have a header and a footer, some have one or two sidebars, and all of them have an area for your page's main content. Each section is represented by a <div> tag, and each div has its own ID applied to it. A layout's accompanying style sheet has predefined ID styles that control where the different divs are placed on the page.

To keep the CSS layouts consistent, Dreamweaver uses the same ID names for every layout (see Figure 9-17). The ID for the <div> tag containing the main content on the page is *#mainContent*; if the layout has a sidebar, its ID is *#sidebar1*; if there's a second sidebar, it's called *#sidebar2*. The header div is ID'ed with *#header*, while the div at the bottom of the page is *#footer*. There's one more <div> that surrounds all the other divs: Its ID is *#container*.

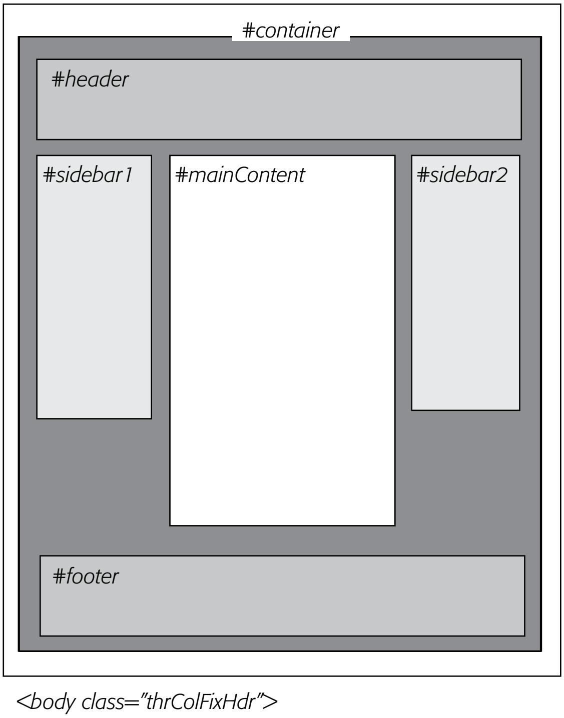


Figure 9-17:
Each Dreamweaver CSS Layout's basic structure is the same. Several <div> tags identify the various layout regions of a page. Each div has its own unique ID name, which is then controlled by an ID style in the design's style sheet.

You may be wondering: If all the CSS layouts share the same names for their layout divs, how do we end up with different types of designs like fixed, liquid, or elastic? That's determined by the <body> tag. The <body> tag of each CSS layout has a class applied to it: This class defines the basic type of page (two-column fixed, three-column liquid, and so on). For example, the page pictured in Figure 9-16 is a fixed-width, three-column design with a header and footer. The class applied to the <body> tag defines that page's style: In this example (just look at the tag selector in the image), the class is named *.thrColFixHdr*.

The first sidebar in Figure 9-16 "knows" it's 150 pixels fixed width and floated to the left because a descendent selector in the layout's style sheet tells it so. You'll recall from page 285 that a descendent selector lets you format a particular tag based on the tags it's nested inside. In this case, the descendent selector *.thrColFixHdr #sidebar1* applies to the tag that has the #sidebar1 ID applied to it, but only when that tag is inside *another* tag with the class *.thrColFixHdr*. In other words, this style applies only to a sidebar for a three column, fixed-width layout with a header and footer. How's that for precision?

FREQUENTLY ASKED QUESTION

Paying Attention to Conditionals

I've noticed that when I create a page using a Dreamweaver CSS Layout, the page has some weird-looking code just above the beginning <body> tag. What's that about?

If you go into Code view of a CSS Layout page, you'll notice some grayed-out HTML that begins with *<!--[if IE]>* and ends with *<![endif]-->*. It's grayed out because Dreamweaver treats this code like an HTML comment. HTML comments are mostly used by those who code their pages by hand. Their purpose is to let a Web designer leave notes about the page–like an explanation for why a chunk of HTML was added, or a note to identify which div a particular closing </div> tag belongs to. Dreamweaver and other browsers ignore HTML comments.

However, this particular HTML comment, while ignored by every other browser, has special significance for Internet Explorer. HTML comments that begin like this *<!--[if IE]>* are actually secret messages, called *conditional comments,* intended just for Internet Explorer. Conditional comments are a way of sending HTML, CSS, and JavaScript to Internet Explorer only; you can even send special HTML to particular versions of Internet Explorer (for example, *<!--[if IE 5]>* sends HTML to just version 5 of Internet Explorer). In the case of Dreamweaver CSS Layouts, these conditional comments provide additional CSS styles that make sure Internet Explorer correctly displays the layout (in other words, Dreamweaver is saving you the hair-pulling experience of creating a design that looks great in Firefox, but breaks in Internet Explorer).

The upshot of this: Don't remove these comments! They ensure that the layout works in IE. In addition, if you use Dreamweaver CSS Layouts, avoid the "Remove Non-Dreamweaver HTML Comments" option for the Clean Up HTML/XHTML command discussed on page 597. Doing so also removes the conditional comments, and wrecks your layouts.

For a short tutorial on conditional comments, visit: *www.javascriptkit.com/howto/cc2.shtml*.

Modifying Dreamweaver's CSS Layouts

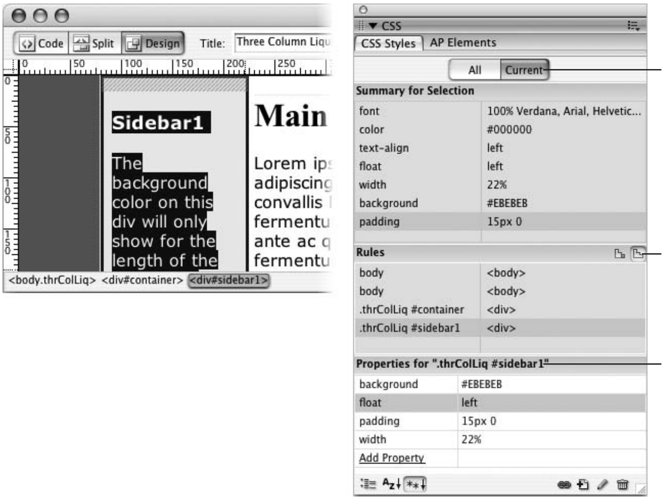
The basic look of a freshly minted Dreamweaver CSS Layout doesn't have much to recommend it: grey sidebars, header, footer, a dark grey page background, and overly large text. One of the first things you want to do with a new layout is remove some of the Dreamweaver formatting. In addition, you might want to tweak some of the basic layout properties, like the width of a fixed-width design, or the width of sidebars and main columns.

Making General Changes

One of your first tasks should be to remove (or change) the gray background colors for the sidebar and other page elements (unless you really like gray, in which case your job is a lot easier). This task generally means editing the style defined in the Dreamweaver-supplied style sheet. You've already learned several methods for editing styles—like double-clicking the style's name in the CSS Styles panel (page 124), or using the Properties Pane (page 289). The real trick is locating the correct style to edit. Here's the fast method:

1. **On the CSS Styles panel, click the Current button (see right image in Figure 9-18).**

   If the Styles panel isn't open, choose Window → CSS Styles. The Current view in this panel shows the styles and properties that affect whatever's selected in the Document window.



Code
Split
Design
Title: Three Column Liqu
Sidebar1
The background color on this div will only show for the length of the
Main
Lorem ip adipiscing convallis fermentu ante ac q fermentu
<body.thrColLiq> <div#container> <div#sidebar1>
CSS
CSS Styles
AP Elements
All
Current

Summary for Selection

font	100% Verdana, Arial, Helvetic...
color	#000000
text-align	left
float	left
width	22%
background	#EBEBEB
padding	15px 0

Rules

body	<body>
body	<body>
.thrColLiq #container	<div>
.thrColLiq #sidebar1	<div>

Properties for ".thrColLiq #sidebar1"

background	#EBEBEB
float	left
padding	15px 0
width	22%
Add Property	

Show CSS properties for currently selected tag

Show cascade

Show CSS properties for currently selected style

Figure 9-18: *Finding the style that formats a particular tag can be tricky…unless you're using Dreamweaver. By combining the tag selector and the Current view of the CSS Styles panel, you can quickly identify and edit a style applied to any tag on a page.*

2. **Make sure that, in the Rules Pane, the Show Cascade button is selected (see Figure 9-18).**

   The Show Cascade option lists all styles that affect the current selection in the order of the "cascade"—most specific style at the bottom, least specific at the top of the list (see page 296 for a refresher on the cascade and specificity).

3. **Highlight the div you want to format. If you want to reformat the header region, select the div with the headline text *Header*. You can do this in a couple of ways:**

   - Click inside the div, and then click the <div> in the Tag Selector at the bottom left of the Document window (see Figure 9-18, left). This selects the div tag.

- Click inside the div, and then press Ctrl+A (⌘-A), or choose Edit → Select All. This selects the contents of the div, and highlights the div in the tag selector. (Pressing Ctrl+A twice selects the <div> tag itself). To highlight a <div> tag that wraps around the div you clicked into, press Ctrl+A (⌘-A) more than once. To highlight the #container div that surrounds the header, sidebars, main content, and footer, you can click the header region, press Ctrl+A twice to select the header, and then press Ctrl+A once more to highlight the #container div.

After you highlight the div, its style appears in the CSS Styles panel's Rules pane. In Figure 9-18, selecting the sidebar div from the tag selector (left) selects that div's style—*.thrColLiq #sidebar1* in this instance—in the Rules pane (right). At this point you can use the Properties pane (directly below the Rules pane) to edit the style as described on page 289, or simply double-click the style name in the Rules pane to open the user-friendly Style Definition window.

Tip: The styles for Dreamweaver CSS Layouts use what's called CSS "shorthand properties." These combine several CSS properties under a single property name. For example, the values for background-color and background-image can be combined into a single property named *background,* while all four margins (top, right, bottom, and left) can be specified with just one property: *margin*. This makes for more compact styles, but it also means that in order to edit a shorthand property in the Properties pane, you need to know how to write the values yourself: Dreamweaver doesn't provide a color box, link button, or any of the other helpful tools used to set the values of a "longhand" property like background color. In other words, unless you know CSS well, if you want to really make changes to a style, you're better off double-clicking the style's name in the Rules pane to access the much more user-friendly Rule Definition window.

Once you've selected a layout region on the page (header, sidebar, and so on), there are a few common changes you'll probably make:

- **Background colors.** To completely remove the gray background of a div, just delete the value next to the Background property in the Properties pane. You can also double-click the style's name in the CSS Styles panel to open it for editing, and then select the Background category of the Rule Definition window, as described on page 217, to edit the color.
- **Padding.** The header, sidebars, and footer of a Dreamweaver CSS Layout include padding to add space from the edges of the layout region and the content inside. In many cases, this is a good thing: Designs can look cramped if text runs from edge to edge in a box. But if you want to completely fill the div, you must remove the padding. You might want to insert an image that fills the entire header region—say, a banner graphic that spans from side to side. Padding adds space between the graphic and the edge. Use the Properties pane to remove the padding (just delete the values that are listed), or double-click the style in the Rules pane to use the Rule Definition window. (Note that you may encounter some differences in the space given for the top padding in Internet Explorer vs. Firefox. See the box on page 333 for the explanation.)

- **Text formatting.** You can modify the text and other content of the page to your heart's content. The earlier chapters in this book cover the techniques for formatting headlines, paragraphs, images, and links. However, when creating styles for these elements, use an external style sheet other than the one Dreamweaver uses for the layout styles. You can store these types of styles in a generic style sheet like *global.css*, instead of the layout-specific style sheet such as *twoColFixLtHdr.css*. See step 5 on page 327 for the reason.

FREQUENTLY ASKED QUESTION

Spacing Differences with IE

I've created a two-column layout. Why is the space between the top of the sidebar and the first paragraph of text different in Internet Explorer and Firefox?

Yes, Firefox and most other browsers can insert space above the first paragraph of text inside a div. That same space, however, doesn't appear in Internet Explorer. The fault lies with the paragraph's top margin (the same applies to headlines or any tag with a top margin). If the paragraph is at the top of the div, IE ignores its top margin. It figures you don't want the space there. Firefox, however, says, "Hey, there's a top margin. I'd better insert some extra space." The upshot is you get inconsistent spacing.

The easiest way to deal with this problem is to simply remove the top margin for headings and paragraphs. You could do this by creating a tag style for the <p> and headline tags that sets their top margin to 0 (see page 322 for more on setting margins). You can adjust the style's bottom margin to provide space between paragraphs or between a paragraph and whatever tag follows it.

Another approach is to create a class style that has 0 top margin and apply it to the first tag in the div. This style removes the top margin for just that tag, and eliminates the difference between the browsers. (For this trick to work, you need to make sure the class is more *specific* than any other style affecting the tag. See page 296 for more on the gory details of specificity.)

Some of Dreamweaver's CSS Layouts introduce another wrinkle. In some cases, Dreamweaver inserts CSS code using an IE Conditional Comment which adds extra padding to the top of sidebars (see the box on page 330 for information on conditional comments).

For example, if you look into the HTML that Dreamweaver creates for a two column fixed design, you'll see this:

```
<!--[if IE]>
<style type="text/css">
/* place css fixes for all versions of IE
in this conditional comment */
.twoColFixLtHdr #sidebar1 { padding-top:
30px; }
.twoColFixLtHdr #mainContent { zoom: 1; }
/* the above proprietary zoom property
gives IE the hasLayout it needs to avoid
several bugs */
</style>
<![endif]-->
```

The highlighted code above (the line with *.twoColFixLtHdr #sidebar1*) includes an instruction to add 30 pixels of space between the top of the first sidebar and the top of the first tag inside the sidebar. If you adjust the sidebar's padding in the main style sheet (as recommended on the opposite page), you'll probably find that the space at the top of the sidebar is different in IE and Firefox. You can either delete this line entirely and use one of the methods suggested above (like removing the top margin from the first element in the sidebar) or edit the code inside this conditional comment until the design looks good. For example, if you see more space in IE than Firefox, change *padding-top: 30px* to something smaller like *padding-top: 20px* until the display matches up between the browsers.

You'll encounter this IE problem (and a solution) in the tutorial at Step 15 on page 365.

Fixed Layouts

The width of any Dreamweaver fixed layout is 780 pixels. That width may be too wide or too narrow for your tastes. If you're designing for the cinema-screen audience, you might want a page that takes advantage of the wider screen, so you might bump the width to 900 pixels or more. In addition, you may want to change the widths of columns on the page. Here are a few key layout changes you may wish to make:

- **Page width.** The area of the page that includes the header, sidebars, and main content is fixed at 780 pixels. This setting is defined in the #container div. Just select the div, and then change 780 to the desired width.
- **Column width.** The sidebar columns have a fixed width setting. Depending on the number of columns in the design, sidebars range in width from 150 to 200 pixels. Select the sidebar you wish to make wider or narrower, and then adjust its *width* property. The main content column doesn't have a set width; rather, its width is determined by its left and right margin values. A left value is used to indent the main content div from a left sidebar, while a right margin value indents the div from a right sidebar. Don't set a width value for this div—it can lead to some weird cross-browser display problems. Instead, adjust the left and right margins until the main content area is the width you wish.

Tip: If you often use Dreamweaver CSS layouts, you may frequently make the same adjustments. For example, you might always remove the padding and background color and adjust the column widths of your designs. Instead of doing that over and over, you can edit the default HTML and CSS files Dreamweaver uses when creating a new blank CSS layout page. You'll find them on Windows in the C:\Program Files\Adobe\Adobe Dreamweaver CS3\configuration\BuiltIn\Layouts folder, and on the Mac in the Applications → Adobe Dreamweaver CS3 → configuration → BuiltIn → Layouts folder. You can also clean up this folder by deleting designs you don't use. *Just make sure you back up the folder before you do anything to the files inside. And then, back up your new designs so that if you ever have to reinstall Dreamweaver, you have a backup of your modified templates.*

Liquid Layouts

Liquid layouts adjust to the width of the browser window. Columns grow wider as visitors widen the browser window, and shrink when the browser window shrinks. However, you can still control the relative widths of the page:

- **Page width.** Although the page content adjusts its width with a liquid layout, Dreamweaver's default styles make the page content 80 percent of the window width. In other words, there's always some empty space on either side of the container div (10 percent on each side). If you want to remove this space to make the page fill the entire width of the browser window, edit the *#container* style: Just delete the width entirely, don't set its width to 100 percent. (Doing so can cause the page to appear a little *wider* than the browser window, forcing visitors to scroll right to see all of the page's content. See the box on page 336 for an explanation.)

- **Column width.** As with fixed layouts, the sidebar widths are set using the width property, and the main content area is controlled by the left and right margin properties of the *#mainContent* style. The only difference is that the width and margin values are set using percentages. So to make the left sidebar wider, change its style's width from 24% to 28%, for instance.

Elastic Layouts

Elastic layouts are put together very much like fixed width layouts, but instead of using pixels to define the width of the page content and columns, they use ems (see page 107 for a discussion of ems). Use the same instructions on page 334 for adjusting the widths on elastic layouts.

You need to keep one thing in mind when working with elastic layouts, however. The actual onscreen width of an em depends not only on the visitor's browser settings, but also on the font size defined for the <body> tag on the page. The normal style sheet Dreamweaver spits out for elastic designs sets the font to 100 percent. If you make this smaller, the page width and columns get thinner. Make the <body> tag's font size larger, and the page and columns get wider.

In addition, the width of a column also changes if you set a font size for the column's style. Suppose you want all the text inside the left sidebar to be 80 percent the size of other text on the page: One technique would be to define the font size for the *#sidebar1* style to 80 percent; then the tags inside this div will inherit that size (see page 294 for how this works). Unfortunately, that action also defines the size of the em for that div, so its width gets smaller. To get around this, set font sizes for the styles formatting the tags *inside* the <div>.

Absolute Positioning

CSS's other technique for placing elements on a page, absolute positioning, lets you specify an exact position on a page for any element. But before you start thinking you've found page layout heaven, keep in mind that the Web is a fluid environment that's difficult to control with pixel level precision. If a visitor increases the font size in her browser, the enlarged text may spill out of your carefully crafted layout. In addition, it's nearly impossible to force a footer to the bottom of a page that's laid out using absolute positioning (a trivial task with float-based layouts). That's why most CSS layouts use floats and the techniques discussed at the beginning of this chapter.

Note: In previous versions of Dreamweaver, absolutely positioned elements were called *layers;* Dreamweaver now refers to them as either AP Divs or AP Elements: *AP* meaning *absolutely positioned*. Any tag can take advantage of CSS positioning, but most often you'll apply positioning to a <div> tag that contains text, images, or other content. In this book, the term AP Div refers to any absolutely positioned div. However, because any tag (a link, unordered list, or just a simple paragraph) can be absolutely positioned, you'll see the term AP Element used to describe any tag that's absolutely positioned.

FREQUENTLY ASKED QUESTION

When Width Doesn't Equal Width

In my style sheet, the CSS Width property of one of my styles is set to 150 pixels. But when I preview the page in a Web browser, the <div> tag I applied the style to is much wider than 150 pixels. Is this a bug with my browser?

No, you're browser's fine. The problem lies with the difference between the CSS width property and the final calculated width of an element onscreen. The width you see onscreen is the sum total of several separate CSS properties, not just the *width* property. The width property merely defines the width of the content area of the style–the place where the text, images, or other nested tags sit.

The actual width–that is, the amount of screen real estate given by the Web browser–is the *total* of the widths of the left and right margins, left and right padding, left and right borders, and the *width* property. So say you've created a style that has a width of 100 pixels, 10 pixels of padding on all four sides, a 2 pixel border, and 20 pixels space on the left margin. While the space dedicated to the content inside the style is 100 pixels, any tag with this style will have an onscreen width of 144 pixels: 100 (width) + 10 (left padding) + 10 (right padding) + 2 (left border) + 2 (right border) + 20 (left margin).

To make matters just a bit more confusing, Internet Explorer 5 on Windows gets the whole thing wrong. That browser includes left and right padding and borders as *part* of the width property. In other words, page elements can appear a lot thinner in that browser than in others. Fortunately, Internet Explorer 5 is on the way out, and you may find that none of your site's visitors even use that browser any more. But if you're one of the unlucky ones who still has to build Web pages to support IE 5, you can find out how to solve this dilemma here: *www.communitymx.com/content/article.cfm?cid=E0989953B6F20B41.*

The CSS height property and the final height of a style behave the same way. The onscreen height of an element is a combination of the height, plus top and bottom margins, padding, and borders (and yes, IE 5 gets this one wrong, too).

That's not to say you shouldn't use absolute positioning. It's great for moving small elements, like a logo, image, or short set of links to a position on the page; and it's the only way to have one element overlap another element on a page (see the circled image in Figure 9-19). As long as you don't try to dictate the exact width, height, and position of every design element, you'll find absolute positioning powerful and helpful.

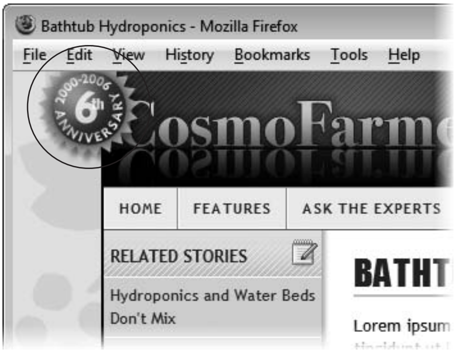
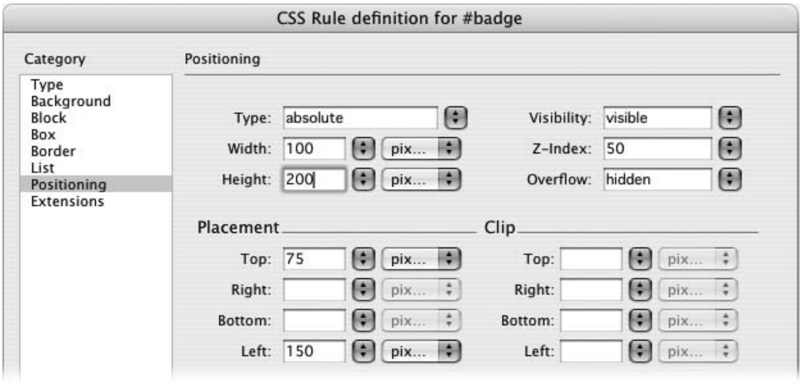


Figure 9-19:
One unique aspect of CSS positioning is its ability to place an element on top of other page content.

The CSS Positioning Properties

Several CSS properties are specifically meant for positioning elements on a screen. You'll find them under the Positioning category of the CSS Rule Definition window (Figure 9-20).



CSS Rule definition for #badge

Category: Type, Background, Block, Box, Border, List, Positioning, Extensions

Positioning

Type: absolute
Width: 100 pix...
Height: 200 pix...
Visibility: visible
Z-Index: 50
Overflow: hidden

Placement
Top: 75 pix...
Right: pix...
Bottom: pix...
Left: 150 pix...

Clip
Top: pix...
Right: pix...
Bottom: pix...
Left: pix...

Figure 9-20: *Dreamweaver gives you easy access to the many CSS Positioning properties available. You'll never need to set all of them and a few, like the settings found in the Clip section of this dialog box, aren't often used by most Web designers.*

Positioning type

Normally, tags are positioned on the screen in the order they appear in the HTML: What appears first in the HTML appears at the top of the browser window. Similarly, HTML at the end of Web page files appears at the bottom of the browser window. In Figure 9-21, the top left image shows a headline, followed by a paragraph of text, followed by a headline, an image, and another paragraph. The order in which they appear in the HTML is the order displayed by the browser: top to bottom.

The CSS *position* property, however, lets you alter how a styled element appears on the screen by assigning one of four available position types: *absolute, relative, static,* and *fixed.*

- **Absolute is the most common option.** It lets you place a tag anywhere on a page, regardless of where the HTML code for the tag is positioned within the Web page's HTML. The top-right image in Figure 9-21 shows a graphic of a sticky note. The graphic is absolutely positioned. Even though in the HTML the code for that image falls after the "Malorum Gipsum" headline, its visual placement is at the top (and even a little bit off the top) of the page. The space where the graphic appeared prior to positioning (top-left image) is now filled by the paragraph of text beneath the second headline.

  In other words, the actual HTML code can go *anywhere* inside the <body> tag and still appear *anywhere* on the page—its location in the code has nothing to do with the positioning of the element on the screen. In addition, any element that's absolutely positioned is removed from the normal flow of the page—other tags on the page aren't even "aware" the AP element exists.

After you select this option, use the Placement properties (see page 341) to specify a specific position.

- **The relative option lets you position a tag relative to its position in the HTML.** When you choose this option and then assign, say, a left and top placement, the positioned element appears relative to where it appeared prior to any positioning. The bottom left image in Figure 9-21 shows the same sticky note graphic positioned using the relative property. The top and left placement values (page 341) are the same as for the top-right image; in this case, however, the graphic is placed relative to its old position below the second headline. Another side effect is that the space formerly taken up by the image remains: Notice that the last paragraph doesn't try to fill up the space where the graphic was. There's still a big empty area.

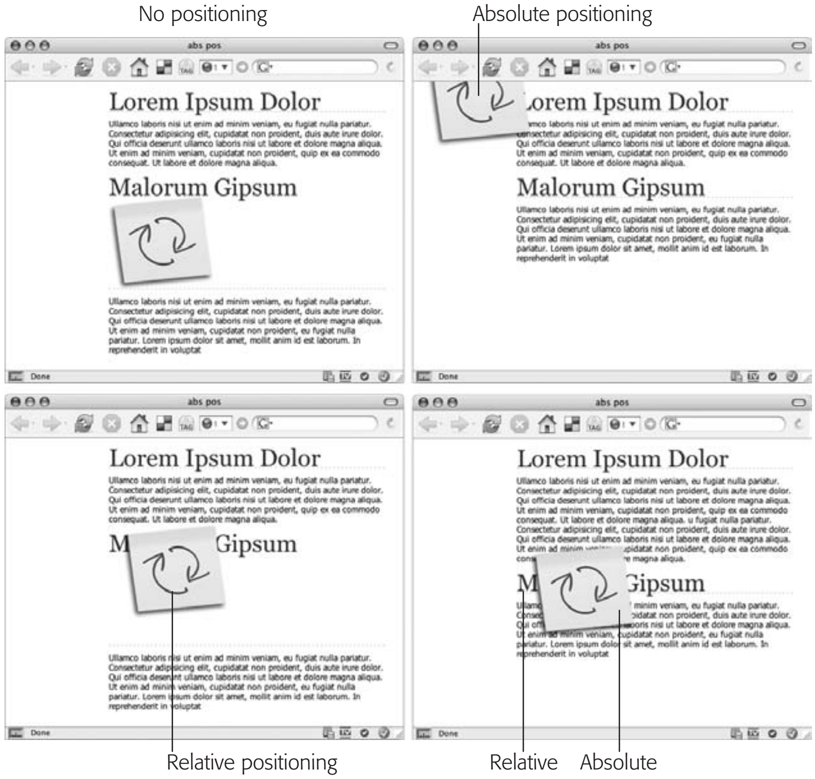


Figure 9-21: *Whenever you use absolute positioning to place an element on the page, its exact position depends upon the positioning of any other tags inside which the styled element is nested. In the top-right image, the sticky note graphic is positioned relative to the browser window because it's been styled with an absolute position, and it's not inside any other tag with either absolute, relative, or fixed positioning. In the bottom-right image, the graphic is absolutely positioned as well, but its placement is relative to the edges of the second headline because the HTML for the image is inside the headline, and the headline has a relative position applied to it.*

At first glance, the *relative* option might seem less than useful. After all, what's the point of positioning something on the page, just to leave a big empty ("I *was* here") space? In most cases, you don't actually apply relative positioning to the element you want to position. You apply it to a tag that wraps *around* the element you wish to position, in order to create a new set of coordinates for an absolutely positioned element to use.

Say you placed an image inside a headline, and you want the image to appear on the left edge of that headline. If you simply position the image in an exact spot in the browser window on the left edge of the headline tag, you're taking your chances. If the headline moves (say you add some new body text), the absolutely positioned image stays glued to its assigned spot. Instead, what you want to do is position the image relative to the headline tag, so that when the headline moves, the image moves with it. Look at the bottom right image of Figure 9-21. In this case, the headline (Malorum Gipsum) has a relative position applied to it, and the sticky note graphic has an absolute position. Even when, later on, you add a little more text to the top of the page (thereby forcing the headline to move down), the sticky note travels along for the ride.

- **Static positioning is the normal behavior of HTML.** Static simply means the content follows the normal top-down flow of HTML. Why would you want to assign an element static positioning? The short answer: You probably never will.
- **Fixed is similar to the "fixed" value of the CSS "attachment" property used to lock a background image in place** (see page 218). This option "fixes" the AP div in place in the browser window. When you scroll down the page, the AP div doesn't move, but remains in an exact position in the browser window. It's a cool option with exciting possibilities...and absolutely *no* support in Internet Explorer 6 and earlier versions. You may want to experiment with the "fixed" option in Internet Explorer 7 or Firefox, but when building a Web site you actually want the whole world to see, skip it.

Width and height

These properties, logically enough, set the width and height of the element. You can use any of the available CSS measurement systems like pixels, ems, and percentages. In most cases, when you want precise control over the dimensions of your tags—that is, a page element that's *exactly* 200 pixels wide and won't change even if the visitor changes the size of her browser window—use pixels. However, if you want the element to resize as the visitor resizes her browser window, use percentages. In this way, you can make a styles that's 50 percent the width of the browser window, no matter the size of the window.

Note: The Width and Height properties available under the Positioning category of the CSS Rule Definition window are identical to the options with the same name under the Box category (see Figure 9-10). Also note that CSS calculates the total width of a style as the Width value *plus* any borders, margins, or padding (see the box on page 336 for more).

Visibility

If left to its own devices, Dreamweaver makes the contents of all tags visible on the page, so you'll usually leave this property blank. After all, if you put something on your page, it's usually because you want people to see it. But there are situations in which you may want to make a certain tag (and its contents) invisible in your visitors' Web browsers.

The power of the Visibility property becomes clear when you start using Dreamweaver behaviors or your own JavaScript programming; in these instances, you can make previously hidden tags visible again, on cue. Imagine a Web page where you've superimposed many hidden divs on a diagram of a car engine. Moving the mouse over a part of the image makes the div visible, revealing text that describes the corresponding engine part. (Page 535 shows you how to create this effect.)

Tip: The CSS *display* property also has an option to hide an element: *none* (see page 137). The benefit of using the *display* property over the *visibility* property is that an element whose display is set to none literally disappears from the page; whereas an element with visibility of *hidden* can still take up space on the page—it just leaves a hole where it normally would appear. After hiding an element by setting its display property to *none*, you can make it visible again by changing the display property to *block* (for example, using the Change Property behavior discussed on page 536). That property makes the element visible again.

The options for this property let you make the AP div "visible" (which is how all tags start out anyway); make it "hidden," so it doesn't appear until you make it visible; or make it "inherit" the visibility of another AP div. (The inheritance option can be useful with nested AP divs, as discussed on page 350.)

Z-index

Welcome to the third dimension. Absolutely positioned tags are unique in the world of Web elements, because they "float" above (or even behind) a Web page, and can overlap each other, completely or partially.

If you were awake in high school algebra, you may remember the graphing system in which the X axis specified where a point was in space from left to right and the Y axis specified where the point was vertically from top to bottom. And if you were awake *and* paying attention, you may remember that the Z axis denoted a point's position in *front-to-back* space. When you draw a three-dimensional object on this type of graph, you need to use all three axes: X, Y, and Z.

The Z-index of an absolutely positioned element doesn't make your Web page *appear* three-dimensional; it simply specifies the "front-to-backness" of overlapping AP elements. In other words, the Z-index, represented by a number in the Z-index field, controls the stacking order of AP elements on a page.

Note: The Z-index setting doesn't always work when you try to overlap certain kinds of content, like pull-down menus, radio buttons, or other form elements. It also may not work with plug-in content like Flash or Java applets. This is because Web browsers let other programs control the display of these items.

The page itself lies behind all AP elements, and the AP elements stack up from there. In other words, the higher the Z-index number, the higher the AP elements, so that an AP element with a Z-index of 4 appears *behind* an overlapping AP div with a Z-index of, say, 7.

Z-index numbers have no relation to the actual number of absolutely positioned items on a page. You can have three AP elements with Z-indexes of 2, 499, and 2000, if you choose. You'd still just have three AP elements, one on top of the other in ascending order. Spacing your Z-index numbers in this manner is helpful, since it lets you insert divs between already positioned divs as you develop your page without having to renumber the Z-indexes of all your AP divs.

Overflow

Suppose you create a square AP div that's 100 × 100 pixels. Then you fill it with a graphic that's 150 × 162 pixels—that is, larger than the AP div itself.

You've already seen how a table cell reacts to this situation: It simply grows to fit the content inside it. AP divs, however, are more (or less) flexible, depending on your choice of Overflow option in the Property inspector. The following choices let you decide how browsers handle the excess part of the image:

- **Visible** makes the AP div grow to accommodate its contents. If you don't choose another setting, then AP divs grow to fit automatically.
- **Hidden** chops off the excess. In the example above, only the top-left 100 × 100 pixels of the image would be visible.
- **Scroll** adds scroll bars to the AP div, so that a visitor can scroll to see all of the AP div's contents. It's like having a miniature browser window embedded in the page. This feature offers an interesting way to add a small, scrollable window within a Web page: Imagine a small "Latest Company News" box, which visitors can scroll to read the text inside without disturbing anything else on the page.
- **Auto** adds scroll bars to an AP element *only* if necessary to accommodate its oversize contents.

In Design view, if you've selected any option besides "Visible", you see the AP div's set dimensions—for example, 100 pixels by 100 pixels. Any content outside that area—the overflow—isn't displayed.

You may have content you'd like to edit that's part of the overflow—like the "Latest Company News" box example above. Dreamweaver does give you an easy way to edit any of that hidden content—just double-click the AP div. Doing so expands the AP div (just as if you'd selected the visible option) so you can edit it. To reset the AP div back to its original dimensions, right-click (Control-click) the AP div and, from the shortcut menu that appears, select Element View → Hidden.

Placement

These properties let you specify an absolutely positioned element's position, which is, after all, the whole point of AP divs. The four properties control where each of the four edges of the AP div begin. Setting the Top box to 200 pixels places the top of the AP div 200 pixels down the screen, whereas the Bottom option identifies where the bottom of the AP div starts. Similarly, the Left and Right properties set where the left edge and right edge of the AP div should appear.

Frequently, you'll use a combination of the Width property (page 339) with the Top and Left or Right properties. To place a 150-pixel-wide sidebar 200 pixels from the top of the page and 15 pixels in from the left side of the page, you'd set the Width property to 150 pixels, the Top property to 200, and the Left property to 15 pixels. The Right property is also handy. Say you want to put a 200-pixel-wide sidebar at the right side of the page. Since you don't know the exact width of a visitor's browser window—580 pixels, 1200 pixels?—you can't know ahead of time how far the AP div needs to be from the left edge of the window. Instead, you can set the Right property to 0—if you want the sidebar to touch the right edge of the page. If you want to indent the AP div 20 pixels from the right edge of the window, type *20*.

While it's technically possible to use Left and Right positioning simultaneously—say, placing an AP div 50 pixels from the left edge and 20 from the right—Internet Explorer doesn't support this combination. Instead, use absolute positioning with one edge of the AP div and a margin setting (see page 322) for the other edge.

Positioning isn't quite as straightforward as it may seem. The exact position of a positioned div is a combination of not only these position values, but also what type of placement you choose for the AP div—absolute or relative. As noted earlier, with relative positioning, the numbers you type for Top or Left, for instance, are calculated based on where the AP div already appears in the HTML code and on the screen. So setting the Top property to 100 pixels doesn't place the AP div 100 pixels from the top of the browser window; it places it 100 pixels from where it would appear on the screen based on the HTML code.

Absolute positioning, however, lets you place an AP div at an exact spot on a page. So setting the Top and Left properties for an absolutely positioned AP div to 100 and 150 pixels *will* place that AP div 100 pixels from the top of the browser window and 150 pixels from the left edge.

Note: There's one additional wrinkle to absolute positioning. For a div that's nested inside another div that has either a "relative" or "absolute" position setting, position values are calculated based on the position of the *parent* div. If you have one AP div that's located 300 pixels from the top of the page, an absolutely positioned AP div nested inside *that* AP div with a Top position setting of 20 doesn't appear 20 pixels from the top of the page. Instead, it appears 20 pixels from the top of the parent AP div, or, here, 320 pixels from the top of the page.

Clip

The Clip property can hide all but a rectangular piece of an AP div. In most cases, you should avoid this property, since it's rarely useful, and it's also a waste of precious bandwidth.

Suppose you put a large graphic into an AP div, but you want to display only one small area. You *could* use the Clip property, but the Web browser still has to download the *entire* graphic, not just the clipped area. You're much better off just preparing the smaller graphic at the right size to begin with (see Chapter 6). The kilobytes you save may be your own.

You can use JavaScript to *move* the clipping area, creating an effect like a spotlight traveling across the AP div. Although that may be a more useful purpose for the Clip property, Dreamweaver unfortunately offers no tools for performing this maneuver.

The four clipping settings—top, right, bottom, and left—specify the positions of the clipping box's four edges. In other words, these indicate the borders of the visible area of the AP div.

Adding an AP Div to Your Page

In most cases, you'll position a <div> tag that contains a variety of HTML elements—images, paragraphs, headlines, and so on. To place a series of links on top of the banner at the top of the page, you could wrap those links in a div tag and position that div. Dreamweaver gives you a couple of ways to insert an absolutely positioned div:

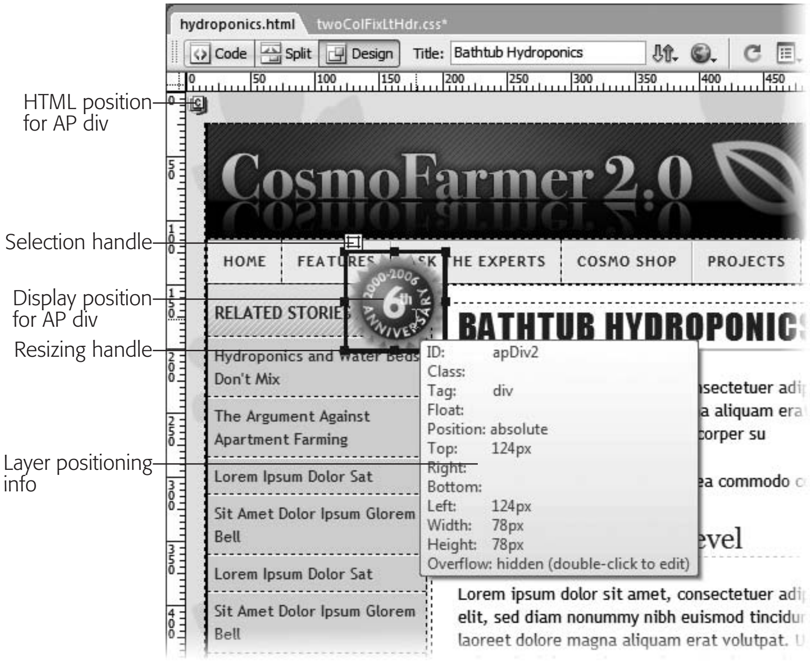
- **Use the Insert Div Tag tool** discussed on page 314. You can start out by selecting already existing content on the page, or just click where you wish to add a new absolutely positioned div. Either way, you either need to create an ID style first (with the positioning properties discussed above), and then select that style from the ID menu of the Insert Div Tag window (Figure 9-6); or, alternatively, create the ID style by clicking the New CSS Style button on the Insert Div Tag window (Figure 9-6).
- **Use the Draw AP Div tool.** Dreamweaver provides a tool to draw a div tag directly onto the document window. Page 346 shows you how this tool works.

Unless you add a background color or border to your AP div, it's difficult to identify its boundaries. To make working with AP divs easier, Dreamweaver provides visual cues in Design view, as shown in Figure 9-22, and explained in the following list:

- **AP element marker.** The gold shield with the letter C (huh?) represents the position in the underlying HTML where the code for the AP div actually appears.

  These markers aren't normally visible. To see them, you must turn them on in the Preferences window: Press Ctrl+U (⌘-U) to open the window, click the Invisible Elements category, and make sure the "Anchor points for AP elements" option is turned on.

  While HTML objects generally appear in the document window in a top-to-bottom sequence that mirrors their order in the HTML source code, the position of AP divs *doesn't* depend on where the AP div-creating code appears in the page's HTML. In other words, it's possible to have an AP div appear near the bottom of the final Web page, whereas the actual code may be the first line in the body of the HTML page (see Figure 9-22 for more detail).



ID: apDiv2
Class:
Tag: div
Float:
Position: absolute
Top: 124px
Right:
Bottom:
Left: 124px
Width: 78px
Height: 78px
Overflow: hidden (double-click to edit)

Figure 9-22: *Unlike other page elements, AP elements don't appear in the same place on the page as their HTML code. Here, a div containing the 6th Anniversary button, appears on top of the navigation bar. The HTML for the div, however, is the first bit of HTML on the page (and is therefore represented by the AP element marker in the top-left corner of the page).*

If you want to move the HTML of the AP div, drag the shield icon. This element appears in the same place on the page, but its code moves to a new location within the page's HTML. Note, however, that dragging the selection handle (described next) visually moves the div, but leaves the HTML in the same location.

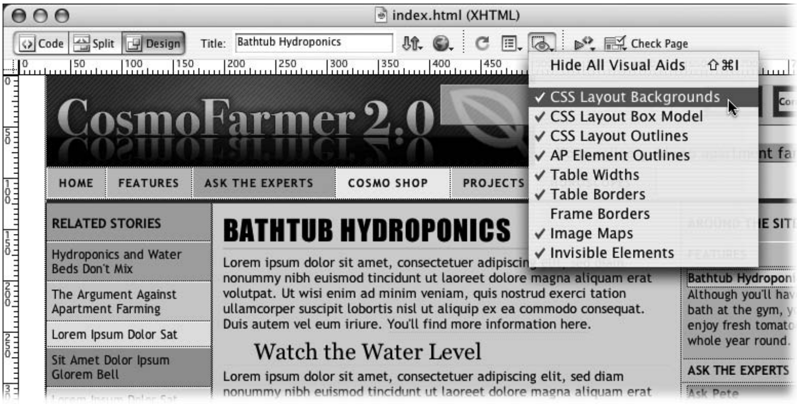
That distinction often confuses Dreamweaver users. For instance, be careful not to drag an AP div marker (the gold shield which represents the HTML code) into a table. Putting an AP div inside a table can cause major display problems in some browsers.

That said, an AP div can *visually overlap* a table, or even appear to be inside a cell; just make sure the gold AP div marker itself isn't inside a cell.

Tip: The AP div marker (shield icon) takes up room on the screen and can push text, graphics, and other items out of the way. In fact, even the thin borders that Dreamweaver adds to divs take up space in the document window, and the space they occupy may make it difficult to place AP divs precisely. The keyboard shortcut Ctrl+Shift+I (⌘-Shift-I) hides or shows invisible items like AP div markers. The Hide All Visual Aids option from the Document toolbar does the same thing (see Figure 9-23).

- **Selection handle.** The selection handle provides a convenient way to grab and move an AP div around the page. The handle appears when you select the AP div, or when you click inside the AP div to add material to it. The handle lets you move the position of the AP div without changing the position of its code (see "Moving AP Elements" on page 349). Behind the scenes, Dreamweaver updates the CSS code (the left and top position properties described on page 341) automatically…pretty nifty.

- **AP element outline.** When an absolutely positioned element isn't selected, a thin, gray, 3-D border outlines each AP element. Like the AP div marker and selection handle, it's there only to help you see the boundaries of the AP element, and doesn't show up in Web browsers. You can turn it on and off, but to turn it off, you need to make sure two options in the View → Visual Aids menu don't have checkmarks next to their names: AP Element Outlines and Layout Outlines. You can also use the Visual Aids menu in the document window (see Figure 9-23).



Lorem ipsum dolor sit amet, consectetuer adipiscin nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure. You'll find more information here.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat

Although you'll hav bath at the gym, y enjoy fresh tomato whole year round.

Figure 9-23: *Choices 2–5 in the Visual Aids menu provide visual cues to help you with CSS layouts in Design view. The CSS Layout Backgrounds option—selected here—lights up each <div> tag on a page with a hideous, randomly selected background color. It also highlights any element whose display property is set to "block," (see page 137) or that uses either absolute or relative positioning (see page 337). Both the CSS Layout Outlines and AP Element Outlines options draw a gray line around positioned elements. In addition, the Layout Outlines option draws a black border around <div> tags that aren't absolutely positioned. The CSS Layout Box model option is discussed on page 324.*

Note: If one AP element overlaps another, the top AP element—the one with the higher Z-index, as described on page 340—has a solid outline; the lower absolutely positioned element's outline appears as a dashed line where the top AP element overlaps it.

- **AP div positioning summary.** If you select an AP div and hover your mouse over that div, Dreamweaver pops up a yellow box with information about how that AP div is positioned (see Figure 9-22), including the name of the ID style or class style, what type of positioning is used, the dimensions of the AP div, and so on. This box provides a quick summary of relevant positioning information, and gives you a bird's-eye view of the CSS properties defining the AP div's placement on the page.

Drawing AP Divs

Dreamweaver wouldn't be Dreamweaver if it didn't give you several ways to perform a certain task, like creating an absolutely positioned div. You can create an AP div as described above, or turn to two methods designed specifically for adding AP divs to a page: You can drag to create an AP div freehand, or use a menu command to insert a full-blown, complete AP div. Your choices are:

- **Use the Draw AP div tool.** The Draw AP div tool is in the Insert bar, on the Layout tab (see Figure 9-5). Click the AP div button, and then drag the + cursor diagonally in the document window to create a box—the outline of the AP div.

Tip: For accurate drawing, you should hide Dreamweaver's visual aids (like the AP div border and selection handles), which take up space and move AP divs slightly out of position in Design view. Ctrl+Shift+I (⌘-Shift-I) does the trick.

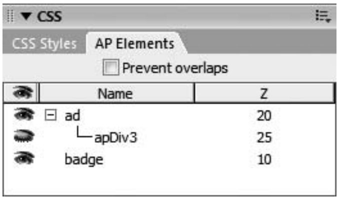
- **Use a menu command.** To insert an AP div at the insertion point, choose Insert → Layout Objects → AP Div.

  If you don't like the looks of the default AP div that Dreamweaver inserts, choose Edit → Preferences (Dreamweaver → Preferences), select the AP Elements category, and then adjust the default properties there. Add a background color, for example, or increase the AP div's size. From then on, you can instantly create your favorite kind of AP div using the Insert → AP div command.

However, Dreamweaver's AP div tools have one drawback: They create internal ID styles with generic names like apDiv1, apDiv2, and so on. So you don't get to take advantage of the byte-saving virtues of an external style sheet until you move the styles to an external style sheet. Fortunately, Dreamweaver CS3's new CSS management options make this maneuver simple, as described on page 291. In addition, you have to take a second to rename these AP divs to something a little more understandable—like changing apDiv1 to *button*. (Your new friend, the AP Elements panel, makes this easy to do, as shown in Figure 9-24, and explained in the next section.)

The AP Elements Panel

The AP Elements panel (Figure 9-24) helps you manage absolutely positioned elements in a document. To open it, choose Window → AP Elements, or press F2. It's called the AP Elements panel instead of the AP Divs panel because any tag that has an ID style and which has its position property set to absolute (see page 337) appears here. So if you absolutely position a single paragraph, its ID appears in this panel. The panel's three columns provide information on each element:



	Name	Z
👁	⊟ ad	20
👁	└ apDiv3	25
👁	badge	10

Figure 9-24:
The AP Elements panel lets you name, reorder, and change the visibility of AP elements. Turning on the "Prevent overlaps" checkbox ensures you can't position or drag an AP div on top of another. This feature is intended to make it easy to convert an AP div layout to a table-based layout using the Modify → Convert → "AP divs to Table". Don't do it! This creates horribly bloated HTML that easily falls apart as you add, edit, and adjust content on the page.

- **Visibility.** To change an absolutely positioned element's visibility property (page 339), click in the column with the eye icon next to the element's name. An open eye indicates that the property is set to visible; a closed eye, hidden. No eye icon at all represents the factory setting: The element is still visible on the page, it's just that the CSS visibility property isn't set.

- **AP element ID.** If you use Dreamweaver's Draw AP div tool, Dreamweaver gives the AP div a generic ID name—like apDiv1. If you created the div yourself, you probably already came up with a pretty good ID like *siteTools* or *navBar*. But if you want to change that name (or provide a more descriptive name for a Dreamweaver-created AP div), double-click the AP element ID name, and then type a new name. (AP element names are just ID names, so they must start with a letter, and can contain only letters and numbers. As Dreamweaver is quick to remind you, spaces and other punctuation aren't allowed.)

  Clicking an item in the AP Elements panel, by the way, is another way to select that element in the document window.

Note: Don't rename an AP element's ID if you've already used it in a Dreamweaver behavior like the Show/Hide Elements action (see page 533). JavaScript uses those names to "talk to" the absolutely positioned elements. If you change its ID in the AP Elements panel, Dreamweaver doesn't automatically update the name in the JavaScript code in your page. The behavior, therefore, no longer works. In that case, you need to edit the behavior using the new ID name.

- **Z-index.** The Z-index provides a third dimension to absolutely positioned elements, letting them overlap one another (see page 340). To change the Z-index of an element, click the number in the Z column, and then type another number. Software veterans will find that Dreamweaver's AP Elements panel works just as it does in Photoshop or Fireworks: You can drag the name up or down the list to the desired position. The AP element at the top of the list (highest number) is in front of all other AP elements, while the AP element at the bottom of the list (lowest number) appears behind all other AP elements.

Modifying AP Element Properties

Once you've added an AP div, you don't need to go back to the CSS Rule Definition window to edit most of the AP div's positioning properties. Using the Property inspector, you can rename it, resize it, move it, align it with other AP divs, and set many other properties.

But first, you have to select the AP div using one of these methods:

- Click the AP div's name in the AP Elements panel (Figure 9-24).
- Click the AP div's selection handle (Figure 9-22).
- Click the AP div's border. The border turns red when you've moved your mouse into the proper position.
- Click the AP element marker that indicates the HTML code for the absolutely positioned item (Figure 9-22). (Out of the box Dreamweaver hides these markers, since they can get in the way of your design work; to show them, see page 344.)

And if those aren't enough ways to select an AP div—Adobe's programmers never sleep—you can also Shift-click an absolutely positioned element. This technique also lets you select multiple AP divs, so that you can set the properties of (or align) many AP divs at once. If you're working in an AP div or have an AP div selected, Shift-clicking another AP div selects them both. You can continue to Shift-click to select additional AP divs. (Shift-click a second time to deselect a selected absolutely positioned element.)

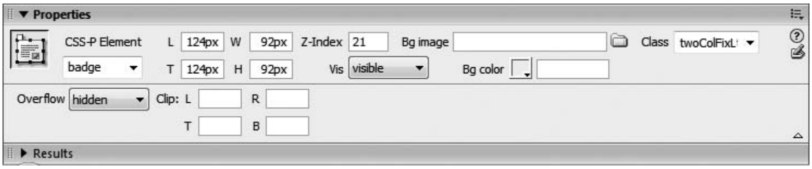
Resizing Absolutely Positioned Elements

When you select an AP element, eight handles appear around the edges of the AP div (see Figure 9-22). You can drag any of these handles to change the AP div's dimensions. The corner handles resize both the width and height simultaneously.

You can also use the keyboard to resize an absolutely positioned element. First, select the AP element, and then do one of the following:

- Press the Ctrl (⌘) key, and then press the arrow keys to change the AP element's size by one pixel. The up and down arrow keys adjust the AP div's height; the left and right arrows affect its width.
- To change the size *10* pixels at a time, press Ctrl+Shift (⌘-Shift), and then press the arrow keys.

For better precision, use the Property inspector to set an exact width and height for the AP element (see Figure 9-25). Type values in the W and H boxes to change the width and height of the AP element, respectively. You can specify any unit of measurement that CSS understands: px (pixels), pc (picas), pt (points), in (inches), mm (millimeters), cm (centimeters), em (height of the current font), ex (height of the current font's x character), or % (percentage)—see page 107 for more on CSS measurement units. To pick your measurement unit, type a number *immediately* followed by the abbreviation for the unit. For example, type *100px* into the W box to make the AP div 100 pixels wide. Don't leave out the measurement unit—px, em, or %, for example—or browsers won't display the correct dimensions of the AP element.



Properties

CSS-P Element: badge

L 124px W 92px Z-Index 21 Bg image

T 124px H 92px Vis visible Bg color

Class twoColFixL

Overflow hidden Clip: L R T B

Results

Figure 9-25: *The Property inspector controls many AP element properties (although some require editing CSS styles).*

Another benefit of using the Property inspector is that Dreamweaver lets you resize multiple AP divs at once. Shift-click two or more AP divs to select them, and then type new widths and heights. Dreamweaver sets all selected AP divs to these same dimensions.

Moving AP Elements

Moving an absolutely positioned element is just as simple as resizing it. Drag any border of the element, or the AP element's selection handle (shown in Figure 9-22). (Avoid the eight resize handles, which change the size of the AP div when dragged.)

For less speed but greater precision, you can move an AP element using the keyboard. First select the element and then do one of the following:

- To move an AP element one pixel at a time, press the corresponding keyboard arrow key.
- Press Shift while using an arrow key to move the element 10 pixels at a time.

As you'd guess, you can also control an AP element's placement by using the Property inspector (see Figure 9-25). Dreamweaver measures an AP div's position relative to the left and top edges of the page (or, for nested AP divs, from the left and top edges of a parent div with a position property set to either absolute or relative). The Property inspector provides two boxes for these values: L specifies the distance from the left edge of the page to the left edge of the selected AP div; T specifies the distance from the top edge of the page to the top of the selected AP div.

Note: You can't edit an AP div's Right or Bottom positioning properties from the Property inspector. For these properties, edit the style using one of the methods discussed on page 124.

To position an AP div using the Property inspector, select the div (for example, by clicking the div's border or selecting its name in the AP Elements panel), and then type distances in the L and T boxes. You can use any of the units of measurement mentioned previously. You can even use negative values to move part or all of an AP div off the page entirely (offstage, you might say), which is something you'd do if you intended a subsequent animation to bring it *onstage*, into the document window.

If you draw a 100-pixel-tall and 50-pixel-wide AP div, you can move it to the very top-left corner of the page by selecting it, and then typing *0* in both the L and T boxes. To position that same AP div so that it's just off the left edge of the page, type *-50px* in the L box.

Aligning AP Elements

At times, you may want to align several AP elements so that their left, top, bottom, or right edges line up with each other. Dreamweaver's Align command does just that; it can even make the width and height of selected AP elements the same.

To use this feature, select two or more AP divs (by Shift-clicking them), choose Modify → Arrange, and then select one of the following options from the submenu:

- **Align Left** aligns the left edges of all selected AP divs. In other words, it gives each AP div the same L property.
- **Align Right** aligns the right edges.
- **Align Top** aligns the top edges, so that the T properties are all set the same.
- **Align Bottom** aligns the bottom edges of the AP divs.
- **Make Same Width** sets the same width for all selected AP divs (in the W box in the Property inspector). **Make Same Height** does the same for the height of the AP divs.

The AP div you select *last* dictates how Dreamweaver aligns the AP divs. Say you have three AP divs—A, B, and C—and select them in order from A to C. You then align them to Left. Dreamweaver uses the left edge of AP div C (the last one you selected) as the value for the other AP divs.

Background Image and Color

To add a background image to the AP div, click the folder icon next to the Bg Image field, and then select an image from your site folder. As usual, Dreamweaver tiles the image, if necessary, until the entire AP div's filled with repeating copies of the graphic. (To adjust how or whether the image tiles, you'll need to edit the style using the normal CSS-style editing techniques; see page 218.)

Setting a background color is even easier. Just use the Bg Color box to select a color or sample a color off the screen.

Nesting AP Divs

Nesting doesn't necessarily mean that one AP div appears inside another AP div; rather, it means that the HTML for one AP div is written inside the code for another. The nested AP div itself can appear anywhere on the page. The main benefit of nested AP divs is that the *parent* AP div—the AP div containing the HTML of one or more other AP divs—can control the behavior of its *child AP divs*.

Suppose you create one AP div, and nest two AP divs inside it. If you move the parent AP div on the screen, the two child AP divs follow it, which gives you an easy way to move several AP divs in unison. Furthermore, the parent AP div can control its children's visibility. When you hide the parent AP div (see page 339), the nested AP divs also disappear (unless you've specifically set the nested AP divs' visibility property to *visible*).

Tip: Dreamweaver's factory settings hide a useful visual cue—"AP element markers (see Figure 9-22). These markers identify where in the code the HTML for the AP div appears. Since a nested absolutely positioned element is a tag whose code appears inside another absolutely positioned element—like inside the parent's <div> tag—an AP element marker appears inside the parent AP div for each nested AP div. To turn on the AP element marker feature, press Ctrl+U (⌘-U) to open the Preferences window, click the Invisible Elements category, and then turn on the "Anchor Points for AP Elements" checkbox. You also need to make sure visual aids are turned on (as explained in Figure 9-23).

Here's how to create a nested AP div:

- While pressing the Ctrl (⌘) key, drag one AP div in the AP divs panel (see Figure 9-24) onto another AP div. The dragged AP div becomes the child of the AP div you drop it on, and its name appears indented in the AP divs panel, also shown in Figure 9-24.

  To un-nest an AP div, drag it above or below the parent AP div in the AP divs panel. (Doing so places the code for the nested AP div directly before the opening <div> tag of the parent AP div.)

Tip: You can also un-nest an AP div, and gain more control over where the HTML for that AP div is written in the document, by dragging the AP element marker to a new spot in the document window. (This AP element marker isn't always immediately visible, however; see the Tip above)

- Use the Insert Div Tag button on either the Common or Layout tab of the Insert bar, or choose Insert → Layout Objects → Div Tag. In either case, the Insert Div Tag window appears (Figure 9-6). Select the name of the AP div you wish to nest inside another AP div; choose either "After start of tag" or "Before end of tag" from the first Insert menu; then choose the name of the parent AP div from the second menu.
- Click inside an AP div, and then choose Insert → Layout Objects → AP div. You get a new, nested AP div inside it.
- Drag the Draw AP Div *button* (see Figure 9-5) from the Insert bar's Layout tab, and drop it inside an AP div on the page.

CSS Layout Tutorial

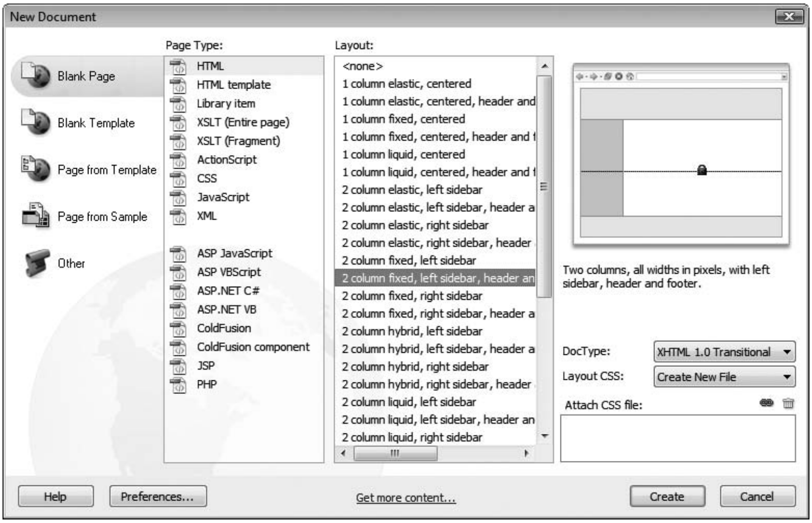
In this tutorial, you'll create a page using one of Dreamweaver CS3's new CSS Layouts. You'll add content to the page, apply styles, and modify the design to meet the exacting standards of Cosmofarmer.com (see Figure 9-36).

Note: You need to download the tutorial files from *www.sawmac.com/dwcs3/* to complete this tutorial. See the Note on page 39 for more details.

Once you've downloaded the tutorial files and opened Dreamweaver, define a new site as described on page 28: Name the site *CSS Layout,* and select the Chapter09 folder (inside the MM_DWCS3 folder). (In a nutshell: choose Site → New Site. In the Site Definition window, click the Advanced tab, type *CSS Layout* into the Site Name field, click the folder icon next to the Local Root Folder field, navigate to and select the Chapter09 folder, and then click Choose or Select. Finally, click OK.)

1. **Choose File → New.**

   The New Document Window opens (see Figure 9-26).


New Document
Blank Page
Blank Template
Page from Template
Page from Sample
Other
Page Type:
HTML
HTML template
Library item
XSLT (Entire page)
XSLT (Fragment)
ActionScript
CSS
JavaScript
XML
ASP JavaScript
ASP VBScript
ASP.NET C#
ASP.NET VB
ColdFusion
ColdFusion component
JSP
PHP
Layout:
<none>
1 column elastic, centered
1 column elastic, centered, header and
1 column fixed, centered
1 column fixed, centered, header and f
1 column liquid, centered
1 column liquid, centered, header and f
2 column elastic, left sidebar
2 column elastic, left sidebar, header a
2 column elastic, right sidebar
2 column elastic, right sidebar, header
2 column fixed, left sidebar
2 column fixed, left sidebar, header an
2 column fixed, right sidebar
2 column fixed, right sidebar, header a
2 column hybrid, left sidebar
2 column hybrid, left sidebar, header a
2 column hybrid, right sidebar
2 column hybrid, right sidebar, header
2 column liquid, left sidebar
2 column liquid, left sidebar, header an
2 column liquid, right sidebar
Attach CSS file:
Help
Preferences...
Get more content...
Create
Cancel

Two columns, all widths in pixels, with left sidebar, header and footer.

DocType: XHTML 1.0 Transitional

Layout CSS: Create New File

Figure 9-26: *Dreamweaver provides 32 CSS layouts organized by the number of columns each layout has.*

2. **Select the "Blank Page" category in the left column; select HTML from the Page Type column, and select "2 column fixed, left sidebar, header and footer" from the Layout column.**

   You've selected a design that has two columns, a left-hand sidebar and a main content area on the right, with areas at the top and bottom of the page to hold a banner and copyright notice.

   Next you need to tell Dreamweaver where to store the CSS required to make this design work.

3. **From the Layout CSS menu, select Create New File.**

   This option tells Dreamweaver to create a new external style sheet with the required styles, and to link it to the new page Dreamweaver is about to create.

4. **Click the Create button.**

   The Save Style Sheet File As window appears. Before Dreamweaver creates a new Web page, you first have to save the external style sheet. Dreamweaver recommends a file name—*twoColFixLtHdr.css* in this instance. You can rename this file to anything you'd like, but the name Dreamweaver suggests is descriptive, if not particularly elegant.

5. **Click the Site Root button to navigate to this site's main folder, and then select the css folder. Click Save.**

   Dreamweaver saves the file, and creates a new document. It's not much to look at yet, but you'll add your own design touches to this page in the steps ahead.

6. **Choose File → Save; click the Site Root button to move to the main folder for the site, and then save the file as *hydroponics.html*.**

   Every page needs a title and the one Dreamweaver supplies—"Untitled Document"—isn't very helpful.

7. **Click the Title box at the top of the Document window, and then type *Bathtub Hydroponics*.**

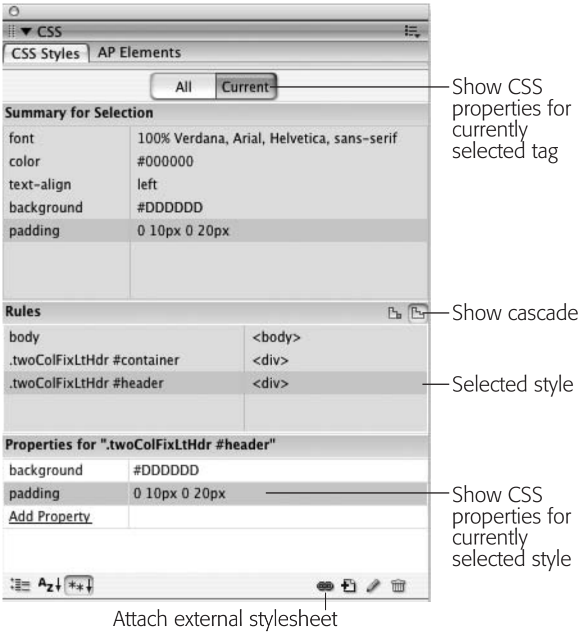
   The first step after creating a page based on a Dreamweaver CSS Layout is to remove some of the formatting that Dreamweaver supplies. For example, to help you easily identify the header, sidebar, and footer, Dreamweaver adds a gray background to each of these elements. Unless you're designing a battleship tribute site, you should remove these colors (or at least change them to colors you like).

8. **Make sure the CSS Styles panel is open (Window → CSS Styles), and the Current button is selected at the top of the panel (see Figure 9-27).**

   Dreamweaver's CSS Panel provides a quick and easy way to identify and edit a style applied to a part of the page. The panel's Current view displays the styles affecting the current selection. Also make sure the Cascade button (labelled in Figure 9-27) is pressed.

9. **In the document window, click inside the word Header at the top of the page, and then choose Edit → Select All (Ctrl+A or ⌘-A for Macs works just as well).**

   Clicking inside the headline places the insertion point inside the <h1> tag, and inside the <div> tag used to define the header portion of the page. The Select All command works slightly differently when the cursor's inside a <div>. Instead of selecting *everything* on the page (probably what you'd think Select All would do), it selects all of the div's contents—it also highlights the <div> tag in the Tag selector at the bottom of the page. Now, if you look at the CSS Styles panel, you see a style *.twoColFixLtHdr #header* listed in the Rules pane (see Figure 9-27).



Summary for Selection

font	100% Verdana, Arial, Helvetica, sans-serif
color	#000000
text-align	left
background	#DDDDDD
padding	0 10px 0 20px

Rules

body	<body>
.twoColFixLtHdr #container	<div>
.twoColFixLtHdr #header	<div>

Properties for ".twoColFixLtHdr #header"

background	#DDDDDD
padding	0 10px 0 20px
Add Property	

Show CSS properties for currently selected tag

Show cascade

Selected style

Show CSS properties for currently selected style

Attach external stylesheet

Figure 9-27:
The Current View of the CSS Styles Panel is one of Dreamweaver's greatest CSS productivity tools. It shows properties and styles that apply to any element you select in the Document window. It's most useful when you click the Show Cascade button (labelled), which displays every style that might affect the current selection, and displays those style names in the order of their importance, with the style that has the greatest impact on the selected page element listed at the bottom. Turn to page 298 to learn more about using the CSS Styles panel.

10. **Make sure *.twoColFixLtHdr #header* is selected in the Rules pane (see Figure 9-27). In the Properties pane, click the Background color value—#DDDDDD—press Delete, and then hit the Enter (Return) key.**

    This removes the background color and, at the same time, deletes the background color property from the style sheet. You could also have changed the color to something more appropriate for the site.

    Next, you'll remove the space that surrounds the headline inside the header area.

11. **In the Properties pane, click the padding values—"0 10px 0 20px"—to select them. Type *0*, and then Enter (or Return).**

    This action removes any padding inside the header div—in other words, it removes the space between the div's edge in the content inside. In some cases, you may want to keep or adjust the padding if you want to keep text inside the div from running to the very edge of the div. In this tutorial, you'll be inserting a banner graphic that needs to fill the entire header region.

12. **Repeat steps 9–11 to remove the background color, and set the padding to 0 for the sidebar and footer.**

    For example, click inside the text "Sidebar1 Content," press Ctrl+A (⌘-A), and edit the *.twoColFixLtHdr #sidebar1* style. The name of the style controlling the footer is *.twoColFixLtHdr #footer*.

If you preview the page now, you'll notice a black border framing the header, sidebar, main content, and footer areas. This border is applied to a <div> tag that wraps all of the other tags. You'll remove that border now.

13. **In the Tag Selector at the bottom left of the document window, click <div# container> to select the div. In the Properties Pane of the CSS Style panel, delete the value "1px solid #000000" from the border property.**

    In other words, click "1px solid #000000," and then press Delete. (If you don't see <div#container> in the Tag Selector, click inside any of the areas with text on the page.)

    Finally, you'll remove the background color for the page.

14. **In the Tag Selector click <body.twoColFixLtHdr> to select the page's <body> tag. In the Properties Pane of the CSS Style panel, remove the gray background color.**

    This is the same as step 10 above. At this point, you've removed some of the visual formatting to start with a clean slate. In the next section you'll add actual content.

Adding Content

Now it's time to add the real content to this page…OK, it's not "real" content, since CosmoFarmer.com doesn't really exist, but you get the idea.

1. **Select and delete the text "Header" at the top of the page; choose "None" from the Property inspector's Format menu.**

   You'll replace that text with a banner image.

2. **Choose Insert → Image; navigate to the images folder, and then select the file *banner.png*. Click the OK or Choose button to insert the image.**

   If the Image Tag Accessibility window appears, type *CosmoFarmer.com* in the Alternate text box, and then click OK.

   The sidebar lists links to other pages related to this one. The content for that sidebar is located in another HTML file in this tutorial.

3. **In the files panel, locate the file *sidebar_content.html* in the content folder, and double-click it to open it.**

   You could also choose File → Open, navigate to the content folder in the site, and then double-click the *sidebar_content.html* file to open it. Either way, a Web page opens with a headline, bulleted list, and paragraph. You'll copy it from this page and paste it into the new layout.

4. **Choose Edit → Select All, then Edit → Copy; in the document toolbar, click the tab for *hydroponics.html* to switch to that page. Click anywhere inside the sidebar, and then choose Edit → Select All and Edit → Paste.**

   The sidebar's dummy text supplied with the layout page is replaced with not much smarter text from CosmoFarmer.com. You'll do the same for the main content area.

5. **Repeat steps 3 and 4 with the *main_content.html* file and the main content region of the page.**

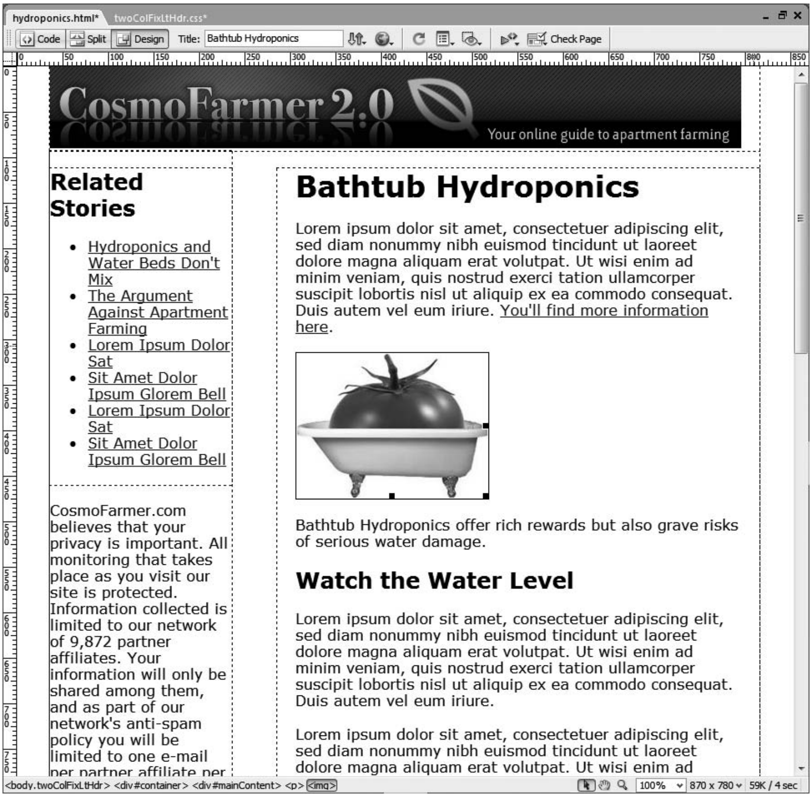
   In other words, open *main_content.html*, and then paste its contents into the div with the big headline "Main Content." You'll just type the copyright notice into the footer.

6. **Scroll to the bottom of the page, double-click the word "footer", and then type *Copyright 2007, CosmoFarmer.com*.**

   There's just one last piece of content missing—a photo to liven up the page.

7. **Scroll to the top of the page; click into the main content area in the empty paragraph just above the paragraph that begins "Bathtub hydroponics offers rich rewards…" Choose Insert → Image and insert the file *tomato_bath.jpg*.**

   If the Image Tag Accessibility window appears, then type *Tomato Bath* for the alternate text, and then click OK. At this point, the page should look like Figure 9-28. The basic structure is together and the contents in place. Now it's time to add some style.


hydroponics.html*
twoColFixLtHdr.css*
Code
Split
Design
Title: Bathtub Hydroponics
Check Page
CosmoFarmer 2.0
Your online guide to apartment farming
<body.twoColFixLtHdr> <div#container> <div#mainContent> <p> <img>
100%
870 x 780
59K / 4 sec

Related Stories

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- The Argument Against Apartment Farming
- Lorem Ipsum Dolor Sat
- Sit Amet Dolor Ipsum Glorem Bell
- Lorem Ipsum Dolor Sat
- Sit Amet Dolor Ipsum Glorem Bell

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Bathtub Hydroponics

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Bathtub Hydroponics offer rich rewards but also grave risks of serious water damage.

Watch the Water Level

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Figure 9-28: *The dotted lines that run around the different layout regions on the page represent the <div> tags that are positioned to create this two-column layout. The left-hand sidebar is a left floated div with a set width.*

Applying Some Style

At this point, you could create new styles to format this page using the techniques you've read about earlier in this book—change the fonts and font sizes, add underlines to headlines, change the look of links, and so on. For the sake of keeping this book from rivaling the length of *War and Peace*, this book assumes you've already got those skills under your belt, and you'll attach a style sheet with some already created styles.

1. **In the CSS Style panel, click the Attach External Style Sheet button** (see **Figure 9-27).**

   The Attach External Style Sheet window opens. It's a good idea to place any styles that don't directly affect the layout of one of Dreamweaver's CSS Layout pages in a separate CSS file, like the one you're about to attach. That way you can have one CSS file that controls style elements that apply to every type of page on your site—the background color of the body, the look of headings and text, and so on. Then you can attach this global style sheet so that it shares these same styles with other pages using different types of CSS layouts—1 column, 3 column, liquid, and so on.

2. **Click the Browse button, and then navigate to the css folder; double-click the file *global.css*. Click OK in the Attach External Style Sheet window.**

   Dreamweaver links the style sheet to the page, and styles the page content. There's still some work to be done with the layout, but first you'll style the background of the page.

3. **In the Tag selector, click <body.twoColFixLtHdr> to select the <body> tag.**

   The CSS Styles panel should look like Figure 9-29. Notice that there are two *body* styles listed in the Rules pane. One is defined in the layout style sheet (*twoColFixLtHdr.css*), and the other is in the global style sheet you just attached. You want to edit the style in the *global.css* file.

4. **In the Rule pane, double-click the body style that appears at the bottom of the list.**

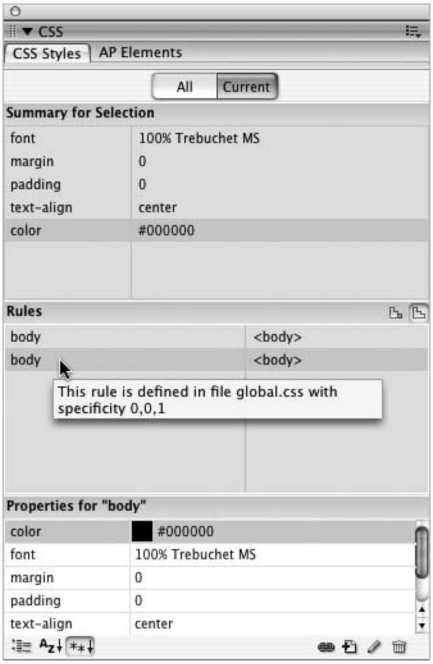
   The CSS Rule Definition window opens.

5. **Click the Background category; in the Background color box, type *#D6D9E1*; click the Browse button, navigate to the images folder, and then select the file *leaf_bg.gif*.**

   The CSS Rule Definition window should look like Figure 9-30.

6. **Click OK to finish editing the style.**

   A simple leaf illustration fills the background of the page. However, there's not a strong enough separation between the background and page content; a border on the left and right sides of the container div will fix that.



Summary for Selection

font	100% Trebuchet MS
margin	0
padding	0
text-align	center
color	#000000

Rules

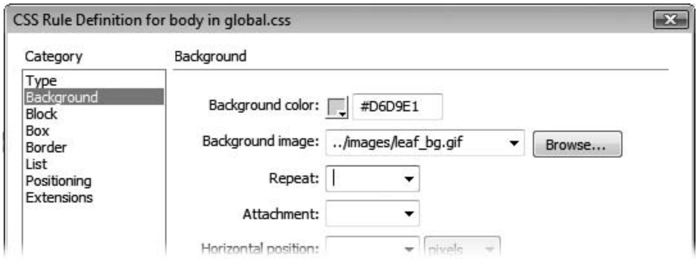
body	<body>
body	<body>

This rule is defined in file global.css with specificity 0,0,1

Properties for "body"

color	#000000
font	100% Trebuchet MS
margin	0
padding	0
text-align	center

Figure 9-29:
When working with multiple style sheets, you might see the same style name listed twice–in this example, the body tag style. To determine which style belongs to which style sheet, mouse over the style's name in the Rules pane (in the middle of this image). A tooltip box provides useful information about the style's specificity and where its code is located. In this case, the CSS for the second body style listed here is stored in a file named global.css. For the lowdown on what specificity is and how it works, turn to page 296.



CSS Rule Definition for body in global.css

Background

Background color: #D6D9E1

Background image: ../images/leaf_bg.gif

Repeat:

Attachment:

Horizontal position:

Figure 9-30:
It's a good idea to set a background color even when assigning a background image to a page. The background color should match the general tone of the image. That way, if a visitor has graphics turned off, or for some reason the background image fails to load, you'll still have background color.

7. **In the CSS Style panel, click the New Style button.**

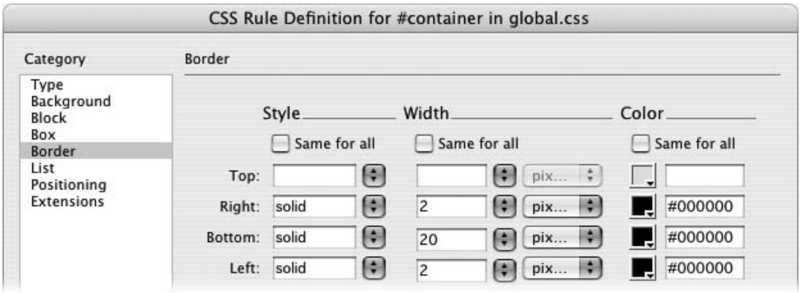
   The New CSS Rule window opens. Every Dreamweaver CSS Layout includes a <div> tag that wraps around all the other tags; it has an ID of #container applied to it (see page 329 for details). So to add a border to that, you just need to create a new ID style with that name.

8. **Select the Advanced button, type *#container* in the Selector box, choose *global.css* in the Define In menu, and then click OK.**

   The CSS Rule Definition window appears (Figure 9-31).

9. **Click the Border category, and then turn off the three "Same for all" checkboxes. For the left and right borders, choose a solid, 2-pixel, black border. Make the bottom border a solid, 20-pixel, black border.**

   The Rule Definition window should look like Figure 9-31.



CSS Rule Definition for #container in global.css

Category: Type, Background, Block, Box, **Border**, List, Positioning, Extensions

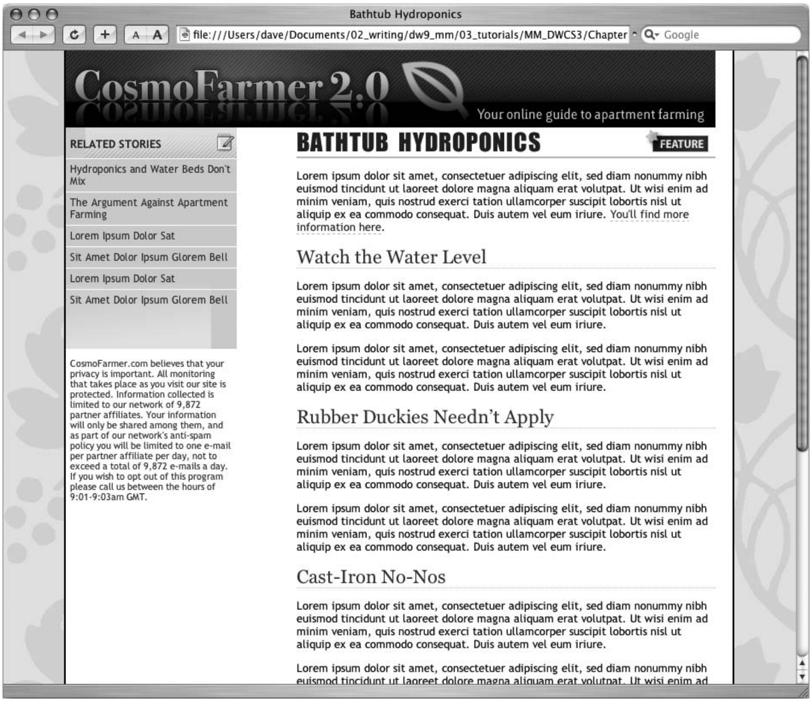
Border

	Style	Width		Color	
	□ Same for all	□ Same for all		□ Same for all	
Top:			pix...		
Right:	solid	2	pix...	■	#000000
Bottom:	solid	20	pix...	■	#000000
Left:	solid	2	pix...	■	#000000

Figure 9-31: *You don't need to add borderlines to all four sides of a style, and you don't even need to make a border that looks like a border. Instead, by making a very thick border, you can create the appearance of a large block on the page–in this case, a thick, black, block adds a solid visual end to the bottom of the page.*

10. **Click OK to complete the style.**

    If you preview the page in a Web browser, it should look like Figure 9-32. A few problems still need fixing.



Bathtub Hydroponics

file:///Users/dave/Documents/02_writing/dw9_mm/03_tutorials/MM_DWCS3/Chapter

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BATHTUB HYDROPONICS

FEATURE

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure. You'll find more information here.

Watch the Water Level

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure.

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure.

Rubber Duckies Needn't Apply

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure.

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Cast-Iron No-Nos

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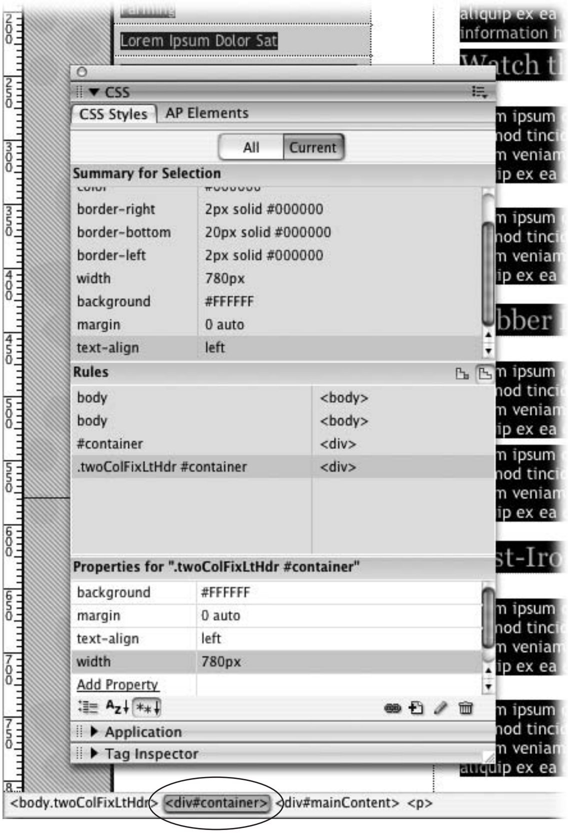
Figure 9-32: *The layout's a bit off. The banner doesn't fit the entire width of the container, and the gutter between the sidebar and the main content is way too wide. You'll fix those problems in the next part of the tutorial.*

Fine-Tuning the Layout

This layout needs a few minor tweaks to make it look just right. First, the container is too wide for the banner logo.

1. **In the Tag selector at the bottom left of the document window, click <div#container> (circled in Figure 9-33).**

   The CSS Styles panel should now look like Figure 9-33 (if it doesn't, make sure the CSS Styles panel is open and that the Current button at the top of the panel is selected).



Summary for Selection

border-right	2px solid #000000
border-bottom	20px solid #000000
border-left	2px solid #000000
width	780px
background	#FFFFFF
margin	0 auto
text-align	left

Rules

body	<body>
body	<body>
#container	<div>
.twoColFixLtHdr #container	<div>

Properties for ".twoColFixLtHdr #container"

background	#FFFFFF
margin	0 auto
text-align	left
width	780px
Add Property	

<body.twoColFixLtHdr> <div#container> <div#mainContent> <p>

Figure 9-33:
If the CSS Styles panel isn't tall enough, the information for the Rules pane or the Properties pane kind of disappears. To quickly expand the CSS Styles Panel, double-click the tab labeled CSS Styles on the panel. This maximizes the height of the panel, and shows the contents of all three panes.

2. **Click 780px next to Width in the Properties pane to select the value. Type *760px* and press Return (Enter).**

   This action changes the width of the container to 760 pixels—the exact width of the banner graphic. The container style actually defines the width of the entire content area, so if you want a wider page, then change this value to a larger number. Some Web sites are now designing to fit monitors that display at 1024 × 768 pixels, using page widths that range from 900 to 1000 pixels.

The sidebar is also a bit wide.

3. **Click inside the sidebar, and then click <div#sidebar1> in the Tag selector. Repeat step 2, but set the width to 170px.**

   The sidebar width changes to 170 pixels. Now it's time to remove the large gap between the sidebar and the main part of the page.

4. **Click anywhere inside the main story text, and then click <div#mainContent> in the Tag selector.**

   This selects the main content div. Its properties now appear in the Properties pane's Styles panel. The #mainContent style doesn't have a set width. Instead, a left margin is used to indent the content from the left edge of the page and away from the sidebar. On the Properties pane, you should see the *margin* property listed and a value of "0 0 0 250px." Margin is a CSS shorthand property, and the four numbers represent the four margins around the div. From left to right, they are the top, right, bottom and left margins. In this case there's no margin for the top, right and bottom, but the left margin is 250 pixels. To close the gap between this div and the sidebar, you just need to make the left margin smaller.

Tip: Here's a short mnemonic to help you remember the order of values (top, right, bottom, and left) for the margin and padding properties: TRBL. If you don't get the order right, you'll be in TRouBLe.

5. **In the Properties Pane, click the "0 0 0 250px" value, and then change it to: "*15px 0 0 175px*".**

   This new setting adds 15 pixels of space above the main content (pushing it down a bit from the banner), and 175 pixels of space on the left (there's also 20 pixels of left padding applied to the main content div, so the text in that div is actually farther than 170 pixels from the left edge of the container—it's 190 pixels, to be precise). Now this div is positioned well. Finally, the copyright notice needs some help.

6. **Scroll to the bottom of the page, click anywhere inside the copyright notice, and then, in the Tag selector, click <div#footer>. In the Rules pane, double-click the *.twoColFixLtHdr #footer* style.**

   The CSS Rule Definition window appears.

7. **In the Font Size box, type *12*.**

   This action makes the copyright notice a little less prominent. Next, you'll move the footer to the left and add a border to the top.

8. **Click the Box category, and then turn off the "Same for all" checkboxes for *both* the padding and margin. Type *20* in the left padding box, and choose *pixels* from the menu to the right. Type *175* in the left margin box, and choose *pixels* from its menu.**

   Finally, add a top border to finish the footer.

9. **Click the Border category, and then turn off all three "Same for all" checkboxes. For the top border, choose "dashed" from the style menu, type *1* in the width box, and then choose a gray color (#666666 is good). Click OK to complete the style.**

   The last layout-related change you'll make is creating a right-floated box to contain the photo and its caption.

10. **In the document window, scroll to the top of the page. Click at the end of the sentence after the photo of the bathtub (the paragraph with the gray background), and then drag to the left and up until that paragraph and the photo are selected.**

    You'll wrap these two elements with a div using Dreamweaver's Insert Div Tag tool.

11. **Choose Insert → Layout Objects → Div Tag.**

    The Insert Div Tag window appears. You need to create a style to format the div you're about to insert.

12. **Click the New CSS Style button, and then, in the New CSS Rule box, click the *class* button; select and delete the stuff in the Name box, and then type *.photoBox*; choose *global.css* from the Define In menu. Click OK.**

    Just a few settings will size and position the photo and caption.

13. **Click the Block category. Choose *center* from the Text align menu. Click the Box category. Choose *right* from the Float menu, and then type *220* in the Width box. Click OK to complete the style.**

    The center option aligns the photo and text in the middle of the box. The other properties set a width of 220 pixels, and move the box to the right edge of the main content area.

    At this point, you've returned to the Insert Div Tag window, and the class box is filled out with the name of the class style you just created.

14. **Click OK.**

    The photo and caption move to the right edge of the story content. Preview the page to check your progress.

Finishing Touches

Currently the page doesn't have any navigation bar, and the sidebar looks a little uninspiring. You'll complete this tutorial by adding just a couple more enhancements.

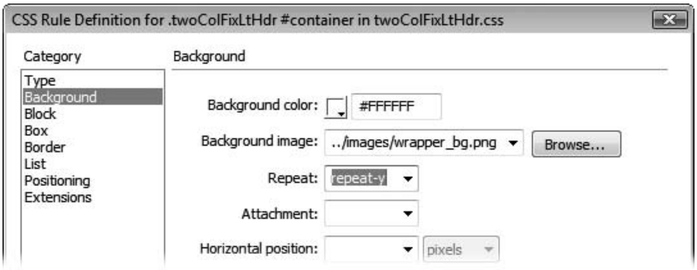
First, the sidebar links have a gray and green background that's only as tall as the link area. It looks a little wimpy: A better design would be a colored background that spans the entire height of the sidebar. But even if you added a background color to the sidebar div, you still wouldn't have a strip that extended the entire height of the page. That's because the content div is much taller and takes up more vertical space than the sidebar. The solution is to add a background image to the container div, and tile it up and down to fill the left sidebar.

1. **Return to Dreamweaver; and click anywhere inside the sidebar or main content of the page. In the Tag selector, click <div#container>. In the CSS Styles panel's Rules Pane, double-click the style *.twoColFixLtHdr #container* to open the CSS Rule Definition window.**

   Because the container encloses all of the other tags, it always stretches to the same height as the divs inside it. By tiling an image in the background of this div, you can be assured that no matter which div (the sidebar or main content) is taller, it'll look like the sidebar extends the entire height of the content area (and if that doesn't make *any* sense, you'll see the results after step 3).

2. **Click the Background category. Click the Browse button, navigate to the images folder, and then double-click the file *wrapper_bg.png*. From the Repeat menu, choose *repeat-y*.**

   The window should now look like Figure 9-34.



CSS Rule Definition for .twoColFixLtHdr #container in twoColFixLtHdr.css

Category

- Type
- Background
- Block
- Box
- Border
- List
- Positioning
- Extensions

Background

Background color: #FFFFFF

Background image: ../images/wrapper_bg.png

Repeat: repeat-y

Attachment:

Horizontal position: pixels

Figure 9-34:
Using a background image to simulate a much taller sidebar is known as the "faux columns" technique. You can read about it at http://alistapart.com/articles/fauxcolumns/.

3. **Click OK to finish the style, and then press F12 (Option-F12) to preview the page.**

   The sidebar is much more solid looking. Scroll to the bottom of the page, and you see that the background extends well past the actual sidebar content. Now, time for the navigation bar.

4. **Return to Dreamweaver. In the files panel, locate the file *menubar.html* in the content folder, and double-click to open it.**

   You could also choose File → Open, navigate to the content folder in the site, and then double-click the *menubar.html* file to open it. Either way, a Web page opens with a bulleted list of links. You'll copy it from this page.

5. **Choose Edit → Select All, then Edit → Copy; in the document toolbar, click the tab for *hydroponics.html* to switch to that page.**

   You'll paste the navigation bar after the banner image.

6. **Click the banner graphic, and then press the right arrow key.**

   This little move deselects the image and places the cursor just next to it, ready for you to paste the navigation bar into place.

7. **Choose Edit → Paste.**

   You could also press Ctrl+V (⌘-V). Either way, your precious layout blows up! The sidebar travels to the far right and the main content drops to the bottom of the page. Ahh, the joys of Web design. You've actually encountered a problem with floated elements, and if you use the Spry Navigation bar (see page 175) you'll probably encounter this same problem frequently.

   Here's what happened: When you pasted the unordered list into the page, it was formatted using styles from the *global.css* style sheet. These styles are the same ones you created in the tutorial for the links chapter. They're the styles used to create a horizontal Spry navigation bar, and they use a left float to position the buttons next to each other. Unfortunately, because they're floated, the sidebar attempts to obey the rules of CSS by wrapping around the floated element (just like text wraps around a floated image.) This positions the sidebar to the right of the navigation bar. The main content, with no place to go (there's no room to wrap around the right side of the sidebar anymore), just drops to the bottom of the page.

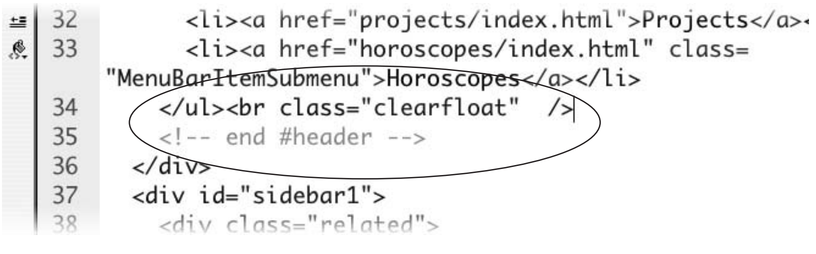
   Fortunately, the solution isn't too painful…but it does require a brief trip into Code view.

8. **Double-click the word *Horoscopes* in the navigation bar, and then, at the top left of the document window, click the Code button.**

   This action drops you into a scary forest of HTML. Here's the lowdown: You're about to insert a linebreak (<br>) tag, right after the closing </ul> tag of the navigation bar. You'll also apply a class named "clearfloat" to the tag. Clearfloat is a style that's in the *twoColFixLtHdr.css* file that was created as part of the Dreamweaver CSS Layout. Its purpose is to prevent an element from wrapping around a floated element—in other words, it uses the CSS *clear* property, described on page 321. In this case, it'll keep the sidebar from trying to wrap around the navigation bar, and restore your beautiful layout to its pristine glory.

9. **Click *after* the closing </ul> tag that appears just before the HTML comment <!--end #header -->, and then type *<br class="clearfloat" />* (see Figure 9-35).**

   Believe it or not, this fixes the problem.



```
        <li><a href="projects/index.html">Projects</a>
        <li><a href="horoscopes/index.html" class=
"MenuBarItemSubmenu">Horoscopes</a></li>
     </ul><br class="clearfloat"  />
     <!-- end #header -->
  </div>
  <div id="sidebar1">
     <div class="related">
```

Figure 9-35: *At times you'll find that floats can sometimes bump into other floats, ruining the layout of a page. By adding a tag that "clears" the float, you can often prevent problems.*

10. **Click the Design view button to return to the wonderful world of visual Web design. (HTML's a wonderful place to visit, but who would want to live there?)**

The layout returns to order, but there's a white space next to the navigation bar. You can make that go away by adding a background color to the header div.

11. **Click the banner image, and then press Ctrl+A (⌘-A) to highlight the header div. Double-click the style *.twoColFixLtHdr #header* in CSS Styles panel's Rules pane.**

    The CSS Rule Definition window appears…honestly, this tutorial's almost over.

12. **Click the Background category, and then set the Background color to #EEEEEE. Click the Border category, and then create a bottom border that's solid, 1 pixel tall, and dark gray.**

    Make sure you turn off all three "Same for all" checkboxes under the Border category, so you add a border only to the bottom of the header, below the navigation bar.

13. **Click OK to finish editing the style. Press F12 (Option-F12) to preview your creation.**

    It should look like Figure 9-36. If it doesn't, you're probably using Internet Explorer. That browser has a few problems that need your attention. First, the gray background of the header doesn't fill the space to the right of the navigation bar. Second, the content in the sidebar is pushed further down from the top than in other browsers. Both of these problems can be tackled in…egads, not again…Code view.

14. **At the top of the document window, click the Code button, and then scroll to the top of the file.**

    You should see a chunk of grayed-out HTML. Those are Internet Explorer conditional comments, and they provide special CSS rules just for the sake of IE (see the box on page 330 for the explanation). In this case, one of those rules is inserting the extra padding at the top of the sidebar. You just need to delete it.

15. **Locate this line of code: `.twoColFixLtHdr #sidebar1 { padding-top: 30px; }` (it should be located at line 15). Select that line, and then delete it.**

    Next, you need to add a new line of CSS code for IE only.

16. **Add a new blank line to the code (either above or below the *.twoColFixLtHdr #mainContent* style), and then type *.twoColFixLtHdr #header { zoom: 1; }***

    This property's a special one that, in the case of many weird display bugs, knocks some sense into Internet Explorer.

    You have to deal with one last Internet Explorer problem. If you preview the page now, you see there's a little extra space between the banner image and the navigation bar. Curse you, IE! One style can fix that.

Note: Internet Explorer has always posed some problems for Web designers. IE 6, which is over half a decade old but still widely used, is full of bugs that wreak havoc on CSS layouts. IE 7 has fixed many of those problems, but still has a few of its own. For help dealing with IE and CSS, visit *www.positioniseverything.net/ie-primer.html* and *www.communitymx.com/content/article.cfm?cid=7A8DF*. For in-depth help, pick up a copy of *CSS: The Missing Manual*.

17. **In the CSS Style panel, click the New Style button. Create a new advanced style named *#banner img,* and store it in the *global.css* style sheet.**

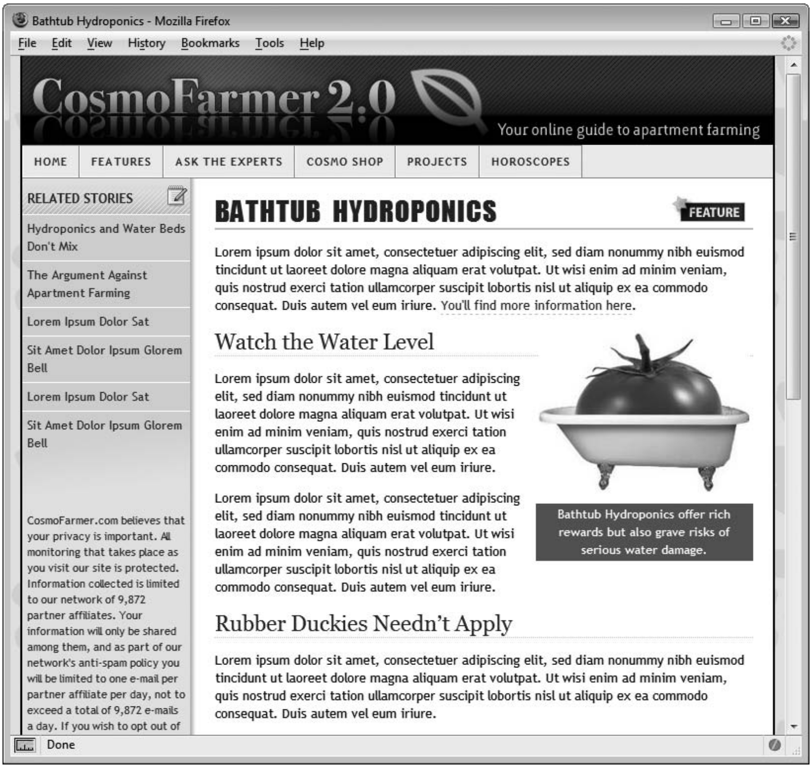
    The extra space is created by the fact that the image is an inline element (see page 137). In other words, it acts just like a letter in a line of text. Because of this, IE makes space for any *descenders* (the bottom half of letters like y, p, q, g that fall below the bottom of other letters on a line) on the line containing the graphic. However, an image isn't a letter, and they don't have descenders; alas, IE makes room for them anyway. It's an easy task to remove that space, however.

18. **In the CSS Rule Definitions window, choose the Block category, and then select "block" from the Display property menu. Click OK to complete the style.**

    Honestly, you're finished. That's it. The page really does work now.

19. **Save the file, and then preview the page in Internet Explorer.**

    Now, even in IE, the page should look like Figure 9-36. If it doesn't, repeat this saying four times: "Practice makes perfect," and then try the tutorial again. You'll find the completed tutorial in the Chapter09_Finished folder.


Bathtub Hydroponics - Mozilla Firefox
File
Edit
View
History
Bookmarks
Tools
Help
CosmoFarmer 2.0
Your online guide to apartment farming
HOME
FEATURES
ASK THE EXPERTS
COSMO SHOP
PROJECTS
HOROSCOPES
RELATED STORIES
Hydroponics and Water Beds Don't Mix
The Argument Against Apartment Farming
Lorem Ipsum Dolor Sat
Sit Amet Dolor Ipsum Glorem Bell
Lorem Ipsum Dolor Sat
Sit Amet Dolor Ipsum Glorem Bell
FEATURE
Done

BATHTUB HYDROPONICS

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Watch the Water Level

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Bathtub Hydroponics offer rich rewards but also grave risks of serious water damage.

Rubber Duckies Needn't Apply

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CosmoFarmer.com believes that your privacy is important. All monitoring that takes place as you visit our site is protected. Information collected is limited to our network of 9,872 partner affiliates. Your information will only be shared among them, and as part of our network's anti-spam policy you will be limited to one e-mail per partner affiliate per day, not to exceed a total of 9,872 e-mails a day. If you wish to opt out of

Figure 9-36:
Using Dreamweaver CS3's CSS Layouts as a starting point, you can quickly build a multicolumn Web page.

CHAPTER

10

Under the Hood: HTML

While Dreamweaver started life primarily as a visual Web page editor, it also hosts powerful code-editing tools that let you work on your pages' HTML, CSS, and JavaScript code directly. In fact, in recognition of the ever-multiplying types of files used to create Web sites, Dreamweaver lets you edit all text-based files, including XML, Java, ActionScript, and just plain text files. The code editor includes professional features like customizable syntax highlighting, auto indenting, line numbering, and code hints; code collapse, so you can concentrate on just the code you want; and the Code view toolbar, which provides one-click access to frequent hand-coding tasks. Dreamweaver may be the only Web page creation program even hard-core code junkies ever need.

Roundtrip HTML

Unlike many other visual HTML editors, Dreamweaver has always graciously accepted HTML written by hand (and even by other programs). In fact, Dreamweaver has always made it easy to jump between itself and text-editing programs like the much loved, but retired, HomeSite (for Windows) and BBEdit (for the Mac).

This ability, which Adobe calls *Roundtrip HTML*, lets Web developers write code the way they want, without worrying that Dreamweaver will change it. For example, suppose you have a particular way of formatting your handwritten code. Maybe you insert an extra carriage return for spacing after every <td> (table cell) tag, or you like to use multiple tabs to indent nested tags. In such cases, Dreamweaver doesn't try to rewrite that to fit its own style—unless you ask it to.

Auto-Fixing Your Code

That's not to say that Dreamweaver doesn't *ever* change your code. In fact, the program can automatically fix errors when you open a page that was created in another program, including:

- **Overlapping tags.** Take a look at this example:

  ```
  <p><strong>Fix your tags!</p></strong>
  ```

  This HTML is invalid, because the opening and closing <strong> tags should appear *inside* the <p> tag. Dreamweaver rewrites this snippet correctly:

  ```
  <p><strong>Fix your tags!</strong></p>
  ```

- **Unclosed tags.** Tags usually come in pairs, like this:

  ```
  <em>This text is in italics</em>
  ```

  But if a page is missing the ending tag (<em>*This text is in italics*), Dreamweaver adds the closing tag.

- **Extra closing tags.** If a page has an *extra* closing tag (<strong>bold text</strong></strong>), Dreamweaver helpfully removes it.

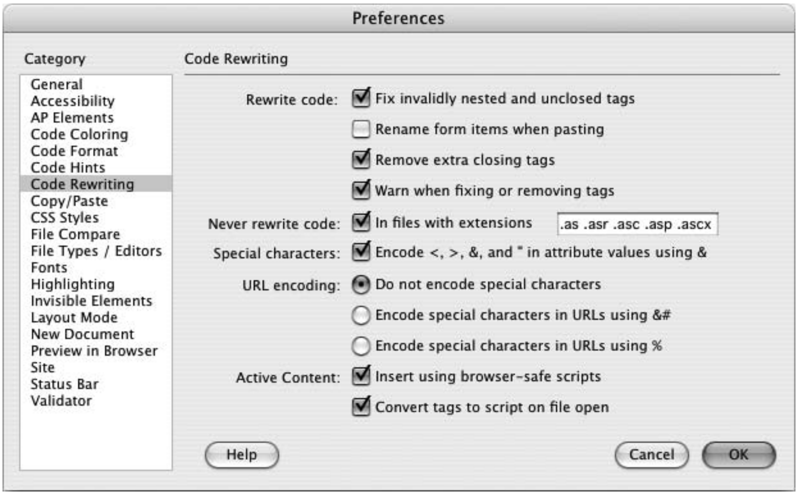
  This feature comes turned *off* in Dreamweaver CS3. If you're working on a site that was hand coded or created by another, less capable Web-editing program, it's wise to turn this feature on, since all of those errors are improper HTML that can cause problems for browsers. (Once upon a time, some Web developers, for example, deliberately omitted closing tags just to save a few kilobytes in file size. While most browsers can still interpret this kind of sloppy code, it's poor practice.)

You can turn auto-fixing on in the Preferences window (see Figure 10-1); just turn on "Fix invalidly nested and unclosed tags" and "Remove extra closing tags." If you don't have these preference options turned on, Dreamweaver doesn't fix the HTML, and there's no command you can run to fix these kinds of problems. Instead, Dreamweaver highlights these mistakes in Document view and Code view (see Figure 10-5).

Tip: The "Warn when fixing or removing tags" option isn't really a warning as much as it is a report. By the time you see the "Warning" message, Dreamweaver's already rewritten the code in your page. You can't undo these changes, but you can close the file without saving the changes, to retain the old (improperly formatted) HTML.

Dreamweaver can also change the capitalization (case) of HTML tags and properties, if you want. For example, if you prefer lowercase letters for tags and properties, like this:

```
<a href="nextpage.html">Click here</a>
```



Code Rewriting

Rewrite code: ☑ Fix invalidly nested and unclosed tags
□ Rename form items when pasting
☑ Remove extra closing tags
☑ Warn when fixing or removing tags

Never rewrite code: ☑ In files with extensions .as .asr .asc .asp .ascx

Special characters: ☑ Encode <, >, &, and " in attribute values using &

URL encoding: ● Do not encode special characters
○ Encode special characters in URLs using &#
○ Encode special characters in URLs using %

Active Content: ☑ Insert using browser-safe scripts
☑ Convert tags to script on file open

Figure 10-1: *To specify a file name extension whose code you never want Dreamweaver to touch, choose Edit → Preferences. Then, in the Category list, choose Code Rewriting, and then type a new extension in the extensions field. (Make sure the "Never rewrite code" checkbox is turned on, as well.)*

Dreamweaver can convert uppercase tags (<A HREF="next.html">) to lowercase, or vice versa, when it finds them in pages created by other programs. (You can turn on this feature, as described on page 383.)

Note: If you're creating XHTML pages (see page 9), you don't get the option to choose between cases–tags must always be lowercase in XHTML files.

Web Application Server Pages

Dreamweaver can leave pages with certain file name extensions untouched—pages created for *Web application servers*, for example. Web application servers process Web pages that access databases and other dynamic services like shopping cart programs and form-processing applications. You'll read about this capability in Part 6 of this book. Many of these systems rely on special code within the HTML of a page—code that Dreamweaver might "fix," interpreting the portions as HTML errors.

Unless you change its settings, Dreamweaver doesn't rewrite code in pages that are designed for the leading application-server technologies—that is, files whose names end in .asp (Active Server Pages that run on Microsoft's IIS Web Server), .aspx (Microsoft's .NET technology), .cfm and .cfml (ColdFusion Markup Language pages that run on Adobe's ColdFusion Server), .jsp (JavaServer Pages that run on any Java Server), or .php (PHP pages), among others. To add an extension to this list, see Figure 10-1.

Special Characters and Encoding

The Code Rewriting Preferences window also lets you control how Dreamweaver handles special characters like <, >, and ", whenever you enter them into the Property inspector or a dialog box. Some characters have special meaning; the "less than" symbol (<), for example, indicates the beginning of an HTML tag, so you can't just link to a page named *bob<zero.html*. If you did, a Web browser would think a new HTML tag (called *zero*) was starting after the < symbol.

There are several ways to avoid this problem. The simplest and wisest method: Avoid strange characters when you name pages, graphics, CSS styles, or any other object in your site. Sticking to letters, numbers, hyphens, and underscores (_) makes your life much easier.

Another option is to let Dreamweaver *encode* those special characters. Encoding a character simply means using a code to represent it. For example, you can represent a space as *%20*, or a < symbol as *%3C*. Thus, the infamous *bob<zero.html* file becomes *bob%3C.html*, and your link will work just fine. To set up encoding, choose Edit → Preferences (Dreamweaver → Preferences on the Mac) and select the Code Rewriting category. Your options are as follows:

- **Special characters.** Turning on this checkbox means that Dreamweaver converts any special character you might type in the Property inspector, or another dialog box, into the % notation described above. (This feature has no effect on code you type in Code view.)

  Dreamweaver comes with this option turned off, since it can sometimes interfere with *server-side* code (see Part 6 of this book). If you stick to the simple rule, "Don't use strange characters in your file names," you'll probably never notice the difference.

- **Do not encode special characters.** Selecting this option, the first of three under "URL encoding," tells Dreamweaver not to touch any Web addresses you enter (in the Property inspector's Link box, say). (Again, selecting this option has no effect on any links you type in Code view.)

- **Encode special characters in URLs using &#** is the safest choice. It's especially helpful if you use a language that has a non-Latin alphabet. If you name your files using Japanese characters, for example, choosing this option can translate them into code that successfully transmits over the Internet.

- **Encode special characters in URLs using %** is intended for use with older browsers (and we're talking *old*, as in pre-Internet Explorer 4).

Code View

Dreamweaver provides several different ways to view a page's HTML code:

- **Code view.** In Code view, Dreamweaver displays your page's raw code.

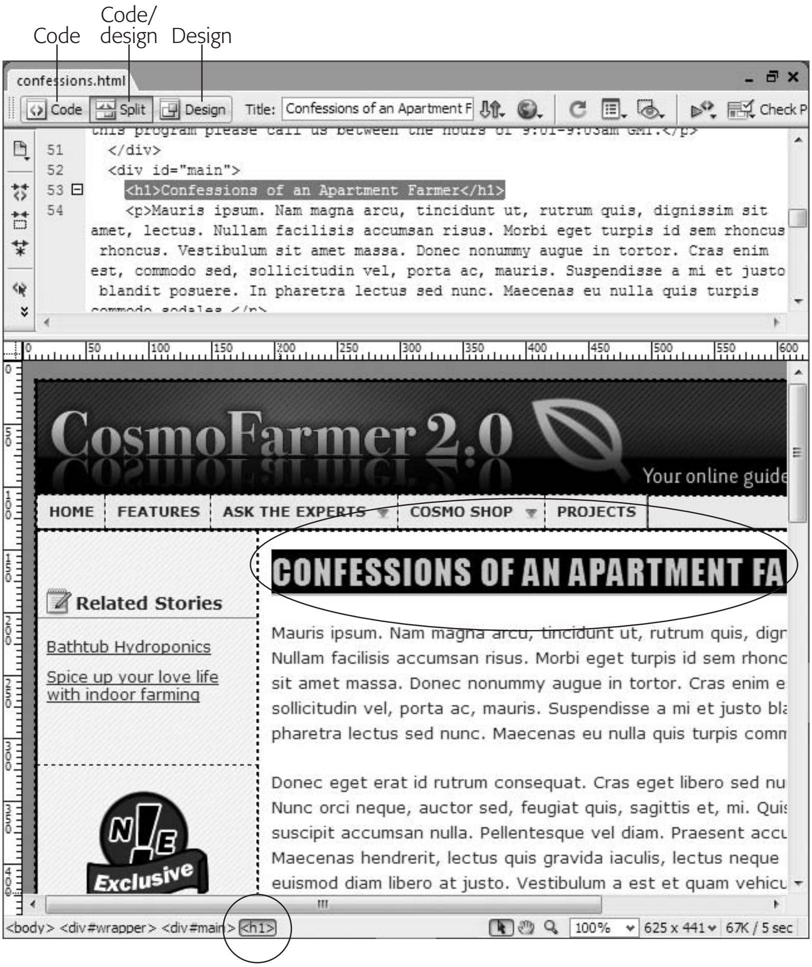
- **Split view.** This shows the HTML code and the "regular" Design view simultaneously (Figure 10-2).

- **Code inspector.** The Code inspector is a floating code window that lets you use Design view in its full glory (not cut in half as in Split view), while still providing access to the code. (To open the Code inspector, choose Window → Code

Inspector, or press F10.) Code warriors who are into serious multitasking can also use the Code inspector to look at one area of code, while using the main document window to work on another area of code.

The rest of this chapter assumes that you're using Code view for HTML editing.

To move between Dreamweaver's different views, use the buttons in the Document toolbar (Figure 10-2) or choose a name from the View menu: Code, Design (the "regular" visual mode), or Code and Design (Split view).



```
this program please call us between the hours of 9:01-9:03am GMT.</p>
  </div>
  <div id="main">
    <h1>Confessions of an Apartment Farmer</h1>
    <p>Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, dignissim sit
amet, lectus. Nullam facilisis accumsan risus. Morbi eget turpis id sem rhoncus
 rhoncus. Vestibulum sit amet massa. Donec nonummy augue in tortor. Cras enim
est, commodo sed, sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo
 blandit posuere. In pharetra lectus sed nunc. Maecenas eu nulla quis turpis
commodo sodales.</p>
```

Mauris ipsum. Nam magna arcu, tincidunt ut, rutrum quis, digr
Nullam facilisis accumsan risus. Morbi eget turpis id sem rhonc
sit amet massa. Donec nonummy augue in tortor. Cras enim e
sollicitudin vel, porta ac, mauris. Suspendisse a mi et justo bl
pharetra lectus sed nunc. Maecenas eu nulla quis turpis comn

Donec eget erat id rutrum consequat. Cras eget libero sed nu
Nunc orci neque, auctor sed, feugiat quis, sagittis et, mi. Qui
suscipit accumsan nulla. Pellentesque vel diam. Praesent acc
Maecenas hendrerit, lectus quis gravida iaculis, lectus neque
euismod diam libero at justo. Vestibulum a est et quam vehic

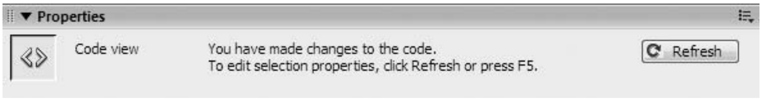
Figure 10-2:
In Split view (also called "Code and Design view"), the top half shows your page's HTML; the bottom half shows the WYSIWYG Design view. Selecting an object in the visual half (the circled headline, for example) also selects the corresponding HTML in the code half (the highlighted paragraph tag)—a great way to identify an object in your HTML. As you work in one half of the Split view, Dreamweaver updates the other half. Use the buttons (labeled) in the Document toolbar to jump between the different views. (Notice that the Tag selector at the bottom of the document window [circled] also identifies the selected tag.)

Tip: You can quickly jump between Code and Design view by pressing Control+' (on both Windows and the Mac). In Split view, this shortcut jumps between the two views, so you could insert an image in the design half of Split view, and then press Control+' to jump right into the HTML for that image in the Code half of the window.

Code view functions just like a text editor. You can click anywhere inside the window, and then start typing HTML, JavaScript, Cascading Style Sheet, or any other programming code (such as ASP, ColdFusion, or PHP).

You don't have to type out *everything* by hand; the Insert bar, Insert menu, and Property inspector also function in Code view. Using these sources of canned HTML blobs, you can combine hands-on HTML work with the easy-to-use, rapid action of Dreamweaver's objects. This trick can be a real time-saver when you need to add a table, which would otherwise be a multiline exercise in typing accuracy. You can also select a tag (like an image's <img> tag) in Code view, and use the Property inspector to modify it.

Note: When you add HTML to Code view, Dreamweaver doesn't automatically update Design view, which can be disconcerting when you're working in Split view. (After all, how would Dreamweaver display a half-finished tag like this: *<table border=*"?) Click the Refresh button in the Property inspector (see Figure 10-3), or press F5, to update the visual display.



You have made changes to the code.
To edit selection properties, click Refresh or press F5.

Figure 10-3: *After changing code in Split view, click Refresh on the Property inspector to update Dreamweaver's visual display.*

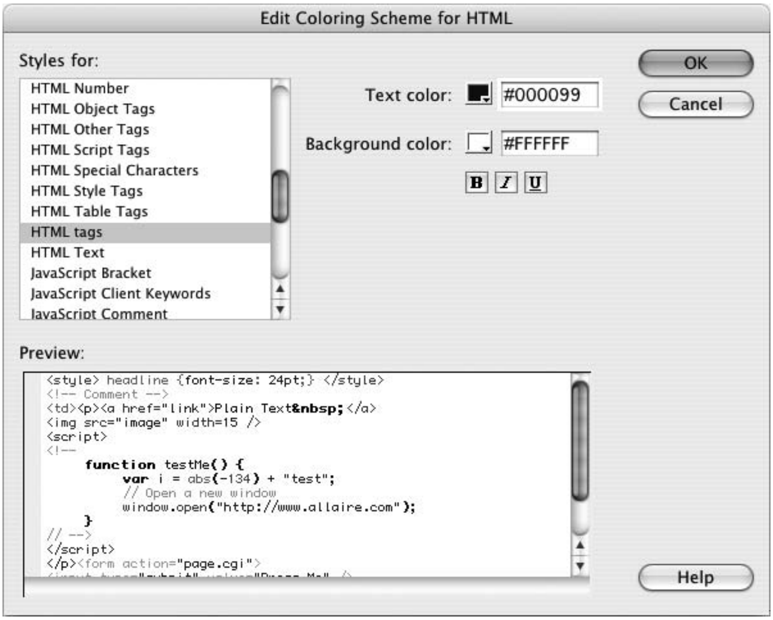
To help you navigate your code, Code view provides several visual cues. They include:

- **Syntax coloring.** Dreamweaver displays different elements in different colors. Comments, for example, are gray. Text is black, HTML tags appear in dark blue, and HTML properties show up in bright blue. You can change any of these colors, and even specify unique colors for different types of tags, using the Preferences window (see Figure 10-4).

  To really make a tag stand out, you can underline it, make it bold, italicize it, and even give it a background color. Dreamweaver has separate color schemes for 24 different types of documents, such as ASP, CSS, and XML files. (But do you really need different colors for HTML forms in ASP pages, HTML pages, and PHP pages? You be the judge.)

- **Bad code highlighting.** When you type incorrect code (an opening tag without a closing tag, say), it's highlighted in yellow (see Figure 10-5). However, you'll see this highlighting only if you turn on the Highlight Invalid Code option from the Document toolbar's View Options menu (see Figure 10-6). That setting is turned off when you first install Dreamweaver.

- **Templates.** Uneditable regions in pages built from templates appear in light gray. You can't actually change this code in Code view. This coloring scheme is a little confusing since HTML comments (see page 376) are also displayed in gray, and you *can* edit those. (For more on templates, see Chapter 19.)



Styles for:

- HTML Number
- HTML Object Tags
- HTML Other Tags
- HTML Script Tags
- HTML Special Characters
- HTML Style Tags
- HTML Table Tags
- HTML tags
- HTML Text
- JavaScript Bracket
- JavaScript Client Keywords
- JavaScript Comment

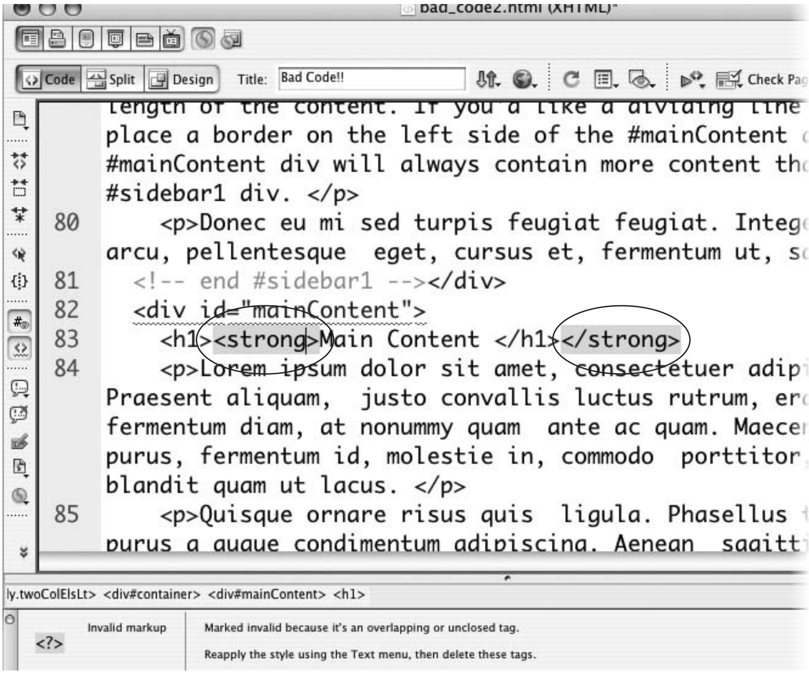
Text color: #000099

Background color: #FFFFFF

Preview:

```
<style> headline {font-size: 24pt;} </style>
<!-- Comment -->
<td><p><a href="link">Plain Text&nbsp;</a>
<img src="image" width=15 />
<script>
<!--
    function testMe() {
        var i = abs(-134) + "test";
        // Open a new window
        window.open("http://www.allaire.com");
    }
// -->
</script>
</p><form action="page.cgi">
```

Figure 10-4:
From the Preferences window, you can control the color Dreamweaver uses to display HTML and script code while in Code view. To do so, select the Code Coloring Category. Then select the type of document–HTML, ASP, CSS, or whatever–and click Edit Coloring Scheme. In the Edit Coloring Scheme window (shown here), select an item whose color you wish to change–Library Item or HTML Form Tags, for example–and set a text and/or background color using the color boxes. You can also make the code bold, italic, or underlined using the appropriate formatting buttons.



Title: Bad Code!!

```
length of the content. If you'd like a dividing line
place a border on the left side of the #mainContent 
#mainContent div will always contain more content th
#sidebar1 div. </p>
    <p>Donec eu mi sed turpis feugiat feugiat. Integ
arcu, pellentesque  eget, cursus et, fermentum ut, s
  <!-- end #sidebar1 --></div>
  <div id="mainContent">
    <h1><strong>Main Content </h1></strong>
    <p>Lorem ipsum dolor sit amet, consectetuer adip
Praesent aliquam,  justo convallis luctus rutrum, er
fermentum diam, at nonummy quam  ante ac quam. Maece
purus, fermentum id, molestie in, commodo  porttitor
blandit quam ut lacus. </p>
    <p>Quisque ornare risus quis  ligula. Phasellus 
purus a augue condimentum adipiscing. Aenean  sagitt
```

ly.twoColElsLt> <div#container> <div#mainContent> <h1>

Marked invalid because it's an overlapping or unclosed tag.

Reapply the style using the Text menu, then delete these tags.

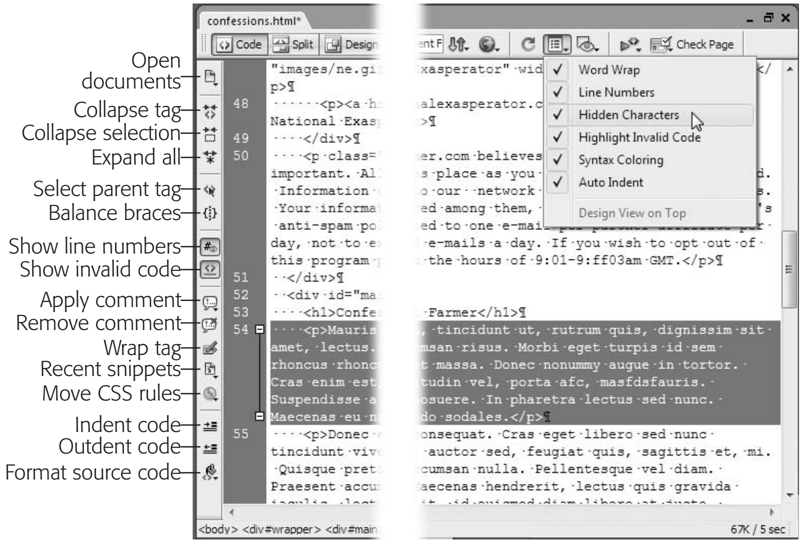
Figure 10-5:
Dreamweaver highlights incorrect HTML code with bright yellow highlighting in Code view (like the <strong> tags in this figure). If you click the yellow area, the Property inspector reveals the mistake. In this case, a tag is improperly nested–part of it is outside the <p> tag. (In Design view, on the other hand, Dreamweaver indicates mistakes by showing the HTML tag–</strong> for example–in front of a bright yellow background.)

- **Browser compatibility highlighting.** Much to the anguish of Web designers, browsers sometimes react differently to CSS formatting. What looks great in Firefox may crumble in Internet Explorer 6. Dreamweaver CS3's new Browser Compatibility Checker can alert you to possible cross-browser CSS problems. When you see a squiggly line underneath code—like underneath the tag <div id="MainContent"> in Figure 10-5—Dreamweaver's alerting you to a potential problem. This cool feature is described on page 129.

Note to Dreamweaver 8 Users: In versions of Dreamweaver prior to CS3, the squiggly line indicates HTML that isn't understood by some browsers; this feature is part of the Check Browser Support tool. That (really useless) tool has been replaced with the new Browser Compatibility tool, which deals only with potential cross-browser CSS problems (see page 129 for more on this great feature).

- **Library Items.** Code from Library items (Chapter 18) has a light yellow background.

You can also control Code view display by using the View Options pop-up menu in the toolbar (see Figure 10-6), or by using the View → Code Options submenu:



```
"images/ne.gi      xasperator"·wid                              </
p>¶
······<p><a·h      alexasperator.c
National·Exas      >¶
····</div>¶
····<p·class="     er.com·believes
important.·Al      s·place·as·you                                d.
·Information·      o·our··network                                s.
·Your·informa      ed·among·them,                               's
·anti-spam·po      ed·to·one·e-mai
day,·not·to·e      e-mails·a·day.·If·you·wish·to·opt·out·of·
this·program·      ·the·hours·of·9:01-9:ff03am·GMT.</p>¶
··</div>¶
··<div·id="ma
····<h1>Confe      ·Farmer</h1>¶
····<p>Mauris      ,·tincidunt·ut,·rutrum·quis,·dignissim·sit·
amet,·lectus.      msan·risus.·Morbi·eget·turpis·id·sem·
rhoncus·rhonc      t·massa.·Donec·nonummy·augue·in·tortor.·
Cras·enim·est      tudin·vel,·porta·afc,·masfdsfauris.·
Suspendisse·a      osuere.·In·pharetra·lectus·sed·nunc.·
Maecenas·eu·n      do·sodales.</p>¶
····<p>Donec·      onsequat.·Cras·eget·libero·sed·nunc·
tincidunt·viv      ·auctor·sed,·feugiat·quis,·sagittis·et,·mi.
·Quisque·pret      cumsan·nulla.·Pellentesque·vel·diam.·
Praesent·accu      aecenas·hendrerit,·lectus·quis·gravida·
```

Figure 10-6: *Code view provides easy access to common code-writing tasks with the Coding toolbar (left edge) and the View Options menu (top right), both of which let you modify how Dreamweaver displays the code. The Word Wrap option, for example, forces all code to fit inside the width of the window. If a line of code extends off the page, Dreamweaver wraps it to the next line. Your only clue that you're looking at one long line is that the entire glob of text has only a single line number.*

- **Word Wrap.** This option makes long lines of code wrap (at the window's edge) to the next line, so you don't have to scroll horizontally to see it all. This option affects only how Dreamweaver displays the line in the document window; it doesn't actually change your code by introducing line breaks.
- **Line Numbers.** This automatic line numbering can come in handy when you're using Dreamweaver's Browser Compatibility Checker (see page 129), or when you encounter an error in a page containing server-side code (such as the code you create in Part 6 of this book). You can also click a line number in Code view to select the entire line, which is a great way to delete or cut a line of code.

- **Hidden Characters.** Some characters you can type on the keyboard aren't visible on the screen: the end of a line, created by hitting the Enter or Return key, for example. Sometimes, these hidden characters can cause big trouble. When working with dynamic, server-side Web pages (described in Part 6), you might find some cool code on the Web, and copy it to your own page. Sometimes copying and pasting code from a Web page introduces hidden characters that prevent the code from working. Turning on the Hidden Characters option can help you ferret out these problem characters and eliminate them. Spaces appear as dots, tabs as a strange, lowercase *a* character, and paragraphs as a paragraph symbol (see Figure 10-6).
- **Highlight Invalid Code.** This is the on/off switch for Dreamweaver's friendly tendency to highlight bad HTML in Code view (see Figure 10-5).
- **Syntax Coloring.** This option turns tags, comments, and text into colorful (and informative) text (see Figure 10-4).
- **Auto Indent.** When you're working with nested HTML tags, it's often helpful to press Tab to indent each level of nested tags, making it easier to identify large blocks of HTML (like a table and all its contents). The Auto Indent option carries the same size indent onto the next line when you hit the Return or Enter key. Suppose you hit the Tab key twice, type a line of code, and then hit Return. Dreamweaver would place the insertion point on the next line, indented using two tabs. To un-indent, just press Backspace.

Coding Toolbar

Dreamweaver includes a handy toolbar that makes many basic hand coding tasks go much more quickly. While working in Code view, the Coding toolbar appears on the left edge of the document window (see Figure 10-6). If you don't see it, you can turn it on by choosing View → Toolbars → Coding, or by right-clicking (Control-clicking) on another toolbar such as the Insert or Document toolbar, and turning on the Coding option in the pop-up menu. Use the same technique to close the toolbar, if you don't use it.

The toolbar contains buttons that duplicate tasks and preference settings you can control from other parts of Dreamweaver. Here's a quick rundown of the buttons listed in Figure 10-6, with a brief explanation of what they do and, when applicable, a cross-reference to a more detailed description of the tool or action:

- **Open Documents.** This is just a pull-down menu, displaying all open documents. It lets you switch among the different documents you're currently working on, but it's actually more work than just clicking a document's tab at the top of the document window (see page 20), so you'll probably want to skip it.
- **Collapse Full Tag/Collapse Selection/Expand All.** These three buttons work with Dreamweaver's Code Collapse feature described on page 379. They let you collapse (and expand) multiple lines of code, essentially keeping it out of the way, letting you concentrate on the code you're currently working on.

- **Select Parent Tag.** This handy feature lets you quickly select the tag that surrounds your current selection. Say you've selected the text inside a link (<a>) tag, or just clicked inside that tag, and your cursor's blinking happily. Click this button, and the entire <a> tag is selected. Click it again, and that link's parent tag is selected. This button provides a quick way to select the tag you're currently working on. If you really want to be productive, the keyboard shortcut Ctrl+[(⌘-[) is quicker.

- **Balance Braces.** If you do a lot of programming using JavaScript or one of the server languages like PHP, ColdFusion, or ASP, this button can help you find the matching brace ({ or }) character in a chunk of programming code. Just click to the right of an opening brace ({) and then click this button to find the closing brace. To find a closing brace's mate, click to the left of the brace, and then click this button. The button also finds matching parentheses characters. The keyboard shortcut—Ctrl+' (⌘-')—is even faster.

- **Apply/Remove Comments.** Comments are a way of including helpful notes in your code, which don't appear on the page when it's displayed in a browser. You may want to leave some explanatory notes in your HTML page to help future generations of Web developers understand what you were doing. You might put a comment before a <div> tag (see page 313) that explains what should go inside it—"Put corporate logo and navigation bar here." People also frequently use comments to mark the end of a page section—"End of navigation bar." These buttons let you add or remove comments to HTML, CSS, JavaScript, PHP, and VBScript code, as demonstrated in Figure 10-7.

Note: Comments are very useful with Cascading Style Sheets. You can open a CSS file, select a property inside a style, and stick a pair of comment tags around this property. When you preview a page that uses the style, you'll see the style minus the property you've commented (or commented out, as some programmers say). This maneuver lets you preview a style, temporarily hiding the effect of one or more styling properties without permanently deleting the property. It's a great help in debugging problematic styles.

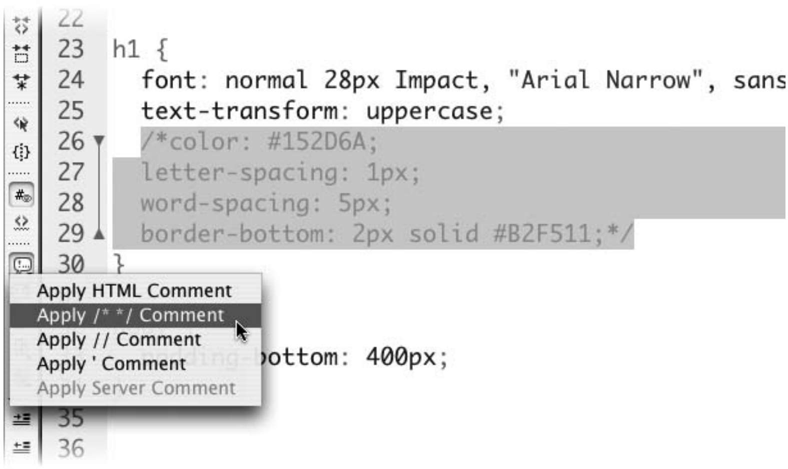
- **Wrap tag.** Works the same as the Quick Tag editor described on page 385.

- **Recent Snippets.** This pop-up menu lists all the snippets (see page 647) you've recently used. Selecting an item from the menu inserts that snippet's code into your Web page.

- **Move CSS Rule.** This pop-up menu lets you move an inline CSS style to either an internal or external style sheet, or lets you move a rule from an internal to an external style sheet. You'll find more details on page 291.

- **Indent/Outdent.** These buttons indent or outdent lines of selected code, using the settings you've defined in the Code Formatting preferences (see page 382).

- **Apply Source formatting.** This button lets you apply specific formatting to an entire Web page, or just a selection of code, using the code-formatting options you've set up in the Code Formatting preferences window (see page 381) and the rules defined in the type-A-uber-geek-what-a-lot-of-work Tag Library described in the box on page 384.



```
h1 {
   font: normal 28px Impact, "Arial Narrow", sans
   text-transform: uppercase;
   /*color: #152D6A;
   letter-spacing: 1px;
   word-spacing: 5px;
   border-bottom: 2px solid #B2F511;*/
}

   padding-bottom: 400px;
```

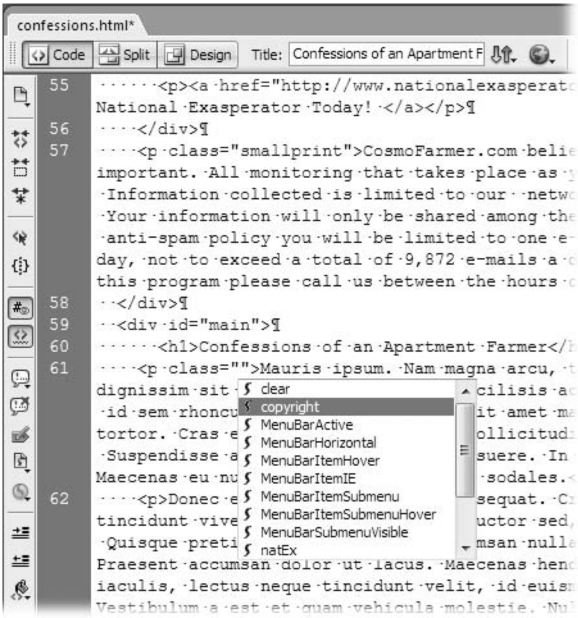
Figure 10-7:
The Coding toolbar lets you wrap HTML, CSS, JavaScript, or other programming code within comment characters. Just select the code you wish to turn into comments, click the Add comment button, and then select the type of comment you wish to add. Use the HTML comment option to hide HTML code; the / */ option to hide multiple lines of CSS, JavaScript, or PHP code; the // option to hide each line of CSS, JavaScript, or PHP code; the ' option to hide VBScript code; and, if you're working on a server-side page as described in Part 6, use the last option to hide code in those pages. To remove a comment, select all of the code (including the comment) and click the Remove comment button (hidden in this figure; it's just below the Apply Comment button).*

Code Hints

Typing code can be a chore, which is why even longtime hand coders take advantage of anything that helps speed up the process. A perfect example is Dreamweaver's Code Hints feature (shown in Figure 10-8). It lets you select tags, attributes, and even Cascading Style Sheet styles from a pop-up menu as you type.

Note: Code Hints work with other tags as well as scripting languages like ASP.NET, ColdFusion, and PHP. In addition, Dreamweaver includes CSS Code Hints, so if you write your style sheets by hand, you can take advantage of the auto-completion features of Code Hints to quickly type out CSS style properties.

Here's how it works. After you begin a new tag by typing an opening bracket (<), a menu pops up, listing all available HTML tags. Use your mouse or arrow keys to select a tag, or type the first few letters of the tag and let Dreamweaver select the closest matching item. When you press Enter (Return), Dreamweaver automatically fills in the tag name. Even better, a second menu now pops up, listing all the properties of that tag.



```
······<p><a·href="http://www.nationalexasperat
National·Exasperator·Today!·</a></p>¶
····</div>¶
····<p·class="smallprint">CosmoFarmer.com·beli
important.·All·monitoring·that·takes·place·as·
·Information·collected·is·limited·to·our··netw
·Your·information·will·only·be·shared·among·th
·anti-spam·policy·you·will·be·limited·to·one·e-
day,·not·to·exceed·a·total·of·9,872·e-mails·a·
this·program·please·call·us·between·the·hours·
··</div>¶
··<div·id="main">¶
······<h1>Confessions·of·an·Apartment·Farmer</
····<p·class="">Mauris·ipsum.·Nam·magna·arcu,·
dignissim·sit·                          cilisis·a
·id·sem·rhoncu                          it·amet·m
tortor.·Cras·e                          ollicitud
·Suspendisse·a                          suere.·In
Maecenas·eu·nu                          ·sodales.
····<p>Donec·e                          sequat.·C
tincidunt·vive                          uctor·sed,
·Quisque·preti                          msan·null
Praesent·accumsan·dolor·ut·lacus.·Maecenas·hen
iaculis,·lectus·neque·tincidunt·velit,·id·euis
Vestibulum·a·est·et·quam·vehicula·molestie.·Nu
```

Figure 10-8:
The Code Hints feature saves your tired fingers from typing tags and tag properties. Just select the appropriate item from a pop-up list, and let Dreamweaver type it for you. Dreamweaver's even thoughtful enough to show you all available CSS styles when you insert a class attribute in a tag.

Note: You can also open the Code Hints menu by pressing Ctrl+Space bar (in both Mac and Windows). This shortcut's very useful when you're editing code and want to add a property or edit a property of a tag you've already created. For example, you could click inside the name of a class style applied to a tag–click inside the word "copyright" in this code *class="copyright"*, for instance–and then press Ctrl+Space bar. This not only selects the name so you can change it, but also opens a menu listing all of the classes available to the page. Then you can use the up and down arrow keys (or even your mouse) to select a different CSS style.

If the feature annoys you, you can get it out of your way. You can turn off Code Hints completely, rein it in by setting a delay (so that pop-up lists don't appear immediately), or turn off Code Hints only for selected types of elements (such as tag properties). To make any of these adjustments, open the Preferences window by pressing Ctrl+U (⌘-U), and then select the Code Hints category. Make your desired changes to the Code Hints Preferences, and then click OK.

Dreamweaver also simplifies the writing of the closing tag: As soon as you type </ (the first two characters for any closing tag), Dreamweaver automatically finishes off your thought by closing the tag for you. For example, after you've typed an opening <p> tag, followed by the content in this new paragraph, Dreamweaver finishes the closing tag—</p>—the moment you type </. For a longer tag like the <address> tag, this feature saves your fingers a lot of work. (Previous versions of Dreamweaver would automatically insert the closing tag immediately after you finished typing the opening tag. This was a pain if you were going to follow your opening tag with a whole bunch of HTML, since the opening and closing tags in this case were not next to each other, but separated by many lines of code. If you like the old way better, or just can't stand the feature at all, you can make your wishes felt in the Code Hints category of the Preferences window mentioned in the previous paragraph.)

Note: If you like Code Hints, you'll love the Snippets panel, which makes reusing code a snap. See Chapter 18 for details.

Code Collapse

One problem with raw HTML is, well, it's raw—a bunch of letters, numbers, and symbols that tend to blend together into a mind-numbing sea of code. This can make locating a particular bit of code needle-in-a-haystack tough. On large pages, with lots of code, it's easy to get lost as you scroll up and down to make a change. In many cases, you don't need to see all of the code, because you're not likely to change it—for example, the top portion of a page containing the *DOCTYPE* and *html* declarations (see page 37)—or because you can't change it—like the HTML embedded in template-based pages (Chapter 19), or containing Dreamweaver Library items (Chapter 18).

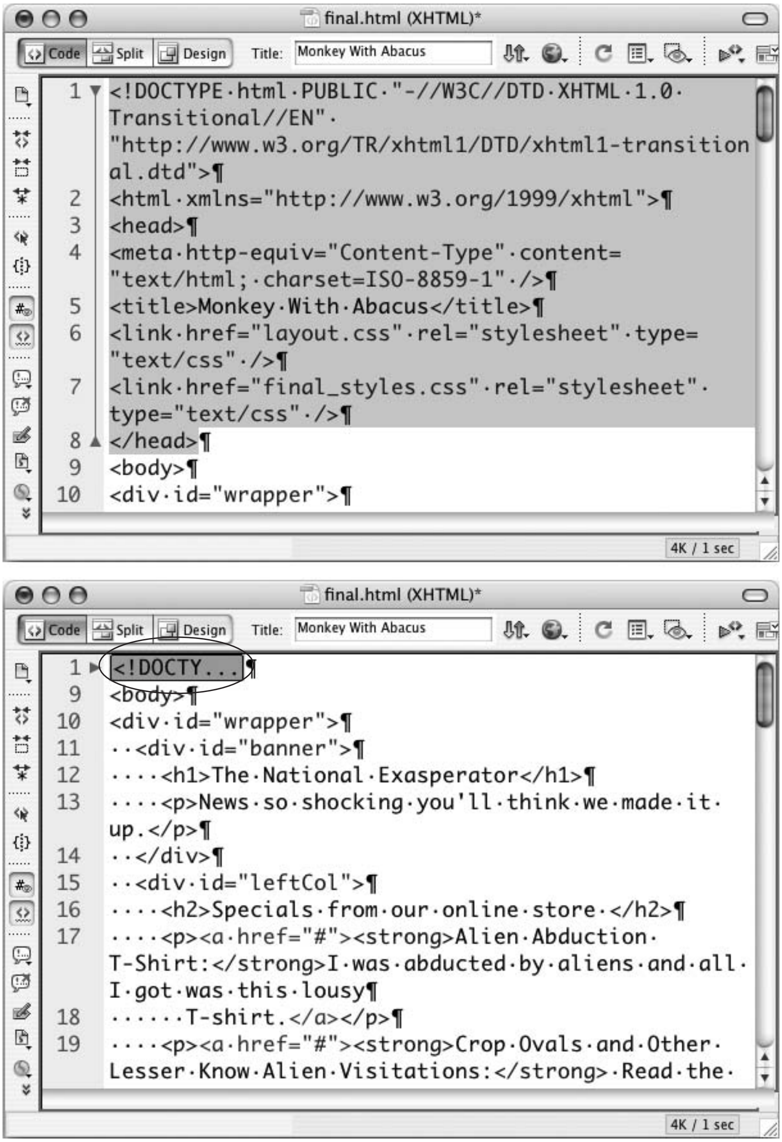
Fortunately, Dreamweaver lets you get that in-your-way code out of your face. The Code Collapse feature condenses multiple lines of code into a single highlighted box of 10 characters (Figure 10-9). The basic process is simple: Select the code you want to collapse—like all the code above the <body> tag—and click the icon (Figure 10-9, top) that appears just to the left of both the first and last line you wish to collapse. On Windows, this icon is a small box with a minus sign (–); on Mac, it's a down-pointing arrow (at the beginning of the selection) and an up-pointing arrow (at the end). The code collapses into a gray outlined box. To expand the code, just select it, and then click the icon (a plus sign [+] in Windows, a right-pointing arrow on the Mac).

Tip: To quickly select multiple lines of HTML, click in the blue, line-number area to the left of the code, indicating where you wish to begin the selection, and then drag to the line where you want to end the selection.

Dreamweaver includes a few more nuanced methods of collapsing code. You can:

- **Collapse an individual tag.** Say you want to hide a long paragraph of text. Instead of selecting it, just click anywhere inside the paragraph (<p>) tag, and then either click the Collapse Tag button on the Coding toolbar (Figure 10-6), choose Edit → Code Collapse → Collapse Full Tag, or press Ctrl+Shift+J (⌘-Shift-J).

  This feature works on the tag the cursor is nearest. Say you have a paragraph of text, and, inside it, a link. If you click inside the <a> tag and use this feature, the <a> tag collapses. But if you click anywhere else inside the paragraph, the paragraph or <p> tag collapses. This behavior is a little confusing, but it can be really useful. Say you want to hide everything inside a page's <head> tags.



Title: Monkey With Abacus

```
<!DOCTYPE·html·PUBLIC·"-//W3C//DTD·XHTML·1.0·
Transitional//EN"·
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transition
al.dtd">¶
<html·xmlns="http://www.w3.org/1999/xhtml">¶
<head>¶
<meta·http-equiv="Content-Type"·content=
"text/html;·charset=ISO-8859-1"·/>¶
<title>Monkey·With·Abacus</title>¶
<link·href="layout.css"·rel="stylesheet"·type=
"text/css"·/>¶
<link·href="final_styles.css"·rel="stylesheet"·
type="text/css"·/>¶
</head>¶
<body>¶
<div·id="wrapper">¶
```

```
<!DOCTY...¶
<body>¶
<div·id="wrapper">¶
··<div·id="banner">¶
····<h1>The·National·Exasperator</h1>¶
····<p>News·so·shocking·you'll·think·we·made·it·
up.</p>¶
··</div>¶
··<div·id="leftCol">¶
····<h2>Specials·from·our·online·store·</h2>¶
····<p><a·href="#"><strong>Alien·Abduction·
T-Shirt:</strong>I·was·abducted·by·aliens·and·all·
I·got·was·this·lousy¶
······T-shirt.</a></p>¶
····<p><a·href="#"><strong>Crop·Ovals·and·Other·
Lesser·Know·Alien·Visitations:</strong>·Read·the·
```

Figure 10-9: *Now you see it, now you don't. You can collapse a multiline selection of HTML code (top) into a compact little gray box (circled in the bottom image). The collapsed code is still there in your page–you haven't deleted it–but now it's conveniently tucked out of sight. If you need a reminder of what code you've collapsed, move your mouse over the gray box, and a yellow tooltip window appears displaying the HTML code.*

Instead of having to select all the lines inside the <head> tag, just click anywhere between the two <head> tags (but make sure you're not inside *another* tag like the <title> tag), and then use any of the commands mentioned in the previous paragraph.

- **Collapse the code outside an individual tag.** This is a quick way to hide everything *except* the code you want to work on. Suppose you want to see only the code inside of the body tag. Click immediately after the <body> tag (to make sure you're not inside another tag that's inside the <body> tag), and either press the Alt (Option) key and click the Collapse Tag button on the Coding toolbar (Figure 10-6), choose Edit → Code Collapse → Collapse Outside Full Tag, or press Ctrl+Alt+J (⌘-Option-J).

- **Collapse the code outside the current selection.** This is another way to view only the code you wish to work on. Select the code, and then either press the Alt (Option) key and click the Collapse Selection button on the Coding toolbar (Figure 10-6), choose Edit → Code Collapse → Collapse Outside Selection, or press Ctrl+Alt+C (⌘-Option-C).
- **Expand All.** If you miss all that hidden code, you can quickly restore it to its full glory by clicking the Expand All button in the Coding toolbar (Figure 10-6), choosing Edit → Code Collapse → Expand All, or pressing Ctrl+Alt+E (⌘-Option-E).

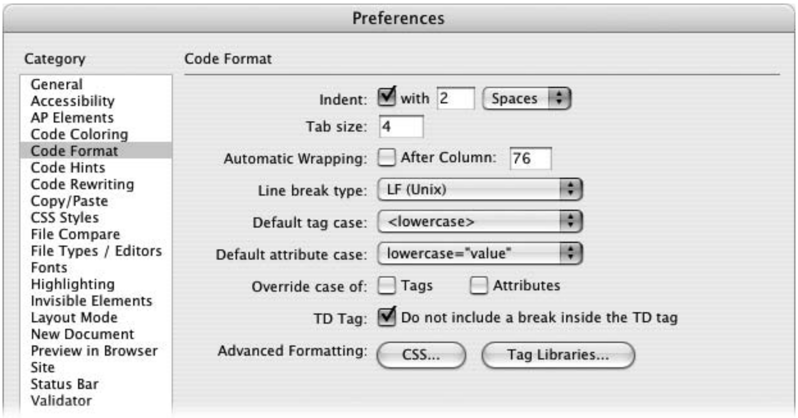
You can hide any number of regions in a page—for example, the top portion of a page, a navigation sidebar that never gets edited, and the copyright notice at the bottom of the page—so you can easily identify the code that you're really interested in working on. Dreamweaver even remembers the state of these sections, which means that if you close a document and then reopen it, the collapsed sections are still collapsed, so you don't have to continually hide code in that page each time you open it for editing.

Setting Code Formatting

Whenever you use the Insert bar, Dreamweaver adds a chunk of HTML that's preformatted for easier reading. The code for table rows, for instance, comes indented using two spaces; the code for table *cells*, meanwhile, is indented four spaces. If you're particular about how your HTML is written, Dreamweaver gives you plenty of control over these settings.

Note: If you don't work in Code view frequently, you may not care a whit how your HTML is formatted in the file–and that's fine. As long as the underlying HTML is valid (and Dreamweaver writes valid HTML), Web browsers can display HTML that's been formatted in many different ways. In fact, Web browsers simply ignore multiple spaces, empty lines, and other "white space" characters used to make HTML code more readable.

Dreamweaver provides several ways to control the formatting of the code it produces. Basic settings are available in the Preferences window; advanced settings for obsessive coders even let you control the formatting of individual tags (see the box on page 384). For basic formatting settings, open the Preferences window (Edit → Preferences or Ctrl+U [⌘-U]) and click the Code Format category (see Figure 10-10). While Dreamweaver's standard settings work fine, you can still configure a number of options.



Code Format

Indent: ☑ with 2 Spaces

Tab size: 4

Automatic Wrapping: □ After Column: 76

Line break type: LF (Unix)

Default tag case: <lowercase>

Default attribute case: lowercase="value"

Override case of: □ Tags □ Attributes

TD Tag: ☑ Do not include a break inside the TD tag

Advanced Formatting:

Figure 10-10: *For general control of HTML code, Dreamweaver offers the Code Format category in the Preferences window. For most people, this degree of control is overkill, but if the way HTML code appears in a page's file matters to you, go wild. (These settings don't affect how the page looks in a Web browser–only how the code appears when viewed in Dreamweaver's Code view or another text editor.)*

Indents

To make your code easier to read, it helps to indent nested tags and other block-level elements. But if you'd prefer that Dreamweaver quit auto-indenting such elements, turn off the Indent checkbox. This is also your opportunity to request tabs instead of spaces for indenting lines of code; just choose Tabs from the pop-up menu.

You can also set the amount of indentation, like this:

- If Spaces is selected in the Indent menu, type the number of spaces you want into the Indent size field. The default setting is two, meaning each indent will be two spaces in the code.
- If you selected Tabs in the Indent menu, the number in the "Tab size" field indicates the size of each tab, measured in spaces. (The size you specify here affects only the display in Code view. In the code itself, Dreamweaver simply inserts a plain tab character.)

Text wrapping

When a line gets long, Dreamweaver can break it into two or more lines by inserting a hard return. This can make your HTML more readable in Code view, and free you from having to scroll to see all of your code. If that's the way you like it, turn on Automatic Wrapping, and then type a number in the After Column field. The number specifies how many characters long a line must be before Dreamweaver attempts to break it up.

This option doesn't affect how the page will look to your visitors, only how it looks in a text editor. But unlike Code view's simulated word-wrap option shown in Figure 10-6, this option adds real line-break characters to split your code into multiple, shorter lines. If you use the Code view's word wrap, you can skip this more intrusive form of text wrapping.

Note: Although Dreamweaver can shorten lines by inserting returns after a specified number of characters, it never does so if the final effect will change the appearance of the Web page. The program is smart enough not to sacrifice the quality of a page just to make the code look better in Code view. That's why some lines of HTML may be considerably longer than the limit you specify here.

Line breaks

Windows, Mac OS, and Unix each look for a different invisible character at the end of each line of code. This expectation can cause problems when you use one kind of computer to create a page, while another OS runs the remote server that dishes out the page. Fortunately, Dreamweaver fixes the problem when it transfers a file to a Web server.

If you plan to use another text editor to edit your Dreamweaver pages, you should select your operating system from the "Line break type" pop-up menu. Doing so assures that the program on the receiving end will properly read the line breaks in Dreamweaver-produced pages.

Case for tags and attributes

You can write tag and property names using either uppercase letters (<B>bold</B>) or lowercase (<b>bold</b>); Web browsers don't care. However, *you* may care how they appear in your HTML display. If so, choose your preference from the two Case pop-up menus. Select either the lowercase or uppercase option from the two menus.

Note: HTML may treat capital and lowercase letters in its tags identically, but XML does not. Both it and the hybrid language *XHTML* require all-lowercase tag and property names.

That's why many Web developers now strictly use lowercase characters, even in their HTML. And that's why, if you select the XHTML option when creating a new page (see page 37), Dreamweaver ignores an uppercase setting in the Preferences panel—even if you turn on either of the "Override case of" checkboxes.

If you also turn on the "Override case of" checkboxes, you can make Dreamweaver scan tags and properties when opening a page created by someone else (or some other program). If the case doesn't match your preferences, Dreamweaver rewrites the code to fit the wishes of you, its master.

TD tag

Adding a line break after an opening <td> (table cell) tag may look good in Code view, but in some browsers it adds an unwanted extra space character in the table cell. Because the extra space can wreak havoc on your design, make sure this box is always turned on.

POWER USERS' CLINIC

Take Control of Code Formatting

For ultimate control over tag formatting, Dreamweaver includes the Tag Library Editor. Not only does it let you control *exactly* how Dreamweaver formats every HTML tag it inserts into a page, it also lets you dictate the formatting for nine other Tag Libraries, such as ASP, PHP, JSP, and Cold-Fusion tags.

Even if you're using some new bleeding-edge tag language unfamiliar to Dreamweaver, you're not out of luck. You can create additional Tag Libraries, and even import custom ASP.NET and JSP tags, as well as DTD Schemas for XML. You can also add additional tags to any Library; so if the HTML standard suddenly changes, you can add new or remove obsolete tags.

To control the formatting of tags in a Library, choose Edit → Tag Libraries to open the Tag Library Editor window. A list of all Tag Libraries appears. Click the + symbol to the left of a Tag Library name to see a list of tags for that Library. Select a tag, and then select formatting options from the Tag Format area in the bottom half of the window. A shortcut for quickly reformatting a particular tag already present on a page is to select the tag in the Tag selector first, and then choose Edit → Tag Libraries; that tag will then be preselected for you.

You can control where a line breaks in relation to the tag, choosing: no line breaks after the tag; no breaks before and after the tag; or no breaks before, inside, *and* after the tag. In addition, you can choose whether any formatting rules are applied to the contents of a tag and choose the case–upper, lower, mixed–to be used when Dreamweaver adds the tags to the code.

Advanced formatting options

For real sticklers, two advanced formatting buttons let you instruct Dreamweaver how to format every aspect of your CSS and HTML code. The Tag Libraries button opens the Tag Library, discussed in the box above. The CSS button opens the CSS Source Format Options window, which lets you dictate how the CSS code Dreamweaver creates should be written: whether properties get indented; whether CSS properties should appear one per line; the placement of the opening brace used in the CSS rule; and whether there should be a blank line between rules to make the CSS more readable. All these options are matters of personal preference, and don't affect the performance of your Web pages or CSS.

If you find yourself wading through lots of HTML and CSS code, you might want to experiment with these settings to see if you can make the code Dreamweaver produces more readable. Both the Tag Library Editor and Source Format Options windows provide previews of what the formatted HTML and CSS code will look like with the settings you select. Keep in mind that these settings aren't going to affect how *you* write your code. But if you do find that your own HTML or CSS hand coding doesn't look as elegant as Dreamweaver's, you can turn to the Apply Source Formatting command (Commands → Apply Source Formatting to make Dreamweaver clean up your code. That command changes a page's code—adds indents, line breaks, and so on—based on the instructions defined by these two options.

Note: There are another set of preference settings that affect how Dreamweaver creates its CSS code. The Preferences window's CSS Styles category tells Dreamweaver whether or not to use CSS shorthand properties. See page 332 for more on CSS shorthand properties.

Quick Tag Editor

Code view is great when you really need (or want) to dig into the trenches and fine-tune your HTML. But if a text editor is all you wanted, you wouldn't have bought Dreamweaver in the first place. Most of the time, you'll be working in Dreamweaver's Design view, enjoying the pleasures of its visual authoring environment.

Occasionally, however, you'll want to dip momentarily into the HTML pond, especially when you need to use some HTML that's not available from the Insert bar. You might wish you could type out a quick HTML tag on the spot, right there in Design view, without having to make the mental and visual shift required for a switch into Code view.

That's what the Quick Tag Editor is all about. To access the Quick Tag Editor, press Ctrl+T (⌘-T)—or, if you're feeling especially mouse-driven, click the Quick Tag Editor button in the Property inspector (see Figure 10-11). Depending on what you've selected in the document window, the Quick Tag Editor opens in one of the following three modes (see Figure 10-11):

- **Insert new tag.** Inserts a new tag in the page. You get this mode if nothing is currently selected in your document window.
- **Edit tag.** Lets you edit the tag for whatever is selected in the document window (a graphic, for example), and all its properties.
- **Wrap tag.** If you've selected a swath of text or other objects (like two images), the editor opens in this mode, which makes it easy to wrap a new tag around the current selection.

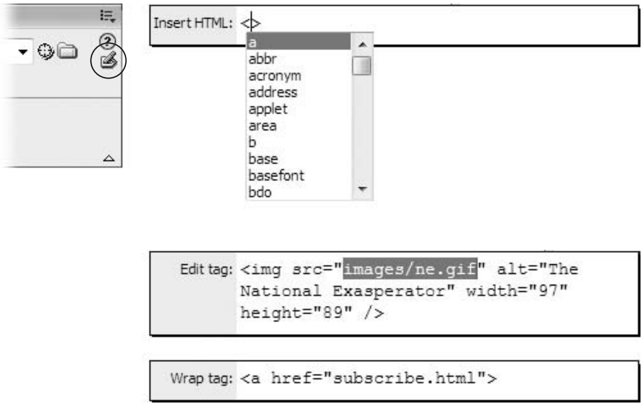
Tip: You can cycle through the modes by repeatedly pressing Ctrl+T (⌘-T).

Using the Quick Tag Editor

You can type tag names, properties, and property values directly into the Quick Tag Editor window. If you're editing a selected tag, you can change any of the properties listed, and even add new ones. When you're done, press Enter (Return). The Quick Tag Editor closes, and the changes take effect.

To make all of this even easier, the Quick Tag Editor sports a helpful list—called *Tag Hints*—of HTML tags and properties, for your selection pleasure. It's much like Code view's Code Hints feature (in fact, the Code Hints category in the Preferences window also controls Tag Hints). When you insert a tag, for example, a menu of available tags appears (top right in Figure 10-11). Use the up and down arrow keys or the scroll bar to move through the list. And when you type the first few letters of a tag or property, Dreamweaver jumps to the nearest match in the list.

To choose the highlighted name, press Enter or Return. Dreamweaver adds that tag or property name to the Quick Tag Editor window. If you've selected a tag property, Dreamweaver adds the proper punctuation (href=" ", for example). The insertion point appears between the quotation marks, waiting for you to type the property's value.



Edit tag: `<img src="images/ne.gif" alt="The National Exasperator" width="97" height="89" />`

Wrap tag: `<a href="subscribe.html">`

Figure 10-11:
Left: You can open the Quick Tag Editor by clicking the corresponding button in the upper-right corner of the Property inspector (circled). (This button is visible only in Design view.)

Right: The three modes of the Quick Tag Editor let you insert new tags, edit old tags, or wrap a new tag around a selection. The Quick Tag Editor is mobile: Drag the window by its handle (the mode name) anywhere on the screen–ideal when you want to see the part of the page you're modifying.

Tip: When editing an existing tag in the Quick Tag Editor, press Tab to select the next property or property value. You can then type a new property or value. Shift+Tab selects the *previous* property or value.

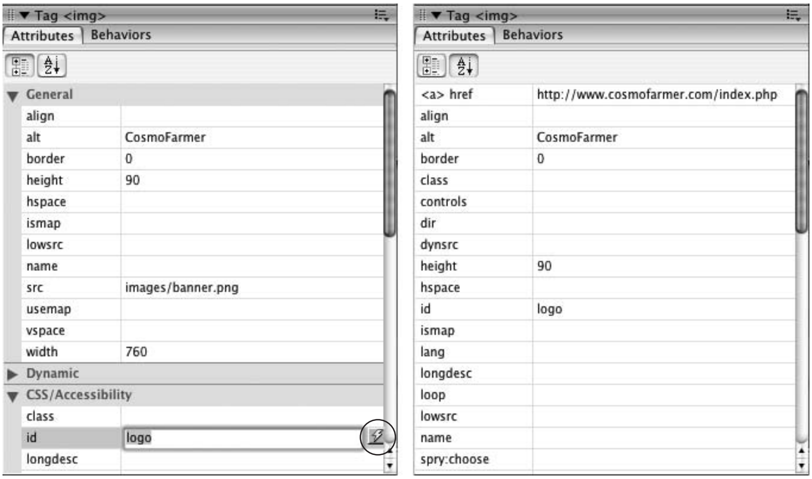
Tag Inspector

The Property inspector is a handy tool. With it, you can adjust properties for all sorts of HTML tags, like a table's width or a paragraph's font. But even the Property inspector doesn't tell the whole story: Some HTML tags have additional properties that don't appear there, such as the *tabindex* property of the <a> tag, which lets you control the order in which links are highlighted as you press Tab. You can set this property with the Tag inspector. As with *tabindex*, the properties listed in the Tag inspector are less frequently used, but you don't have to go into Code view to add or edit them.

For these hard-to-reach properties, turn to the *Tag inspector* (see Figure 10-12). Think of it as the uber–Property inspector. For hard-core HTML fanatics, it's the best way to set properties for every HTML tag. To display it, press the F9 key, or choose Window → Tag inspector (the same procedure also hides this panel).

When you select a tag on the page (in either Code or Design view), *all* of its properties appear in the panel. You can choose one of two views for displaying these properties: one long list, or grouped into tidy categories (see Figure 10-12). You can edit any of these properties by clicking in the space to the right of the property name. You can type a new value or, for certain properties, use a pop-up menu to choose from a list of property values. For color properties, use Dreamweaver's ubiquitous color box to select just the right shade.

Unfortunately, you need to understand HTML fairly well to set the correct values; Dreamweaver doesn't make the process foolproof, leaving open the possibility that you could enter an invalid property. (To learn more about HTML tags and their properties, turn to Dreamweaver's built-in HTML reference, described on page 394.)



General	
align	
alt	CosmoFarmer
border	0
height	90
hspace	
ismap	
lowsrc	
name	
src	images/banner.png
usemap	
vspace	
width	760
Dynamic	
CSS/Accessibility	
class	
id	logo
longdesc	

<a> href	http://www.cosmofarmer.com/index.php
align	
alt	CosmoFarmer
border	0
class	
controls	
dir	
dynsrc	
height	90
hspace	
id	logo
ismap	
lang	
longdesc	
loop	
lowsrc	
name	
spry:choose	

Figure 10-12: *Dreamweaver's Tag inspector lets you edit every property of every tag on a page. What it lacks in user-friendliness–you need to know a lot about HTML to use it correctly–it makes up for in comprehensiveness. It has two faces: Category view (left) and List view (right.) The List view is just that: a list of all properties for the selected tag. The Category view imposes a bit of order on this mess, by organizing the different properties into related categories. You can even set a property value dynamically, based on information retrieved from a database, using the lightning bolt button (circled). (Of course, you must first learn how to build dynamic Web sites by reading Part 6 of this book.)*

Comparing Versions of a Web Page

Sometimes you make a change to a page, save it, preview it, close it, and move along to the next assignment for the day. Only later, when you're previewing your day's changes, just before moving them up to the Web server, you notice that one of the pages you changed has some problem you didn't notice at first: Perhaps the left sidebar is suddenly wider than it was before. Since you've already closed the file, you can't use the Undo feature to remove whatever wacky mistake you made. You could, of course, retrieve the current version of the page from the Web server (see page 624), thus overwriting your changes. But what if you did a lot of good work on the page—adding text, graphics, and links—that you don't want to lose? Ideally, you'd like to see all of the changes you made to the page, and selectively undo the mistake you accidentally introduced to the sidebar.

Enter the Compare File command. Dreamweaver CS3 includes a command that lets you compare two files and see what lines of code are different between the two. This tool is a perfect solution for problems like the unintentionally botched sidebar. With it, you can compare the local file (the one with the messed-up sidebar) with the remote file (the live version of the Web site that works, but is missing the fine new pictures and words you added). You can then identify any changes you made, and undo your mistake.

Dreamweaver doesn't actually have this tool built into it. Instead, Dreamweaver just passes the files you wish to compare to a separate file-comparison utility (often called a "diff" tool, since it identifies *differences* between files). You'll need to download this utility, and there are a lot of different ones to choose from. Fortunately, there are several free utilities for both Windows and Mac that you can download (see the following boxes).

WINDOWS ONLY

Getting Your Hands on the Goodies

There are lots of file-comparison tools for Windows. Beyond Compare from Scooter Software (*www.scootersoftware.com*) is a commercial product ($30) that offers a wide range of comparison options. For a free alternative, check out WinMerge (*www.winmerge.org*). This open source software provides all the basic options you'll need. Here's how you get it. Go to *www.winmerge.org*. Click the WinMerge link in left sidebar's Downloads section. On the downloads page, you have several options: Click the Installer link, which takes you to a different site–Source Forge.net, a kind of warehouse for open source software. At this point you're asked to save the file to your computer.

Once you've downloaded the program, the process for installing the program is like most other Windows programs. Just double-click the file to launch an installer, and follow the step-by-step installation instructions. Once it's installed, you're ready to proceed as described below.

After downloading and installing the file-comparison utility, you need to tell Dreamweaver where to find your new helper:

1. **Open the Preferences panel, by choosing Edit → Preferences (Dreamweaver → Preferences on the Mac), or pressing Ctrl+U (⌘-U), and then click the File Compare category.**

   There's not much to this Preferences category, just a single box and a Browse button.

2. **Click the Browse button, and then navigate to and select the file-comparison utility.**

   For example, on Windows you might find your utility here: *C:\Program Files\WinMerge\WinMerge.exe*.

   On the Mac, it's slightly different. Instead of selecting the text-editing program Text Wrangler or BBEdit, you need to specify the proper "diff" tool, which is stored in a special location on your computer. Navigate to the */usr/bin* folder—something like this: *Macintosh HD:usr:bin*—and select the correct file. For Text Wrangler, it's *twdiff*; for BBEdit, it's *bbdiff*; and for FileMerge, it's *opendiff*.

3. **Click OK to close the Preferences window.**

   Dreamweaver's been notified of the location of the utility, so you're ready to begin comparing files.

MACS ONLY

What Difference Does It Make?

The Mac version of Dreamweaver supports only three file comparison tools: File Merge (which is a Mac developer program that comes with the XCode tools on your Mac OS X installation disc), BBEdit (the powerful, $125 commercial text editor), and Text Wrangler (the free little brother of BBEdit). Bare Bones Software (*www.barebones.com*) produces both BBEdit and Text Wrangler, but since Text Wrangler's free, it's the best place to begin.

Point your Web browser to *www.barebones.com/products/textwrangler/download.shtml*, and click any of the download links to download the program to your computer. As with many Mac programs, this download opens a disk image–just like a folder–with the application inside it. Just drag it to your Applications folder to install it. Once installed, you're ready to proceed as described on the opposite page.

The Compare File command works with a local file and a remote file, so you need to have already defined a site with both local and remote root folders (see Chapter 17 for details on how to do this). In addition, since you're comparing two files, you need to make sure you've got two versions of the same file on your local computer and your remote site—for example, your home page, or one of the other pages in your site. To compare the files, follow these steps:

1. **In the Files panel, locate the file you wish to compare.**

   This file can be listed either in the Local View or Remote View of the Files panel (see page 567).

2. **Right-click (Control-click) the file, and then, from the pop-up menu that appears, select "Compare with Remote."**

   This menu will say, "Compare with Local" if you're in the Remote view of the files panel.

   Dreamweaver does a little behind-the-scenes trickery before passing the files off to the file comparison program. It first creates a folder (if it's not already created) named *_compareTemp* in the local root folder of your site. Dreamweaver then creates a temporary file with all of the code from the remote-site file, and stores that in the new folder. In other words, you don't actually compare the file on the live Web server with the local file on your computer; you compare a copy of the remote file with the local file. This distinction is important to keep in mind if you want to incorporate changes between the files, as described in step 3.

   At any rate, your selected file-comparison program—for example, WinMerge or Text Wrangler—starts and compares the two files. If there are no differences—they're *exactly* the same files—then you'll most likely get a message saying something to the effect of "The Selected Files are Identical." So if no differences are found between the files, your work is done. If there is a difference, the file-comparison program displays the two files and identifies the code that differs between the two files (see Figures 10-13 and 10-14).

3. **Evaluate the differences and incorporate any changes into your local file.**

   File-comparison programs work generally the same way. When comparing two files, you see the code for the two files side by side. In addition, the program has some way of notifying you of any differences. You can then review the differences in the code, and merge the changes into one file or the other. For example, say you accidentally deleted a table from your local file; a comparison of this file with the remote file shows the table intact in the remote file, and indicates that it's missing in the local file. You can then copy the table code from the remote file into the local file. If, however, you deleted the table purposefully, then do nothing, and move on to evaluate the next difference.

   Here's where Dreamweaver's little bait-and-switch mentioned in step 2 becomes important. You're not actually comparing the remote file with the local file; you're comparing a *copy* of the remote file saved locally in the *_compare Temp* folder. As a result, you want to move changes only in one direction—from the temporary file to your local file. Changes in the temporary file have no effect on the actual live file on your Web server. So how do you update the remote file? Move any changes you want made *from* the temporary file *to* your local file. Once you're satisfied with the changes, you can save them, return to Dreamweaver, and then upload them to your remote site folder. Then pour yourself a cup of tea and be thankful you don't have to do *that* very often.

4. **Save any changes, return to Dreamweaver, and then move your newly updated local file to your Web server.**

   The exact process varies from program to program, but see the next two sections for examples using WinMerge and Text Wrangler.

Tip: Dreamweaver lets you compare two files on your local hard drive (the home page of the site you're working on vs. a backup of that page you made last week, for example). To do this, go to the Files panel, and select your hard drive (instead of a defined site) from the site list. In this mode, the Files panel acts just like Windows Explorer or the Mac Finder. You just need to wade through all of the folders until you can see both files at once. Ctrl-click (⌘-click) each file to select them both, right-click (ctrl-click) one of the files, and then choose Compare Local Files from the pop-up menu. The process from that point on is the same as comparing a local and remote file.

Using WinMerge to Compare Files

If you've got a Windows PC and you're interested in taking Dreamweaver's Compare Files command for a test drive, see the box on page 388 for instructions on how to download WinMerge, and then follow these steps:

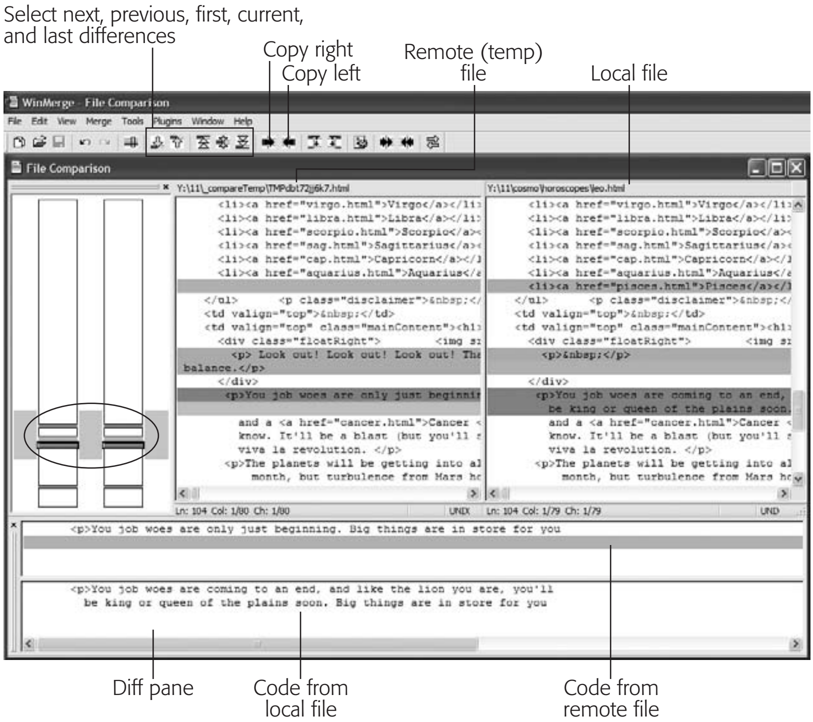
1. **Once you've downloaded and installed WinMerge, follow the steps on page 388 to set up Dreamweaver's preferences for working with WinMerge.**

   First you need to make sure Dreamweaver knows to use WinMerge for file comparison.

2. **Follow steps 1 and 2 on page 389 to select a file and tell Dreamweaver to compare it with its sibling on the remote Web server.**

   WinMerge launches, and if there are any differences between the files, the program shows the code for the two files side by side, with all differences highlighted (see Figure 10-13).

   In WinMerge, differences are highlighted by one or more yellow bars in the left Location pane (circled in Figure 10-13), and the code is highlighted either in yellow (meaning there's content present in one file that's missing in the other file) or gray (meaning there's content missing in one file that's present in the other file).


Select next, previous, first, current, and last differences
Copy right
Copy left
Remote (temp) file
Local file
WinMerge - File Comparison
File Edit View Merge Tools Plugins Window Help
File Comparison
Y:\11_compareTemp\TMPdbt72jj6k7.html
Y:\11\cosmo\horoscopes\leo.html
Ln: 104 Col: 1/80 Ch: 1/80
UNIX
Ln: 104 Col: 1/79 Ch: 1/79
UNIX
Diff pane
Code from local file
Code from remote file

```
    <li><a href="virgo.html">Virgo</a></li
    <li><a href="libra.html">Libra</a></li
    <li><a href="scorpio.html">Scorpio</a><
    <li><a href="sag.html">Sagittarius</a><
    <li><a href="cap.html">Capricorn</a></l
    <li><a href="aquarius.html">Aquarius</a

  </ul>      <p class="disclaimer">&nbsp;</
  <td valign="top">&nbsp;</td>
  <td valign="top" class="mainContent"><h1
    <div class="floatRight">          <img sr
      <p> Look out! Look out! Look out! The
balance.</p>
    </div>
     <p>You job woes are only just beginnin

       and a <a href="cancer.html">Cancer <
       know. It'll be a blast (but you'll s
       viva la revolution. </p>
     <p>The planets will be getting into al
         month, but turbulence from Mars hc
```

```
    <li><a href="virgo.html">Virgo</a></li
    <li><a href="libra.html">Libra</a></li
    <li><a href="scorpio.html">Scorpio</a><
    <li><a href="sag.html">Sagittarius</a><
    <li><a href="cap.html">Capricorn</a></l
    <li><a href="aquarius.html">Aquarius</a
    <li><a href="pisces.html">Pisces</a></l
  </ul>      <p class="disclaimer">&nbsp;</
  <td valign="top">&nbsp;</td>
  <td valign="top" class="mainContent"><h1
    <div class="floatRight">          <img sr
      <p>&nbsp;</p>

    </div>
     <p>You job woes are coming to an end,
       be king or queen of the plains soon.
       and a <a href="cancer.html">Cancer <
       know. It'll be a blast (but you'll s
       viva la revolution. </p>
     <p>The planets will be getting into al
         month, but turbulence from Mars hc
```

```
      <p>You job woes are only just beginning. Big things are in store for you
```

```
      <p>You job woes are coming to an end, and like the lion you are, you'll
        be king or queen of the plains soon. Big things are in store for you
```

Figure 10-13: *WinMerge includes a kind of bird's-eye view of code differences in the far-left Location pane. Click near any yellow bands (circled) to jump to code that differs between the two files. You can also tell which file is the temp (remote) file, by looking at the file path just above the page's code and locating the file with _compareTemp in the name. In this example, the left page's path is Y:\11_compareTemp\TMPdbt72jj6k7.htm; it's the code from the remote file.*

3. **Click anywhere in the page, and then click any of the "diff" navigation buttons—next diff, previous diff, first diff, or last diff** (see Figure 10-13).

   "Diff" stands for difference, so clicking these buttons takes you to the locations in the files where the code differs. Doing so also selects the differing code and highlights it in red. You can now see which code you wish to keep.

4. **If the code in the remote file looks correct, click the Copy Right or Copy Left button.**

   Which button you click depends on whether the remote file is on the left or right side of the window (see Figure 10-13 for instructions on figuring this out).

If the remote code is on the left, click the Copy Right button. This button moves the code over to the page on the right—your local file.

You don't need to do anything if the code in the local file looks OK.

Tip: The "diff" pane gives a clear picture of how the code differs between the files. To view it, choose View → Diff Pane.

5. **Continue with steps 3 and 4 until you've evaluated all the differing code in the two pages.**

   At this point, the "perfect" copy is your local file. It has all the correct code from the remote file, and all the correct code from the local file. You just need to move it to your Web server.

6. **Move your local file to your Web server, using one of the techniques described on page 620.**

Using Text Wrangler to Compare Files

Mac owners can download the free Text Wrangler if they want to compare files (see the box on page 389). And since BBEdit is a more powerful version of Text Wrangler, these steps will work for that program as well:

1. **Once you've installed Text Wrangler, follow the steps on page 388 to set up Dreamweaver's preferences.**

   First you need to make sure Dreamweaver knows to use Text Wrangler for file comparison.

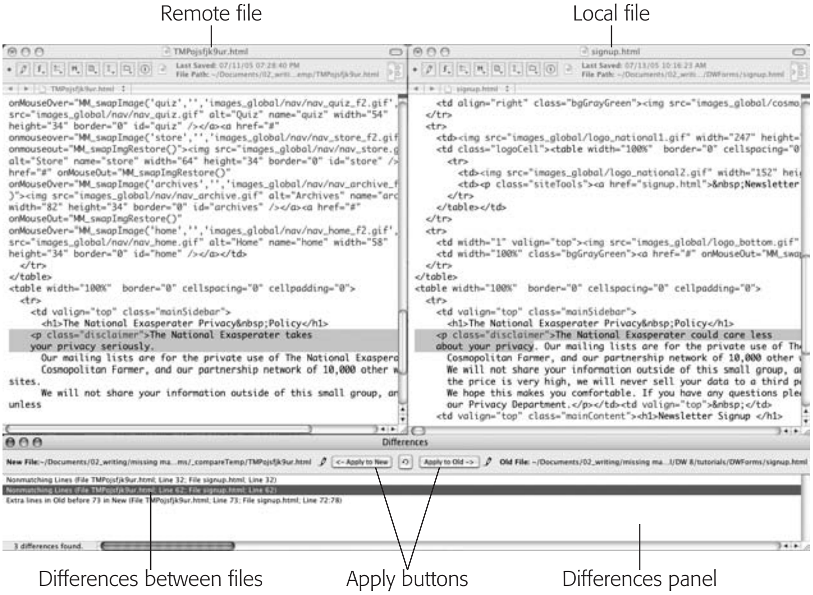
2. **Follow steps 1 and 2 at the bottom of page 389 to select a file and tell Dreamweaver to compare it with its sibling on the remote Web server.**

   Text Wrangler launches, and if there are any differences between the files, it shows the code for the two files side by side (see Figure 10-14). Where lines of code differ, Text Wrangler identifies them in the Differences panel below the two pages. The program also gives some indication of how the lines differ: for example, "Nonmatching lines" means the lines are similar (some of the code is the same) but not identical, while "Extra lines before line xx" means that completely different lines of code are in one file but not the other.

   If the files are identical, Dreamweaver pops up a "No difference found between these files" message (although sometimes, if there's no difference, you don't see any message at all).

3. **In the Differences panel, double-click the difference you wish to inspect.**

   It's a good strategy to just start at the top of the list and work your way down.


Remote file
Local file
TMPojsfjk9ur.html
Last Saved: 07/11/05 07:28:40 PM
File Path: ~/Documents/02_writi...emp/TMPojsfjk9ur.html
signup.html
Last Saved: 07/11/05 10:16:23 AM
File Path: ~/Documents/02_writi.../DWForms/signup.html
Differences
<-- Apply to New
Apply to Old -->
Differences between files
Apply buttons
Differences panel

```
onMouseOver="MM_swapImage('quiz','','images_global/nav/nav_quiz_f2.gif',
src="images_global/nav/nav_quiz.gif" alt="Quiz" name="quiz" width="54"
height="34" border="0" id="quiz" /></a><a href="#"
onmouseover="MM_swapImage('store','','images_global/nav/nav_store_f2.gif
onmouseout="MM_swapImgRestore()"><img src="images_global/nav/nav_store.g
alt="Store" name="store" width="64" height="34" border="0" id="store" />
href="#" onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('archives','','images_global/nav/nav_archive_f
)"><img src="images_global/nav/nav_archive.gif" alt="Archives" name="arc
width="82" height="34" border="0" id="archives" /></a><a href="#"
onMouseOut="MM_swapImgRestore()"
onMouseOver="MM_swapImage('home','','images_global/nav/nav_home_f2.gif',
src="images_global/nav/nav_home.gif" alt="Home" name="home" width="58"
height="34" border="0" id="home" /></a></td>
  </tr>
</table>
<table width="100%"  border="0" cellspacing="0" cellpadding="0">
  <tr>
    <td valign="top" class="mainSidebar">
      <h1>The National Exasperater Privacy&nbsp;Policy</h1>
    <p class="disclaimer">The National Exasperater takes
    your privacy seriously.
      Our mailing lists are for the private use of The National Exaspera
      Cosmopolitan Farmer, and our partnership network of 10,000 other w
sites.
      We will not share your information outside of this small group, an
unless
```

```
    <td align="right" class="bgGrayGreen"><img src="images_global/cosmo
  </tr>
  <tr>
    <td><img src="images_global/logo_national1.gif" width="247" height=
    <td class="logoCell"><table width="100%"  border="0" cellspacing="0
      <tr>
        <td><img src="images_global/logo_national2.gif" width="152" hei
        <td><p class="siteTools"><a href="signup.html">&nbsp;Newsletter
      </tr>
    </table></td>
  </tr>
  <tr>
    <td width="1" valign="top"><img src="images_global/logo_bottom.gif"
    <td width="100%" class="bgGrayGreen"><a href="#" onMouseOut="MM_swap
  </tr>
</table>
<table width="100%"  border="0" cellspacing="0" cellpadding="0">
  <tr>
    <td valign="top" class="mainSidebar">
      <h1>The National Exasperater Privacy&nbsp;Policy</h1>
    <p class="disclaimer">The National Exasperater could care less
    about your privacy. Our mailing lists are for the private use of Th
      Cosmopolitan Farmer, and our partnership network of 10,000 other
      We will not share your information outside of this small group, a
      the price is very high, we will never sell your data to a third p
      We hope this makes you comfortable. If you have any questions ple
      our Privacy Department.</p></td><td valign="top">&nbsp;</td>
    <td valign="top" class="mainContent"><h1>Newsletter Signup </h1>
```

```
New File:~/Documents/02_writing/missing ma...ms/_compareTemp/TMPojsfjk9ur.html
Old File: ~/Documents/02_writing/missing ma...l/DW 8/tutorials/DWForms/signup.html

Nonmatching Lines (File TMPojsfjk9ur.html; Line 32; File signup.html; Line 32)
Nonmatching Lines (File TMPojsfjk9ur.html; Line 62; File signup.html; Line 62)
Extra lines in Old before 73 in New (File TMPojsfjk9ur.html; Line 73; File signup.html; Line 72:78)

3 differences found.
```

Figure 10-14: *Text Wrangler in action. Where the remote file's code appears (left side or right side) determines which of the two Apply buttons you should click. You can identify the remote file by its name. In this example, TMPojosfkj9ur.html indicates the temporary copy of the remote file Dreamweaver created, as described on page 390.*

4. **If the code in the remote file looks correct, click one of the Apply buttons in the Differences panel.**

   Which button you click depends on whether the remote file is on the left or right side of the window (see Figure 10-14 for instructions on figuring this out).

   If the remote code is on the left, click the "Apply to Old" button. Doing so moves the code over to the page on the right, your local file.

   You don't need to do anything if the code in the local file looks OK.

5. **Continue with steps 3 and 4 until you've evaluated all of the differing code in the two pages.**

   At this point, the "perfect" copy is your local file. It has all the correct code from the remote file, and all the correct code from the local file. You just need to move it to your Web server.

6. **Move your local file to your Web server, using one of the techniques described on page 620.**

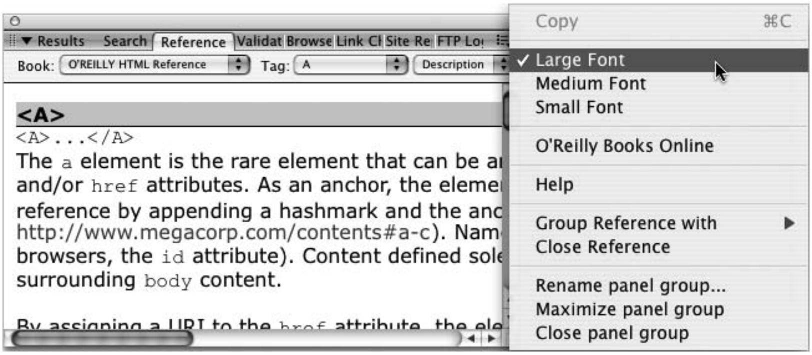
Comparing a local file to a remote file with Dreamweaver is quick and easy. You can also access the file-compare feature to compare two local files, or two remote files, but the steps are so convoluted that it's a lot easier just to bypass Dreamweaver and go directly to WinMerge, Text Wrangler, or the file-comparison utility of your choice. In the case of two remote files, download them first, and then conduct the comparison.

Reference Panel

When it comes to building Web sites, there's a lot to know. After all, Cascading Style Sheets, HTML, and JavaScript are filled with cryptic terms and subtle nuances. Fortunately, Dreamweaver's Reference panel makes your search for knowledge a little bit easier. It gives you quick access to reference excerpts on 13 Web topics from a variety of authoritative sources, including:

- *O'Reilly CSS Reference*. In-depth information on Cascading Style Sheets.
- *O'Reilly HTML Reference*. Complete guide to HTML tags and properties.
- *O'Reilly JavaScript Reference*. A not-so-well-organized reference to JavaScript topics, concepts, and commands.
- *O'Reilly PHP Pocket Reference*. A less-than-user-friendly reference to PHP. For seasoned programmers.
- *O'Reilly SQL Language Reference*. If you plan to go deeper into database-driven Web development, this great reference can help you figure out how to write the perfect database query.
- *O'Reilly ASP Reference*. Look up commands for Active Server Pages, one of Microsoft's server-side programming technologies.
- *O'Reilly ASP.NET Reference*. More server-side commands, but this time for ASP's more powerful successor, .NET.
- *UsableNet Accessibility Reference*. Guidelines for making Web pages more accessible to the disabled.
- *Adobe CFML Reference*. Complete reference to tags used in the Cold-Fusion Markup Language (used with Adobe's ColdFusion application server).
- *Adobe CF Function Reference*. A reference of different functions (commands) built into ColdFusion functions. Includes helpful examples of how to use each function.
- *O'Reilly JSP Reference*. Java got you down? Quickly look up Java Server Page commands here.
- *O'Reilly XML Reference*. Dreamweaver offers some interesting XML features (see Chapter 26), but this general dictionary of XML terms and properties isn't the place to start your education.
- *O'Reilly XSLT Reference*. To turn XML into readable XHTML, you'll turn to XSLT (and Chapter 26, where you'll learn how to use it). This reference describes the various XSLT functions.

To open the Reference panel, choose Window → Reference, or press Shift+F1. The Reference panel appears at the bottom of the screen, docked with the Results panel group (see Figure 10-15). The first menu at the top of the panel lets you choose the "book" you want. Once you've selected a reference, choose a particular HTML tag, CSS style, JavaScript object, or appropriate reference topic from the menu to the right of the Book menu. A description of that item appears in the main window. Depending on the reference, there may be sample usage and browser-support details. A secondary menu to the right lets you access additional information about a particular property or details of the selected tag, style, object, or topic. For example, in Figure 10-15, to display information about the <a> tag's *tabindex* property, you'd choose "a" from the Tag menu, and "tabindex" from the Attribute menu.



<A>

<A>...</A>

The a element is the rare element that can be a
and/or href attributes. As an anchor, the eleme
reference by appending a hashmark and the anc
http://www.megacorp.com/contents#a-c). Nam
browsers, the id attribute). Content defined sol
surrounding body content.

By assigning a URI to the href attribute, the ele

Figure 10-15: *If the print in the Reference panel is too small or too large, use the panel's shortcut menu (click the arrow in the upper-right corner of the panel), as shown here, and select a different size. When perusing the reference panel, Dreamweaver lets you copy examples of tags and code, so you can paste them into a page, but it doesn't let you copy the reference information that explains the tag or code. Oh well. You'll just have to type your "Plagiarist's Guide to Web Design."*

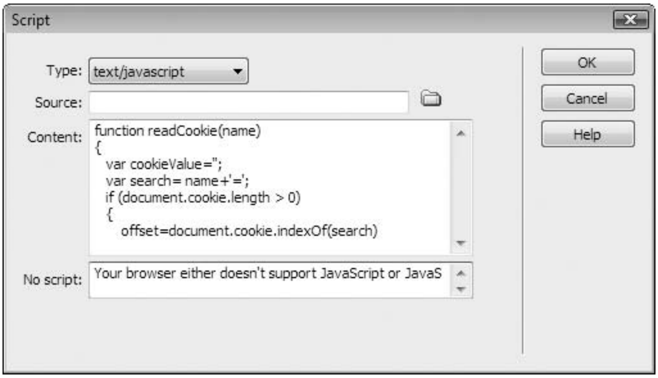
Tip: You can quickly see reference information for a tag by either clicking or selecting a tag, and then pressing Shift+F1. The Reference panel opens, and information for that particular tag appears.

While you won't spend every waking minute in the Reference panel, it's a good way to keep your HTML, CSS, and JavaScript chops sharp.

Inserting JavaScript

Dreamweaver CS3 includes many fun and useful interactive effects—Spry Menus, Spry Form Validation, Spry Effects, Dreamweaver behaviors, and so on. All of these effects are achieved with JavaScript programming. Of course, there are a lot of other cool things you can do with JavaScript that Dreamweaver isn't programmed for. In these cases, you'll need to wade into the depths of JavaScript programming yourself.

The most straightforward approach, especially if you're already familiar with JavaScript, is to simply switch into Code view (Ctrl+` [Option-`]) and type away. Or, if you prefer, you can use Dreamweaver's Script window to add your JavaScript code (see Figure 10-16).



Type: text/javascript

Source:

Content:

```
function readCookie(name)
{
  var cookieValue='';
  var search= name+'=';
  if (document.cookie.length > 0)
  {
    offset=document.cookie.indexOf(search)
```

No script: Your browser either doesn't support JavaScript or JavaS

Figure 10-16:
Unlike Code view, the Script window doesn't respond to the Tab key; if you're accustomed to indenting your code, you need to use spaces. You can also insert a message in the "No script" box; the note will appear if the Web browser doesn't understand JavaScript.

To add your JavaScript code, click in either the head or body section of the page, and then choose Insert → HTML → Script Objects → Script. In the Script window that appears (Figure 10-16), choose "text/javascript" from the Type menu (there are a bewildering selection of options, but for straightforward JavaScript choose "text/javascript").

Tip: You can use the Insert Script command in Design view also, but to add a script to the <head> of the page, first chose View → Head Content, which opens a small bar below the Document toolbar that lists all of the different tags like <title>, <script>, and <meta> that appear in the head of a page. Click here, and then follow the above recipe for inserting a script.

Just type your script into the Content section (no need to include <script> tags, as Dreamweaver handles that part), and then click OK. If you inserted the script in the body of the document, you see a small gold icon (indicating an invisible element on the page) to mark its location.

You can edit your script in Code view, of course. In Design view, select the script icon, and then, in the Property inspector, click Edit.

If you use external JavaScript files, you can link to them directly in the Script window (see Figure 10-16). Instead of typing any code, click the familiar Browse for File icon (to the right of the Source box), locate the external JavaScript file, and then click OK. Dreamweaver adds the appropriate code to link the script file to the Web page.

Dreamweaver also lets you open and work on external JavaScript files (.js files) right in Code view. The program doesn't try to interpret the file as an HTML page; it doesn't attempt to make any of the changes described on page 368. But you can just use the built-in text-editing capabilities of Code view to write your JavaScript programs.

Note: JavaScript programming is no walk in the park. While it's certainly easier to learn than full-featured languages like Java or C++, it can still be challenging. If you want to get your feet wet, here's a great resource for basic tutorials and information on JavaScript: *www.w3school.com/js/*.

3

Part Three: Bringing Your Pages to Life

CHAPTER

11

Forms

A Web site is a great way for you to broadcast a message, announce a new product, post late-breaking news, or just rant about the state of the world. But that's all *one-way* communication, which you may find a bit limiting. You may be curious to get some feedback from your audience. Or you may want to build your business by selling your product online, and you need a way to gather vital stats from your customers. If you want to receive information as well as deliver it, it's time to add *forms* to your Web design repertoire (see Figure 11-1 for a simple example). Whatever type of information you need to collect on your site, Dreamweaver's *form objects* make the task easy.

Form Basics

A form begins and ends with the HTML <form> tag. The opening <form> tag indicates the beginning of the form and sets its properties; the closing </form> tag, of course, marks the form's end.

In between these tags, different objects provide the basic user-interface elements of the form. Radio buttons, text fields, and pull-down menus are just a few of the ways you can gather input. It's perfectly OK to include other HTML elements inside a form, too. In fact, your site's visitors would be lost if you couldn't also add (and format) text that explains each form object's purpose. And if you don't use a table or Cascading Style Sheets to lay out a form in an organized way, it can quickly become an unreadable mess (see the box on page 416).

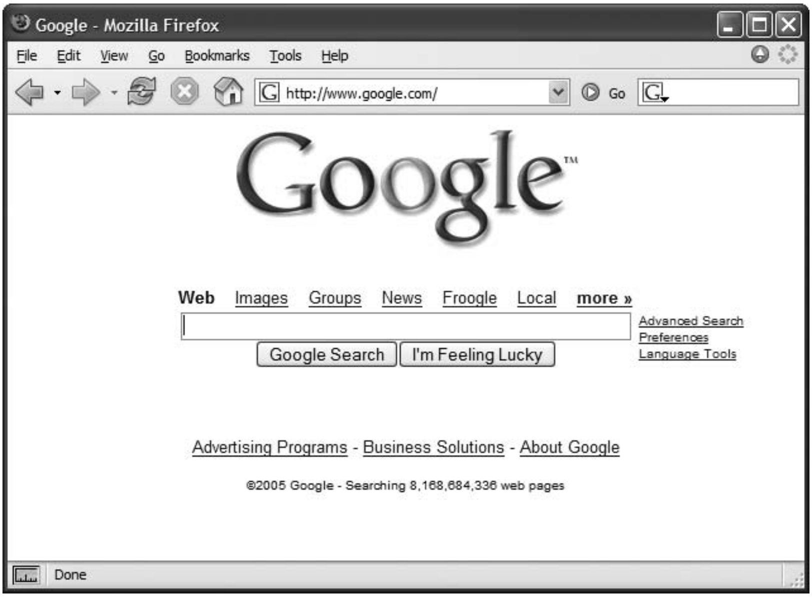

Google - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
http://www.google.com/
Go
Google™
Web Images Groups News Froogle Local more »
Advanced Search
Preferences
Language Tools
Google Search
I'm Feeling Lucky
Advertising Programs - Business Solutions - About Google
©2005 Google - Searching 8,168,684,336 web pages
Done

Figure 11-1: *A form can be as simple as a single empty text box (a field) and a button, or as complex as a 100-question survey composed of fill-in-the-blank and multiple-choice questions.*

Every form element, whether it's a text field or a checkbox, has a *name* and a *value*. The name indicates what information the element is intended to collect. If you want your visitors to type their email addresses into a text field, the name of that field might be *email*. The value, on the other hand, is the visitors' input—what they type into the text field, for example, or the selections they make from a pull-down menu.

After your visitors fill out the form and click the Submit button to transmit their responses, each form element is transmitted as a name/value pair like this: *email=bob@bobville.com*. Submitting both pieces of information helps the program that processes the form figure out what the input means. After all, without a name, a value of 39 doesn't mean much (39 what? Potatoes, steps, days until Christmas?). The name/value pair (age=39) provides context for a visitor's input.

The Code Backstage

Creating a form is just the first step in collecting information from your Web site's visitors. You also need to connect the form to a computer program that actually *does* something with the information. The program may simply take the data from the form and email it to you. However, it could do something as complex as contacting a bank, processing a credit card payment, creating an invoice item, or notifying a shipping department to deliver the latest Stephen King novel to someone in Nova Scotia. A form is pretty useless without a form-processing program running on the Web server. These information-crunching programs come in a variety of languages—Perl, C, C#, Visual Basic, VBScript, JavaScript, Java, ColdFusion Markup Language, PHP—and may be part of a dedicated application server like Macromedia's ColdFusion Server or Microsoft's .NET technology.

Writing the necessary behind-the-scenes processing software can be complex, but the concepts behind forms are straightforward:

- First, someone fills out a form on your Web page, and then clicks the Submit button.
- Next, the form data is transmitted over the Internet to a program on your Web server.
- The program collects the data and does something with it—whatever you and the programmer decide it should do: For example, send the data off as an email to you or store the information in a database.
- Finally, the Web server returns a page to the Web visitor. It may be a standard Web page with a message like "Thanks for the info," or a page dynamically generated by the program itself—like a detailed invoice page, or the results of a search.

So how do you create the processing half of the forms equation if you're not a programmer? You can use Dreamweaver, of course. Part 6 of this book describes Dreamweaver's dynamic Web building tools for creating pages that use information collected from forms in a database. If your Web server accommodates Active Server Pages, ASP.NET, ColdFusion, Java Server Pages, or PHP, Dreamweaver can create form-processing programs for you.

If you're part of a Web development team in a company, you may already have in-house programmers who can help you create the processing program.

Furthermore, even if your Web hosting company doesn't tolerate any of the application servers that work with Dreamweaver, they probably offer free form-processing programs as part of their services. Contact your Web host and ask about this; most companies provide basic instructions on how to use these programs.

Finally, if you feel adventurous, many form-processing programs are available for free on the Web. For a thorough sampling, see the CGI Resource Index at *http://cgi.resourceindex.com*. Using these free programs can be tricky, however, because you need to download the appropriate program, and then install it on your Web server.

Creating a Form

In Dreamweaver, you can build forms with one-click ease using the Insert bar's Forms tab (see Figure 11-2).

To begin, you need to insert a <form> tag to indicate the boundaries of a form:

1. **In the document window, click where you wish to insert the form.**

   You might decide to place it after a regular paragraph of introductory text, for example.

2. **On the Insert bar, select the Forms tab.**

   The tab reveals 18 form-building tool icons.

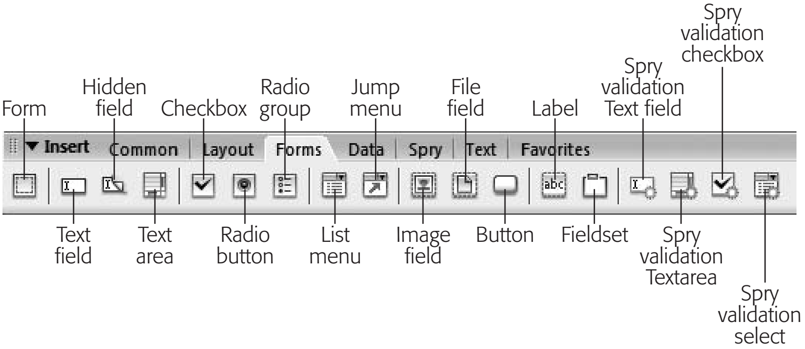


Figure 11-2: *The Insert bar's Forms tab gives you one-click access to all the different form elements–buttons, text fields, checkboxes, and more.*

3. **On the Insert bar, click the Form icon (the far-left square).**

   Alternatively, if you're a menu-driven person, choose Insert → Form → Form instead.

   Either way, a red, dashed-line rectangle appears in the document window, indicating the boundaries of the form. (If you don't see it, choose View → Visual Aids → Invisible Elements.) The top line represents the opening <form> tag; the bottom represents the closing tag. Make sure you always insert form objects, like buttons and menus, *inside* these lines. Otherwise, Dreamweaver thinks you're trying to create a second form on the page. (It's perfectly valid to include more than one form per page [as long as you don't try to insert a form inside *another* form], but your visitor can submit only one form—and its data—at a time.)

   Since you can place so many other HTML elements inside a form, it's often easier to insert the form first, adding tables, graphics, text, and form objects later.

4. **If it isn't already selected, click the dotted red line to select the form.**

   Unlike other objects, like images, the red line of the form doesn't change its appearance when selected. The only way you know you've selected the form is by checking the Property inspector. If it displays the "Form name" label at the upper-left corner, as shown in Figure 11-3, you've done it correctly.

5. **If you like, type a name for your form into the "Form name" field.**

   This step is optional. Dreamweaver supplies a generic name—form1, but a form doesn't even need a name to work. However, a name is useful if you use JavaScript or a Dreamweaver behavior (see the next chapter) to interact with the form or any of its fields.

6. **Type a URL into the Action field, or select a file by clicking the tiny folder icon.**

   Your mission here is to specify the location of the program that will process the form. If someone else is responsible for the programming, ask that person what to enter here. It's a standard Web path—either an absolute URL (one that begins with *http://*) or just the path to the server's form-processing program.

(See page 153 for more on these different kinds of links.) If you're using Dreamweaver's dynamic page-building tools, you'll most often leave this field blank. When you apply a server behavior—the programming code that makes the page "dynamic"—Dreamweaver inserts the correct URL.

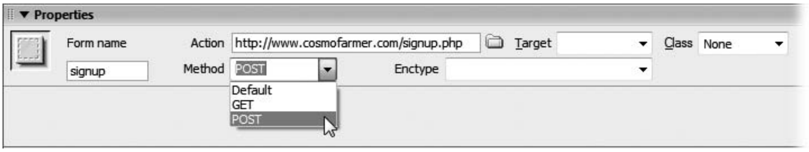
Either way, the file name *doesn't* end in .html. The path might be, for example, *../cgi-bin/forms.pl*. In this case, .pl is the extension used to indicate a program written in the Perl programming language. Other common file extensions for Web programs include .asp (for Active Server Pages), .cfm (for ColdFusion Markup Language pages), .jsp (for JavaServer Pages), .php (for PHP pages), or .cgi (for CGI programs).

7. **Using the Method pop-up menu, specify how you want the form data transmitted to the processing program (see Figure 11-3).**

   Basically, forms can transmit data to a Web server in either of two ways. The more common method, called POST, is the one you'll use most often. It sends the form data in two steps: First, the browser contacts the form program at the URL you specified in the previous step; then, it sends the data to the server. This method gives a bit more security to your data, and it can easily handle forms with lots of information.

   The GET method, on the other hand, transmits the form data in the URL, like this: *http://search.yahoo.com/bin/search?p=dogs*. The characters following the ? in the address represent the form data. This code submits a single form field—named *p*, with the value *dogs*—to the server. As you can see, such a URL could get extremely long. Because some servers can't handle very long URLs, the GET method is inappropriate for forms that collect a lot of data.

Tip: The GET method has one big benefit: You can bookmark it. This is great if you want to save and reuse a common search request for Google, or want to send someone Google Maps driving directions. That's why search engines use the GET method for form submissions.



Properties

Form name: signup

Action: http://www.cosmofarmer.com/signup.php

Method: POST

Target:

Class: None

Enctype:

Figure 11-3: *You'll generally want to use the POST method of sending data to the server. See step 7 for more details.*

8. **If you're using frames, select a Target option.**

   You'll most likely skip this menu. Frames are so 1998 Web design, and pose serious problems for Web designers and search engines. However, you can choose the "_blank" option to open a new browser window to display the results. (See page 161 for more on the Target property.)

9. **Select an encoding type, if you like.**

   You usually don't have to select anything from the Enctype menu. The default value—*empty*—is almost always correct, and is the same as selecting the much more long-winded "application/x-www-form-urlencoded" option.

   But if you're using the File Field button (see page 416) to let visitors upload files to your site, you should use the "multipart/form-data" option. In fact, Dreamweaver automatically selects this option when you add a File Field to a form.

You've laid the foundation for your form. Now you're ready to add the input controls—menus, checkboxes, and so on— to it, as described in the next section.

Note: In some cases, you may find that the server generates errors or doesn't process your forms correctly.

One cause may be the form's encoding method. If you add a File Field button to a form (page 416), Dreamweaver automatically sets the form's encoding method to "multipart/form-data." For this method to work, the Web server must be set up to receive files, and many Web servers have this option turned off for security reasons. So when your visitors attempt to submit a form–even one without a file attachment–and you've used this encoding method, the Web server spits back a nasty error.

So the first thing you may be tempted to do is delete this File Field button from your form. So far, so good. But you're not done yet. Dreamweaver doesn't reset the encoding method to the original setting of "application/x-www-form-urlencoded." You must remedy the situation manually by selecting the form, and then using the Property inspector to change the encoding method back to "application/x-www-form-urlencoded."

Adding Form Elements

Unless you've never used a computer before, the different user interface elements available for HTML forms should look familiar (Figure 11-4): text fields where people can type in information (their names, addresses, phone numbers, and so on); checkboxes for making multiple-choice selections; and menus for picking items from a list. The Insert bar's Forms tab lets you create all of these elements and more (see Figure 11-2).

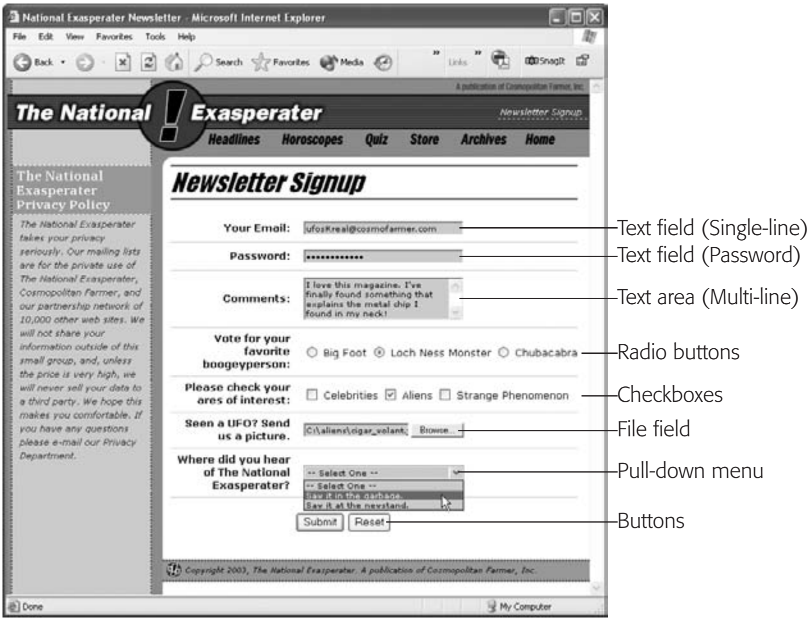
Dreamweaver CS3 introduces several new form elements, called Spry Validation widgets. These are like the regular form elements discussed below, but have the added ability to *verify* the contents of a form field, and prevent a form from being submitted if it's not filled out correctly. The Spry Validation widgets are discussed starting on page 422.

What All Form Elements Have in Common

Adding form elements to your document always follows the same pattern:

1. **In the document window, insert a form (see page 401).**

   Or, if the page already has a form, click inside its red border.


National Exasperater Newsletter - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media Links SnagIt
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The National Exasperater
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Headlines Horoscopes Quiz Store Archives Home
Browse...
Submit Reset
Done
My Computer
Text field (Single-line)
Text field (Password)
Text area (Multi-line)
Radio buttons
Checkboxes
File field
Pull-down menu
Buttons

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Figure 11-4: *Forms collect information using a variety of different interface elements like text boxes, password fields, and pull-down menus. You can even add a File Field to let visitors select and upload a file to your site.*

Tip: You can also have Dreamweaver add the form element when you first add a form field to a page. When you insert a field (step 2) and there isn't yet a form, Dreamweaver asks if you'd like to add the proper form tag. Click the Yes button, and Dreamweaver automatically creates the red, dotted-line form boundaries (and, behind the scenes, the corresponding <form> tags). You should *always* click the Yes button. A form field that isn't surrounded by the proper form tag won't work.

2. **Click the appropriate button on the Insert bar (see Figure 11-2).**

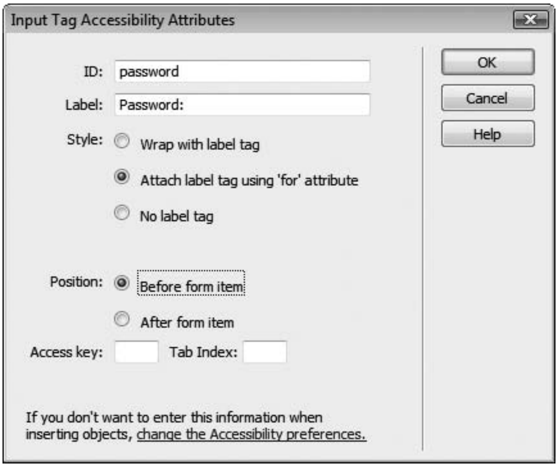
   Alternatively, use the Insert → Form submenu. You'll soon discover that every form object on the Insert bar is also represented by a command on the Insert menu (for example, Insert → Form Objects → Text Field).

Tip: Instead of just clicking a form-element button on the Insert bar, you may prefer to drag it off the tab and into a specific position on your Web page. This trick works with any of the user controls on the Insert bar, not just text fields.

3. **In the Input Tag Accessibility Attributes window, type an ID (see Figure 11-5).**

   This window serves a couple of functions. It lets you assign an ID (this step), and set a few accessibility options. These options add information and tools for the benefit of those who surf using "assistive technologies"—like screen readers—or those who don't use mice to jump from form field to form field.

   The ID you type in this field also determines the *name* of the field. Remember, each field has a name so that the form processing program can identify what the



Input Tag Accessibility Attributes

ID: password

Label: Password:

Style: ○ Wrap with label tag

● Attach label tag using 'for' attribute

○ No label tag

Position: ● Before form item

○ After form item

Access key: Tab Index:

If you don't want to enter this information when inserting objects, change the Accessibility preferences.

Figure 11-5:
This window appears when you're inserting a form element. If you don't see it, you or someone else has turned off Dreamweaver's factory setting to automatically launch this window. To summon it, choose Edit → Preferences (Dreamweaver → Preferences), click the Accessibility category, and then turn on the Form Objects checkbox. You can also turn off this option by clicking the "Change the Accessibility preferences" link at the bottom of this window.

information it's receiving is for (see page 400). Say you're adding a text field to a page that'll collect a visitor's town name. If you type *town* in the ID box, then when Dreamweaver inserts the text field onto the page, the HTML looks like this: <input type="text" name="town" id="town">.

Be sure to follow the same naming conventions you'd use for CSS ID names: Begin with a letter, use only numbers, letters, hyphens, or underscores, and skip spaces, punctuation, and other characters. You don't have to create a CSS ID style, either, but you can if you want to format the look of the form field.

Note: The ID value you type in step 3 has a slightly different effect when adding radio buttons. Radio buttons that are part of the same group (like answers to a multiple-choice question) must have the same name: This characteristic lets only one button in the group be selected at one time (see page 411). Because all radio buttons in a group share the *same* name, and because you can apply each ID only once per page (see page 284), each radio button must have its own unique ID. So Dreamweaver takes the ID you enter and adds it to the radio tag, but then sets that radio button's name to the generic "radio." Therefore, make sure you rename your radio button using the Property inspector as described on page 412.

4. **Type a label, and then select label options** (**see Figure 11-5**).

   The label option lets you add text that identifies the form element's purpose (see page 420 for a description of the Label tag). The label is visible to the person filling out the form, and appears either to the left or right of the form field. If you add a text field to collect someone's name, the label might be *Name*:. Someone filling out the form would then see the text "Name:" followed by a box for typing a name. It's always a good idea to add a label. In addition, Dreamweaver wraps the text you type inside an HTML tag created just to indicate a form's purpose: the <label> tag.

Tip: Sometimes you don't need or want a label. For example, buttons already have a label—like Submit or Reset—so you don't need to add another. In this case, either click the Cancel button, which just adds the form field without any of these *accessibility* properties, or leave the label box empty, and select the "No label tag" radio button.

You have two ways to attach a label to a form element. The first method, indicated by the radio button labeled "Wrap with label tag" (as shown in Figure 11-5), wraps the <label> tag around both the text you type and the form element itself. This method keeps the two together and easily identifies which label goes with each form field.

The second method, "Attach label tag using 'for' attribute," also wraps the text you type inside a <label> tag. However, it places the form field *outside* the label tag. This method is useful if the label and form field don't appear directly next to each other in the HTML code. People often use a table to visually organize forms (see the box on page 416). By placing text labels in one table column and form fields in an adjacent column, you can neatly align the labels and their corresponding fields. However, organizing your page like this puts the labels and form fields into separate table cells, and "breaks" the connection between the label and the field. Those visitors who use a screen reader, to read your form may not understand which label applies to which form field. Fortunately, Dreamweaver can add a *for* property to the label tag, which tells a Web browser which form element the label is "for."

Note: Using the "Attach label tag using the 'for' attribute" option was essentially broken in Dreamweaver 8. In order for it to work properly, you always had to go into Code view and adjust the HTML. Thankfully, Dreamweaver CS3 correctly tracks the name of the field and its label. Even if you later change the field's name in the Property inspector, Dreamweaver updates the label tag's *for* property to make sure the connection between the label and field isn't broken.

Say you add a text field that lets someone enter their email address to register for your site's email newsletter. If, when you inserted the field, you used the ID *email*, the label "Your email address:," and the "Attach label tag using the 'for' attribute" option, you'd end up with this HTML code:

```
<label for="email">Your email address: </label>
<input type="text" name="email" id="email" />
```

At this point, you could move the <label> tag to any other location on your Web page, and the label would still remain related to the field. Of course, if you place the label at the top of the page and the field at the bottom, your visitors won't know they're related, so keep the two tags in close visual proximity. One common method, however, is putting the <label> tag in one table cell of a row, and the field in a table cell to the right (this technique is one way of visually organizing a form, as described in the box on page 416).

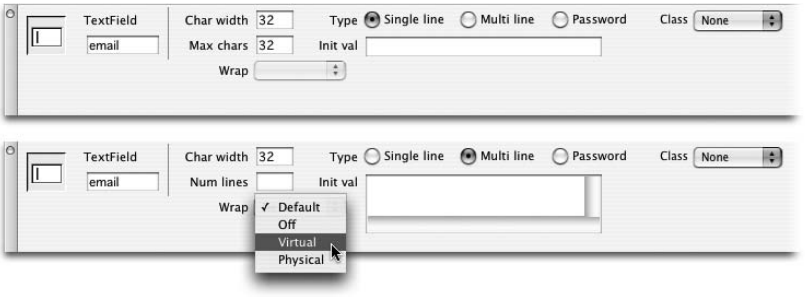
5. **Type an "Access key" and a Tab Index number, and then press OK.**

   These optional steps let visitors access the form field using the keyboard. The "Access key" option lets visitors use a keyboard shortcut to jump immediately into or select a field. If you enter *M* for a form element's access key, visitors can jump to that element using Alt+M (Windows) or Control-M (Mac). While this feature seems to be a great way to make your forms more usable, it has a couple of drawbacks. First, not all browsers support this feature. In addition, since it's not at all obvious to your site's visitors what keyboard shortcuts you've added to your form, you need to list the shortcut next to the form element, or create a "user's manual" of sorts that explains the shortcuts used in your forms.

   Browsers support the Tab Index more often than the "Access key" property. The Tab Index lets you number each form field and, in the process, set the order in which the fields will be selected as a visitor presses the Tab key. Number 1 indicates the first field to be selected when a visitor presses the Tab key, and each number after that—2, 3, 4, and so on—dictates the order of selection when the Tab key is pressed. You don't usually need to go to this extreme, since most browsers jump to the next form field when you press the Tab key, but it sometimes comes in handy when you have a particularly complex form, and use either tables or CSS to lay it out. In some cases, the order the fields are selected by default doesn't match the visual presentation of the form (in other words, when you press the Tab key, you actually jump to a different field than the one you expect). If this is the case, setting the Tab Index lets you correctly specify the tab order.

6. **In the Properties inspector, set the form element's properties** (Figure 11-6).

   For instance, you may be able to specify the element's width, height, and other variables. The following descriptions indicate the options available for each form element.



TextField: email
Char width: 32
Max chars: 32
Type: ● Single line ○ Multi line ○ Password
Class: None
Init val:
Wrap:

TextField: email
Char width: 32
Num lines:
Type: ○ Single line ● Multi line ○ Password
Class: None
Init val:
Wrap: ✓ Default

Figure 11-6:
The Property inspector looks slightly different depending on the type of text field you choose. The Class menu (available to all form elements) lets you apply a Cascading Style Sheet class style (see page 114) to the selected form field.

Text Fields

When you need to collect a specific piece of information like a person's name, phone number, or address, you use a text field (shown in Figure 11-4). Text fields accept typed responses and are great for open-ended questions. They come in three different flavors: *single-line* fields for short responses, *password* fields to hide people's input from snooping eyes, and *multiline* fields for longer typed replies.

Once you've inserted the text field, you can adjust the following settings in the Property inspector (see Figure 11-6):

- **Char Width.** The width of a text field is measured in characters; so if you type *20* for the Char Width (character width), the text field will be as wide as necessary to hold 20 typed letters. Be aware that the exact size can vary from browser to browser. (You can use Cascading Style Sheets to set an exact width.)
- **Type.** You can choose from three different types of text fields.

  — A *single-line* text field, of course, holds just one line of text. This kind of text field is the most common; use it for collecting small pieces of information, like a last name, Social Security number, or credit card number.

  — *Multiline* fields provide a larger area for adding multiple lines of text. You need to use this kind of text field when offering a place to type longer comments, such as in a "Let us know what you think!" or "Nature of problem:" field.

Note: Dreamweaver includes a separate button for adding a multiline text field–called *Textarea* in HTML (see Figure 11-2).

  — *Password* fields hide a password being typed from the prying eyes of passing spies. Whatever your Web visitor types appears as asterisks *** (Windows) or bullets ••••; (Mac) on the screen. (Of course, the information in the password field is still transmitted as plain text, just like any other form field. The masking action takes place only in your visitor's browser.)

- **Max Chars/Num Lines.** Max Chars (maximum characters) is a text field that lets you limit the number of characters the field accepts. It's a good way to help ensure that guests type the right information in the right place. For instance, if you use a field to collect the visitor's age, odds are you don't need more than three characters to do it; very few 1,000-year-olds surf the Web these days (and those who do don't like to reveal their ages).

  When you've specified a multiline text field, the Max Chars box morphs into the Num Lines box. In this case, you can't limit the amount of text someone types into the field. Instead, this field lets you specify the height of the text field on the screen.

Note: The limit you specify here affects only how tall the field is *onscreen*. Your visitors can type as many lines of information as they want. (A scroll bar appears if the typing exceeds the size of the box you've specified with the Num Lines option.)

- **Wrap.** The Wrap property is meant to specify what happens when your visitor types right to the edge of the text box. Although most browsers recognize this property, it isn't officially part of the HTML or XHTML standard. In general, the "Default" option is your best bet. It leaves this nonstandard property out of your HTML, and lets the text box behave as most people would expect: When the typing reaches the edge of the box, it automatically wraps to the next line. The Off setting completely prevents sentences from wrapping inside the text field. When the typed text exceeds the width of the field, a horizontal scroll bar appears at the bottom of the field, and the text scrolls to the left. The text remains on a single line until the visitor hits Enter or Return. You'll almost never want to use this option, because it forces your visitor to scroll not only up and down, but left and right, too, to see everything she's typed. And the last two options—Virtual and Physical—have no effect in most browsers, but add invalid HTML to your page (see page 593 to learn more about HTML validation).

- **Init val.** Here, you can specify the Initial Value of the field—starter text that automatically appears in the field, so that it isn't empty when the visitor begins completing the form. You can use this feature to include explanatory text inside the field itself, such as "Type your name in this box" or "Example: (212) 555-1212." Another common use for the "Init val" box: You've created an *update form*—a form for editing previously entered information. If you wanted to update your MySpace profile, you'd go to a page that presents a form containing all the information you've previously entered. You could then change the information and submit the form to update your profile. An update form requires a database and some server-side programming—you'll learn how to build this type of form in Chapter 24.

Note: If your form page is one of the dynamic file types with which Dreamweaver works–ASP, ASP.NET, PHP, ColdFusion, or JSP–you also see a small lightning bolt to the right of the "Init val" box. This button lets you add *dynamic data*–information drawn from a database–to the text field. (In-depth coverage of this feature starts on page 857.)

FREQUENTLY ASKED QUESTION

Using the Password Field for Credit Card Numbers

Can I use the Password field type for credit card numbers and other sensitive information?

Yes, but it doesn't give the information any extra security.

The Password field does one thing: It hides people's input on the screen. Someone looking over your visitor's shoulder can't read what's being typed–it'll look like a bunch of dots–but once that information is submitted over the Internet, it's just as visible as a regular text field.

To provide real security for form information, you need an encrypted connection between the Web server and the visitor's computer. Most Web site creators use SSL (Secure Socket Layer) technology for this purpose.

Most Web browsers understand this technology, but your Web server must be specially configured to work in this mode. Contact your Web host to see if you can use SSL on your server (the answer is usually yes). If so, they'll be able to tell you how to set it up.

Checkboxes

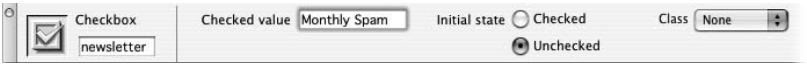
Checkboxes (see Figure 11-4) are simple and to the point; they're either turned on or not. They're great for questions in which your visitor is allowed to select more than one item in a group. Suppose you produce three different email newsletters that you send out each month. In your form, you might include some text—"Check the boxes for the newsletters you'd like to receive"—and three corresponding checkboxes, so that each visitor can sign up for only the newsletters he wants.

Once you've added a checkbox to a form, you can set up these options in the Property inspector (Figure 11-7):

- **Checked value.** If your visitor turns on the checkbox, here's where you're specifying the information that's submitted when the form data is sent to your processing program. It doesn't necessarily have to match the checkbox's label (which you'll create in a subsequent step); it could, instead, transmit some special coded response to your processing application. Your visitors never actually see this information.
- **Initial state.** If you like, your checkbox can already be on when your Web page first appears. You may have seen this setup on sites that require you to sign up for some service. Usually there's a checkbox—already checked—down near the bottom of the form, with fine print like this: "Check here if you want to get daily, unsolicited email from our marketing department."

Note: As with many form elements, your checkbox can respond to information it retrieves from a database. The Property inspector's Dynamic button–available only when you're working on a dynamic page (ASP, PHP, and so on)–lets you set the checkbox state (Checked or Unchecked) based on data in a database. (See page 858 for details.)

After adjusting the Property inspector, if you don't use Dreamweaver's accessibility options discussed on page 405, make sure you return to the document window to add a text label next to the field. Let people know what the checkbox is for: "Yes, sign me up!" for example. Finally, you may want to insert another checkbox. Checkboxes don't have to come in groups, but they often do, as in "yes" and "no" boxes.



Checkbox newsletter

Checked value Monthly Spam

Initial state ○ Checked ● Unchecked

Class None

Figure 11-7:
The "Checked value" property defines the checkbox's actual value .

Radio Buttons and Radio Groups

Radio buttons, like checkboxes, are very simple (see Figure 11-4); they're either selected (represented on screen as a solid circle) or not (an empty circle).

But unlike checkboxes, radio buttons restrict your visitor to making only one choice from a group, just like the radio buttons on an old-style automobile dashboard (or, if you're too young to remember those car radios, like the buttons on a blender). Radio buttons are ideal for multiple-choice questions like, "What is your income: A. $10–35,000, B. $35–70,000, C. $70–100,000, D. None of your business."

In the Property inspector, you can set up these options for a radio button (Figure 11-8):

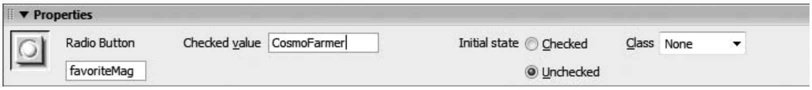
- **Name.** Dreamweaver supplies the generic name *radio* (or radio2, radio3, and so on) when you insert a radio button. Make sure you change it to something more descriptive, and when inserting a group of related radio buttons, give them all the same name. Given a group of radio buttons, your visitors should be able to select only one button in the group. To make sure that's the case, every button in the same group needs to share the same name (although they should have different "Checked values"; see the next bullet point).

  If, when testing your page, you notice that you can select more than one radio button at a time, you must have given them different names. (Consider using Dreamweaver's Radio Group object, described next. It acts as a wizard that simplifies the process of creating a group of radio buttons.)

- **Checked value.** This value is the information that the form submits when your visitor selects this button. Once again, it doesn't necessarily have to match the radio button's onscreen label. If you filled out the accessibility window's ID box (see Figure 11-5), Dreamweaver uses the ID you supplied as the checked value. Change the value Dreamweaver supplies if it doesn't match the value you want.

- **Initial state.** Often, when a form page first loads, one radio button in each set is preselected. To do your visitors this timesaving courtesy, turn on Checked for the button that holds the default value—the one they'll choose most often.

  Of course, if making a choice here is optional, then you can leave all of the buttons unselected by setting their initial states to Unchecked. However, once somebody *does* select a radio button, only the Reset button (if you add one) can make them *all* unselected again (see page 418 for information on creating a Reset button).



Radio Button favoriteMag

Checked value CosmoFarmer

Initial state ○ Checked ● Unchecked

Class None

Figure 11-8: *Radio buttons offer answers to a single multiple-choice question.*

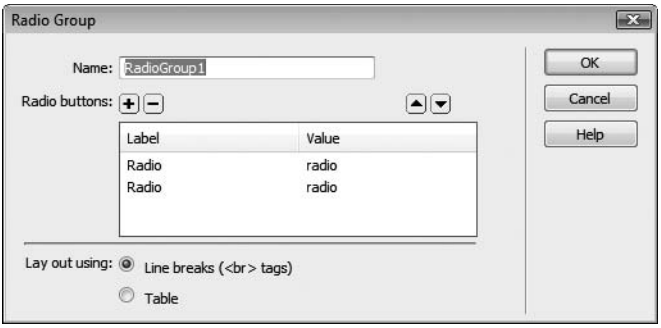
Finally, you add text labels for the entire group. If you have the accessibility features turned on (see page 405), you'll have already added labels to each button. If not, simply click the document window and type, just as you'd add any text to the page. Your whole-group-of-buttons label may take the form of a question ("How would you like to pay?"); the labels for the individual buttons might say, "Visa," "MasterCard," and "I.O.U."

Radio Group

Although creating a group of radio buttons using the Radio Button object is easy, Dreamweaver includes the Radio Group object to make it even simpler. The Radio Group object provides a single dialog box for creating a group of radio buttons and their labels in one fell swoop. To use it:

1. **On the Insert bar, click the Radio Group button.**

   The Radio Group window appears (see Figure 11-9).



Radio Group

Name: RadioGroup1

Radio buttons:

Label	Value
Radio	radio
Radio	radio

Lay out using: ● Line breaks (
 tags)

○ Table

***Figure 11-9:** The Radio Group dialog box lets you quickly add multiple radio buttons to a page. The buttons form a single group that lets visitors select one of a group of options.*

2. **In the Name field, type a name.**

   This name covers all radio buttons in the group, saving you the trouble of typing the name for each button yourself.

3. **In the Label column, click the top Radio label. Type a label for the first button.**

   This label appears next to the button onscreen.

4. **Hit the Tab key to jump to the Value column for that button, and then type a value for the first button.**

   This value is the button's "checked value." Type what you want passed to the Web server when somebody selects this button and submits the form.

5. **Repeat steps 3 and 4 for the second button in the group.**

   You can create additional radio buttons by clicking the + button. Follow steps 3 and 4 for each additional button you add in this way.

6. **Select a layout option for the group.**

   Dreamweaver puts each radio button in the group on its own line. You can choose whether Dreamweaver uses a line break (<br> tag) to separate each line, or whether it uses a table—one radio button per row.

   Don't care for either of these options? Pick the "Line breaks" option. It's the easiest to modify.

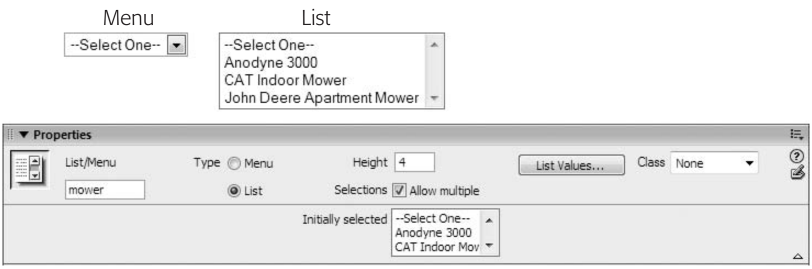
Tip: If you want a group of radio buttons to appear side by side instead of stacked one on top of the other, then, in the Radio Group dialog box, choose the "Line breaks" option. Then make sure Dreamweaver is set to display the invisible line break character (see page 68). Click the line break's gold shield, and then hit backspace or Delete to move the lower radio button onto the same line as another button.

7. **Click OK to add the radio group to your page.**

   The radio buttons and their labels are essentially text and buttons on the screen. You can move the buttons around, change their labels, and alter each button's properties in the Property inspector.

Pull-Down Menus and Lists

While checkboxes and radio buttons both provide ways to offer multiple choices, you should consider them only when there are relatively few choices. A form can quickly become overcrowded with buttons and boxes if there are too many options to choose from. The beauty of lists and pull-down menus (usually called *pop-up menus* on the Macintosh) is that they offer many choices without taking up a lot of screen space. (Figure 11-10, top, shows an example.)



--Select One--

--Select One--
Anodyne 3000
CAT Indoor Mower
John Deere Apartment Mower

List/Menu: mower
Type: ○ Menu ● List
Height: 4
Selections: ☑ Allow multiple
Class: None
Initially selected: --Select One-- Anodyne 3000 CAT Indoor Mov

Figure 11-10:
A menu is a single compact line; a list can take up any number of lines on the page. Use the first menu or list item to instruct visitors what to do. For example, "Select the state you live in" or "--Select One--."

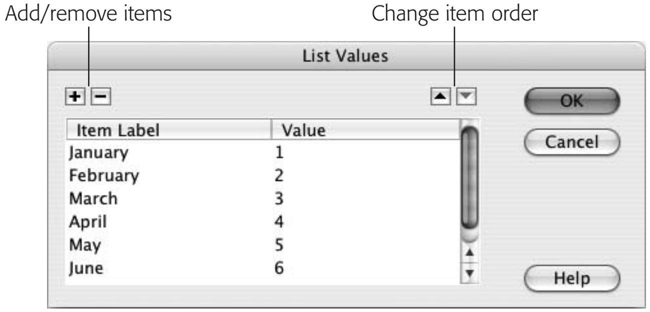
Once you've inserted a menu or list object into your document window, here's how to adjust the Property inspector settings:

- **Type.** Menus and lists differ both in appearance (see Figure 11-10) and function, as described in a moment. Click the one you want (Menu or List).
- **Height.** The number you type into the Height box (available only for lists) should reflect the amount of space you wish the list to take up on the page. A list can be a single line tall (in which case you might as well use a menu) or many lines (letting your visitors see a number of choices at once). A vertical scroll bar appears automatically if the height you specify here is smaller than the number of items in the list.
- **Allow multiple.** Here's a key difference between menus and lists: If you turn on this option, a visitor can select more than one item from a list, just by pressing the Ctrl (⌘) key while clicking different options in the list.

- **List Values.** This button opens the List Values dialog box (see Figure 11-11), where you build the list of options in your list or menu. Each item is composed of two parts: a *label* (the text that actually appears in the menu or list on the Web page) and the *value* (the information that gets submitted with the form, which isn't necessarily the same thing as the label).

  To use this dialog box, type an item label. Press Tab (or click in the Value column), and then type the value, if you like. (See Figure 11-11 for details.)

  Including a value is optional; if you don't specify one, your form submits the item's label *as* the value. Still, setting up a separate value is often useful. Imagine that you've designed a pull-down menu on an e-commerce site so that your visitors can select their credit card's expiration month. Figure 11-11 shows what the items for such a pull-down menu might look like: The names of the months appear on the menu, but when a visitor selects, say, April, the form would actually transmit the number 4 to your form-processing program.



Item Label	Value
January	1
February	2
March	3
April	4
May	5
June	6

Figure 11-11:
Using the + button, you can add an item to the end of a list; when you click in the Value column of the list's last item, pressing Tab creates a new list item. To delete an item, select it, and then click the minus sign (–) button. You can move an item higher or lower in the list of options by selecting the option, and then clicking the up or down arrow buttons. Like radio buttons, pop-up menu and list items always flock together—nobody ever creates just one.

  Since computer programs are often more comfortable with numbers than names—and humans are often the exact opposite—it makes more sense to use numbers for list values in this case.

  When offering your visitors a pop-up menu of products from which to choose, the label might be the human-friendly name of the product, like "Blue Wool Cap." The value would be the model number that your form-processing program can understand, like XSD1278.

- **Dynamic values.** Dreamweaver can also create a *dynamic menu*, where the menu's labels and values come from a database. This option—available only when you insert a menu into one of the dynamic page types, as described in Part 6 of this book—is great when the menu items change frequently, as they would in a list of employee names. This feature is described on page 860.

Click OK when you're finished building your menu or list. You can always return to this screen and edit the list of options. To do so, in the document window, click the menu or list, and then, in the Property inspector, click the List Values button. You return to the dialog box shown in Figure 11-11.

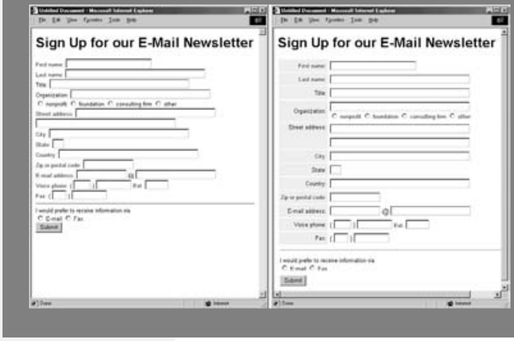
As with other form elements, you can, and probably should, add some explanatory text alongside the list or menu in the document window. One easy method: You can automatically add a label to a menu or list using Dreamweaver's accessibility features as described on page 405.

POWER USERS' CLINIC

Giving Order to Your Forms

If you're not careful, creating forms can quickly lead to visual chaos. The different shapes and sizes of text boxes, radio buttons, and other form objects don't naturally align well with text. One solution: Use tables to control your forms' appearance.

In the picture on the left, form elements were added next to the label text on each line, forcing your eye to follow an ungainly zigzag pattern created by the form's text boxes. The result is not only ugly, but also hard to read.



In the picture on the right, a table made of two columns and 13 rows (one row for each question) organizes the text and form elements into two columns. Notice that the text next to each form element aligns to the right, creating a clean edge that effectively mirrors the edge created by the form fields.

To make this table-based solution work most effectively, set each text field to the same width using the Char Width property or Cascading Style Sheets.

When using this technique, add the <form> tag first, insert the table inside the form's dotted red boundaries, and then add form elements inside the table. If you make a table first and then try to insert a form, Dreamweaver lets you add it to only a single cell of the table. See Chapter 7 for more on creating tables.

You can also use CSS to lay out a form. This technique is a bit more complex, but if you're interested, you can find a good demonstration of CSS-based form layout at: *http://jeffhowden.com/code/css/forms/*.

File Field

Receiving responses to checkboxes, radio buttons, and pull-down menus is all well and good, but what if you'd like your visitors to submit something a little meatier—like an entire file? Imagine a bulletin board system that lets guests post JPEG images of themselves, or upload word processing documents to share with others. They can do just that, thanks to File Field (see Figure 11-4)—and a little magic from your Web server.

Before you get carried away with the possibilities the File Field offers, you need to do a little research to see whether you can use it on your Web site. Although Dreamweaver makes it easy to *add* a field for uploading image files, text files, and other documents, you need to check your Web server administrator to see if anonymous file uploads are permitted (some servers don't allow this kind of activity for fear of receiving viruses or overly large files). Then, of course, you'll have to ensure that the program that processes the form is programmed to *do* something with the incoming file—store it somewhere on the server, for instance. Dreamweaver doesn't have anything built in that helps with this, but you can enlist some third-party solutions as described in the box on page 418.

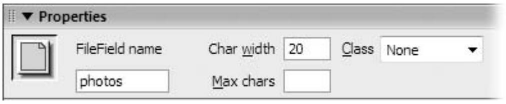
When you click the File Field button on the Insert bar (or choose Insert → Form Objects → File Field), Dreamweaver inserts a text field *and* a Browse button; together, they constitute a single File Field. When you click either one, you highlight both.

The Browse button, once it's posted on the Web and visible in somebody's browser, opens up the standard Windows or Macintosh Open File dialog box, permitting your visitor to navigate to and select a file for uploading.

The Property inspector offers only two settings to change (other than specifying a more creative name):

- **Char width.** The width of a text field is measured in characters; if you type *20* for the character width, the field is 20 characters wide.
- **Max chars.** Leave this blank, as shown in Figure 11-12.

Your File Field isn't finished until you've added a label to it in the document window, something like "Click the Browse button to select a file for uploading" (again, a task that Dreamweaver simplifies with the Label option in the forms Accessibility window described on page 406).



FileField name: photos

Char width: 20

Class: None

Max chars:

Figure 11-12:
Avoid the "Max chars" field. It's intended to limit the number of characters that the field accepts, but doesn't have any effect on the File Field, which selects the full path to the file regardless of how many characters long it is.

Hidden Field

Most form elements are designed to accommodate interaction from your visitors: clicking radio buttons, typing into text fields, and making choices from menus, for example. But there's one kind of field that your visitors won't even know about and will never see: the *hidden* field.

Why, you're probably asking, would you need to submit a value you already know? Hidden fields supply information to the programs that process forms—information that the program has no other way of knowing. For example, most Web hosting services offer a generic form-processing program that collects information submitted with a form, and emails it to a selected person. But how does the program know where to email the data? After all, it's a *generic* program that's used by hundreds of other people. The solution: A hidden field that stores the information required for the program to properly process the form—like *email=me@mydomain.com*.

To insert a hidden field, click Insert bar's Hidden Field button, or choose Insert → Form → Hidden Field. A gold shield icon appears on the page (this is Dreamweaver's

EXTENSION ALERT

Adding File Upload Ability to Your Site

Imagine adding a "Job Application" page to your site, where applicants could upload their resumes for review. Or a Web-based way for clients to submit their graphic files and word processing documents.

Dreamweaver lets you add a File Field to a form, but doesn't provide the tools to make this useful feature function on your Web site. To compensate for that glaring omission, you can turn to extensions that add this missing power to Dreamweaver when building a dynamic Web site (as described in Part 6 of this book). But before you shell out any hard-earned cash on the extensions listed next, make sure your Web hosting company allows anonymous file uploads from a Web form–some don't.

Adobe sells an extension for database-driven Web sites that lets you do this: The Adobe Dreamweaver Developer Toolbox (*www.adobe.com/products/dreamweaver/addt/*) lets your site visitors upload images and files to a Web server. It works with PHP, ColdFusion, and ASP server technologies, and includes other useful tools for working with database-driven sites. DMXZone (*www.dmxzone.com/index.asp?TypeId=3&CatId=862*) offers three fee-based extensions for ASP, ASP.NET, and PHP. The Pure Upload extension offers many different settings to manage the process of uploading files to a Web site, including the ability to rename duplicate files, and add file information to databases.

Finally, WebAssist (one of the big players in the Dreamweaver Extensions market) offers a commercial product, Digital File Pro, for uploading *and* downloading files from a server (*www.webassist.com/professional/products/ProductDetails.asp?PID=112*). This extension works for ASP, PHP, and ColdFusion.

symbol for HTML, that you can't see in Web browsers). Use the Property inspector to give the field a name and a *value*—that is, the value that will get submitted to your form-processing program (in the example above, your email address).

Note: The gold shield indicating a hidden field appears only if the Hidden Form Fields box is turned on in the Preferences window's Invisible Elements category (see page 68), and, in the View menu, Invisible Elements is turned on (View → Visual Aids → Invisible Elements).

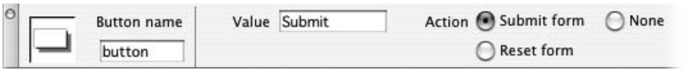
Buttons

No form is complete without a Submit button for your Web visitors to click as a final step (see Figure 11-4). Only then do their responses set out on their way to your form-processing application. People sometimes add a Reset button, which visitors can click when they've filled out a form and realize they've made an error. The Reset button clears all the form entries, and resets all of the form fields to their original values.

Use the Insert bar's Forms tabs (see Figure 11-2), or choose Insert → Form → Button. If the Accessibility window appears (see page 405), you don't need to add a label, since the button itself has "Submit," "Reset," or whatever text you wish emblazoned across its face.

The Property inspector controls (Figure 11-13) for a freshly inserted button are:

- **Button name.** The button's name provides the first half of the "name/value" pair that's sent when the form is submitted (see page 400).



Button name button

Value Submit

Action ● Submit form ○ None ○ Reset form

Figure 11-13: *Buttons have just three properties: Name, Value, and Action. Like other form elements and HTML tags, Dreamweaver also lets you apply a CSS class style to improve your forms' design.*

- **Value.** The value is the label that appears on the button. Dreamweaver proposes *Submit*, but you're free to substitute *Do It*, *Make It So*, or *Send my data on its merry way*.

  So what your visitors see printed on the button—"Click Me"—is also the value that's transmitted along with the button's name when the form is submitted. This characteristic opens up some interesting possibilities. You could, for example, include *several* Submit buttons, each with a different label. Maybe you're creating a form for a database application; one button might say Delete, while another says Edit. Depending on which button your visitor clicks, the program processing the form either deletes the record from the database or modifies it.

- **Action.** These three buttons govern what happens when somebody clicks your button. A "Submit form" button transmits the form data over the Internet to the form-processing program. A "Reset form" button sets all the fields back to their original values. (The fields, checkboxes, or menu items aren't left blank, unchecked, or unselected. Instead, they return to their *initial* values, which you specified when creating these various controls. If you set the Initial State property of a checkbox to Checked, and your visitor unchecks the box, and then clicks the Reset button, then a checkmark reappears in the box.)

  The Reset button used to appear on nearly every form on the Web; these days it is much less frequent, mainly because it's unlikely that anyone would want to *completely* erase *everything* they've typed into the form. In addition, its presence offers the unfortunate possibility that a visitor, after painstakingly filling out a form, will mistake the Reset button for the Submit button, and click it—erasing everything she's typed. If you do add a Reset button, make sure you don't put it right next to a Submit button.

Note: A Reset button can come in handy on a page intended to *update* information. An update form contains previously recorded information (like your shipping address for your Amazon.com account). In this case, a Reset button lets the visitor erase any mistakes he made when updating his account information. Clicking a Reset button, in this case, sets the form back to display the original information. You'll learn how to create an update form for a database-driven site in Chapter 24.

Setting the button's action to None means that clicking on the button has no effect on the form. "Gee *that's* useful," you're probably thinking. But although the button doesn't submit the data or reset the form's fields, you need to choose the None option if you want to add interactivity to the button using Dreamweaver's built-in behaviors (see the chapter 13). In this way, you can use a common user interface element—the 3-D beveled look of a form button—to trigger any of many different actions, like opening a new browser window, starting or stopping a Flash movie, or popping up a message on the screen. If you're a JavaScript programmer, you can use the button to activate your own programs.

Tip: You can also use a graphic as a Submit button, thanks to something called an Image Field, thus freeing you to be more creative with the look of the button itself. Click the Image Field button on the Insert bar, or choose Insert → Form Objects → Image Field, to select a graphic you want to use as a button. When a Web visitor clicks the image, it submits the form and all its data. (Unfortunately, Image Fields only do one thing: submit form data. You can't use them as form Reset buttons.)

Label Tag

The Label tag lets you associate a label with a particular form element, like a checkbox or text field. Of course, you can always place plain text next to a form element on the page. But because a Label tag is "attached" to a particular form element, it's more helpful in explaining the function and layout of your form to people who use assistive technologies like screen-reading software for the blind.

The Label tag button on the Insert bar's Forms tab (see Figure 11-2) doesn't do much more than switch you into Code view, and drop the <label> tag into your HTML. You're much better off inserting labels with Dreamweaver's form accessibility option, as described on page 405. However, there are some cases where you don't want to put the label directly next to the form field; for example, when using tables to lay out a form, you usually put the label in one table cell, and the form element in another. In this case, you need to jump into Code view to add a label anyway, and this button can save you a little typing.

Fieldset Tag

The Fieldset tag is a form organization tool, intended to let you group related form fields. For example, if you're creating an online ordering form, you can organize all of the "ship to" information—address, city, state, Zip code, and so on—into a single set. Again, this arrangement can help those using assistive technology to understand the organization and intent of a form.

In most of the latest browsers, the Fieldset tag also has a visual benefit. Internet Explorer 4 and above, Firefox, Safari, Opera, and other newer browsers display an attractive border around fieldsets, and add a useful label to identify the fields.

To use this tag, select the related form fields. The form fields must be next to each other onscreen, and can be organized within other HTML elements like a table. Then, on the Insert bar, click the Fieldset button (see Figure 11-2). In the Label window that appears, type a label (called, somewhat dramatically, a "Legend") for the fieldset, and then click OK.

FREQUENTLY ASKED QUESTION

Emailing the Results of a Form

I don't want to store form submissions in a database or anything fancy like that. I just want to receive an email with the information from each form submitted on my site. How do I do that?

This common function—available on countless Web sites—may seem like an easy task, but Dreamweaver doesn't supply a tool for automating the process. Basically, you need a program to collect the data, and then send it off in an email. Most Web hosting companies provide just such programs. They generally work like this: You build a form, set the form's Action property (see page 402) to point to the URL of the form-emailing program, and then add one or more hidden fields. The hidden fields contain information for the program to use—such as the email address the results should go to and the page the visitor should end up at after she submits the form. Since this form-emailing program varies from server to server, you need to contact your Web hosting company for details.

There are many commercial extensions. For basic form mailing, the Mail Form extension for ASP and PHP is available from Felix One (*www.felixone.it/extensions/dwextensionsen.asp*). Two other extensions offer much more advanced emailing features, including the ability to mass-email newsletters to email addresses stored in a database: WA Universal Email from WebAssist (*www.webassist.com/professional/products/ProductDetails.asp?PID=13*) works for ASP, PHP, and ColdFusion pages, and DMXZone (*www.dmxzone.com*) sells both an ASP and a PHP version of its Smart Mailer extension.

Dreamweaver, in addition to displaying the label you type, displays a simple border around all the fields you select. Because different browsers display this border differently, make sure to preview the page (F12, or Option-F12 on a Mac) in a recent version of Internet Explorer, Mozilla, Opera, or Safari to see both the label and the border surrounding the form elements in the set.

Validating Forms

You might get frustrated when you look over feedback that's been submitted via a form on your Web page, only to notice that your visitor failed to provide a name, email address, or some other piece of critical information. That's why, depending on the type of form you create, you might want to make certain information *mandatory*.

For instance, a form used for subscribing to an email newsletter isn't much use if the would-be reader doesn't type in an email address for receiving it. Likewise, if you need a shipping address to deliver a brochure or product, you want to be sure that the visitor included his address on the form.

Luckily, Dreamweaver CS3 introduces a new set of validation options that accomplish this exact task: Spry Form validation "widgets." (The term *widget* refers to any of the Web page elements Spry helps you create, such as the Spry menu bar, Spry validation text field, and Spry tabbed panels). With a Spry validation widget you can display a friendly "Hey, please fill this box out" message when someone tries to submit a form that's missing important information. You can specify that a particular field can't be left blank, or that it must contain information in a specific format, such as a phone number, email address or credit card number. If someone attempts to submit the form without the correct information or with the incorrect type of information, she'll be notified. And instead of popping up an annoying and amateurish JavaScript error window, Spry form validation displays error messages directly in the Web page, directly next to the faulty form field. You can even change the way the field looks (add a red background to the field, for example) to further highlight the problem.

Note: Spry validation widgets are much more useful than Dreamweaver's old Form Validation behavior. The new validation tools provide professional-looking error messages and a wider range of validation options. If you've used the Form Validation behavior in the past, switch to the Spry validation widgets, and prepare to be pleased.

Spry Validation Basics

The Spry validation widgets let you validate input received via a text field, a text area, a pull-down menu, or a checkbox. You can make sure a field is filled out, a checkbox turned on, or a selection's been made from a pull-down menu. You can require a specific type of information such as a date or a phone number, and even limit the number of letters someone can type into a text box.

Note: Unfortunately, Dreamweaver doesn't provide a way to validate radio buttons. But you can fake it using checkboxes; see the Tip on page 439.

The basic process for all form validation widgets is the same:

1. **Insert the widget.**

   Buttons for inserting the four types of Spry validation form fields are on the Insert bar's Forms (see Figure 11-2) and Spry tabs (Figure 12-2). You can also insert a Spry form field from the Insert → Form submenu. The initial steps are just like inserting any form field. The Input Tag Accessibility window appears (Figure 11-5) and you follow steps 3, 4, and 5 on page 405.

   If you've already inserted a text field, multiline text box, checkbox, or pull-down menu, you can add Spry validation to it by selecting the form element on the page, and then, on the Insert bar, clicking the appropriate Spry form button. If you want to add validation to a text field, select the text field, and then click the Spry Validation Text Field button.

   When you insert one of these widgets, Dreamweaver adds more than just the HTML needed for the form field: It also inserts a <span> tag that surrounds the form field, a label, and additional HTML for displaying one or more error messages. A Spry validation widget also adds JavaScript programming (to make sure the form field receives valid information), and CSS (to style the appearance of the field and the validation error messages).

Note: When you save a Web page after inserting a Spry widget, Dreamweaver pops up a window letting you know that it's added JavaScript and CSS files to a SpryAssets folder in the site's root folder (see the Tip on page 180).

2. **Rename the Spry widget (optional).**

   Once inserted, you can customize the form widget using the Property inspector (see Figure 11-14). Every Spry widget is assigned a generic ID like sprytextfield1, sprytextfield2, and so on. You can change this, if you wish, to something more descriptive, but for clarity's sake leave "spry" in the ID name. If you inserted a Spry text field for collecting a person's email address, you might name the widget spryEmail. Dreamweaver applies this ID to a <span> tag that wraps around the actual form field, form label, and error messages that Spry creates. Don't get this ID confused with the ID you assigned to the form field—that's a different tag that requires its own ID. That's why it's a good idea to include "spry" in the new ID you assign to the widget. If this all sounds confusing, then do yourself a favor and don't bother renaming the widget. Dreamweaver can track the IDs just fine, and since the generic name assigned by Dreamweaver is never visible on the form, no one visiting your site will know the difference.

3. **Assign a validation requirement.**

   Use the Property inspector to assign the type of validation you'd like to apply to the field. The most basic form of validation is simply requiring input from the form field. That is, ensuring that something's been typed in the text box or text area, a selection has been made from a pull-down menu, or a checkbox has been turned on. But each type of form field has additional validation options. For example, you can make sure a text field is filled with numbers in the correct format for a credit card. The specific options for each type of form field are discussed below.

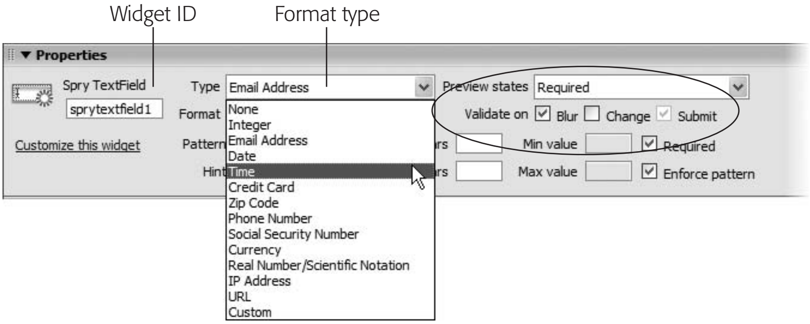
Note: Properties for a Spry widget appear in the Property inspector only when you've selected the widget (as opposed to selecting the form field itself). To select the widget, mouse anywhere over the form field until a blue Spry tab appears (see Figure 11-15); then click the tab to select the Spry widget.

4. **Select *when* validation occurs.**

   A browser validates form fields as soon as the visitor submits the form. In other words, when someone clicks the Submit button on the form, the JavaScript code in the Web page checks to make sure everything was filled out correctly. If it's not, the form does not pass Go and one or more error messages appear, letting the visitor know what went wrong.

   However, to provide more responsive feedback, you can also check to make sure the form has the right info immediately after the visitor interacts with it. Say you've added a text field to collect a visitor's email address and some wisenheimer types, "I'm not telling" instead of his email address. You could present an error message—like "This is not a valid email address"—when the form is submitted. Or you could display an error message the moment he moves onto the next form field. This kind of instant feedback can make it easier for your site visitors: They can immediately see and fix their mistake, and they don't have to wait until the form is submitted to see (and fix) all the errors they may have made.

You dictate *when* a field is validated by turning on one or both of the Property inspector's "Validate on" checkboxes (circled in Figure 11-14). Dreamweaver lets you validate a form field when the field is "blurred," "changed," or both. "Blur" doesn't mean the form field suddenly gets fuzzy; blur simply refers to the moment when the visitor clicks on another form field or another part of the page. If you type something into a text box, and then click the Tab key to jump to another form field, the text box is considered "blurred." Or if you type into a text box, and then click somewhere else on the page, that text box also becomes blurred. This blurred state is a great time to validate a text field, because you know the visitor is done providing input into that field the moment he tabs to the next field.



Spry TextField sprytextfield1

Type Email Address

Preview states Required

Validate on ☑ Blur □ Change ☑ Submit

Min value

Max value

☑ Required

☑ Enforce pattern

Figure 11-14: *Depending on the type of form field, Spry validation can check for different types of input. In the case of a text field, pictured here, Dreamweaver lets you verify that the visitor input text conforms to one of 14 different formats.*

You can also validate a field when it's changed. This happens when someone types into a text field, for example. In fact, each letter the person types is a "change" to the field, so the field is validated following each keystroke. This quality can be a bit annoying, since an error message might appear the moment you start typing. With email address validation, the JavaScript that validates user input is looking for text in the form of *bob@cosmofarmer.com*. So say Bob clicks into the field and starts to type. The moment he hits the 'b' key, the field is changed, and its contents are validated. Since 'b' isn't a proper email address format, an "Invalid Format" message appears on the page. That's a bit rude. In this case, the "blur" option is better, since it waits until the visitor has finished filling out the field.

On the other hand, validating a pull-down menu field when it changes can be quite useful. Say you've added a pull-down field to a form, and the first option is "Please make a selection." Obviously, you want people filling out the form to select something other than that initial "Please make a selection" option. Imagine someone starts to fill out the form and selects an item on the pull-down menu; then, for whatever reason, she goes back to the menu and chooses "Please make a selection." This option isn't valid, and the visitor should be notified immediately. If you validate the form when it changes, an error message pops up the moment she chooses "Please make a selection." On the other hand, if validation occurs when the menu is "blurred," the visitor is notified only after she's clicked somewhere else on the page—in other words, a few moments later, rather than immediately.

In general, "blur" works best for text fields and text areas, while "change" is better for checkboxes and pull-down menus.

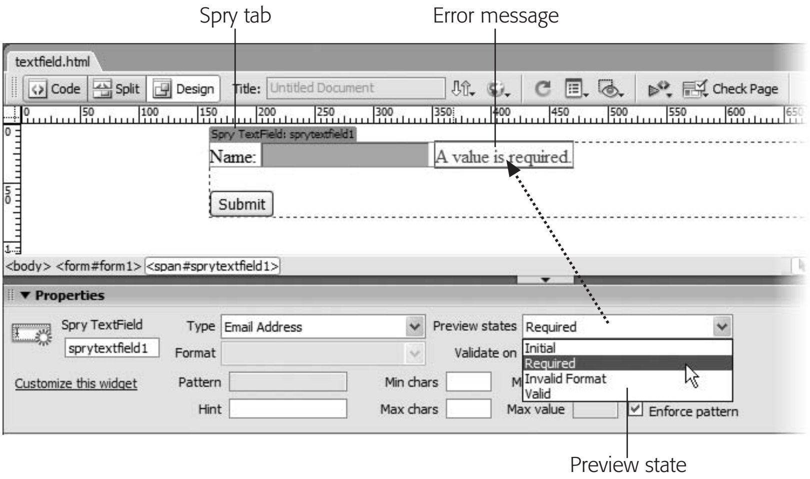
5. **Set other options for the widget.**

   Some widgets have other settings that can come in handy. For instance, you can limit the number of letters someone can type into a text area validation widget; and in text field widgets, you can add a helpful "hint" (like "Type your name in this box," which would appear inside the text field). These options are discussed below.

6. **Modify the error messages.**

   Preventing incomplete visitor input solves only part of the problem. When a visitor leaves a required field blank, or types incorrect information into a field, you need to let him know what went wrong, so he can fix it. Every form validation widget includes one or more error messages. An error message appears next to a form field if the contents of the field aren't successfully validated: Different error messages appear under different circumstances. For example, a Spry validation text field displays the message "A value is required" if the field is left blank, or "Invalid format" if the field isn't empty but has the wrong type of response—a word instead of a year in a "What year were you born?" field, for instance.

   You can customize each of these error messages by selecting the proper "preview state" from the Property inspector (see Figure 11-15). After selecting a preview state, Dreamweaver changes the display of the page in Design view. In Figure 11-15, selecting "required" displays the error message that appears if the form is submitted but this field is left blank.



Name: A value is required.

Spry TextField sprytextfield1

Type Email Address

Preview states Required

☑ Enforce pattern

***Figure 11-15:** Click the blue Spry tab to select a Spry validation widget. This way is the only way to display the widget's properties in the Property inspector. If you click the form field (text box, checkbox, or pull-down menu), you see just the regular form field properties, discussed on page 408.*

To change the message, select the text in Design view, and then type a new error message. It's generally a good idea to come up with a friendly and descriptive message. If a text field is programmed to accept a date in a particular format, you might change the "invalid format" error message to something like "Please enter a date in this format: 02/27/2007."

Warning: Validation error messages are wrapped in <span> tags. It's easy to select the error message and the <span> tag at the same time. If this happens and you type a new error message, the <span> tag is deleted, and the error message you add *always* appears, even before the visitor has touched the form! To prevent this message, select everything but the error message text's final period, and then type the new error message. This precaution makes sure you insert the new message inside of the <span>–right where it belongs.

Most validation widgets have more than one error message, so make sure you preview each of the different "states." Some preview states have no error message, so you're just previewing how the page will look in the selected state. For example, there's no error message when the form first loads, so the "Initial" option in the preview state menu just shows what the form field looks like when the form page is first visited. Every other widget except for the checkbox widget also includes a "valid" preview state. This is how the form field looks when input is received. There's no error message in this instance, but the form field's background changes to green. You create this green formatting with CSS, which you'll learn to modify next.

Formatting Spry Error Messages and Fields

Spry's error messages are red with a red outline. Fortunately, you're not stuck with this factory setting. CSS controls the display of Spry widgets; a single style, for example, controls the "invalid" error message's formatting. Each Spry validation widget (text boxes, text areas, menus, and checkboxes) has its own external style sheet. The style sheet is named after the type of widget: The style sheet for a Spry validation text field is named SpryValidationTextField.css. When you insert a Spry validation widget, Dreamweaver adds the style sheet to the SpryAssets folder in your site's root folder (see page 180).

Fortunately, you don't have to hunt and peck through the .css file to modify an error message's style. By using Dreamweaver's CSS Styles panel's Current view, you can easily identify the proper style and edit it. Here's how:

1. **Open the CSS Styles panel (see Figure 11-16).**

   For example, choose Window → CSS Styles, or Shift-F11 on Windows.

2. **At the top of the panel, click the Current button.**

   The Current view shows the styles and properties that apply to a given selection in the document window.

3. **Make sure the Cascade button is pressed (Figure 11-16).**

The Cascade button activates the Rules pane in the middle of the CSS Styles panel. It displays all CSS styles that apply to the selection in the order of their specificity—least specific on top, most specific on bottom. The style that most directly applies to the given selection is listed last.

4. **Select the Spry validation widget.**

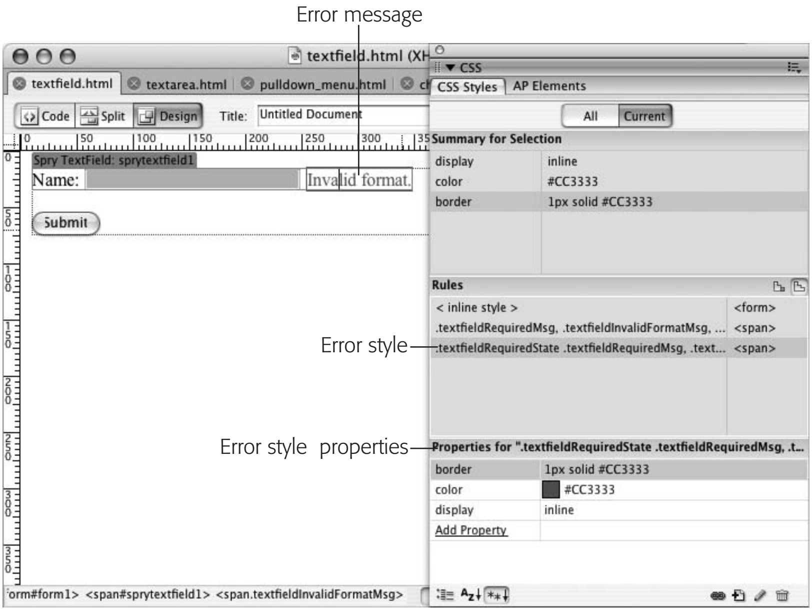
   To select the widget, mouse anywhere over the form field until a blue Spry tab appears (see Figure 11-15); click the tab to select the Spry widget.

5. **Select the preview state you wish to format from the Property inspector's "Preview states" menu.**

   The error message for the selected state appears. In addition, the preview state may also include formatting for the form field itself; for example, a text field in its "valid" state has a green background. You can adjust the formatting of that field as well.

6. **In the document window, click inside the error message or select the form field you wish to format.**

   The style appears in the CSS Styles panel's Rules pane (see Figure 11-16). The style's name is a rather long-winded descendent selector (like *.textfieldRequiredState .textfieldRequiredMsg*). In addition, several descendent selectors are usually lumped together in a group style (see page 288 for details on group styles). You don't really need to pay attention to the name, however, since you've already identified the style you're going to edit.



Title: Untitled Document

Spry TextField: sprytextfield1

Name: Invalid format.

orm#form1> <span#sprytextfield1> <span.textfieldInvalidFormatMsg>

Summary for Selection

display	inline
color	#CC3333
border	1px solid #CC3333

Rules

< inline style >	<form>
.textfieldRequiredMsg, .textfieldInvalidFormatMsg, ...	<span>
.textfieldRequiredState .textfieldRequiredMsg, .text...	<span>

Properties for ".textfieldRequiredState .textfieldRequiredMsg, .t...

border	1px solid #CC3333
color	#CC3333
display	inline

Figure 11-16: *Adjusting the formatting of a Spry validation error message is as easy as clicking inside the error message, identifying the style in the Rules pane, and, in the Properties pane, editing the style properties.*

Note: When formatting an error message, just click inside the text. Don't try to select the entire message–if you do, you might select more than the error message, and the CSS Styles panel won't reflect the correct style.

7. **Edit the style's properties.**

   You can do this most easily by double-clicking the style's name in the Rules pane; this action opens the CSS Rule Definition window, where you can edit CSS properties as with any other style (see page 124). You can also use the Properties pane for a more rapid edit: To quickly change the text color, for instance (see page 289 for more on how to use the Properties pane to edit and set CSS properties).

Tip: Spry error messages are presented inside <span> tags, which are displayed inline (meaning on the same line as the form field). If you want to put the error message on its own line, change the *display* property from inline to *block* (the chapter-ending tutorial includes an example of this trick on page 444).

In addition, you can move the <span> tags containing the error messages, and even change them from a <span> to a <div> or <p> tag. The exact tag type doesn't matter–but if you do change the tag type (from span to p, for instance), make sure the class name remains the same. Spry depends on the proper class name to identify the error message. If you move the error message, it must remain inside the outer <span> tag that forms the Spry validation widget. You'll see an example of this in the tutorial on page 453.

A few other styles affect the appearance of Spry form fields, but you can't preview or adjust them using the method just described. For example, when you click into a Spry-enabled text field, its background color changes to yellow; when you click a Spry menu, its background also changes to yellow (in all browsers except Safari). These different colors are applied to what's called the field's "focus state"—the moment a visitor interacts with the field. The styles to control these focus states are:

- **Text field focus style:** ***.textfieldFocusState input, input.textfieldFocusState***. This style is located in the SpryValidationTextField.css file.
- **Text area focus style:** ***.textareaFocusState textarea, textarea.textareaFocusState***. This style is located in the SpryValidationTextarea.css file.
- **Menu focus style:** ***.selectFocusState select, select.selectFocusState***. This style is located in the SpryValidationSelect.css file. While Internet Explorer and Firefox let you use nearly any CSS style to format a menu, Safari lets you change only the font family, color, and size of pull-down menus.

In addition, another special style formats text fields and text area boxes when a visitor presses an invalid key on the keyboard (see the Tip on page 433).

Note: Styling form fields can be frustrating. Not all browsers format form fields in the same way, and some browsers limit what kind of styling you can apply to a form field. For a good introduction to styling form fields, visit *www.456bereastreet.com/archive/200701/styling_form_controls_with_css_revisited*.

Spry Text Field

Spry text fields have the most options of any Spry form validation widget. Dreamweaver gives you 14 different validation types as well as several other settings, such as an option to limit the minimum and maximum number of characters.

First you should decide whether the field is required, and if it is, then, in the Property inspector, turn on the Required box (circled in Figure 11-17). A form frequently has some fields that are required (an email address to sign up for a newsletter, for instance). Sometimes a response is optional, such as when you add a field for someone to add a phone number. In this case, you don't turn on the Required box. But you still want to use a Spry field, so that you can make sure any phone number that *is* submitted is formatted accurately.

Validation types

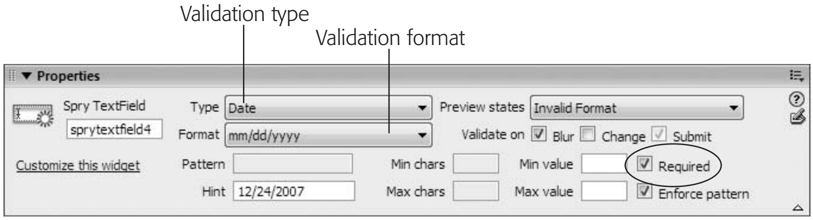
To make sure your visitors supply the appropriate information for your forms, you frequently validate the contents of a field to make sure the data is formatted correctly: that a required zip code isn't just a series of letters, for instance. In the Property inspector, use the Type menu (see Figure 11-17) to assign one of 14 possible validation options:

- **None**. This is the default setting: no validation. The contents of the field aren't inspected to make sure they match any particular format. You use this setting, in combination with the "Required" checkbox, when you don't care what someone types, just that they enter something: like a field used to capture visitor comments.

Note: When you assign any validation option other than "None," Dreamweaver adds an "Invalid Format" error to the page. You can change this error message, as described on page 426.

- **Integer**. Use this to verify that a whole number was typed into the field, like a field asking for someone's age or a year of birth. The integer option checks for a whole number, so if someone types 1.25 into the field, it doesn't validate: The form doesn't submit, and an "Invalid format" error appears. (If you *do* want to allow decimal values, then use the Real Number option discussed below.)

  If you specify integer validation, you can also assign minimum and maximum allowed values as discussed on page 434.



Spry TextField
sprytextfield4
Customize this widget
Type Date
Format mm/dd/yyyy
Pattern
Hint 12/24/2007
Min chars
Max chars
Preview states Invalid Format
Validate on ☑ Blur □ Change ☑ Submit
Min value
Max value
☑ Required
☑ Enforce pattern

Figure 11-17: *Spry validation text fields provide multiple options for managing user input.*

- **Email.** This option looks for a validly formatted email address (like *missing@sawmac.com*). It can't actually make sure that the email address itself is real, however. Someone could still enter a fake email address *nobody@nowhere.com*; but this option at least makes sure an honest visitor doesn't make a typo.
- **Date.** When you require a specific date, use this option. If you created a form for scheduling the use of a meeting room at the office, you could add a "Date needed" field to the form. A date is composed of the month, day of the month, and the year, which can be formatted in many different ways: 12-02-2007, 12/02/07, 02.12.07, and so on. To specify the format you want, use the Property Inspector's Format menu (see Figure 11-17).

Note: With data validation, the option *yyyy* means the field must have the full year (2007) to be valid. However, *mm* and *dd* both allow single digit values—for example, 1 for January, or 2 for the second day of the month. An initial zero (01 or 02) isn't required.

A month is indicated by *mm*, the day by *dd* and the year by *yy* (for just the last two digits of the year: 07) or *yyyy* (for a complete year: 2007). Separators like / and the hyphen (–) are also used to separate the month, day, and year values. So, for example, the option *mm/dd/yyyy* means that 1/2/2007 and 12/15/2007 would both be valid inputs, but 1-2-2007 or 12/15/07 would not.

Tip: If data from a date form field will eventually be stored in a MySQL database in a MySQL DATE field, then choose yyyy-mm-dd as the format option. That matches the date format for MySQL.

- **Time.** This option validates a time in one of several different formats such as 12:15 PM or 23:15. You could use it along with a date field to capture the exact time of an event: A meeting room scheduling form might include a "What time does the meeting begin?" field, and another field to specify an ending time. As with the Date format, Time validation requires that you specify a particular time format using the Property inspector's Format menu. *HH* indicates the hour specified using 24-hour time: 13 for 1 p.m., for example; *hh* is the hour; *mm* is minutes; *ss* indicates seconds; *tt* is before-noon and afternoon notation (that is, a.m. or p.m.); *t* indicates time of day using just a single letter, A or P.

  For example, the HH:MM option would validate 13:35, but not 01:35 PM (a zero is required for single digit hours, minutes, and seconds). The hh:mm:ss tt option requires a time to be formatted like this: 01:35:48 PM.

Tip: Whenever you require a visitor to type information in a specific format—12:45 PM, for instance—be sure to include clear instructions on how to fill out the form. Something like, "Please enter the time you'd like to reserve, using this format: 12:45 PM." You can also take advantage of a Spry text field's Hint setting, as described on page 433.

- **Credit Card.** An e-commerce site wouldn't be much good if you didn't provide a way for someone to pay for your products. To make sure a validly formatted credit card number is entered into a field, choose this option. If you accept only one type of credit card—like Visa or Mastercard—you can specify the acceptable type of card using the Property inspector's Format menu. As with email addresses, this validation format checks only to make sure the number is formatted correctly—it can't actually check to see if this is a real (and not stolen!) credit card.

Note: Be careful accepting credit card numbers online. An awful lot of responsibility goes along with taking someone's credit card number, as well as potential liability if the card was stolen, or someone manages to steal credit card numbers you collect. For an introduction to online payment processing, check out *http://particletree.com/notebook/processing-online-credit-card-transactions/*.

- **Zip Code.** To mail a brochure, T-shirt, book, or any product your site distributes, you'll need a zip code. Use the Zip Code validation format to make sure the Zip code you receive is formatted correctly. The Format menu lets you specify a type and country. For example, US-5 means a 5 digit US Zip code like 97213, whereas US-9 is the 9 digit format composed of 5 digits, a hypen, and 4 more numbers: 97213-1234. You can even create your own Zip code format by specifying a custom pattern (see page 432).

- **Phone Number.** Use the Format menu to choose a US/Canada phone number format, or select Custom Pattern, which you then define in the Pattern field as described on page 432. The US/Canada phone format has to be entered like this: (555) 555-1234. The parentheses, space, and hyphen are required. For an alternative style, see page 433.

- **Social Security Number.** This option requires three numbers, a hyphen, two numbers, a hyphen, and three more numbers, like this: 555-12-4888. You might want to avoid requesting Social Security numbers: For reasons of privacy and fear of identity theft, many people are reluctant to disclose their Social Security numbers, and by law, they don't have to share these numbers with anyone.

- **Currency.** If you require someone to specify a monetary amount in a field—"How much money would you like to contribute to the home for wayward Web designers?"—then choose the currency option to validate their responses. You can choose between US and European formatting. US format is like 1,000.00, while in Europe the same value is expressed as 1.000,00. The comma (period for European value) that's used to indicate a thousands position—1,000—is optional. Both 1000.00 and 1,000.00 are considered valid. However, an opening $ or € sign won't be accepted; so if a visitor enters $1,000.00 into a currency field, he gets an "Invalid format" error message.

- **Real number/Scientific Notation.** To allow decimal points in a field intended to capture numeric values, use this option. For a serious, scientific audience, numbers can even be entered using scientific notation: 1.231e10.

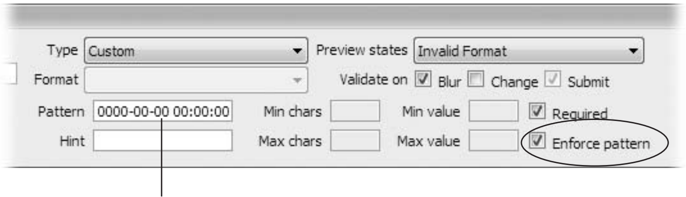
- **IP Address**. Because we all like having people type the unique set of numbers that identify a computer on the Internet, you can make sure only properly formatted IP addresses (like 192.168.1.1) are accepted. The Format menu lets you choose between the current IPv4 and (the newer, not yet adopted) IPv6, or both—oh, please…
- **URL**. Make sure visitors enter proper Web addresses using this option. For example, use this option for a form field requesting the address of a favorite Web site. The address has to include the protocol (http://) as well. So *http://www.sawmac.com/* is valid, but *www.sawmac.com* isn't.
- **Custom**. If you're unhappy with the validation options Dreamweaver offers, you can create your own as described next.

Custom validation

If you need to make sure information is entered in a very precise way, and one of Dreamweaver's predefined validation types don't fit the bill, you can create your own custom validation format. Say your company has an internal ID system for employees. Each employee is assigned an ID composed of three numbers, a hyphen, followed by the first three letters (in uppercase) of the person's last name: like 348-MCF. You can create your own custom validation "pattern" to enforce this format. If a visitor's input matches the pattern, the data is considered valid and the form can be submitted. If the input doesn't match the pattern, then an error message appears.

A pattern is just a series of symbols that indicate acceptable input; each letter in the pattern has a special meaning that defines the valid character type. AAA means "Accept three uppercase letters in a row as valid." To create your own custom validation, select a Spry text field widget, choose Custom from the Property inspector's Type menu, and then type the pattern into the Pattern field (see Figure 11-18). Here's a key to the symbols you use to create a pattern:

- **0** means a whole number between 0 and 9. If you want to make sure that someone enters five digits, type *00000* in the Property inspector's Pattern field. This pattern is the same as a five-digit Zip code.
- Type **A** to indicate a single uppercase alphabetic character. The pattern, A0A, for instance, is good for an uppercase letter, followed by a number, followed by another uppercase letter, like U5U.
- A lowercase **a** identifies a lowercase alphabetic character. The pattern *aaa*, then, matches *abc*, but not *ABC*.
- To accept either an uppercase or lowercase letter, use **B**. The pattern *BBB* matches both *abc* and *ABC*.
- To include numbers along with uppercase letters, use **X**; the letter **x** matches both numbers and lowercase alphabetical characters. Use **Y** for a case-insensitive match for numbers and letters. *XXX* matches *B2B*, *BBB* and *123*, but not *b2b* or *bbb*.



Type: Custom

Preview states: Invalid Format

Format:

Validate on ☑ Blur □ Change ☑ Submit

Pattern: 0000-00-00 00:00:00

Min chars

Min value

☑ Required

Hint

Max chars

Max value

☑ Enforce pattern

Validation pattern

Figure 11-18: *Are Spry's validation types not enough for you? Create your own by creating a pattern that a form field's input must match in order to validate.*

- Finally, use ? as a kind of wild card. It stands in for any character whatsoever, and you should use it when a character other than a letter or number (like a period, !, or $ symbol) is also valid.

You can include any required symbol, like a period, comma, or hyphen, as part of the pattern. In the employee ID example discussed at the beginning of this section, the pattern to match that format would be 000-AAA. In other words, three numbers, a hyphen, and three uppercase letters. The pattern to match a phone number entered in this format (503-555-1234) is 000-000-0000. And the pattern to match the MySQL DATETIME format is 0000-00-00 00:00:00.

Enforcing a pattern

You can make sure incorrect characters aren't even allowed into a form field by turning on, in the Property inspector, the "Enforce pattern" checkbox (circled in Figure 11-18). When this option is selected, the form field doesn't let anyone enter invalid characters.

Suppose you added a Spry text field, and then set its validation type to Zip code using the US-Zip5 format. That box can accept only digits, and only five digits at that. If the "Enforce pattern" option were turned on for this field, then a visitor could type only five numbers into the field. If a visitor clicks into the field, and types the letter A, nothing happens. If the visitor types five numbers, and then any other character (like another number or even a letter), that sixth character never appears.

You can choose the "Enforce pattern" option for any validation type except *None.* It even works with custom patterns that you create.

Tip: When someone types invalid characters into a form field that has the "Enforce pattern" option set, any text inside the box flashes bright red to indicate a problem. If you want to change that color, you can edit the styles responsible. For text fields, the style is a group selector named ".textfieldFlashText input, input.textfieldFlashText" in the SpryValidateTextField.css file. A similar style named ".textareaFlashState textarea, textarea.textareaFlashState" in the SpryValidationTextarea.css file applies to text area fields.

Supplying a hint

As mentioned in the Tip on page 430, when you require a very specific format for a form field, you should provide clear instructions on how visitors should fill out the field. These instructions might appear next to the label or below the form field.

Dreamweaver also lets you add a short “hint” inside a Spry text field. This hint appears when the form first loads, but the moment a visitor clicks into the field, the hint disappears; visitors are then free to type a response.

To add a hint, select the Spry widget, and then enter what you want to appear in the Property inspector’s Hint field (see Figure 11-17).

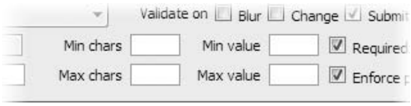
Since text fields are relatively short, the hint shouldn’t really be instructions on what to type. Instead, hints work best if they’re examples of the format the field requires. If the form field is intended to collect an email address, the hint might be *your_email@your_site.com*. If you’re looking for a phone number and use the phone number validation type (page 431), you should add a sample phone number like this: (555) 555-1234. This lets visitors know that they should include the parentheses and hyphen.

Limiting characters and enforcing a range of values

At times you may want to control how much or how little text someone types into a form field. If you’ve created a form to sign up new members to your “members-only” Web site, you might want to make sure any passwords they sign up for have at least 10 characters, but no more than 15. As you’ve read, you can control the maximum number of characters entered into a text field with a text field’s “Max chars” property (see page 409). However, HTML provides no way to require *at least* a certain number of characters; setting the “Max chars” property doesn’t alert a visitor when she’s typed the maximum number of allowable characters.

With Spry text fields, you can set both, using the Property inspector’s “Min chars” and “Max chars” fields (see Figure 11-19). Select the Spry widget by clicking the blue Spry tab that appears when you mouse over a Spry text field; then type the minimum number of allowable characters in the “Min chars” field, and the maximum number of allowable characters in the “Max chars” field. You can fill in either field, both, or neither. In the password example from the previous paragraph, you’d type *10* in the “Min chars” box and *15* in the “Max chars” box.

Each setting has its own error message that you can view and edit by choosing the appropriate state from the Preview States menu (see page 425). The error message for the minimum number of characters is “Minimum number of characters not met.” You should change the error message to something more descriptive like “Your password must be at least 10 characters long.”



Validate on □ Blur □ Change ☑ Submit
Min chars
Min value
☑ Required
Max chars
Max value
☑ Enforce

Figure 11-19:
Go ahead, be a dictator. The Spry text field validation widget even lets you control how many characters someone can type into a field.

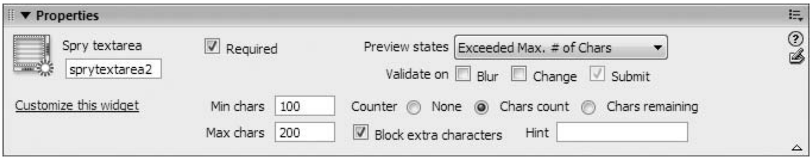
Some types of validation also let you enforce a range of values. If you select the Integer validation type (see page 429), the “Min value” and “Max value” boxes in the Property inspector (see Figure 11-19) become active. Say you include a question on a form that reads, “Please rate our service quality from 1 to 10,” and supplies a text box for a response. In this case, set the “Min value” to 1 and the “Max value” to 10; that way answers like 100, or -10 aren’t allowed.

You can also set Min and Max values for other numeric validation types like currency (page 431) and real numbers (page 431). These two settings even work with the date and time validation types (page 430). Say you’re offering rebates to anyone who bought your product before a certain date—08/05/2007, for instance; the online rebate form includes a “Date purchased” field. In this instance, you can choose the Date validation type, select mm/dd/yyyy from the Format menu (see page 429), and then type 08/05/2007 into the “Max value” field. If someone who bought the product on 09/15/2007 tries to claim the rebate, they get an error when they fill out the form.

Note: Setting a Min and Max value for a text field that uses Time validation works reliably only if you use 24-hour time (like 18:00 for 6:00 PM). If you use one of the formats that requires a.m. or p.m., you can end up with inaccurate results. Spry treats 12:00 PM (noon) as later than 5:00 PM, and 8:00 AM as earlier than 12:00 AM (midnight).

Spry Text Area

A Spry text area has far fewer validation options than a normal text field. You can’t select a type of validation or enforce a pattern on the text box’s contents. However, the Property inspector for a Spry text area widget does let you specify whether content is required; dictate the minimum and maximum number of characters allowed; and supply a “hint” that appears inside the text area box when the form page first loads (see Figure 11-20). (These options works just like those for a text field, as described on page 434.)



Spry textarea: sprytextarea2

☑ Required

Preview states: Exceeded Max. # of Chars

Validate on □ Blur □ Change ☑ Submit

Min chars: 100

Max chars: 200

Counter ○ None ● Chars count ○ Chars remaining

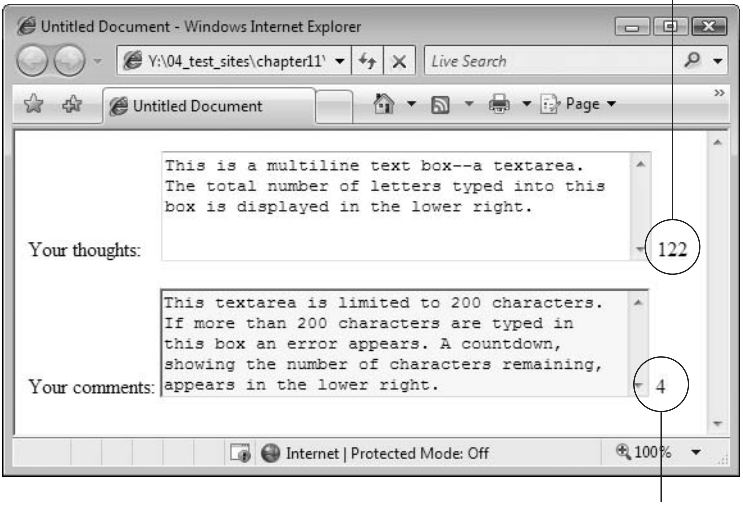
☑ Block extra characters

Hint:

Figure 11-20:
If you turn on the “Block extra characters” checkbox after you set a value in the “Max chars” field, anything someone types beyond the maximum character limit doesn’t appear. HTML provides no way to limit the amount someone can type into a multiline text box, so this Spry feature offers a nice workaround. (Also note that the error message that normally appears when someone exceeds the maximum number of characters doesn’t appear if the “Block extra characters” option is turned on.)

In addition, you can include a counter alongside the text area that indicates the total number of characters that have been typed into the box. Maybe you want to limit the amount of feedback a visitor can type into a multiline text box, so you add a message like "Please limit your feedback to under 300 letters." If you select the "Chars count" radio button, when the Web form is viewed in a Web browser, a counter appears next to the text area. As letters are typed into the box, the counter value increases to show the number of letters typed (Figure 11-21, top text box).

If you specify a maximum number of allowable characters in the "Max chars" field, you can instead select the "Chars remaining" button (see Figure 11-20). Instead of displaying the number of characters inside the text area, it displays how many characters are still allowed (see Figure 11-21, bottom text box).


Untitled Document - Windows Internet Explorer
Y:\04_test_sites\chapter11\
Live Search
Untitled Document
Page
Internet | Protected Mode: Off
100%

Total number of characters typed

Your thoughts:

```
This is a multiline text box--a textarea.
The total number of letters typed into this
box is displayed in the lower right.
```

122

Your comments:

```
This textarea is limited to 200 characters.
If more than 200 characters are typed in
this box an error appears. A countdown,
showing the number of characters remaining,
appears in the lower right.
```

4

Total number of characters remaining

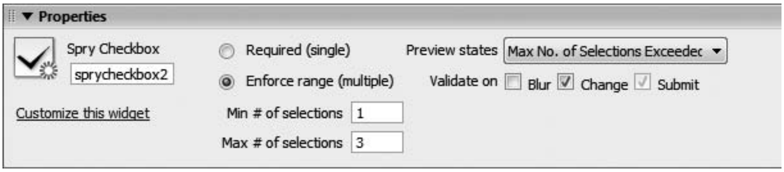
Figure 11-21:
A Spry text area can include feedback regarding how many letters have been typed into a multiline text box (top). It's also possible to display a countdown that shows how many letters are still allowed before the limit is reached (bottom).

Both of these counters are helpful, but unfortunately, there's no context provided for the numbers: 128? 128 what? Letters remaining, or letters already typed into the box? To add a message that appears next to the number, you have to go into Code view. The best method is to select the text area field in Design view; click the Code view button; then look for a <span> tag that looks something like: <span id="countsprytextarea2">&nbsp;</span>. In this example, "sprytextarea2" is the name of the Spry widget. You must add your message either before or after the span tag, but not inside the span. The code above could be changed to "<span id="countsprytextarea2">&nbsp;</span> characters remaining" for a text area with the "Chars remaining" option turned on. In this way, a visitor would see something like "128 characters remaining."

Spry Checkbox

The Spry validation checkbox lets you make sure a particular checkbox has been selected. This checkbox is useful for those ubiquitous "I agree to your rules and conditions" checkboxes. In addition, you can add several checkboxes as a group and require that the person filling out the form selects a minimum number ("Please make at least two choices") or a maximum number ("Please choose no more than two") of options.

To add a single Spry checkbox, choose Insert → Form → Spry Validation Checkbox, or click the Spry Validation Checkbox button on the Insert bar's Forms tab (Figure 11-2). The Spry checkbox that appears on the page already has the "Required" option selected in the Property inspector (see Figure 11-22). If you want just a single checkbox that visitors must check in order to submit the form, you're done. But beyond the kind of "You must turn on this checkbox to free us from all legal responsibility" scenario, a single, required checkbox isn't so useful. After all, checkboxes more commonly come in groups as part of a multiple-choice question.



Properties

Spry Checkbox: sprycheckbox2

○ Required (single)

● Enforce range (multiple)

Min # of selections: 1

Max # of selections: 3

Preview states: Max No. of Selections Exceedec

Validate on: □ Blur ☑ Change ☑ Submit

Figure 11-22: *Use the Spry validation checkbox widget to make sure your site visitors turn on a checkbox (in cases where you want this to happen, of course).*

Unfortunately, Dreamweaver doesn't include a simple "Add a group of checkboxes" tool. If you insert several Spry checkboxes in a row, they're each inside their own Spry widget, and each is separately validated. Nor can you insert a bunch of regular checkboxes, select them, and then apply the Spry validation checkbox to them.

To create a group of related Spry checkboxes, you need to either go into Code view or do a delicate keyboard dance to insert all of the necessary code just right. The tutorial starting on page 440 presents the method that requires going into Code view. If you want to stay in Design view, here's a method for inserting a group of checkboxes that are validated together.

1. **Insert a Spry checkbox.**

   Use either the Insert → Form menu or the Insert bar. Dreamweaver inserts a checkbox, and the familiar blue Spry tab appears. Let's assume you added a label to the right of the checkbox, and you want to add another checkbox to the right of the one you just inserted.

2. **Click the label text (see top image in Figure 11-23).**

   Assuming you added a label (see page 405), your goal is to move the cursor *outside* the <label> tag for the current checkbox. If you simply click to the right of the label to insert the next checkbox, one of two (bad) things can happen. Either you insert another checkbox inside the first checkbox's <label> tag—when this happens Dreamweaver gets really confused and omits a <label> tag for the new checkbox. Or, you insert the checkbox outside the Spry widget, meaning the new checkbox isn't validated along with the first checkbox.

3. **Press the right arrow key until the <label> tag disappears from the Tag selector, but you still want to see something like <span#sprycheckbox1> (Figure 11-23, bottom image).**

   Once again, the Tag selector comes to the rescue. When you no longer see <label> in the Tag selector, the cursor is outside the label, and you can now insert another checkbox. The <span#sprycheckbox1> identifies the tag responsible for the Spry checkbox widget. As long as you still see that in the Tag selector, the next checkbox you insert receives Spry validation.

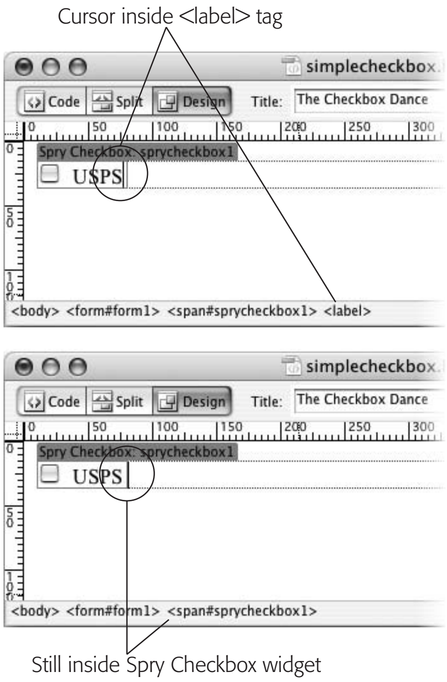

Cursor inside <label> tag
simplecheckbox
Code
Split
Design
Title: The Checkbox Dance
Spry Checkbox: sprycheckbox1
USPS
<body> <form#form1> <span#sprycheckbox1> <label>
simplecheckbox
Code
Split
Design
Title: The Checkbox Dance
Spry Checkbox: sprycheckbox1
USPS
<body> <form#form1> <span#sprycheckbox1>
Still inside Spry Checkbox widget

Figure 11-23:
If you want to include multiple checkboxes in a single Spry checkbox validation widget, you need to first insert a Spry checkbox, then insert additional regular (non-Spry) checkboxes. The trick is making sure you don't insert the new checkbox inside the <label> tag of another checkbox (top), but still insert the new checkbox inside the Spry validation widget's code (bottom).

4. **Insert a *regular (non-Spry)* checkbox as described on page 411.**

   The cursor is already inside a Spry checkbox widget, so don't insert a Spry checkbox.

5. **Repeat steps 2–4 to insert as many additional checkboxes as needed.**

   You can add as many checkboxes as you want. As long as they're inserted inside the Spry widget, they'll be part of the validation process.

Note: If you want to place each checkbox in its own paragraph, you must change the <span> tag used for the Spry checkbox validation widget to a <div> tag. According to the rules of HTML, a <span> tag can't be wrapped around block level elements such as paragraphs. Just go into Code view, locate the <span> (which should look something like <span id="sprycheckbox1">), and then change *span* to *div*. Then locate the closing </span> tag, and change it to </div>.

6. **Click the blue Spry tab to select the widget; in the Property inspector, select the "Enforce range" button, and then type numbers in the "Min # of selections" and the "Max # of selections" fields (see Figure 11-22).**

   You don't have to fill out both the Min and Max fields. If you have a question like "What type of food do you like (select as many as apply)," you might choose 1 for "Min # of selections" but leave the Max field blank. This way, you require at least one choice, but the visitor is free to choose as many other options as she wants.

   Or, you might have a question like "Select your four favorite foods." In this case, you'd type *4* in the Max field, since you don't want more than four answers. (You could also type *4* in the Min field if you want to make sure you get no more or less than four choices.)

Tip: There's no Spry validation available for a group of radio buttons, but you can get the same effect using a group of checkboxes inside a Spry validation widget: Choose the "Enforce range" button, and then type *1* in both the Min # and Max # of selections boxes.

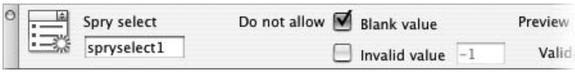
Spry Select

The Spry validation select widget validates the selection of pull-down menus and has two options to determine if a selection in the menu is valid or not (see Figure 11-24). Remember that a pull-down menu (created with the <select> tag) consists of a label and a value (see page 414). The label is what someone sees when he makes a selection from the menu, and the value is what's sent over the Internet when the form is submitted.

With a Spry menu, you can prevent a form from submitting, and instead display an error message if the current menu selection has no value set or has a particular "invalid" value set. Say you have a menu listing all the months of the year. The label is the month's name and its value is a number (see Figure 11-24). Suppose you added "Please select a month" as the first item on the menu. This is a common technique to let visitors know what's listed on the menu and what they should select from the menu. Of course, when the form is submitted, you want to make sure a month and *not* "Please select a month" is selected.

Note: Although Dreamweaver inserts a pull-down menu when you insert a Spry validation select widget, you can convert the menu to a list, as described on page 414. The same validation options apply.

To prevent a visitor from submitting the form without selecting a month in this scenario, just leave the value for the "Please select a month" label blank, and turn on the "Blank value" checkbox for the Property inspector's "Do not allow" option (see Figure 11-24). With this setting, if the visitor selects a month (say February), there is a set value (2, for instance) and the menu validates. However, if she doesn't make a selection, the "Please select a month" choice (which has no value) invalidates the menu, and prevents the form from submitting.


Spry select spryselect1

Do not allow ☑ Blank value

☐ Invalid value -1

Figure 11-24:
Remember: You see validation options only when the Spry widget (represented by a blue tab in the document window) is selected. Clicking on the actual form field (clicking a form menu in Design view, for instance) just selects the field, not the widget.

Sometimes the label and the value are the same. On a menu with a list of years ("What year were you born?"), for example, the label ("1967") is the same as the value ("1967") and it would be a bit redundant to set both the label and value for each menu item. Fortunately, you don't have to double your effort in this case. As you read on page 415, a label doesn't require a value. If no value is specified, the label is submitted as the value.

When there are no assigned labels, the "Blank value" validation option doesn't work. After all, even valid selections don't have a value explicitly set—just a label. In this case, use the "Invalid value" option. To use this option, just assign an arbitrary value to an illegitimate menu selection, and specify that value in the text box to the right of the Property Inspector's "Invalid value" text (Figure 11-24). For example, the first menu option on the list of years might be "Please select a year." Just assign a value (like -1) to that menu option in the List Values window (page 415). Then select the Spry widget, and specify the same value in the Property inspector's "Invalid value" field. (See page 414 for more on assigning labels and values to form menus.)

Tip: If your form menu has a long list of options, you might add a separator (like a row of hyphens, ----------) as a label, in order to divide groups of options. You could either forego assigning a value to that separator and use the "Blank value" validation option, or assign it an invalid value (like -1) and use the "Invalid value" setting. In this way, if someone accidentally selects the separator, she can't submit the form.

Forms Tutorial

In this tutorial, you'll build a simple newsletter sign-up form for *The CosmoFarmer* Web site (see Figure 11-36). To make sure the folks at CosmoFarmer receive the right information, you'll also use the Spry form validation tools.

Note: You'll need to download the tutorial files from *www.sawmac.com/dwcs3/* to complete this tutorial. See the note on page 39 for more details.

Once you've downloaded the tutorial files and opened Dreamweaver, define a new site as described on page 28: Name the site *Forms,* and then select the Chapter11 folder (inside the MM_DWCS3 folder). (In a nutshell: Choose Site → New Site. In the Site Definition window, click the Advanced tab, type *Forms* into the Site Name field, click the folder icon next to the Local Root Folder field, navigate to and select the Chapter11 folder, and then click Choose or Select. Finally, click OK.)

Inserting a Form and Adding a Form Field

The first step to building a form is inserting a <form> tag. This tag encloses all the different fields in the form, and indicates where the form begins and ends. As noted earlier in this chapter, you can also insert other HTML elements, like text and <div> tags within the form.

1. **Choose File → Open; click the Site Root button (at the bottom left of the open file window). Select the file *signup.html*, and then open it.**

   (If you have the Files panel open [Window → Files], you can also just double-click the *signup.html* file in the panel to open it.) The page is partly designed already with a banner, sidebar, and footer.

2. **Click the empty white space directly below the headline and paragraph that begins "Signup today." On the Insert bar, select the Forms option (see Figure 11-2).**

   The Insert bar now shows you the Forms icons you'll need.

3. **Click the Insert bar's Form button (see Figure 11-2), or choose Insert → Form → Form.**

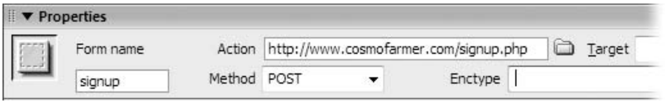
   A red, dashed rectangle appears in the document window, indicating the boundaries of the form.

4. **In the Property inspector, in the "Form name" field, type *signup* (Figure 11-25).**

   You've just named your form.

5. **In the Action field, type *http://www.cosmofarmer.com/signup.php*.**

   (Leave off the final period, as shown in Figure 11-25.)



Form name: signup

Action: http://www.cosmofarmer.com/signup.php

Method: POST

Enctype:

Figure 11-25: *The Action property of a form is simply the URL for the program that processes the form.*

A form's Action property identifies the address of the program that processes the form's submitted data. In this case, you've been spared the effort of writing (or hiring a programmer to write) the required form-processing software. Such a program already exists on the Web site whose address you've just specified, and it's waiting to process the form you're about to design.

You may be creating your own form-processing programs if you're using Dreamweaver's dynamic Web-building tools described in Part 6. See the tutorial on page 821 for an example.

6. **In the Method menu, make sure POST is selected. Leave the Target and Enctype fields blank.**

   The Method indicates how the form sends information to the form-processing program (see page 403).

   Now you're ready to insert a text field.

7. **In the document window, click the form—anywhere inside the red, dashed lines. Next, hit Enter (Return) to create a new paragraph, and then press the backspace key to delete that new paragraph.**

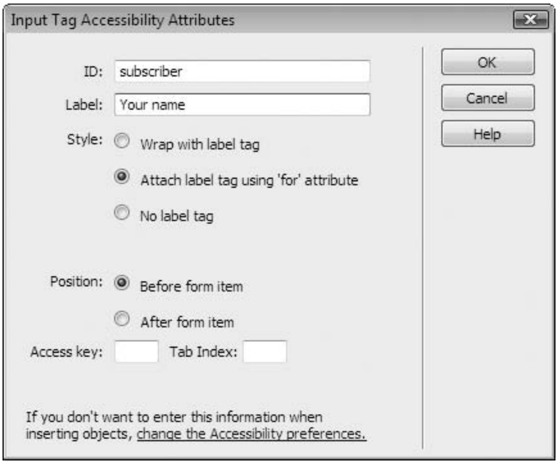
   No, this isn't an experiment, and you're not being led around like a lab rat. This strange little two-step overcomes a Dreamweaver bug you would otherwise encounter in a few moments. In a nutshell: When you insert a form and click it, there's no paragraph formatting yet—in other words, no paragraph tag exists to hold the first form field. If you simply insert a text field with a label (like you're about to do), and then press Enter to create a new paragraph for a new form field, Dreamweaver does a weird thing: The first form field is wrapped inside a paragraph tag, but its label isn't. The result? The label and the field are split apart from each other. By pressing Enter first, and then pressing the backspace key, you're actually creating a paragraph tag in which you'll now insert the label and text field.

8. **On the Insert bar, click the Text Field button (see Figure 11-2) or choose Insert → Form → Text Field.**

   The Input Tag Accessibility window appears (see Figure 11-26). If you don't see this window, choose Edit → Undo to remove the Text Field you just entered; use the Preferences window to turn on the accessibility options for form objects as described in Figure 11-5.

9. **In the ID box, type *subscriber*.**

   The name you type into the ID box is added as both the *name* and *ID* property of the field's HTML. The form processing program that receives the form input uses the name property: It's how that program knows what the visitor feedback means. In this case, visitors type their name into this form field, so the form processing program receives information (*subscriber=Bob,* for instance) in what's called a name/value pair (see page 400).



Input Tag Accessibility Attributes

ID: subscriber

Label: Your name

Style: ○ Wrap with label tag

● Attach label tag using 'for' attribute

○ No label tag

Position: ● Before form item

○ After form item

Access key: Tab Index:

If you don't want to enter this information when inserting objects, change the Accessibility preferences.

Figure 11-26:
The Input Tag Accessibility Attributes window is a great way to quickly insert a bunch of form-related HTML.

The ID uniquely identifies the form element. If you want, you can create an ID style to format this particular form field—for example, to assign a width or background color to this one field. Next you'll add the text label that appears along with the text field on the Web page.

10. **Type *Your name* in the label box; select the "Attach label tag using 'for' attribute"; and select the "Before form item" button.**

    The window should now look like Figure 11-26.

11. **Click OK to insert the text field.**

    The label and text field appear side by side on the page. The label's text is wrapped inside the HTML <label> tag (page 420). Your first order of business is to set the width of the form field.

12. **Click the newly inserted field (the box on the page); in the Property Inspector's "Char width" field, type *25*.**

    This action defines the number of characters wide the box will be. In other words, the box will display 25 letters (this step sets only the visible width of the field; a visitor can actually type more letters than this into the field, as described on page 409).

    Now it's time to add some style.

13. **Make sure the CSS Styles panel is open (choose Window → CSS Styles); on the Styles panel, click the + button to create a new style.**

    Alternatively, you can choose Text → CSS Styles → New Style. Either way, the New CSS Style window opens. (For a refresher on creating styles, see page 117.)

14. **Select the Advanced radio button; replace the text in the Selector box with *#mainContent .question* (make sure to include the space character between *#mainContent* and *.question*); from the "Define in" menu, select *global.css*; click OK.**

The CSS Rule Definition window opens. You've just created a descendent selector—actually, a new class style named .question. But the formatting you're about to assign applies only to an element with the *question* class applied to it that also happens to be inside *another* tag with an ID of *mainContent*. In this case, you've inserted your form inside a <div> tag with the mainContent ID assigned to it. You'll use this style to make each form field's label stand out and visually separate different questions on the form.

15. **In the Rule Definition window's Type category, choose *bold* from the Weight menu; select the Block category, and, from the Display menu near the bottom of the window, choose *block*.**

    The block option for the CSS Display property formats a tag like a block-level element—in other words, there's a line break above and below the element. You use this option to change the display of a tag that would normally appear "inline" (side-by-side) with other elements. For example, the <label> tag is an inline element and, in the form you're working on, the label "Your Name" appears directly to the left of the text field. By applying this style with its *block* display to that label, you force the label to appear above the field. Positioning the label in this manner isn't any kind of requirement for forms; it's just a design choice to make the form more readable.

    Next you'll add a border above the label to visually separate it from an element above it.

16. **Select the Border category, and turn off the three "Same for all" checkboxes. From the Top Style menu, choose dashed; type *1* in the top Width box; and type *#C9F173* in the top Color box.**

    Finally, you'll just add a bit of padding to separate the border and the label. You'll also add some top margin to create a bit more space between form elements.

17. **In the CSS Rule Definition window, select the Box category. Turn off the two "Same for all" checkboxes and, in the Padding's Top box, type *5*; type *15* in the Top Margin box; type *0* in the Bottom Margin box. Click OK to complete the style.**

    Because this is a class style, you must apply it manually.

18. **In the document window, click anywhere inside the label text "Your name." In the Tag selector, click <label> (circled in Figure 11-27) to select the label tag; in the Properties inspector's style menu, choose *question* (see Figure 11-27).**

    The form field drops below the label. Next you'll add a Spry form field to make sure the form submits the information you're looking for.

Adding a Spry Validation Text Field

Next up for this form: an email address field. Because the whole point of the form is to get a visitor's email address, you need to make sure that the visitor fills out the email address field with the proper data (namely, a well-formed email address). A Spry validation text field is the perfect solution.

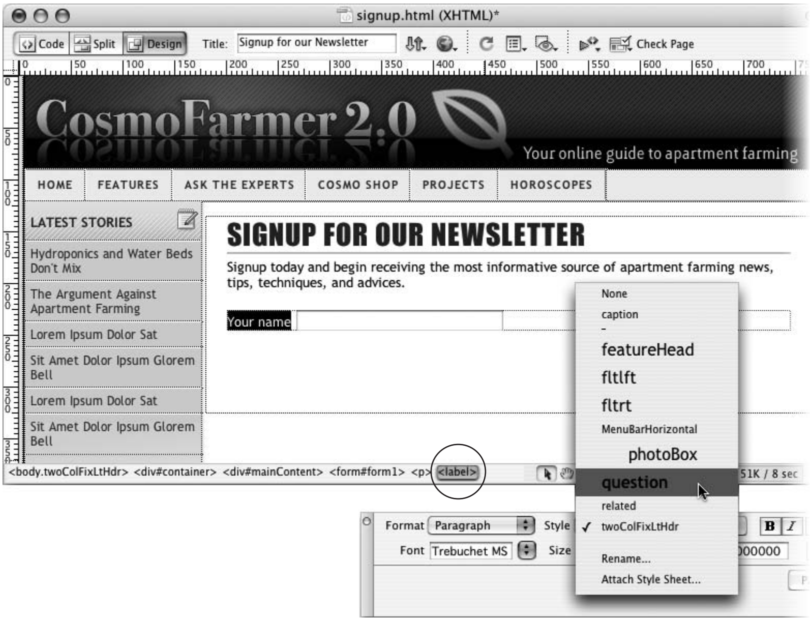

signup.html (XHTML)*
Code
Split
Design
Title: Signup for our Newsletter
Check Page
CosmoFarmer 2.0
Your online guide to apartment farming
HOME
FEATURES
ASK THE EXPERTS
COSMO SHOP
PROJECTS
HOROSCOPES
LATEST STORIES
Hydroponics and Water Beds Don't Mix
The Argument Against Apartment Farming
Lorem Ipsum Dolor Sat
Sit Amet Dolor Ipsum Glorem Bell
Lorem Ipsum Dolor Sat
Sit Amet Dolor Ipsum Glorem Bell
SIGNUP FOR OUR NEWSLETTER
Signup today and begin receiving the most informative source of apartment farming news, tips, techniques, and advices.
Your name
<body.twoColFixLtHdr> <div#container> <div#mainContent> <form#form1> <p> <label>
51K / 8 sec
None
caption
featureHead
fltlft
fltrt
MenuBarHorizontal
photoBox
question
related
✓ twoColFixLtHdr
Rename...
Attach Style Sheet...
Format Paragraph
Style
Font Trebuchet MS
Size

Figure 11-27:
The Tag selector and the style menu are a great one-two punch for precisely applying a CSS class style to any tag.

1. **In the document window, click to the right of the text field you added in the last part of this tutorial. Hit Enter (Return) to create a new paragraph. On the Insert bar's Forms tab, click the Spry Validation Text Field button (see Figure 11-2).**

   Alternatively, you could choose Insert → Form → Spry Validation Text Field. Either way, the Input Tag Accessibility window appears just as it does when you're inserting a regular text field…you fill it out the same way, too.

2. **In the ID field, type *email*; type "Your email address" in the label field; make sure the "Attach label tag using 'for' attribute" and the "Before form item" radio buttons are selected; click OK to insert the text field.**

   A new text field and label appear. A blue tab also appears, identifying this as a Spry widget. If you look at the Property inspector, you see all the properties available for Spry Text Fields. You'll choose a few options in a minute, but first you'll format this field like the one you inserted earlier.

3. **Repeat step 12 on page 443 to set the Char width of the new field to 25.**

   The label also needs some formatting.

4. **Repeat step 18 on page 444 to format the "Your email address" label.**

   When you use the Property inspector's style menu to apply the .question class style, you'll see a whole bunch of new classes listed. Those come from another external style sheet that Dreamweaver quietly attached to this page after you inserted the Spry form field.

5. **Choose File → Save.**

   Dreamweaver opens the Copy Dependent Files dialog box, letting you know the page now requires both a style sheet file and a JavaScript file.

6. **Click OK to close the Copy Dependent Files window.**

   If you look at the Files panel (Window → Files), you'll see a new folder named SpryAssets where Dreamweaver just saved the two new files (see page 180 for an explanation).

7. **Move your mouse over the email form field; click the blue Spry tab when it appears.**

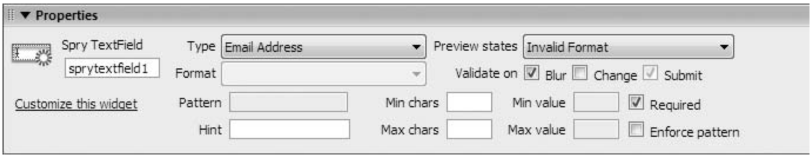
   The Properties inspector displays the Spry field's properties (see Figure 11-28). First you'll assign a validation type to this widget.

Note: Dreamweaver automatically creates a name for the Spry widget. The Spry text field you just inserted is named sprytextfield1. You can change the name to something more descriptive like spryEmail, but you don't have to. The name doesn't ever appear on the Web page; the Spry programming uses it to identify the particular validation widget.

8. **From the Type menu, select Email Address, and then turn on the Blur checkbox (see Figure 11-28).**

   The Type menu defines what type of information should be allowed in the field. In this case, only a validly formatted email address works. The Blur box determines when the contents of the field will be validated (in addition to the moment the visitor submits the form). In other words, if a visitor types "not telling" into the field and then presses the Tab key to jump to the next form field, he'll receive an error message.

   If you look at the document window now, you see that the email field has a red background color and a red "Invalid format" message to the right of it. Every Spry validation field has several "preview" states. You can preview the field as it will look at various points when a visitor to your Web site interacts with the field—for example, when she's typed invalid information, or simply left a required field blank. You'll tweak this error message now.



▼ Properties

Spry TextField: sprytextfield1

Type: Email Address

Preview states: Invalid Format

Format

Validate on ☑ Blur ☐ Change ☑ Submit

Pattern — Min chars — Min value — ☑ Required

Hint — Max chars — Max value — ☐ Enforce pattern

Figure 11-28: *Select a Spry validation widget in the document window, and then use the Property inspector to assign validation options.*

9. **In the document window, delete the text "Invalid format," and type *Please enter a valid email address.***

Now when some wise guy types "not telling," he'll get an error message informing him to enter a validly formatted email address. There's also an error message that appears if this field is just left blank. You can adjust this message as well, but first you must switch to a different "preview state."

Warning: The "Invalid format" error message is contained inside a <span> tag. You can easily accidentally select and delete this entire span. If that happens, the error message no longer works. If, when you replace the error message in step 11, the new message you add appears in black instead of red, you've accidentally deleted the span. If this mistake happens, choose Edit → Undo until you see the old error message in red. Try selecting "Invalid format" but not the trailing period. Then type the new message.

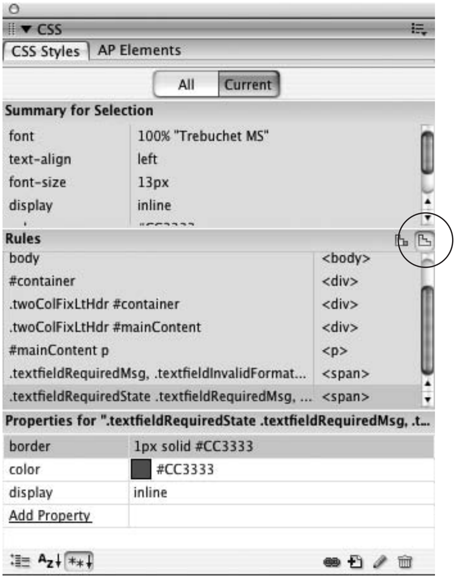
10. **Click the blue Spry tab again; from the Property inspector's "Preview states" menu, select Required.**

    A new error message appears: "A value is required." This message appears when nothing is entered into a required answer field and the visitor tries to submit the form.

11. **Repeat step 11, replacing the "A value is required" with "We need your email address to sign you up."**

    The red outline surrounding the error message doesn't fit the look of CosmoFarmer.com. Fortunately, it's easy to update the look of a Spry widget.

12. **Click anywhere inside the error message text you added in the last step; make sure the CSS Styles panel is open (Window → CSS Styles). At the top of the panel, select the Current button, and make sure the Cascade button is selected (circled in Figure 11-29).**



Summary for Selection

font	100% "Trebuchet MS"
text-align	left
font-size	13px
display	inline

Rules

body	<body>
#container	<div>
.twoColFixLtHdr #container	<div>
.twoColFixLtHdr #mainContent	<div>
#mainContent p	<p>
.textfieldRequiredMsg, .textfieldInvalidFormat...	<span>
.textfieldRequiredState .textfieldRequiredMsg, ...	<span>

Properties for ".textfieldRequiredState .textfieldRequiredMsg, .t...

border	1px solid #CC3333
color	■ #CC3333
display	inline
Add Property	

Figure 11-29:
When formatting Spry widgets, it's easiest to use the CSS Styles panel's Current view. If the Cascade button is selected (circled), you merely need to click the element whose style you want to change. In this case, selecting the error message for a Spry Validation Text field highlights the appropriate style's name. Double-click the name to open the CSS Rule Definition window, and style away!

A descendent selector named ".textfieldRequiredState .textfieldRequiredMsg" controls the error message's styling. This is the last style listed in the Rules pane of the Styles panel (the middle pane in Figure 11-29).

13. **In the Rules pane, double-click the style ".textfieldRequiredState .textfield-RequiredMsg" to open the CSS Rule Definition window.**

    You'll make the error message bold and remove the border.

14. **In the Rule Definition window, from the Weight menu, choose "Bold." Click the Border category, and then delete the contents of the top row of boxes.**

    Deleting the contents of the type, width, and color boxes removes the border entirely.

15. **Click OK to complete the style.**

    Notice that the error message next to the Spry form field is bold, but no longer has a border. Time to insert another form field.

Adding a Spry Form Menu

Text boxes aren't the only form fields that you can validate. You can also make sure someone's made a selection from a pull-down menu, by adding a Spry menu to a form.

1. **Click to the right of the error message you just added (after "sign you up."), and then press Enter or Return to insert a new empty paragraph.**

2. **Choose Insert → Form → Spry Validation Select, or, on the Insert bar, click the Spry Validation Select button** (see **Figure 11-2**).

    As with any form field, the Input Tag Accessibility window appears.

3. **In the ID field, type *decade*; type "What decade did you begin apartment farming?" in the label box; click OK to insert the menu.**

    A form menu appears on the page.

4. **Choose File → Save.**

    Another window appears, letting you know that an additional JavaScript file and CSS file are needed to make this new Spry validation widget work. Click OK to dismiss that window. Time to style the label.

5. **Repeat step 18 on page 444 to format the "What decade did you begin…" label.**

    At this point, the pull-down form menu is empty, so your next step is to add a few options.

6. **In the document window, click the newly inserted menu to select it. In the Property inspector, click the List Values button.**

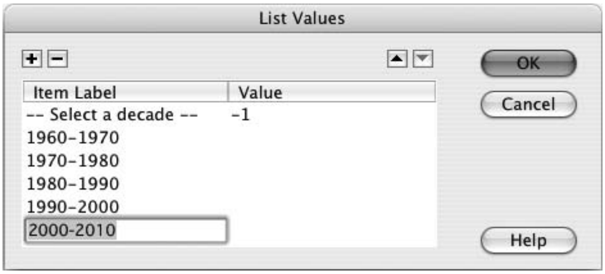
    The List Values window opens (see Figure 11-30). Here you can add options for the menu.

7. **Type "-- Select a decade --"; press the Tab key, and then type *-1*.**

   The text ("Select a decade") appears at the top of the menu. It's an instruction for the person filling out the form, letting him know what he should do. Of course, you want someone to choose an option *other* than this one when submitting the form. The -1 is the value transmitted over the Internet when this option is selected and the form submitted; however, in this case, -1 is kind of a secret message that you'll use to notify the Spry validation program that this option isn't valid. Before you get to that though, add the valid selections for this form.

8. **Press the Tab key and then type *1960-1970*; press the Tab key twice to create another list option, and then type *1970-1980*. Continue adding options in this way until you've added *2000-2010*.**

   The List Values window should look like Figure 11-30.



List Values

Item Label	Value
-- Select a decade --	-1
1960-1970	
1970-1980	
1980-1990	
1990-2000	
2000-2010	

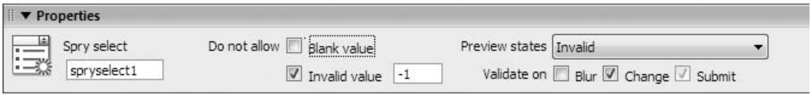
Figure 11-30: *The label column displays what will appear in the menu on the Web page, while the value column contains the value that's actually submitted (-1 in the first row, for example). If you don't specify a value (as with all of the decade ranges here), the label's text is submitted as the value.*

9. **Click OK to insert the menu. Move your mouse over the menu, and then click the blue Spry tab to select it.**

   You need to specify what type of menu selection should be considered invalid.

10. **In the Property inspector, turn off the "Blank value" box; turn on the "Invalid value" box and make sure -1 appears in the field; turn on the Change checkbox.**

    The Property inspector should look like Figure 11-31. Make sure "Invalid" is selected from the "Preview states" menu. In the document window, to the right of the form menu, you should see a red error message, "Please select a valid item." You'll change this message and its style next.



Properties

Spry select: spryselect1

Do not allow □ Blank value

☑ Invalid value -1

Preview states: Invalid

Validate on □ Blur ☑ Change ☑ Submit

Figure 11-31: *You can assign an arbitrary value (like -1) to any menu item that you want to prevent from being submitted.*

11. **Replace the text "Please select a valid item" with "Please select a decade." Repeat steps 13-15 on page 448 to make the error message bold and remove the borderline.**

    Each type of Spry validation widget (text field, menu, checkbox, text area) has its own CSS styles to format error messages. In the case of a pull-down menu error message, the style is named ".selectRequiredState .selectRequiredMsg," and is in an external style sheet named SpryValidationSelect.css.

Add Spry Checkboxes

Just a couple more form fields and you'll be done. Now it's time to ask a multiple-choice question that requires two responses.

1. **Click to the right of the error message you just formatted (after "select a decade."), and then press Enter (Return) to insert a new empty paragraph. Type *Please select your two favorite urban farming techniques.***

   Time to format the question.

2. **From the Property inspector's Style menu, select "question".**

   This formats the paragraph so that it looks like the labels for other questions on the form. Next you'll add a few checkboxes.

3. **Press the Enter (Return) key to create a blank paragraph.**

   The new paragraph also has the *question* class applied to it. You need to remove that style.

4. **From the Property inspector's Style menu, choose None. Choose Insert → Form → Checkbox.**

   You can also click the Checkbox button under the Insert bar's Forms tab (see Figure 11-2). Either way, the Input Tag Accessibility window appears. You should know the drill by now.

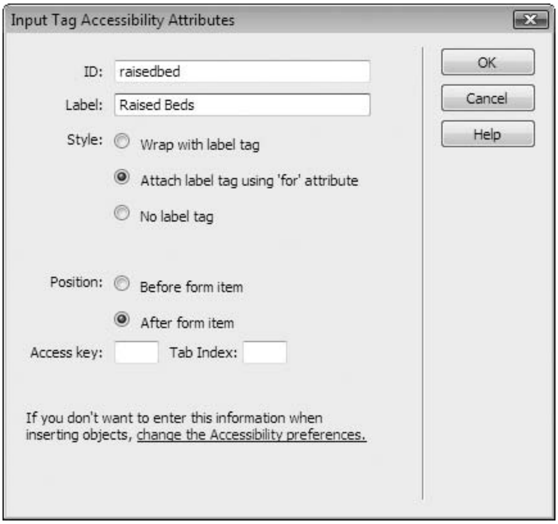
5. **Type *raisedbed* in the ID box; type *Raised beds* in the Label box; the rest of the window should look like Figure 11-32. Click OK to insert the checkbox.**

   Because you can't type information inside a checkbox—you can only turn it on or off—you need to supply a value that's submitted when the checkbox is turned on. You'll do that next.

6. **In the document window, click the checkbox to select it. In the Property inspector's "Checked value" field, type *Y*.**

   If someone filling out this form turns on this checkbox and then submits the form, the name/value pair (see page 400) *raisedbed=Y* is submitted. In other words, the Y is just a way to indicate that "yes" someone selected this answer.

7. **In the document window, click after the label "Raised beds," and then press Shift-Enter (Shift-Return).**



Input Tag Accessibility Attributes

ID: raisedbed

Label: Raised Beds

Style: ○ Wrap with label tag

● Attach label tag using 'for' attribute

○ No label tag

Position: ○ Before form item

● After form item

Access key: Tab Index:

If you don't want to enter this information when inserting objects, change the Accessibility preferences.

Figure 11-32:
When you insert a Spry form validation widget, you encounter the same Input Tag Accessibility Options window that appears when you insert regular form fields.

As you'll recall (or not) from page 67, pressing Shift-Enter is a fast way to insert a line break (the HTML <br> tag). It simply drops the cursor to the next line without creating a new paragraph. You'll add a checkbox here.

8. **Choose Insert → Form → Checkbox; in the Accessibility Options window, type *waterbed* in the ID box; type "Waterbed hydroponics" in the Label box; click OK to insert the checkbox.**

   Now add a value for the new checkbox.

9. **In the document window, click the checkbox to select it. In the Property inspector's "Checked value" field, type *Y*.**

   You'll insert one more checkbox this way, and then you'll insert a Spry checkbox.

10. **Repeat steps 7-9 to insert one more checkbox: For one box, use the ID name *bathtub* and the label "Bathtub hydroponics".**

    Now it's time to add a validation checkbox.

11. **Click to the right of the label for the newly inserted checkbox, and then press Shift-Enter to add a line break. Choose Insert → Form → Spry Validation Checkbox.**

    You can also click the Spry Validation Checkbox button from the Insert bar's Forms tab (see Figure 11-2). Either way, the Input Tag Accessibility window appears.

12. **In the ID box, type *fallow,* and for the label type "Fire fallow cultivation." Click OK to insert the checkbox.**

    In addition to the checkbox and its label, a blue Spry tab appears indicating a validation field. Even though you can use Spry to validate a group of checkboxes (for example, to make sure at least two boxes have been turned on), there's no straightforward way to create a single group of Spry checkboxes. You need to insert a single Spry checkbox (like you just did), and then go into Code view to readjust the code. But before that happens, you need to make sure you've added a value for this field.

13. **Choose File → Save.**

    Another window appears, letting you know that you need an additional JavaScript file and a CSS file to make this new Spry validation widget work (click OK to close that window).

14. **Repeat step 9 to add a "Y" value for this new checkbox field.**

    To set the validation options for the checkbox, you must select the blue Spry tab, not the checkbox itself.

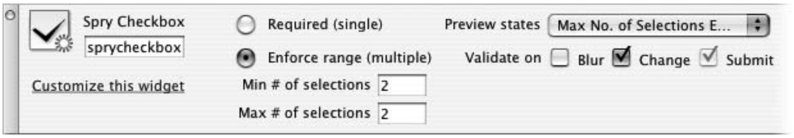
15. **Mouse over the last checkbox or "Fire Fallow Cultivation" label, until the Blue Spry tab appears; click the tab to select it.**

    The Property inspector now shows the properties for the checkbox validation.

16. **Select the "Enforce range" button; type *2* in the "Min # of selections" field; type *2* in the "Max # of selections" field; and turn on the Change checkbox.**

    The Property inspector should look like Figure 11-33. This configuration makes sure that at least (but no more than) two checkboxes are turned on. Since the question asks for a visitor's "two favorite techniques," it makes sense that you should require two boxes to be turned on. In addition, the "Change" option makes sure that the Spry programming inspects what's happening each time a box is changed (from checked to unchecked or vice versa). In this way, the person filling out the form gets immediate feedback: If he clicks a third box, he's notified that he's selected too many options; if he selects only one, he's told that he needs to make an additional selection.

    Now you can customize the error messages.



Spry Checkbox
sprycheckbox
Customize this widget

○ Required (single)
● Enforce range (multiple)
Min # of selections 2
Max # of selections 2

Preview states Max No. of Selections E...
Validate on □ Blur ☑ Change ☑ Submit

Figure 11-33:
You can make selecting a checkbox mandatory, or you can require that a minimum and/or maximum number of checkboxes are turned on.

17. **In the Property inspector's "Preview states" menu, make sure "Max. No. of Selections Exceeded" is selected.**

    On the page, you should see the error message "Maximum number of selections exceeded."

18. **Change the error message on the page to read "Only two choices please."**

    There's also an error message if too few choices are made; you'll change that next.

19. **Click the blue Spry tab to select the Spry checkbox widget. From the “Preview states” menu, choose “Min. No. of Selections Not Met.” Change the error message on the page to read “Two choices please.”**

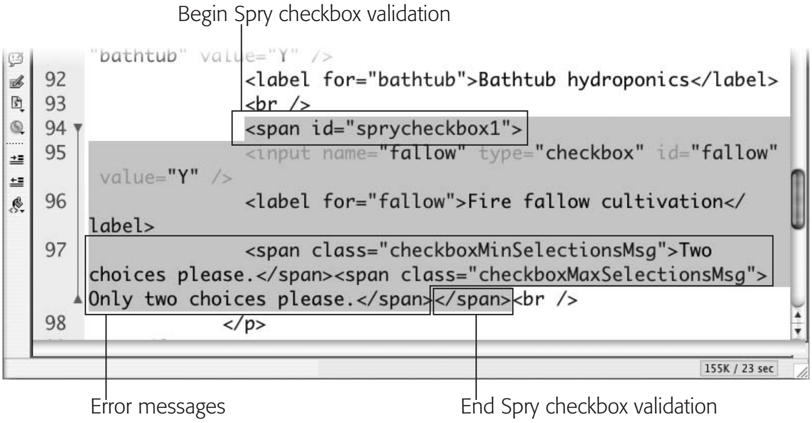
    These error messages should match the look of the ones you formatted earlier.

20. **Repeat steps 13–15 on page 448 to make the error messages for the checkbox bold and without a border line. In addition, in the CSS Style Definition window, select the Block category, and then change the Display property from *inline* to *block*.**

    The style you need to edit is named “.checkboxRequiredState .checkboxRequiredMsg.” At this point, there are four checkboxes, but only the last checkbox is part of the Spry validation. To make sure all four checkboxes are included in the validation process, you need to go into Code view.

21. **Mouse over the bottom checkbox on the page, and then click the blue Spry tab to select it. In the top left of the document window, click the Code button.**

    The code should look like what you see in Figure 11-34. The opening tag—<span id="sprycheckbox1">—indicates the beginning of the Spry checkbox validation. If you move this opening tag before the code for the other three checkboxes, they’ll all be included as part of the validation process.



```
"bathtub" value="Y" />
            <label for="bathtub">Bathtub hydroponics</label>
            <br />
            <span id="sprycheckbox1">
            <input name="fallow" type="checkbox" id="fallow" value="Y" />
            <label for="fallow">Fire fallow cultivation</label>
            <span class="checkboxMinSelectionsMsg">Two choices please.</span><span class="checkboxMaxSelectionsMsg">Only two choices please.</span></span><br />
          </p>
```

Figure 11-34: *Spry validation fields are created by wrapping a regular form field inside a <span> tag. The error messages for the validation also appear inside <span> tags that are enclosed by the <span> tag for the validation field.*

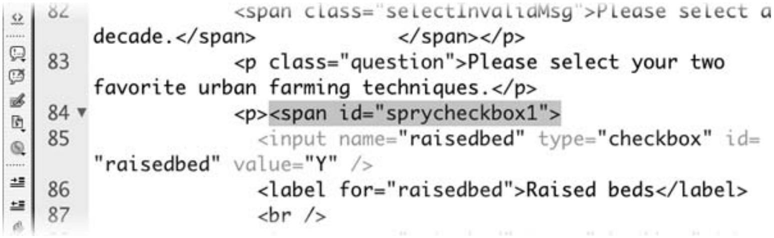
22. **Select the code <span id="sprycheckbox1">, and then choose Edit → Cut.**

    This step removes the code from the page. You’ll paste it back in above the first checkbox.

Warning: Don’t try to save the page between steps 22 and 23. If you do, Dreamweaver sees that the special Spry code you cut out in step 22 is missing, and suggests that you let it remove the widget entirely.

23. **Scroll up a few lines, and locate the tag <input name="raisedbed" type="checkbox" id="raisedbed" value="Y" />. Click before this tag (in other words, between the <p> tag and the <input> tag), and then choose Edit → Paste.**

    The code should look like Figure 11-35. Now all four checkboxes are part of the validation. The form is nearly complete.



```
            <span class="selectInvalidMsg">Please select a
decade.</span>          </span></p>
            <p class="question">Please select your two
favorite urban farming techniques.</p>
            <p><span id="sprycheckbox1">
              <input name="raisedbed" type="checkbox" id=
"raisedbed" value="Y" />
              <label for="raisedbed">Raised beds</label>
              <br />
```

Figure 11-35:
Simply by moving the opening <span> tag, you can change the range of checkboxes that are included in a Spry validation.

Completing and Testing the Form

At this point there's no way to submit the form after it's filled out. You need to add a submit button.

1. **At the top of the document window, on the toolbar, click the Design button to return to Design view. Click to the right of the label for the last checkbox, and then hit Enter to insert a new paragraph. From the Property inspector's style menu, choose *question*.**

   A green line and a little extra space appear above the paragraph. This matches the look of the other parts of the form.

2. **Choose Insert → Form → Button or, on the Insert bar, click the Button icon (Figure 11-2).**

   Your old friend the Input Tag Accessibility window appears again. This time, however, you don't need an ID or label. Buttons already have a message (like Submit) printed on them, so you don't need to add a label.

3. **Leave the ID and Label fields empty; select the No Label Tag radio button, and then click OK.**

   A submit button appears on the page. You can change the generic "Submit" message to something more reflective of the form's purpose.

4. **Click the button on the page; in the Property inspector's Value field, type "Sign up."**

   The form is done. Now take it for a test drive.

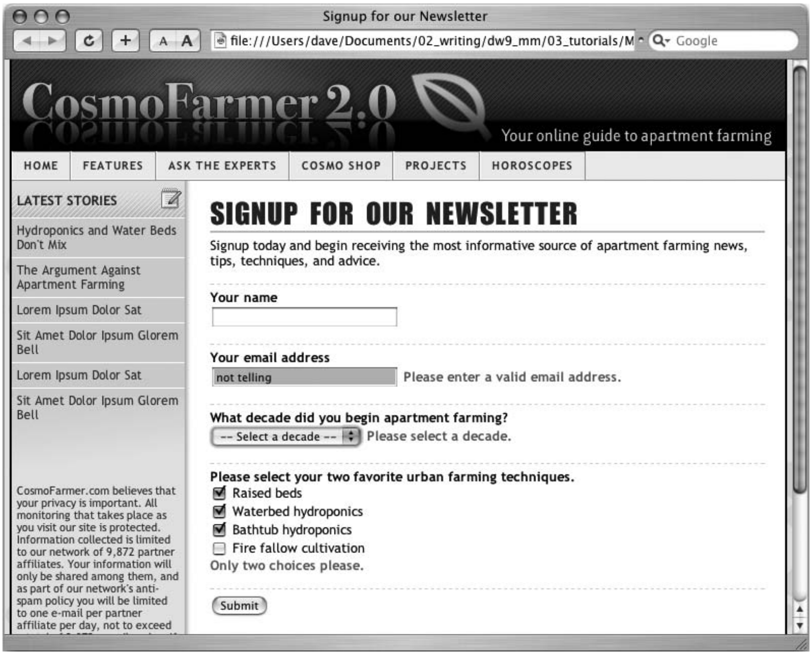
5. **Choose File → Save All, and press the F12 (Option-F12) key.**

   A Web browser opens with the new form.

Note: If you preview this in Internet Explorer for Windows, you may see a security warning. This problem and a solution are discussed on page 231.

6. **Click the submit button.**

   The form doesn't submit (see Figure 11-36). Instead, several error messages appear. Fill out the form correctly and try to submit it again.


Signup for our Newsletter
file:///Users/dave/Documents/02_writing/dw9_mm/03_tutorials/M
Google
CosmoFarmer 2.0
Your online guide to apartment farming
HOME
FEATURES
ASK THE EXPERTS
COSMO SHOP
PROJECTS
HOROSCOPES
LATEST STORIES
Hydroponics and Water Beds Don't Mix
The Argument Against Apartment Farming
Lorem Ipsum Dolor Sat
Sit Amet Dolor Ipsum Glorem Bell
Lorem Ipsum Dolor Sat
Sit Amet Dolor Ipsum Glorem Bell
Submit

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Signup today and begin receiving the most informative source of apartment farming news, tips, techniques, and advice.

Your name

Your email address: not telling — Please enter a valid email address.

What decade did you begin apartment farming? -- Select a decade -- Please select a decade.

Please select your two favorite urban farming techniques.

☑ Raised beds
☑ Waterbed hydroponics
☑ Bathtub hydroponics
□ Fire fallow cultivation

Only two choices please.

***Figure 11-36:** Dreamweaver CS3's new Spry validation form widgets can help ensure that your forms collect the information you want. Professional-looking error messages, placed next to the offending responses, provide clear feedback to visitors.*

CHAPTER
12

Spry

As a Web designer, you can count on one thing: The Web is always changing. Yesterday's technology is yesterday's news—remember Java applets, frames, and messages that scroll in your browser's status bar? You can see the most recent Web design innovations on Web sites like Google Maps, Flickr, and Meebo, all of which offer a high degree of interactivity without resorting to multimedia plug-ins like Flash. Google Maps lets you zoom in, zoom out, and scroll across a map of the world without loading a new Web page. Many of the most cutting-edge Web sites almost feel like the kinds of complex software you run right on your computer.

JavaScript, which has grown from a simple little language that helped create pop-up windows and image rollovers, to a full-blown programming tool that can change the content of a Web page as you look at it, is the key to this interactivity. JavaScript can even update a page with new data that gets downloaded behind the scenes (that's what's happening when you scroll to new sections of that Google Map). Dreamweaver, which has always tried to provide tools to meet Web designers' current needs, adds a new set of JavaScript tools to Dreamweaver CS3. Based on what Adobe calls its "Spry framework for Ajax," Dreamweaver's new Spry toolset lets you add interactive page elements like drop-down navigation menus, tabbed panels, and XML-driven, sortable data tables.

What is Spry?

You've already seen Spry in action in Chapters 5 and 11, where you learned about the Spry menu bar and Spry validation widgets. But what exactly is Spry? Spry isn't just a Dreamweaver tool; it's a technology developed by Adobe, and distributed freely and independently on the Adobe Labs Web site (*http://labs.adobe.com/technologies/spry/*).

It's officially called the "Spry framework of Ajax" and it's a collection of JavaScript programs that let you, the Web designer, offer sophisticated control of a Web page to your visitors through *widgets*, *effects*, and *data sets*. A widget is an interface element like a menu bar, form validation message, or set of tabbed panels that generally makes a page easier for site visitors. For example, the Spry menu bar adds a lot of links to a compact navigation bar, so you can easily navigate a Web site.

An effect is a visual treat that doesn't necessarily improve how a Web page works, but adds cool looking eye candy. You can use a Spry effect to fade page elements in and out of view (effects are discussed in the next chapter). Finally, a Spry data set is a data presentation format that's more interactive than a standard HTML table. Imagine you have a table listing products your company sells. Each product is presented in its own row with columns for product name, price, and availability. A visitor can sort a Spry data table by any of those columns, simply by clicking the name of a column. And it all happens without the browser ever having to reload a Web page.

In addition, a Spry data set can suck down the contents of an XML file, and then update a Web page with the file's content; see page 477 for the full scoop on XML, an increasingly popular and extremely flexible data format. This Spry data set/XML tango is the "Ajax" part of the "Spry framework for Ajax." Ajax is a term coined in 2005 to describe a timesaving system for transferring information from a Web server to a Web page (and vice versa). The revolutionary advantage of Ajax, as highlighted in the Google Maps example, is that it lets a page's contents change quickly without having to reload a new page from the server.

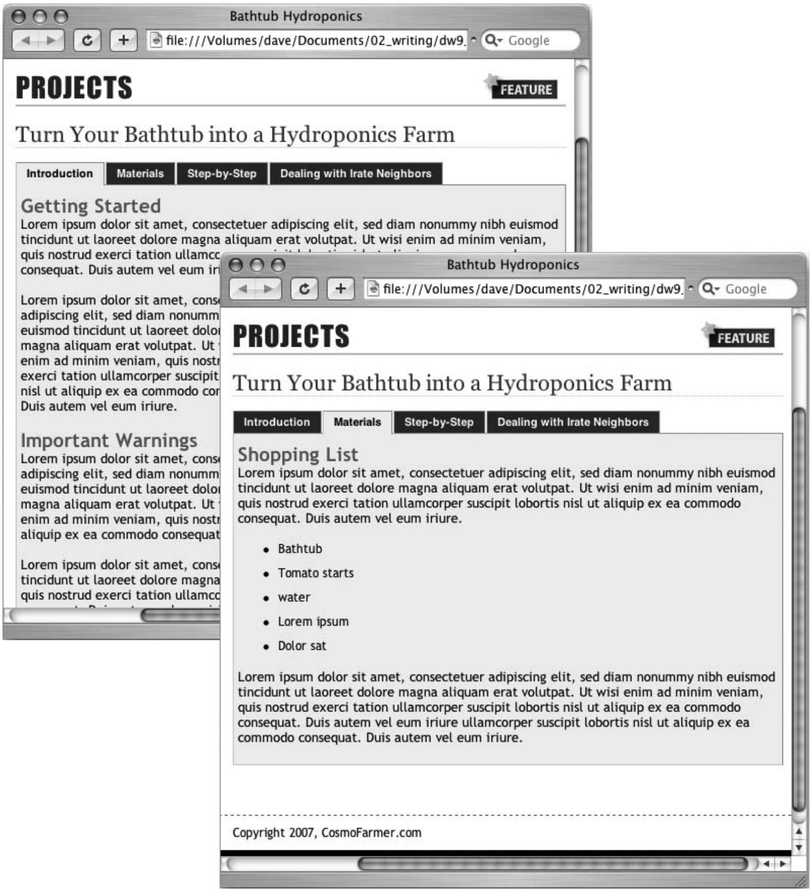
Note: Ajax originally stood for "Asynchronous JavaScript and XML," since most original Ajax examples used XML. Nowadays the term more commonly describes the use of JavaScript to send and receive data to and from a Web server, and update the contents of a page based on that data.

Tabbed Panels

Some Web site visitors are loath to scroll; if they don't see what they want when a page first loads, they move on. Because of this attitude, some Web designers divide long passages of information into multiple pages so that each page presents small, easy-to-digest chunks. Of course that means building several pages instead of just one, and forces the visitor to click through (and wait for) a series of pages. Fortunately, Spry Tabbed Panels provides another alternative (see Figure 12-1). Instead of creating one long page, or several smaller pages, you can organize information into separate tabbed panels. That way your content is always front and center, and your visitors can easily access different sections by clicking a tab above each panel.

Adding a Tabbed Panel

You can place Spry tabbed panels anywhere on a Web page. But since the tabs form a single row at the top of the group of panels, you'll need enough horizontal



Bathtub Hydroponics
file:///Volumes/dave/Documents/02_writing/dw9_
Google
PROJECTS
FEATURE
Turn Your Bathtub into a Hydroponics Farm
Introduction
Materials
Step-by-Step
Dealing with Irate Neighbors

Getting Started

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Important Warnings

Lorem ipsum dolor sit amet, cons
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tincidunt ut laoreet dolore magna
quis nostrud exerci tation ullamcc

Bathtub Hydroponics
file:///Volumes/dave/Documents/02_writing/dw9_
Google
PROJECTS
FEATURE
Turn Your Bathtub into a Hydroponics Farm
Introduction
Materials
Step-by-Step
Dealing with Irate Neighbors

Shopping List

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure.

- Bathtub
- Tomato starts
- water
- Lorem ipsum
- Dolor sat

Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure.

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Figure 12-1:
Organize your page's content into easily accessible panels with the Spry Tabbed Panels widget. Clicking a tab opens a new panel's worth of information without loading a new Web page.

space to accommodate all the tabs (see the box on page 465 for an exception to this limitation). Unless you have only a couple of tabs with one-word text labels, you should place the tabbed panels in a fairly wide space, such as the main column of a Web page, or across the entire width of the page. Just follow these steps:

1. **In the document window, click where you wish to insert the panels.**

   For example, inside a div tag (page 313).

2. **Choose Insert → Spry → Spry Tabbed Panels, or, on the Insert bar, click one of the Spry Tabbed Panels buttons (see Figure 12-2).**

   You can find several Spry widgets (including tabbed panels) under the Layout tab of the Insert bar (Figure 12-2, top); other Spry buttons are grouped under other tabs (form validation Spry widgets appear under the forms tab); and all the Spry goodies are found on the Spry tab (Figure 12-2, bottom).

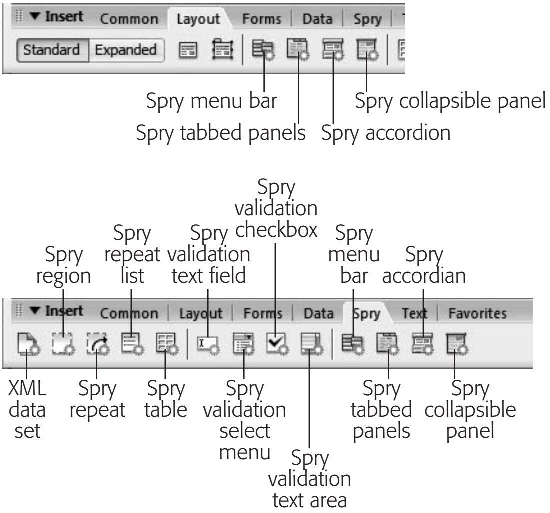


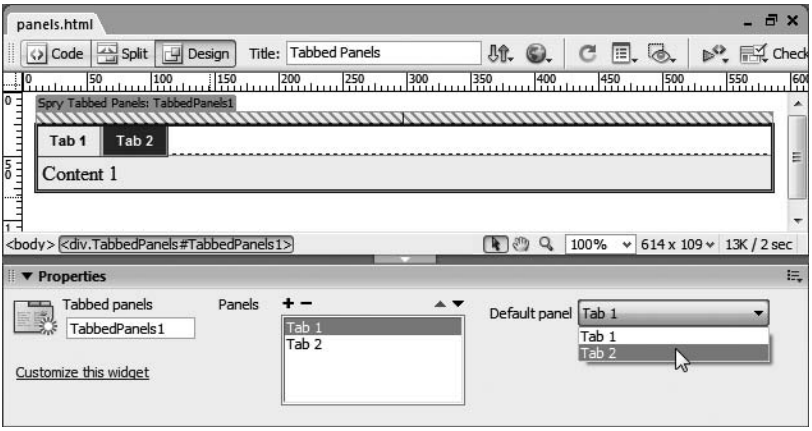
Figure 12-2:
It's easy to identify a Spry icon in the Insert bar, even when Spry buttons are mixed in with regular HTML objects (top). The bright orange starburst that appears in a button's lower-right corner identifies it as a Spry object.

After inserting a tabbed panel, you see two tabs and two panels on the page (Figure 12-3); in addition, a blue tab appears above the panels indicating the Spry widget. The blue tab appears only in Dreamweaver's Design view, not when the page is viewed in a Web browser. The blue Spry tab provides an easy way to select the Spry widget and access its properties in the Property inspector.

Note: When you save a page after inserting a Spry Tabbed Panel, Dreamweaver notifies you that it has added two files to the site: a CSS file (SpryTabbedPanels.css) for formatting the panel group, and a JavaScript file (SpryTabbedPanels.js) to make the panels appear and disappear when the tabs are clicked. Dreamweaver saves both files in the SpryAssets folder in your site's root folder (see page 180). Make sure you upload this folder when moving your site onto your Web server.

3. **In the Property inspector, name the panel group** (Figure 12-3).

   This step is optional. Dreamweaver provides a generic name, TabbedPanels1, for the group of panels. You don't really have to name the Spry panel group; the name never appears in a browser window. However, if you take the plunge into manually modifying your Spry widgets in Code view (see the box on page 471), you may wish to change the Spry panel group's name to something more descriptive. If you created a group of tabbed panels to house information about a product, you might name the panel group, *productPanels.* A descriptive name helps you identify code related to this particular panel group if you ever want to dive into Code view, and enhance or change the functionality of the panels (see the box on page 471).



Title: Tabbed Panels

Tabbed panels TabbedPanels1

Default panel Tab 1

Figure 12-3: *Normally, when a Web browser downloads a page containing Spry panels, the first tab and panel are highlighted. However, if you'd rather open another panel when the page loads, then, in the Property inspector's "Default panel" menu, select the tab's name.*

4. **Add additional panels.**

   If two panels aren't enough for your needs, use the Property inspector to add more. Click the + button above the list of tab names (see Figure 12-3) to add a new panel. To remove a panel, click the name of a tab in this list and click the minus (–) button. (You can also reorder the panels by selecting a tab from the list, and then clicking the up or down arrow button. The up arrow moves a panel to the left, while the down arrow moves a panel to the right.)

Note: A Spry widget's properties appear in the Property inspector only when you've selected the widget. To select the widget, click the blue tab that appears above the elements inside the widget (see Figure 12-3).

Adding and Editing Panel Content

Each tabbed panel has two parts: a labeled tab, and a panel containing content associated with the tab. In Figure 12-1, "Introduction," "Materials," "Step-by-Step," and "Dealing with Irate Neighbors" are each tabs, while the area of the page beginning with the "Shopping List" headline is the panel for the "Materials" tab.

To change the label on a tab, just select and replace the tab's text in Design view. The label is normal HTML text, so you can just triple-click to select it as you would any block of text.

Text for the panel itself is contained inside a <div> tag, so you can select it by clicking anywhere inside the panel, and then choosing Edit → Select All (or Ctrl+A [⌘-A]). You can place any combination of HTML inside a panel: headlines, paragraphs, bulleted lists, forms, images, and Flash movies (you can even insert *another* Spry Tabbed Panel if you like that kind of Circus-Sideshow-hall-of-mirrors effect).

If you want to edit a panel's contents, you do need to make the panel visible first. Since the entire point of the Spry Tabbed Panels is to present a lot of information within overlapping panels, you see only one panel at a time. Fortunately, Dreamweaver offers a simple way to close the current panel and open another panel for editing: Move your mouse over the tab for a hidden panel, and an eye icon appears at the tab's right edge (see Figure 12-4). Click the eye to open the tab's panel for editing.

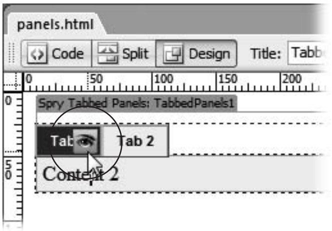


Figure 12-4:
Dreamweaver displays an eye icon for all Spry widgets that include tabs and panels. Clicking the eye makes a currently hidden panel visible and ready to edit.

Formatting Tabbed Panels

Spry Tabbed Panels are actually just basic HTML with a good dose of CSS. The tab buttons are a simple bulleted list, while each panel is a separate div; all the panels are wrapped together in another div. All the fancy formatting—tab buttons sitting side by side, borders, and background colors—is controlled by an external style sheet named SpryTabbedPanels.css, which is located in the SpryAssets folder in the site root.

Tip: You can change the folder in which Dreamweaver inserts Spry support files (the external CSS and JavaScript files that make Spry so spry), as described on page 180.

Dreamweaver supplies different CSS styles to format the panels, the currently selected tab, and the tabs whose panels aren't currently visible. The general process of modifying the look of any element in a panel group is simple: Identify the element you want to modify (like the panel or a selected tab), locate the style that controls that element, and then edit that style. If you want to change the text color of the currently selected tab, you need to open the *.TabbedPanelsTabSelected* class style in the *SpryTabbedPanels.css* file. The basic steps are as follows:

1. **Open the CSS Styles panel (Window → CSS Styles).**

   At the top of the Styles panel, make sure the All button is selected.

2. **Expand the list of styles for the SpryTabbedPanels.css style sheet.**

   Just click the + (arrow on a Mac) symbol next to the file's name to reveal all the styles for tabbed panels.

3. **In the Styles panel, double-click the style's name.**

   The Style Definition window for that style opens.

4. **Make the changes, and then, in the Style Definition window, click OK to finish editing the style.**

   You can use the CSS Properties pane (page 289) to edit the styles as well. For a recap on editing CSS styles, see page 126.

To help guide you in the process of modifying Spry panels, here's a list of panel elements and the styles that control them:

- **Spry Tabbed Panel group: *.TabbedPanels***

  Normally, the width of a collection of panels and tabs stretches to fit the available space. So if you place a panel group on an empty page, it stretches to fit the entire width of the browser window. Placed inside a div with a set width, the group of panels stretches to match the div's width. If you wish to make the group of panels thinner, change the width property of the *.TabbedPanels* style. Normally it's set to 100 percent, but you could change this to 50 percent or a set pixel amount. The entire group of panels and tabs is floated to the left, so any content that appears after the panel group wraps around the right side of the panels (see page 312 for more on floats). (To adjust the height of a group of panels, see the "Panels" bullet point, below.)

- **All tabs: *.TabbedPanelsTab***

  There are two types of tabs: the one for the currently displayed panel, and the tabs that aren't active. The *.TabbedPanelsTab* style controls both types of tabs. If you want to change the font used on all tabs, edit the *.TabbedPanelTab* style, and choose a new font family. In addition, if you wish to change the borders that appear around the tabs, edit this style. To adjust the amount of space between the edge of the tab and the text label inside, edit the style's padding property (page 322); to change the space between tabs, edit the style's margin property (page 322).

- **Not selected tab: *.TabbedPanelsTab* and *.TabbedPanelsTabHover***

  The *.TabbedPanelsTab* also dictates the basic look of an unselected tab, things like its background color. In addition, a non-selected tab has a hover style—*.TabbedPanelsTabHover*—so that when the mouse moves over the tab, it highlights to indicate that you can click it. The basic style sheet supplied with Dreamweaver merely changes the tab's background color when the mouse moves over it, but you're free to change other settings, such as the font color.

- **Currently selected tab: *.TabbedPanelsTabSelected***

  The *.TabbedPanelsTabSelected* style applies to the tab associated with the currently displayed panel. This style essentially overwrites style properties inherited from the *.TabbedPanelsTab* style that all tabs share. The background color and text color differ from the other tab style, but, again, you're free to modify this style (by picking a new font, for instance).

With this style, be aware of a couple of things. First, the style has a set bottom border. You shouldn't eliminate it, unless you eliminate bottom borders on the *.TabbedPanelsTab* as well. Otherwise, you'll see a noticeable line separating the tab from its panel. In addition, if you change the background color of the tab and the panel (they're usually set to the same color to make it appear that they form one unified element), set the color of the bottom border for this style to match. If you don't, you'll end up with a line separating the tab from the panel.

Tip: If you make the text size for one type of tab larger or smaller than the other tab type, you end up with different heights for the different tabs. What's worse, the shorter tab no longer touches the top of the panel group. To fix this, add a line-height property (page 134) to the *.TabbedPanelsTab* style that's large enough to force the two tabs to occupy the same height–use a pixel value so that you can guarantee the different tabs will be the same height. You'll probably need to conduct some trial and error testing to get this right.

- **Panels: *.TabbedPanelsContentGroup* or *.TabbedPanelsContent***

  Two styles affect the panels. The first, *.TabbedPanelsContentGroup*, is applied to a <div> tag that wraps around the HTML of *all* of the panels. Second, the content of each panel is itself wrapped in a <div> tag with the *.TabbedPanelsContent* class applied to it. You can edit either style to adjust basic properties like font color, size, and so on. However, the borders and background color for the panels is controlled by the *.TabbedPanelsContentGroup*; edit that style if you wish to change the panels' borders or backgrounds. Out of the box, the *.TabbedPanelsContent* style sheet just has padding set on it—the padding property (page 322) adds space inside each panel so its contents don't butt right up against the borders of the panel.

  Each panel is only as tall as the content inside it. If one panel has a lot of information and another just a little, the panels grow wildly as you switch among the different tabs and panels. If you're a stickler for consistency, you can set a height for all panels: Edit the *.TabbedPanelsContent* style, and add a height property (see page 320). Be careful with height, however; before building a Web page, it's difficult to judge how much content a panel will have (and thus how tall it needs to be). If the content inside a panel grows taller than the panel's height setting, you get some weird display problems, as explained on page 321.

Tip: In Firefox, when you click a tab, it gains a fuzzy, dotted outline around it. This outline is applied by a "focus" state (see page 174). To remove it, you need to create an advanced style named *.TabbedPanelsTab:focus*. Then you need to set the CSS *outline* property to *none*. Unfortunately, you can't do this setting with Dreamweaver's Rule Definition Window. To add this property, first create the *.TabbedPanelsTab:focus* style; when the CSS Rule Definition window appears, just click OK. This action creates a style with no properties. Next, find the style in the CSS Styles panel, and then select it; then, in the Properties Pane (see page 289), click the Add Property link, type *outline*, hit Tab, and then type *none*. You're done.

- **Content inside the panel**

  Dreamweaver doesn't start you off with any styles that control specific tags inside a panel. Although headlines and paragraphs inherit (see page 294) any text properties added to the panel styles, you might want to define a different look for headlines, paragraphs, lists, and other tags inside a panel. This situation is perfect for a descendent selector. A descendent selector, as you read on page 285, lets you specify the look of a tag when it's inside another tag, and thus lets you pinpoint the look of page elements based on where they appear on the page. In this case, say you want paragraphs inside a panel to look different from other paragraphs on the page: Create a descendent selector style named "*.TabbedPanelsContent p*," and then add any CSS properties you'd like. A style to format heading 2 tags inside a panel: "*.TabbedPanelsContent h2*". To control the look of any particular tag inside a panel, create an advanced style, and then tack *.TabbedPanelsContent*, followed by a space before the name of any tag you want to look different when it appears inside a panel (see page 117 for more on creating styles).

FREQUENTLY ASKED QUESTION

.VTabbedPanels Explained

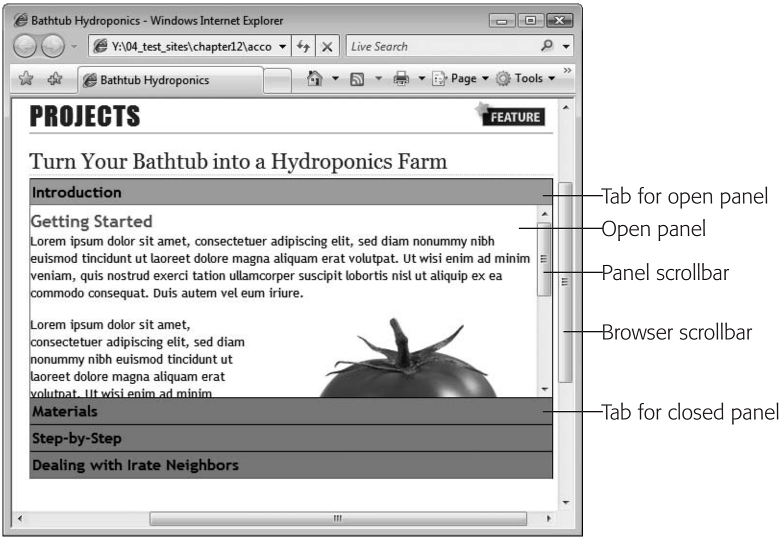
In the SpryTabbedPanels.css style sheet, what do all the styles whose names begin with .VTabbedPanels do?

The short answer: They don't do anything. The longer answer: Unless you want to have vertical tabbed panels. A vertical tabbed panel displays the tabs one on top of the other along the left edge of the groups of panels. In other words, the panels appear to the right instead of the tabs. They don't look particularly good, and if that weren't reason enough to avoid them, they're difficult to manage. To see one in action, visit: *http://labs.adobe.com/technologies/spry/samples/tabbedpanels/tabbed_panel_sample.htm*.

If you feel like experimenting, you can turn a regular tabbed group of panels into vertical tabs by applying a *.VTabbedPanels* class to the <div> tag that surrounds the entire Spry Tabbed Panel group. (This div tag looks something like <div.TabbedPanels#TabbedPanels1> in the Tag selector). The exact ID—#TabbedPanels1 in this example—depends on the ID you set on step 3 on page 460. You can most easily change this div's ID with the Tag selector method described in Figure 8-2 on page 285.

Accordions

A Spry Accordion is another space-saving widget for stuffing lots of content into a multi-paneled display (Figure 12-5). Like Spry Tabbed Panels, a Spry Accordion contains panels of information, each with a labeled tab. However, the tabs are stacked on top of each other instead of side by side. When you click the tab of a panel that's not currently visible, that panel rises with a smooth animated effect. In addition, you must set each panel's height, so if the content inside a panel is taller than the panel itself, a scroll bar appears on the panel's left edge: It's kind of like having a browser window inside a browser window. Dreamweaver's stock style sheet sets the height of each panel to 200 pixels, but you can change that (see the bullet point "Panels" on page 470).



PROJECTS

FEATURE

Turn Your Bathtub into a Hydroponics Farm

Introduction

Getting Started

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Figure 12-5:
Accordion panels must have a set height, so you always know how much room they take up on a page. Panels that have lots of content automatically get scroll bars added to them. The content in the "Introduction" panel in this image doesn't fit within the height of the panel, so to read all the information, a visitor must use the small scroll bar. Depending on how you look at it, the additional scroll bar provides a great space-saving device or an annoying inconvenience that forces visitors to scroll unnecessarily.

Adding an Accordion

You can place a Spry accordion anywhere on a Web page—on an empty page, inside a div tag, and so on.

1. **In the document window, click where you wish to insert the accordion.**

   For example, inside a div tag.

2. **Choose Insert → Spry → Spry Accordion, or, on the Insert bar, click one of the Spry Accordion buttons (see Figure 12-2).**

   After inserting an accordion, you see a tab (labeled "Label 1"), an open panel (with "Content 1" inside) and another tab ("Label 2") at the bottom (see Figure 12-6); in addition, a blue Spry tab appears above the top tab, and the Property inspector displays the accordion's properties (Figure 12-6).

Tip: You can insert any Spry widget by dragging its icon from the Insert bar to anywhere on a Web page.

3. **In the Property inspector, name the accordion.**

   As with Spry Tabbed Panels, this step is optional (see step 3 on page 460).

4. **Add additional tabs and panels to the accordion.**

   If two panels aren't enough for your needs, use the Property inspector to add more. Click the + button above the list of tab names (see Figure 12-6) to add a new tab and panel. To remove a panel, in the panels list, click the name of the tab, and then click the minus (–) button. (You can also reorder the panels by selecting a tab from the list, and then, in the Property inspector, clicking the up or down arrow button.)

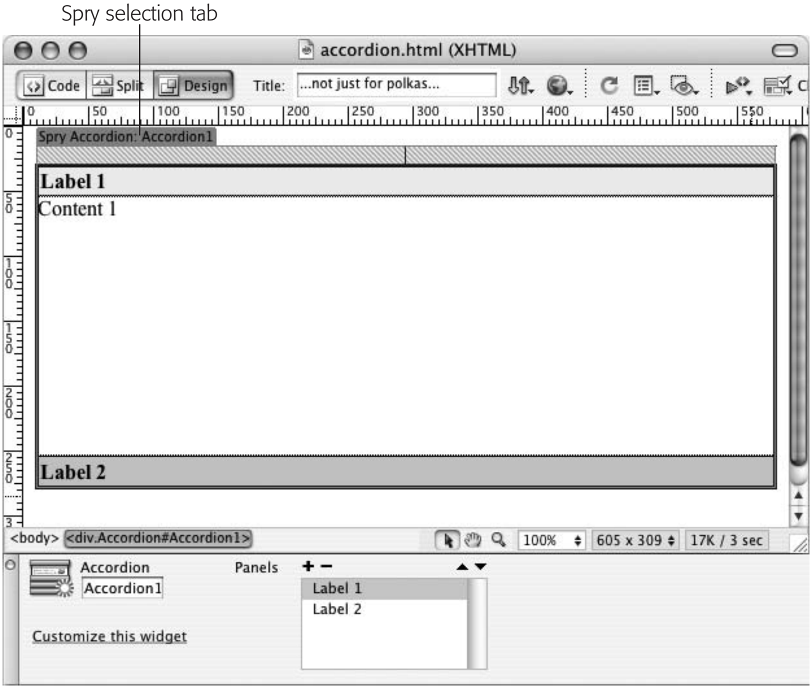


Figure 12-6:
To edit a Spry Widget's properties, select it: in Design view, on top of the widget, click the blue Spry tab. The blue tab is an internal Dreamweaver control, and doesn't appear in a Web browser.

Adding and Editing Accordion Content

An accordion is divided into sections, composed of a labeled tab and a content panel associated with the tab. Each tab is embedded in its own <div> tag; content for a panel appears inside another <div> tag. Each tab-panel pair is enclosed by yet another div (and the entire accordion [all tab-panel groups] is wrapped in one final div).

To edit a tab's label, in Design view, just select its text, and then type a new label. (Since the label is enclosed in a <div> tag, you can also just click the tab, and then press Ctrl+A (⌘-A) to select all the label's text.) Since accordion widget tabs span the entire width of the accordion, you can put a lot more words on an accordion tab than on tabs on the tabbed panels.

As with Spry Tabbed Panels, you have to make a panel visible to edit it: Mouse over the tab whose panel is hidden, and then, at the right edge of the tab, click the eye icon to open the panel for editing. It's the same procedure (and same eye icon) as with tabbed panels (see Figure 12-4). To select all the text inside a panel, click the panel, and then choose Edit → Select All (or Ctrl+A [⌘-A]). You can place any combination of HTML inside a panel: headlines, paragraphs, bulleted lists, forms, images, and Flash movies.

You'll run into one big problem if you add more content than you can fit inside an accordion panel's height: You can't see all the content in Dreamweaver! Remember, accordion panels occupy a fixed height: When the accordion is viewed in a browser, you can just scroll inside the panel to see any content that doesn't fit (see Figure 12-5). But you don't get any scroll bars in Dreamweaver's Design view, so when you add more content than you can fit into the height of the panel, you can't edit it. You can work around this problem in two ways:

- Double-click the panel.
- Right-click (control-click on a Mac) the panel, and then, from the contextual menu, choose Element View → Full (see Figure 12-7).

Either way, the panel fully expands so you can now see and edit all the content inside. In fact, all the panels in the accordion expand when you do either of these things. This "full" view is visible in Dreamweaver only in order to make it easier to edit content in the accordion panels: When someone views the page in a Web browser, he sees only the top panel, and he must click another tab to view another panel's content.

Formatting a Spry Accordion

When you add a Spry Accordion to a Web page, Dreamweaver links an external style sheet named SpryAccordion.css to the page. This CSS file contains all the styles that control the look of the accordion's tabs and panels. The process for modifying the appearance of those tabs follows the same general sequence described on page 462 for Spry Tabbed Panels: Identify the element you wish to format, and then open and edit that element's style to match your page's overall design.

To help guide you in the process of modifying Spry accordions, here's a list of accordion elements and the styles that control them:

- **The Accordion (all tabs and panels):** ***.Accordion***

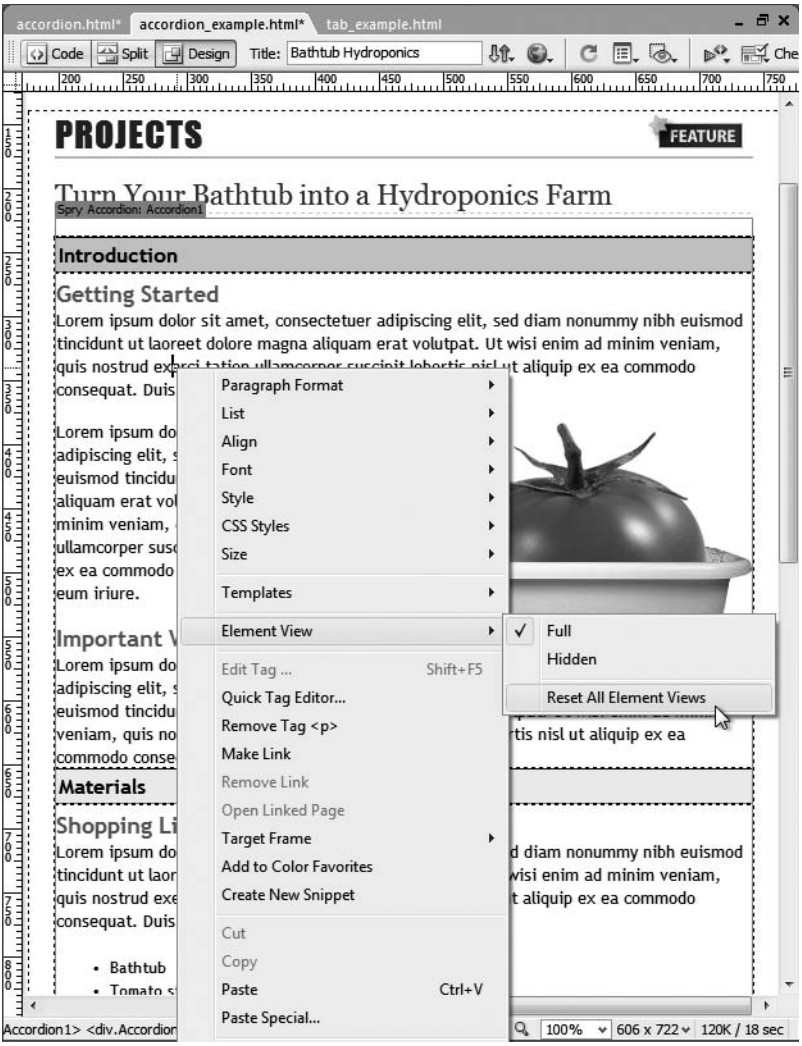
  The *.Accordion* class style controls the overall settings for the accordion. This class is applied to the <div> that surrounds the tabs and panels. If you add basic font formatting to this style, such as font color, size, and font family, the other tabs and panels inherit (see page 294) these same settings.

  In addition, the left, right, and bottom borders that appear around the accordion are set in this style.

- **All tabs:** ***.AccordionPanelTab***

  Tabs inside a Spry Accordion are displayed in four possible ways (some design-inspired Adobe engineer got a little wild): As with a Spry tabbed panel, you see both a selected tab (the tab for the currently displayed panel) and a non-selected tab (the tab eagerly waiting to be clicked to reveal the hidden contents of its panel).

  In addition, both the selected and non-selected tab have "focus" states that kick into action to format *all* tabs when you click any *one* tab. In other words, click a single tab, and all tabs change appearance—"Yes sir, my tabs-in-arms and I are ready for your command!" Overall, the focus tabs are visually distracting (especially since the background colors are two shades of electric blue). They aim to



Turn Your Bathtub into a Hydroponics Farm

Getting Started

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Figure 12-7: *"Full" view shows all the content in all panels for a Spry accordion widget. Double-click any panel whose content is taller than the panel's height to enter Full view, or right click (control-click) on the panel, and then, from the Element View submenu, choose Full. To return the accordion back to its collapsed state (the way it appears in a Web browser), right-click (Control-click) anywhere on the page, and then, from the Element View submenu, choose Reset All Element Views.*

aid someone who is using a keyboard instead of a mouse to navigate the accordion panels (you can actually tab to the accordion, and then use the up and down arrow keys to hide and reveal panels).

Note: You see only the "focus" state for tabs in Firefox and Internet Explorer. Neither Safari nor Opera display the effects of the focus styles discussed here.

To alter the basic appearance of all tabs, edit the .AccordionPanelTab style. If you define a font family for this style, then all tabs use that font. In addition, the padding inside each tab, and the borders that appear around each tab are defined in this style.

- **Not selected tab: *.AccordionPanelTab, .AccordionPanelTabHover,* and *".AccordionFocused .AccordionPanelTab"***

  The *.AccordionPanelTab* style also dictates the background color for a non-selected tab. In addition, a non-selected tab has a hover style—*.AccordionPanelTabHover*—so that when a visitor's mouse moves over the tab, the tab highlights to indicate that you can click it. The basic style sheet supplied with Dreamweaver merely changes the tab's text color when the mouse moves over it, but you're free to change other settings as well.

  When any tab is clicked, all non-selected tags also change appearance, thanks to the "*.AccordionFocused .AccordionPanelTab*." Tabs also use this style when a visitor presses his keyboard's Tab key to access the accordion panels. The stock style sheet changes the background color to a bright blue. You can delete the style completely if you don't want the tabs to change when clicked. (At the very least, for the sake of all who care about beauty in this world, change the electric blue color to something less obnoxious.)

Tip: The same Tip on page 464 regarding the fuzzy line that Firefox places around focused tabs applies to the Spry accordion. In this case, the fuzzy line appears around the entire accordion. To remove this outline, create an advanced style called *.Accordion:focus*, and then follow the steps in the Tip on page 464 to set that style's *outline* property to *none*.

- **Currently selected tab: *".AccordionPanelOpen .AccordionPanelTab", ".AccordionPanelOpen .AccordionPanelTabHover",* and *".AccordionFocused .AccordionPanelTab"***

  The "*.AccordionPanelOpen .AccordionPanelTab*" style applies to the tab associated with the currently opened panel. This style essentially overwrites style properties inherited from the *.AccordionPanelTab* style that all tabs share. In the stock style sheet, only the background color differs from the other tab style, but, again, you're free to modify this style. In addition, the text on a selected tab also changes color when a visitor's mouse moves over it, thanks to the "*.AccordionPanelOpen .AccordionPanelTabHover*" style. This subtle "you can click me" cue is useful for a non-selected tab (since clicking one of those tabs actually does something). But since clicking an already opened tab doesn't do anything, this hover style is actually a needless distraction.

  A selected tab also changes color when you click its tab, or press the keyboard's Tab key to access the accordion (again, you see that hideous electric blue). The "*.AccordionFocused .AccordionPanelTab*" style is the culprit.

- **Panels: *.AccordionPanelContent***

  The *.AccordionPanelContent* class is applied to the <div> tag that surrounds the HTML contained in an accordion panel. You can adjust font settings for this style to affect only the text inside the panel.

In addition, this style defines each panel's height. The CSS *height* property is set to 200 pixels at first, but you can make this value larger to display a bigger panel, or smaller for a shorter panel. Unfortunately, there's no way to make the panels automatically adjust to fit whatever content is inside them; you must have a set height for the accordion panels to work.

- **Content inside the panel**

  Dreamweaver supplies you with no specific styles for controlling specific tags inside an accordion panel. You can use the same general process described for Spry tabbed panels (under the bullet point "Content inside the panel" on page 475) to create descendent selectors that affect only tags inside accordion panels. Just use *.Accordion* as the first part of the selector. For example, "*.Accordion p*" is a descendent selector for formatting paragraphs inside an accordion panel.

  Also note that content inside an accordion panel butts directly up against the panel's left and right edges. You can't apply padding directly to the panel (the *.AccordionPanelContent* style) because you would create empty space underneath the tabs of closed panels. Instead, you must add padding to the tags that appear inside the panel. If you want all heading 2 tags to indent 5 pixels from both the left and right sides of the panel, create a descendent selector like "*.Accordion h2*", and then set the left and right margin properties to 5 pixels.

POWER USERS' CLINIC

Get the Most from Spry

Spry isn't just a Dreamweaver tool; it's a separate JavaScript-based toolset that has a lot of bells and whistles beyond what's available from Dreamweaver's Insert bar and Property inspector. You can do things like change the speed of most effects (like how fast collapsible panels open and close). You can even program other ways to make an accordion panel open–by clicking another link on a page, or simply mousing over a tab. You can even change the underlying HTML for most Spry widgets. You could change the <span> tags usually used for Spry Validation error messages to a <p> tag.

To modify the Spry widgets that Dreamweaver inserts into a Web page, you need to dip into Code view and make some changes. This sounds scarier than it actually is. Adobe made Spry easy for non-programmers to learn and use. The complex programming that makes Spry work its magic is hidden; you need to learn only a few basic concepts, and have a handy guidebook nearby, to take control of your Spry widgets.

To learn more about Spry and how to modify it, check out the online manual at *http://livedocs.adobe.com/en_US/Spry/1.4/index.html*. If you're more the bookish type who likes to relax by the fire, you can also download and print a PDF version at *http://help.adobe.com/en_US/Spry/1.4/dw_spry_help.pdf*.

Collapsible Panels

A Spry Collapsible Panel is a single tab and panel (see Figure 12-8). The tab toggles the panels' display; each click of the tab either opens or closes the panel. You decide whether the panel is opened or closed when the Web page first loads. A closed collapsible panel is great for keeping information out of a visitor's face until she wants it—like a form for signing up for an e-mail newsletter, or driving directions to your business. Add an opened panel to your page when you want to present an important announcement that, once read, can be quickly hidden with a click of the mouse.

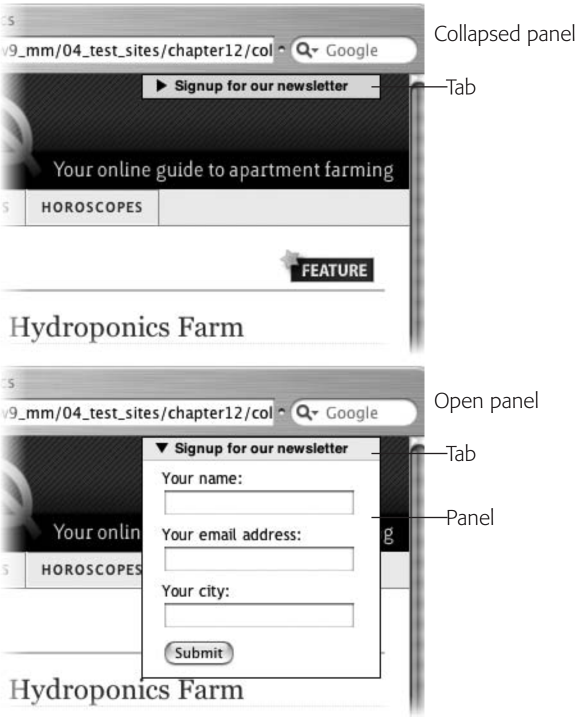

Collapsed panel
9_mm/04_test_sites/chapter12/col
Google
▶ Signup for our newsletter
Tab
Your online guide to apartment farming
HOROSCOPES
FEATURE
Hydroponics Farm
Open panel
▼ Signup for our newsletter
Tab
Your name:
Your email address:
Your city:
Submit
Panel

Figure 12-8:
Collapsible panels work especially well as absolutely positioned divs (page 335). Here, the collapsible panel is positioned at the top of the page overlapping an empty area on the page's banner (top). Because the panel is absolutely positioned, it floats above other content on the page. When a visitor clicks the tab, and the panel expands (bottom), it doesn't push other page content out of the way; it merely sits above the page, like a sheet of paper on a desktop. Clicking the tab above the panel once again hides the panel.

Adding a Collapsible Panel

You can place a Spry Collapsible Panel anywhere on a Web page—on an empty page, inside a div tag, and so on.

1. **In the document window, click where you wish to insert the collapsible panel.**

   For example, inside a div tag.

2. **Choose Insert → Spry → Spry Collapsible Panel, or, on the Insert bar, click one of the Spry Collapsible Panel buttons** (see Figure 12-2).

   After inserting a collapsible panel, in the document window, you see a tab (labeled "Tab"), and an open panel with "Content"; in addition, a blue Spry tab appears above the top tab, and the Property inspector displays the properties for the collapsible panel (Figure 12-9).

3. **In the Property inspector, name the collapsible panel.**

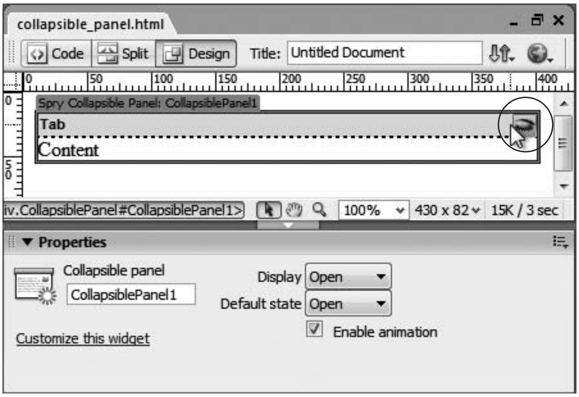
   As with Spry Tabbed Panels, this step is optional (see step 3 on page 460).

   Unlike tabbed panels and accordions, a collapsible panel is just a single tab/panel pair. You can't add additional tabs or panels. You can, however, place multiple collapsible panels on a page, stacked one on top of the next. This method has two distinct advantages over an accordion. First, you don't have to have a panel open when the page loads. You can have three collapsible panels on a page with all three closed. A visitor clicks the tab of one panel, and it opens, leaving the other collapsible panels unaffected.

   In addition, because each collapsible panel is independent, a visitor can have all of the panels open at once.

4. **From the Property inspector's Display menu, choose either Open or Closed (see Figure 12-9).**

   The Display menu controls only whether the panel is opened or closed in *Design view*. In other words, this setting is just to help you while working within Dreamweaver; it doesn't affect how the panel appears when the page is viewed in a Web browser.



Collapsible panel: CollapsiblePanel1

Display: Open

Default state: Open

☑ Enable animation

Figure 12-9: *You can skip the Display menu in the Property Inspector, and open and close the panel by clicking the eye icon–to open a closed panel–or the shut-eye icon (circled)–to hide an open panel. Like the Display menu options, this action controls only whether the panel is opened or closed in Dreamweaver's Design view as you work on the page.*

5. **From the Property inspector's "Default state" menu, choose either Open or Closed** (**see Figure 12-9**).

   This menu controls how the panel appears—open or closed—when a Web browser first loads the page. In other words, a visitor sees the panel this way when he visits the page: Either the panel is open and visible, or closed and hidden. Of course, a visitor can change that view simply by clicking the tab when he views the page.

6. **Enable or disable animation.**

   Turn on the Property inspector's "Enable animation" checkbox (see Figure 12-9), if you want the panel to move in and out of view in a smooth "window-blind" effect. Uncheck this box if you simply want the panel to instantly appear and disappear from view each time the tab is clicked. The choice is purely aesthetic, so choose according to your design preferences.

Adding Content to a Collapsible Panel

A collapsible panel consists of a simple combination of div tags: one div tag (marking the beginning and end of the widget) that wraps around two other div tags (one tag for the tab, followed by another div for the panel).

To edit a tab's label, in Design view, just select its text, and then type a new label. Since the label is enclosed in a <div> tag, you can also just click inside the tab, and then press Ctrl+A (⌘-A) to select all of the label's text.

To edit the contents of the panel, the panel must be visible, and you control it either with the Property inspector's Display menu (step 4 on page 473) or by clicking the eye icon on the panel's tab (Figure 12-9). To select all the text inside a panel, click anywhere inside the panel, and then choose Edit → Select All (or Ctrl+A [⌘-A]). You can place any combination of HTML inside a panel: headlines, paragraphs, bulleted lists, forms, images, and Flash movies.

Formatting a Collapsible Panel

When you add a Spry Collapsible Panel to a Web page, Dreamweaver links the page to an external style sheet file named SpryCollapsiblePanel.css, which contains all the styles that control the look of the tab and the panel. The process for modifying the appearance of those elements follows the same general sequence described on page 462 for Spry Tabbed Panels: namely, identify the element you wish to format, and then open and edit that element's style to match your page's overall design.

To help guide you in the process of modifying Spry Collapsible Panel styles, here's a list of the panel elements and the styles that control them:

- **The Collapsible Panel:** *.CollapsiblePanel*

  This style controls the border that appears around a collapsible panel. Alter the color or style of the border, or completely remove it.

- **All tabs:** ***.CollapsiblePanelTab***

  Four styles control how a collapsible panel's tab is displayed. Each style applies to the tab under different circumstances: When the panel is open, when the panel is closed, when the mouse moves over the tab, and when the tab is clicked (this last action gives the tab "focus").

  To alter the basic appearance of all tabs, edit the *.CollapsiblePanelTab* style. For example, define a font family for this style, and all tabs use that font. In addition, this style dictates the padding inside each tab, and the border that separates the tab and the panel beneath it.

- **Tab when panel is closed: *.CollapsiblePanelTab***

  The *.CollapsiblePanelTab* style also dictates the properties, such as the background color, for the tab when the panel is closed.

Tip: The same Tip on page 464 regarding the fuzzy line that Firefox places around focused tabs applies to the Spry Collapsible Panel. To remove this outline, create an advanced style called *.CollapsiblePanel:focus*, and then follow the steps in the Tip on page 464 to set that style's *outline* property to *none*.

- **Tab when moused over: "*.CollapsiblePanelTabHover, .CollapsiblePanelOpen .CollapsiblePanelTabHover*"**

  This long group selector applies to the hover state for tabs—both when the panel is open and when it's closed. If you want to define a different hover appearance for a tab when the panel is open, create two styles: *.CollapsiblePanelTabHover* for a tab when the panel is closed, and "*.CollapsiblePanelOpen .CollapsiblePanelTabHover*" for a tab that's moused over when the panel is closed. (If you go this route, you should either delete the supplied group selector style—"*.CollapsiblePanelTabHover, .CollapsiblePanelOpen .CollapsiblePanelTabHover*"—or change its name as described on page 127 so that it only applies to one of the tab states.)

- **Tab when panel is opened: "*.CollapsiblePanelOpen .CollapsiblePanelTab,*" "*.CollapsiblePanelFocused .CollapsiblePanelTab*"**

  The "*.CollapsiblePanelOpen .CollapsiblePanelTab*" descendent selector style applies to the tab when the panel is opened. This style overwrites style properties inherited from the *.CollapsiblePanelTab* style. In the stock style sheet, only the background color differs from the other tab style, but, again, you're free to modify this style.

  A tab also changes color when you click it, or press the Tab key is pressed to access it (but only in Internet Explorer and Firefox, as described in the Note on page 469). The "*.CollapsiblePanelFocused .CollapsiblePanelTab*" style is the culprit here, so you want to edit this style if you don't want this color change.

- **Panel: *.CollapsiblePanelContent***

  The *.CollapsiblePanelContent* class is applied to the <div> tag that surrounds the HTML contained in an accordion panel. You can adjust font settings for this style to affect only the text inside the panel, or add a background color to make the panel stand out from other page content.

- **Content inside the panel**

  As with the panels for Spry Tabbed Panels and Spry Accordions, Dreamweaver doesn't start you out with any styles that control specific tags inside a collapsible panel. You can use the same general process described for Spry Tabbed Panels (under the bullet point "Content inside the panels" on page 465) to create descendent selectors that affect only tags inside a collapsible panel. Just use *.CollapsiblePanel*, followed by a space as the first part of the selector: for example, "*.CollapsiblePanel p*" is a descendent selector for formatting paragraphs inside an accordion panel.

Also note that content inside a collapsible panel butts directly up against the panel's left and right edges. You can't apply padding directly to the panel (the *.CollapsiblePanelContent* style) because this adds extra space inside a closed panel, making it look not so closed. Instead, you must add padding to the tags inside the panel. If you want all heading 2 tags to indent 5 pixels from both the left and right sides of the panel, create a descendent selector (like "*.CollapsiblePanelContent h2*"), and then set the left and right margin properties to 5 pixels.

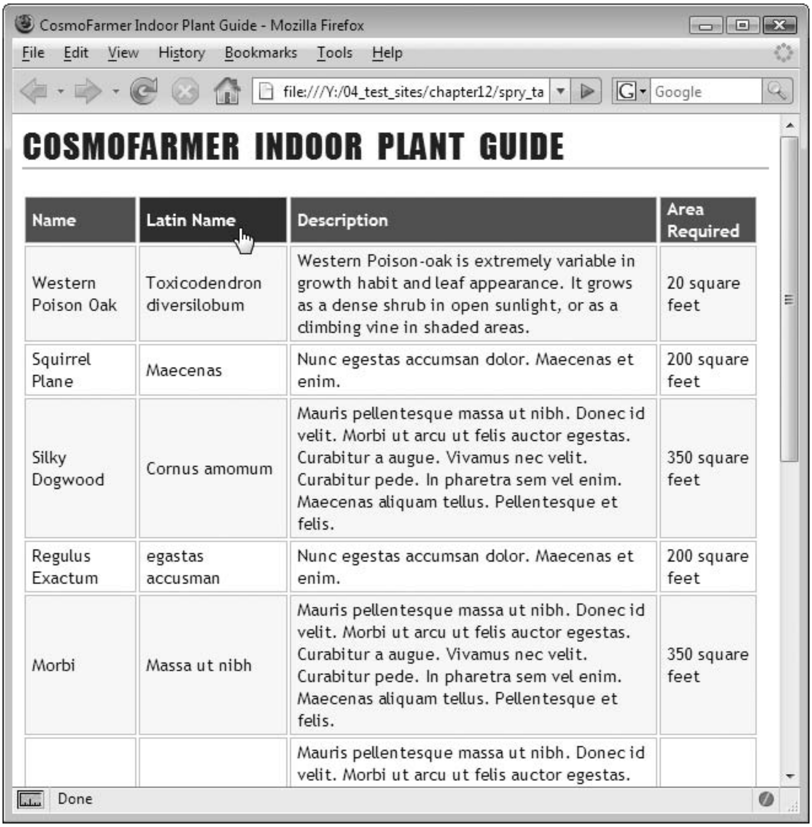
Spry Data Sets

Dreamweaver also includes a way to display data more dynamically than the plain-vanilla HTML table. Spry Data Sets let you create interactive data tables that visitors can sort just by clicking the top of a table column (Figure 12-10). Say a page has a table that lists all the employees in a company. Each employee's name, the region of the country in which she works, the phone number, and other important data is included. Say you sometimes want to see the list of employees alphabetized by last name, and other times you want to sort the list of employees by the region in which they work (Northeast, Southeast, and so on). Normally, this requires creating two pages: one with a table of employees listed by last name, and another with employees listed by their region.

With a Spry data set you need only one page and one table, no matter how many columns you wish to sort by. That's because a Spry table is interactive, just like a regular old Excel spreadsheet. Want to see employees organized by last name? Click the "Name" column. To group employees by region, just click the "Region" column. A Spry table is interactive, instantaneous, and doesn't require loading another Web page.

In addition, Spry data sets let you display detailed data on a single item contained within the table. Suppose you have a simple table that just lists employees' names and the regions in which they work. With Spry you can add an "Up Close and Personal" section to the page, so that when an employee name is clicked in a table row, detailed information such as the employee's phone number, photo, and email address appear in another part of the page. Once again, this little trick doesn't require that the visitor download a different Web page. All this information appears on the same Web page with a simple mouse click.

If you often add data tables to your site, or simply have large amounts of related data that you want to display in an interactive format, the Spry data set may be the tool for you. You need to do a little extra work, however. The data for a Spry data set isn't just plunked into an HTML table, as described in Chapter 7; instead, the data must be formatted in an XML file. That means you're actually dealing with


CosmoFarmer Indoor Plant Guide - Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///Y:/04_test_sites/chapter12/spry_ta
Google
Done

COSMOFARMER INDOOR PLANT GUIDE

Name	Latin Name	Description	Area Required
Western Poison Oak	Toxicodendron diversilobum	Western Poison-oak is extremely variable in growth habit and leaf appearance. It grows as a dense shrub in open sunlight, or as a climbing vine in shaded areas.	20 square feet
Squirrel Plane	Maecenas	Nunc egestas accumsan dolor. Maecenas et enim.	200 square feet
Silky Dogwood	Cornus amomum	Mauris pellentesque massa ut nibh. Donec id velit. Morbi ut arcu ut felis auctor egestas. Curabitur a augue. Vivamus nec velit. Curabitur pede. In pharetra sem vel enim. Maecenas aliquam tellus. Pellentesque et felis.	350 square feet
Regulus Exactum	egastas accusman	Nunc egestas accumsan dolor. Maecenas et enim.	200 square feet
Morbi	Massa ut nibh	Mauris pellentesque massa ut nibh. Donec id velit. Morbi ut arcu ut felis auctor egestas. Curabitur a augue. Vivamus nec velit. Curabitur pede. In pharetra sem vel enim. Maecenas aliquam tellus. Pellentesque et felis.	350 square feet
		Mauris pellentesque massa ut nibh. Donec id velit. Morbi ut arcu ut felis auctor egestas.	

Figure 12-10:
A Spry data table lets visitors interact with your data. Clicking a column header sorts the column in ascending order; click the column again, and data is sorted in descending order. Here, if you wish to view the plants in alphabetical order by their Latin names, click the Latin Name column header. The table's data is sorted instantly, without loading a new Web page.

two files: a Web page that you've added the Spry data magic too, and an XML file that contains data. When the Web page loads, the JavaScript programming provided by the Spry data set downloads the XML file, extracts the required data, and then displays it on the page. When a visitor interacts with that data (by clicking a column header to sort the data, for instance), the Spry programming dynamically reorders the content on the page.

You'll learn more about XML in a moment, but keep in mind that Spry data sets are primarily intended for when you want to display repeating rows of information. Although an XML file can really hold any type of information, the kind of XML file you should use with Spry should contain lists of information, like product catalogs or employee records.

What Is XML?

XML, or Extensible Markup Language, has many similarities to HTML. Like HTML, it's a tag-based language used to identify different pieces of information, and structure data into a meaningful document. For example, HTML has the

<h1> tag to identify the most important headline, or the <ul> tag to denote a bulleted list. But HTML has only a handful of tags, and, in many cases, they don't always meaningfully identify the information you're presenting. You can format a news title like "Bigfoot to Wed Super Model" with an <h1> tag, but you could also use the <h1> tag to format the name of a product you're selling, the title of a book, or an event on a calendar. In these cases, you're using the same tag to identify different *types* of information. Technically speaking, there's nothing wrong with using h1 tags in that way. But you can introduce some awfully messy organizational problems into your document, as you'll learn in a moment. Instead, it would be much more informative to use a tag that accurately identifies the type of information, like <product>, <title>, or <event>.

That's where the "X" in XML comes in. XML is not really a markup language like HTML, as much as it's a set of guidelines for creating your own markup languages. The X, or *extensible*, part of XML lets you define your own types of tags—or "extend" the language to fit your needs. In this way, you can create very specific tags to describe different types of information like invoices, books, personnel, and so on.

Tip: To learn more about XML, check out *www.w3schools.com/xml*, grab a copy of *Learning XML* (O'Reilly) by Erik T. Ray, or visit the XMLTopic Center on the Adobe Web site: *www.adobe.com/devnet/topics/xml.html*.

Suppose *CosmoFarmer* wants to use Dreamweaver's new-fangled XML data set tools, and so decides to come up with an XML format for storing their list of favorite indoor plants. That list consists of a plant's regular and Latin names, a short description of the plant, the path to an image file on the site, and a number representing the recommended square footage you need to grow the plant. In HTML, this information might look like this:

```
<h2>Kudzu <em>(Pueraria lobata)</em></h2>
<p><img src="images/kudzu.jpg">Kudzu is a climbing, woody or semi-woody,
perennial vine capable of reaching heights of 66-98 ft, but also scrambles
extensively over lower vegetation. <strong>1200</strong></p>
```

This code is all well and good for display in a Web browser, but it doesn't give any sense of what *kind* of information is being presented. This quality is particularly important when you keep in mind that XML was invented as a way of exchanging data between computers. So if another computer encountered this HTML, it wouldn't understand the purpose of the text inside the <h2> tag. In fact, even a human viewing this code might not easily discern what the "1200" means; it's a number, but without some descriptive label, you can't tell that this number refers to square footage. XML provides a much clearer way of defining the structure and meaning of content.

CosmoFarmer's IT staff could decide to come up with their own XML format to store this data. In this case, the same information might be written in XML like this:

```
<plants>
<plant>
<name latin="Pueraria lobata">Kudzu</name>
<description>Kudzu is a climbing, woody or semi-woody, perennial vine capable
of reaching heights of 66-98 ft, but also scrambles extensively over lower
vegetation.</description>
<area>1200</area>
<image>images/kudzu.jpg</image>
</plant>
</plants>
```

Kind of like HTML, right? But with a completely different set of tags. This new markup makes the meaning of each chunk of information clearer. You can easily tell that this data describes a plant (the <plant> tag) with a regular name, a Latin name, and so on. In a nutshell, that's what XML offers: tags that meaningfully identify the information inside them.

Rules of the Road

Because XML is intended to be an easy way to exchange data between different computers, operating systems, programs, institutions, and people, it has some fairly strict requirements to ensure that everyone's playing by the same rules. If you've done your fair share of writing raw HTML code, much of this will be familiar to you (see page 6). In fact, if you've written XHTML code (see page 9), you've already been writing XML. XHTML is an XML version of HTML that just has a few more rules than plain old HTML.

- **Every XML document must have a single "root" element.** A root element is a tag that surrounds all other tags in a document, and appears only once in a document. In an XHTML (and an HTML) document, this tag is the <html> tag. In the *CosmoFarmer* XML format introduced above, this tag is <plants>. If you're creating your own XML-formatted file, you can make this root element whatever you want: <events>, <employees>, and so on. It makes sense for this tag to describe whatever content you're storing inside the file.
- **All tags must be nested properly, with no overlapping tags.** This rule works just as it does in HTML. You can't have code like this: <b><i>Bold and italics</b> </i>. Since the opening <i> tag appears after the opening <b> tag, its closing tag—</i>—must appear before (or inside of) the closing <b> tag, like this: <b><i>Bold and italics</i></b>.
- **All tags must have both an opening and closing tag, or be self-closing.** In HTML, a paragraph of text is indicated by both an opening <p> and a closing </p>. Some HTML tags, however, don't hold content, like the <img> tag or the line break (<br>) tag. The XML version of these tags include a forward slash at the end of the tag, like this: <br />. This type of tag is called an *empty element*.

- **The property values of all tags must be quoted.** In regular old HTML, you could get away with this line as a way to add a link to a page: <a href=index.html>Home</a>. In XML, this doesn't fly. You need to quote the href property's value like this: <a href="index.html">Home</a>. You're probably used to doing this already, and if you've been using Dreamweaver, the program always does it for you. But when writing your own XML files, make sure to include quotes around a tag's property values.

If your XML file meets these conditions, it's known as (to use the official XML designation) "well-formed." In other words, your XML code is written properly. If you write more complex XML documents, you'll need to follow additional rules, but these requirements are basic.

In many cases, you'll also include what's called a *prolog*—an introduction of sorts that appears at the very top of the document and announces what kind of document it is. In its most basic form, the prolog looks like this:

```
<?xml version="1.0"?>
```

The prolog can also include the type of encoding (useful for indicating different characters for different languages) used in the document.

Here, then, is a basic, complete, and well-formed XML document:

```
<?xml version="1.0" encoding="utf-8"?>
<plants>

<plant>
    <name latin="Pueraria lobata">Kudzu</name>
    <description>Kudzu is a climbing, woody or semi-woody, perennial vine
capable of reaching heights of 66-98 ft, but also scrambles extensively over
lower vegetation.
    <area>1200</area>
    <image>images/kudzu.jpg</image>
</plant>

<plant>
    <name latin="E. globulus">Blue Gum Eucalyptus</name>
    <description>One type of the large family of Eucalypts native to
Australia. The grow best in multi-story loft apartments or on balconies with
sturdy steel reinforcing.
    <area>20</area>
    <image>images/eucalyptus.jpg</image>
</plant>

</plants>
```

Tip: Dreamweaver can verify whether or not an XML file is well formed. Open the file in Dreamweaver, and then choose File → Validate → As XML. The Results panel opens. If nothing appears inside the Validation panel, the file is OK. If there's an error, then a message explaining the problem appears. Fix the error, and then try to validate the document again. Dreamweaver can even validate XML using a DTD file (see the box below).

UP TO SPEED

Taming the Tower of Babel: DTDs and XML Schemas

You may be wondering: If anyone can make up her own tags to create her own types of XML files, how can XML help computers, people, and organizations exchange data? After all, if you come up with one way of formatting invoices using XML, and your buddy in accounting uses his own set of tags to create invoices, you'll end up with two different and incompatible types of files for tracking the same information. It's like the Tower of Babel—everyone speaking their own language and unable to talk to each other. Fortunately, XML provides two solutions to this problem: *DTDs* (or Document Type Definitions) and *XML Schemas.* Both are methods of creating a common vocabulary, so everyone can use the same language to talk about the same things.

In fact, you've already been using a DTD when building Web pages in Dreamweaver. When you create a new Web page, Dreamweaver adds a line of code at the beginning of the page, like this:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML
1.0 Transitional//EN" "http://www.w3.org/
TR/xhtml1/DTD/xhtml1-transitional.dtd">
```

This line varies depending on the type of HTML or XHTML you use. But the concept is the same. The entire line defines the document type for the page—in this example, XHTML 1. 0 Transitional—and points to a URL where the DTD can be found—here, it's *http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd*.

Essentially, the DTD for each type of HTML or XHTML defines what tags are allowed and how they should be written. If you don't follow the rules, the page is considered invalid. In fact, Dreamweaver's validator, discussed on page 593, is doing just that—making sure your code follows the rules of a particular DTD.

XML Schemas are just another method of enforcing a language for a particular XML format, with a few bells and whistles that DTDs lack. DTDs have been around a long time and are more common; schemas are a newer concept, but will probably eventually replace DTDs. Both XML Schemas and DTDs are very confusing beasts—difficult to read, and difficult to create. Many DTDs and Schemas are available for describing a wide range of different types of information. A consortium of businesses that agree to a single way of describing information often create these DTDs and Schemas, so that they can easily share data with each other. You probably won't be creating your own anytime soon, but just keep in mind that they exist, and are a common way to make sure everyone's speaking the same tongue.

Dreamweaver includes a nice feature related to both DTDs and Schemas: If you include a DTD or Schema in an XML file, and then edit that XML file in Code view, Dreamweaver displays Code Hints for the various XML tags as you type. Code Hints are shortcuts for typing an entire tag or tag property; as you begin to type a tag, Dreamweaver pops up a small window displaying any tags that match what you've typed so far. At that point, you can just select the correct tag, instead of having to type it all out. This feature is also available when working with HTML in Code view, and is described on page 377.

Tip: Dreamweaver includes built-in reference material covering XML. See page 394 for more on Dreamweaver's Reference panel.

Inserting a Spry Data Set

To begin using a Spry data set, you must first tell Dreamweaver which XML file you wish to use, and what data in the XML file you want to access. Start by clicking the Spry XML Data Set button on the Insert bar's Data tab (Figure 12-11) or on the Insert bar's Spry tab (Figure 12-2, bottom). You can also choose Insert → Spry → Spry XML Data Set. Either way, the Spry XML Data Set window opens (Figure 12-12).

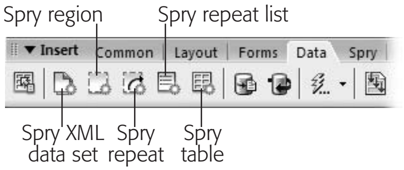


Figure 12-11:
You can find buttons for inserting Spry data set objects under the Insert bar's Data tab.

The number of choices makes this window a little intimidating, but filling out the options correctly is a simple process:

1. **Type a name in the "Data Set name" field.**

   Dreamweaver supplies a generic name—like ds1—but change the name to something that's more descriptive. If you add multiple data sets to a page, distinguishing among ds1, ds2, ds3 isn't as easy as among dsEvents, dsEmployees, and dsProducts.

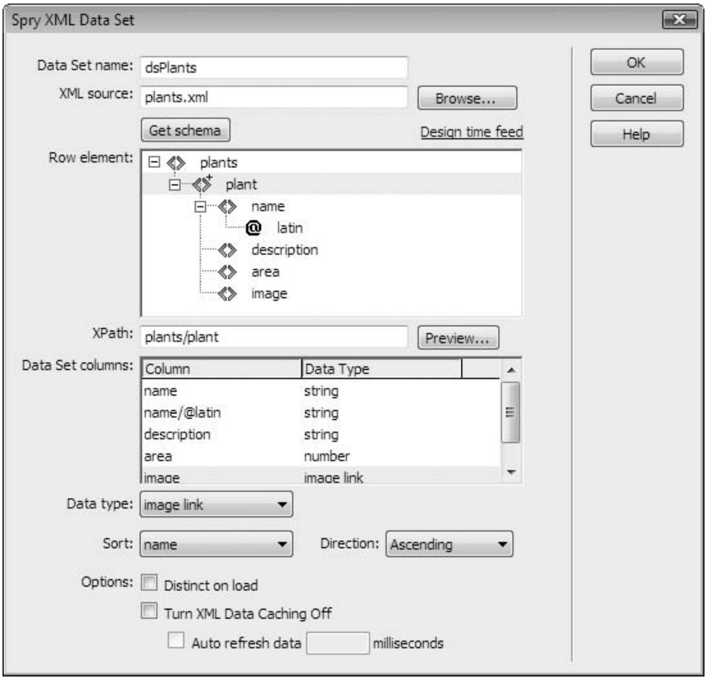
   However, do leave 'ds' as a prefix to the name—dsEvents, for example. If you ever go into Code view, this small step makes it easy for you to identify a reference to a Spry data set.

2. **Click the Browse button, and then locate and select an XML file.**

   You can also type an absolute URL that points to an XML file—like *http://www.cosmofarmer.com/plants.xml*. Keep in mind a couple of caveats for working with absolute URLs, however. First, in order for the Spry data set to work, the Web site the file is located on must be the same site the Web page is on. In other words, if you add a Spry data set that specifies an XML file on *www.cosmofarmer.com*, to a Web page that will ultimately reside on *www.nationalexasperator.com*, the Spry data set doesn't work. In fact, a browser trying to view that Spry-enabled page will display a nasty error message.

   That error is part of a Web browser's built-in security system. When a Web page on one site tries to use JavaScript to access and display data from another site, the Web browser smells something fishy—"Is this Web page trying to pretend it's on another site?"—and spits out an error.

   There's yet another problem you'll face when using an absolute URL to specify an XML file. Even if the Web page and the XML file will *eventually* sit on the same Web site, that isn't the case as you're building your page: While you build and test the Spry Web page, that Web page is on your computer, but the XML file is stored wherever you're absolute URL is pointing.



Spry XML Data Set

Data Set name: dsPlants

XML source: plants.xml

Row element:

- plants
  - plant
    - name
      - @ latin
    - description
    - area
    - image

XPath: plants/plant

Data Set columns:

Column	Data Type
name	string
name/@latin	string
description	string
area	number
image	image link

Data type: image link

Sort: name Direction: Ascending

Options: □ Distinct on load

□ Turn XML Data Caching Off

□ Auto refresh data milliseconds

Figure 12-12:
Unless you're an XML pro, don't fill out the XPath field. Dreamweaver does that for you automatically when you identify a repeating row. XPath is a language used to identify particular elements or tags in an XML file. You use XPath to create what's called an "XPath expression," which is kind of like a trail of cookie crumbs that leads from one part of the document (frequently the beginning tag, or "root element") to the particular "node"–tag or tag property–you wish to select. In its most basic form, XPath works very much like the document window's Tag selector: it pinpoints a tag nested in any number of other tags. For instance, in this example, the XPath expression plants/plant means: Start at the plants element (that's the root element of this particular XML file), and then find a nested tag named plant. Chapter 26 has more about XPaths.

Note: You can still work with a remote XML file in Dreamweaver's Design view. You can add XML data, and format it as described on page 488. You just can't preview the page with real data on it until you put it up on the Web server where the XML file is.

The same rules apply here that you just read about with the first absolute URL problem: The Web browser thinks the local Web page is trying to get the XML from another place (a Web site on the Internet), and doesn't allow it. You end up with another error, and you can't preview your page.

Because of these problems, it's best to work with a local XML file.

Note: Internet Explorer 7 doesn't display Spry data set pages if you preview them locally–even if both the XML file and the Web page are together on your computer. IE 7 spits out a nasty error message. The only way around this is to put the page and XML file up on your Web server, or create a local *testing server* that includes a Web server running right on your desktop computer (you'll learn how to do this in Part 6 of this book). You have one other solution: Test your pages locally using Firefox, and then move the completed Web page and XML file to your Web server. Finally, preview the finished product using Internet Explorer 7.

3. **Click the "Get Schema" button.**

   Dreamweaver loads the XML schema—the structure of the XML file. This structure is pictured in the large "Row element" box. In Figure 12-12, a nested list of names indicates the different tags in the XML file. Each tag is represented by the < > icon. The topmost item (plants) is the root element (see page 479). Inside the root element are other nested tags.

The XML file usually has at least one repeated element, which has a + symbol to the right of its < > icon. In Figure 12-12, the repeated element is named plant. (You can tell by the straightforward names that this XML file contains a list of plants.) Within a repeated element, you can have other elements as well, such as the *name*, *description*, *area,* and *image* tags pictured in this example. The @ symbol indicates an attribute of an element (like a tag's property). In this example, *latin* is an attribute of the <name> tag. (One example of this tag in the XML file might look like this: <name latin="E. globulus">Blue Gum Eucalyptus</name>.)

4. **From the list of XML tags, select a Row element.**

   The Spry data set tools are intended to display multiple instances of similar data, such as a list of employee phone numbers, or a list of events. So your job is to tell Dreamweaver which XML tag indicates a repeating item. Basically, you just select the element that has a + symbol. In Figure 12-12, that's the *plant* element.

   After selecting a row element, Dreamweaver fills out the XPath field in the Spry XML Data Set window (see Figure 12-12). You can click the Preview button at this point to see a sample of the data pulled from the XML file. Each tag nested inside the row element tag is treated like a column in a table. In Figure 12-12, the plant element is like a table row; the name, description, area, and image elements are each like the data you'd find in that row's columns.

5. **Select a "Data type" for each column of data.**

   In the "Data Set columns" list, Dreamweaver lists the name of each XML element inside the row element. Dreamweaver assumes that the data contained inside each element is a string—meaning just a collection of letters and numbers like "Hello," or "100 Years of Solitude." However, an XML tag might contain other types of data such as a date, a number, or a path to a graphics file. An XML file containing accounting information might have a tag named "balance" that contains a financial balance: <balance>1000</balance>.

   In this case, you would change the data type in the XML Spry Data set window: In the "Data Set columns" list, click the element (like "balance"), and then, from the "Data type" menu, select a new type. For any element that contains just numbers, select "number." For an element that contains a date, select date. And for an element that contains a path to an image file, choose "image link."

   As you'll see on page 493, a Spry table allows a visitor to sort the data inside a table simply by clicking a column header. Assigning a data type of string, number, or date makes sure the Spry programming correctly sorts the data for that column.

   The "image link" option has a different purpose: If you use an XML tag to identify a path to an image file on your site, then Dreamweaver can insert the proper image tag and link to the specified file.

6. **Choose sorting options.**

   If you want the data in the XML file to be sorted (for example, alphabetically) when it first appears on the Web page, then, from the Sort menu, select the name of the XML column that you wish to sort by. Then, select the direction you wish to sort that information from the Direction menu. Ascending sorts A–Z or 1–100, while the Descending option sorts in the opposite direction: Z–A or 100–1.

   If you choose none, Dreamweaver doesn't sort the data, and simply lists it in the order in which it appears in the XML file.

7. **Select the other options that apply.**

   Dreamweaver gives you a few other options when you're inserting a Spry XML Data Set, all of which affect how the XML data is requested and displayed on the Web page:

   - The "Distinct on load" checkbox eliminates any duplicate records inside an XML file. If, for whatever reason, the same content is duplicated in an XML file, turning this option on prevents the duplicate from appearing on the Web page. If your XML file doesn't have duplicate records, this won't be an issue; but since turning this checkbox on doesn't do any harm, you might as well.

   - The other two settings—"Turn XML Data Caching Off" and "Auto refresh data"—ensure that your site's visitors are looking at the data's most recent version. Normally, when a Web page with a Spry data set is downloaded, the XML file is downloaded and stored in the browser's cache (see page 607). If a visitor revisits the Web page, the version of the XML file stored on their computer is used. However, if you frequently update the XML file with new data, you might turn on the "Turn XML Data caching off" box: This way, each time the visitor visits the Spry data set page, he will also download the XML file's latest version.

     If your XML file is updated *really* frequently—like every few seconds or so—you can also force the Web page to automatically reload the XML file, and update the Web page dynamically with new data (great for displaying up-to-the-minute stock prices). To use this option, a database or program on a Web server needs to automatically generate the XML file (unless you want to manually update an XML file every 5 seconds). If you do have time-sensitive data, and a quickly updated XML file, then turn on the "Auto refresh data" checkbox, and type the number of milliseconds the browser should wait before asking for the XML file again. Type *5000* to wait for 5 seconds. Set the refresh time to be no sooner than the time in which the XML file will realistically be updated. If the data in the database used in the XML file isn't updated any more frequently than once a minute, type *60000* (60 seconds). If you type *1* in the milliseconds box, the Web browser will try to download the XML file 1000 times a second, potentially affecting the browser's performance (and your Web server's performance).

Finally, think twice before enabling either of these options. If you update the XML file only every month or so, there's no reason to waste your visitor's time (and your Web server bandwidth) downloading the same XML file over and over again.

Note: Dreamweaver doesn't have a built-in method to dynamically produce XML files–like pulling information from a database, and then turning it into an XML file to use with a Spry data set. However, that feature is built into Adobe's Dreamweaver Developer Toolkit–and, at the time of this writing, Adobe was offering a free extension from that Toolkit that lets you turn database records into XML. Register your copy of Dreamweaver, and Adobe will send you an email with details.

8. **Click OK to finish the Data set.**

   Dreamweaver adds the code needed for the Web page to download and process the XML file. In addition, Dreamweaver attaches two JavaScript files—*xpath.js* and *SpryData.js*—to the Web page. (These files are stored in the SpryAssets folder in your site's root folder, as described on page 180.)

Creating a Spry Region

Adding a Spry data set to a Web page merely tells Dreamweaver which XML file to use and how to process it; none of the information from the XML file actually appears on the Web page until you add it. Usually you'll display multiple items from an XML file using one of the Spry tools dedicated to this task: a Spry Table, a Spry Repeat List, or a Spry Repeat region. Each of these tools provides a different way to display multiple records from an XML file. If you want to display a list of employee names, you can present them in an orderly HTML table, as a simple bulleted list, or in a bunch of repeating <div> tags.

But before you use one of these tools, you must first insert a Spry Region. A Spry Region is simply a tag that marks the beginning and end of a portion of a Web page dedicated to displaying Spry data. A Spry Region tells the Spry programming, "Hey, all the action's over here; you can ignore all that other boring HTML on the page." You then add dynamic XML data inside the region.

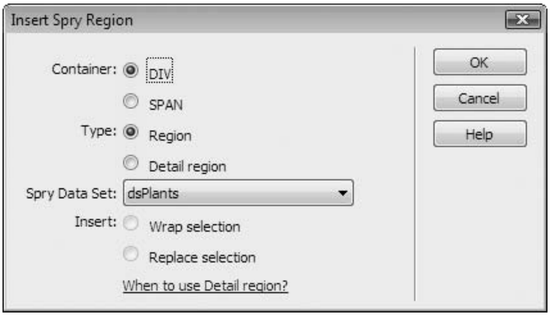
To insert a Spry region:

1. **Click the Web page where you wish to insert the Spry region.**

   This area might be inside a <div> used for laying out the Web page, such as inside a sidebar or on the main content region of a page. In addition, you can select any HTML that's already on the page, and either replace it with a Spry region, or wrap the Spry Region around it as described in step 6.

2. **On the Insert Bar's Data tab or Spry tab, click the Spry Region button.**

   You can also choose Insert → Spry → Spry Region. Either way, the Insert Spry Region window opens (Figure 12-13).



Insert Spry Region

Container: ● DIV
○ SPAN

Type: ● Region
○ Detail region

Spry Data Set: dsPlants

Insert: ○ Wrap selection
○ Replace selection

When to use Detail region?

Figure 12-13:
A detail region lets you display more detailed information about individual records from the XML file. It works in conjunction with a Spry table as described on page 493.

3. **Choose a type of container—div or span.**

   A Spry region uses either a <div> tag or a <span> tag to hold Spry data content. Div is the most common selection, since a <div> tag can hold block level elements like tables, bulleted lists, and other divs. In other words, a <div> tag provides plenty of room to insert content.

4. **Choose the type of region.**

   To display multiple records from an XML file (like a list of employee names, or a catalog of all of your company's products), choose the Region option. People often choose this.

   The "Detail region" button is useful when you want to display extra information about one particular record in the XML file (like a photo and extra statistics about a particular plant). This information appears when the person viewing the Web page clicks a row in a Spry table; the detail region is then updated with whatever extra data you want to grab from the XML file. This advanced tool is discussed on page 495.

5. **From the Spry Data Set menu, choose a data set.**

   If you've added multiple data sets to a page, use this menu to specify the data set whose data you wish to insert into the region. Dreamweaver lets you insert data from more than one data set into the same Spry Region: from the Bindings panel, simply drag an XML element from the different data sets into the Spry region.

6. **If you selected content on the page before inserting the Spry Region, choose either "Wrap selection" or "Replace selection."**

   Choose "Wrap selection" if you want to include elements that are already on the page within a Spry region. Say you want to add a bunch of information from an XML file to various locations in the main content area of a page (like inside a div), but you already had some content in that div. Just click the div, click Ctrl+A (⌘-A) to select everything inside the div, insert a Spry Region, and then choose the "Wrap selection" button. Dreamweaver then "spry-ifies" that div.

   Be careful of the "Replace selection" option: It deletes anything that you've selected, and replaces it with an empty Spry Region.

7. **Click OK to insert the Spry Region.**

   Dreamweaver inserts the <div> (or <span> depending upon your choice in step 2) in the page, and then adds the proper code to mark it as a Spry Region. You can insert anything inside this region, even non-Spry stuff such as tables, other divs, images, and so on. In addition, you've now enabled that area so that it's ready to accept Spry data using the Bindings panel—or one of the Spry data tools discussed in the following pages.

Warning: Spry data sets add invalid HTML to a Web page. To make all the Spry XML magic happen, Dreamweaver inserts invalid HTML attributes like *spry:repeat* and *spry:region* to <div> and <span> tags. The Web page no longer passes muster as proper HTML. The page still works in Web browsers, but it's harder for you to locate any invalid HTML that might actually affect how your page displays in a Web browser (see page 593 for more on validation). Note that the other Spry widgets discussed in this chapter, as well as Spry Effects, Spry Menu Bars, and Spry Validation widgets, do not insert invalid HTML. The Spry data set is the only culprit.

The Bindings Panel

The bindings panel lists the Spry data sets attached to the current Web page (see Figure 12-14). All the XML elements for a particular data set are also listed there. You can drag an element from the Bindings panel into any Spry Region on a page. In Design view, the element is just a placeholder for the XML element—its name surrounded by braces like this: {employee}. Dreamweaver adds a blue background to the placeholder to make it easy to identify as a special Spry element. When the page is viewed in a Web browser, that placeholder is replaced with actual data from the XML file—like Frank Jones.

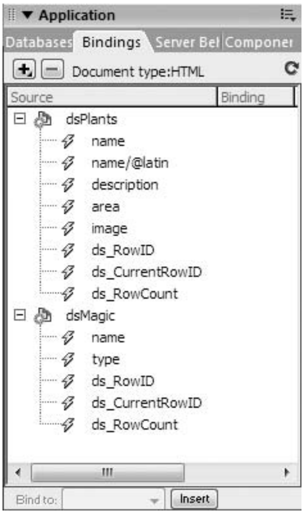


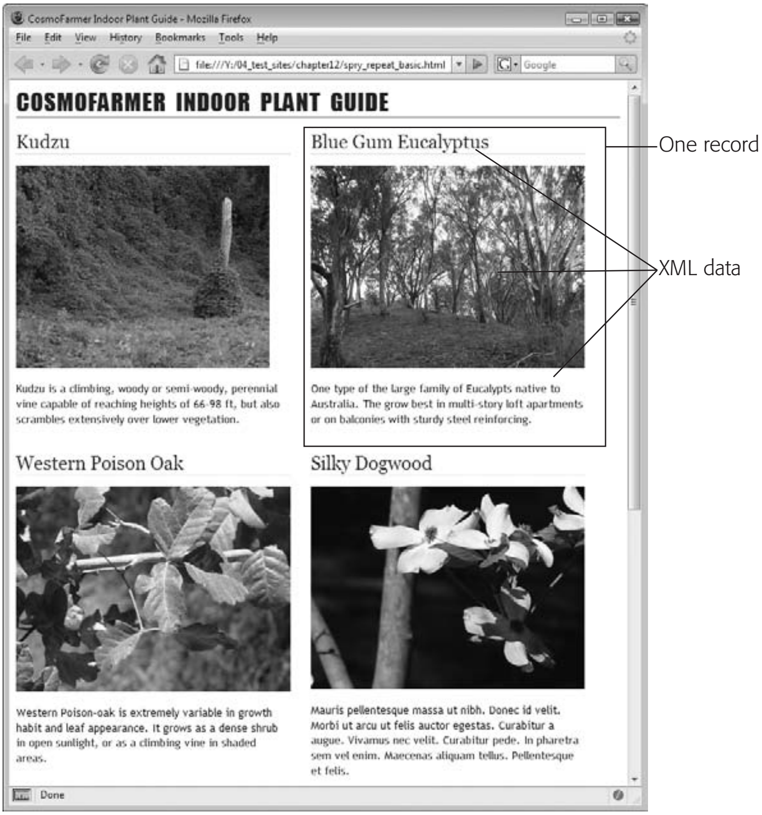
Figure 12-14:
The Bindings panel adds three elements to the bottom of each data set: ds_RowID, ds_CurrentRowID, and ds_RowCount. ds_RowCount is the number of items in the data set. Each item in the data set has its own ds_RowID number, and the ds_CurrentRowID indicates the currently active row, which comes into play when adding a detail region as described on page 495.

You can select an XML data set element on a Web page, style it with CSS, include it inside other HTML (such as a paragraph or heading 1), and even move it around the page (as long as it remains inside a Spry region). To delete the element, just select it, and then press Delete.

However, if you insert a Spry region, and then immediately drag an element from the Bindings panel, you see only the first item from the XML Data Set—for example, the first employee listed, not a list of all employees. To see all the records in a data set, you must use one of Spry's repeating region tools, discussed next.

Spry Repeating Region

Dreamweaver provides three methods for inserting multiple rows of information from a data set. The most flexible is the Spry Repeating Region. A Spry Repeating Region is a <div> or <span> tag in which you insert any combination of HTML and Spry Data (using the Bindings panel as described above). The tag and its contents are repeated once per row in the XML file (see Figure 12-15).


CosmoFarmer Indoor Plant Guide - Mozilla Firefox
File
Edit
View
History
Bookmarks
Tools
Help
file:///Y:/04_test_sites/chapter12/spry_repeat_basic.html
Google
Done
One record
XML data

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Kudzu

Kudzu is a climbing, woody or semi-woody, perennial vine capable of reaching heights of 66-98 ft, but also scrambles extensively over lower vegetation.

Blue Gum Eucalyptus

One type of the large family of Eucalypts native to Australia. The grow best in multi-story loft apartments or on balconies with sturdy steel reinforcing.

Western Poison Oak

Western Poison-oak is extremely variable in growth habit and leaf appearance. It grows as a dense shrub in open sunlight, or as a climbing vine in shaded areas.

Silky Dogwood

Mauris pellentesque massa ut nibh. Donec id velit. Morbi ut arcu ut felis auctor egestas. Curabitur a augue. Vivamus nec velit. Curabitur pede. In pharetra sem vel enim. Maecenas aliquam tellus. Pellentesque et felis.

Figure 12-15:
A Spry repeating region provides a flexible method for displaying data from an XML file. This page includes four records from an XML file. The repeating region is a <div> tag (outlined), containing three pieces of information from one XML record.

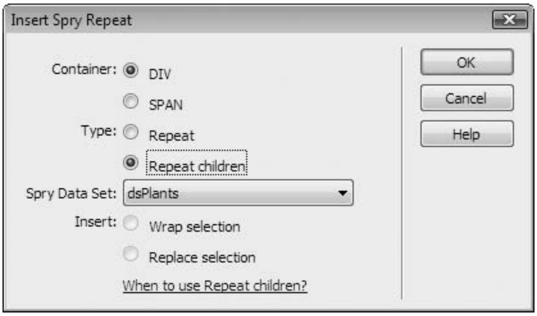
To create a repeating region:

1. **Click anywhere inside a Spry Region.**

   Anything related to Spry data sets must be inserted inside of a Spry Region. You can click inside an empty area, or even select HTML inside the Spry Region that you want to be included as part of the repeated region.

2. **On the Insert bar's Data tab, click the Spry Repeat button (Figure 12-11).**

   Alternatively, choose Insert → Spry → Spry Repeat. The Insert Spry Repeat window opens (see Figure 12-16).



Insert Spry Repeat

Container: ● DIV ○ SPAN

Type: ○ Repeat ● Repeat children

Spry Data Set: dsPlants

Insert: ○ Wrap selection ○ Replace selection

When to use Repeat children?

Figure 12-16:
A Spry Repeat region is the most flexible method of inserting multiple records from an XML file. However, unlike a Spry Repeat List or a Spry Table, this tool doesn't insert XML data automatically; you need to decide which XML elements to include, and drag them from the Bindings panel into the Repeat region.

3. **Choose the type of container for the repeating region.**

   In most cases, select DIV, since this inserts a <div> tag in which you can put lots of other HTML elements, such as paragraphs and other divs. The SPAN option can come in handy when you wish to display a single row of XML data elements side by side.

4. **Select the "Repeat children" button.**

   In practice, you'll find no difference between the Repeat and "Repeat children" options. However, the "Repeat children" option is very useful for adding more complex logic to Spry data. (You may not be ready to jump into Code view and start hand-coding Spry data just yet, but this will at least leave you prepared for the day you do [see the box on page 471 for more on enhancing Dreamweaver's Spry offerings].)

5. **From the Spry Data Set menu, choose a data set.**

   If you're inserting data from multiple XML files, your page has several data sets. Choose the data set whose data you wish to display. Remember, this is a repeating region, so each record in the XML file will appear in its own <div> as part of the repeating region.

6. **If you selected content on the page before inserting the Spry Region, choose either "Wrap selection" or "Replace selection."**

Choose "Wrap selection" if you want to include elements that are already on the page within a Spry region. Be careful of the "Replace selection" option: It deletes anything that you've selected, and replaces it with an empty Spry Region.

7. **Click OK to insert the Spry Region.**

   Dreamweaver inserts the <div> (or <span>, depending upon your choice in step 3) in the page, and then adds the proper code to mark it as a Spry Repeat region.

At this point, you can add any HTML to the repeat region. In addition, to include XML data (which is, after all, the whole point) drag elements from the Bindings panel (page 488) from the data set into this region. Everything inside the region is repeated once for each row in the XML file.

Note: If you completely remove a Spry data set from a Web page, Dreamweaver still leaves a couple of code remnants behind, which you should remove. Go into Code view (page 370), and then locate and delete these two lines:

```
<script src="SpryAssets/xpath.js" type="text/javascript"></script>
<script src="SpryAssets/SpryData.js" type="text/javascript"></script>
```

If you don't remove these lines, the Web browser tries to download these files and run the JavaScript programming in them; since these two files weigh in at a whopping 173K total, you should spare visitors the unnecessary download.

Spry Repeat Lists

If you simply want to list a bunch of repeating elements from an XML file, the Spry Repeat list provides the simplest method. It inserts either a bulleted list, a numbered list, a form menu, or a definition list full of XML data (see Figure 12-17). Here's how:

1. **Click inside a Spry Region where you wish to insert a list of repeating elements.**

2. **On the Insert bar's Data tab, click the Spry Repeat List button.**

   Alternatively, choose Insert → Spry → Spry Repeat List. The Insert Spry Repeat List window opens (see Figure 12-18).

3. **From the "Container tag" menu, choose the type of container you want for the repeating region.**

   Pick from any of the four list types: bulleted lists (page 92), numbered lists (page 92), form menus (page 414), or definition lists (page 98).

4. **Choose the data set whose XML data you wish to repeat.**

   Make your choice from the Spry Data Set menu.

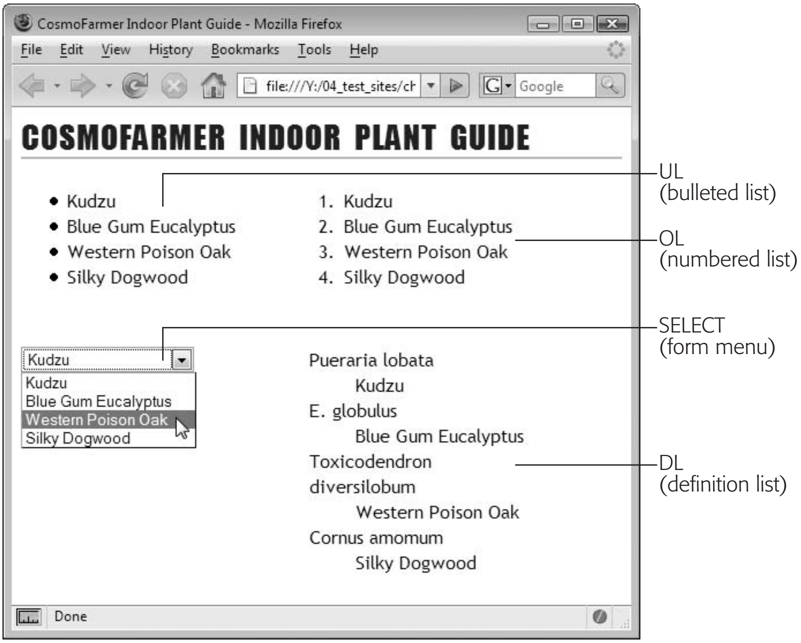
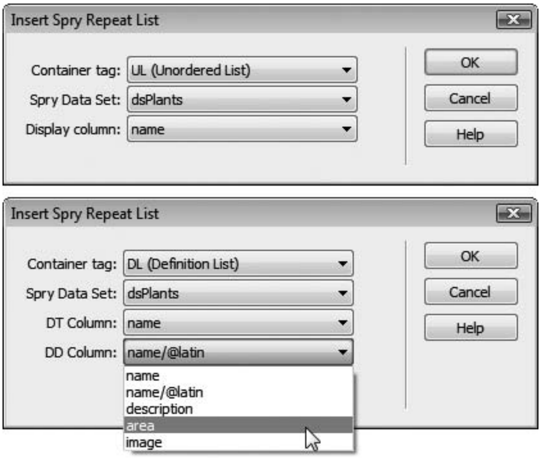


Figure 12-17:
A Spry Repeat List provides four ways of displaying repeating XML data.

5. **Choose the column or columns to display.**

   If you're going with a bulleted or numbered list, you get to pick only one column (Figure 12-18, top). If you're using a form menu or a definition list, you can pick two XML elements (Figure 12-18, bottom). For a menu, you can select one element for the label—what the visitor sees when they view the menu—and another for the value—the information submitted to the Web server when the form is processed. Definition lists include one term (like a word in a glossary) represented by the DT tag, and one definition represented by the DD tag.


Insert Spry Repeat List

Container tag: UL (Unordered List)
Spry Data Set: dsPlants
Display column: name

Insert Spry Repeat List

Container tag: DL (Definition List)
Spry Data Set: dsPlants
DT Column: name
DD Column: name/@latin

Figure 12-18:
Dreamweaver provides different options for a Spry Repeat List, depending on the type of list you insert. For a numbered or bulleted list, you choose just one XML element to display from the "Display column" menu (top); form menus and definition lists require two XML elements (bottom). Once the list is inserted, you can use the Bindings panel to add more XML elements to the list. If you want a bulleted list of employee names, but also want to include the employee's phone extension as part of the list item–Bob Jones (x456)–insert the Spry list using the employee name, and then, from the Bindings panel, drag the phone extension number.

6. **Click OK to insert the list.**

   Dreamweaver inserts the list onto the page. In Design view, you don't actually see an entire list of items. You see only one bulleted or numbered item. You have to preview the page to see the final effect with all the items listed.

   You can select and style a Spry Repeat List just like a regular chunk of HTML, and you can even move it (as long as it remains inside the Spry Region).

Spry Table

A Spry table is the easiest way to present rows of information from an XML file in a quick and orderly fashion. In just a few steps, you can create sortable columns, assign CSS styles to alternating rows of data, insert an HTML table, and add row after row of XML data. Spry tables aren't just easy to create, they also present data in an easily understandable spreadsheet-like format (see Figure 12-10).

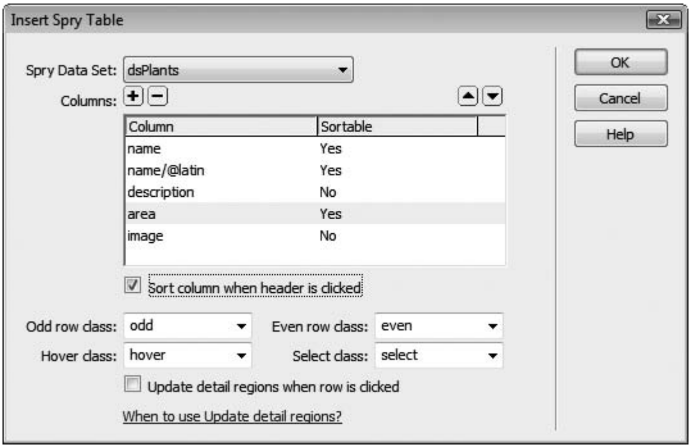
To add a Spry table:

1. **Click inside a Spry Region (page 486).**

   Or, if the page doesn't yet have a Spry Region, you can click anywhere on the page. Dreamweaver automatically inserts a Spry Region after you finish creating the Spry table.

2. **On the Insert bar's Data tab, click the Spry Table button.**

   Alternatively, choose Insert → Spry → Spry Table. The Insert Spry Table window opens (see Figure 12-19).



Spry Data Set: dsPlants

Column	Sortable
name	Yes
name/@latin	Yes
description	No
area	Yes
image	No

☑ Sort column when header is clicked

Odd row class: odd   Even row class: even

Hover class: hover   Select class: select

☐ Update detail regions when row is clicked

Figure 12-19:
It doesn't always make sense to make a column sortable. For example, it's not useful to sort a column full of descriptive paragraphs (who wants to see a list of items based on whether their description begins with "A," "The," or "This"?).

3. **From the Spry Data Set menu, choose a data set.**

   You should select, of course, the data set whose data you wish to display in the table.

4. **Remove and rearrange columns.**

   Dreamweaver lists all XML elements from the data set. Each XML element appears inside a single table cell. If you don't want one of the elements to appear in the table, click its name in the Columns list, and then press the minus (-) button to remove it. (If you want to bring back a column you've deleted, press the + button and then, in the window that appears, select a column name).

   Removing an element from the column list only means that Dreamweaver won't add a column to the table it's about to create. You're free to use the Bindings panel after the table is inserted, to drag missing elements into the table.

   You can also rearrange the columns, so that they appear in a different order in the table. The name at the top of the list is the table's left-most column; the name at the bottom is the table column on the far right. To rearrange a column, click its name, and then press the up arrow button (to move its column of data to the left in the final table) or the down arrow button (to move the column to the right).

5. **Assign sortable columns.**

   One of Spry tables' coolest features is the ability to dynamically resort table data simply by clicking a column's header. If someone visiting your Web page wishes to sort the information in a Spry table differently from the way you presented it, he only needs to click a different header to change the data's order.

   Columns aren't normally sortable—the Insert Spry Table window defaults to listing all columns as non-sortable. To make a column sortable, select its name in the Column list, and then turn on the "Sort column when header is clicked" checkbox (see Figure 12-19).

6. **Assign CSS classes to table rows.**

   A Spry table provides helpful visual feedback that makes a table of data easier to read and interact with. It's easier to scan all of the columns in a single, wide row of data if every other row has a distinct background color (see the Spry table in Figure 12-20). Dreamweaver lets you assign a class style to a table's odd rows and another class style to even rows. A simple approach is to create two classes, *.odd* and *.even*, each with different background colors. Then, in the Insert Spry Table window, select the appropriate class from the "Odd row class" menu and the "Even row class" menu.

   Similarly, you can assign classes to rows based on how someone interacts with a row. You can make a row change color when someone mouses over any column in the row. This trait is useful if you add a detail region (opposite page). That's because, with a detail region, clicking a table row changes data in another part of the page. So a *hover* class for a table row provides the same helpful feedback as a hover style for a link: In other words, a hover style screams, "Hey, you can click me and something's going to happen."

In addition, since a detail region displays data from a row that's been clicked, a *select* class provides a way to highlight the row that's just been clicked. As with the odd and even classes, a simple strategy for hover and select modes is to simply create a *.hover* and *.select* class styles, and then, in the Insert Spry Table window, choose them from the "Hover class" and "Select class" menus.

If you haven't yet created any class styles for these rows, just type in a class name (without the period). Even if you're not sure whether you want to change the look of the table's rows, assign classes to all four (odd, even, hover, and select) anyway. Dreamweaver provides no way to return to the Insert Spry Table window, so if you later decide to add styles to the rows, then you have to go into Code view and add them by hand using specific Spry syntax (see page 471). Save yourself this hardship by assigning the classes while you've got an easy dialog box.

7. **If you plan on including a detail region (discussed next), turn on the "Update detail regions when row is clicked" checkbox.**

   This option makes sure that the Spry programming changes a detail region when a visitor clicks a row in the Spry table.

8. **Click OK.**

   Dreamweaver inserts a table onto the page. It's just an HTML table with a little extra Spry code. You can resize the table and adjust it just as you would a regular HTML table (see Chapter 7). The top row of the table contains a series of table headers (<th> tags) containing each XML element's name. The names are regular text and you can change them to a more understandable label if you'd like.

   The second row of cells represents the XML data. Only one row is represented in Dreamweaver, but when you preview the page in a Web browser, a table row appears for each row of data in the XML file. In Design view, each cell in this row has an XML data placeholder (the element's name on a blue background) just as if you had dragged the element from the Bindings panel into the table cell. You can select a format for the XML element placeholder as if it were regular HTML (for example, apply a CSS style to it or make it bold).

Adding a Detail Region

A Spry table is even more useful when you add a Spry Detail Region to a page. As with a normal Spry Region, a detail region is an area of the page that you fill with XML data: it's usually a <div> that you fill with HTML and XML data from the Bindings panel (page 488). However, unlike a repeating region, which displays information from every row in an XML file, a detail region shows information from a single row. The fun part is that the person viewing the Web page controls the information in the detail region by selecting a row from a Spry table (Figure 12-20).

Adding a detail region involves several steps:

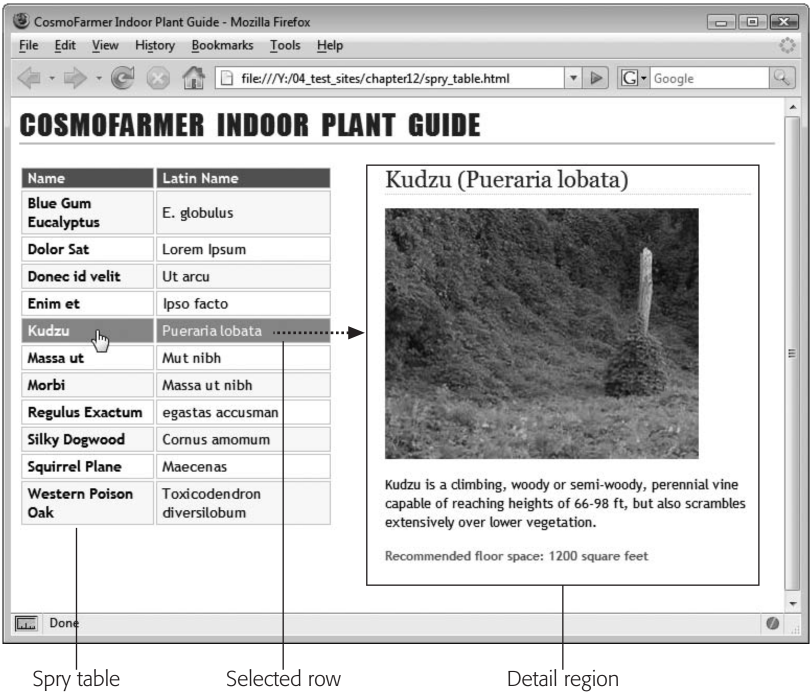
1. **Insert a Spry Region as described on page 486.**

   This region is for the Spry table, so make sure you select the "Region" button in step 4 on page 487 (not the "Detail region" button).

2. **Click inside the Spry Region, and then insert a Spry table.**

   Follow the procedure described on page 493. Make sure you turn on the "Update detail regions when row is clicked" checkbox (see step 7 on page 495 and Figure 12-19). This step lets Dreamweaver know that you plan on having this Spry table control the XML data that's going to be presented in a detail region.

   In addition, you'll usually remove most of the columns from the table (step 4 on page 494). Since you're adding a detail region to provide more information for a selected row from the Spry table, there's no point in displaying all the information in the table as well. In Figure 12-20, the Spry table has just two columns of information—a plant's English name and the plant's Latin name. The majority of the XML data for that row is reserved for the detail region (on the right in Figure 12-20).


CosmoFarmer Indoor Plant Guide - Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///Y:/04_test_sites/chapter12/spry_table.html
Google
Done
Spry table
Selected row
Detail region

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Name	Latin Name
Blue Gum Eucalyptus	E. globulus
Dolor Sat	Lorem Ipsum
Donec id velit	Ut arcu
Enim et	Ipso facto
Kudzu	Pueraria lobata
Massa ut	Mut nibh
Morbi	Massa ut nibh
Regulus Exactum	egastas accusman
Silky Dogwood	Cornus amomum
Squirrel Plane	Maecenas
Western Poison Oak	Toxicodendron diversilobum

Kudzu (Pueraria lobata)

Kudzu is a climbing, woody or semi-woody, perennial vine capable of reaching heights of 66-98 ft, but also scrambles extensively over lower vegetation.

Recommended floor space: 1200 square feet

Figure 12-20: *Add real interactivity to your data with a Spry Detail Region. Clicking one of the rows in a Spry table (left) updates the Spry Detail region from the same row of the XML file. In this example, clicking the Kudzu row in the left hand table displays the plant's name, photo, description, and recommended square footage.*

3. **Insert a Spry Detail Region.**

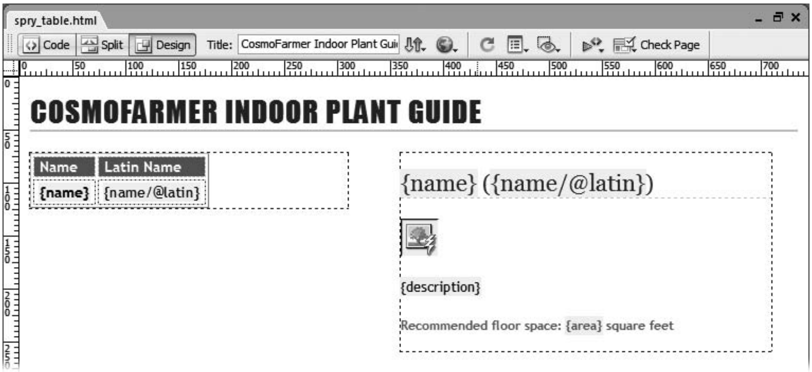
The process is the same as inserting a Spry Region as described on page 486, except that you turn on the "Detail region" button (step 4 on page 487). This is the secret sauce that lets the Spry programming know that this region is dependent upon a Spry table. In addition, you must select the same data set (step 5 on page 487) that you selected for the Spry table. Because the detail region is displaying XML data from the same XML file as the Spry table, the two must share the same data set.

Note: You can't place a Spry Detail region inside a Spry table, or another Spry region. (If you try, Dreamweaver tells you as much.)

4. **Add XML data to the detail region.**

   Use the Bindings panel as described on page 488 to add XML data to the region. If the page has multiple data sets, make sure you're dragging XML elements from the data set used in the Spry table. You can add other HTML as well, such as additional text, images, tables, divs, and so on. In addition, you can select an XML element and apply a style, make it bold or move it around inside the detail region (see Figure 12-21).

   When you view the Spry page, the detail region contains the detail information for the first row of the Spry table. When you click on another row, the Spry details are updated automatically.



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Name	Latin Name
{name}	{name/@latin}

{name} ({name/@latin})

{description}

Recommended floor space: {area} square feet

Figure 12-21: *Here's the Design view perspective of the Web page pictured in Figure 12-20. Unfortunately, Dreamweaver doesn't provide any obvious visual clues to let you know whether a Spry region is a detail region. In this case, both the Spry region containing the Spry table (the left box with the dotted outline) looks the same as the detail region (the right box). To find out if a Spry region is a detail region or not, you must select the region's <div> tag and go into Code view. If you see spry: region as part of the opening div tag (<div spry:region= "dsPlants">) then that div is a regular Spry region. If you see spry:detailregion, it's a Spry detail region.*

CHAPTER
13

Dreamweaver Behaviors

Chapter 6 makes clear how easy it is to add mouse rollover effects using Dreamweaver's Rollover Image object. That and other interactive features rely on *scripts* (small programs) written in the JavaScript programming language. You've already seen some of the JavaScript-powered tools new to Dreamweaver CS3 like the Spry menu, Spry form validation, and all of the cool Spry tricks discussed in the previous chapter.

You *could* create the same effects without Dreamweaver, but you'd need to take a few extra steps: buy a book on JavaScript; read it from cover to cover; learn about concepts like arrays, functions, and the Document Object Model; and spend weeks discovering the eccentric rules governing how different browsers interpret JavaScript code differently.

Like the new Spry tools, Dreamweaver's Behaviors let you add dynamic JavaScript programs to your Web pages without doing a lick of programming. Most Dreamweaver Behaviors have been around for a while, but Dreamweaver CS3 adds a new set of behaviors called Spry Effects that let you add dazzling visual touches like fading a photo in or out, highlighting a portion of a page with a flash of color, and shaking a <div> tag to catch a visitor's attention.

Understanding Behaviors

Dreamweaver behaviors are prepackaged JavaScript programs that let you add interactivity to your Web pages with ease, even if you don't know the first thing about JavaScript. By adding behaviors, you can make your Web pages do things like:

- Make portions of a page appear and disappear.

- Open a new browser window to a specified size, with or without scroll bars, status bar, location bar, and other Web browser "chrome."
- Change the background color of any element on a page.
- Pop open an alert box with an important message for your site's visitors.

Note: Try it yourself. See examples of all of Dreamweaver's behaviors on this book's companion Web site, *www.sawmac.com/dwcs3/*.

Behavior Elements

To use a behavior, you bring together three elements: an action, an event, and an HTML tag:

- The **action** is whatever the behavior is supposed to *do*—such as open a new browser window or hide an absolutely positioned div.
- The **event** is the *trigger* that causes the action to happen. It's usually something your visitor does, like clicking a Submit button on a form, moving the mouse over a link, or even simply loading a Web page into the browser.
- Finally, you apply the event and the action to an **HTML tag** to bring interactivity to your Web page.

Let's say you want to let visitors access different Web pages on your site by offering them a pop-up menu (also known, ironically, as a drop-down menu)—a common form element. This menu lists the different pages of your site—*About This Company, Contact Us, See Our Products*, and so on.

When someone selects one of the options from the menu, his browser opens the Web page for that section of the site. In this case, the HTML tag is the pop-up menu itself—a <select> tag; the *action* is opening another Web page in the site; and the *event* brings the two together so that, when your visitor makes a selection from the pop-up menu, his browser goes to the selected Web page. Voilà—interactivity!

More about Events

When people visit a Web page, they do more than just read it—they interact with it. You already know that when someone clicks a link, the browser reacts by loading a new Web page or jumping to a named anchor (page 167).

But visitors can also interact with a Web page in a variety of other ways. They may resize the browser window, move the mouse around the screen, make a selection from a pop-up menu, click an image, type inside a form field, or click a form's Reset button. Web browsers "listen to" and react to these triggering events with actions.

In JavaScript and Dreamweaver, the names of events always begin with the word "on," which essentially means "when." For example, the onLoad event refers to the moment when an object fully loads into the browser—like when a Web page, its

FREQUENTLY ASKED QUESTION

Behaviors and Added Code

I hear the JavaScript that Dreamweaver produces adds excessive lines of code, unnecessarily adding to a page's file size. Is this a reason not to use behaviors?

In some cases, it's true that a seasoned JavaScript programmer could write a program that does what a Dreamweaver behavior does using less code.

However, Dreamweaver behaviors were created to work in as many browsers as possible without producing errors in older browsers. The hitch is that JavaScript doesn't work the same in all browsers or even in all versions of browsers.

Indeed, many browsers have, until recently, understood JavaScript so differently that programmers have resorted to elaborate workarounds, requiring a lot of experience, practice, and patience.

Accordingly, the engineers at Adobe used their vast understanding of JavaScript, HTML, and Web browsers to ensure that Dreamweaver behaviors work in as many browsers as possible. At times, this compatibility may lead to larger files with more lines of code, but it also assures that your Web pages will work for the broadest possible audience.

In addition, while the programming code for most behaviors is stored directly within the Web page itself, in the case of Spry Effects and the other Spry tools in Dreamweaver, the majority of the programming magic is stored in an external JavaScript file–that's a good thing too, because the file for Spry Effects alone is a whopping 67k in size. Fortunately, visitors to your site need only download the file once, thanks to their browsers' caches (see page 607).

images, and other linked files have downloaded. Events also include the various ways someone can interact with a particular HTML tag (element). For instance, when someone moves the mouse over a link or clicks a link, the corresponding events are called onMouseOver and onClick.

Note: Traditionally, JavaScript programmers have capitalized the second word in a JavaScript event–onMouseOver, for instance. Trouble is, XHTML doesn't allow uppercase letters for tags or their properties. So if you're creating XHTML pages, events should always be lowercased, like this: *onmouseover.* (Dreamweaver converts such terms to lowercase automatically as you create XHTML pages.)

Applying Behaviors

Dreamweaver makes adding behaviors as easy as selecting a tag and choosing an action from a drop-down menu in the Behaviors panel.

The Behaviors Panel

The Behaviors panel is your control center for Dreamweaver's behaviors (Figure 13-1). On it, you can see any behaviors that are applied to a tag, add more behaviors, and edit behaviors that are already applied.

You can open the Behaviors panel in any of three ways:

- Choose Window → Behaviors.
- Press Shift+F4.
- If the Tag inspector is open, click the Behaviors tab.

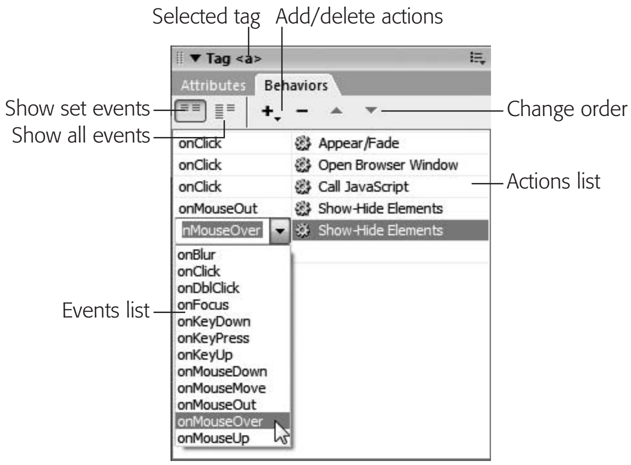


Figure 13-1:
Behaviors are grouped by event and listed in the order in which they occur on the Behaviors panel. You can change the type of event by clicking the event name and selecting another event. For actions with different events, the order is irrelevant, since the event determines when the action takes place, not the order. One HTML element can trigger multiple actions. In this example, five different actions are applied to a single link (the <a> tag); in fact, one event even triggers multiple actions. In this case, the onClick event makes something on the page appear, opens a browser window, and calls a custom JavaScript program. When one event triggers several behaviors, you can change the order in which they occur with the up- and down-pointing arrows

GEM IN THE ROUGH

Link Events Without Loading a New Web Page

As you start to use behaviors, you'll quickly notice that there are an awful lot of useful events associated with links. Links can respond to interactions of all sorts, like moving the mouse over the link, moving it away from the link, or clicking the link.

Clicking a link usually opens a different Web page. But there are times when you may want to use the onClick event to trigger an action without leaving the current Web page.

For instance, you may have a Web page with lots of unusual or technical words. It would be great to program the page so that when someone clicks an unfamiliar word, a dialog box displaying its definition pops up on the screen (using the Popup Message action, described on page 529). Unfortunately, a Web browser doesn't know when you click a word, since there's no event associated with regular text. However, browsers do know when you click a link and can respond to this action accordingly.

But in this case, you don't want to use a real link; that would force a new page to load. You just want to use a link's onClick event.

The secret is, instead of using a real URL or path for the link, you use a "dummy" link–a link that goes nowhere. This way, you can still take advantage of all of the great events links have to offer without adding links that take you away from the page.

There are two types of dummy (also called *null*) links. The first uses the pound symbol (#). Select the text or graphic you want to add the behavior to, and then, in the Property inspector, instead of adding a URL in the Link field, type in #. You can also create a dummy link by typing *javascript:;* into the Link field. Be sure to include both the colon and semicolon. This dummy link doesn't load a new Web page, but provides a link to which you can apply behaviors.

The advantage of the second method is that some browsers (including Internet Explorer for Windows) scroll to the top of the page when a visitor clicks a link that uses the # symbol, which could be disconcerting if you attached a behavior that appears far down a page.

Note: Dreamweaver includes two different types of behaviors, and it's important not to get them confused. This chapter describes JavaScript programs that run in your audience's Web browsers–these are called "client-side" programs. The *server behaviors* listed in the Application panel group, on the other hand, run on the Web *server* to let you access information from a database. These are described in Part 6.

The currently selected tag is indicated at the top of the Behaviors panel, and a list of all of the behaviors applied to that tag, if any, appears below. Each behavior is listed in two parts: Events and Actions, as described earlier.

The Behaviors panel offers two different views. You switch between them using the buttons at the upper left of the panel:

- **Show set events** (pictured in Figure 13-1) gets down to the specifics: which behaviors you've applied to the tag and which events trigger them. When you're working on a Web page, this view moves extraneous information out of your way.
- **Show all events** lists all of the events *available* to a particular tag. Someday, should you decide to *memorize* which events apply to which tags (see page 506), you may no longer need this view.

Applying Behaviors, Step by Step

Open the Behaviors panel, and then proceed as follows:

1. **Select the object or tag.**

   You have to attach a behavior to an HTML tag, such as a link (indicated by the <a> tag) or the page's body (<body> tag). Take care, however: It's easy to accidentally apply a behavior to the wrong tag. Form elements, like checkboxes and text fields, are easy—just click one to select it. For other kinds of tags, consider using the Tag selector, as described on page 22, for more precision.

Tip: You can be sure which tag the behavior is applied to by looking at the Tag inspector's header (above the Behaviors tab). For example in Figure 13-1, "Tag <a>" indicates that the behaviors listed are applied to an <a>, or link, tag.

2. **In the Behaviors panel, add an action.**

   Click the + button in the Behaviors panel and, from the Add Action menu, select the action you wish to add (see Figure 13-2). You'll find a list of these behaviors and what they do beginning on page 511.

   Some actions are dimmed in the menu because your Web page doesn't have elements necessary for the behavior to work. For instance, if you haven't included a form in your Web page, then the Validate Form behavior is grayed out. Others are dimmed because they have to be applied to a particular page element. For example, Jump Menu is off limits until you've added a list/menu field to the page and selected it.

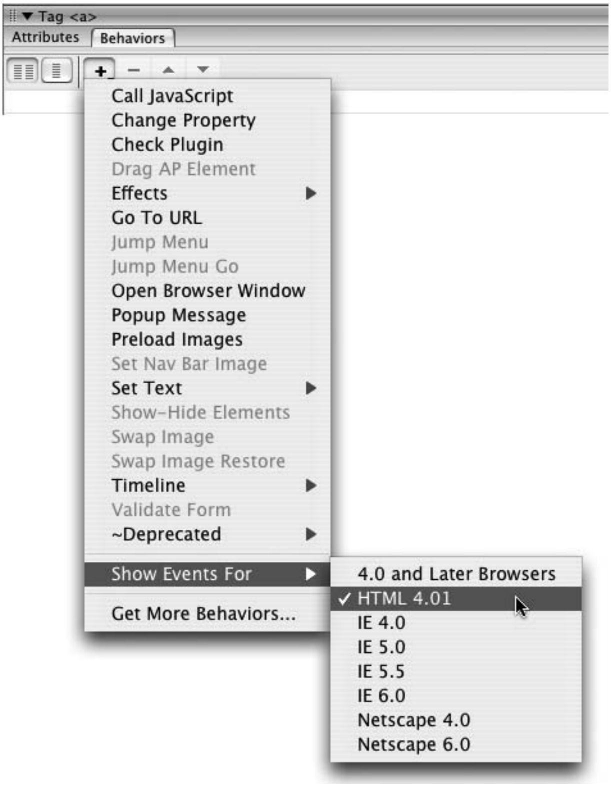


Figure 13-2:
Behaviors you can't currently apply are grayed out. Dreamweaver is trying to tell you that either a necessary object is missing from your page, or you've selected an object that can't have that behavior applied to it. For example, you can't apply the Show-Hide Elements behavior if the page doesn't have at least one tag with an ID applied to it.

3. **In the dialog box that opens, set options for the action.**

   Each action has properties that pertain specifically to it, and you set them to your liking in the dialog box that now appears. For instance, when you choose the Go To URL action, Dreamweaver asks what Web page you want to load. (Once again, the following pages describe each of these actions.)

4. **Click OK to apply the action.**

   At this point, Dreamweaver adds, to the underlying code of your page, the HTML and JavaScript required to make the behavior work. Your behavior's name appears in the Behaviors panel.

   Unlike HTML objects, behaviors usually add code to two different places in a document. For behaviors, Dreamweaver usually adds JavaScript code to the head of the document *and* to the body of the page.

5. **Change the event, if desired.**

   When your newly created action shows up in the Behaviors panel, Dreamweaver displays—in the Events column of the panel—a default event (trigger) for the selected tag and action. For example, if you add an Open Browser Window behavior to a link, then Dreamweaver suggests the onClick event.

However, this default event may not be the only event available. Links, for instance, can handle many different events. An action could begin when your visitor's cursor moves *over* the link (the onMouseOver event), *clicks* the link (the onClick event), and so on.

To change the event for a particular behavior, click the event's name, and the Events pop-up menu appears (see Figure 13-1). Select the event you want from the list of available events for that particular tag. (See page 506 for a list of all available events in current versions of the most popular browsers.)

When you're done, you can leave the Behaviors panel open to add more behaviors to the tag, or to other tags. Select another tag, using the document window or Tag selector, and repeat steps 2 through 5.

Adding Multiple Behaviors

You're not limited to a single behavior per HTML tag. You can, and often will, apply several behaviors to the same tag. For instance, when a page loads—the onLoad event of the <body> tag—it can preload images to be used in rollover effects, open a small browser window displaying a pop-up advertisement, *and* highlight a message on a page with a flash of color.

Nor are you limited to a single *event* per tag—you can add to a link any number of actions that are triggered by different events, such as onMouseOver, onMouseOut, and onClick. For example, if you set things up for a link as shown in Figure 13-1, when you click the selected link in the browser window, some element on the page fades into view, and then a new browser window opens, and finally a custom JavaScript program runs. The link also responds to other events, like moving the mouse over it—in this example, making an invisible element appear on the page.

Editing Behaviors

Once you've applied a behavior, you can edit it anytime. Double-click the behavior in the Behaviors panel to reopen the Settings dialog box, as described in step 3 of the previous instructions. Make any changes you like, and then click OK.

To remove a behavior from your Web page, select it in the Behaviors panel and click the minus sign (–) button or press Delete. (If you *accidentally* delete a behavior, just choose Edit → Undo Remove Behavior.)

A Quick Example

This brief example is designed to give you a clear overview of the behavior-creation process. In it, you'll use a behavior that makes an important message appear automatically when the Web page opens.

1. **Choose File → New to create a new untitled document.**

   You'll start with a new page.

2. **Choose File → Save and save the file to your computer.**

   It doesn't matter where you save the page, since you won't be including any graphics or linking to any pages.

   You start the process of adding a behavior by selecting a specific tag—in this case, the page's <body> tag.

3. **In the Tag selector in the lower-left corner of the document window, click <body>.**

   Once the tag is selected, you can apply one or more behaviors to it. But first, make sure the Behaviors panel is open. If you don't see it, choose Window → Behaviors or press Shift+F4.

4. **Click the + button on the Behaviors panel. From the Add Action menu, choose Popup Message (see Figure 13-2).**

   The Popup Message dialog box appears.

5. **In the message box, type *Visit our store for great gifts!* Then click OK.**

   Dreamweaver adds the required JavaScript code to the page. Notice that the Behaviors panel lists the *action* called Popup Message next to the *event* called onLoad. The onLoad event triggers an action *after* a page and everything on it—graphics and so on—have loaded.

   To see the page in action, just preview it in a Web browser by pressing the F12 (Option-F12) key.

Note: Dreamweaver behaviors rely on little JavaScript programs running inside the Web browser. If you've got Windows XP and have Service Pack 2 installed or if you're running Windows Vista, whenever you preview a behavior-using page in Internet Explorer, you'll run into the same problems you encountered with rollover images in Chapter 6. For a solution, turn to the Tip on page 231.

Events

Events are at the heart of interactive Web pages. They trigger behaviors based on how site visitors interact with a Web page: clicking a link, mousing over an image, or simply loading a Web page. But not all events work with all tags. For example, the onLoad event only works with Web pages and images, not paragraphs, divs, or any other page element. The Event menu in the Behaviors panel can help: It only lists events available for the tag you're applying the behavior to.

Current browsers—Firefox, Safari, and Internet Explorer 6 and 7—support a wide range of events for many HTML tags. In most cases, you'll find that many of the events in the following list work with all of the tags pictured in Figure 13-3. Many events work with other tags as well, such as headline, paragraph, or div tags. However, don't go crazy. Making an alert message appear when someone double-clicks a paragraph is more likely to win your site the Hard-to-use Web Site of the Month award than a loyal group of visitors.

To help you select a good combination of event and HTML tags, the following pages list and explain the most common and useful HTML tags and events.

Each entry shows you the name of the event as you'll see it listed in the Behaviors panel; a plain-English description of what that event really means; and the list of tags to which this event is most commonly applied. See Figure 13-3 for the visual representations of those HTML tags. For example, you'll find out that the <select> tag represents a pop-up menu.

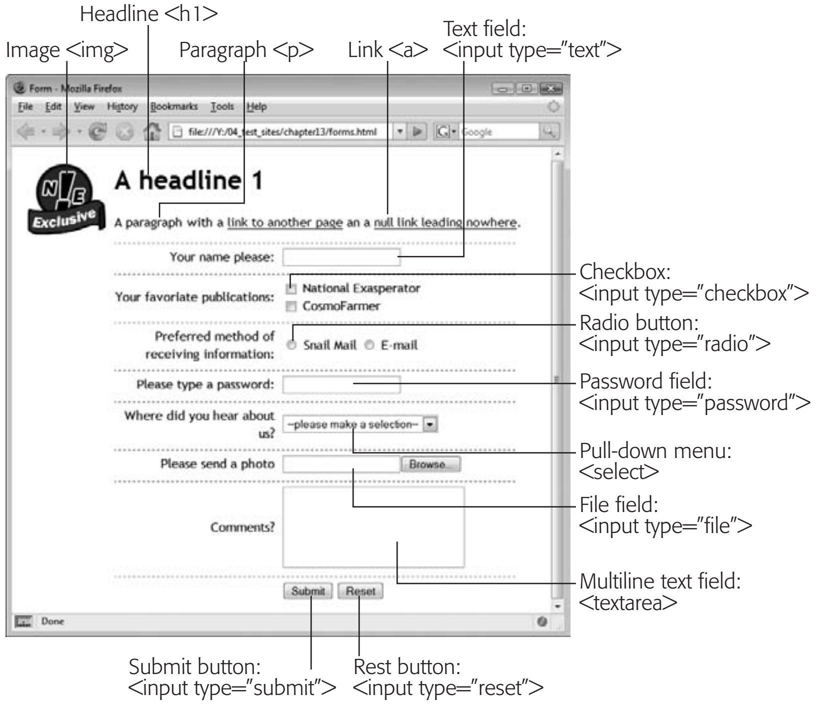


Figure 13-3: *This sample Web page illustrates HTML tags to which you can attach events. Not shown is the body of the Web page (the whole thing, in other words), whose tag is <body>, and the form portion of this page (see Chapter 11), whose tag is <form>. Whenever you set up a behavior, you should attach it to one of the tags shown here. Today's browsers add events to every tag, so you could add a behavior to a level 1 heading or a paragraph of text, but since those tags usually aren't associated with user interactions (like clicking or mousing over), visitors to your site probably won't interact with them.*

Mouse Events

Web designers most often use mouse *movement* events to trigger actions (like the familiar rollover image). But mouse *clicks*—on checkboxes, radio buttons, and other clickable form elements—also qualify as mouse events.

Note: In the following list, the many different types of *input* form elements are listed like this: <input type="button | checkbox | radio | reset | submit">. This notation simply means that *any* of these form elements–buttons, checkboxes, radio buttons, reset buttons, or submit buttons–react to the listed event. Also, when you see an <area> tag, it refers to the hotspots on an image map (see page 226).

onMouseOver

Gets triggered: When the cursor moves over the tag.

Commonly used with these tags: <a>, <area>, <img>

onMouseout

Gets triggered: When the cursor moves off of the tag.

Commonly used with these tags: <a>, <area>, <img>

onMouseMove

Gets triggered: When the cursor moves anywhere inside the tag. Works similarly to onMouseOver, but onMouseOver is triggered only once—when the mouse first moves over the tag. onMouseMove is triggered continually, whenever the mouse moves over the tag. The possibilities for an annoying Web page are endless.

Commonly used with this tag: <body>

onClick

Gets triggered: When a visitor clicks the tag and releases the mouse button.

Commonly used with these tags: <a>, <area>, <input type="button | checkbox | radio | reset | submit">

FREQUENTLY ASKED QUESTION

The Vanishing Events List

I applied a behavior to a link, but the only event available is onMouseOver. What happened to all the other events?

To make sure your behavior works in as many browsers as possible, check out the Show Events For submenu (also shown in Figure 13-2). The earlier the browser version you choose here, the fewer events you'll see listed. On the other hand, choosing an earlier browser version ensures that your behavior will work for more of your visitors. If you're developing your site with modern, standards-compliant browsers in mind, you can safely pick the HTML 4.01 specification listed on the Show Events For submenu. Your site will then work with the vast majority of Web browsers in use today.

onDblClick

Gets triggered: When a visitor double-clicks the tag.

Commonly used with these tags: <a>, <area>, <input type="button | checkbox | radio | reset | submit">

onMouseDown

Gets triggered: When a visitor clicks the tag. The mouse button doesn't need to be released for this event to occur (note the contrast with onClick).

Commonly used with these tags: <a>, <img>, <input type="button | checkbox | radio | reset | submit">

onMouseUp

Gets triggered: When a visitor releases the mouse button while the cursor is over the tag. The effect is the same as the onClick event.

Commonly used with these tags: <a>, <img>, <input type="button | checkbox | radio | reset | submit">

Keyboard Events

Keyboard events respond to key presses and releases. Most Web designers use them in association with form elements that accept text, such as password or text fields. (See Chapter 11 for more on forms.)

onKeyPress

Gets triggered: When a visitor presses and releases a key while the tag is highlighted.

Commonly used with these tags: <textarea>, <input type="file | password | text">, <a>

onKeyDown

Gets triggered: When a visitor presses a key while the tag is highlighted. The key doesn't need to be released for this event to occur.

Commonly used with these tags: <textarea>, <input type="file | password | text">, <a>

onKeyUp

Gets triggered: When a visitor releases a key while the tag is highlighted.

Commonly used with these tags: <textarea>, <input type="file | password | text">, <a>

Body and Frameset Events

Several events relate to actions involving an entire Web page or frameset.

onLoad

Gets triggered: When a Web page *and* any embedded elements—like images and Flash and QuickTime movies—load. Frequently used for triggering actions when a visitor first loads the Web page; can also be used with an image tag to signal when that particular image has finished loading.

Commonly used with these tags: <body>, <frameset>, <image>

onUnload

Gets triggered: When the Web page is about to be replaced by a new Web page—for instance, just before the Web browser loads a new Web page after a visitor clicks a link.

Commonly used with these tags: <body>, <frameset>

onResize

Gets triggered: When a visitor resizes the Web browser window.

Commonly used with these tags: <body>, <frameset>

onError

Gets triggered: When an error occurs while a Web page or an image is loading.

Commonly used with these tags: <body>, <img>

Note: The onFocus and onBlur events described in the following section also apply to the <body> and <frameset> tags.

Selection and Highlighting Events

Some events occur when the visitor focuses on different parts of a Web page, selects text, or chooses from a menu.

onSelect

Gets triggered: When a visitor selects text in a form field.

Commonly used with these tags: <textarea>, <input type="text">

onChange

Gets triggered: When a visitor changes the text in a form field.

Commonly used with these tags: <textarea>, <input type="file | password | text">, <select>

onFocus

Gets triggered: When an element becomes the focus of the visitor's attention. For instance, clicking in a form text field or tabbing to it gives the text field focus.

Commonly used with these tags: <body>, <frameset>, <textarea>, <input type="button | checkbox | file | password | radio | reset | submit | text">, <select>

onBlur

Gets triggered: When an element loses the focus. For instance, if the visitor is typing into a form text field and then clicks outside of that field, the onBlur event occurs. The onBlur event is also triggered when the visitor sends a window to the background. Suppose your visitor is reading your Web site in one window and has another open in the background. If he clicks the background window, the current page loses focus and an onBlur event occurs.

Commonly used with these tags: <body>, <frameset>, <textarea>, <input type="button | checkbox | file | password | radio | reset | submit | text">, <select>

Form Events

While each element of a form (radio button, text field, checkbox) can respond to a variety of events, the whole form—the entire collection of elements—can respond to only two events:

onSubmit

Gets triggered: When a visitor clicks the Submit button on a form.

Commonly used with this tag: <form>

onReset

Gets triggered: When a visitor clicks the Reset button on a form.

Commonly used with this tag: <form>

The Actions, One by One

While events get the ball rolling, actions are, yes, where the action is. Whether it's opening a 200×200 pixel browser window or slowly fading in a photograph, you'll find an action for almost every interactivity need.

In some cases, alas, the actions aren't very good. Dreamweaver CS3 is still saddled with behaviors that were created for (and haven't been updated since) Dreamweaver 4. Although the new Spry Effects offer a fresh set of behaviors to play with, Adobe has only weeded out a few behaviors that aren't very useful or that don't work well. This book makes clear which are the rotten eggs to steer clear of.

Note: You'll find a menu named "~Deprecated" in the behaviors list on the Behaviors panel (see Figure 13-2). This menu includes five behaviors that have been "deprecated"–meaning AVOID AT ALL COSTS. Those behaviors don't work well (or at all, in some cases). They still appear in the menu to help out the poor Web designers who added these behaviors to their sites using a previous version of Dreamweaver.

After you complete the steps required to set up an action as described on page 503, the new action appears in the Behaviors panel, and your Web page is ready to test. At that point, you can click the behavior's name in the Behaviors panel, where—by clicking the Events pop-up menu, as shown in Figure 13-1—you can change the event that triggers it.

Spry Effects

Spry Effects are the only addition to Dreamweaver CS3's arsenal of behaviors. They're sophisticated visual effects that can do things like highlight elements on a page, make a photo fade in, or shake an entire sidebar of information like an earthquake. They're mostly eye candy and work well when you want to draw attention to an element on the page, or create a dramatic introduction. It's easy to abuse these fun effects, however: If every part of your page blinks, shrinks, shakes, and flashes, then most visitors will quickly grow tired of your page's nonstop action.

Spry Effects are part of Adobe's Spry Framework, which you read about in-depth in the previous chapter and have encountered when learning about the Spry menu bar and Spry validation widgets. To use a Spry Effect, you first have to apply an ID to the "target" element—the part of the page you wish to affect. Every effect, except Slide, can target any element (an <img> tag, for instance, for an image). (The Slide effect can target only a <div> tag).

You're probably thinking of IDs as something you'd use when creating the kinds of CSS layouts discussed in Chapter 9. True, IDs are often associated with Cascading Style Sheets as a way of formatting a unique element on a page. However, IDs are also handy when you want to use JavaScript to add interactivity to a page. In fact, you can add IDs to HTML without ever creating any associated ID styles using CSS.

Recall that the HTML ID attribute marks a tag with a unique name. You can apply CSS to that tag using an ID style, but you can also control that tag using JavaScript.

How you apply an ID to a tag differs depending on the tag, but here are the most common techniques:

- **Div tags.** Assign an ID to a div using the Property inspector. Just select the div tag, and then use the ID field in the Property inspector to give it a unique name. In addition, you can wrap any collection of HTML tags (or even a single element like an image) inside a <div> tag and apply an ID at the same time using the Insert Div Tag tool (see page 314).
- **Images.** When you select an image in the document window, you can type an ID for that image in the Property inspector's Name box (see Figure 6-6).
- **Forms.** Select the form and type an ID in the Name field on the left edge of the Property inspector (see Figure 11-3).
- **Form fields.** When you insert a form field, you can set the field's ID in the Input Tag Accessibility Options window (see Figure 11-5). You can later set or change a field's ID by selecting it and then using the Name field on the left edge of the Property inspector.
- **Other elements.** It's not as straightforward to add an ID to paragraphs, headlines, bulleted lists, and other tags. However, it's not that difficult if you use the Tag selector's contextual menu, as described in Figure 8-2.

After you've applied an ID to the target, you then add a Spry Effect behavior to a tag (usually some tag other than the target) which then triggers the effect. For example, you might want the site's banner image to fade into view after the Web page loads. The target is the banner image, but you apply the Spry Effect behavior to the <body> tag using the onLoad event (page 509). Any of the tag/event combinations discussed on page 506 will work.

Appear/Fade

To make an element fade in or out, use the Appear/Fade effect. To add a dramatic introduction to your site, you can fade in a large photograph on your site's home page after the page loads. Or you can have an "Important Announcement" box disappear when it's clicked.

To use this effect:

1. **Select the tag that you want to trigger the fade in or out.**

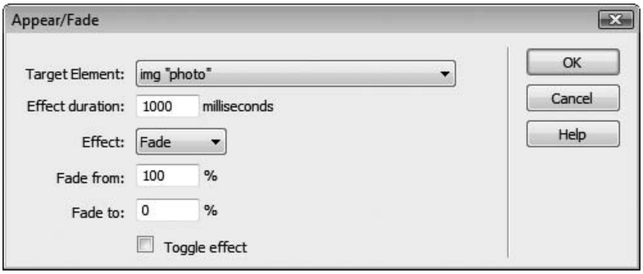
   For example, you could pick a link that triggers the effect, or you could use the <body> tag coupled with the onLoad event (page 509).

2. **From the Actions list on the Behavior panel, choose Effects → Appear/Fade.**

   The Appear/Fade window appears (see Figure 13-4).

3. **Select a target element from the first menu.**

   Here's where you specify which element on the page should appear or fade away. This menu lists every tag on the page that has an ID applied to it. In addition, you may see <current selection> listed, which refers to the tag you selected


Appear/Fade

Target Element: img "photo"

Effect duration: 1000 milliseconds

Effect: Fade

Fade from: 100 %

Fade to: 0 %

□ Toggle effect

Figure 13-4: *Use the Appear/Fade effect to make an element fade from the page, or have a photograph fade into view on your site's home page.*

in step 1. You would choose this option if you wanted to apply the behavior to an absolutely positioned <div> tag that contains some kind of message—like "Welcome to our Web site!" When a site visitor clicks this <div>, it fades away.

4. **Type an amount in the "Effect duration" field.**

   This setting controls how long the fade in or out lasts. The duration is measured in milliseconds, so entering *1000* gets you 1 second. If you want the target element to appear or disappear immediately, enter *0*.

5. **Choose the type of effect—Fade or Appear—from the Effect menu.**

   If you want the target element to fade into view, it must be hidden to begin with. Otherwise the fade in effect looks really weird: first you see the photo, then you don't, and *then* it fades in. To make the element invisible, add (or edit) a style for the target element, and then use the CSS *visibility* property (page 339). Set the visibility property to "hidden."

Note: Don't use the CSS display property setting "none" for an element you wish to fade in. This setting does indeed hide the element from view, but the fade in effect won't work in the Safari Web browser: The target element will remain invisible.

6. **Type a percentage amount in the "from" and "to" fields.**

   Depending on which type of effect you selected, you'll see either "Appear from" or "Fade from" and "Appear to" or "Fade to" in the Appear/Fade window. These two fields let you define the opacity of the target element. You'll commonly type *100* in the "Fade from" field and *0* in the "Fade to" field. Doing so causes an image to fade completely out of view. However, if you like ghostly apparitions, you can fade from 100% to 25%—this makes a solid element become transparent.

7. **Optionally, turn on the "Toggle effect" checkbox.**

   This option turns the trigger tag into a kind of light switch that lets you fade the element in and out. Say you added an absolutely positioned div to a page that contained helpful hints on getting the most out of your Web site. You could then add a link that said "Show/hide hints." Add the Appear/Fade effect, target the AP div, and turn on the Toggle effect checkbox. Now, when that link is clicked, the div would fade into view (if it were hidden) or fade out of view (if it were visible).

8. **Click OK to apply the behavior.**

   Once you've added the effect to a tag, you can edit or delete it just like any other behavior; see page 505 for details.

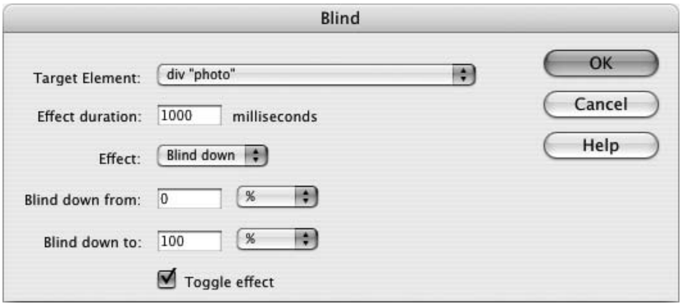
Blind

Don't worry: The Blind effect won't hurt your eyes. It's actually just a way of simulating a window blind—either being drawn over an element to hide it or opened to reveal an element. The basic concept and functionality is the same as the Fade/Appear effect: It lets you hide or reveal an element on a page. Follow the same basic steps as described in the previous section for Fade/Appear.

Once you select Blind from the Effects menu in the Behaviors panel, you can control all of the basic elements of this effect from the Blind dialog box (Figure 13-5).

Use the Effect pull-down menu to choose which direction the blind moves. If you want to hide an element on the page as if a blind where being pulled down over it, choose "Blind down." To make a hidden element appear as if a blind were being drawn to reveal it, choose "Blind up." You can choose either direction for both revealing or hiding an element; the key is entering the correct percentage values in the "from" and "to" fields (Figure 13-5). If you wish to hide an already visible element, then type *100* in the "from" field and *0* in the "to" field.

To make an element appear, first you need to set its visibility property (page 339) to *hidden* by creating a CSS style for the target element. Next, apply the Blind effect to a tag (for example, a link or the body tag), and then select the direction you wish the blind to move (up or down) from the Effect menu. Finally, type *0* in the "from" field and *100* in the "to" field. The "Toggle effect" checkbox reverses the effect when the event is triggered again. For example, a link clicked for the first time might reveal a photo on the page; when clicked again, the photo disappears.


Blind

Target Element: div "photo"

Effect duration: 1000 milliseconds

Effect: Blind down

Blind down from: 0 %

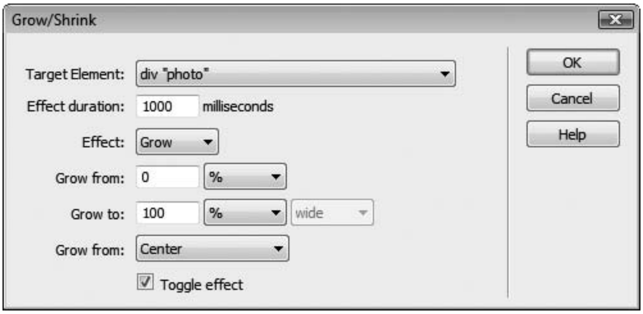
Blind down to: 100 %

☑ Toggle effect

Figure 13-5:
The "from" and "to" fields can also hide or reveal just a portion of a div. If you set "Blind down from" to 0% and "Blind down to" to 50%, the effect will begin to reveal the contents of the div starting at the top and then stop at the halfway mark–in other words, the bottom half of the div will still be invisible.

Grow/Shrink

The Grow/Shrink effect is another "now you see it, now you don't" type of effect. With it, you can make a photo, a paragraph, or a div full of content grow from a tiny speck on the screen to its full size, or you can make an element disappear by shrinking into nothingness. The basic setup is the same as with the Appear/Fade effect described on page 512. The Grow/Shrink window (Figure 13-6) lets you target any element with an ID; set a duration for the effect; and then select whether to make the element appear (grow) or disappear (shrink). You can also have an element grow or shrink to a percentage of its full size. However, unless you're targeting an image, displaying an element at less than its full size is usually unattractive and unreadable.



Target Element: div "photo"
Effect duration: 1000 milliseconds
Effect: Grow
Grow from: 0 %
Grow to: 100 % wide
Grow from: Center
☑ Toggle effect

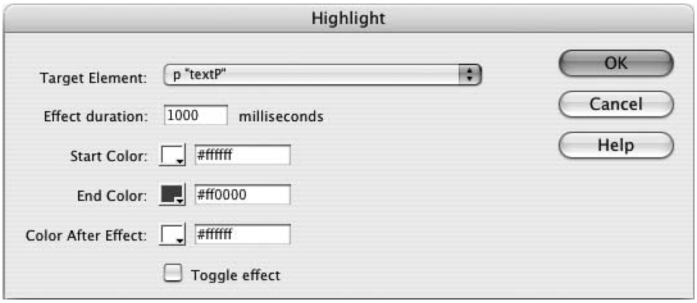
Figure 13-6:
The "Grow from" menu ("Shrink from" if the Shrink effect is selected) determines the point on the page from which the element begins its growth on its way to achieving its full size. You can either make the element grow from its center or from its top-left corner. The "center" option makes the element appear to come straight at you (or recede straight from you when Shrink is selected).

Tip: You can combine multiple types of effects for a single target element. For example, you could make a photo fade into view when the page loads, shake when the mouse is moved over it, and even slide out of view when a link is clicked. However, be careful assigning multiple effects to the same event on the same element. If you add a Grow/Shrink effect and a Shake effect, both targeting the same element and using the same event, you won't see the element grow and *then* shake–you'll see it shake *as it grows*. In other words, the effects happen simultaneously (and usually bizarrely) instead of one after the other.

Highlight

Adding a background color to a paragraph, headline, or div is one way to create visual contrast and make an important piece of information stand out. A red box with white type will draw the eye quicker than a sea of black type on a white page. But if you really want to draw someone's attention, use the Highlight effect. Highlightling an element lets you add a flash of bright background color to it. For instance, on a form, you may have an important instruction for a particular form field ("Your password must be 10 characters long and not have !, # , or $ in it"). You could add the Highlight effect to the form field so that when a visitor clicks in the field, the instruction's background color quickly flashes, ensuring that the visitor sees the important information.

As with other Spry Effects, you use the Behaviors panel to apply the Highlight effect to some triggering element (like a form field you click in, or a link you mouse over). Then you set options in the Highlight window (see Figure 13-7): a target element (any tag with an ID), the duration of the effect, and background colors.



Target Element: p "textP"

Effect duration: 1000 milliseconds

Start Color: #ffffff

End Color: #ff0000

Color After Effect: #ffffff

□ Toggle effect

Figure 13-7:
The "Toggle effect" checkbox lets you fade in a background color with one action (for example, a click of a link) and then fade the background color out when the same event occurs again (the same link is clicked a second time, for instance). But in order for it to look good, make sure the Color After Effect is the same as the End Color. Otherwise, the second time the highlight is triggered (in other words, when the effect is toggled) the background won't fade smoothly back to the start color.

Colors work like this: The Start Color is the background color of the target element when the effect begins. The background subsequently fades from the Start Color to the End Color (the duration of the fade is determined by the Effect duration setting). Finally, the End Color abruptly disappears and is replaced by the Color After Effect. The general settings suggested by Dreamweaver when you apply the effect aren't so good: white, red, white. Assuming the background color of your page is white, you don't get so much of a flash effect as a "fade-to-a-color-that-immediately-disappears" effect. The effect looks a lot better if the Start Color is set to some bright, attention grabbing, highlight color, and the End Color is set to match the current background color of the target element. Then the effect looks like a bright flash that gradually fades away.

However, instead of a flash, you may want an element's background to slowly fade to a different color and stay that color. In that case, set the Start Color to match the target element's current background color, and use the same color for both End Color and Color After Effect.

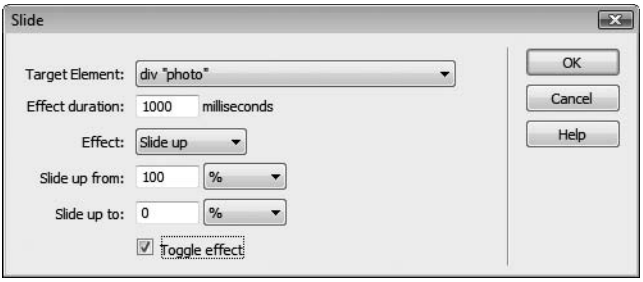
Shake

The Shake effect is like adding an earthquake to a Web page. The target element shakes violently left to right on the page for a second or so. And that's all there is to it. When you apply this behavior, you have just one option: which element on the page to shake. You can shake any element with an ID—a div or even just a paragraph. It's kind of a fun effect…once…and maybe just for kids.

Slide

The Slide effect is just like the Blind effect. But instead of a "blind" moving over an element to hide it, or moving off an element to reveal it, the element itself moves. Say you have a <div> tag that contains a gallery of photos. If you target that div with a "slide up" effect, then the images will all move upwards and disappear at the top edge of that div. Think of the <div> as a kind of window looking out onto the photos. When the photos move up past the window, you can't see them any longer.

You can make an element slide up or slide down using the Effect menu in the Slide window (Figure 13-8). And, as with the Blind effect, to make an element disappear, type *100* in the "from" field and *0* in the "to" field. To make an element slide either up or down and *appear* on the page, first create a style for the element's ID; then apply the Slide behavior to some other element (a link or the body tag, for instance). Finally, type *0* in the "from" field and *100* in the "to" field.



Target Element: div "photo"
Effect duration: 1000 milliseconds
Effect: Slide up
Slide up from: 100 %
Slide up to: 0 %
☑ Toggle effect

Figure 13-8:
The Slide effect works just like the Blind effect described on page 514. The one difference is that the element itself moves and disappears (as opposed to a blind being drawn over the element).

Squish

The Squish effect offers no options other than selecting a target element. The effect only works to first hide an element (by shrinking it down until it disappears) and then revealing it by making it grow. It's exactly like the Shrink/Grow effect (page 514) with the "Toggle effect" box turned on and the Shrink effect selected (see Figure 13-6). Since it doesn't provide any controls for timing the effect, you're better off just sticking with the Shrink/Grow effect.

Navigation Actions

Many of Dreamweaver's actions are useful for adding creative navigational choices to your Web sites, giving you the opportunity to go beyond the simple click-and-load approach of a basic Web page.

Open Browser Window

No matter how carefully you design your Web page, chances are it won't look good in every size window. Depending on the resolution of your visitor's monitor and the dimensions of his browser window, your Web page may be forced to squeeze into a window that's 400 pixels wide, or it could be dwarfed by one that's 1200 pixels wide. Designing your Web pages so they look good at a variety of different window sizes is challenging.

It's the Open Browser Window action to the rescue (Figure 13-9). Using this behavior, you can instruct your visitor's browser to open a new window to whatever height and width *you* desire. In fact, you can even dictate what elements the browser window includes. Don't want the toolbar, location bar, or status bar visible? No problem; this action lets you include or exclude any such window chrome.

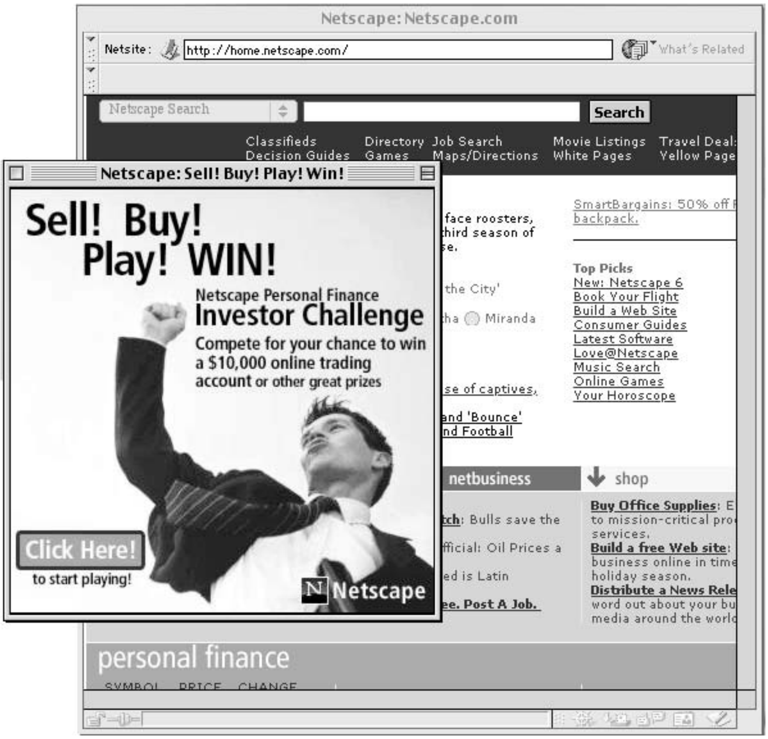


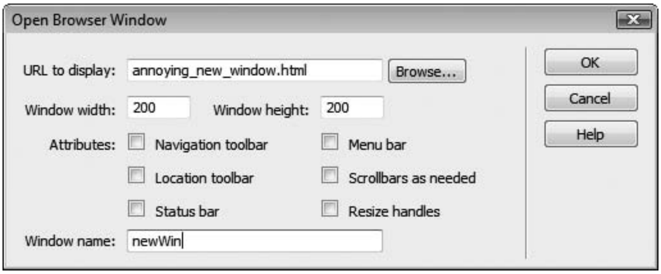
Figure 13-9:
You, too, can annoy your friends, neighbors, and Web site customers with these unruly pop-up windows. Just add the Open Browser Window action to the <body> tag of your document. Now, when that page loads, a new browser window opens with the ad, announcement, or picture you specify. To be even more annoying, use the onUnload event of the <body> tag to open a new browser window—with the same Web page—when your visitors try to exit the page. They won't be able to get to a different page, and may even encounter system crashes. Now that's annoying! Most current Web browsers, however, prevent these kinds of automatic window-opening tricks.

To open a new browser window, you start, as always, by selecting the tag to which you wish to attach the behavior. You can attach it to any of the tags discussed on page 511, but you'll usually want to add this action to a link with an onClick event, or to the <body> tag with the onLoad event.

Tip: Most browsers have pop-up blockers. This nifty feature prevents the browser from opening a new browser window unless the visitor initiates the request. In other words, browser windows that are meant to open when a new page is loaded won't, but browser windows that open based on a visitor's action—like clicking a link—will.

Once you've selected this action's name from the + menu in the Behaviors panel, you'll see the dialog box shown in Figure 13-10. You have the following choices to make:

- **URL to display.** In this box, type the URL or path of the Web page, or click Browse and find the Web page on your computer (the latter option is a more foolproof method of ensuring functional links). If you're loading a Web page on somebody else's site, don't forget to type an *absolute* URL, beginning with *http://* (see page 154).



Open Browser Window

URL to display: annoying_new_window.html

Window width: 200 Window height: 200

Attributes: □ Navigation toolbar □ Menu bar

□ Location toolbar □ Scrollbars as needed

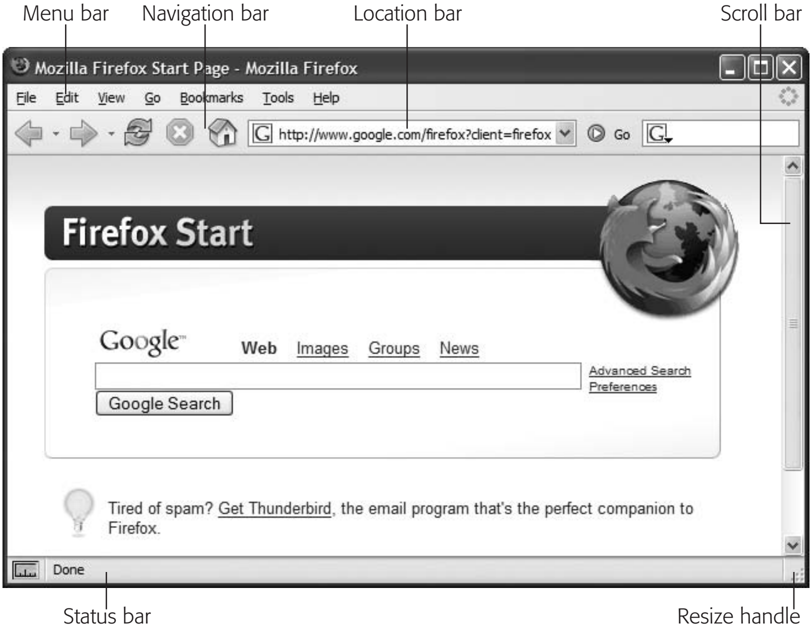
□ Status bar □ Resize handles

Window name: newWin

Figure 13-10:
Here, you can define the properties of the new window, including what Web page loads into it, its dimensions, and so on. If you leave the "Window width" and "Window height" properties blank, the new window is the same size as the window it opens from.

- **Window width, Window height.** Next, type in the width and height of the new window. These values are measured in pixels; in most browsers, 100 x 100 pixels is the minimum size. Also, strange visual anomalies may result on your visitors' screens if the width and height you specify here are larger than the available space on their monitors.

- **Attributes.** Turn on the checkboxes for the window elements you want to include in the new window. Figure 13-11 shows the different pieces of a standard browser window.



Mozilla Firefox Start Page - Mozilla Firefox

http://www.google.com/firefox?client=firefox

Tired of spam? Get Thunderbird, the email program that's the perfect companion to Firefox.

Done

Figure 13-11:
The parts of a browser window. Note: The menu bar only appears as part of the browser window on Windows machines. On Macs, the menu bar appears at the top of the screen and can't be hidden; in addition, the Safari browser won't hide the resize handle or the scroll bars (if they're needed).

- **Window name.** Give the new window a name here (letters and numbers only). If you include spaces or other symbols, Dreamweaver displays an error message and lets you correct the mistake. This name won't actually appear on your Web page, but it's useful for targeting links or actions from the original window.

Once a new window is open, you can load other Web pages into it from the original page that opened the window; simply use the name of the new window as the link's target. For example, you could add this behavior to an "Open photo gallery" link that, when clicked, opens a small new window showcasing a photo. You could add links to the main page that then load additional photos into the small window.

If you use more than one Open Browser Window behavior on a single page, make sure to give each new window a unique name. If you don't, you may not get a new window for each Open Browser Window action.

When you click OK, your newly created behavior appears in the Actions list in the Behaviors panel.

Go to URL

The "Go to URL" action works just like a link, in that it loads a new Web page. However, while links work only when you click them, this action can load a page based on an event *other than* clicking. For instance, you may want to load a Web page when your visitor's cursor merely moves over an image, or when she turns on a particular radio button.

Once you've selected a tag and chosen this action's name from the + menu in the Behaviors panel, you can make these settings in the resulting dialog box:

- **Open in.** If you aren't using frames, only Main Window is listed here. But if you're working in a *frameset* file and have named each of your frames, they're listed in the "Open in" list box. Click the name of the frame where you want the new page to appear.
- **URL.** Fill in the URL of the page you wish to load. You can use any of the link-specifying tricks described on page 159: type in a path or an absolute URL starting with *http://*, or click the Browse button and then select a page from your site.

Jump Menu and Jump Menu Go

Conserving precious visual space on a Web page is a constant challenge for Web designers. Putting too many buttons, icons, and navigation controls on a page can clutter your presentation and muddle a page's meaning. As sites get larger, so do navigation bars, which can engulf a page in a long column of buttons.

The Spry menu bar is one solution to this problem, but you may not want to go through the lengthy process of creating and styling a Spry menu as described on page 175. A simpler way to add detailed navigation to a site without wasting pixels is to use Dreamweaver's Jump Menu behavior. A *jump menu* is a form pop-up menu that lets visitors navigate by choosing from a list of links.

The Jump Menu behavior is listed in the Behaviors panel, but for a simpler, happier life, don't insert it onto your page that way. Instead, use the Insert bar or Insert menu, like this:

1. **Click where you want the jump menu to appear on your Web page.**

   It could be in a table cell at the top of the page, or along the left edge, for example.

2. **Under the Forms tab on the Insert bar, click the Jump Menu icon (see Figure 11-2 on page 402). Or choose Insert → Form → Jump Menu.**

   If you use the Behaviors panel instead, you first have to add a form and insert a menu into it. The Insert Jump Menu object saves you those steps.

Tip: Even though the jump menu uses a pop-up menu, which is a component of a *form*, you don't have to create a form first, as described in Chapter 11. Dreamweaver creates one automatically when you insert a jump menu.

   The Insert Jump Menu dialog box opens, as shown in Figure 13-12.

3. **Type an instructive label, like *Select a Destination*, in the Text box.**

   What you enter in the Text box sets the menu's default choice—the first item listed in the menu when the page loads. Dreamweaver provides two methods for triggering the jump-menu behavior: when the visitor makes a selection from the list—which is an onChange event, since the visitor changes the menu by selecting a new option—or when the visitor clicks an added Go menu button after making his selection. The second method requires extra effort from the visitor—making a selection *and* clicking a button. The first method, therefore, offers a better visitor experience. But it means that you can't include an actual link in the first item in the menu; after all, the behavior is triggered only when a visitor selects an item other than the one currently listed.

   If you intend to add a Go button, you can skip this step and jump down to step 6.

4. **Leave the "When selected, go to URL" box empty.**

   Since the first item in the list is just an instruction, you don't link it to any page.

5. **To add a link, click the + button.**

   This adds another item to the menu.

6. **Type the name of the link in the text field.**

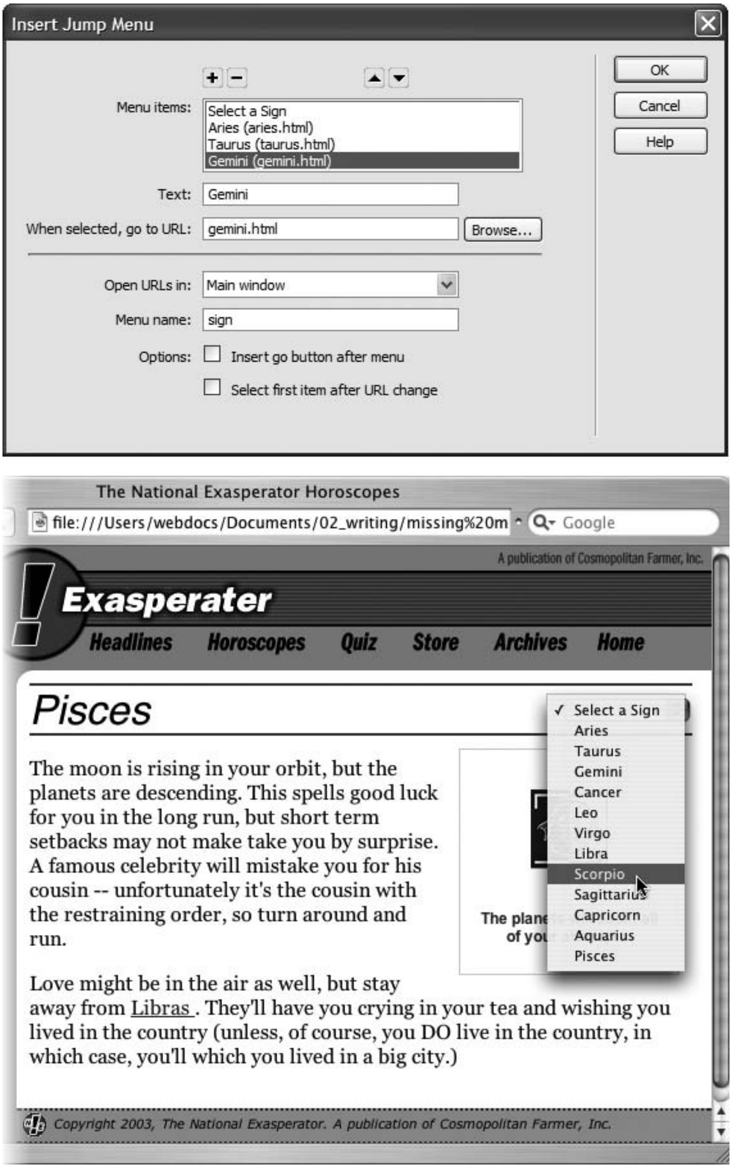
   You're specifying the first link in your pop-up menu. The name doesn't have to match the page's title or anchor's name; it's whatever you want your menu to say to represent it. For instance, you can call a menu choice *Home* even if the title of your home page is "Welcome to XYZ Corp."

7. **Enter a URL for this link in the "When selected, go to URL" field.**

   Use any of the usual methods for specifying a link (see page 159).

8. **To add the next link in your pop-up menu, click the + button and repeat steps 6 and 7. Continue until you've added all of the links for this menu.**

   If you want to remove one of the links, select it from the "Menu items" list and then click the minus sign (–) button. You can also reorder the list by clicking one of the link names and then clicking the up and down arrow buttons.



Insert Jump Menu

Menu items:
Select a Sign
Aries (aries.html)
Taurus (taurus.html)
Gemini (gemini.html)

Text: Gemini

When selected, go to URL: gemini.html

Open URLs in: Main window

Menu name: sign

Options: □ Insert go button after menu

□ Select first item after URL change

The National Exasperator Horoscopes

file:///Users/webdocs/Documents/02_writing/missing%20m

Pisces

The moon is rising in your orbit, but the planets are descending. This spells good luck for you in the long run, but short term setbacks may not make take you by surprise. A famous celebrity will mistake you for his cousin -- unfortunately it's the cousin with the restraining order, so turn around and run.

Love might be in the air as well, but stay away from Libras . They'll have you crying in your tea and wishing you lived in the country (unless, of course, you DO live in the country, in which case, you'll which you lived in a big city.)

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Figure 13-12:

Top: The Insert Jump Menu dialog box is set up so that the onChange event of the <select> tag triggers the Jump Menu action. That is, the Jump Menu behavior works when your visitor selects an item other than the one currently listed.

Bottom: Unless you turn on the "Insert go button after menu" checkbox, the first item of a jump menu should never be used as a link. Instead, use some descriptive text–such as "Select a Sign"–to let visitors know what the menu does. Then leave the URL blank in the Insert Jump Menu dialog box. When placed on a page, the resulting menu is very compact, but it can offer a long list of pages.

9. **If you're using frames, use the "Open URLs in" pop-up menu to specify a frame in which the indicated Web page should appear.**

   Otherwise, the "Main window" option loads links into the entire browser window.

10. **In the "Menu name" box, give the menu a name.**

    This step is optional; you can also just accept the name Dreamweaver proposes. Since Dreamweaver uses this name only for the internal purposes of the JavaScript that drives this behavior, it doesn't appear anywhere on the page.

11. **If you want a Go button to appear beside your jump menu, turn on the "Insert go button after menu" checkbox.**

    You need to use this option only when the jump menu is in one frame and is loading pages into another, or when you want to make the first item in your jump menu a link instead of an instruction.

    When you include a Go button, Dreamweaver adds a small form button next to the menu, which your visitor can click to jump to whatever link is listed in the menu. But most of the time, your visitors won't get a chance to use this Go button. Whenever they make a selection from the menu, their browsers automatically jump to the new page without waiting for a click on the Go button.

    The Go button's handy, however, when there's no selection to make. For example, if the first item in the menu is a link, your visitors won't be able to select it; it's *already* selected when the page with the menu loads. In this case, a Go button is the only way to trigger the "jump."

12. **If you want to reset the menu after each jump (so that it once again shows the first menu command), turn on "Select first item after URL change."**

    Here's another option that's useful only when the jump menu is in one frame, loading pages into another frame. Resetting the menu so that it shows its default command makes it easy for your visitors to make another selection when ready.

13. **Click OK to apply the action and close the Jump Menu dialog box.**

    Your new pop-up menu appears on your Web page, and the new behavior appears in the Actions list in the Behaviors panel.

Tip: To edit a jump menu, click the menu in your document and then, in the Behaviors panel, double-click the Jump Menu action in the Actions list. The settings dialog box reappears. At this point, you can change any of the options described in the previous steps, except you can't add a Go button to a jump menu that didn't have one to begin with. Click OK when you're finished.

The Jump Menu Go action (available on the Behaviors panel) is useful only if you didn't add a Go button in step 11. In this case, if there's a jump menu on the page and you wish to add a Go button to it, click next to the menu, add a form button, and then attach this behavior to it. (For more on working with forms, see Chapter 11.)

Check Plugin

The Check Plugin behavior isn't a navigation tool per se, but it helps you guide visitors to the right page if their Web browser is missing software it needs to view your latest Shockwave game, Flash animation, or QuickTime movie. All these multimedia goodies can add a lot of excitement to any Web site. Unfortunately, they don't work unless your visitors have downloaded and installed the corresponding browser plug-ins (see page 539 for more on this topic).

The Check Plugin behavior can detect whether your visitor's browser has the required plug-in installed (Flash, Shockwave, LiveAudio, Netscape Media Player, or QuickTime)—and if not, it can redirect your visitor to a special page for such less-fortunate Web surfers. Again, this behavior works in theory. In reality, it doesn't work with Internet Explorer—the most popular Web browser—except in the case of Flash and Shockwave. That's because Internet Explorer doesn't have an easy way to determine which plug-ins are installed. With Flash and Shockwave, however, Dreamweaver adds some additional code in VBScript, a language understood by Internet Explorer.

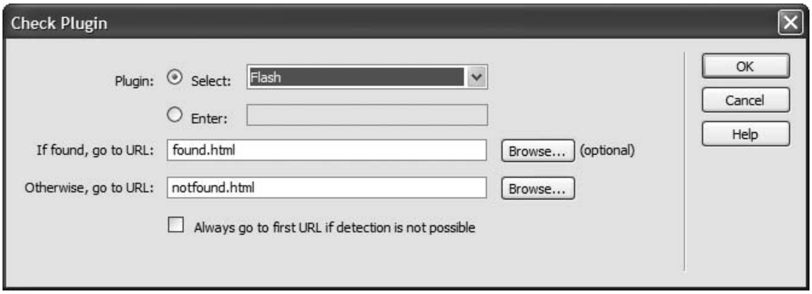
Because of this limitation, it's really best to use this behavior just for determining if the plug-ins for these Adobe technologies are installed, and skip the other plug-in options.

You can attach this behavior to the <body> tag and trigger it with the onLoad event. You may want to include this behavior on your home page to detect if the Flash plug-in is installed in your visitor's browser; if it is, you can either send visitors off to your crazy Flash page or keep them on the home page. Alternatively, you could add this behavior to a link with an onClick event. That way, when your visitors click the link, they see one page if they have the plug-in, and another if they don't.

When you choose Check Plugin from the + menu in the Behaviors panel, the Check Plugin dialog box (Figure 13-13) lets you adjust the following settings:

- **Plugin.** From the pop-up menu, choose the plug-in's name, or type its name in the Enter field.

  The plug-in options in the menu are Flash, Shockwave, LiveAudio, Netscape Media Player, and QuickTime. Only the Flash and Shockwave options work with Internet Explorer, and some don't work with other browsers. In Safari, for example, this behavior doesn't work for detecting Apple's QuickTime player.



Check Plugin

Plugin: ● Select: Flash

○ Enter:

If found, go to URL: found.html (optional)

Otherwise, go to URL: notfound.html

□ Always go to first URL if detection is not possible

Figure 13-13:
If you leave the "If found, go to URL" field empty, the visitor who has the correct plug-in installed stays right there on the same page. Use this arrangement when you apply the action to a <body> tag with an onLoad event and the page contains the plug-in object.

- **If found, go to URL/Otherwise, go to URL.** Using these text fields, specify the Web pages to which your visitor is directed if the plug-in is—or isn't—installed.

  You can indicate these pages just as you would any link (see page 159). If the Web page is part of the site you're working on, click Browse to locate and open the Web page document.

The "Otherwise, go to URL" page can let visitors know that they need a plug-in to view the site. It should also offer a link to the site where they can download the plug-in.

- **Always go to first URL if detection isn't possible.** Remember that Internet Explorer can't detect all plug-ins. It wouldn't make sense to send Internet Explorer people to a "You don't have the correct plug-in" page when they have the plug-in installed. If you turn on this checkbox, your Web page assumes that the plug-in is installed if it can't determine otherwise.

Note: However you plan to use this action, always make sure that you give visitors who don't have the plug-in a way to quickly and easily download and install it, so they can return to your site to bask in the glorious multimedia experience you've created for them.

Image Actions

Images make Web pages stand out. But adding Dreamweaver behaviors can make those same images come to life.

Preload Images

It takes time for images to load over the Internet. A 16 KB image, for instance, takes about 4 seconds to download over a 56k dial-up modem. However, once a Web browser loads an image, it stores the image in its *cache*, as described on page 607, so that it loads extremely quickly if a page requires the same graphic again. The Preload Images action takes advantage of this fact by downloading images and storing them in the browser's cache, *even before* they're actually needed.

Preloading is especially important when using mouse rollover effects on a Web page (see page 229). When a visitor moves the mouse over a particular button, it may, for example, appear to light up. If you couldn't preload the image, then the lit-up graphic wouldn't even begin to download until the cursor rolled over the button. The resulting delay would make your button feel less like a rollover than a layover.

If you use the Insert Rollover Image command (see page 229), you won't need to apply this action by hand, since Dreamweaver adds it automatically. But there are exceptions, such as when you use the CSS background property (page 217) to add an image to the hover state of a link (see page 172). In this case, a new background image appears when the link is moused over; however, a Web browser only loads that image when the hover state is triggered, not before.

To add the Preload Images action, select the tag you want to attach the behavior to. You'll usually use the <body> tag with an onLoad event.

If you've added rollover images to your page, this behavior may already be in the <body> of the page. In this case, just double-click the Preload Images action that's already listed in the Behaviors panel. If not, just choose this action's name from the + menu in the Behaviors panel. Either way, you're now offered the Preload Images dialog box.

Click the Browse button and navigate to the graphics file that you wish to preload, or type in the path or (if the graphic is on the Web already) the absolute URL of the graphic. Dreamweaver adds the image to the Preload Images list. If you want to preload another image, click the + button and repeat the previous step. Continue until you've added all the images you want to preload.

You can remove an image from the list by selecting it and then clicking the minus sign (–) button. (Be careful not to delete any of the images that are required for a rollover effect you've already created—the Undo command doesn't work here.)

When you click OK, you return to your document and your new action appears in the Behaviors panel. Here you can edit it, if you like, by changing the event that triggers it. But unless you're trying to achieve some special effect, you'll usually use the onLoad event of the <body> tag.

That's all there is to it. When your page loads in somebody's browser, the browser continues to load and store those graphics quietly in the background. They'll appear almost instantly when they're required by a rollover or even a shift to another Web page on your site that incorporates the graphics you specified.

Swap Image

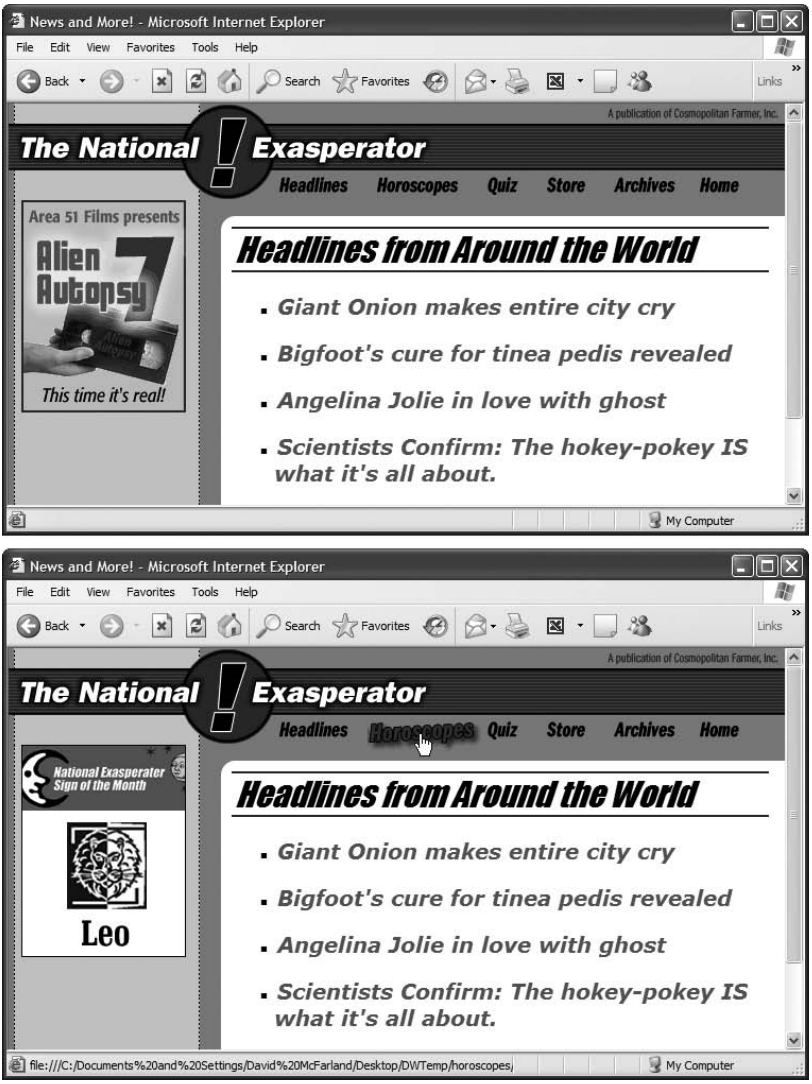
The Swap Image action exchanges one image on your page for another. (See the end of this section for detail on Swap Image's sibling behavior, Swap Image Restore.)

Simple as that process may sound, swapping images is one of the most visually exciting things you can do on a Web page. Swapping images works something like rollover images, except that a mouse click or mouse pass isn't required to trigger them. In fact, you can use *any* tag and event combination to trigger the Swap Image action. For instance, you can create a mini slideshow by listing the names of pictures down the left side of a Web page and inserting an image in the middle of the page. Add a Swap Image action to each slide name, so that the appropriate picture swaps in when your visitor clicks any one of the names.

To make this behavior work, your Web page must already contain a starter image, and the images you want swapped in must be the same width and height as the original graphic. If they aren't, the browser resizes and distorts the subsequent pictures to fit the "frame" dictated by the original.

To add the Swap Image behavior, start by choosing the *starter image* file that you want to include on the page. (Choose Insert → Image, or use any of the other techniques described in Chapter 6.) Give your image a name in the Property inspector, so that JavaScript knows which image to swap out. (JavaScript doesn't really care about the original graphic image itself, but rather about the space that it occupies on the page.)

Note: You can swap more than one image using a single Swap Image behavior (Figure 13-14). Using this trick, not only can a button change to another graphic when you mouse over it, but any number of other graphics on the page can also change at the same time. An asterisk (*) next to the name of an image in the Swap Image dialog box (see Figure 13-15) indicates that the behavior will swap in a new image for that particular graphic. In the example in Figure 13-15, you can see that two images–*horoscope* and *ad*, both marked by asterisks–swap with a single action.


News and More! - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Links
A publication of Cosmopolitan Farmer, Inc.
The National ! Exasperator
Headlines Horoscopes Quiz Store Archives Home
Area 51 Films presents
Alien Autopsy 7
This time it's real!
My Computer
National Exasperater Sign of the Month
Leo
file:///C:/Documents%20and%20Settings/David%20McFarland/Desktop/DWTemp/horoscopes/

Headlines from Around the World

- Giant Onion makes entire city cry
- Bigfoot's cure for tinea pedis revealed
- Angelina Jolie in love with ghost
- Scientists Confirm: The hokey-pokey IS what it's all about.

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Figure 13-14:
You can use the Swap Image behavior to make multiple graphics change with a single mouseover. A humble Web page (top) comes to life when the mouse is moved over the Horoscopes button (bottom). Not only does the graphic for the Horoscopes button change, but the ad on the left sidebar is also replaced with a tantalizing look at the "Sign of the Month." This type of effect, sometimes called a disjoint rollover, is easy with the Swap Image action.

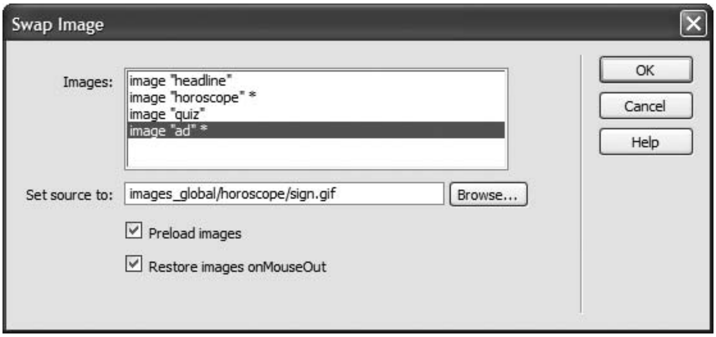
Now select the tag you want to attach the Swap Image behavior to. When you choose this action's name from the Behaviors panel, the Swap Image dialog box appears, as shown in Figure 13-15.

- **Images.** From the list, click the name of the starter image.
- **Set source to.** Here's where you specify the *image* file that you want to swap in. If it's a graphics file in your site folder, click Browse to find and open it. You can also specify a path or an absolute URL to another Web site, as described on page 163.
- **Preload images.** Preloading ensures that the swap action isn't slowed down while the graphic downloads from the Internet.
- **Restore images onMouseOut.** You get this option only when you've applied this behavior to a link. When you turn this checkbox on, moving the mouse *off* the link makes the previous image reappear.

Swap Image Restore

The Swap Image Restore action returns the last set of swapped images to its original state. Most designers use it in conjunction with a rollover button so that the button returns to its original appearance when the visitor rolls the cursor off the button.

You'll probably never find a need to add this behavior yourself. Dreamweaver automatically adds it when you insert a rollover image and when you choose the "Restore images onMouseOut" option when setting up a regular Swap Image behavior (see Figure 13-15). But, if you prefer, you can add the Swap Restore Image behavior to other tag and event combinations, using the general routine described on page 503. (The Swap Image Restore dialog box offers no options to set.)



Swap Image

Images:
image "headline"
image "horoscope" *
image "quiz"
image "ad" *

Set source to: images_global/horoscope/sign.gif

☑ Preload images

☑ Restore images onMouseOut

Figure 13-15: *Some actions, like the Swap Image action, can automatically add behaviors to a Web page. In this case, the "Preload images" and "Restore images onMouseOut" options actually add a Swap Image Restore action to the onMouseOut event of the currently selected tag, and a Preload Images action to the onLoad event of the <body> tag.*

Set Navigation Bar Image

The Navigation Bar object's enticing name tricks many people into thinking that they can quickly and easily build a useful navigation bar for their sites. They can, sort of, but the object adds lots of additional JavaScript code that's easily avoided by simply using Dreamweaver's "Rollover image" feature. The Navigation Bar is really a tool for those outdated dinosaurs—frames-based Web sites (see the box on page 163).

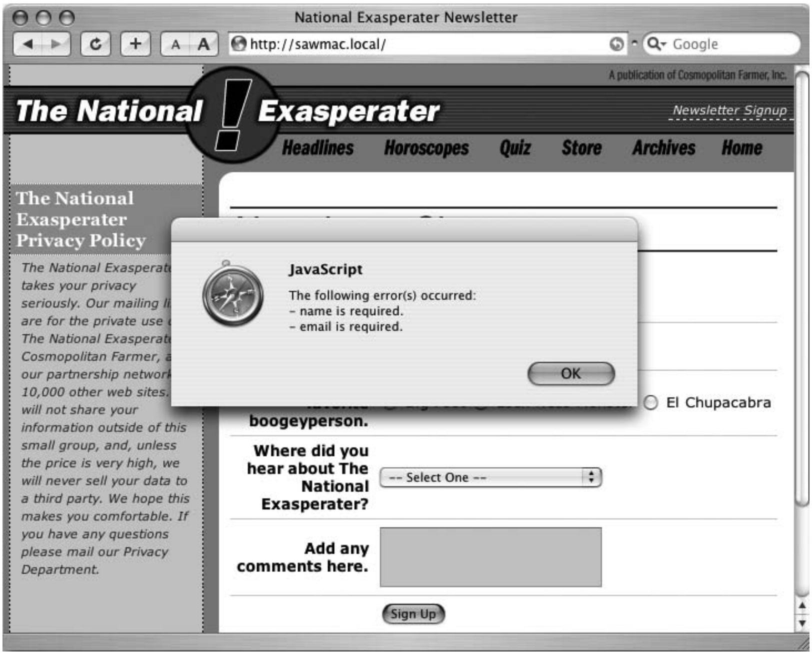
You're better off skipping the Navigation Bar object and using the Spry Menu Bar discussed on page 175 instead.

Message Actions

Communication is why we build Web sites: to tell a story, sell a product, or provide useful information that can entertain and inform our visitors. Dreamweaver can enhance this communication process with actions that provide dynamic feedback. From subtle messages in a browser's status bar to dialog boxes that command a visitor's attention, Dreamweaver offers numerous ways to respond, in words, to the things your visitors are doing on your Web pages.

Popup Message

Use the Popup Message behavior to send important messages to your visitors, as shown in Figure 13-16. Your visitor must click OK to close the dialog box. Because a pop-up message demands immediate attention, reserve this behavior for important announcements.


National Exasperater Newsletter
http://sawmac.local/
Google
A publication of Cosmopolitan Farmer, Inc.
The National ! Exasperater
Newsletter Signup
Headlines
Horoscopes
Quiz
Store
Archives
Home
The National Exasperater Privacy Policy
El Chupacabra
boogeyperson.
Where did you hear about The National Exasperater?
-- Select One --
Add any comments here.
Sign Up
OK

JavaScript

The following error(s) occurred:
- name is required.
- email is required.

Figure 13-16: *Here, a pop-up message indicates that a Web form wasn't correctly filled out.*

To create a pop-up message, select the tag to which you want the behavior attached. For example, adding this action to the <body> tag with an onLoad event causes a message to appear when a visitor first loads the page; adding the same behavior to a link with an onClick event makes the message appear when the visitor clicks the link.

From the Add Action menu (+ button) in the Behaviors panel, choose Popup Message. In the Popup Message dialog box, type the message that you want to appear in the dialog box. (Check the spelling and punctuation carefully; nothing says "amateur" like poorly written error messages, and Dreamweaver's spell-checking feature isn't smart enough to check the spelling of these messages.) Then click OK.

Note to JavaScript Programmers: Your message can also include any valid JavaScript expression. To embed JavaScript code in a message, place it inside braces ({ }). If you want to include the current time and date in a message, for example, add this: {*new Date()*}. If you just want to display a brace in the message, add a backslash, like this: \{. The backslash lets Dreamweaver know that you *really* do want a { character–and not just a bunch of JavaScript–to appear in the dialog box.

Set Text of Status Bar

Pop-up messages, like those described above, require your visitors to drop everything and read them. For less urgent messages, consider the "Set Text of Status Bar" behavior. It displays a message in the status bar of a browser window—the strip at the bottom of the window. You can add a message to a link, for example, that lets visitors know where the link takes them. Or you could set things up so that when a visitor moves the cursor over a photograph, copyright information appears in the window's status bar.

Note: The "Set Text of Status Bar" effect was common in the early days of the Web, but its popularity has waned for several reasons: People don't always notice their status bars. The bar is down at the bottom of the browser window and doesn't change dramatically–flash, blink, or sing, for example–when text appears. What's worse, visitors can hide the status bar and *never* see your message. And finally, the behavior doesn't work in many newer browsers like Opera, Safari, and Firefox.

To apply the "Set Text of Status Bar" action, select a tag (a very common example is a link [<a>] tag with the onMouseOver event); choose this behavior's name from the Add Action menu (+ button) in the Behaviors panel; and then, in the "Set Text of Status Bar" dialog box, type your message. Keep the message short, since browsers cut off any words that don't fit in the status bar. Your message can also include any valid JavaScript expression, as described in the Note above.

Set Text of Text Field

Normally, a text field in a form (see page 408) is blank. It sits on the page and waits for someone to type in it. The "Set Text of Text Field" behavior, by contrast, can save your visitors time by filling in form fields automatically with obvious answers.

For instance, imagine you've created a Web survey that has a series of questions. The first question might require a yes or no answer, along the lines of "Do you own a computer?" And you've provided radio buttons for Yes or No. The second question might be "What brand is it?" followed by a text field where your visitors can type in the brand.

But if someone answers "No" to question 1, there's no point in her typing a response to the second question. To help keep things moving along, you can set the second question's text field so that it says, "Please skip to Question 3." To do so, simply add the "Set Text of Text Field" action to the onClick event of the No radio button of Question 1.

To apply the "Set Text of Text Field" action, make sure your page includes a form and at least one text field. Because this behavior changes the text in a form text field, you won't get very far without the proper HTML on the page.

Select the tag to which you want the behavior attached. In the example above, you'd attach the behavior to the form's No radio button with an onClick event. However, you aren't limited to form elements. Any of the tags discussed on pages 506–510 work.

When you choose "Set Text of Text Field" from the + menu in the Behaviors panel, the "Set Text of Text Field" dialog box opens. Make the following changes:

- **Text field.** The menu lists the names of every text field in the form; choose the name of the text field whose default text you want to change. (See Chapter 11 for the full story on building online forms in Dreamweaver.)
- **New text.** Type the text you want that field to display. Make sure you don't make the message longer than the space available in the field. If you leave the New Text field blank, the contents of the field will be erased. Once again, your message can include a JavaScript expression, as described in the Note on page 530.

Set Text of Container

Another way to get your message across is to change the text that appears inside any element with an ID applied. For example, this might be a <div> tag, an absolutely positioned element (see page 335), or just a paragraph with its ID property set. This action also lets you use HTML code to *format* the message that appears in the layer. (Actually, the "Set Text" part of this action's name is a bit misleading, since this action also lets you include HTML code, images, forms, and other objects in the layer—not just text.)

As always, you start by selecting a tag. In this case, you could select a link, for example, so that moving the mouse over the link changes the text inside a <div> to read, "Click here to see our exclusive photos of unexplained phenomena."

When you choose this action's name from the + menu in the Behaviors panel, you get these controls in a dialog box:

- **Container.** The menu lists the names of every element on the Web page with an assigned ID (see page 284 for more on IDs); choose the name of the container whose text you want to set.

- **New HTML.** In this field, type the text you wish to add to the layer. You can type in a plain-text message or use HTML source code to control the content's formatting.

  For instance, if you want a word to appear bold in the layer, place the word inside a pair of strong tags like this: <strong>important</strong>. Or if you'd rather not mess around with HTML code, you can design the content using Dreamweaver's Design view—that is, right out there in your document window. Copy the HTML source from the Code view (Chapter 10), and then paste it into this action's New HTML field.

Text of Frame

Like the "Set Text of Layer" action, the "Set Text of Frame" action replaces the content of a specified frame with HTML you specify. It's like loading a new Web page into a frame, only faster. Since the HTML is already part of the page that contains this action, your visitors don't have to wait for the code to arrive from the Internet.

To apply the "Set Text of Frame" action, create frameset and frame pages. (For more about frames, see the online chapter about frames, which you can find at *www.sawmac.com/missing/dw8/chapters.php*.) When you select a tag in any of the frames—even the one whose content you intend to replace—and then choose this action from the + menu in the Behaviors panel, the "Set Text of Frame" dialog box opens:

- **Frame.** The menu lists the names of every available frame. Choose the frame where you want the text to appear.

- **New HTML.** Type the text you want the frame to display. You can type in a plain-text message, or use HTML source code to control the content's formatting: <strong> like this </strong> for bold, for example.

  You can also copy the HTML currently in the frame by clicking the Get Current HTML button, which copies the HTML source into the New HTML Field. Once it's there, you can modify it as you see fit. Use this technique if, for example, you want to keep much of the formatting and HTML of the original page. Be careful, however: This action can only update the *body* of the frame; any code in the <head> of the frame is lost. You can't add behaviors, meta tags, or other <head> content to the frame.

- **Preserve Background Color.** This option ensures that the background color of the frame won't change when the new text appears.

Element Actions

Dreamweaver includes several tools that let you manipulate the appearance and placement of any element on a page.

Show-Hide Elements

Do you ever stare in awe when a magician makes a handkerchief disappear into thin air? Now you, too, can perform sleight of hand on your own Web pages, making HTML disappear and reappear with ease. Dreamweaver's Show-Hide Elements behavior is a piece of JavaScript programming that lets you make your own magic.

Show-Hide Elements takes advantage of the Visibility property. You can use it for things like adding pop-up tooltips to your Web page, so that when a visitor's mouse moves over a link, a paragraph appears offering a detailed explanation of where the link goes (see Figure 13-17).

The following steps show how to create this effect:

1. **Add absolutely positioned divs to your Web page using the techniques described on page 343. Use the Visibility setting (page 339) to specify how you want each div to look when the page loads.**

   If you want a layer to be visible at first and then disappear when your visitor performs a specific action, set the layer to Visible. If you want it to appear only *after* some specific event, set it to Hidden.

Note: You don't have to use an absolutely positioned div to take advantage of this behavior; any element with an ID applied to it can be hidden or shown. (See page 284 for more on IDs and page 335 for more on absolute positioning.)

2. **In the Tag selector, click the tag to which you want the behavior attached.**

   Web designers often attach behaviors to link (<a>) tags. But you can also attach them to images or, as in Figure 13-17, to an image map, which defines hotspots on a single graphic.

   To create this effect, attach two behaviors to each hotspot in the document window (that is, to each <area> tag in HTML): one to show the div, using the onMouseOver event, and one to hide the div, using the onMouseOut event.

Note: If this is all Greek to you, see page 226 for more on image maps and hotspots.

3. **If it isn't already open, choose Window → Behaviors to open the Behaviors panel.**

   The Behaviors panel (as pictured in Figure 13-1) appears. It lets you add, remove, and modify behaviors.

4. **Click the + button on the panel. Select Show-Hide Elements from the menu.**

   The Show-Hide Elements window appears (see Figure 13-18). You'll use this window to tell Dreamweaver what div you intend to work with first.

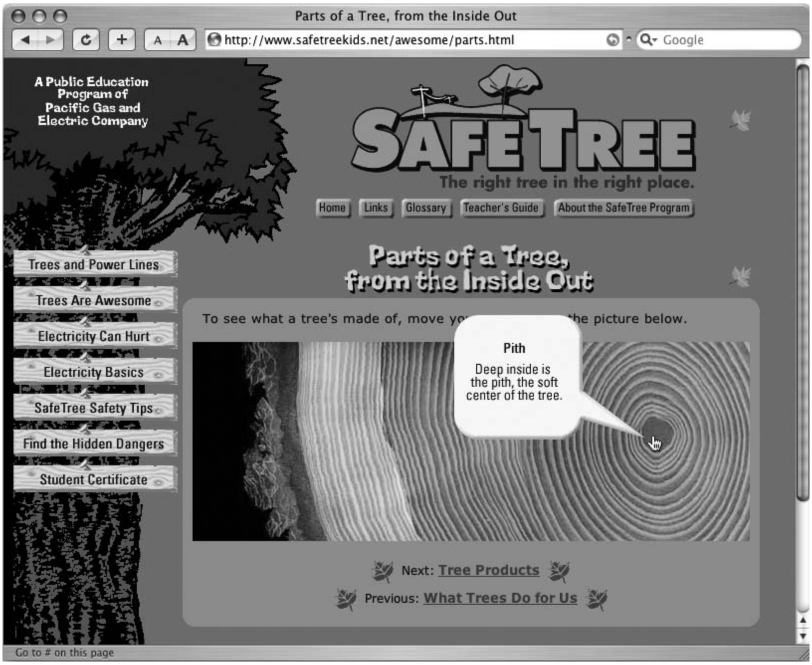

Parts of a Tree, from the Inside Out
http://www.safetreekids.net/awesome/parts.html
A Public Education Program of Pacific Gas and Electric Company
SAFETREE
The right tree in the right place.
Home
Links
Glossary
Teacher's Guide
About the SafeTree Program
Parts of a Tree, from the Inside Out
Trees and Power Lines
Trees Are Awesome
Electricity Can Hurt
Electricity Basics
SafeTree Safety Tips
Find the Hidden Dangers
Student Certificate
To see what a tree's made of, move yo… …he picture below.
Pith
Deep inside is the pith, the soft center of the tree.
Next: Tree Products
Previous: What Trees Do for Us
Go to # on this page

Figure 13-17: *Using Dreamweaver's Show-Hide Elements behavior, you can make elements appear and disappear. In this example, several elements lay hidden on the page. When a visitor moves the mouse over different parts of the tree cross-section, informative graphics (each placed in a hidden element) suddenly appear. Moving the mouse away returns the element to its hidden state. Notice how the information bubble overlaps the tree image and the text above it–a dead giveaway that this page uses absolutely positioned divs.*

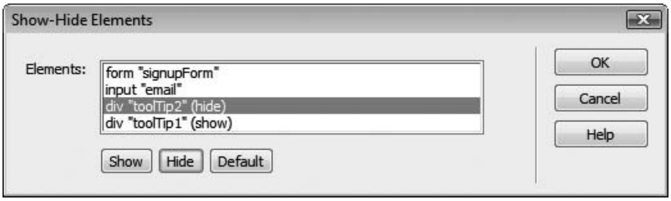
5. **Click an element in the list of named elements.**

   It's useful to give your elements descriptive ID names so you can easily distinguish which is which in a list like this one.

6. **Choose a Visibility setting for the elements by clicking one of the three buttons: Show, Hide, or Default.**

   You're determining what happens to the element when someone interacts with the tag you selected in step 2. Show makes the element visible, Hide hides the element, and Default sets the element's Visibility property to the browser's default value (usually the same as the Inherit value described on page 340).

   The choice you selected appears in parentheses next to the layer's name, as shown in Figure 13-18.


Show-Hide Elements

Elements:
form "signupForm"
input "email"
div "toolTip2" (hide)
div "toolTip1" (show)

Figure 13-18: *This box lets you hide or show any element on the page. In fact, you can control multiple elements at once. Here, the "toolTip1" div appears, while the div "toolTip2" disappears, when the behavior is triggered. Other elements–like an HTML form and a form field (both have IDs so they appear here)–are unaffected by this particular action.*

7. **If you like, select another element and then apply another visibility option.**

   A single Show-Hide Elements action can affect several elements at once. A single action can even make some visible and others invisible. (If you apply an action to an element by mistake, select the same option again to remove it from that element.)

8. **Click OK to apply the behavior.**

   The Show-Hide Elements action is now listed in the Behaviors panel, as is the event that triggers it.

Once you've added Show-Hide Elements, you can preview the behavior in a Web browser (Dreamweaver can't display behaviors by itself). Like other Dreamweaver behaviors, you can edit or delete this action; see page 505.

Draggable and Animated Divs

Dreamweaver includes a few other behaviors for working with absolutely positioned divs. The Drag AP Div behavior lets you create pages with AP divs that you can freely position anywhere on the Web page (think interactive jigsaw puzzle). The Timeline behavior lets you create animations, allowing your divs to travel freely around a page. Both of these were cool behaviors in their day, but they haven't been updated for years. Not only do they add lots and lots of JavaScript code that really weighs down your Web page, but they're also based on really old code that isn't guaranteed to work in any new browser. In fact, Adobe even recognized that the code was so old; when they first released Dreamweaver MX 2004, they temporarily removed the animation features. (The few, die-hard fans of the animation tools raised such a ruckus that Adobe put them back in.)

At any rate, the tools still sort of work. If you're interested in them, you'll find instructions on how to use them online at *www.sawmac.com/missing/dw8/chapters.php*.

Advanced Behaviors

Dreamweaver has two advanced behaviors that let you call custom JavaScript functions and change the properties of various HTML elements. Both of these actions require familiarity with JavaScript and HTML (Chapter 10). Unlike the other Dreamweaver behaviors, these two can easily generate browser errors if used incorrectly.

Call JavaScript

You can use the Call JavaScript behavior to execute a single line of JavaScript code or to call a JavaScript function that you've added to the <head> section of your Web page.

When you select a tag and choose this behavior's name from the Behaviors panel, the Call JavaScript dialog box opens. If you want to execute a single line of JavaScript code, simply type it in. For instance, if you want to make the browser window close, type *window.close( )*. If you want to call a JavaScript function, type the function name, like this: *myFunction( )*.

POWER USERS' CLINIC

Closing Browser Windows with the Call JavaScript Behavior

Suppose you've added an Open Browser Window behavior to your home page, so that when visitors come to your site, a small window opens, displaying a Web page that advertises some new feature of your site.

After they've read the ad, your visitors will want to close the window and continue visiting your site. Why not make it easy for them by adding a "Close this Window" button?

To do so, simply add a graphic button–text works fine, too–and then add a dummy (null) link to it (that is, in the Property inspector, type *javascript:;* in the Link field). Next, add the Call JavaScript behavior; in the Call JavaScript window that appears, type the following line of JavaScript code: *window. close()*.

Finally, after you click OK, make sure that the event is set to onClick in the Behaviors panel.

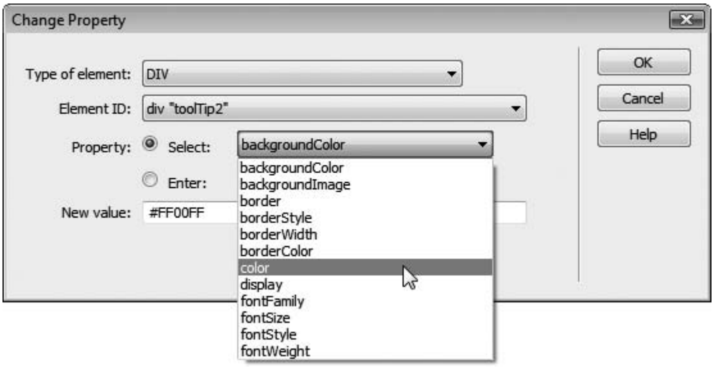
That's all there is to it. The link you've added to the pop-up window offers a working close button.

Change Property

The Change Property behavior can dynamically alter the value of a property or change the style of any of the following HTML tags: <div>, <span>, <img>, <form>, <textarea>, or <select>. It can also change properties for radio buttons, checkboxes, text fields, and password fields on forms (see Chapter 11). As with the previous behavior, this one requires a good knowledge of HTML, CSS, and JavaScript. Dreamweaver's built-in HTML, CSS, and JavaScript references (see page 394) can help you get up to speed.

Select a tag, choose this behavior's name from the + menu in the Behaviors panel, and then fill in the following parts of the Change Property dialog box (see Figure 13-19):

- **Type of element.** This pop-up menu lists the 13 HTML tags that this behavior can control. Choose the type of element whose property you wish to change.



Change Property

Type of element: DIV

Element ID: div "toolTip2"

Property: ● Select: backgroundColor

○ Enter:

New value: #FF00FF

Figure 13-19:
Caution: The Change Property behavior requires some knowledge of HTML, JavaScript, and CSS. All of the options in the menu refer to various CSS properties.

- **Element ID.** From this pop-up menu, choose the ID of the object you want to modify. You'll only see elements of the type you selected from the first menu (for example <div> or <p> tags). Any tag of the selected type that doesn't have an ID applied to it will be listed, but will have the label "unidentified" next to it. Dreamweaver will only let you choose an element with an ID.

- **Property.** Choose the property you want to change (or, if you know enough about JavaScript and CSS, just type the property's name in the Enter field). All of the options in the menu refer to various CSS properties. For example, "colors" refers to the color property, which sets the color of text as discussed on page 134.

- **New value.** Type the new value you wish to set for this property. This value should be appropriate to the type of property you'll be changing. For example, if you're changing a background color, the value should be a color, like #FF0066. The options in the Property menu refer to CSS properties, so you'll find that the different possible values listed for the different CSS properties in Chapters 4, 5, and 6 should work. For example, the *fontWeight* property is the CSS Font Weight property (page 133), so you could enter a value of "bold" to change text in an object (inside a <div> tag, for instance) to bold.

Adding More Behaviors

Dreamweaver's behaviors can open a new world of interactivity. Even if you don't understand the complexities of JavaScript and cross-browser programming, you can easily add powerful and interesting effects that add spice to your Web visitors' experience.

Dreamweaver comes with the preprogrammed behaviors described in this chapter, but you can download many additional behaviors from Adobe's Exchange Web site (*www.adobe.com/exchange*) or any of the Web sites mentioned on page 741. Once you've downloaded them, you can easily add them to Dreamweaver, as described in Chapter 21.

CHAPTER

14

Flash and Other Multimedia

With Cascading Style Sheets (Chapter 4), Spry widgets (Chapter 12), Dreamweaver Effects and Behaviors (Chapter 13), and images (Chapter 6), you can bring your Web pages to life with interactivity and animation. But as you may have noticed, more and more Web pages these days blink, sing, and dance with sound, video, and advanced animation.

You can create these effects too, but you'll need outside help from programs like Flash (see Figure 14-1) or Director, or the Java programming language, all of which are designed to create complex multimedia presentations. Dreamweaver provides powerful tools for adding these external media files and embedding them into your Web pages.

Four warnings, however. First, while all of the technologies discussed in this chapter let you expand your Web pages into new and exciting territory, they also require that your site visitors have external applications (not just a Web browser). These programs, usually called *plug-ins*, are a bit controversial in the Web development community, mainly because they can limit your audience. Not all Web site visitors have the necessary plug-ins installed on their computers. Those guests must choose from three equally unpalatable options: go to a different Web site to download the plug-in, skip the multimedia show (if you've built a second, plug-in–free version of your site), or skip your Web site entirely. All media types in this chapter require a plug-in of some kind; see each section for more detail.

Second, it's worth noting that these effects can bulk up your Web site considerably, making it slower to load and making it still more likely that some of your visitors (especially those using dial-up modems) won't bother sticking around.

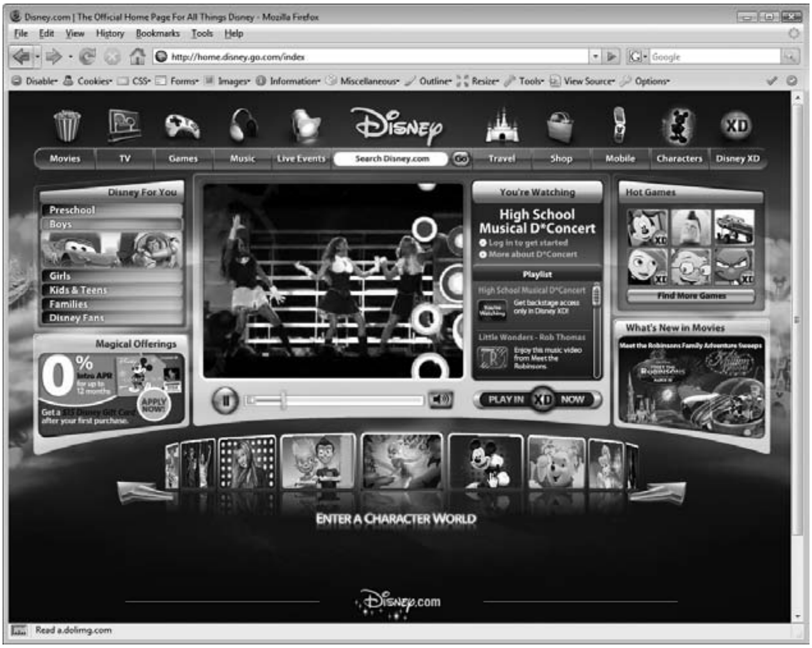


Figure 14-1: *Some Web pages, like the Disney.com home page, are created almost entirely with Flash. The interactivity, animation, and video playback abilities of Flash make it a great technology for entertainment Web sites. Ultimately, however, you still need an HTML file to display the Flash movie.*

Third, these flashy multimedia effects are easy to overuse. Blink and flash too much, and you'll find your audience beating a hasty retreat for the cyber-exits.

Finally, creating external movies, animations, or applications is an art (and a book or two) unto itself. This chapter is a guide to *inserting* such add-on goodies into your Web page and assumes that a cheerful programmer near you has already *created* them.

Note: For the full scoop on Flash, pick up a copy of *Flash CS3: The Missing Manual*.

Flash: An Introduction

Flash is the standard for Web animation, complex visual interaction, and what has become known as "Rich Internet Applications" (which is just a fancy way of saying you can make a Web page work a lot like a desktop program). Adobe's Flash technology produces high-quality animated images—known as Flash movies—at a relatively small file size. Its drawings and animations are *vector graphics*, which means that they use mathematical formulas to describe objects on the screen. By contrast, *bitmap* technology like GIF and JPEG include data for every pixel of an image, gobbling up precious bytes and adding download time. Flash's vector graphics, on the other hand, save file size with their compact mathematical expressions.

Flash can also handle MP3 audio, video playback, and advanced programming features, providing an added dimension of sound, video, and interactivity that can make a plain HTML page look dull by comparison. For example, sophisticated Flash gurus can build automatic score tracking into an online game or add a cannon-firing animation each time the player clicks the mouse. While Dynamic HTML (see Chapter 13) can do some of these things, Flash movies are easier to create. An intriguing advantage of Flash movies is that they look and work exactly the same in every browser, whether on Windows, Mac, or even Linux.

Of course, all of this power comes at a price. Although Dreamweaver has some limited Flash-creation abilities (such as the Flash buttons feature, discussed on page 231) you need another program, such as Adobe Flash or Swish (*www.swishzone.com*) to produce full-fledged movies. These programs aren't difficult to learn, but they're more programs to buy and more technologies to get under your belt.

Furthermore, your visitors can't play Flash movies without the Flash Player plug-in (see page 229). If they don't have it, they'll need to download and install it—a sure spontaneity killer. Fortunately, chances are your visitors already have Flash Player, since all major browsers (even Opera) now come with the Flash plug-in installed. In fact, Adobe says that (insert grain of salt here) over 98 percent of Web browsers in use now have some version of the Flash Player (a much smaller percentage has the *latest* version of the player).

Inserting a Flash Movie

To insert a Flash movie into a Web page, click where you want to insert the movie, and then choose Insert → Media → Flash (or, on the Common tab of the Insert bar, choose Flash from the Media menu [circled in Figure 14-2]). Either way, a Select File dialog box appears. Navigate to the Flash movie file (look for an .swf extension) and double-click it. Dreamweaver automatically determines the width and height of the movie and generates the appropriate HTML to embed it into the page.

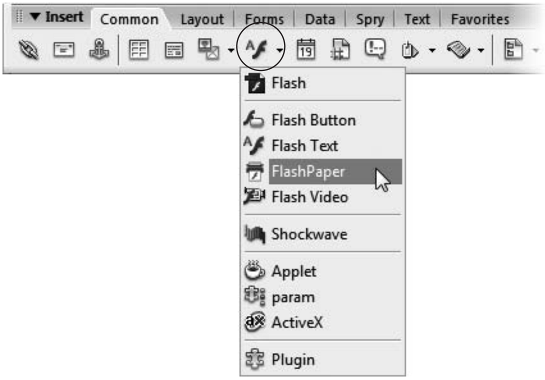


Figure 14-2:
The Media menu on the Insert Bar's Common tab is where old Web technologies go to die. Only Flash and Flash video are commonly used on Web sites these days.

Note: In addition to the HTML required to add a Flash movie to a page, Dreamweaver CS3 also links to a JavaScript file that's used when the Web page is viewed. The purpose of this Javascript code is to overcome security settings in some versions of Internet Explorer that force a visitor to click on the Flash movie before it can play. You'll have to upload this Javascript file–it's contained in the Scripts folder and is named AC_RunActiveContent.js–to your Web server, along with the Flash movie and the Web page. (See page 620 for more on uploading files to a Web site.)

The movie appears as a gray rectangle with the Flash logo in the center; you can adjust its settings as described in the next section.

Tip: You can also drag a Flash movie file from the Files panel (see page 567) into the document window. Dreamweaver automatically adds the correct code.

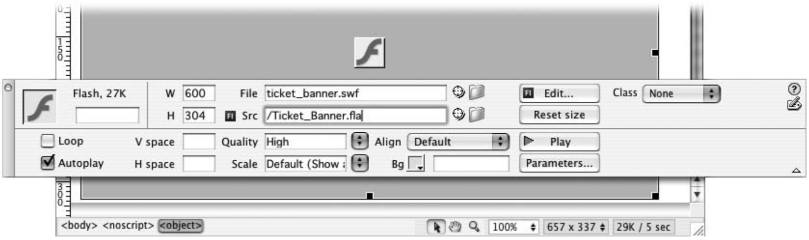
POWER USERS' CLINIC

The <object> and <embed> Tags

If you choose View → Code after inserting a Flash movie, you may be surprised by the amount of HTML Dreamweaver deposits in your page. You may also encounter some HTML tags you've never heard of, including <object>, <embed>, and <param>. These tags provide browsers with the information they need to launch Flash Player and play a Flash movie. Other embedded media (Shockwave, for example) make use of these tags, too.

The <object> and <embed> tags do the same thing in different browsers. Some browsers (including Netscape, Opera, Internet Explorer for Mac, and Mozilla) use <embed> to insert movies and other plug-in media, while Internet Explorer for Windows uses the <object> tag to insert ActiveX controls (Microsoft's own kind of plug-in technology). For maximum browser compatibility, Dreamweaver adds both tags. Browsers ignore HTML tags that they don't understand, so this method doesn't cause problems.

To preview Flash files directly in Dreamweaver, just select the movie and then click the Play button on the Property inspector (see Figure 14-3). To stop the movie, click the same button, which has now become a Stop button.



Flash, 27K

W 600 File ticket_banner.swf

H 304 Src /Ticket_Banner.fla

Class None

□ Loop V space Quality High Align Default

☑ Autoplay H space Scale Default (Show a Bg

Figure 14-3:
When you insert a Flash movie into a page, Dreamweaver tracks the original Flash file. When you click the Edit button here, the file opens in Flash for you to edit.

Note: When inserting a Flash movie, an "Object Tag Accessibility Options" window appears. This window lets you set options that are intended to make accessing the Flash content easier, but they don't really work in most browsers. If you don't want to set these options, just click Cancel, and Dreamweaver still inserts the Flash movie. To permanently turn off this window, open the Preferences window–Edit → Preferences (Dreamweaver → Preferences on Mac)–click the Accessibility category, and then turn off the Media checkbox.

If your page has lots of Flash movies—numerous animated buttons, say—you can play all of them at once by pressing Ctrl+Shift+Alt+P (⌘-Shift-Option-P). Then sit back and watch the show. To stop all running movies, press Ctrl+Shift+Alt+X (⌘-Shift-Option-X). You can also preview Shockwave movies in Dreamweaver. (And no wonder: Adobe makes Shockwave, too.)

EXTENSION ALERT

Who's Got Flash?

One tricky thing about using Flash movies is that you never know whether the people visiting your site even have the correct version of Flash Player. For example, say you create a snappy new Flash-based program for translating text into different languages using Flash CS3. This cool Flash movie will have people across the globe communicating in each other's language–but, unfortunately, only if they have the latest version of Flash Player. Earlier versions don't understand some of Flash CS3's complex features.

Instead of making your visitors scratch their heads and curse your name when they can't get this cool movie to work, you can advise them they need a newer version of the player. Adobe offers a Flash Detection kit that includes an extension for Dreamweaver. This kit (a collection of instructions and sample files) lets you build pages that can tell whether visitors have Flash Player and, if so, which version they have. For information and downloads, visit *www.adobe.com/products/flashplayer/download/detection_kit/*.

Flash Movie Properties

You'll rarely have to change the default properties Dreamweaver assigns to Flash movies. But if you ever want to change the margin of space around a movie, restore it to its original size after resizing it, or swap in a different movie, the Property inspector is the place to do it.

Naming a Flash movie

As with images and navigation buttons, you can use JavaScript to control Flash movies. If you plan to use JavaScript with your Flash movie, you need to give the Flash element a name. To do so, type the name you wish to use in the Name field (the box directly below Flash in the Property inspector). JavaScript uses this name to identify the movie in its code.

The movie file

The File field specifies the path to the Flash movie file on your hard drive. To select a different file, type a new path into the File field, or click the folder icon to access your site folder's contents.

Src property

As with Fireworks files (see page 225), Dreamweaver can keep track of the original Flash file you used when creating a Flash movie. That's fortunate because, once again, Flash movies start off in the program's native format (as .fla files) and then must be exported as .swf (Flash movie) files, which are viewable on the Web.

The Src property field indicates where the original Flash file is stored. Clicking the Property inspector's Edit button launches Flash and opens the original Flash file. You can then make any changes you wish to the movie and, in Flash, click Done. Flash exports the updated .swf file into your site, replacing the previous version of the file.

Movie size

Although dragging to enlarge a GIF or JPEG image can turn it into a pixellated mess, you can usually resize Flash movies without problems, since their vector-based images are based on mathematical formulas that scale nicely. (The exception is when you've included bitmap images—such as GIFs, PNGs, or JPEGs—in your Flash movie. Then, as when resizing an image in a Web page, you'll see distortion and pixellation in the movie.)

To resize a movie, do one of the following:

- Select the movie in the document window; drag one of the three resizing handles that appear at the edges of the movie. To avoid changing the movie's proportions in the process, press Shift as you drag the lower-right corner handle.
- Select the movie in the document window; type new width and height values into the W and H boxes in the Property inspector. You can also use percentage values, in which case Web browsers scale your movie to fit the window.

If you make a complete mess of your page by resizing the movie beyond recognition, just click Reset Size in the Property inspector.

Play options

The Loop and Autoplay checkboxes control how the Flash movie plays back. When you turn on Loop, the Flash movie plays over and over again in an endless loop, an approach advertisers often use in animated banner ads.

The Autoplay checkbox instructs the Flash movie to start playing when the page loads.

Note that neither of these options overrides specific programming instructions in the Flash movie. For instance, if you've added a Stop action to the final frame of a movie—an action that stops the movie at that frame—then the Loop option has no effect.

Margins

Flash movie *margins* are especially useful if you've wrapped text around the movie on the page; they determine how much buffer space falls between the movie and the text.

To add space above and below a selected movie, type a number of pixels into the V space field in the Property inspector (note that you need to type only a number; don't add *px* to specify pixels). Press Enter to see the results of your change. To add space to the left and right, type a pixel measurement in the H space field; 10 or 20 pixels usually provides an attractive amount of space. Unfortunately, you can't specify independent values for each of the four margins—only top/bottom and side/side. (You can, however, accomplish this setting using Cascading Style Sheets; see page 322.)

Quality settings

If your Flash movie's heavy data requirements overwhelm a visitor's computer, it may run slowly and appear choppy, especially if the animation is action-packed and complex. Not every computer on earth has at least a three-gigahertz processor and two gigabytes of RAM. Until then, you may need to adjust the quality settings of your Flash movies to help them look better on all computers, from the sluggish to the speedy.

By default, Dreamweaver sets the quality to High, but you can choose any of the following four settings from the Quality menu in the Property inspector:

- **High** provides the best quality, but the movie may run slowly on older computers.
- **Low** looks terrible. This setting sacrifices quality by eliminating all *antialiasing* (edge smoothing) in the movie, leaving harsh, jaggy lines on the edges of every image. Movies set to Low quality look bad on *all* computers; to accommodate both the fast and the slow, use Auto High or Auto Low.
- **Auto Low** forces the movie to start in Low quality mode, but to switch automatically to High if the visitor's computer is fast enough.
- **Auto High** makes the movie switch to Low quality mode only if the visitor's computer requires it. In this way, you can deliver a high-quality image to most visitors, while still letting those with slow computers view the movie. This mode is the best choice if you want to provide a high-quality image but still make your movie accessible to those with older computers.

Scaling

When you resize a Flash movie (see the opposite page), changing its original proportions, your visitors' Web browsers scale or distort the movie to fit the newly specified dimensions. Scaling becomes an issue particularly when, for example, you give a Flash movie *relative* dimensions (setting it to, say, 90 percent of the browser window's width), so that it grows or shrinks as your visitor's browser window grows or shrinks.

The Scale property lets you determine *how* the Flash Player plug-in scales your movie. For example, in Figure 14-4, the top movie's original size is 200 × 50 pixels. But if you resize the movie so that it's *300* × 50 pixels, one of three things may happen, depending on your choice of Scale setting:

- **Show All.** This setting, the default, maintains the original aspect ratio (proportions) of the movie (second from top in Figure 14-4). In other words, although the overall size of the movie may change, the movie's width-to-height proportion remains the same. This setting keeps the movie from distorting, but it may also cause borders to appear on the top, bottom, or either side of the movie. (To hide the borders, match the movie's background color to the color on the page.)
- **No Border.** This setting resizes the movie according to your specifications *and* maintains its aspect ratio, but may also crop the sides of the movie. Notice how the top and bottom of "Cosmopolitan Farmer" are chopped off (third from top in Figure 14-4).

- **Exact Fit.** This option may stretch your movie's picture either horizontally or vertically. In Figure 14-4 (bottom), "Cosmopolitan Farmer" is stretched wider.

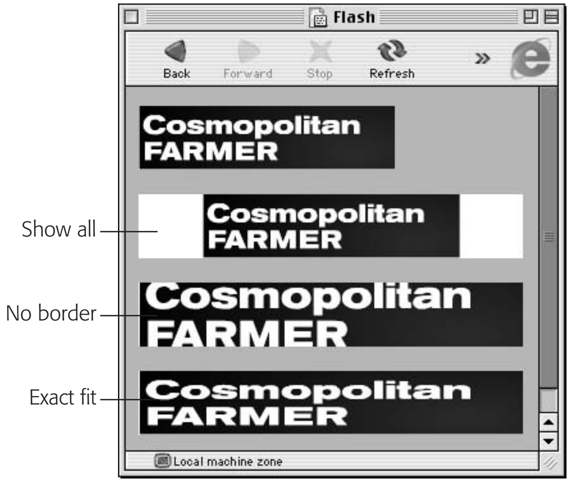


Figure 14-4: *This browser window shows the results of your different choices in the Scale menu on the Property inspector. A Flash movie's Scale property specifies how a movie should be scaled when its width and height properties are set differently than the original movie. If you've resized a movie, press F12 (option-F12) to see how it looks in a Web browser, and then, if necessary, choose a different setting from the Scale pop-up menu in the Property inspector.*

Alignment

You can align Flash movies relative to the paragraphs around them, just as you do with images. In fact, the alignment options in the Property inspector work exactly the same as the text alignment properties discussed on page 90. For example, choosing Right from the Align menu positions the movie at the right of the screen and wraps text around its left side. (If the movie is inside a cell, Align Right moves it all the way to the right of the cell.)

Background color

To set a background color for a Flash movie, use the Bg Color box in the Property inspector. This color overrides any background color set in the movie itself; it fills the space where the movie appears when the page first loads (and the movie hasn't).

Adding Flash Videos

In addition to animations and games, the Flash player can also project videos. In fact, *Flash video,* as this feature is called, is now one of the most common methods for putting video up on the Web. If you've visited a little Web site named *YouTube.com,* you've seen Flash video. High among this format's advantages—compared to competing standards like QuickTime or Windows Media Video—is that you can reasonably count on the fact that visitors won't have to download additional software to view the videos.

Dreamweaver makes it a snap to add these videos to a Web page. Unfortunately, you can't use Dreamweaver to transform existing videos into the appropriate format (called Flash Video; format extension: *.flv*). Nor can you use just any old video format, like MPEG or AVI. Instead, you need to create the Flash Video file using one of several Adobe products. If you bought the Creative Suite 3, you're in business; it includes the Flash Video Encoder for creating these types of files. Otherwise, you need Flash CS3 Pro or Flash 8 Pro.

Note: For a quick intro to creating Flash videos, visit *www.adobe.com/designcenter/dialogbox/encode_video.html*. Adobe also dedicates an entire section of their site to Flash video: *www.adobe.com/devnet/flash/video*.

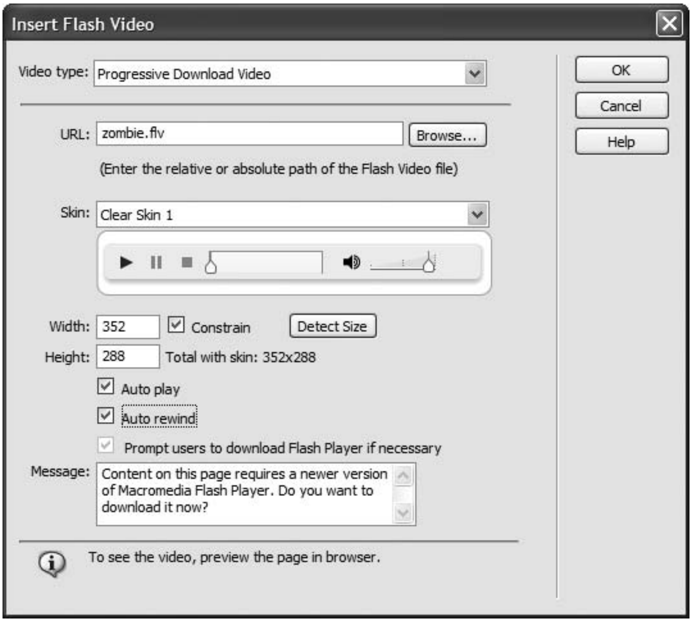
Fortunately, creating the .flv file is the hardest part. In just a few simple steps, Dreamweaver can insert Flash video directly into a Web page, complete with VCR-like controls (or maybe that's now *DVD*-like controls) for start, stop, pause, and volume control.

1. **Click the page where you'd like to insert the Flash video.**

   Like other Flash movies, you'll want an open area of your page to place the video.

2. **Choose Insert → Media → Flash Video.**

   Or, from the Common tab of the Insert bar, select Flash Video from the Media menu (see Figure 14-2). The Insert Flash Video window appears (see Figure 14-5).



Insert Flash Video

Video type: Progressive Download Video

URL: zombie.flv

(Enter the relative or absolute path of the Flash Video file)

Skin: Clear Skin 1

Width: 352 ☑ Constrain

Height: 288 Total with skin: 352x288

☑ Auto play

☑ Auto rewind

☑ Prompt users to download Flash Player if necessary

Message: Content on this page requires a newer version of Macromedia Flash Player. Do you want to download it now?

To see the video, preview the page in browser.

Figure 14-5:
The Insert Flash Video command is probably the easiest way to add video to your Web site. All your visitors need is the Flash Player, which in most cases comes preinstalled in their browser.

3. **Select Progressive Download from the "Video type" menu.**

   Dreamweaver provides two options, but the second one—Streaming Video—requires some expensive software (the Flash Server) or a Flash video streaming service which can run you anywhere from $10 a month to a couple hundred dollars a month. Streaming Video is best used for live events or to handle very large numbers of viewers. That's why Web sites for TV networks like *ABC.com* use streaming servers—it's a more efficient method when thousands of people are watching the same video at the same time.

   Choosing Progressive Download means that the video doesn't have to download completely before it begins playing. That way viewers don't have to wait, say, 30 minutes while your 40 MB movie downloads. Instead, the video starts as soon as the first section of the file arrives on their machine; playback proceeds while the rest of the movie downloads.

4. **Click the Browse button and select the Flash Video (.flv) file you wish to add to the page.**

   Due to some differences in how operating systems work, you're better off putting your Flash Video file in the same folder as the Web page you're adding it to. If you want to put your Flash video files elsewhere (for instance in one dedicated Flash Video folder, or even on a different Web server) use absolute links (see page 154) to make sure your video appears.

5. **Select a skin.**

   The *skin* is the visible set of controls that you add to your video: buttons for starting, pausing, and stopping the video; a progress bar; and various volume-adjustment controls (see Figure 14-6).

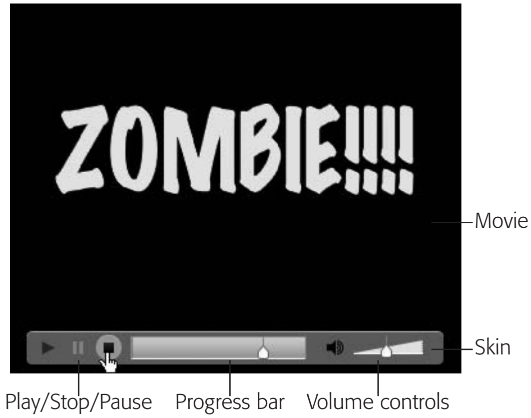


Figure 14-6:
The "Clear" skin controls lie directly over the movie ("Clear Skin 3" is shown here). They disappear if the mouse isn't anywhere inside the movie, but they reappear the moment you mouse back over the video. Try each skin to see which fits your taste.

Dreamweaver adds these controls to your video, and they're offered in nine different styles—actually, three different types of controllers, each with three different graphical styles. Each skin includes controls for starting the video and controlling the sounds. You also get some additional buttons for stopping and pausing the video, and a progress bar that lets you see how far the video has progressed.

6. **Click the Detect Size button.**

   Flash Videos contain *meta-data*—additional information embedded inside the video file that describes features like dimensions, size, and so on. The Flash video encoder adds this meta-data when you create a Flash video file. Clicking the Detect Size button extracts the movie's width and height; adds the width and height of the various elements of the selected skin; and then automatically fills in the width and height boxes in the Insert Flash Video window (see Figure 14-5).

   If for any reason your file doesn't include meta-data, you'll have to enter the width and height values yourself—these settings specify how much space the Flash video occupies on the page. Note that entering these dimensions won't actually distort your video—making it really, really thin, or really, really wide, for example. No matter what size you enter, the original aspect ratio (proportions) of the movie is preserved, and extra, empty space is added to fill any area not filled by the movie. For example, say your movie is 352 pixels wide and 288 pixels tall. If you entered width and height dimensions of 100 × 288, respectively, the movie won't stretch like you're watching it in fun-house mirror. Instead, the movie appears 100 pixels wide and 82 pixels tall, with 53 pixels of blank space above and below it.

7. **If you want, turn on the "Auto play" checkbox.**

   Doing so makes the movie play as soon as enough video data has downloaded from the Web. Otherwise, your site's visitors need to press the play button to begin the video.

8. **If you want, turn on the "Auto rewind" checkbox.**

   If you want the movie to automatically rewind to the beginning after it's done playing, turn on this checkbox. Your movie will then return to the first frame of the video after it's played through. But you may not always want to abide by the video-store credo "Be Kind, Rewind." If your movie ends with a dramatic message—"Stay tuned for the next exciting installment of Blind Mole Rats from Mars!"—you might prefer to leave the movie on its last frame when it's complete.

9. **Turn on the "Prompt users to download Flash player if necessary" checkbox.**

   Flash Video is a relatively new and advanced technology. It requires your visitors to have at least version 7 of the Flash Player. Turning on this checkbox presents the few people who have an older version of the Flash plug-in with a helpful message—and a link to the Adobe site where they can download and install the latest Flash Player. If you want to customize the message those viewers see, type a new message in the Message box.

10. **Click OK to add the Flash Video to your page.**

    This step installs the necessary code not only for the video, but for the "Flash detection" message from step 9 as well. You can check out the newly inserted video by pressing F12 (Option-F12) to preview the page in a Web browser.

Note: When you upload your Web page and Flash Video to your site (see Chapter 17), you also need to upload three additional files that Dreamweaver secretly added to your site: the JavaScript file discussed in the Note on page 542, the *FLVPlayer_progressive.swf* file, and the .swf (Flash movie) file for the skin you selected. That last file is named after the skin you chose–for example, Clear_Skin_1.swf. Save yourself some work: When uploading your Flash-filled Web page (uploading details are on page 620) choose to include "dependent files"; that way Dreamweaver grabs these three files for you.

The Land of Obsolete Web Technology

Dreamweaver CS3 includes many other options on the Media menu of the Insert Bar (see Figure 14-2). Some of these options have been around since Dreamweaver was in training pants. Most of them don't see much use on today's Web; they either don't work for many users, or creating the content to work with these technologies is so hard that few Web designers bother. In addition, some of these technologies look like they're being phased out by their creators.

- **FlashPaper.** This simple and useful technology, introduced back in the days when Flash was owned by Macromedia, provides a simple way to export any document (like a Word file or an Excel spreadsheet) into a Web-ready format. Visitors can zoom in on a FlashPaper document, scroll through it, and print it out. It's kind of like a "light" version of a PDF file; in fact, since FlashPaper competes with one of Adobe's premier products—Adobe Acrobat—it may not be around for much longer. The program that creates FlashPaper documents used to be included in the Studio suite of programs along with Dreamweaver and Flash, but now it's only available as a stand-alone product.

  If you happen to have the FlashPaper program, you can still use Dreamweaver to insert a FlashPaper document (which are really just Flash movies, after all): choose Insert → Media → FlashPaper, or choose FlashPaper from the Media menu on the Common tab of the Insert bar. When the Insert FlashPaper window opens, click the browse button and select the FlashPaper document (an .swf file), type a height and width, and then click OK. The height and width you specify determine the size of the "window" that contains the FlashPaper document. Viewers of your page can use the FlashPaper controls to zoom, scroll, and print the document.

  After inserting the FlashPaper document into the page, it acts like a regular Flash movie.

- **Shockwave** is another Web technology that's been around a long time. It's the Internet-ready form for movies created with Macromedia Director. Director has a longer history as a program for creating CD-ROMs. But when the Web exploded onto the scene, Director quickly morphed into a Web authoring tool. As a result of its CD background, Shockwave offers complex programming possibilities, which makes it ideal for detailed, interactive presentations.

However, there are some indications that this technology either won't be around for much longer or will just be used by a very small group of designers. First, Flash provides much of the functionality of Director (at least for Web sites) and is, consequently, the much more common choice for Web designers. Second, Director hasn't been updated in quite some time—it's still Director MX 2004. In addition, Adobe hasn't changed its name: It's still called *Macromedia* Director. Finally, the Shockwave plug-in (which weighs in at a hefty 2.5 MB) hasn't been updated to run natively on Intel Macs. (You might not care about this if you're a Windows user, but it does seem to signal that Adobe isn't too interested in this technology.)

But if you just can't do without Shockwave, you can insert a Shockwave movie into a Web page just as you would any multimedia format. Click where you want to insert the movie, and then choose Insert → Media → Shockwave (or choose Shockwave from the Media menu on the Common tab of the Insert bar). Either way, a Select File dialog box appears. Find and double-click the Shockwave movie file (look for the .dcr extension).

- **Other Multimedia Controls.** Dreamweaver also includes tools for inserting other multimedia and plug-in files. In fact, these tools have been around since much earlier incarnations of Dreamweaver, when there really *were* other media types like Java applets, ActiveX controls, and other plug-in technology. However, Java applets never really took off (their performance never quite lived up to the hype), and ActiveX controls are limited to Internet Explorer for Windows.

FREQUENTLY ASKED QUESTION

Adding Sound to Web Pages

Hey man, I'm a rock-star in training, and I want to surprise the world with my cool tunes. How do I put my music on my Web site?

There are lots of different technologies that let you add music and sound to your Web site. Most require plug-ins that severely limit your audience (few people are going to rush off to another Web site and download and install more software just to enjoy your site–unless you're U2 or William Hung).

Flash provides the best and fastest way to add sound to a site. Flash can import different audio formats such as MP3, WAV (Windows), AIFF (Mac), and if you have QuickTime installed, even more formats. You'll have to dip into the Flash Help files to learn how to import audio, but it's not too hard. If you just want ambient background music on a page, you can even create a very small (like 1 pixel x 1 pixel) Flash movie that simply plays back music. Follow the steps on page 541 for inserting the Flash movie into a Web page.

There are also a few Dreamweaver extensions that let you add sound and music to your site: Speaker from Hot-Dreamweaver.com (*www.hotdreamweaver.com/speaker*) is a $19.99 extension that lets you insert an MP3 file onto your page that's played back by clicking a small icon. Trio Solutions (*http://components.developers4web.com/*) sells over a dozen different MP3 player extensions; each lets you insert CD-player-like controls (play, pause, stop, fast-forward) to control playback of audio and some let you create a playlist of multiple songs.

4

Part Four: Building a Web Site

CHAPTER

15

Introducing Site Management

As the dull-sounding name *site management* implies, organizing and tracking your Web site's files is one of the least glamorous, most time-consuming, and error-prone aspects of being a Web designer. On the Web, your site may look beautiful, run smoothly, and appear to be a gloriously unified whole, but behind the scenes, it's nothing more than a collection of varied files—HTML, images, Cascading Style Sheets, JavaScript, Flash movies, and so on—that must all work together. The more files you have to keep track of, the more apt you are to misplace one. A single broken link or missing graphic can interfere with the operation of your entire site, causing personal—even professional—embarrassment.

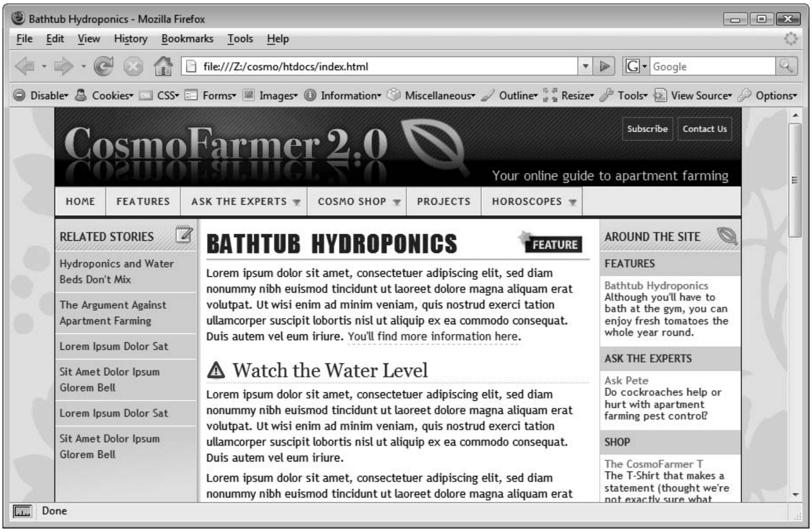
Fortunately, computers excel at tedious organizational tasks. Dreamweaver's site management features take care of the complexities of dealing with a Web site's many files, freeing you to concentrate on the creative aspects of design. In fact, even if you're a hand-coding HTML junkie and you turn your nose up at all visual Web page editors, you may find Dreamweaver worth its weight in gold just for the features described in this chapter and the next two.

Where the first three parts of this book describe how to create, lay out, and embellish a Web site, this part offers a bird's-eye view of the Web production process as you see your site through to completion and, ultimately, upload it to the Internet.

To get the most out of Dreamweaver's site management features, you need to be familiar with some basic principles for organizing Web files, as discussed in the next section.

Structuring a Web Site

When you build a Web site, you probably spend hours providing your visitors with carefully planned links, helpful labels, and clear, informative navigation tools. You want your *site architecture*—the organizational structure of your site's various sections—to make it easy for visitors to understand where they are, where they can go, and how to return to where they came from (see Figure 15-1). Behind the scenes, it's equally important to organize your site's files with just as much clarity and care, so that you can find *your* way around when updating or modifying the site later. And, as on your home computer, a Web site's main organizational tool is the humble *folder*.



BATHTUB HYDROPONICS

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Watch the Water Level

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Bathtub Hydroponics
Although you'll have to bath at the gym, you can enjoy fresh tomatoes the whole year round.

Ask Pete
Do cockroaches help or hurt with apartment farming pest control?

The CosmoFarmer T
The T-Shirt that makes a statement (thought we're not exactly sure what

Figure 15-1:
A good site has an easy-to-understand structure. Content is divided into logical sections, and a prominent navigation bar–the row of buttons below the CosmoFarmer logo in this image–gives visitors quick access to the site's information. When building a site, this "site architecture" provides a useful model for naming and creating the folders that hold the site's files.

You organize files on your computer every day, creating, say, a folder called Personal, within which are folders called Financial Planning and Vacation Pictures. Inside the Vacation Pictures folder, you have separate folders for your memories of Maui, Yosemite, and the Mall of America.

The same principle applies to the folders that make up a Web site: All Web sites have one primary folder—the *root folder*—that holds all of the site's Web pages, graphics, and other files used in the site. The root folder usually contains additional folders for further subdividing and organizing the site's files.

A good structure (see Figure 15-2) speeds up the production and maintenance of your site by providing quick access to whatever graphic, style sheet, or Flash movie you're looking for. But don't fall into the trap of becoming so obsessed that you put every graphic or Web page you create in its own separate folder; creating a structure for the files in a site should make your job easier, not harder.

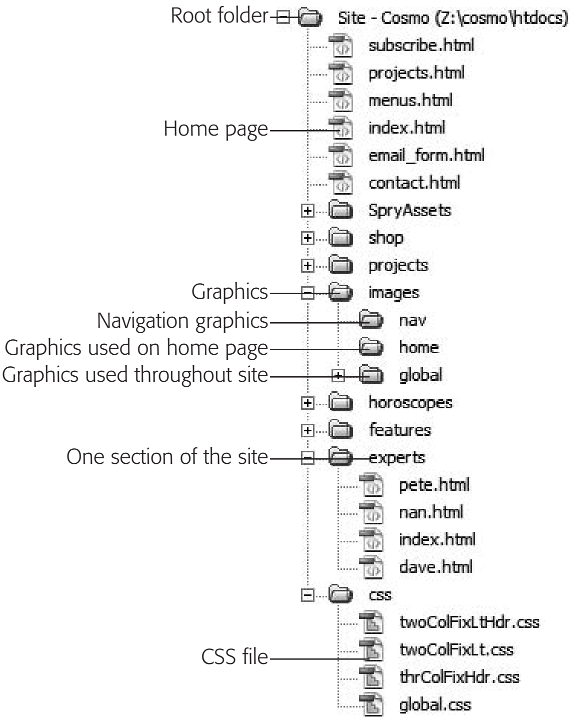


Figure 15-2:
Here's a sample structure for a Web site. The root (main) folder, htdocs, holds all of the pages in the site. The home page, index.html, is in the root folder, while other pages are in subfolders–one folder for each section. The home page uses lots of graphics that don't appear anywhere else on the site; a folder named home inside the img (short for images) folder helps keep those in order. In addition, since many pages share the same logos and other graphics, there's a folder called global. Finally, to keep all the graphics used in the site's navigation bar orderly, there's a nav folder. Also notice that the experts folder (like the folder for each section of the site) has its own default page, here called index.html, and can contain additional subfolders (see the box on page 560).

Tip: If you already have a Web site that suffers from lack of organization, it's not too late. Dreamweaver can help you reorganize your files quickly and accurately. Take the following rules to heart and then turn to "Organizing Site Files" on page 567 to learn how Dreamweaver can whip your current site into shape.

Here, then, are some guidelines for effective site organization:

- **Plan for future growth.** Like ever-spreading grapevines, Web sites grow. Today you may have only enough words and pictures for 10 Web pages, but tomorrow you'll put the finishing touches on your new 1,000-page online catalog. It may seem like overkill to create a lot of folders for a small site, but better to start with a solid structure today than find yourself knee-deep in files tomorrow.

  For instance, it's useful to create additional folders for *graphics* files that appear within each section of the site. If a section of your site is dedicated to promoting your company's products, create a folder called *products* for storing product Web pages. Create an additional folder called *images* to store the pictures of those products. Then, when you add more products or images, you know right where to put them.

Note: While you can start with no organization plan and later use Dreamweaver to bring it all into shape (see page 567), you may run into unforeseen problems if your site is already on the Internet. If your site's been up and running for a while, search engines may have indexed your site, and other Web sites may have linked to your pages. If you suddenly rearrange the pages of your site, those cherished links from the outside world may no longer work, and people who try to access your site from a search engine may be foiled.

- **Follow the site's architecture.** Take advantage of the work you've already done in organizing the content on your site. For instance, the *CosmoFarmer* site content is divided into five main sections: Features, Ask the Experts, Cosmo Shop, Projects, and Horoscopes, as shown in Figure 15-1. Following this architecture, it makes sense to create folders—*features, experts, horoscopes*, and so on—in the site's root folder for each section's respective Web pages. If one section is particularly large, add subfolders.

- **Organize files by type.** After you create folders for each section of your site, you'll probably need to add folders for storing other types of files like graphics, Cascading Style Sheets, external JavaScript files, and PDF files. Most sites, for instance, make extensive use of graphics, with several graphics on each page. If that's the case for you, then you need to file those images neatly and efficiently.

  One way to organize your graphics is to create a folder for images that appear on your home page and another for images that appear elsewhere in the site. Often, the home page is visually distinct from other pages on the site and contains graphics that are unique to it. You can create a folder—such as *images_home*—in the root folder for images that appear only on the home page. Create another folder—*images_global*, for example—to store graphics that all or most of the pages use, such as the company logo, navigation buttons, and other frequently used icons. When you add these images to other pages of your site, you'll know to look for them in this folder. Alternatively, you could create an *images* folder in the root of your site and add subfolders such as *home, global*, and *nav* (see Figure 15-2). The choice of an organizational system is yours; just make sure you have one.

- **Use understandable names.** While file names like *1a.gif, zDS.html*, and *f.css* are compact, they aren't very explanatory. Make sure file names mean something. Clear, descriptive names like *site_logo.gif* or *directions.html* make it a lot easier for you to locate files and update pages.

  This principle is especially important if you work as part of a team. If you're constantly explaining to your coworkers that *345g.gif* is the banner for the home page, changing the file name to *home_banner.gif* could save you some aggravation. There's a tradeoff here, however, as long file names can waste precious bytes. For instance, a name like *this_is_the_image_that_goes_in_the_upper_right_corner_of_the_home_page.gif* is probably not a good idea.

Note: Dreamweaver employs the industry-standard .html extension for Web pages—as in *index.html*. Another common extension is .htm (a holdover from the days when Windows could only use three-letter extensions). It doesn't really matter which you use, and if you're used to .htm, you can easily change the extension Dreamweaver uses. Just choose Edit → Preferences (Dreamweaver → Preferences on Mac) to open the Preferences window, select the New Document category, and then type *.htm* in the default extension box.

It's also helpful to add a prefix to related files. For example, use *nav_* at the beginning of a graphic name to indicate that it's a navigation button. In this way, you can quickly identify *nav_projects.png*, *nav_quiz.png*, and *nav_horoscopes.png* as graphics used in a page's navigation bar, or *bg_body.png* and *bg_column.png* for graphics used as backgrounds. As a bonus, when you view the files on your computer or in Dreamweaver's Files panel (see Figure 15-6), they'll appear neatly sorted by name; in other words, all the *nav_* files cluster together in the file list. Likewise, if you have rollover versions of your navigation graphics (see page 229), give them names like *nav_projects_over.gif* or *nav_ horoscopes_high.gif* to indicate that they're the highlighted (or over) state of the navigation button. (If you use Fireworks, its button-creation tools automatically use names like *nav_projects_f1.gif* and *nav_projects_f2.gif* to indicate two different versions of the same button.)

- **Be consistent.** Once you've come up with a system that works for you, follow it. Always. If you name one folder *images*, for instance, don't name another *graphics* and a third *pretty_pictures*. And certainly don't put Web pages in a folder named *images* or Flash movies in a folder named *style_sheets*.

  In fact, if you work on more than one Web site, you may want to use a single naming convention and folder structure for all of your sites, so that switching among them goes more smoothly. If you name all your graphics folders *images*, then no matter what site you're working on, you already know where to look for GIFs and JPEGs.

UP TO SPEED

Naming Your Files and Folders

The rules for naming files and folders in Windows and Macintosh are fairly flexible. You can use letters, numbers, spaces, and even symbols like $, #, and ! when naming folders and files on these operating systems.

Web servers, on the other hand, are far less accommodating. Because many symbols—such as &, @, and ?—have special significance on the Web, using them in file names can confuse Web servers and cause errors.

The precise list of no-no's varies from Web server to Web server, but you'll be safe if you stick to letters, numbers, the hyphen (-), and the underscore (_) character when naming files and folders. Stay away from spaces. File names like *company logo.gif* or *This company's president.html* probably won't work on most Web servers. Replace spaces with underscores or inner caps—*company_logo.gif* or *companyLogo.gif*—and remove all punctuation marks.

Sure, some operating systems and Web servers permit strange naming conventions, but why take the chance? Someday you may need to move your site to another, less forgiving Web server. Play it safe: keep your file names simple.

Note: Put only files that go on your Web site in the root folder and its subfolders. Keep your source files–the original Photoshop, Fireworks, Flash, or Word documents where you created your content–stored elsewhere on your computer. This way, you're much less likely to accidentally transfer a 14.5 MB Photoshop file to your Web server (a move that would *not* gain you friends in the IT department). But if you insist on keeping all those files together with your Web site files, check out Dreamweaver's *cloaking* feature (described on page 626). Using it, you can prevent certain file types from being transferred to your Web server when using Dreamweaver's FTP feature.

FREQUENTLY ASKED QUESTION

All Those Index Pages

Why are so many Web pages named index.html (*or* index.htm)*?*

If you type a URL like *www.missingmanuals.com* into a Web browser, the Missing Manuals home page opens on your screen. But how did the Web server know which page from the site to send to your browser? After all, you didn't ask for a particular Web page, like *www.missingmanuals.com/index.html*.

When a Web server gets a request that doesn't specify a particular Web page, it looks for a default Web page–often named *index.html* or *index.htm*. It does the same thing even when the URL you've typed specifies (with a slash) a folder inside the site root, like this: *www.missingmanuals.com/cds/*. In this case, the Web server looks for a file called *index.html* inside the *cds* folder and–if it finds the file–sends it to your Web browser.

If the Web server doesn't find an *index.html* file, two things can happen, both undesirable: the Web browser may display either an ugly error message or a listing of all the files inside the folder. Neither result is helpful to your visitors.

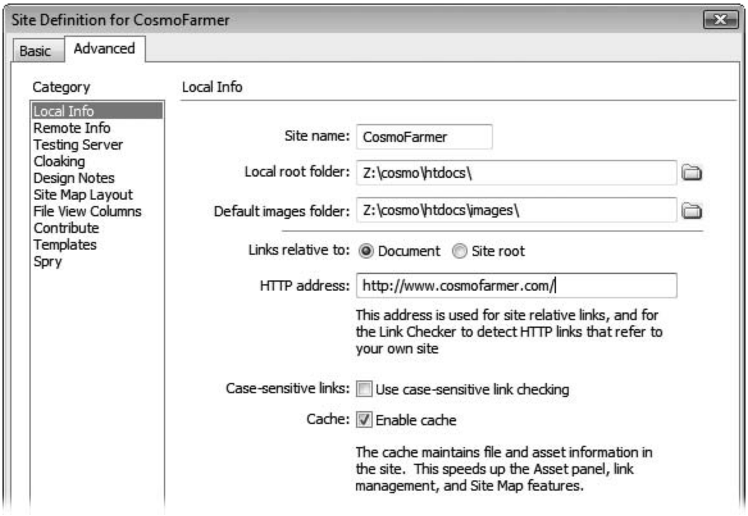
While your site still functions without this step, it's good form to give the main Web page inside each folder in your site the proper default page name. Web servers use different names for these default pages–*index.html* or *default.html*, for example–so check with your Web server's administrator or help desk. In fact, you can name any page as a default page, as long as you set up your Web server to look for the correct default name. So if you're creating a dynamic site like those discussed in Part 6, you can set up a server to look for a dynamic page like *index.asp* or *index.php* as the default page. On many Web servers, multiple default page names are specified, so if it doesn't find a file named *index.html*, it may then look for a file called *index.php*.

Defining a Site

Organizing and maintaining a Web site—creating new folders and Web pages; moving, renaming, and deleting files and folders; and transferring pages to a Web server—can require going back and forth between a couple of different programs. With Dreamweaver's site management features, however, you can do it all from within one program. But to take advantage of these features, you must first *define* the site; in other words, give Dreamweaver some basic information about it.

Defining the site involves showing Dreamweaver which folder contains your Web site files (the *root folder*) and setting up a few other options. You've already learned how to do this site-building using Dreamweaver's Site Definition Wizard (see page 29) and you got a quick introduction to the advanced Site Definition window (see page 34). Here, you'll get a more detailed explanation of the options available in the advanced Site Definition window.

Start by choosing Site → New Site. This opens the Site Definition window (see Figure 15-3). Click the Advanced tab to access Dreamweaver's advanced settings. There are ten categories of information for your site, but to get up and running, you need to provide information only for the first category: Local Info. (The remaining categories are discussed in Chapters 16 and 17.)



Local Info

Site name: CosmoFarmer

Local root folder: Z:\cosmo\htdocs\

Default images folder: Z:\cosmo\htdocs\images\

Links relative to: ● Document ○ Site root

HTTP address: http://www.cosmofarmer.com/

This address is used for site relative links, and for the Link Checker to detect HTTP links that refer to your own site

Case-sensitive links: □ Use case-sensitive link checking

Cache: ☑ Enable cache

The cache maintains file and asset information in the site. This speeds up the Asset panel, link management, and Site Map features.

Figure 15-3: *The Basic tab of the Site Definition window provides a simple method for new users to set up a Web site. But Dreamweaver pros can take advantage of the greater options available under the Advanced tab shown here. The ten categories listed on the left side of the window are discussed in this and the next two chapters.*

Here are the options on the Local Info tab:

Site name

Into the Site Name field, type a name that briefly identifies the site for you—and Dreamweaver. This is the name that appears, among other places, on the Site pop-up menu on the Files panel (Figures 15-6 and 15-8), so that you can tell what site you're working on. It's just for identifying your site while working in Dreamweaver and doesn't have any effect on the actual pages of your site.

Local root folder

Identify your site's local root folder—the folder that contains all files belonging to your site—by clicking the folder icon to the right of the "Local root folder" box. The procedure is described on page 31. (Also see the box on page 33 for more information on local root folders.)

Tip: If you're confused about which folder should be the local root folder, just ask yourself this question: "Which folder on my computer contains (or will contain) my site's home page?" That's the local root folder.

All of Dreamweaver's tools for managing your sites' files rely on the local root folder. Once you've defined a site, you see all of its files listed in the Files panel.

Default images folder

For a graphic image to work properly on the Web, you can't just add it to a Web page (Chapter 6); you also have to store a copy of the graphics file in the local root folder or one of its subfolders. In other words, if you link to a graphic that's sitting on your computer's hard drive *outside* of the root folder, the Web browser will never find it.

Dreamweaver offers a feature that puts images in the right place even if you forget. When you add a stray graphics file to a page in your site, the program automatically copies the file into your default images folder. In fact, even if you drag a graphic from your desktop onto a Web page in progress, Dreamweaver copies the file to the default images folder without missing a beat.

The process of choosing the default images folder is the same as selecting a local root folder. Click the folder icon and select the proper folder, which can be an existing folder in your local root or a new one you create on the spot. (For example, this could be a folder named *images* or *images_global* in your local root folder.)

Links relative to

As discussed on page 153, there are a variety of ways to link to a Web page. When linking to another page in your site, Dreamweaver lets you create document-relative or root-relative links. Document-relative is often the easiest way to go (see page 155), but Dreamweaver offers you the flexibility to choose. Click either the Document or "Site root" radio button. Dreamweaver then uses that method when adding links between pages of your site.

Tip: You can override this setting and use whichever type of link you wish–site root-relative or document-relative–when actually creating the link, as described on page 161.

FREQUENTLY ASKED QUESTION

Bringing Your Own Web Site

I already have a Web site. Will Dreamweaver work with it?

Yes. In fact, Dreamweaver's site management features are an invaluable aid in organizing the files of an existing site. As you can read in "Organizing Site Files" on page 567, you can use Dreamweaver to rearrange, rename, and reorganize files–tasks that are extremely difficult and time-consuming to do by hand.

Furthermore, Dreamweaver lets you clean up and reorganize a site without breaking links. So Dreamweaver is just as useful for working with a completed site as it is for creating one from scratch.

To work on an existing site, first save a copy of all site files on your computer, all in one folder. When defining the site (see page 560), choose this folder for the local root folder.

HTTP address

This option serves two functions: first, if you use absolute URLs to link to pages within your site (see page 154), you must fill out the "HTTP address" field for Dreamweaver's link-management features to work properly. Type your site's full URL beginning with *http://*. Dreamweaver uses this address to check for broken links within your site and to correctly rewrite links if you move pages around. For example, maybe your Webmaster has told you to link a form to *http://www.yourdomain.com/cgi/formscript.php* instead of using a document-relative link. In this case, you'd type *http://www.yourdomain.com/* in the "HTTP address" box. Now, if you move or rename the *formscript.php* page from within Dreamweaver, the program is smart enough to update the link on the page with the form.

This setting is also incredibly valuable for one particular situation: if you're using site root–relative links, but the site you're working on isn't actually located in the site root on the Web server. For example, maybe you're running the marketing department at International ToolCo. You manage just the Web pages for the marketing department, and they're located in a folder called *marketing* on the Web server. In essence you manage a sub-site, which acts as an independent site within the larger International ToolCo site. Maybe your Webmaster demands that you use site root–relative links—man is that guy bossy.

This is potentially a tricky situation. Here's why: site root–relative links always begin with a /, indicating the root folder on the Web server (for a refresher on this concept, see page 155). Normally, if you add a root-relative link, say to the main page in a folder named *personnel* located inside the local root folder, Dreamweaver would write the link like this: */personnel/index.html*. But in this case, that wouldn't work. The *personnel* folder is actually located (on the Web server) inside the *marketing* folder. So the link should be */marketing/personnel/index.html*. In other words, Dreamweaver normally thinks that the local root folder maps exactly to the Web server's root folder.

You can solve this dilemma by adding a URL that points to the "sub-site" in the Site Definition window's "HTTP address" box. In this example, you'd type *http://www.intltoolco.com/marketing/* in the box. Then, whenever you add a site root–relative link, Dreamweaver begins with */marketing/* and then adds the rest of the path to the URL. In summary, *if* you use site root–relative links *and* you're working solely on pages located inside a subdirectory on the actual Web server, *then* fill out the absolute URL to that subdirectory. Finally, add this whole rigmarole to the list of reasons why document-relative links are easier to manage in Dreamweaver.

Case-sensitive links

Some Web servers (namely, those of the Unix and Linux variety) are sensitive to the case used in a file name. For example, *INDEX.html* is a different file than *index.html*. In this case, you can turn on the "Use case-sensitive link checking" box to make sure Dreamweaver doesn't mistake one file for another when checking links. For example, say you link to a file named *INDEX.html*, but change the name of another file named *index.html* to *contact.html*. Without this option turned on, Dreamweaver may mistakenly update any links to *INDEX.html*.

In real-world use, you probably won't need this option. First, it's not possible to have two files with the same name but using different combinations of upper- and lowercase letters in the same folder on a Mac or Windows machine. So if your local root folder is located on your Mac or Windows computer, you'll never be able to get into this situation. In addition, it's confusing (and just plain weird) to use the same name but different cases to name your files. Revisit the rules of file naming (see page 38) if you find yourself tempted to do this.

Cache

The cache is a small database of information about the files in your site. It helps Dreamweaver's site management features work more efficiently; leave this checkbox turned on.

Once you've provided the local information for your site, click OK to close the Site Definition window and begin working.

Editing or Removing Defined Sites

Sometimes you need to edit the information associated with a site. Perhaps you want to rename the site, or you've reorganized your hard drive and moved the local root folder to a different location, and you need to let Dreamweaver know what you've done.

UP TO SPEED

Local vs. Remote Root Folders

A root folder is the main, hold-everything folder for your site. It contains every piece of the site: all Web page documents, graphic images, CSS style sheets, flash movies, and so on.

The word "root" implies that this is the master, outer, main folder, in which there may be plenty of subfolders. Remember that, in most cases, your Web site exists in two locations: on your computer as you work on it, and on the Internet where people can enjoy the fruits of your labor. In fact, most Web sites in the universe live in two places at once–one copy on the Internet and the original copy on some Web designer's hard drive.

The copy on your own computer is called the *local site* or the *development site*. Think of the local site as a sort of staging ground, where you build your site, test it, and modify it. Because the local site isn't on a Web server, and the public can't see it, you can freely edit and add to a local site without affecting the pages your visitors are viewing, meanwhile, on the remote site. The root folder for the version of the site on your computer, therefore, is called the *local root folder*.

When you've added or updated a file, you move it from the local site to the *remote site*. The remote, or live, site mirrors the local site. Because you create it by uploading your local site, it has the same organizational folder structure as the local site and contains the same polished, fully functional Web pages. However, you leave the half-finished, typo-ridden drafts on your local site until you've perfected them. Chapter 17 explains how to use Dreamweaver's FTP features to define and work with a remote site.

To edit a site, open the Manage Sites dialog box (choose Site → Manage Sites or, in the Files panel, choose Manage Sites from the Site pop-up menu) and double-click the name of the site you want to edit. The Site Definition window opens

(Figure 15-3). Now you can type a new name in the Site Name box, choose a new local root folder, or make any other changes. Click OK to close the dialog box when you're done.

Tip: If you want to edit the current site's information, there's a shortcut. In the Files panel (Figure 15-6), just double-click the name of the site in the Sites menu. (Mac owners need to click once to select the name in the menu, and then click again to open the Site Definition window.)

Once you've finished a site and are no longer working on it, you may wish to remove it from Dreamweaver's list of sites. To delete a site from the list, open the Manage Sites dialog box as described above, click to select the site you wish to delete, and then click Remove.

A warning appears telling you that this action can't be undone. Don't worry; deleting the site here doesn't actually *delete* the site's images, Web pages, and other files from your computer. It merely removes the site from Dreamweaver's list of defined sites. (You can always go back and define the site again, if you need to, by following the steps on page 564.) Click Done to close the Manage Sites window.

Note: If you do, in fact, want to delete the actual Web pages, graphics, and other site components, you can either switch to the desktop (Windows Explorer or the Finder, for example) and delete them manually, or delete them from within Dreamweaver's Files panel, described on page 567.

Exporting and Importing Sites

When you define a site, Dreamweaver stores that site's information in its own private files. If you want to work on your site using a different computer, therefore, you must define the site again for *that* copy of Dreamweaver. In a design firm where several people are working together on many different sites, that's a lot of extra setup. In fact, even if there's just one of you working on two computers, duplicating your efforts is a pain.

So that you can put your time to better use, Dreamweaver lets you import and export site definitions. For example, you can back up your *site definition* files—in case you have to reinstall Dreamweaver—or export a site definition for others to use.

To export a site definition:

1. **Choose Site → Manage Sites.**

   The Manage Sites window appears, listing all the sites you've defined (Figure 15-4).

2. **Select a site from the list, and then click Export.**

   If the site definition includes remote site information (see page 609), you'll see a dialog box called "Exporting site" (Figure 15-5). If you're simply making a backup of your site definition because you need to reinstall Dreamweaver, select the "Back up my settings" radio button. (The other option, "Share settings," is

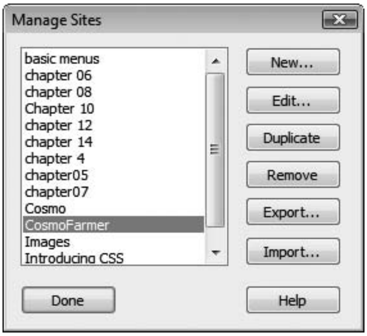
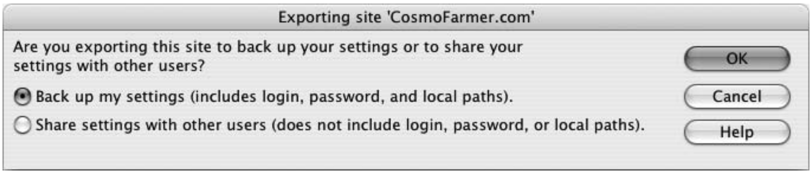


Figure 15-4:
The Manage Sites window is the control center for managing your sites. Add new sites, edit old sites, duplicate a site definition, and even export site definitions for use on another computer, or as a precautionary backup.

useful when, for example, your local root folder is on the C: drive, but the root folder is on the E: drive on someone else's computer, so your setup information doesn't apply to them. It's also handy when you don't want to give someone else your user name and password to the Web server.)



Are you exporting this site to back up your settings or to share your settings with other users?

● Back up my settings (includes login, password, and local paths).

○ Share settings with other users (does not include login, password, or local paths).

Figure 15-5:
This dialog box lets you back up your settings or share them (minus your login information) with other people.

3. **Click OK.**

   The Export Site panel appears.

Tip: You can export multiple sites in one step. Just select all of the sites you wish to export (Ctrl-click [⌘-click] the names of the sites you wish to export), and then click the Export button.

4. **In the Export Site panel, specify where you want to save the file and give it a name.**

   If you're making a backup, save the file outside the local root folder (for example, with the Photoshop, Fireworks, and Word source files). Because the export file can potentially contain the username and password you use to move files to your site, you don't want to keep the file anywhere in your local root folder—it might mistakenly be uploaded to the Web server where someone might find the file and discover your username and password.

   Dreamweaver ends site definition files with the file extension *.ste*.

Once you have a *site definition* file, you can import it into any version of Dreamweaver as follows:

1. **Choose Site → Manage Sites.**

   The Manage Sites panel appears.

2. **Click Import.**

   The Import Site panel appears. Navigate to a *site definition* file—look for a file ending in .ste. Select it, and then click OK.

If you're importing the site definition to a computer other than the one you used to export the site, you may need to perform a few more steps. If Dreamweaver can't locate the local root folder in the *site definition* file, it asks you to select a local root folder on the new computer, as well as a new default images folder.

Organizing Site Files

Once you've defined your local site, Dreamweaver helps you organize your files, create folders, and add new Web pages to your site, using the Files panel as your command center. To open the Files panel, choose Window → Files, or just press F8.

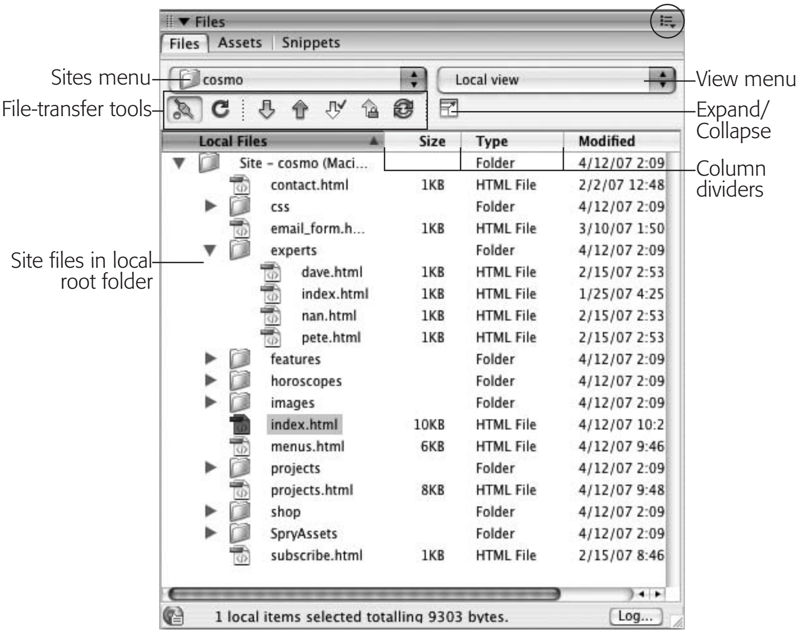
In its most basic incarnation, the Files panel displays the files in the current site's local root folder (see Figure 15-6). This list looks and acts just like Windows Explorer or the Macintosh Finder; you see names, file sizes, and folders. You can view the files inside a folder by clicking the + (triangle on Mac) symbol next to the folder (or simply by double-clicking the folder). Double-click a Web page to open it in Dreamweaver.

Dreamweaver CS3 has added more file information to this panel: now you can see the size of a file, the type of file, and the last time the file was modified. In previous versions all of this information was only available when you expanded the Files panel as described in the Figure on page 570. (If you find this new view a little too crammed with information, you can hide any columns you don't like—see page 568.)

Note: You can open certain types of files in an outside program of your choice by defining an external editor for that file type. For example, you can tell Dreamweaver to open GIF files in Fireworks, Photoshop, or another image editor. (See page 222 for more on this feature.)

You can view your site's files in four different ways using the View pop-up menu (shown in Figure 15-6):

- **Local view** shows the files in your local root folder. Folders in this view are green.
- **Map view** shows a map of your site (see the box on page 576).
- **Remote view** shows files on the Web server in the remote root folder (see page 564). Of course, before you've posted your site on the Web, this list is empty. Information appears here only after you've set up a connection to a remote root folder (see page 609) and connected to a Web server. Folders in this view are yellow on Windows and blue on Macs.
- **Testing Server** view is useful when you're creating the dynamic, database-driven sites discussed in Part 6 of this book. No files appear in this view until you've set up a testing server (see page 754) and connected to it. Folders in this view are red.



Local Files	Size	Type	Modified
Site - cosmo (Maci...		Folder	4/12/07 2:09
contact.html	1KB	HTML File	2/2/07 12:48
css		Folder	4/12/07 2:09
email_form.h...	1KB	HTML File	3/10/07 1:50
experts		Folder	4/12/07 2:09
dave.html	1KB	HTML File	2/15/07 2:53
index.html	1KB	HTML File	1/25/07 4:25
nan.html	1KB	HTML File	2/15/07 2:53
pete.html	1KB	HTML File	2/15/07 2:53
features		Folder	4/12/07 2:09
horoscopes		Folder	4/12/07 2:09
images		Folder	4/12/07 2:09
index.html	10KB	HTML File	4/12/07 10:2
menus.html	6KB	HTML File	4/12/07 9:46
projects		Folder	4/12/07 2:09
projects.html	8KB	HTML File	4/12/07 9:48
shop		Folder	4/12/07 2:09
SpryAssets		Folder	4/12/07 2:09
subscribe.html	1KB	HTML File	2/15/07 8:46

1 local items selected totalling 9303 bytes.

Figure 15-6: *The Files panel, logically enough, lists files in the currently active Web site. A list of all the Web sites you've defined in Dreamweaver appears in the Sites pop-up menu; to work on a different site, select its name (but be aware you can also select files on your local file system, potentially tripping up Dreamweaver's Site Management tools–see the box on page 574). You can use the Files panel to transfer files back and forth between your local and remote sites, as described on page 620. You can also use the panel to access a contextual menu (circled) that lets you perform many file-related tasks.*

Tip: If you've got a small monitor, the Files panel (and other panel groups) might take up too much space to comfortably work on a Web page. You can hide (and show) all panels, including the Property inspector and the Insert bar, by pressing F4.

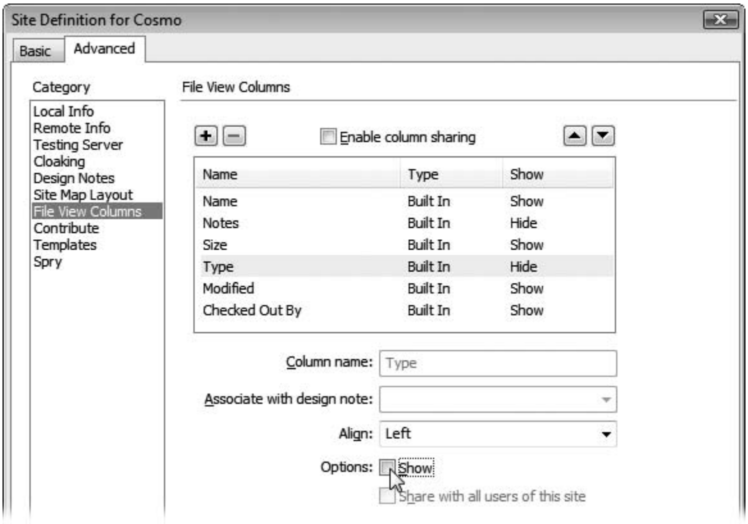
Modifying the Files Panel View

Dreamweaver CS3 has stocked the Files panel with loads of new information. Previous versions of the program only listed the files in the site; now you'll see the file name, the size of the file, the type of file (Web page, graphic, and so on), and the date the file was last modified. This is useful information, but if you have a relatively small monitor, you may not be able display all of that information. What's worse, the filenames themselves can get clipped off as Dreamweaver tries to display the other columns of information.

There are a couple of things you can do to fix this situation. First, you can resize the width of each column by dragging one of the dividers that separates each column name (see Figure 15-6). Using this technique you can at least make the file name column wide enough to display the complete name of each file.

If you don't like the new columns Dreamweaver CS3 displays, you can hide any or all of the columns. After all, how useful is listing the type of each file? The folder icon clearly indicates when you're looking at a folder; a file name ending in .html is a Web page; and a JPEG file's extension, .jpg, is clearly visible as part of the file's name. For most folks, that's enough.

Unfortunately, there's no program-wide setting to control which columns appear. You have to define the visible columns on a site-by-site basis. Start by editing the Site definition, following the instructions on page 564. Next, click the File View Columns category (under the Advanced tab of the Site Definition window; see Figure 15-7). Select a column you wish to hide and turn off the Show checkbox. The column's status under the Show column changes from Show to Hide as shown in Figure 15-7.



☐ Enable column sharing

Name	Type	Show
Name	Built In	Show
Notes	Built In	Hide
Size	Built In	Show
Type	Built In	Hide
Modified	Built In	Show
Checked Out By	Built In	Show

Column name: Type

Associate with design note:

Align: Left

Options: ☐ Show

☐ Share with all users of this site

Figure 15-7:
Use the File View Columns category to show or hide columns of information in the Files panel. It's also useful for working with Dreamweaver's collaborative note sharing feature called Design Notes. Information on Design Notes and instructions for how to use them start on page 637.

You can also change the order of the columns—perhaps the Modified date information is more important than the file size to you. Select a column and click the up or down arrow. The up arrow moves the column to the left in the Files Panel, while the down arrow demotes a column to the right in the Files panel.

Adding New Folders and Files

The Files panel provides a fast way of adding blank Web pages to your site. With one click, you can create a new page in any folder you like, saving several steps you'd otherwise have to perform using the File menu.

Adding files

To create a new, blank Web page, open the Files panel using one of the methods described on page 567, and then right-click (Control-click) a file or folder in the Files panel.

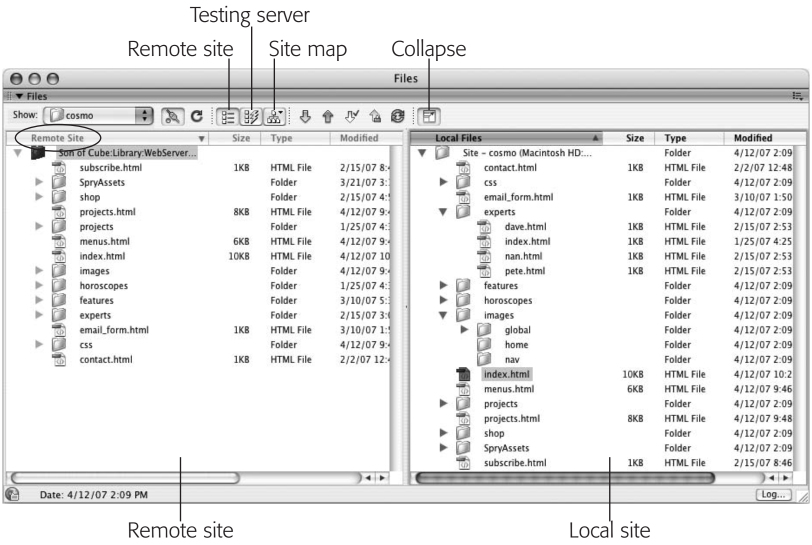
In the shortcut menu that appears, choose New File. Dreamweaver creates a new, empty Web page. (Actually, the page doesn't have to be empty; you can edit the file Dreamweaver uses as its default new page, as described in the box below.)

FOR WINDOWS PCS

The Windows Files Panel

If you'd like to expand the Files panel, so you can see a side-by-side view of both the *remote site* files and *local site* files, click the Expand/Collapse button (labeled in Figure 15-6). The Files panel fills the screen as shown in Figure 15-8. The obvious drawback is that you can't work on a Web page while the Site window is maximized, because you can't even see it. Click the Expand/Collapse button again to minimize the Files panel and gain access to your document window.

To get around this limitation, you can undock the Files panel before clicking the Expand button: Grab the Files panel group by its grip—the tiny column of dots to the left of the *word* Files—and drag it toward the middle of the screen. (Stay away from the edges of the screen when performing this maneuver; touching there may simply redock the panel group.) The panel group then becomes a floating panel. Now press the Expand button to get the side-by-side files view. You're now free to resize the Files panel even after expanding it.



Remote Site	Size	Type	Modified
Son of Cube:Library:WebServer...			
subscribe.html	1KB	HTML File	2/15/07 8:
SpryAssets		Folder	3/21/07 3:
shop		Folder	2/15/07 4:
projects.html	8KB	HTML File	4/12/07 9:
projects		Folder	1/25/07 4:
menus.html	6KB	HTML File	4/12/07 9:
index.html	10KB	HTML File	4/12/07 10
images		Folder	4/12/07 9:
horoscopes		Folder	1/25/07 4:
features		Folder	3/10/07 5:
experts		Folder	2/15/07 3:
email_form.html	1KB	HTML File	3/10/07 1:
css		Folder	4/12/07 9:
contact.html	1KB	HTML File	2/2/07 12:

Date: 4/12/07 2:09 PM

Local Files	Size	Type	Modified
Site – cosmo (Macintosh HD:...		Folder	4/12/07 2:09
contact.html	1KB	HTML File	2/2/07 12:48
css		Folder	4/12/07 2:09
email_form.html	1KB	HTML File	3/10/07 1:50
experts		Folder	4/12/07 2:09
dave.html	1KB	HTML File	2/15/07 2:53
index.html	1KB	HTML File	1/25/07 4:25
nan.html	1KB	HTML File	2/15/07 2:53
pete.html	1KB	HTML File	2/15/07 2:53
features		Folder	4/12/07 2:09
horoscopes		Folder	4/12/07 2:09
images		Folder	4/12/07 2:09
global		Folder	4/12/07 2:09
home		Folder	4/12/07 2:09
nav		Folder	4/12/07 2:09
index.html	10KB	HTML File	4/12/07 10:2
menus.html	6KB	HTML File	4/12/07 9:46
projects		Folder	4/12/07 2:09
projects.html	8KB	HTML File	4/12/07 9:48
shop		Folder	4/12/07 2:09
SpryAssets		Folder	4/12/07 2:09
subscribe.html	1KB	HTML File	2/15/07 8:46

Figure 15-8: *Clicking the Expand/Collapse button maximizes the Files panel and lets you display two views simultaneously. This way, you can view both the remote and local sites at the same time. Local files always appear on the right (unless you change the preference setting located in the Site category of the Preferences window—Ctrl+U [⌘-U]). The view that appears on the left side—Remote, Testing, or Site Map—depends on which view you selected before clicking the Expand button. To change views, click a different view button—Remote, Testing, or Site Map.*

Note: The type of file Dreamweaver creates depends on the type of site you're creating. For a plain HTML site, Dreamweaver creates a blank HTML page. However, if you're building a dynamic, database-driven site like those described in Part 6, Dreamweaver creates a blank page based on the type of server model you've selected. For example, if you're building a site using PHP and MySQL, the page is a blank PHP page (named *untitled.php*).

The new file appears in the Files panel with a highlighted naming rectangle next to it; type a name for the page here. Don't forget to add the appropriate extension (.htm or .html) to the end of its name.

Tip: If, immediately after creating a new file in the Files panel, you rename that file and add a new extension, the contents of the file update to reflect the new file type. For example, changing *untitled.html* to *global.css* erases all of the HTML code in the file and turns it into an empty CSS file.

POWER USERS' CLINIC

Changing the Default New Page

Whenever you create a new Web page—for example, by choosing File → New or by right-clicking (Control-clicking) an existing file in the Files panel—Dreamweaver gives you a blank, white document window. But what if you always want your pages to have gray backgrounds, or you always want to include a link to the same external style sheet?

Every new Web page you create is actually an untitled copy of a default template document called Default.html. You can find this file in the Dreamweaver configuration folder. On Windows it's in *C:\Program Files\Adobe\Adobe Dreamweaver CS3\configuration\DocumentTypes\NewDocuments.* On a Mac, you can find it in *Applications → Adobe Dreamweaver CS3 → configuration → DocumentTypes → NewDocuments* folder. You can open this file within Dreamweaver and edit it however you like: change its background color, margins, text color, or whatever, so that all subsequent new pages you create inherit its settings. Consider making a backup of this file before editing it, however, so that you can return to the factory settings if you accidentally make a mess of it. (Also, make sure you don't touch an HTML fragment that probably appears to you to be incorrect: namely, the *charset="* snippet, which appears at the end of the <meta> tag. This fragment of HTML is indeed incomplete, but when you create a new page, Dreamweaver correctly completes this code according to the alphabet—Chinese, Korean, or Western European, for example—that your page uses.)

You'll also notice lots of other files in this folder. Since Dreamweaver can create lots of different file types—Cascading Style Sheets, Active Server Pages, and so on—you'll find a default blank file for each. You can edit any of these—but don't, unless you're sure of what you're doing. You can easily damage some of the more complex file types, especially those that involve dynamic Web sites.

Adding folders

You can add folders to your site directly in Dreamweaver using the Files panel. Just right-click (Control-click) a file or folder in the local files list. From the shortcut menu, choose New Folder. If you clicked a file, Dreamweaver creates the new folder in the same folder as that file; if you clicked a folder, you get a new folder inside it.

If you crave variety, you can add a folder another way. Select a file or folder in the Files panel and then click the contextual menu button (circled in Figure 15-6) and select File → New Folder.

Finally, in the naming rectangle that appears in the Files panel, type a name for the new folder.

Moving files and folders

Because the Dreamweaver Files panel looks and acts so much like the Windows Explorer and the Macintosh Finder, you may think it does nothing more than let you move and rename files and folders on your computer. You may even be tempted to work with your site files directly on the Mac or Windows desktop, thinking that you're saving time. However, when it comes to moving the files and folders in your site, Dreamweaver does more than your computer's desktop ever could.

In your Web travels, you've probably encountered the dreaded "404: File Not Found" error. This "broken link" message doesn't necessarily mean that the page doesn't exist, just that your Web browser didn't find the page at the location (URL) specified by the link you just clicked. In short, someone working on that Web site probably moved or renamed a file without updating the link. Because Web site files are interrelated in such complex ways—pages link to other pages, which include paths to graphics, which in turn appear on other pages—an action as simple as moving one file can wreak havoc on an entire Web site. That's why you shouldn't drag Web site files around on your desktop or rename them in Windows Explorer or the Macintosh Finder.

In fact, moving and reorganizing Web site files is so headache-ridden and error-prone that some Web designers avoid it altogether, leaving their sites straining under the weight of thousands of poorly organized files. But you don't have to be one of them: Dreamweaver makes reorganizing a site easy and error-free. When you use the Files panel to move files, Dreamweaver looks for actions that could break your site's links and automatically rewrites paths of links, images, and other media (see the cautionary box on page 574).

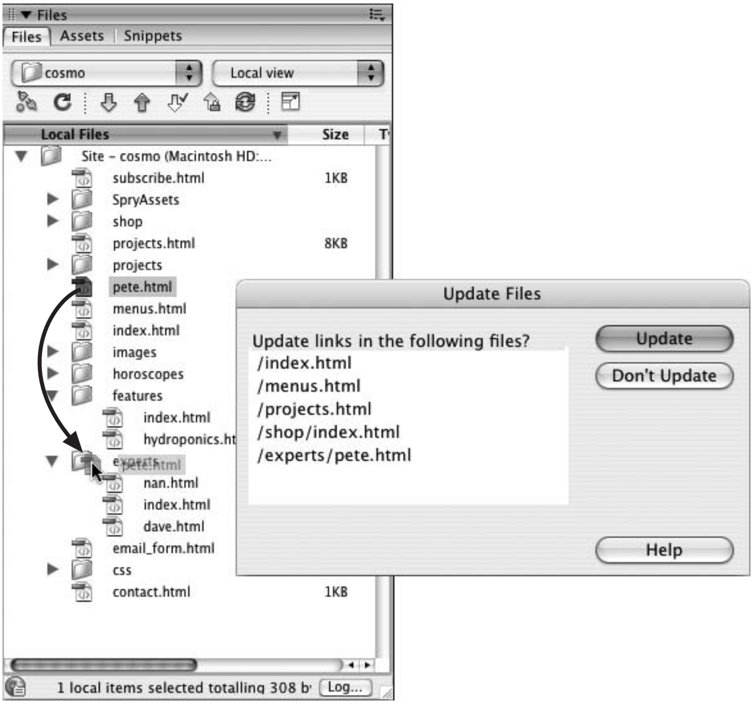
Note to JavaScript Programmers: If your custom JavaScript programs include paths to images, Web pages, or other files in your site, Dreamweaver can't help you. When you reorganize your site with the Files panel, the program updates *links* it created, but not *paths* you've included in your JavaScript programs.

Just be sure to do your moving from within Dreamweaver, like this: In the Files panel, drag the folder or file into its new folder (see Figure 15-9). To move multiple files, Ctrl-click (⌘-click) each of the ones you want to move, and then drag them as a group; to deselect a selected file, Ctrl-click or ⌘-click it again. You can also select one folder or file and Shift-click another to select all files and folders in the list between the two.

Note: Close *all* of your Web documents *before* reorganizing your files in this way. Dreamweaver has been known to not always correctly update links in open files. But if you do end up with malfunctioning links, you can always use Dreamweaver's Find Broken Links tool (see page 586) to ferret out and fix any broken links.

When you release the mouse button, the Update Files dialog box appears (Figure 15-9); just click Update. Dreamweaver updates all the links for you.

Tip: If you accidentally dragged the file or folder to the wrong location, click Don't Update. Then drag the file back to its original location and, if Dreamweaver asks, click Don't Update once again.



Update Files

Update links in the following files?

```
/index.html
/menus.html
/projects.html
/shop/index.html
/experts/pete.html
```

Figure 15-9: *Left: You can move files and folders within the Files panel just as you would in Windows Explorer or the Macintosh Finder. Simply drag the file into (or out of) a folder. But unlike your computer's file system, Dreamweaver constantly monitors the links between Web pages, graphics, and other files.*

Right: If you move a file using Windows Explorer or the Finder, you'll most likely end up breaking links to that file or, if it's a Web page, links in that file. By contrast, Dreamweaver is smart enough to know when moving files will cause problems. The Update Files dialog box lets you update links to and from the file you're moving, so that your site keeps working.

Renaming files and folders

Renaming files and folders poses the same problems as moving them. Because links include file and folder names, altering a file or folder name can break a link just as easily as moving or deleting the file or folder.

For example, say you've created a new site with a home page named *home.html*. You cheerfully continued building the other pages of your site, linking them to *home.html* as you went along. But after reading this chapter and checking to find out what default file name your Web server requires (see page 560), you found that you need to rename your home page file *index.html*. If you were to rename the file *index.html* using Windows Explorer or the Macintosh Finder, every link to *home.html* would result in a "File not found" error.

Dreamweaver, on the other hand, handles this potential disaster effortlessly, as long as you rename the file in the Files panel instead. To do so, just click the file or folder in the Files panel. Pause a moment, and click the *name* of the file or folder. (The pause ensures that Dreamweaver won't think you just double-clicked the file for editing.)

FREQUENTLY ASKED QUESTION

Beware "Site-less" Web Design

Why doesn't Dreamweaver warn me when I delete or move a file?

Dreamweaver's site management tools are always watching your back—unless you're not working in a site. Dreamweaver tries to be a flexible tool for use in all situations. Some developers don't like the whole notion of sites and prefer to just work on their pages in the old (unmonitored) way of most programs. And in cases where you just want to edit a single page, but don't want to go through the whole business of defining a site, Dreamweaver's Files panel lets you browse your files, just like the regular Windows Explorer or Mac Finder. If you click the Sites menu (where you'd normally switch between defined sites) and scroll to the top of the menu, you'll see a list of hard drives and other networked storage devices. For example, you could select your main drive (C: or Macintosh HD, for example). The Files panel then displays all of the files on that drive. Unfortunately, this flexibility can also cause a lot of trouble.

Sometimes people accidentally select their hard drive instead of their site in the Sites menu, and *then* navigate to the folder holding their site's files. They then begin working, blissfully unaware that they're working without Dreamweaver's safety net. When looking at your files in this way, changes you make to your existing site files—like moving, deleting, or renaming—aren't monitored by Dreamweaver (it figures you know better). Similarly, all of Dreamweaver's other site management features like Libraries (Chapter 18), templates (Chapter 18), and file transfers (Chapter 17) don't work when you're off in un-site-managed-land. In other words, it's best to always define a site, and always make sure you've selected the site's name in the Files panel, as you work on your Web site.

A renaming rectangle appears; type the new name. Be sure to include the proper extension for the type of file you're renaming. For example, GIFs end with .gif and Cascading Style Sheets end with .css. Although Dreamweaver lets you name files without using an extension, the extensionless files won't work when you move them to a Web server.

Finally, in the Update Files dialog box (Figure 15-9), click Update. Dreamweaver updates all the links to this file or folder to reflect the new name.

Warning: It bears repeating: never rename or move files and folders *outside* of Dreamweaver. If you use Windows Explorer or the Macintosh Finder to reorganize the files in your site, links will break, images will disappear from your pages, and the earth will open underneath your feet. (Well, actually, that last thing won't happen, but it can *feel* that way when your boss comes in and says, "What's happened to our Web site? Nothing works!")

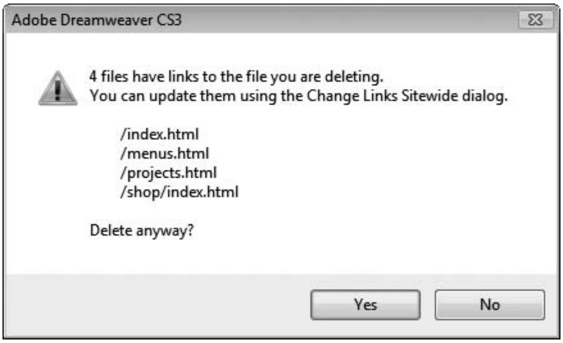
If you've edited files outside of Dreamweaver by accident, see page 586 to learn how to find and fix broken links.

Deleting files and folders

It's a good idea to clean up your site from time to time by deleting old and unused files. Just as with moving and renaming files, you delete files from the Files panel.

To delete a file or folder, just click to select it in the Files panel and press Backspace or Delete. (To select multiple files or folders, Ctrl-click [⌘-click] them as described on page 572.) If the doomed file or folder isn't referenced by any other page on the site, a simple "Are you sure you want to delete this file?" warning appears; click Yes.

However, if other files link to the file—or to files within the folder—that you're deleting, then a warning dialog box (Figure 15-10) appears informing you that you're about to break links on one or more pages in your site.



4 files have links to the file you are deleting.
You can update them using the Change Links Sitewide dialog.

/index.html
/menus.html
/projects.html
/shop/index.html

Delete anyway?

Figure 15-10:
When you delete files in the Files panel, Dreamweaver warns you if other pages reference (link to) the file. If you click Yes, you'll need to go back and repair the links. Dreamweaver gives you a convenient way to do so–the Change Links Sitewide command (see page 592)–and reminds you of it in this dialog box.

The message even lists the first few pages that use the file. If you've made a mistake, click No to leave your site untouched.

If you're sure you wish to delete the file, click Yes. And yes, this move does *break links* in all the pages listed. Repairing those links, which usually means linking them to a new page, requires a separate step: using the Site → Change Links Sitewide command, as described on page 592.

Site Assets

Web pages integrate lots of different elements: PNGs, GIFs, JPEGs, links, colors, and Flash movies, to name just a few. In a large site with lots of files, it's a challenge to locate a particular image or remember an exact color.

To simplify the process, Dreamweaver provides the Assets panel. For want of a better generic term, Dreamweaver defines the term *asset* to mean any element you use on a Web page, such as a GIF file, a link, or even an individual color.

Viewing the Assets Panel

Dreamweaver lists your site's assets on the nine category "pages" of the Assets panel (Figure 15-11). To open the panel, choose Window → Assets, or press F11.

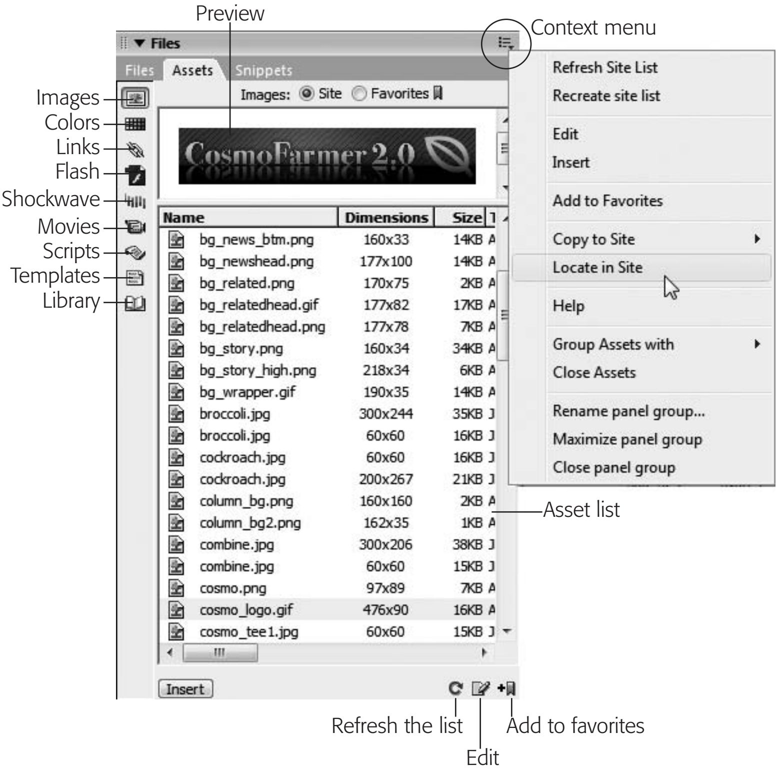
GEM IN THE ROUGH

A Map That's Better Buried

Dreamweaver includes yet another view of your site's files: Site Map view. To see a map of your site choose Map View from the Files panel's View menu (see Figure 15-6), or, when the Files panel is expanded, click the Site Map button (see Figure 15-8). Unfortunately, the kind of map Dreamweaver displays isn't the kind of nicely organized hierarchical drawings favored by Web designers. Instead of showing the logical organization of a site–the main sections of the site and which page fits into which section–a Dreamweaver Site Map is a sprawling diagram of links. In fact Site Map view shows *every* link on every page of your site.

However, there is one useful feature buried in the site map–the ability to quickly re-title Web pages (that is, change the title that appears at the top of the browser). Perhaps you've inherited a Web site from a Web designer who didn't know much about how to title a page (see page 38). Now it's your job to re-title every page with a snappy and descriptive title. One quick way to re-title pages on a site (without opening every single page) is with Site Map view.

To re-title pages quickly, go to Site Map view (for example, select Map View from the View menu in the Files panel). Choose View → Site Map → Options → Show Page Titles from the Files panel's contextual menu (see Figure 15-6). Now, each page, instead of displaying its file name–*index.html,* for example–will show the page title. To change a page's title, select it in the Site Map and then click the title name–this will take you into an editing mode in which you can re-title the page.



Name	Dimensions	Size	T
bg_news_btm.png	160x33	14KB	A
bg_newshead.png	177x100	14KB	A
bg_related.png	170x75	2KB	A
bg_relatedhead.gif	177x82	17KB	A
bg_relatedhead.png	177x78	7KB	A
bg_story.png	160x34	34KB	A
bg_story_high.png	218x34	6KB	A
bg_wrapper.gif	190x35	14KB	A
broccoli.jpg	300x244	35KB	J
broccoli.jpg	60x60	16KB	J
cockroach.jpg	60x60	16KB	J
cockroach.jpg	200x267	21KB	J
column_bg.png	160x160	2KB	A
column_bg2.png	162x35	1KB	A
combine.jpg	300x206	38KB	J
combine.jpg	60x60	15KB	J
cosmo.png	97x89	7KB	A
cosmo_logo.gif	476x90	16KB	A
cosmo_tee1.jpg	60x60	15KB	J

Figure 15-11:
Most of the commands in the contextual menu shown here are duplicated in the panel itself, but three options appear only on this menu. Recreate Site List comes in handy if you've added or deleted files outside Dreamweaver. It rebuilds the site cache and updates the list of assets. "Copy to Site" copies the selected asset to another site. "Locate in Site" opens the Files panel and highlights the file of the asset you selected in the Assets panel. You can also open a contextual menu by right-clicking (Control-clicking) any asset in the list.

You select an asset in the list by clicking its name; a miniature preview appears above the Assets list. To preview a movie, click the green arrow that appears in the preview window.

The Assets panel highlights nine different categories of site elements. To view the assets in a particular category, click its icon at the left of the Assets panel:

- The **Images** category lists all of the GIF, JPEG, and PNG files in your site. Dreamweaver lists the dimensions of each image next to its name, so you can quickly identify whether *logo1.gif*, or *logo2.gif* is your 728 × 90 pixel banner logo. You can also see the images' sizes, types, and where they're located in the site (you may need to scroll to the right to see all of this information).
- The **Colors** category shows all of the colors specified in the Web pages and style sheets of your site. These include link colors, background colors, and text colors.
- The **Links** category lists all external links—not just standard *http://* links, but also email links, FTP addresses, and JavaScript links. (For an example of a JavaScript link, see the box on page 502.)
- The **multimedia** categories—Flash, Shockwave, and Movies—are roughly equivalent. They each display *movie* files with their corresponding extensions: .swf (Flash), .dcr (Shockwave), .flv (Flash video), and .mov or .mpg (QuickTime and MPEG).
- The **Scripts** category lists JavaScript files. This category only includes external *script* files that Web pages link to; for example, the JavaScript files that are part of the Spry Framwork and which are attached to a Web page whenever you use a Spry widget or effect. Scripts that are embedded *into* a Web page—like those created using Dreamweaver behaviors—aren't listed.
- The last two categories—**Templates** and **Library**—are advanced assets that streamline Web site production. They're discussed in Chapters 18 and 19.

You can switch between two different views for each asset category—Site and Favorites—by clicking the radio buttons near the top of the Assets panel. The Site option lists all the assets that appear in the Site for the chosen category. Favorites lets you create a select list of your most important and frequently used assets (see page 579).

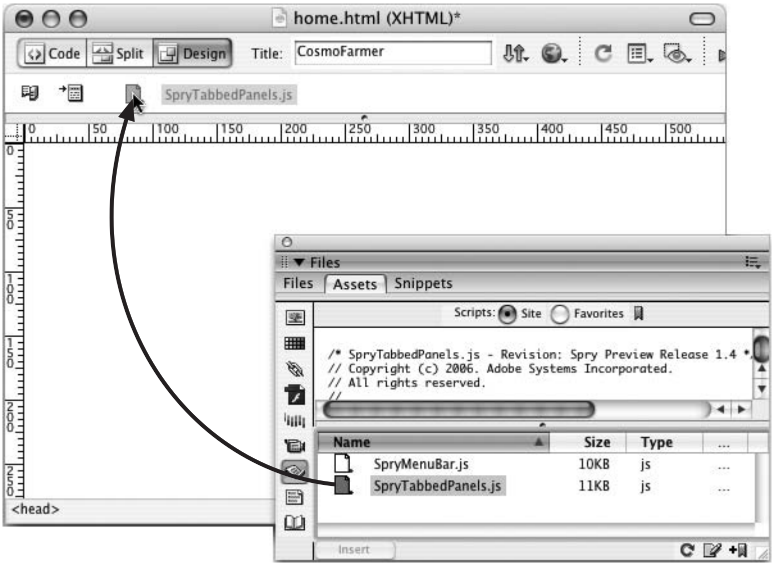
Note: Dreamweaver's cloaking feature lets you hide files from many sitewide tasks, including the Assets panel. So, if you have a folder with thousands of *image* files that you'd rather not display on the Assets panel, you can hide that folder and its files. See page 626 for more on this feature.

If, as you're working on a site, you add additional assets—for example, you create a new GIF image in Fireworks and import it to the site—you'll need to update the Assets panel. Click the Refresh Site List button (see Figure 15-11) to update the list of assets.

Inserting Assets

The Assets panel's prime mission is to make using assets easier. From the Assets list, you can add graphics, colors, and links to your pages with a click of the mouse. Most of the categories on the panel refer to external files that you can include on a Web page: images, Flash, Shockwave, movies, and scripts.

The easiest way to insert an asset file is to drag it from the Assets panel into the document window. You can drag the asset anywhere on the page you'd normally insert an object—in a table cell, a <div> tag, at the beginning or end of a page, or within a paragraph. Script assets can go in the head of a Web page (see Figure 15-12).



Title: CosmoFarmer

SpryTabbedPanels.js

Scripts: ● Site ○ Favorites

```
/* SpryTabbedPanels.js - Revision: Spry Preview Release 1.4 *
// Copyright (c) 2006. Adobe Systems Incorporated.
// All rights reserved.
//
```

Name	Size	Type	...
SpryMenuBar.js	10KB	js	...
SpryTabbedPanels.js	11KB	js	...

Figure 15-12:
While you'll insert most assets into the body of a Web page, you can (and usually should) place script files in the head of the page. To do this, first choose View → Show Head Content. Then drag the script from the Assets panel into the head pane, as shown here. (Adding a script asset doesn't copy the JavaScript code into the Web page. Instead, just as with external style sheets, Dreamweaver links to the script file so that when a Web browser loads the page, it looks for and then loads the file from the Web site.)

(If you're billing by the hour, you may prefer the long way: click in the document window to plant the insertion point, click the asset's name, and then click Insert at the bottom of the Assets panel.)

POWER USERS' CLINIC

The Return of Root-Relative Paths

Chapter 5 explains the different types of link paths–absolute, document-relative, and root-relative–that Dreamweaver understands (see page 153). While it's best to use document-relative paths for linking to pages within your own site, or for adding images and other media to a page, you may notice that Dreamweaver frequently displays root-relative paths in its site management tools.

For instance, the list in the Assets panel includes the full root-relative path of each asset–*/images_home/banner.png*, for example. The initial "/" indicates the root folder of the site, and the information that follows indicates the rest of the path to that asset. In this example, the graphic asset *banner.png* is in a folder called *images_home*, which is itself in the site's root folder. Dreamweaver needs to look no further than the root folder to find the asset in question.

Root-relative paths indicate a precise location within a site and let Dreamweaver know where to find a file. This doesn't mean, however, that when you use the Assets panel to insert an image or other file, that Dreamweaver uses site-root-relative links. Dreamweaver uses the type of link you specified for the site as described on page 562.

Adding color and link assets

Color and link assets work a bit differently than other asset files. Instead of standing on their own, they *add* color or a link to images or text you've selected in the document window. (You can add colors to any text selection, or add links to images and text.) In this way, you can quickly add a frequently used link—the URL to download the Flash player or Adobe Reader, for example.

To do so, start by highlighting the text (to change its color or turn it into a link) or image (to turn it into a link). In the Assets panel, click the appropriate category button—Colors or Links. Click the color or link you want, and then click Apply. Alternatively, you can drag the color or link asset from the panel to the selection.

Note: Applying color to text using the Assets panel either creates a new CSS style or wraps the selected text in a <font> tag. The actual result depends on the Preferences setting described on page 38.

Favorite Assets

On a large site, you may have thousands of image files, movie files, colors, and external links. Because scrolling through long lists of assets is a chore, Dreamweaver lets you create a compact list of your favorite, frequently used assets.

For example, you might come up with five main colors that define your site's color scheme, which you'll use much more often than the other miscellaneous colors on the Assets list. Add them to your list of favorite colors. Likewise, adding graphics files you use over and over—logos, for example—to a list of favorites makes it easy to locate and insert those files into your pages. (Don't forget that you can also use Dreamweaver's Library and template features for this function. They're similar, but more powerful tools for keeping frequently used items at the ready. Turn to Chapter 18 for the details.)

Identifying your Favorites

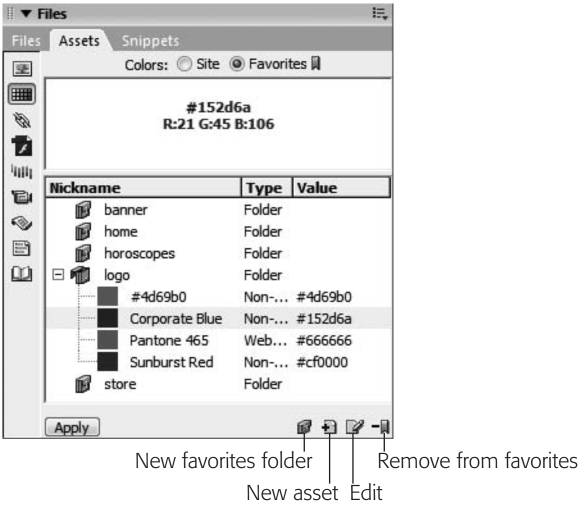
If the color, graphic, or other element to be added to your Favorites list already appears on your Assets panel, highlight it in the list and then click the "Add to Favorites" button (see Figure 15-11).

Even quicker, you can add Favorites as you go, snagging them right from your Web page in progress. If you're working on your site's home page and you insert a company logo, for example, that's a perfect time to make the logo a favorite asset.

Simply right-click (Control-click) the image. From the shortcut menu, choose "Add Image to Favorites;" Dreamweaver instantly adds the graphic to your list of favorites. You can do the same with Flash, Shockwave, and QuickTime files, as well as with links. (Unfortunately, this shortcut doesn't work for colors and script files.)

When it comes to colors and links, there's another way to turn them into Favorites. In the Assets panel, select the Color or URLs category, click the Favorites radio button, and then click the New Asset button (see Figure 15-13). Then:

- If you're adding a favorite color, the Dreamweaver color box appears. Select a color using the eyedropper (see page 47).



#152d6a
R:21 G:45 B:106

Nickname	Type	Value
banner	Folder	
home	Folder	
horoscopes	Folder	
logo	Folder	
#4d69b0	Non-...	#4d69b0
Corporate Blue	Non-...	#152d6a
Pantone 465	Web...	#666666
Sunburst Red	Non-...	#cf0000
store	Folder	

Figure 15-13:
In addition to using folders to organize your favorites, you can give a Favorite asset an easily identifiable nickname. Instead of listing a favorite image using its file name–148593.gif–use an easily understood name like New Product. Naming favorite colors is particularly helpful; a nickname like Page Background is more descriptive than #FF6633. To name a Favorite asset, click to select it; pause a moment, and then click again to edit its name. (These nicknames apply only in the Assets panel; they don't rename or retitle your files.)

- If you're adding a favorite link, the Add URL window opens. Type an absolute URL in the first field, either a Web address starting with *http://* or an email link (for instance, *mailto:subscriptions@nationalexasperator.com*). Next, type a name for the link—such as *Acrobat Download* or *Subscription Email*—in the Nickname field and then click OK.

Your new color or link appears in the Favorites list.

GEM IN THE ROUGH

Better Use of Color Assets

Although color assets are meant only for coloring text, you can use them any time Dreamweaver's eyedropper tool appears, such as when you're creating a CSS style and wish to add text color, background color, or border color. In other words, any time you need a frequently used color, you can hop right to the Assets panel rather than pecking around on the color palette or trying to find another occurrence of the color on your screen.

Whenever you click a color box–in the Page Properties window, Property inspector, or Style Definition window, for example–a color palette appears and the cursor changes to an eyedropper. You could, of course, use this eyedropper to pick a color from the palette or to sample a color from the screen. But if you've already used the color in your site–or saved it in the Favorites list–just grab it from the Assets panel. To do so, make sure you have the Assets panel open, and the color category selected; next, click the color box (for example, next to the Color CSS Property when creating a new style using the CSS Rule Definition window). Finally, move the eyedropper to the colored swatch in the Assets list and click.

Using your Favorites

You insert assets from the Favorites list into your Web pages just as you would any other assets; see page 577.

Removing Favorites

Removing assets from the Favorites list is just as straightforward as adding them: just select one in the Favorites list of your Assets panel and then press Delete. The "Remove from Favorites" button (see Figure 15-13) on the Assets panel does the same thing. Yet another approach is to use the contextual menu (Figure 15-11).

Don't worry; removing an asset from the Favorites list *doesn't* delete that asset from the Assets panel (or your site)—only from the Favorites list. You can still find it listed if you click the Site radio button.

Organizing Favorite assets

On a large site with lots of important assets, even a Favorites list can get unwieldy. That's why you can set up folders within the Assets panel to organize your assets. For example, if you use lots of ads on a site, create a folder in the Image assets Favorites called Ads or, for even greater precision, create multiple folders for different types of ads: Banner Ads, Half Banner Ads, and so on.

You can then drag assets into the appropriate folders, and you can expand or contract the folder to show or hide the assets inside (see Figure 15-13). These folders simply help you organize your Assets panel; they don't actually appear anywhere within the structure of your site. Moving a Favorite asset into a folder in the Assets panel doesn't change the location of files within your site.

To create a Favorites folder, click the appropriate category button at the left edge of the Assets panel (any except the bottom two, since, alas, you can't create folders for templates and Library items). Click Favorites at the top of the Assets panel (you can't create folders in Site view). Finally, click the New Favorites Folder button (see Figure 15-13) at the bottom of the Assets panel. When the new folder appears with its naming rectangle highlighted, type a new name for the folder and then press Enter. (Don't use the same name for more than one folder.)

To put an asset into a folder, just drag it there from the list. And if you're really obsessive, you can even create subfolders by dragging one folder onto another.

EXTENSION ALERT

Importing and Saving Color Palettes

The Color Palette Extension for Dreamweaver is a simple, but useful tool created by Brian Newtz. It can capture all of the colors in the current Web page or CSS Style Sheet and display them on a floating color palette. You can then sample colors from the palette when defining colors for styles (see the box on page 47).

Even better, if you specify a link to another Web site (either a page or a CSS file), the Color Palette panel grabs all of the colors specified on that page–a quick way to "borrow" some color inspiration from another site.

You can also export the captured color palette as a simple HTML page that you could then distribute to others: for example, other designers, co-workers, and even off to a client for their review and approval. You can find this extension at *http://bnewtz.cannet.com/wp/2006/06/color-palette-for-dreamweaver/*. (To learn how to install extensions turn to page 742.)

CHAPTER 16

Testing Your Site

As you've no doubt realized by now, there are quite a few steps involved in building a Web site. At any point in the process, it's easy to introduce errors that affect the performance of your pages. Both small mistakes, like typos, and site-shattering errors, like broken links, occur frequently in the Web development cycle.

Unfortunately, Web designers often don't develop a good procedure for testing their sites. This chapter offers some helpful techniques for testing your site, including using Dreamweaver's wide array of site-testing tools.

Site Launch Checklist

Don't wait until you've finished your site before embarking on a thorough strategy of testing. By that time, serious design errors may have so completely infested your site's pages that you may have to start over, or at least spend many hours fixing problems that could have been prevented early on.

- **Preview early and often.** The single best way to make sure a page looks and functions the way you want is to preview it in as many Web browsers as possible. Use Dreamweaver's Preview command (see page 55) to preview your page in every browser you can get your hands on. Make sure the graphics look right, that your layout remains the same, and that Cascading Style Sheets, Dreamweaver behaviors, and complex layout methods work as you intended.

Note: If you don't have every browser ever created installed on your Mac, Windows, and Linux machines (you *do* have all three, don't you?), consider the commercial Web site *www.browsercam.com*. This service lets you view screenshots of your site using a wide variety of browsers and operating systems to make sure your site is working. The downside: $40 a month (ouch).

Free alternatives include iCapture (*www.danvine.com/icapture*) for getting screen captures of your Web pages using Apple's Safari browser, and Browsershots (*www.browsershots.org*), which provides a wide-range of Linux screenshots plus IE 6 (no IE 7 as of this writing) on Windows, and Safari 2 on the Mac.

Alternatively, you can download and install the real thing from *http://browsers.evolt.org/*. This site has archived versions of nearly every Web browser created.

If you're a Mac person with an Intel Mac you can install Windows on your machine using Apple's Boot-camp technology (*www.apple.com/bootcamp*) or third-party "virtualization" software which lets you run Mac and Windows simultaneously on the same computer (and believe it or not the universe does *not* implode). Parallels Desktop for Mac (*www.parallels.com/en/products/desktop/*), for example, lets you run multiple versions of Windows (XP and Vista) as well as Mac OS X.

For a thorough evaluation, however, you should preview your pages using every combination of browser *and* operating system you think your site's visitors may use. Enroll co-workers, family members, and household pets, if necessary, in this effort. At the very least, test your pages using Internet Explorer 6 and 7 on Windows, Firefox on Windows or Mac, and Safari on the Mac. According to several sources, including TheCounter.com (*www.thecounter.com/stats/*) and BrowserNews (*www.upsdell.com/BrowserNews/stat.htm*), Internet Explorer 6 for Windows is installed on over 50 percent of all computers surfing the Web, followed by Internet Explorer 7, Firefox, Safari, and others. And as the population of Opera browsers grows, you might want to add this browser to your test schedule, too.

Tip: If you already have a site up and running, you can find useful browser information in your site's log files. These files track information about visits to your site, including which browsers and platforms your visitors are using. Most Web hosting companies provide access to these files, as well as software to analyze the confusing code inside them. You can use this information, for example, to see whether *anyone* who visits your site still uses Internet Explorer 5. If no one does, that's one less browser you have to design for.

Unfortunately, you'll discover that what works on one browser/operating system combination may not work on another. That's why you should preview your designs *early* in the process of constructing your site. If you design a page that doesn't work well in Internet Explorer 6 on Windows, for example, it's better to catch and fix that problem immediately than discover it after you've built 100 pages based on that design.

Note: Internet Explorer 6 is usually where most Web pages fall apart. This old and crotchety browser is full of bugs that often cause head-scratching bouts of hysteria among Web designers. Most of these problems are related to using CSS for layout (see Chapter 9). One approach recommended by professional Web designers is to preview your page in Firefox, Safari, or Internet Explorer 7 first. Get the page working in those browsers and then preview the page in IE 6 to fix the bugs. If you design just with IE 6 in mind, you'll find that the site won't work in Firefox, Safari, and, in many cases, the ever growing population of IE 7 browsers. Dreamweaver CS3's new Check Browser Compatibility tool is one way to track down nasty CSS bugs (see page 129).

- **Validate your pages.** Dreamweaver includes a tool that lets you compare your Web pages against agreed-upon standards for HTML and other Web languages. It checks to make sure your pages are *valid* (that they conform to these standards).

  Valid pages are more likely to work in a predictable way on all Web browsers. And if you envision your site on mobile devices such as cellphones and palmtops, valid pages are again a better bet. In fact, you can even validate your Web pages to see if they conform to Wireless Markup Language (WML)—a tag-based language like HTML used for creating content for mobile phone Web browsers.

- **Check for accessibility.** Not everyone experiences the Web in the same way. People with poor vision, for example, will miss out on the beautiful, full-color banner and navigation buttons you've created. To help you build Web sites that don't shut out people with disabilities, Dreamweaver can check your Web site to make sure it conforms to Section 508 (a Federal regulation mandating that Web sites built by or for the Federal Government are accessible to those with disabilities).

Some troubleshooting steps should come at the end of the process, when a page (or entire site) is ready to be moved to a Web server:

- **Check spelling on your pages.** Amazingly, this simple step is often overlooked. As a result, it's easy to find otherwise professional-looking Web pages on the Internet that are undermined by sloppy spelling. To learn how to use Dreamweaver's built-in spell checker, see page 79.

- **Check your links.** As the name indicates, a Web site can be a complex and twisted collection of interconnected files. Web pages, graphics, Flash movies, and other types of files all work together. Unfortunately, if one file is moved or deleted, problems can ripple through the entire site. Use Dreamweaver's Check Links command to identify and fix broken links (see page 586).

- **Run site reports.** It's always the little things. When building a Web site, small errors inevitably creep into your pages. While not necessarily life-threatening, forgetting to title a Web page or to add an Alt property to an image does diminish the quality and professionalism of a site. Use Dreamweaver's site-reporting feature to quickly identify these problems (see page 600).

Note to Dreamweaver 8 Users: The Check Browser Support command was removed in Dreamweaver CS3. It wasn't a very useful tool since it concentrated on incompatibilities in different browsers' understanding of HTML. Most browsers now recognize the same HTML tags and tag properties. The real problem is differences in how browsers understand CSS. That's why Dreamweaver CS3 added a new Check Browser Compatibility tool–the name sounds like the tool it's replacing, but it only worries about CSS. Learn about this new tool on page 129.

Find and Fix Broken Links

Broken links are inevitable. If you delete a file from your site, move a page or graphic outside of Dreamweaver, or simply type an incorrect path to a file, broken links and missing graphics may result. In the B.D. era (Before Dreamweaver), the only way to fix such problems was to methodically examine every link on every page in your site. Fortunately, Dreamweaver's link-checking features can automate the process of tracking down broken-link problems.

Note: In this context, a link doesn't only mean a hyperlink connecting one page to another. Dreamweaver also uses the term to include the paths that identify external files incorporated in your Web page, such as PNGs, GIFs, JPEGs, external CSS style sheets, and Flash movies. For example, if a graphic is missing or isn't in the place specified by the Web page, Dreamweaver reports a broken link.

Finding Broken Links

The Check Links Sitewide command scans an entire site's worth of files and reports all links and paths that don't lead to a file. (It's one of Dreamweaver's site management features, meaning that you have to define a local site before using this command; see page 28 for instructions on defining a site.) Note that Dreamweaver checks only links and paths *within* the local site folder; it doesn't check links that lead to other people's Web sites (see the note on page 587 for a tool that can help with *that* annoying chore).

Note: If your local site contains a lot of pages, you may not want to check links in one or more folders whose pages *you know* have no broken links. You can exclude files from the Check Links Sitewide operation using the Cloaking feature described on page 626. Doing so also makes the link-checking operation go faster.

Checking just one page

To check links on an open page, save it in your local site folder. Then choose File → Check Page → Links (or press Shift+F8). Dreamweaver scans the page and opens the Link Checker window, which lists files containing broken links (see Figure 16-1). If Dreamweaver doesn't find any broken links—you HTML god, you—the window comes up empty.

Note: Although Dreamweaver can't check links to the outside world, a free tool from the W3C can. You can find its link checker at *http://validator.w3.org/checklink*. This tool checks both internal links (between pages on the same site) and external links (to other sites). The only possible downside: the pages you wish to check must already be up on the Web. Windows users will find Xenu's Link Sleuth, a free, automated link checker, can help speed up the process of checking external links (*http://home.snafu.de/tilman/xenulink.html*).

Checking specific pages

You can also check links just on specific pages of your site from the Link Checker panel:

1. **Choose Window → Results to open the Results panel and click the Link Checker tab.**

   The Link Checker panel opens.

2. **Use the Files panel to select the site you wish to check (see Figure 15-6).**

   If you're already working on the site you want to check, you can skip this step.

3. **In the Files panel, select the files you'd like to check.**

   For techniques on selecting files and folders in the Files panel, see the box on page 588.

Tip: Selecting a folder makes Dreamweaver scan all files in that folder.

4. **Click the green-arrow icon in the Link Checker panel. From the menu that appears, choose "Check Links for Selected Files/Folders in Site".**

   Alternatively, you can right-click (Control-click) the selected files, and then choose Check Links → Selected Files from the shortcut menu.

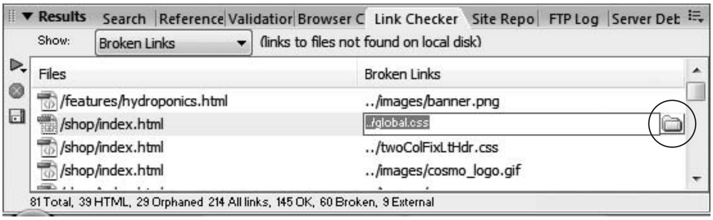
   Either way, Dreamweaver scans the pages and opens the Link Checker panel (Figure 16-1).

Checking the entire Web site

You can check all the links on all pages of your Web site in any of three ways:

- Open the Web site you want to check (press F8 to open the Files panel and use the panel's menu to select the site), and then choose Site → Check Links Sitewide. Or use the keyboard shortcut, Ctrl+F8 (⌘-F8).
- Open the Files panel and right-click (Control-click) any file. Choose Check Links → Entire Local Site from the shortcut menu.
- Open the Link Checker panel (Window → Results to open the Results panel, and then click the Link Checker tab), click the green-arrow icon, and, from its menu, choose "Check Links for Entire Current Local Site".

Once again, Dreamweaver scans your site and opens the Link Checker panel, which lists files containing broken links (Figure 16-1).



Files	Broken Links
/features/hydroponics.html	../images/banner.png
/shop/index.html	../global.css
/shop/index.html	../twoColFixLtHdr.css
/shop/index.html	../images/cosmo_logo.gif

81 Total, 39 HTML, 29 Orphaned 214 All links, 145 OK, 60 Broken, 9 External

Figure 16-1:
The Check Links Sitewide command generates a list of all external links and orphaned files (files with no links to them). If you wish, click the Save (floppy disk) button to save all of this information into a tab-delimited text file. You can also fix a broken link directly inside this panel using the "Browse for File" button (circled) as described on page 589.

UP TO SPEED

Selection Shortcuts for the Files Panel

You'll often want to use the tools in the Results panel on more than one page in your Web site. Fortunately, most of these tools can work on multiple pages in the Files panel.

You probably can figure out that you should click a file to select it. But you can also select several files that are listed consecutively: click the first one, scroll if necessary, and then Shift-click the last one. Dreamweaver highlights all the files between your first and final clicks.

If you want to select several files that aren't consecutive in the list, the trick is to click each one while pressing the Ctrl (⌘) key.

Once you've selected one or more files, you can deselect one by Ctrl-clicking (⌘-clicking) it once again.

Dreamweaver also includes a snazzy command for selecting recently modified files in the Files panel. Suppose you want to select all the files you created or changed today (to see if the links work or to upload them to your Web server, as described on page 620). To use this command, you need to click the Files panel's contextual-menu button in the upper-right corner of the panel. From the menu that appears, select Edit → Select Recently Modified.

The Select Recently Modified window appears. You can either specify a range of dates (for example, files you created or changed between December 1, 2007, and December 7, 2007) or a number of days (to specify all modified files in, say, the last 30 days). (The last option–Modified By–works only with Adobe's Contribute program.) Set the options, click OK, and Dreamweaver selects the appropriate files in the Files panel.

Fixing Broken Links

Of course, simply finding broken links is only half the battle. You also need to *fix* them. The Link Checker panel provides a quick and easy way to do this:

1. **In the Link Checker panel, click a path in the Broken Links column.**

   The path is highlighted, and a tiny folder icon appears to the right (circled in Figure 16-1).

Note: The Link Checker panel shows you which pages *contain* broken links, but doesn't show you the text or images of the broken links themselves, which can make it difficult to figure out how you're supposed to fix them ("Was that a button that links to the home page?"). In such a case, *double-click* the file name in the left column in the Link Checker panel. Dreamweaver opens the Web page and, even better, highlights the link on the page.

Once you've determined where the link should lead ("Oh yeah. That's the button to the haggis buffet menu"), you can fix the link on the page (see page 171) or go back to the Link Checker panel and make the change as described in the next step.

2. **Click the tiny folder icon.**

   The Select File dialog box opens. From here, you can navigate to and (in the next step) select the correct page—the one that *should* have been opened by that link.

   If you prefer, you can type a path directly in the Link Checker panel. Doing so usually isn't a good idea, however, since it's difficult to understand the path from one page to another by just looking at the Link Checker panel. Searching for the proper page using the Select File dialog box is a much more accurate and trouble-free method.

3. **Double-click a Web page in the Select File dialog box.**

   The dialog box disappears, and Dreamweaver fixes the link.

   If your Web site contains other links pointing to the same missing file, Dreamweaver asks if you'd like to fix the same broken link on those pages, too—an amazing time-saver that can quickly repair broken links on dozens of pages.

Note: Dreamweaver's behavior is a bit odd in this regard, however. Once you fix one link, it remains selected in the Link Checker panel. You must click another broken link, or one of the buttons in the window, before Dreamweaver asks if you'd like to fix that same broken link on other pages.

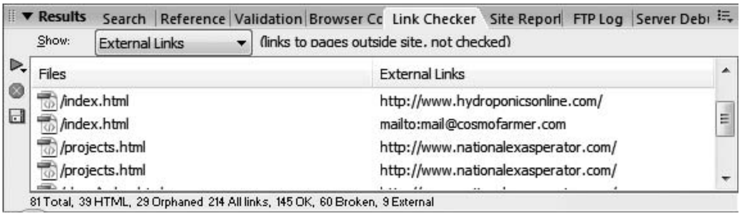
4. **Continue to fix broken links, following steps 1–3.**

   When you've repaired all the broken links, click the close button.

Listing External Links

Although Dreamweaver doesn't verify links to other Web sites on your pages, it does show you a list of such external links when you run the link checker. To see this list, choose External Links from the Show menu of the Link Checker panel (see Figure 16-2). The list includes absolute URLs leading to other sites (like *http://www.yahoo.com*) as well as email links (like *mailto:alien_sightings@nationalexasperator.com*).

This window is especially useful if you've created a link to a certain external Web site several times throughout your Web site and you've decided to change the link. For example, you discovered through testing (or through the W3C Link Checker



Show: External Links (links to pages outside site. not checked)

Files	External Links
/index.html	http://www.hydroponicsonline.com/
/index.html	mailto:mail@cosmofarmer.com
/projects.html	http://www.nationalexasperator.com/
/projects.html	http://www.nationalexasperator.com/

81 Total, 39 HTML, 29 Orphaned 214 All links, 145 OK, 60 Broken, 9 External

Figure 16-2:
Although Dreamweaver can't check external links, you can use this window to change the URL of an external link.

mentioned in the Note on page 587) that an external link that you've peppered throughout your site no longer works:

1. **Choose Site → Check Links Sitewide (or press Ctrl+F8 [⌘-F8]).**

   Dreamweaver scans your site and opens the Link Checker panel.

2. **From the Show pop-up menu, choose External Links.**

   The window lists links you've created to sites outside your own.

3. **Click the external link you want to change.**

   Dreamweaver highlights the link, indicating that you can now edit it.

4. **Type the new URL and then press Enter (Return).**

   If other pages contain the old URL, Dreamweaver asks if you would like to fix them as well. If so, click Yes; the deed is done.

Orphaned Files

The Link Checker panel also provides a list of files that aren't used by any Web page in the site—*orphaned files*, as they're called. You wind up with an orphaned graphic file when, for example, you save a GIF into your site folder but then never use it on a Web page. Or suppose you eliminate the only link to an old page that you don't need anymore, making it an orphaned file. Unless you think you may link to it in the future, you can delete it to clean up unnecessary clutter in your site.

In fact, that's the primary purpose of this feature: to locate old and unused files and delete them. Here's how it works:

1. **Choose Site → Check Links Sitewide, or press Ctrl+F8 (⌘-F8).**

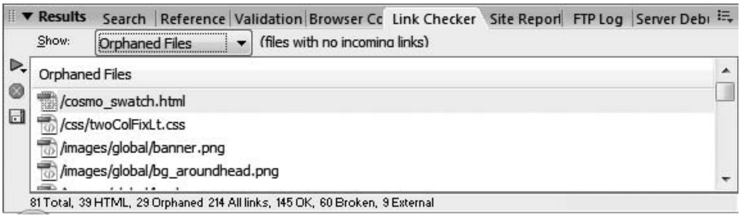
   Dreamweaver opens the Link Checker panel.

2. **From the Show menu, choose Orphaned Files.**

   The list of orphaned files appears (see Figure 16-3).

3. **Select the files you want to delete.**

   For example, by Ctrl-clicking (⌘-clicking) the files.



Show: Orphaned Files (files with no incomina links)

Orphaned Files

/cosmo_swatch.html

/css/twoColFixLt.css

/images/global/banner.png

/images/global/bg_aroundhead.png

81 Total, 39 HTML, 29 Orphaned 214 All links, 145 OK, 60 Broken, 9 External

Figure 16-3: *Identify (and delete) unused files with Dreamweaver's Link Checker panel. This panel lists external links and orphaned files as well as broken links; use the Show menu to isolate the different types of link.*

4. **Press Delete.**

   Dreamweaver asks if you really want to delete the files. Click OK if you do, Cancel if you suddenly get cold feet.

5. **Click the Close button when you're finished.**

Before you get spring-cleaning fever and delete all *orphaned* files in your site, however, keep a few pointers in mind:

- Just because a file isn't *currently* in use doesn't mean you won't need it again later. For example, say you have an employee-of-the-month page. In March, you included a photo of Robin Albert, your best salesperson. In April, someone else got the award, so you removed Robin's photo from the page. The actual graphic file of the photos is still on your computer, it's just that no Web page is currently using it—that makes it an orphaned file—but next month you may need the photo again, when Robin develops a spurt of motivation. Make sure a file is really useless before deleting it.
- More important, Dreamweaver may flag files your site actually needs as *orphaned*. For example, some sites include what's called a *splash page*: an introductory page that first appears when someone comes to the site. It can be a page with a bold graphic and the text "Click here to enter the site." Or it may be a fancy Flash movie intended to make a big impact on your visitors. Usually, this page is nothing more than a welcome mat that leads to the *real* home page. Since it's simply an introductory page, no other page in the site links to it. Unfortunately, that's precisely what Dreamweaver considers an *orphaned* file.
- If you write your own JavaScript code, you may reference graphic files and Web pages. Dreamweaver doesn't keep track of these references, and identifies those files as orphans (unless they're inserted or linked to elsewhere in the page or site).

  On the other hand, Dreamweaver is somewhat smarter when it comes to Spry widgets and Dreamweaver Behaviors. It can track files referenced as part of its own JavaScript programs—for example, graphic files you use in a rollover effect—and doesn't list them as orphaned files.

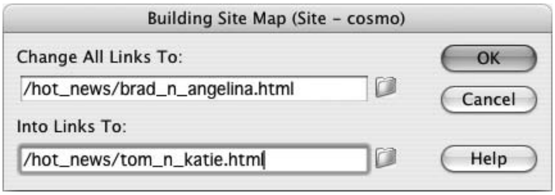
The bottom line is that while this report is useful, use it cautiously when deleting files.

Changing a Link Throughout a Site

Suppose you've created a page on your site to teach your visitors about the basics of the HTML language. You think this page would be really, really helpful to your visitors, so you create links to it from every page on your site. After a while, you realize you just don't have the time to keep this page up to date, but you still want to help your visitors get this information. Why not change the link so it points to a more current and informative source? Using Dreamweaver's Change Link Sitewide command, you can do just that:

1. **Choose Site → Change Link Sitewide.**

   The Change Link Sitewide dialog box opens (see Figure 16-4).



Change All Links To: /hot_news/brad_n_angelina.html

Into Links To: /hot_news/tom_n_katie.html

Figure 16-4: *Dreamweaver uses a root-relative link to specify the page, as indicated by the slash (/). Don't worry: this doesn't mean Dreamweaver makes the link root-relative. It's just how Dreamweaver identifies the location of the page in the site. See page 155 for more on root-relative links.*

   This dialog box offers two different fields: Change All Links To and Into Links To. Understanding what you're supposed to do at this point is easier if you imagine that the first label is actually Change All Links That *Currently* Point To. In other words, first you'll indicate where those links point now; then you'll indicate where you'd like them to go instead.

   At this point, you can type the old Web address into the Change All Links To field. For example, if your aim is to round up every link that now points to Yahoo and redirect them to Google, you could start by typing *http://www.yahoo.com* here.

   If the links you're trying to change refer to a page in your own site, however, proceed to step 2.

2. **Click the folder icon to the right of the Change All Links To field.**

   The "Select Link to Change" dialog box opens. You're about to specify the file that the links point to *now*.

3. **Select a file in the local site folder; click OK (Windows) or Choose (Mac).**

   In the following steps, Dreamweaver will change every link that leads to *this file*, whether it's a graphic, Cascading Style Sheet file, or any other external file that can be part of a Web page.

Tip: As a shortcut to following steps 1, 2, and 3, you can select a file in the Files panel, and *then* choose Site → Change Link Sitewide. Dreamweaver automatically adds the selected file's path to the Change All Links To field.

Now it's time to substitute the new URL or file—the one to which all of those links will be redirected. If you're reassigning them to a different Web site, you can type its URL directly into the Change All Links To field. For example, in the previous example, you can type *http://www.google.com*.

Note: For another way to change one external link into another, see Figure 16-2.

If you'd like the changed links to point to a file on your own Web site instead, proceed to step 4.

4. **Click the folder icon to the right of the Into Links To field.**

   The "Select Link to Change" dialog box opens.

5. **Select a file in the local site, and then click OK (Windows) or Choose (Mac).**

   You've just selected the new file you wish to link to. In other words, every link that once led to the file you selected in step 3 now links to this file. You can select graphics, Cascading Style Sheet files, and any other external files you can include in a Web page.

   You'll get unpredictable results, however, if you change a link that points to a graphic file into, say, a link that points to a Web page, or vice versa. Make sure the "before" and "after" links share the same file type: Web page, style sheet, or graphic.

6. **Click OK to make the change.**

   The same Update Files dialog box you encountered in the last chapter appears, listing every page that will be affected.

7. **Click Update to update the pages.**

   Dreamweaver scans your site and updates the pages.

Validating Web Pages

The Web is a far-flung collection of technologies, scripting and programming languages, and people all working together. When you think about it, it's pretty amazing that an 11-year-old in Fargo, North Dakota, can create a Web site viewable by millions of people around the world, or even that hundreds of different browsers, from Internet Explorer to cellphones, can browse the same Web site. This kind of global communication owes its success in large part to the World Wide Web Consortium (the W3C), an organization composed of representatives from universities, research institutions, corporations, and government agencies dedicated to creating standards for different Internet-related technologies.

The W3C developed standards for HTML, XHTML, CSS, XML, and other Web languages, and continues to create new standards as technologies evolve. Thanks to these standards, companies have a guide to follow when creating new Web browsers.

It sure would be great if all companies followed the standards when building Web browsers, and all Web designers followed the standards when building Web pages. Then anyone with any Web browser could view any Web page. What a wonderful world *that* would be—you'd never have to test your Web pages in different browsers.

Of course, this kind of utopian thinking hasn't always been applied by the major browser makers. As a result, Web developers have been forced to come up with techniques to deal with the way different browsers display HTML. (The Check Browser Compatibility command, covered on page 129, is great for helping you figure out where browsers fail.)

Fortunately, the situation is improving; browser makers are making more of an effort these days to stick to the W3C's recommended standards. And you can, too: Dreamweaver includes a tool for making sure your pages meet the standards set by the W3C.

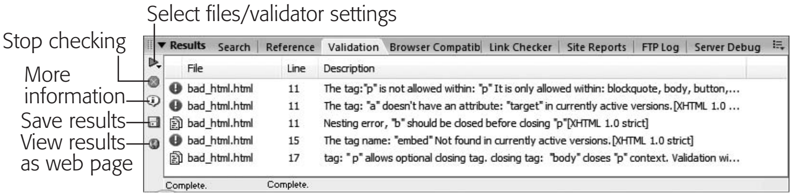
Steps for Validating Web Pages

You can check either an open and saved page or any pages selected in the Files panel (see page 588) by following these steps:

1. **Choose Window → Results and click the Validation tab.**

   The keyboard shortcut for the Results panel is F7. Either way, the Results panel opens, showing the Validation tab (Figure 16-5).

Note: If you want to validate just the page you're working on, choose File → Check Page → Validate Markup.



File	Line	Description
bad_html.html	11	The tag:"p" is not allowed within: "p" It is only allowed within: blockquote, body, button,...
bad_html.html	11	The tag: "a" doesn't have an attribute: "target" in currently active versions.[XHTML 1.0 ...
bad_html.html	11	Nesting error, "b" should be closed before closing "p"[XHTML 1.0 strict]
bad_html.html	15	The tag name: "embed" Not found in currently active versions.[XHTML 1.0 strict]
bad_html.html	17	tag: " p" allows optional closing tag. closing tag: "body" closes "p" context. Validation wi...

Complete. Complete.

***Figure 16-5:** The Validation panel lets you check your Web pages against various W3C standards.*

2. **In the Validation panel, click the green arrow and select which files to inspect.**

   The green arrow reveals a menu with four options. The first checks the page you're currently working on. The second option checks all pages in your site, and the third option checks just those files selected in the Files panel.

   The fourth option—Settings—opens the Validator Preferences window, which lets you select which type of standard to validate against if no *doctype* is specified. A doctype (see page 37) is just a line of code that goes in the head of a document and tells a Web browser which standard the particular page is attempting to adhere to. Because Dreamweaver automatically inserts a doctype (as specified by you either in the site definition window or when you create the page) you won't need to change any of these settings.

Note: You can also validate the file as an XML file by choosing File → Check Page → "Validate as XML." (To the technically inclined: this command not only checks whether your XML is "well-formed," but can also check the document against the Document Type Definition [DTD] specified in your document.)

3. **Review the results.**

   Dreamweaver displays the results in the Validation panel (Figure 16-5). Each validation message is divided into four columns: the first includes an icon that indicates the severity of the error, the second lists the file, the thirds lists which line in the code the message applies to, and the fourth describes the validation error or message.

   The icon at the beginning of the message helps you determine which errors are important. A red stop sign identifies a violation of the standards for the particular doctype (HTML 4.01 Transitional, XTHML 1.0 Transitional, and so on) the page is attempting to follow. In some cases, this warning can indicate that a mandatory tag (like the <body> tag) is missing—a serious problem.

   Other stop-sign errors aren't necessarily fatal. For example, when you insert a Flash movie, Dreamweaver uses the <embed> tag to insert information to play the movie—the <embed> tag isn't even part of the HTML standards; it was created by Netscape but is widely supported by other browsers. You'll get all manner of errors if you validate a page containing this tag, even though it's necessary for viewing the Flash movie in non-IE browsers.

GEM IN THE ROUGH

Is the Validator Valid?

Dreamweaver's validation feature is a big help in seeing where your code fails to match the standards set by the W3C, but it's an imperfect tool. For example, it doesn't provide very good explanations for errors, it doesn't always catch invalid code, and it can't validate CSS.

For the best source of validation information and tools, turn to the W3C's free validation services and information resources. You can find the HTML (or XHTML) validator at *http://validator.w3.org/*. For CSS validation, visit *http://jigsaw.w3.org/css-validator/*. With these tools, you can validate files already online or upload a Web page or CSS file for analysis. It's free, and it provides detailed information about the meaning of any errors.

Because Dreamweaver's validator is faster (you don't need to upload files to the Internet or wait for the W3C validator to download files over the Web), it's a good approach to start with it. Find and fix errors Dreamweaver identifies, and then try out the W3C validator for the finishing touches.

You may also get the red stop-sign error when using some of Dreamweaver's own tools. For example, if you use a Spry Table (page 495), Dreamweaver adds some invalid HTML attributes with names like "spry:repeat", "spry:select", and "spry:detailregion". These aren't "real" HTML, so you'll end up with errors. Just ignore errors that include "spry" in the description.

Less serious problems are flagged with little message balloons. These may inform you that the page has *no* problems, or point out optional fixes. (See the following section for a list of common errors and messages.)

You may also encounter an icon that looks like two pieces of paper placed one on top of the other (who comes up with these things?). These usually occur when you validate against any of the HTML standards and have incorrectly written code—an unclosed <p> tag, for example.

4. **Fix the errors.**

   Alas, Dreamweaver can't fix all of these validation errors. For errors related to improperly written code (see the last paragraph of step 3), you can let Dreamweaver automatically fix them as described on page 368.

   For the other errors, it's up to you and your knowledge of HTML to go into the code and fix any problems. For assistance, check out the online HTML reference (see page 394).

   To get started, double-click an error in the Validation results panel. The Web page opens in Split view, with the invalid HTML code selected. You can then delete or modify the offending code. Keep in mind, though, that the code Dreamweaver produces is the result of many thousands of hours of engineering and testing. Unless you're sure you know how to fix a problem, you may just want to trust the code Dreamweaver produces.

Common Validation Errors

Although a complete reference for creating valid Web sites would fill a book of its own, here are some errors you'll encounter frequently when using Dreamweaver's validator:

- **In HTML 4.0, FONT is deprecated.** You encounter this message in pages you've built with earlier versions of Dreamweaver, or if you set your preferences to work with the old style <font> tag. Since version MX 2004, Dreamweaver has used Cascading Style Sheets when formatting text with the Property inspector, so you probably won't encounter this error on any pages you build using Dreamweaver CS3 (unless you've changed Dreamweaver's factory presets as described on page 40).

- **The tag name: "embed" not found in currently active versions.** This error appears when you insert Flash movies (including Flash buttons and Flash text), as described on page 231. Other errors related to the <embed> tag may also appear, including "The tag: 'embed' doesn't have an attribute: 'quality' in currently active versions." Ignore them.

- **In tag: 'script' the following required attributes are missing: 'type'.** This message indicates that the <script> tag used to insert JavaScript programs is missing the following Type property. Dreamweaver now inserts this property correctly, but it didn't always. If you used Dreamweaver 4 to build your site, for example, you'll get this error message for any page that uses a Dreamweaver behavior. To fix it, add *type="text/JavaScript"* to the <script> tag.

- **The tag: 'body' doesn't have an attribute: 'marginwidth' in currently active versions.** (Similar messages for *marginheight* may also appear.) If you set the left and top margin of a page in the <body> tag (in a previous version of Dreamweaver, for example), you'll encounter this message. Dreamweaver's Page Properties window (see page 45) uses CSS to set margins instead. *Marginwidth* is a Netscape-specific property and not part of any HTML standard. Internet Explorer's *leftmargin* and *topmargin* properties are similarly browser-specific. Although using these properties poses no real problems—other browsers ignore them—you're bettter off using Cascading Style Sheets to set the margins of a page.

Cleaning Up HTML (and XHTML)

You've been reading about what great HTML code Dreamweaver writes, and how all you hand coders need to get on the WYSIWYG bandwagon. But there are exceptions to every rule. In the process of formatting text, deleting elements, and—in general—building a Web page, it's quite possible to end up with less-than-optimal HTML coding. While Dreamweaver usually catches potentially sloppy HTML, you may nonetheless run across instances of empty tags, redundant tags, and nested tags in your Dreamweaver pages.

For example, in the normal course of adding, editing, and deleting content on a page (either by hand or even in Dreamweaver's Design view), you can occasionally end up with code like this:

```
<div align="center"> </div>
```

This empty tag doesn't serve any purpose and only adds unnecessary code to your page. Remember, the less code your page uses, the faster it loads. Eliminating redundant tags can improve the download speed of your site.

Another possible source of errors is you. When you type HTML in Code view or open pages created by another program, you may introduce errors that you'll need to clean up later.

Note: The Clean Up HTML command doesn't fix really bad errors like missing closing tags, or improperly nested tags. You can have Dreamweaver automatically fix these types of problems when opening a file (see page 368).

Aware of its own limitations (and yours), Dreamweaver comes with a command that's designed to streamline the code in your pages: Clean Up HTML (if you're using Dreamweaver's XHTML mode, the command is called Clean Up XHTML). This command not only improves the HTML in your page, it can also strip out other nonessential code such as comments and special Dreamweaver markup code, and it can eliminate a specific tag or tags.

Note: The Clean Up HTML command is extremely useful. Once you've tried it a few times, you'll probably want to use it on all your pages. Unfortunately, it doesn't come with a keyboard shortcut. This is a classic case when Dreamweaver's *keyboard-shortcut editor* is just the white knight you need; using it, you can add a key combination to trigger this command from the keyboard. See page 733 for details.

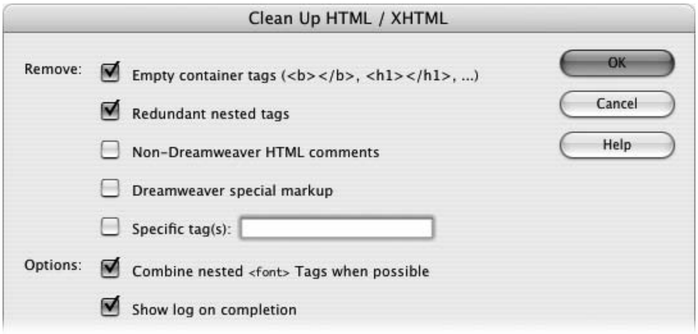
To use this command:

1. **Open a Web page to clean up.**

   Unfortunately, this great feature works only on one page at a time. No cleaning up a site's worth of pages in one fell swoop! Accordingly, it's best to first use the Site Reports feature (see page 600) to identify problem pages. *Then* open them in Dreamweaver and run this command.

2. **Choose Commands → Clean Up HTML (or Clean Up XHTML).**

   The Clean Up HTML/XHTML window appears (see Figure 16-6).



Clean Up HTML / XHTML

Remove: ☑ Empty container tags (<b></b>, <h1></h1>, ...)

☑ Redundant nested tags

□ Non-Dreamweaver HTML comments

□ Dreamweaver special markup

□ Specific tag(s):

Options: ☑ Combine nested <font> Tags when possible

☑ Show log on completion

Figure 16-6:
The Clean Up HTML/XHTML command lets you improve the quality and speed of a Web page by stripping out redundant and useless code. You can even use it to strip out useful tags by specifying a tag in the "Specific tag(s)" field (although the "Find and Replace" command provides a much more powerful method of identifying and removing HTML tags; see page 718).

3. **Turn on the checkboxes for the options you want.**

   Here's a rundown:

   - **Empty Container Tags** deletes any tags that don't actually contain anything. For example, you may delete some text that had been set in boldface, leaving behind opening and closing bold tags without any text in between: <b></b>. Or you may delete an image within a link, leaving behind a useless pair of <a> tags. It's always a good idea to turn on this option.

   - **Redundant Nested Tags** deletes tags that appear within other tags of the same type, like this: <b>You can't get any <b>bolder</b> than bold</b>. The inner set of bold tags does no good, so choosing this option would produce this: <b> You can't get any bolder than bold</b>. This is an extremely useful option.

   - **Non-Dreamweaver HTML Comments** deletes any comments *not* inserted by Dreamweaver as part of its site management tools. For example, the Dreamweaver Template tool (Chapter 19) inserts HTML comments to help identify different parts of the template. However, Web designers also place notes within code to give directions or explain parts of the code. (These comments are invisible in a Web browser. They appear only in the Code view, or as a gold comment icon in Dreamweaver's document window.) In addition, Dreamweaver CS3's CSS Layout files (page 324) also add HTML comments to help you learn how those pages work. Since comments are often added as an aid for maintaining a Web page, you may not want to choose this option.

However, if the page is finished, and you doubt you'll need the information the comments contain, you can decrease the file size of a page by using this option.

Tip: Dreamweaver's Clean Up HTML command won't strip out CSS comments. If you use Dreameweaver's CSS Layouts you'll find the style sheets loaded with CSS comments. If you want a quick way to remove those types of comments visit *www.foundationphp.com/tools/css_comments.php*. On this Web page, you can download a "stored query" (a reusable search) to use with Dreamweaver's "Find and Replace" tool (page 718).

- **Dreamweaver Special Markup** deletes any special code Dreamweaver inserts. Dreamweaver relies on certain code in some of its features, including tracing images, templates (Chapter 19), and Libraries (Chapter 18). Choosing this option also eliminates the special code that makes those features work, so use this option with care. (Since the template feature adds a great deal of this specialized code, Dreamweaver includes a Template Export command that lets you export an entire site with all template code removed. See page 700.)
- **Specific Tag(s)** deletes HTML tags you specify. Type the name of the tag (without brackets) in the field like this: *font*. To remove multiple tags at once, separate each tag name by a comma like this: *font*, *blink*.

  Be careful with this option. Since it lets you remove *any* tag from a page, it's easy to delete an important and necessary tag (like the <body> tag) from your page by accident. Furthermore, Dreamweaver's "Find and Replace" command provides much more powerful tools for performing this kind of surgery (see page 718).
- **Combine Nested <font> Tags when Possible** combines multiple *font* properties into a single tag. Hopefully, you've moved to CSS for all of your text formatting needs, so you don't use the <font> tag and don't need this option.
- If you want to see a report of all the changes Dreamweaver makes to a page, turn on **Show Log on Completion**.

4. **Click OK to clean up the page.**

   If you selected "Show Log on Completion," a dialog box then appears, listing the types of changes and the number of changes that Dreamweaver made to the page.

Note: When running this command on an XHTML page, Dreamweaver also checks to make sure the syntax of the page matches the requirements of an XHTML document (see page 9). Among other concerns, in XHTML, all tags must be lowercase, and any empty tags must be terminated correctly–<br /> for the line break tag, for example. Dreamweaver fixes such problems.

As long as you keep the page open, you can undo changes Dreamweaver made. Suppose you asked Dreamweaver to remove any comments, and suddenly realized you really did need them. Ctrl+Z (⌘-Z) does the trick. You can also use the History panel (page 81), which lists this step as Clean Up HTML/XHTML.

Site Reporting

The Clean Up HTML command is a great way to make sure your code is well written. But what if you forget about it until after you've built all 500 pages of your site? Do you have to open each page and run the command—whether there's a problem or not?

Fortunately, no. Dreamweaver's Site Reports feature makes identifying problems throughout a site a snap. As well as locating the problems fixed by the Clean Up HTML command, it makes Dreamweaver check your pages for other problems, such as missing titles, empty Alt properties for images, and other problems that can make your Web site less accessible to disabled Web surfers.

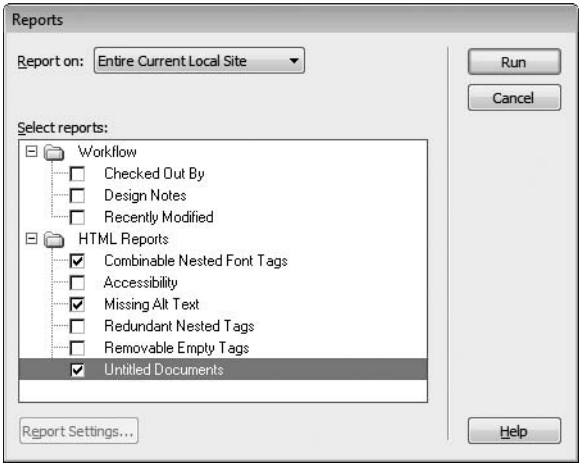
Tip: To save time when running a report, you can exclude select folders from a Site Report operation using the cloaking feature described on page 626.

After running a report, Dreamweaver displays a list of pages with problems. Unfortunately, the Site Reports feature only finds problems; it doesn't fix them. (To see the full lifecycle of an HTML error, see Figure 16-9.) You have to open and fix each page individually.

To run a report on one or more Web pages, proceed like this:

1. **Choose Site → Reports.**

   The Reports window opens (see Figure 16-7).



Reports

Report on: Entire Current Local Site

Select reports:

- Workflow
  - □ Checked Out By
  - □ Design Notes
  - □ Recently Modified
- HTML Reports
  - ☑ Combinable Nested Font Tags
  - □ Accessibility
  - ☑ Missing Alt Text
  - □ Redundant Nested Tags
  - □ Removable Empty Tags
  - ☑ Untitled Documents

Figure 16-7: *Dreamweaver's Site Reports feature makes quick work of finding common page errors. You won't use all of these options, but making sure you check for missing Alt text (page 209) and any untitled documents is a very good idea before you put a new Web site up on the Internet.*

2. **From the "Report on" menu, select the files to analyze.**

   Dreamweaver can report on a single Web page, multiple pages, or even an entire site. Choose *Current Document* to check the Web page that's open at the moment. *Entire Current Local Site* checks every Web page in the local site folder, including folders inside it. This option is great when you want to check your entire site prior to uploading it to a Web server and making it "live" (more on that in Chapter 17).

Selected Files in Site checks only the files you choose in the Files panel. You need to open the Files panel and select files in the local file list for this option to work. See the box on page 588 for methods on selecting files in the Files panel. Choose this option when you've modified or added pages to a site, and are ready to move them to the Web server.

Folder checks all Web pages in a selected folder. After you choose this option, an empty field and a folder icon appear. Click the folder icon; a dialog box gives you the opportunity to locate and select the folder you wish to check, including any folders inside it. You can also use this option when you wish to check pages that aren't actually part of the current site.

3. **Select the types of reports you want Dreamweaver to generate.**

The Reports window is divided into two types of reports. The first set, Workflow reports, mostly deals with features that facilitate working with others as part of a production team (see the following chapter). The last option in this group—Recently Modified—generates a list of files that have either been created or modified within a certain number of days or within a range of dates (February 1 of last year to the present, say). When you run this type of report, Dreamweaver lists the files in the Site Reports panel *and* opens a Web page listing the files in your browser.

Note: The Recently Modified site report looks for files created or changed in the last seven days, but you can adjust that time frame. Select Recently Modified in the Reports window and click the Report Settings button (Figure 16-7). A window appears where you can change the range of dates to check.

In fact, you'll find the technique described on page 588 more useful. It not only identifies recently modified files, but also selects them in the Files panel, giving you a lot more options for acting on this information. For example, with those files selected, you can upload them to your Web server, run Find and Replace operations on just those files, or access many other tools.

The second type, HTML Reports, are useful for locating common errors, such as forgetting to title a Web page or forgetting to add an Alt property to an image.

Three of the HTML Report options—*Combinable Nested Font Tags*, *Redundant Nested Tags*, and *Removable Empty Tags*—search for pages with common code mistakes. These are the same problems fixed by the Clean Up HTML command (see page 597).

The *Accessibility* report lets you see how usable your site is to people with disabilities. This sophisticated command checks to see how well your pages conform to Web accessibility guidelines mandated by the U.S. Government and recommended by the W3C (see page 604). This option produces detailed reports, so it's usually best to run it separately.

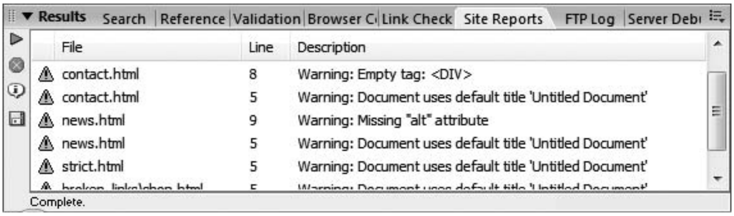
Turn on *Missing Alt Text* to search for pages with images that are missing an alternate text description (see page 209). If you turn on the Accessibility option, you can leave this option turned off; the Accessibility analyzer already includes missing Alt text.

Finally, turn on *Untitled Documents* to identify pages that are either missing a title or still have Dreamweaver's default title (page 38).

Note: The Site Report command won't identify XHTML syntax errors like those fixed by the Clean Up XHTML command (see page 597).

4. **Click Run.**

   Dreamweaver analyzes the pages you specified. It then produces a report that lists pages that match your report settings (see Figure 16-8). Each line in the Results window displays the name of the file, the line number where the error occurs, and a description of the error.



File	Line	Description
⚠ contact.html	8	Warning: Empty tag: <DIV>
⚠ contact.html	5	Warning: Document uses default title 'Untitled Document'
⚠ news.html	9	Warning: Missing "alt" attribute
⚠ news.html	5	Warning: Document uses default title 'Untitled Document'
⚠ strict.html	5	Warning: Document uses default title 'Untitled Document'
⚠ broken_links\shop.html	5	Warning: Document uses default title 'Untitled Document'

Complete.

Figure 16-8:
If you decide that the report is taking too long, you can always stop it by clicking the icon in the left-hand toolbar of the Results panel. It looks like a red stop sign with an X through it.

5. **In the Results panel, double-click the file to open it.**

   Dreamweaver opens the file and automatically highlights the offending code.

6. **Fix the problem according to its type.**

   For a page containing *Combinable Nested Font Tags*, *Redundant Nested Tags*, or *Removable Empty Tags* errors, use the Clean Up HTML command as described on page 597.

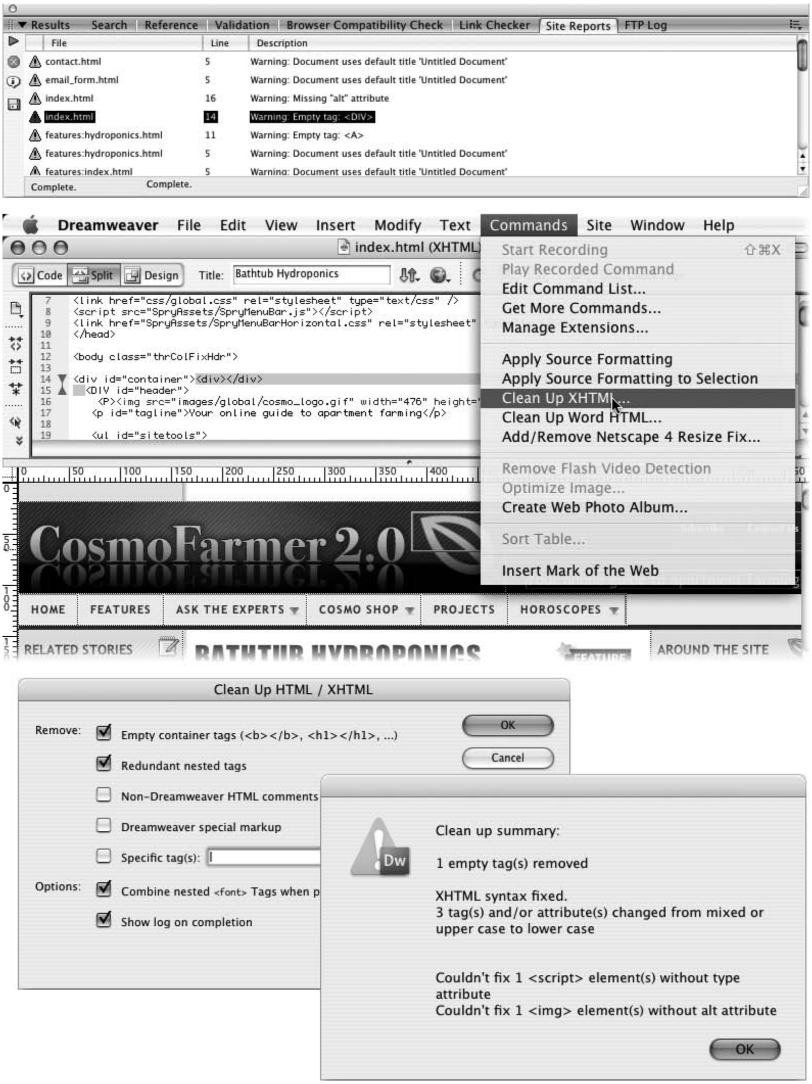
   For pages missing a title, add one using the technique described on page 45.

   For Accessibility problems, read the detailed discussion starting on page 604.

   You can add missing Alt properties using the Property inspector, as described on page 209, but you may find it faster to use Dreamweaver's powerful "Find and Replace" command (see page 718).

7. **Continue opening files from the Results window and fixing them until you've corrected each mistake.**

   Unfortunately, Dreamweaver doesn't provide a quick, one-step method to fix any of these problems. Except when using the "Find and Replace" tip for adding missing Alt text, you must open and fix each page individually.



File	Line	Description
contact.html	5	Warning: Document uses default title 'Untitled Document'
email_form.html	5	Warning: Document uses default title 'Untitled Document'
index.html	16	Warning: Missing "alt" attribute
index.html	14	Warning: Empty tag: <DIV>
features:hydroponics.html	11	Warning: Empty tag: <A>
features:hydroponics.html	5	Warning: Document uses default title 'Untitled Document'
features:index.html	5	Warning: Document uses default title 'Untitled Document'

Complete. Complete.

```
<link href="css/global.css" rel="stylesheet" type="text/css" />
<script src="SpryAssets/SpryMenuBar.js"></script>
<link href="SpryAssets/SpryMenuBarHorizontal.css" rel="stylesheet"
</head>

<body class="thrColFixHdr">

<div id="container"><div></div>
  <DIV id="header">
    <P><img src="images/global/cosmo_logo.gif" width="476" height="
    <p id="tagline">Your online guide to apartment farming</p>

    <ul id="sitetools">
```

Remove: ☑ Empty container tags (<b></b>, <h1></h1>, ...)
☑ Redundant nested tags
□ Non-Dreamweaver HTML comments
□ Dreamweaver special markup
□ Specific tag(s):
Options: ☑ Combine nested <font> Tags when p
☑ Show log on completion

Clean up summary:

1 empty tag(s) removed

XHTML syntax fixed.
3 tag(s) and/or attribute(s) changed from mixed or upper case to lower case

Couldn't fix 1 <script> element(s) without type attribute
Couldn't fix 1 <img> element(s) without alt attribute

Figure 16-9: *The life cycle of a typical HTML error.*

Top: After running a report, you may find a common HTML error, like an empty div tag. Double-click the page in the Results window to open it.

Second from top: The page opens with the offending code selected in Split Code view. (Dreamweaver often highlights the problem HTML code so that you can identify the problem.) Since you can fix this particular error–and more–with the Clean Up HTML/XHTML command, choose Commands → Clean Up HTML/XHTML.

Third: The Clean Up HTML/XHTML window opens. Even though you can just clean up the error you identified earlier, it won't hurt to clean up other problems that may appear in your code (and somewhere else in the Site Report Results window). Click OK to clean up the HTML.

Bottom: Dreamweaver reports back to you. In this case, Dreamweaver fixed a few other XHTML problems that the Site Report didn't catch and reported what it couldn't automatically fix: the type attribute for a script tag and the Alt property for an image, both of which require human intervention to fix (see page 209).

If you want to save the results of your report, click the Save Report button. Dreamweaver opens a Save As dialog box and lets you save the report as an XML file (so you can file it in the "Files I don't really need" folder on your desktop).

Accessibility

Even the clearest, most well-planned Web sites can pose a real challenge to people with vision problems. Likewise, people with motor skill problems may be unable to use a mouse and have to rely on keyboard shortcuts to navigate a Web page.

To make Web sites more accessible to those with a variety of disabilities, the Web Accessibility Initiative (WAI)—a part of the World Wide Web Consortium—has proposed guidelines for the design of Web sites. In fact, the U.S. government has mandated its own set of guidelines (Section 508 of the U.S. Rehabilitation Act) for all Web sites built by and for the government. Some states have even more stringent guidelines, and countries throughout the world are either in the process of developing accessibility standards or already have such standards in place. Following the WAI guidelines improves your site by making it accessible to a larger audience.

Dreamweaver provides several tools for meeting these guidelines and helping Web designers build more accessible sites (see page 211). But for comprehensive analysis of your site, use the Accessibility site report. With it, you can evaluate your Web pages to make sure they comply with W3C guidelines and the requirements of Section 508.

Checking your site against accessibility standards is similar to running any other report. Follow steps 1–4 on page 600, taking care to turn on the Accessibility checkbox. (You can also check accessibility for just the page you're working on: choose File → Check Page → Accessibility.)

Once the report is complete—which may take awhile for an entire site—the process of identifying and fixing the errors is a little different than with other reports:

1. **Select an error in the Results panel (see Figure 16-10).**

   Accessibility errors come with one of two designations: *Failed* and *Manual*. A failure (marked by a red X in the Results panel) indicates that some item on the page fails to meet one of the prescribed guidelines. The most common failure is missing Alt text for graphics.

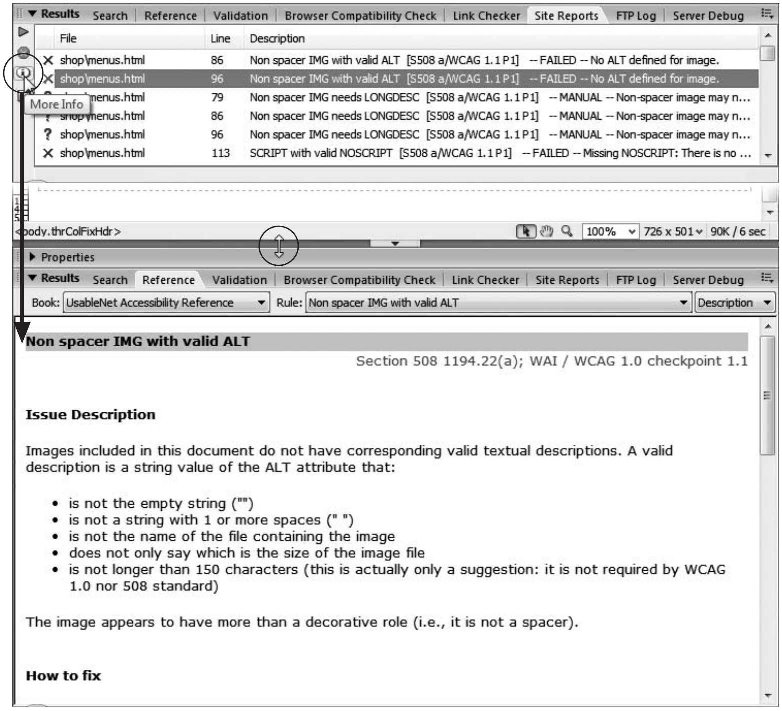
   "Manual" errors are those that Dreamweaver is not sure about. Check them manually and make corrections, if you deem them necessary.

   In both cases, fixing the problems is up to you; Dreamweaver doesn't do any auto-fixing here.

Tip: The Insert Image command should be set to remind you to add alt text; if you're not prompted to supply alt text when inserting an image, turn to page 211 to learn how to turn on this feature.

2. **Click the More Information (i) button in the Results panel.**

   The Reference panel shows a description of the problem and techniques for fixing it (see Figure 16-10). In addition, you'll find some guidance in the accessibility guide built into the Reference panel (see page 394).



	File	Line	Description
✕	shop\menus.html	86	Non spacer IMG with valid ALT [S508 a/WCAG 1.1 P1] -- FAILED -- No ALT defined for image.
✕	shop\menus.html	96	Non spacer IMG with valid ALT [S508 a/WCAG 1.1 P1] -- FAILED -- No ALT defined for image.
	menus.html	79	Non spacer IMG needs LONGDESC [S508 a/WCAG 1.1 P1] -- MANUAL -- Non-spacer image may n…
?	shop\menus.html	86	Non spacer IMG needs LONGDESC [S508 a/WCAG 1.1 P1] -- MANUAL -- Non-spacer image may n…
?	shop\menus.html	96	Non spacer IMG needs LONGDESC [S508 a/WCAG 1.1 P1] -- MANUAL -- Non-spacer image may n…
✕	shop\menus.html	113	SCRIPT with valid NOSCRIPT [S508 a/WCAG 1.1 P1] -- FAILED -- Missing NOSCRIPT: There is no …

Book: UsableNet Accessibility Reference Rule: Non spacer IMG with valid ALT Description

Non spacer IMG with valid ALT

Section 508 1194.22(a); WAI / WCAG 1.0 checkpoint 1.1

Issue Description

Images included in this document do not have corresponding valid textual descriptions. A valid description is a string value of the ALT attribute that:

- is not the empty string ("")
- is not a string with 1 or more spaces (" ")
- is not the name of the file containing the image
- does not only say which is the size of the image file
- is not longer than 150 characters (this is actually only a suggestion: it is not required by WCAG 1.0 nor 508 standard)

The image appears to have more than a decorative role (i.e., it is not a spacer).

How to fix

Figure 16-10: *The UsableNet Accessibility Reference provides diagnosis and recommendations for all accessibility problems encountered by Dreamweaver's Accessibility reporting command. You will probably have to stretch the panel to a taller height to read this information: Windows users just drag the dark bar (circled in the middle of the figure) upward to make the Reference panel taller.*

3. **Double-click the name of the file in the Results panel.**

   As with other reports, Dreamweaver opens the file and automatically highlights the offending code. You can then make the recommended changes and save the page.

Accessibility Priorities

As you'll quickly learn, there are a *lot* of different guidelines for creating accessible sites. The whole issue can be confusing (some helpful resources are listed in the box on page 606).

To get you started, here are a few of the priority items recommended by the WAI:

- **Images, animations.** Use the Alt property to describe the function of each visual element on a page (see page 209).
- **Image maps.** Provide Alt descriptions for each link in an image map (see page 226).
- **Hypertext links.** Use understandable text for all links. Try reading it aloud to make sure the text clearly indicates where the link goes. Avoid "click here" links.
- **Organizing page content.** Use headings, lists, and consistent structure. Avoid the <font> tag and the <table> tag for organizing page content; instead, use Cascading Style Sheets for text styling and page layout.

- **Graphs, charts.** Summarize information contained in informational graphics.
- **Scripts, applets, plug-ins.** Provide alternative content, in case active features are inaccessible or unsupported.
- **Frames.** Use the *noframes* element and title each frame page (though you're better off skipping this quickly dying Web design technique).

POWER USERS' CLINIC

Making Accessible Web Sites

Building Web sites that meet everyone's requirements is a daunting task. Unless you have screen-reader software to simulate the experience of a visually impaired visitor, or a crew of people with a variety of impairments (from color-blindness to repetitive stress injury) to test your site, how do you know what it takes to build a fully accessible Web site?

Fortunately, there are plenty of resources to get you started. The best place to start is at the Web Accessibility Initiative's Web site, especially their accessibility resources page: *www.w3.org/WAI/Resources*. Here you'll find lots of information, including examples of different disabilities some Web surfers face, plus tips, checklists, and techniques for making sites accessible. You should also check out Dive Into Accessibility (*http://diveintoaccessibility.org*), a Web site dedicated to teaching Web designers the whys and hows of accessibility.

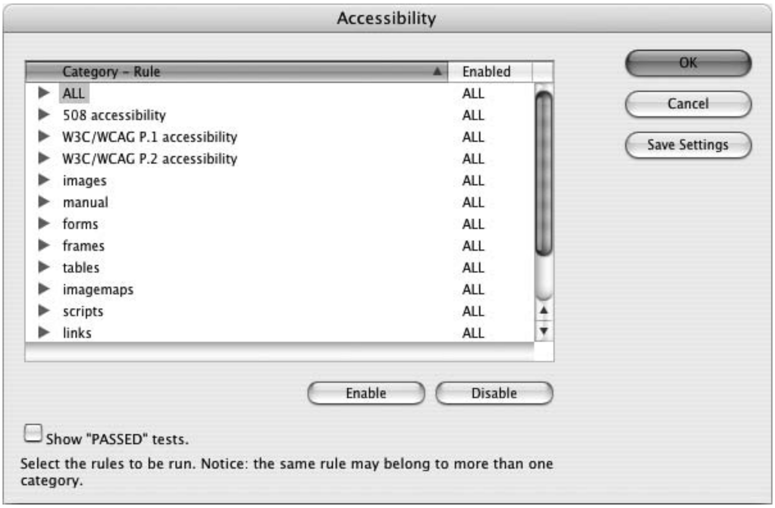
And if you do want to see how screen readers work with your site, you can download a demo of JAWS, one of the most popular screen readers, at *www.freedomscientific.com/fs_downloads/jaws.asp*. A free alternative is a Firefox extension named Fangs, which displays (in text) what a screen reader like JAWS reads aloud. You can download it from *http://sourceforge.net/projects/fangs/*.

Finally, Adobe dedicates an entire section of its site to accessibility issues: *www.adobe.com/accessibility/*. Here, you'll find explanations of the issues, tips for using Adobe products, and a showcase of accessible Web sites.

Accessibility Options

Dreamweaver's accessibility report covers the Section 508 requirements as well as version 1 of the WAI's "Web Content Accessibility Guidelines" (more commonly referred to as WCAG 1.0). This thoroughness is commendable, but it may be more than you need. By all means, pare down the report to include just the guidelines that apply to your site. To do so, choose Site → Reports and turn on the Accessibility box. Click the Report Options button to open the window shown in Figure 16-11.

You can disable any rules Dreamweaver uses to evaluate your pages. To turn off an entire category—forms, frames, or tables, for example—click the name and then click Disable. If you'd like to get more specific, click the + button next to a category name to expand a list of individual rules for that category. You can select and disable one or more rules. For example, if your site doesn't use frames, you'll save time and Dreamweaver's energy by turning off the frames category.



Category – Rule	Enabled
ALL	ALL
508 accessibility	ALL
W3C/WCAG P.1 accessibility	ALL
W3C/WCAG P.2 accessibility	ALL
images	ALL
manual	ALL
forms	ALL
frames	ALL
tables	ALL
imagemaps	ALL
scripts	ALL
links	ALL

☐ Show "PASSED" tests.

Select the rules to be run. Notice: the same rule may belong to more than one category.

Figure 16-11:
The Accessibility options window lets you control which rules Dreamweaver uses to evaluate a Web site's accessibility. You may want to fine-tune this list based on recommendations in this book or from the online sources mentioned in the box on the opposite page.

Download Statistics

Remember the old joke that WWW really stands for "World Wide Wait"? Even as more and more people upgrade to speedy DSL and cable modems, file size is the constant foe of the Web designer. What takes only a moment to load from your computer's hard drive could take minutes to travel across the Internet. The more information you put into a Web page, the more time it takes to load.

You can judge how big your page is, and therefore how long it will take to download, by looking at the download stats in the status bar at the bottom of the document window. You'll see something like this: *9k/2 sec*. This term indicates the file size of the Web page (9k, for instance) and how long it will take a visitor to download the page (2 seconds) using a 56 Kbps modem.

GEM IN THE ROUGH

Caching In

Behind the scenes, Web browsers store the graphics they download onto the computer's hard drive. This is a speed trick. If you click your Back button to return to a Web page whose graphics files the browser has already downloaded, the browser simply pulls them out of the cache–off the hard drive, in other words–instead of re-downloading them. This arrangement makes the page load more quickly, since the hard drive is generally much faster than the modem.

As a Web designer, you can capitalize on this standard Web browser feature by reusing the same graphics files on more than one page of your site. For instance, you can create a navigation bar composed of small graphic buttons (Home, Contact Us, Products, and so on). If you reuse those buttons on other pages of the site, those pages appear to download more quickly.

This same trick works for external CSS style sheets. A browser needs to download a complete style sheet with hundreds of formatting commands only once for any page on a site to reuse it. By putting all of your formatting into one or more external files, you can keep your Web pages mean and lean.

The file size and download time takes into account linked files like images, external CSS style sheets, and Flash movies. This information provides a realistic picture of download speed, since not only does a page have to download, but any files that page uses (like a photo) also need to travel across the Internet to a visitor's browser. The file size and download time can be misleading, however. If you use the same external files on other pages in the site (for example a common external style sheet or a logo graphic that appears on each page) your site's visitors may have already "cached" those files and won't need to spend the time downloading them again (see the box on page 607).

Note: People hate to wait. You may think that the graphic design of your Web site is so compelling that even if it takes a full minute to download that zippy new Flash home page, people will stick around.

Think again. Research shows that 10 seconds is the maximum amount of time that someone stays focused on a task while waiting. That means if you're designing a Web site for people with 56 Kbps modems, keep your pages below about 45 KB.

CHAPTER

17

Moving Your Site to the Internet

Building Web pages on your computer is a big accomplishment, but it's not the whole job. Your beautifully designed and informative Web site will simply languish in obscurity on your hard drive unless you move it to a Web server.

Fortunately, once your Web site is ready for prime time, you can put it on a server without ever leaving the comfort of Dreamweaver. The program includes simple commands for transferring files back and forth between the Web server and your desktop.

Depending on how you operate, choose one of these two methods for transferring your files:

- If you're the sole Web developer for a site, Dreamweaver's Get and Put commands are the easiest way to go.
- If, on the other hand, there's a group of people working on your site, Dreamweaver's Check Out and Check In tools let you move files at will without wiping out others' hard work. In addition, this group feature integrates seamlessly with two other industrial-strength Web collaboration tools: Microsoft's Visual SourceSafe and WebDAV, an open source file management tool.

Either way, you begin by defining a remote site.

Defining a Remote Site

As you create your Web site on your computer, you keep it in a *local root folder* (see page 33), often called a *local site* for short. You can think of a local site as a work-in-progress. As your site is under construction—whether you're building it from scratch or adding and modifying pages—you'll routinely have partially finished documents sitting on your computer.

Then, when you've perfected and tested your pages using the techniques described in Chapter 16, you're ready to transfer them to a Web server that's connected to the Internet. Dreamweaver calls the Web server copy of your files the *remote site*, and the program provides five methods for transferring files between it and your local site:

- **FTP.** By far, the most common method is *FTP*, or File Transfer Protocol. Just as HTTP is the process by which Web pages are transferred from servers to Web browsers, FTP is the traditional method of transferring files over the Internet, and it's the one to use if a Web hosting company or Internet Service Provider (ISP) provides the home for your Web pages.
- **Over the local area network.** If you're working on an intranet, or if your company's Web server is connected to the company network, you may also be able to transfer files just as you would any files on your office network (using the Network Neighborhood, My Network Places, or "Connect to Server" command, depending on your operating system), without even connecting to the Internet.
- The last three options—**RDS, SourceSafe, and WebDAV**—are advanced file management systems used for collaborative Web development. They're discussed on page 616.

Setting Up a Remote Site with FTP

You can set up a remote site only if you've first set up a *local* site on your computer. Even if you're just putting up a temporary site while working on your *real* Web site, you must at least have the temporary site constructed and defined in Dreamweaver (see page 28).

FREQUENTLY ASKED QUESTION

Beyond Dreamweaver

Do I have to use Dreamweaver to move my files to the Web server?

No. If you're used to using another program for this purpose, such as CuteFTP (Windows) or RBrowser (Mac), you can continue to use it and ignore Dreamweaver's Remote Site feature.

However, if you've never before used Dreamweaver to move files to a server, you may want to at least try it; you'll find that Dreamweaver simplifies much of the process. For example, when you want to move a file from your computer to the Web server using a regular FTP program, you must first locate the file on your local machine and then navigate to the proper folder on the Web server. Dreamweaver saves you both steps; when you select the file in the Files panel and click the Put button, Dreamweaver automatically locates the file on your computer and transfers it to the correct folder on the Web server.

Note: Dreamweaver lets you edit *directly* on pages located on a Web server, using an FTP connection (or if you're working with ColdFusion files, an RDS connection). This feature isn't always the best way to go: It's slow and leaves your works-in-progress open for the world to see on the Internet.

Once that's done, here's how you go about creating an Internet-based mirror of your local site folder:

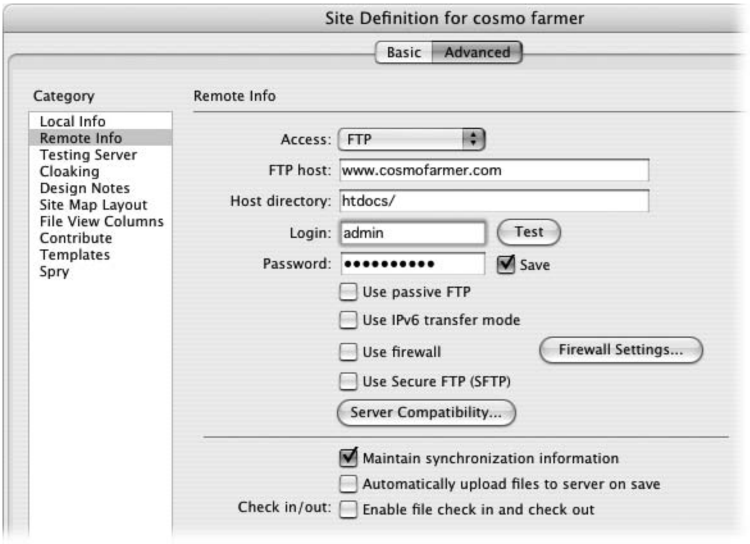
1. **Choose Site → Manage Sites.**

   The Manage Sites dialog box opens, listing all sites that you've defined so far. You're about to create a living, Internet-based *copy* of one of these hard drive–based local sites.

2. **Click the name of the site you want to post on the Internet, and then click Edit.**

   Alternatively, just double-click the site name in the list. The Site Definition window appears for the selected site, as shown in Figure 17-1.

Note: You can also define the remote site and the local site simultaneously, when you first begin creating a Web site (as described on page 34). Even then, however, Dreamweaver requires that you first give the site a name and choose a local root folder. At that point, you rejoin the steps described here.



Access: FTP

FTP host: www.cosmofarmer.com

Host directory: htdocs/

Login: admin

Password: •••••••••• ☑ Save

□ Use passive FTP

□ Use IPv6 transfer mode

□ Use firewall

□ Use Secure FTP (SFTP)

☑ Maintain synchronization information

□ Automatically upload files to server on save

Check in/out: □ Enable file check in and check out

Figure 17-1: *If a Web hosting company or ISP hosts your Web site, you'll most likely use FTP to put your site on the Web. To make sure you have all the information you need to connect to the Web server, ask your ISP for these four pieces of information: (1) the FTP host name of the server, (2) the path to the root directory for your site, (3) your login name, and (4) your password. (If the Web server comes with your email account, your login and password may be the same for both.)*

3. **Click the Advanced tab.**

   You can also use the Site Definition Wizard (Basic tab) to set up a remote site. However, since the wizard requires you to step through screen after screen of setup information—even after you've already supplied most of it—the Advanced tab is faster.

4. **In the Category panel, click Remote Info. From the Access pop-up menu, choose FTP.**

   The Site Definition window now shows menus and fields for collecting your connection information (see Figure 17-1).

5. **Fill in the "FTP host" field.**

   Your *FTP host name* may be a name like *www.cosmofarmer.com*. It never includes directories, folders, or slashes (like *www.cosmofarmer.com/home*); never includes codes for the FTP protocol (*ftp://ftp.cosmofarmer.com*); and is usually not just a domain name, such as *cosmofarmer.com*. It can also be an IP address, like *64.226.43.116*. In most cases, it's the address you would enter into a Web browser (minus the *http://*) to get to your site's home page.

   If you don't know the host name, there's only one way to find out: call or email your Web hosting company or ISP, or check its Web site.

6. **In the "Host directory" field, type the path to the root directory.**

   You're specifying which *folder* within your Web hosting account will contain your Web page files and serve as the root folder for your site.

   Just as on your own hard drive, all your Web site's files on the Web server are completely contained inside a master folder referred to as the *root folder*. But when you connect to your Web server using FTP, you're rarely connected to the root folder itself. Instead, you usually connect to a folder that isn't accessible over the Web—some administrative folder for your Web account, often filled with folders for log reports of your site's Web traffic, and other files not visible over the Web.

   Your hosting account's root directory folder (or even a folder within it) is where you place your *site's* root folder; that's why you're typing its name here. Common names for the root folder at ISPs or Web hosting companies are *docs, www, htdocs, public_html, or virtual_html*. (Call or email your Web hosting company or ISP to find out.)

   The information you give Dreamweaver here represents the path from the FTP folder to the root folder. It may look like this: *www/htdocs/* (if you leave the trailing forward slash off, Dreameaver adds it when you close the Site Definition window). In effect, you're telling Dreamweaver: "After connecting to the Web server, you'll find a folder named *www*. Inside *this* folder is another folder, *htdocs*. Put my site files in there." In other words, *htdocs* is the Web site's root folder on this particular remote hosting account.

7. **In the Login field, type your user name, and then type your password in the Password field.**

   Dreamweaver uses bullets (•••) to display your password so that passing evildoers in your office can't see what you're typing.

   If you want Dreamweaver to remember your password each time you use the program, turn on the Save checkbox. This way, you won't have to type your password each time you connect to the Web server.

Warning: For security reasons, don't turn on the Save box if you access the Web using computers at, say, your local library, or anywhere else where people you don't trust may use the machine. Otherwise, you might just awaken one morning to find the following splattered across your home page: "Hi there! Welcome to Jack's house of illegally acquired and unlawfully distributed music, featuring Metallica's greatest hits."

8. **Turn on the "Use passive FTP" or "Use firewall" boxes, if necessary.**

   If you're building sites from your home, home office, or small company, you may never need to use these options.

   Many corporations, however, use *firewalls*: hardware- or software-based gateways that control incoming and outgoing traffic through a network. Firewalls protect the company network from outside hackers; unfortunately, they also limit how computers inside the network—behind the firewall—can connect to the outside world.

Tip: When Dreamweaver can't connect to a Web server, one of the first things you should try is turning on the "Use passive FTP" checkbox. Your first chance to see whether this maneuver is necessary comes below, in step 13.

   If your company's system administrator confirms that you have a firewall, you'll need to also get the name of the firewall host computer and its port number. Click the Firewall Settings button, which opens the Site Preferences dialog box). Your firewall configuration may also require *passive FTP*—a method of connecting using your local software, rather than the firewall server. Check with your administrator to see if this is the case, and, if so, turn on the "Use passive FTP" checkbox.

Note: You probably won't need to turn on the "Use IPv6 transfer mode" checkbox for several years to come. It's intended for the day when we run out of IP addresses, and Web servers switch from IP addresses that look like *192.168.1.1* to ones that look like this: *1A23:120B:0000:0000:0000:7634:AD01:004D.* Egads.

9. **If your Web server uses SFTP (a secure, encrypted form of FTP), turn on the Use Secure FTP (SFTP) box.**

   Secure FTP encrypts *all* of your data, not just your user name and password, so information transferred in this way is unintelligible to Internet snoops. It's the ideal method of connecting to a Web server, since normal FTP connections send your username and password unencrypted, susceptible to Internet creeps; in many cases, Secure FTP is also faster. Unfortunately, not all Web hosting companies offer this advanced option.

   By the way, leave "Automatically upload files to server on save" turned off. Because it makes Dreamweaver upload the file each time you save, it slows you down and runs the risk of putting half-finished Web pages on your server for all the world to see. It's better to just upload the page after you're completely finished with it.

10. **Leave the Server Compatibility options alone.**

    That big Server Compatibility button is useful when you're having trouble connecting to the server or moving files on the server. Dreamweaver, out of the box, is tuned to make FTP run as fast as possible, so leave these options alone, unless you're having trouble. If you are having trouble connecting to your server, start with the Tip on page 613. If that doesn't work click the Server Compatibility button and turn off the "Use FTP performance optimization" box.

    If everything's okay when you're connecting to your server, but you're getting errors when moving files on the server, you should turn on the "Use alternative FTP move method" box. This method is slower but more reliable. It's also handy if you use Adobe's Contribute program and are taking advantage of the "rollback" feature (to learn more about Contribute, visit *www.adobe.com/contribute/*).

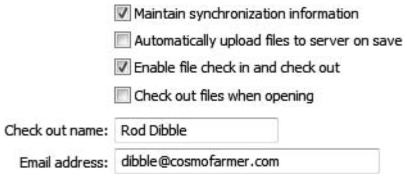
11. **If you don't want to synchronize files, turn off the "Maintain synchronization information" box.**

    Dreamweaver's synchronization was greatly improved in Dreamweaver 8 and is a useful tool for keeping a site up to date. It helps you maintain the most recent versions of a file on the remote server, by keeping track of when you've changed a file on your computer. When you synchronize a site, Dreamweaver can move the more recent files onto the Web server. This feature is described in detail on page 634. If you don't use synchronization, definitely turn off this checkbox. When this feature is on, Dreamweaver inserts little files named *dwsync.xml* throughout your site in folders named *_notes*. These items keep track of synchronization information about each file in your site, but there's no need to clutter things up with these files if you don't use synchronization.

12. **Turn on "Enable file check in and check out," if you like.**

    Turn it on if, for example, you and your team of Web developers all use Dreamweaver. Then fill in the corresponding options as explained in Figure 17-2.

    If you do wind up using the "checking out" feature (see page 628), you can save yourself some clicks by turning on "Check out files when opening." (Fill in your name and email address, too, as shown in Figure 17-2.) Now you can "check out" a file from the remote server just by double-clicking its name in the Site Files list.



☑ Maintain synchronization information

□ Automatically upload files to server on save

☑ Enable file check in and check out

□ Check out files when opening

Check out name: Rod Dibble

Email address: dibble@cosmofarmer.com

Figure 17-2:
If you're using Dreamweaver's Check In/Check Out feature and you work on your site in several different locations (for example, from home and your office), use a different name for each location (BobAtHome and BobAtWork, for example). In this way, you can identify which files you've checked out to your home computer and which to your computer at work.

13. **Click the Test button to see if Dreamweaver can connect to the Web server.**

    If everything goes according to plan, you'll see a "Dreamweaver connected to your Web server successfully" message. If not, you'll get an "FTP error" message with some additional information that can help you determine the problem (see the box below).

14. **Click OK to return to the Manage Sites dialog box, and then click Done.**

    The Manage Sites dialog box closes, and the Files panel opens.

At this point, you're ready to connect to the Web server and transfer files. If you're the only person working on the site, Dreamweaver's Get and Put commands will do the trick (page 620). If, however, you're part of a development team, use Dreamweaver's Check In and Check Out feature, described on page 628.

FREQUENTLY ASKED QUESTION

When Your Remote Site Is Too Remote

Help! I can't connect to my Web server. What should I do?

Things don't always go smoothly. That's doubly true when trying to connect to a Web server, since you depend on a variety of things–your Internet connection, the networks connecting you to your Web server, the Web server itself, and the FTP software–working together in harmony. Dreamweaver presents an error message if you can't successfully establish an FTP connection with your Web server. The error box frequently contains useful information that can help you determine the problem. Here are some of the most common:

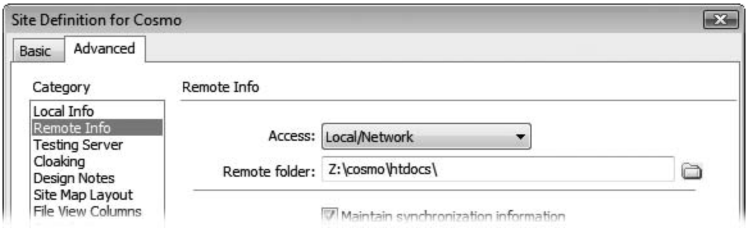
- **Remote host cannot be found** usually means you typed an incorrect FTP Host address (step 5 on page 612).
- **Your login or password is incorrect** means just that–you've typed the wrong user name or password (step 7 on page 612).
- **Cannot open remote folder** usually means you mistyped or input the wrong Host directory (step 6 on page 612).

Unfortunately, there are lots of reasons Dreamweaver may not be able to connect, so sometimes the error message isn't particularly helpful. Here are a few other suggestions for troubleshooting: make sure you're connected to the Internet (open a Web browser and see if you can visit a site on the Web); return to the Remote Info category of the Site Definition window, and turn on the "Use passive FTP" option (sometimes this just makes things work); click the Server Compatibility button, and then turn off the "Use FTP performance optimization" box; and if you have another FTP program like CuteFTP or RBrowser, see if you can connect to your Web server using the same settings you gave Dreamweaver. If all these steps fail, you can visit this page on the Adobe Web site for additional troubleshooting tips: *www.adobe.com/cfusion/knowledgebase/index.cfm?id=tn_14834*.

Setting Up a Remote Site over a Local Network

If you're working on an intranet, or if your company's Web server is connected to the company network, you may also be able to transfer your Web files just as you'd move any files from machine to machine. Dreamweaver provides the same file-transfer functions as with FTP, but setup is simpler.

Follow steps 1 and 2 of the previous instructions, but in step 4, click the Remote Info category and then choose Local/Network from the Access pop-up menu. Menus and fields for collecting your connection information appear in the Site Definition box (see Figure 17-3).



Access: Local/Network

Remote folder: Z:\cosmo\htdocs\

Figure 17-3:
If your company's Web server is hosted in your office, the "remote site" might not be that remote: In this case, choose a folder on your local network as the remote site.

Now click the folder icon next to the "Remote folder" field. In the resulting dialog box, navigate to and select your site's remote root folder. On a local network, this folder functions as the root folder on your company's Web server, even though it's actually still within the walls of your building. (For differences on selecting root folders on Windows and Macs, see page 32.)

Wrap up with steps 10, 11, 12, and 14 of the previous instructions. At this point, you're ready to connect to the Web server and transfer files.

Setting Up a Remote Site with RDS

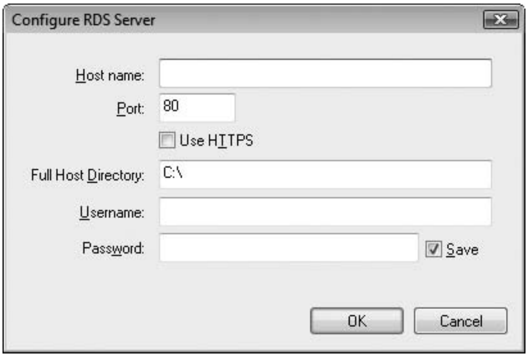
RDS (Remote Development Services) is a feature of Adobe's ColdFusion Server. It lets designers work on Web files and databases in conjunction with a ColdFusion application server. If you aren't using ColdFusion, then this option isn't for you.

To create a remote site in Dreamweaver that works with RDS, follow steps 1 through 3 on page 611. In step 4, click the Remote Info category, and then choose RDS from the Access pop-up menu.

The Site Definition window displays a version number, a short description, and a Settings button. Click Settings to open the Configure RDS Server window, shown in Figure 17-4. Fill in the dialog box as directed by your server administrator or help desk.

Setting Up a Remote Site with WebDAV

Dreamweaver also allows access to a remote site using *WebDAV*, short for Web-based Distributed Authoring and Versioning. Like FTP, it's a method, or protocol, for transferring files. Like SFTP, it lets you use a secure connection (SSL or Secure Socket Layer) so that all of your data is encrypted as it passes back and forth between your computer and the Web server. But unlike both of those technologies, WebDAV also addresses the kinds of problems you encounter when collaborating on a Web site with other people.



Host name:

Port: 80

□ Use HTTPS

Full Host Directory: C:\

Username:

Password: ☑ Save

Figure 17-4:
Remote Development Services is a feature of the ColdFusion application server. However, even if you use ColdFusion, you may not be able to use RDS, since most Web hosting companies that offer ColdFusion servers turn off RDS due to potential security problems.

Note: WebDAV isn't a very common option at most Web hosting companies, where FTP is still the norm. So you may not be able to take advantage of this exciting technology. However, if you're a Mac fan and have an Apple .Mac account, your iDisk actually works using WebDAV, so you can connect to your .Mac Homepage files using Dreamweaver. (Even Windows owners can use Dreamweaver to work on a WebDAV .Mac Web site.)

For instance, all kinds of havoc can result if two people edit a page simultaneously; whoever uploads the page to the Web server *second* winds up wiping out the changes made by the first person. WebDAV supports a check-in and check-out system that works similarly to Dreamweaver's Check In/Check Out tool (see page xx) to make sure only one person works on a file at a time and no one tramples on anyone else's files. In fact, Dreamweaver's Check In and Check Out tools work seamlessly with WebDAV.

Both Microsoft Internet Information Server (IIS) and Apache Web Server can work with WebDAV. WebDAV is commonly found at colleges and universities, but it's less common at traditional Web hosting companies. To find out if your Web server can handle WebDAV (and to find out the necessary connection information), consult your Web server's administrator (for example, call or email your Web hosting company).

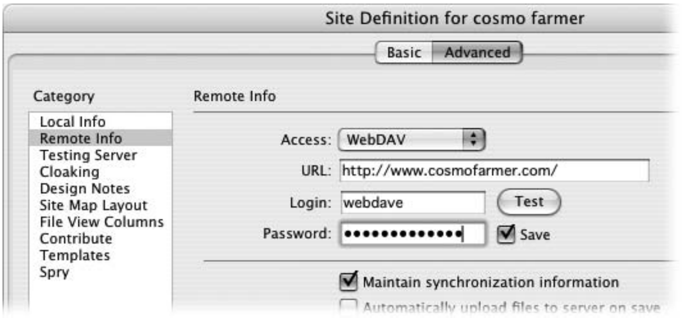
Setting up WebDAV access to a remote site is very similar to setting up FTP access. Follow steps 1 through 3 on page 611, and then follow these steps:

1. **Click the Remote Info category, and then choose WebDAV from the Access pop-up menu.**

   The Site Definition window displays the WebDAV settings (Figure 17-5).

2. **In the URL box, type in the URL of the WebDAV server.**

   In most cases, this is the URL of the Web site, so it begins with either *http://* or *https://*. The *s* in *https* means you'll connect securely to the Web server using SSL. The normal *http://* method doesn't use any encryption, which means that, just like with regular FTP, your user name, password, and all data are sent "in



Remote Info

Access: WebDAV

URL: http://www.cosmofarmer.com/

Login: webdave

Password: ••••••••••••• ☑ Save

☑ Maintain synchronization information

□ Automatically upload files to server on save

Figure 17-5: *WebDAV, short for Web-based Distributed Authoring and Versioning, is a powerful tool for working on a site with other people. It's built into several Web server packages but, unfortunately, isn't a very common option at most Web hosting companies.*

the open" across the Internet. Note that just adding an *s* won't suddenly make your file transfers secure; the Web server needs to be set up to accept https connections (a technically challenging task).

Note: .Mac account holders who want to connect to their Homepage Web site should type *https://idisk.mac.com/UserName/Sites* where "UserName" is your .Mac account name.

3. **In the Login field, type your user name, and then type your password in the Password field.**

   Turn on the Save checkbox if you want to save yourself the hassle of having to type in your password each time you move files to your Web server (but heed the Warning on page 613).

4. **Click the Test button to see if your connection works.**

   If Dreamweaver succeeds, it proudly tells you. Unfortunately, if it fails, you'll get an error message that isn't exactly helpful. WebDAV isn't nearly as finicky as FTP, so if there's an error, you most likely just typed the URL, password, or login incorrectly, or WebDAV just isn't available for the server.

Note: However, due to the different possible server configurations for WebDAV, Dreamweaver may not be able to connect at all. If this is the case, you'll need to use FTP or another method to connect to your server.

5. **Leave the "Automatically upload files to server on save" box turned off.**

   This option makes Dreamweaver upload the file each time you save; it slows you down and runs the risk of putting half-finished Web pages on your server for all the world to see. It's better to just upload the page after you're completely finished with it.

The rest of the process is identical to the FTP setup process, so follow steps 11, 12, and 14, starting on page 614. You're ready to connect to the Web server and transfer files, as described on page 620.

Setting Up a Remote Site with SourceSafe

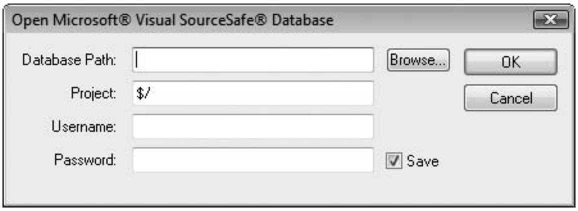
Microsoft originally created Visual SourceSafe for managing team software development. Like WebDAV, SourceSafe makes sure you don't accidentally stomp on someone else's hard work by overwriting a Web page they just modified. In addition, this sophisticated program tracks different versions of files and lets an administrator "roll back" to previous versions of a Web page, or even an entire site; it's the granddaddy of Undos.

To take advantage of this power, however, you need a Visual SourceSafe (VSS) server and VSS database already setup. In addition, Windows people need to install Microsoft Visual SourceSafe Client version 6 on their PCs.

Note: The Visual SourceSafe option isn't available in the Mac version of Dreamweaver.

Once you've installed the VSS Client software, and you've created and defined a local site (see page 28), you're ready to configure Dreamweaver for SourceSafe using the Site Definition window. Basically, you tell Dreamweaver where to find the SourceSafe database and how to sign on to the server.

Once again, follow steps 1 though 3 on page 611. But in step 4, click the Remote Info category, and then choose Microsoft® Visual SourceSafe® from the Access pop-up menu. In the resulting dialog box, click Settings to reveal the Open Microsoft® Visual SourceSafe® Database dialog box (Figure 17-6).



Open Microsoft® Visual SourceSafe® Database

Database Path:

Project: $/

Username:

Password:

☑ Save

Figure 17-6:
This window, sometimes called the "Microsoft's® Lawyers Are Everywhere®" dialog box, lets you set up Dreamweaver for use with Microsoft's Visual SourceSafe system. Many corporations use this powerful file-control system to control access to files in large projects involving many people.

Click Browse to select the Visual SourceSafe (VSS) database file on your computer (or type in the file path, if you know it, into the Database Path field)—the *srcsafe.ini* file that Dreamweaver uses to initialize SourceSafe.

Then, in the Project field, fill in the name of the *project* within the VSS database that you wish to use as the remote root folder. (A VSS database can have many projects and Web sites listed in it. Make sure you enter the correct project name for this site. If in doubt, contact the administrator of the Visual SourceSafe database.) Type your user name and password into the appropriate fields; again, ask the administrator for guidance.

Click OK. But before dismissing the Site Definition dialog box, turn on "Check Out Files when Opening," so that Dreamweaver's Check In and Check Out features (see page 628) work with the VSS system. Click OK, and then click Done.

Transferring Files

Once you've told Dreamweaver *how* you plan to ship off your Web page files to the Net, you can now set about actually *doing* it. Thanks to Dreamweaver's Files panel, the whole process takes only a few steps.

Moving Files to the Web Server

To transfer files to your Web server:

1. **Open the Files panel (Figure 17-7).**

   Choose Window → Files (keyboard shortcut: F8).

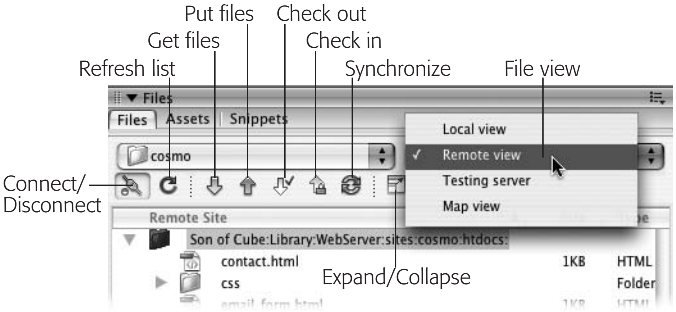


Figure 17-7:
The Files panel offers toolbar buttons for uploading and downloading your Web files to and from the actual Web server that dishes them out to your site's adoring public. (See Chapter 15 for much more on this important window.)

2. **From the Site menu, choose the name of the site whose files you wish to move (if it isn't already selected).**

   The Files panel displays files for the selected site. You can use the File View pop-up menu to access either a list of the local files or the remote files on the Web server (see Figure 17-7). You can also see both local and remote files side by side if you first choose "Remote view" from the File View pop-up menu and then click the Expand button on the Files panel, as described on page 570.

Note: The color of the folders in the Site panel lets you know which view you're currently in: green folders mean Local view (your computer), beige (blue on the Mac) folders mean Remote view, and red folders indicate the Testing view for a testing server as described on page 762.

3. **From the file list in the Files panel, select the files you wish to upload to the Web server.**

   To move a folder and every file inside it, just select the folder. (In other words, you can transfer your *entire* Web site to the server by simply selecting the local root folder—the folder listed at the very top of the Local Folder file list.) When only a few files have changed, you can also select only certain files or folders for uploading, using any of the techniques described on page 588.

Note: If you don't see the files you wish to upload in the Site Files list, you may have Remote view selected. Select Local view to see only those site files on your computer and click the Refresh button on the Files panel (Figure 17-7).

When you use do-it-yourself FTP programs like WS_FTP or Fetch, you have to specify a folder location for every file you transfer to the Web server. But here's one of the great advantages of letting Dreamweaver do your file shuffling; it already knows where the files should go on the remote site. The local and remote sites are, after all, mirror images, so Dreamweaver simply puts files in the corresponding folders on the remote site.

For example, suppose you select the file *mayo.html*, which is in a folder called Condiments, which is itself stored in the local root folder. When you transfer the file, Dreamweaver knows to put this file in the Condiments folder in the root folder on the remote site. In fact, if the folder Condiments doesn't exist on the remote site, Dreamweaver creates it and *then* puts the file into it. Now that's service.

A hush falls over the audience; you're ready to go live with your Web page.

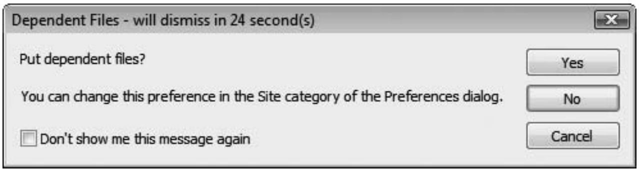
4. **Click the "Put files" button—the up-arrow icon identified in Figure 17-7—on the Files panel.**

   Alternatively, you can use the keyboard shortcut Ctrl+Shift+U (⌘-Shift-U).

   Several things happen when you do this: First, if you're using an FTP connection, Dreamweaver attempts to connect to your Web server, dialing your modem if necessary. As you can see in the status window that opens, it may take a minute or so to establish a connection; the Connect button (see Figure 17-7) displays a bright green light when Dreamweaver is connected.

   Next, if any of the files you're transferring are currently open and have unsaved changes, Dreamweaver asks if you want to save the files before transferring them to the server. Click Yes to save the file, or, if there are multiple unsaved files, click the Yes To All button to save all of them before posting them online.

   In addition, Dreamweaver asks if you wish to transfer any *dependent files* (see Figure 17-8). Dependent files are graphics, external CSS files, or Flash movies that you've placed onto a page and are needed for the page to display properly.



Dependent Files - will dismiss in 24 second(s)

Put dependent files?

You can change this preference in the Site category of the Preferences dialog.

☐ Don't show me this message again

Figure 17-8:
The Dependent Files feature of Dreamweaver's File Transfer command makes sure all necessary files–graphics, Flash movies, and so on–are copied to the Web server along with your Web pages. There's also a countdown–a "will dismiss in xx seconds" message. If you don't click a button within 30 seconds, Dreamweaver assumes you mean "No" and just uploads the selected files.

This feature can save you considerable time and hassle; no need to hunt for and upload each graphic file or external style sheet yourself. On the other hand, if all the dependent files are *already* on the server, having Dreamweaver transfer the same files again is a waste of time. Fortunately, Dreamweaver helps stop this wasted effort as described in the next step.

Note: If you turn on the "Don't show me this message again" box and then click Yes, Dreamweaver copies dependent files without asking. On the other hand, if you turn on the "Don't show me this message again" box and click No, Dreamweaver *never* copies dependent files.

If you want the Dependent Files dialog box to appear again after you've turned it off, hold down the Alt (Option) key when you transfer a file (using any method *except* a keyboard shortcut). Or choose Edit → Preferences → Site Category (Dreamweaver → Preferences → Site Category) to turn this feature on or off.

5. **Click Yes to transfer dependent files, or No to transfer only the files you selected.**

   Dreamweaver copies the files to the Web server. If you're copying a file that's inside a folder that isn't already on the remote site, Dreamweaver creates the folder as well. In fact, Dreamweaver creates as many subfolders as necessary to make sure every file is transferred to the same folder location on the remote site as it is in the local site. (Try doing *that* with a regular FTP program.)

   If you've chosen to transfer dependent files as well, Dreamweaver may or may not put the dependent file on the Web server. If you've turned on the "Maintain Synchronization Information" checkbox when defining your remote site (see step 11 on page 614), Dreamweaver determines if the dependent file is already on the Web server and, if it is, whether your local copy of the file is a newer version. If the dependent file doesn't exist on the server *or* your local copy is newer (meaning you've made some changes to it locally but haven't yet moved it onto the Web), Dreamweaver puts it on the remote site when you tell it to transfer dependent files.

   However, if Dreamweaver thinks that it's the same file, or that the copy of the file on the Web server is newer, it won't transfer the dependent file. This behavior is a huge time-saver, since you won't have to repeatedly upload the same 50 navigation buttons each time you say "Yes" to transferring dependent files; but, best of all, Dreamweaver still transfers those dependent files that really *are* new.

Note: Dreamweaver's ability to correctly determine whether a dependent file on your computer is the same as the file on the remote site depends on its Site Synchronization feature, described on page 634. While Dreamweaver's accuracy with this tool is good, Dremweaver has been known to get it wrong. If Dreamweaver isn't moving a dependent file that you want moved to the remote server, you can just select that file and upload it manually (for example, select it in the Files panel and click the Put button). Dreamweaver always obeys a direct order to move a selected file to the remote site.

6. **Continue using the Put button to transfer all files in your Web site to the remote site.**

   Depending on the number of files transferred, this operation can take some time. Transferring files over the Internet using FTP isn't nearly as fast as copying files from one hard drive to another (see the box below).

POWER USERS' CLINIC

A Little More Background on File Transfers

Dreamweaver lets you keep working as it dutifully moves files in the background. You can edit a Web page, create a new style sheet, and so on, while the program busily transfers files over the Internet. However, there are some things you can't do while Dreamweaver is transferring files. These are mostly logical restrictions: you can't edit the site definition (since this could affect how you connect to the remote server); you can't put or get other files (since Dreamweaver's already busy doing that); you can't delete a file on the local or remote server (since you may be transferring that file). Dreamweaver lets you know if you try to do one of these forbidden actions while it's working with the server.

If you find the background activity window a nuisance, click the Hide button and it temporarily disappears. In addition, if you accidentally start uploading a 10,000 page Web site, you probably won't want to wait until Dreamweaver is finished. Click the Cancel button to stop the process.

Once Dreamweaver's finished moving files around, you can see a record of Dreamweaver's actions by clicking the Log button that appears at the bottom-right corner of the Files panel. This log is a different record than the raw FTP log discussed in the box on page 626. This plain-language window lets you know what Dreamweaver did–"Put successful," "Get successful," and so on. If you see a "not transferred" message, this means that you tried to Get or Put a file, but both the local and remote copies were identical, so Dreamweaver didn't do anything. See the above Note for more information.

Other ways to move files to the Web server

In the Files panel, you can also *drag* a file from the Local Folder list into the Remote Site list. (You first must expand the Files panel, as described on page 570.) But don't do it: it's too easy to drag a file into the wrong place. If you drag a file to the wrong folder on the remote site, for example, you'll probably break all the links on the page. It's much better to let Dreamweaver keep track of where files should go in the organization of your site. (However, if you're already in this mess, see "Find and Fix Broken Links" on page 586.)

You can also copy your current document to the Web server without using the Files panel at all. You can go directly to the Put command when, say, you finish building or modifying a Web page and want to immediately move it to the Web server. Just choose Site → Put or press Ctrl+Shift+U (⌘-Shift-U); Dreamweaver automatically copies the fresh page to the proper folder online.

The toolbar also provides a quick menu shortcut for this operation, as shown in Figure 17-9.

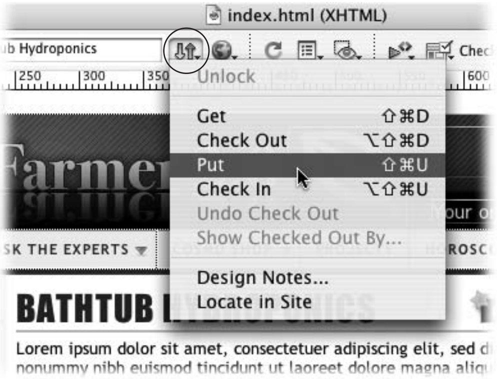


Figure 17-9:
Click the File Status button (circled) and choose Put to quickly move a file to your Web server. You can also use this menu to retrieve a copy of this file from the server (Get), use Check In and Out features (page 628), or review Design Notes (page 637) for the page. To select this file in the Files panel, choose "Locate in Site".

Getting Files from the Web Server

So far, this chapter has described getting your hard drive–based Web pages *to* the Internet. Sometimes, however, you'll want to download one or more files *from* the Web server. Perhaps you've made a horrible (and irreversible) mistake on the local copy of a file, and you want to retrieve the last version from the Web server, using the remote site as a last-ditch backup system. Or perhaps someone else uploaded some files to the site, and you want to download a copy to your own computer (although the Synchronize feature described on page 634 would also work).

To get files from the remote site, open the Files panel (press F8) and proceed as follows:

1. **From the Site pop-up menu, choose the site whose files you wish to retrieve.**

   From the Files panel's View menu (see Figure 17-7), choose "Remote view."

   Dreamweaver tells you that it's attempting to connect to the Web server. Once the connection has been made, a list of files and folders appears in the Remote Site list, and the Connect button displays a bright green dot. (Dreamweaver automatically disconnects you after 30 minutes of inactivity, at which point the green dot turns black.)

Tip: If you'd like to change the disconnect-after-30-minutes-of-inactivity setting, press Ctrl+U (⌘-U) to open the Preferences window. Click the Site category and change the number listed in the Minutes Idle box. Be aware, however, that some Web servers have their own settings and may disconnect you sooner than you've specified.

2. **From the Remote Site file list, select the files you wish to download from the Web server.**

   For techniques on selecting files in the Files panel, see page 588. To download a folder and every file inside it, just click the folder. This technique also lets you get your *entire* Web site from the server; just click the remote root folder, which appears at the very top of the Remote Site file list.

TROUBLESHOOTING MOMENT

Don't Replace the Wrong File

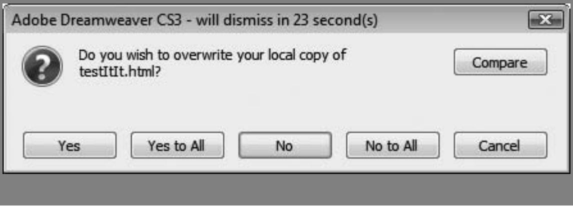
One strange feature of the Files panel's Get and Put commands may get you in trouble. Suppose, having just added new information to the home page (*index.html*), you want to transfer it to the Web server. You select it in the Local Folder list—but then you accidentally click Get instead of Put.

Not knowing your true intention, Dreamweaver dutifully retrieves the file from the Web server and prepares to replace (wipe out) the newly updated home page on your computer.

Fortunately, Dreamweaver also opens a warning message asking if you really want to overwrite the local file. Click No or Cancel to save your hard work.

There may be times when you *do* want to wipe out your local copy—for example, if your cat walks across your keyboard, types illegible code, presses Ctrl+S to save the ruined page, and Ctrl+Q to quit Dreamweaver (keeping you from using Undo to fix the mistakes). In this common situation, you'll want to replace your local copy with the remote copy. To do so, press the Yes key to wipe out your cat's errors. Oh yeah, this is also a useful trick if *you* ever make a mistake on a page you can't fix and want to return to the working copy on your Web server.

Dreamweaver also includes a useful Compare button to help you sort out the differences between the local and remote file. Clicking this button lets you compare the local and remote copies of the page, so you can identify which changes you made. In this way, you can salvage changes you made to the local copy and discard errors you (or your cat) may have introduced to the page. This feature is described on page 387.



Adobe Dreamweaver CS3 - will dismiss in 23 second(s)

Do you wish to overwrite your local copy of testItIt.html?

3. **Click the Get files button—the down arrow.**

   Alternatively, you can use the keyboard shortcut Ctrl+Shift+D (⌘-Shift-D).

   If the *local* version of any file you're getting from the remote site is currently opened and has unsaved changes, Dreamweaver warns you that you'll lose those changes. (No surprise there; copying a file from the remote site automatically replaces the same file in the local site, whether it's open or not.) Dreamweaver also warns you if you're about to replace a local file that's *newer* than the remote one.

   In addition, Dreamweaver offers to transfer any dependent files, as described in Figure 17-8.

4. **Click Yes to transfer dependent files, or No to transfer only the files you selected.**

   Dreamweaver copies the files to the local site folder, creating any folders necessary to replicate the structure of the remote site.

POWER USERS' CLINIC

Troubleshoot with the FTP Log

If you're having problems moving files using Dreamweaver's FTP command, you may be able to find some clues in the records Dreamweaver keeps when transferring files. If you've used other FTP programs, you may have seen little messages that are sent back and forth between the Web server and the FTP program like this:

```
200 PORT command successful. LIST 150
Opening ASCII mode data connection for
/bin/ls.
```

Dreamweaver also sends and receives this information, but it keeps it hidden. In order to see the FTP log, choose Window → Results, and then click the FTP Log tab. Any errors appear in this log.

For example, if you encounter a "cannot put file" error, it may mean that you're out of space on your Web server. Contact your ISP or the administrator of your Web server for help. WebDAV connections also produce a log of file-transfer activity, but it's not very easy to decipher.

And Secure FTP (SFTP) produces no log in Dreamweaver—hush, hush, it's a secret.

Cloaking Files

You may not want *all* files transferred to and from the Remote site. For example, as part of its Library and Template tools, Dreamweaver creates folders inside your local root folder. The Library and templates folders don't do you any good on the Web server; their sole purpose is to help you build the site on your computer. Likewise, you may have Photoshop (.psd), Flash (.fla), or Illustrator (.ai) files in your local root folder. They're inaccessible from a Web browser and can take up a lot of disk space, so they shouldn't be transferred to the Web server when you move your site online.

Note: If you work on a Web site with other people, you probably *will* want to have the Library and templates folders on the server. This way, others who work on the site can access them as well.

To meet such challenges, Dreamweaver includes a feature called *cloaking*. It lets you hide folders and specific file types from many file-transfer operations, including Get/Put files, the Check In/Check Out feature (page 628), and site synchronization (page 634). In fact, you can even hide files from many sitewide Dreamweaver actions, including reports (see page 600), search and replace (page 718), check and change links sitewide (page 586), and the Assets panel (page 575). There's one exception: files that are linked to Library items (see Chapter 18) or templates (Chapter 19) can still "see" items in cloaked Library and template folders.

Dreamweaver lets you cloak specific folders in your site or particular file types (those that end with a specific extension such as .fla or .psd). Each type of cloak requires a different technique.

To hide specific types of files:

1. **Choose Site → Manage Sites.**

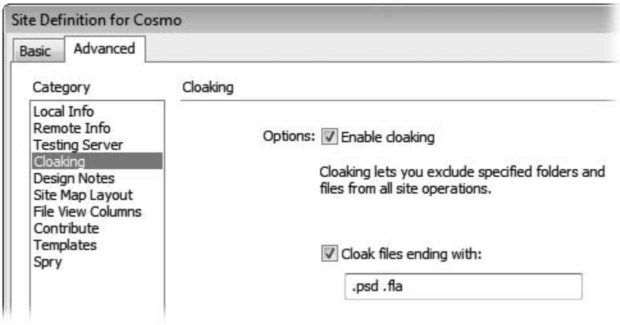
   The Manage Sites window opens, listing all sites you've defined in Dreamweaver.

2. **Select the site you wish to use cloaking on and click Edit.**

   That site's Site Definition window opens.

3. **Click the Cloaking category.**

   The cloaking settings appear (see Figure 17-10). The factory setting is On for every site you define. (If you want to turn it off, just turn off the "Enable cloaking" box.)



Options: ☑ Enable cloaking

Cloaking lets you exclude specified folders and files from all site operations.

☑ Cloak files ending with:

.psd .fla

Figure 17-10:
The Cloaking category of the Site Definition window lets you turn cloaking on and off–a feature that lets you hide specific file types and folders from sitewide operations like transferring files to a Web server or searching and replacing text. In this window, you can specify which types of files to hide by listing their extensions (.psd for Photoshop files, for example).

Tip: You can quickly turn cloaking on and off by right-clicking (Control-clicking) any file or folder in the Files panel and selecting Cloaking → Enable Cloaking from the context menu. A checkmark next to Enable Cloaking means cloaking is turned on.

4. **Turn on the "Cloak files ending with" checkbox.**

   Dreamweaver identifies file types by their extensions—.fla for Flash files, for example. Make sure you remove the .png listed in this box by default. It's meant to refer to Adobe Fireworks files, which end with the .png extension, but .png is also used by the very common and useful PNG file format (see page 200).

Note: Mac programs don't always add these file name suffixes, but without them, Dreamweaver can't cloak.

5. **In the text box, type the extensions you wish to cloak.**

   Each extension should start with a period followed by three or four letters. To type multiple extensions in the box, separate them with a space.

6. **Click OK twice to close this window and the Manage Sites window.**

   All cloaked files have a red slash through them in the Files panel.

You can also cloak a folder using the Files panel like this:

1. **Open the Files panel by pressing F8.**

   Alternatively, choose Window → Files.

2. **Right-click (Control-click) a folder in Local Files view.**

   A shortcut menu appears with many site-related options.

3. **Select Cloaking → Cloak.**

   Dreamweaver adds a red slash through the folder's icon in the Files panel. All files and folders inside the cloaked folder are hidden as well, as indicated by the red slashes through their icons.

Note: You can't hide individual files in the Files panel—only *folders*. (You can only hide file types using the Site Definition window.)

Once you've cloaked a folder, it and any folders inside it disappear from Dreamweaver's file-transfer functions. Files with specific extensions that you specified in the Preferences window are also hidden.

However, there are exceptions. You can override the cloaking, for example, by selecting a cloaked folder or file and then using the Get or Put file buttons as described on page 620. Dreamweaver assumes that since you specifically selected that file or folder, you intend to override the cloaking feature.

Dreamweaver also ignores cloaking if you answer Yes in the Dependent Files message box (Figure 17-8) when you put or get files. In that case, Dreamweaver transfers all dependent files, even if they're cloaked (this applies to Library and template files as well).

Check In and Check Out

If you're the sole developer for a Web site, the Files panel's Get and Put buttons are fine for transferring your files. But if you're on a team of developers, these simple tools can get you in trouble.

For example, suppose your boss emails you an important announcement that she wants posted on the home page immediately. So you download the home page from the Web server and start to edit it. At the same time, your co-worker Bob notices a typo on the home page. He downloads it, too.

You're a much faster worker than Bob, so you've added the critical news to the home page and moved it back to the Web server. But now Bob transfers his corrected home page to the Web server, *overwriting* your edits and eliminating that urgent notice you just uploaded. (An hour later, your phone rings. It's the boss.)

Without some kind of system to monitor who has what file, and to prevent people from overwriting each other's work, collaborative Web development is a chaotic mess. Fortunately, Dreamweaver's Check In and Check Out system provides a civilized answer to this problem. It works like your local public library: When you check a file out, no one else can have it. When you're finished, you check the file back in, releasing control of it, and allowing someone else on the team to check it out and work on it.

To use the Check In/Check Out feature effectively, it helps to keep a few things in mind:

- When you're developing a Web site solo, your local site usually contains the most recent versions of your files. You make any modifications or additions to the pages on your computer first and *then* transfer them to the Web server.

  But in a collaborative environment where many people are working on the site at once, the files on your hard drive may not be the latest ones. After all, your co-workers, like you, have been updating pages and transferring them to the Web server. The home page file sitting in the local site folder on your computer may be several days older than the file on the remote site, which is why checking out a file from the *remote* site, rather than editing from the copy on your computer, is so important. It guarantees that you have the latest version of the file.

- In a collaborative environment, nobody should post files to the Web server using any method except Dreamweaver's Check In and Check Out system.

  The reason is technical, but worth slogging through: When Dreamweaver checks out a file, it doesn't actually *lock* the file. Instead, it places a small, invisible text file (with the three-letter suffix .lck) on both the remote server and in your local site folder. This text file indicates who has checked out the file. When Dreamweaver connects to a remote site, it uses these files to know which Web files are in use by others.

  But only Dreamweaver understands these .lck files. Other FTP programs, like WSFTP (Windows) or Fetch (Mac), gladly ignore them and can easily overwrite any checked-out files. This risk also applies when you simply copy files back and forth over the office network.

Note: Adobe's word processor–like Web page editing program, Contribute, also takes advantage of this Check In/Check Out feature, so you can use the two programs on the same site.

- All Dreamweaver people must configure their remote site to use Check In and Check Out (see page 628). If just one person doesn't do it, you risk overwritten files.

Note: Visual SourceSafe and WebDAV people are free of these last two constraints. As long as everyone working on the site uses programs that support the Visual SourceSafe client or the WebDAV protocol, they can work seamlessly with Dreamweaver people, and vice versa.

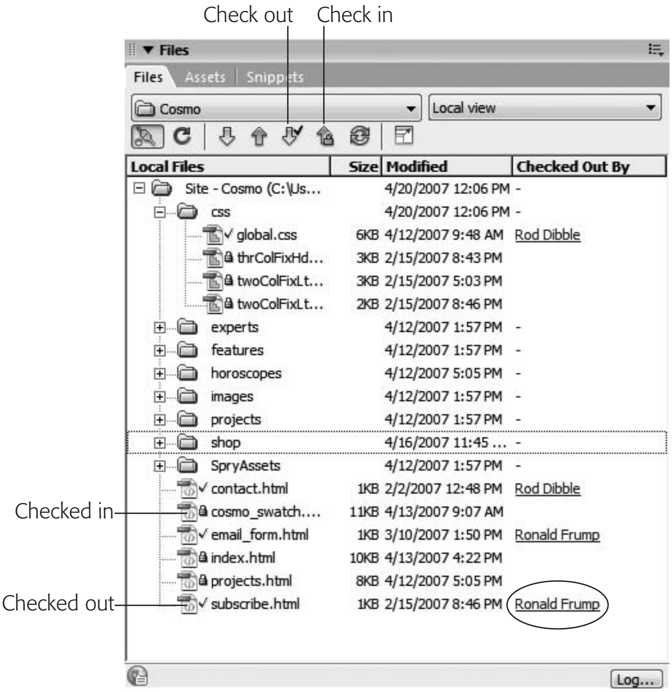
Checking Out Files

When you want to work on a file in a collaborative site, you check it out from the Web server. Doing so makes sure that *you* have the latest version of the file, and that nobody else can make changes to the file.

If you're used to creating sites by yourself, this business may feel a little strange; after all, your local site (the files on your computer) contains the latest versions of all files. When working with a group, however, you should consider the *remote* site—where everyone can access, edit, and add new Web pages—to be the master copy of your site's files.

Note: There's nothing to check out when you're creating a *new* page for the site. Since the only version of the file in the universe is on your computer, there's no fear that someone else may work on it at the same time as you. In this case, you only need to check the file *into* the site when you're done (see page 633).

You check out a file using the Files panel; if it's not open, press F8 or use any of the methods described on page 567. Then choose the remote site you wish to work on from the Site pop-up menu (shown at top in Figure 17-11).



Local Files	Size	Modified	Checked Out By
Site - Cosmo (C:\Us...		4/20/2007 12:06 PM	-
css		4/20/2007 12:06 PM	-
✓ global.css	6KB	4/12/2007 9:48 AM	Rod Dibble
🔒 thrColFixHd...	3KB	2/15/2007 8:43 PM	
🔒 twoColFixLt...	3KB	2/15/2007 5:03 PM	
🔒 twoColFixLt...	2KB	2/15/2007 8:46 PM	
experts		4/12/2007 1:57 PM	-
features		4/12/2007 1:57 PM	-
horoscopes		4/12/2007 5:05 PM	-
images		4/12/2007 1:57 PM	-
projects		4/12/2007 1:57 PM	-
shop		4/16/2007 11:45 ...	-
SpryAssets		4/12/2007 1:57 PM	-
✓ contact.html	1KB	2/2/2007 12:48 PM	Rod Dibble
🔒 cosmo_swatch....	11KB	4/13/2007 9:07 AM	
✓ email_form.html	1KB	3/10/2007 1:50 PM	Ronald Frump
🔒 index.html	10KB	4/13/2007 4:22 PM	
🔒 projects.html	8KB	4/12/2007 5:05 PM	
✓ subscribe.html	1KB	2/15/2007 8:46 PM	Ronald Frump

Figure 17-11:
The Check In/Out buttons transfer files between the local site and the Web server. A padlock identifies files that are checked into the remote site. Confusingly, the lock means that the file is open for anyone to check out and edit. If a file is currently checked out, a checkmark appears next to its name. A green checkmark indicates you've checked out the file; a red checkmark means someone else has checked it out.

Now you're ready to begin. From the Local Folder file list in the Files panel, click to select the files you wish to check out from the Web server—or, to check out an entire folder and every file inside it, just select the folder.

You may in some instances want to select a file from the Remote Site list as well. For example, maybe you need to modify a page that you didn't create, and which you've never before checked out. In this case, the file isn't *in* your local folder, so you must select it from the Remote Site list. Select Remote view from the Files panel (see Figure 17-7); Dreamweaver connects to the server and then displays the remote files in the Files panel. Select the ones you wish to check out.

Tip: If, when you define the remote site (see page 609), you select the Check Out File when Opening option, you can also check out (and open) a file by double-clicking it in the Files panel. This is a quick way to open a page for editing while still using Dreamweaver's Check Out feature.

In any case, now just click the Check Out files button on the Files panel (see Figure 17-11), or use the keyboard shortcut Ctrl+Alt+Shift+D (⌘-Option-Shift-D). (Not enough fingers? See page 733 to learn how to change Dreamweaver's shortcuts.)

Dreamweaver asks if you wish to also check out any dependent files. Click Yes if you think the page you're checking out uses files you haven't yet downloaded. Dreameaver then copies the dependent files to your computer, so the page you've checked out and are working on displays the current images, CSS style sheets, and other linked files correctly. It doesn't *check out* those files, so if you do want to edit a dependent file—for example, you need to also edit styles on a linked external style sheet that's used by the page you checked out—you must also check out that file.

Note: If you try to edit a file that you haven't checked out, Dreamweaver lets you know and then ask if you'd like to check out the file.

When you check out files, Dreamweaver copies them to your computer and marks them as checked out so others can't change them. As when uploading and downloading files, checking out files can take time, depending upon the speed of your Internet connection.

After you've checked out a file, a green "checked-out" checkmark appears next to its name in the Files panel (see Figure 17-11). You can now open and edit it, and (when you're done) check the file back in.

WORKAROUND WORKSHOP

Manual Checkout Override

Occasionally, you may wish to erase the checked-out status of a file. Suppose, for example, someone who's checked out a lot of files suddenly catches the plague and can't continue working on the site. To free those files so others can work on them, you should undo his checkout (and quarantine his cubicle).

To do this, make sure the Files panel is in Remote view (this trick won't work when looking at the Local Files). Then, right-click (Control-click) the checked-out file in the Files panel and select Undo Checkout from the menu that appears.

Dreamweaver warns you that whoever checked out the file won't be able to check it back in. (This is, in fact, false. That person can still check in the file, overwriting whatever's on the Web server. So you can see why you should override the check-out only when the person who checked it out is very unlikely to check it back in–stranded on a deserted island, perhaps.)

When complete, a padlock icon appears next to the file.

You can also use this technique on a file you've checked out. For example, if, after checking out a file, you've made a horrible mistake on the page and wish to revert to the copy on the Web server.

If you attempt to check out a file someone else has already checked out, Dreamweaver tells you as much. It also gives you the option to override the person's checkout—but unless you're the boss, resist the temptation, for two reasons. First, your colleagues may have made some important changes to the page, which you'll wipe out with your shenanigans. Second, because you so rudely stole the file, they may stop bringing you donuts in the morning.

A better way to work with someone who's checked out a file you need is to use Dreamweaver's email feature. You can see who checked out a file by consulting the Checked Out By column (see the circled entry in Figure 17-11). Even better, if you click the name, Dreamweaver opens your email program and addresses an email to that person, so you can say: "Hey Bob, you've had the home page checked out for two days! I need to work on it, so check it back in!"

The name and email address Dreamweaver uses depends on the information your co-workers provided, just as you did when you configured your computer for remote site use (see page 609).

FREQUENTLY ASKED QUESTION

Get and Put, In and Out

I'm using Dreamweaver's Check In and Check Out buttons to transfer my files. What do the Get and Put buttons do when the Check In/Out feature is in use?

If you're using Check In and Out, the Get and Put commands function slightly differently than described on page 620. Get copies the selected file or files to your local site. However, Dreamweaver draws a small lock icon next to each of these "gotten" files in your Local Folder list. The files are locked, and you shouldn't edit them. Remember, checking out a file is the only way to prevent others from working on it. If you edit a locked file on your computer, nothing is stopping someone else from checking the page out from the Remote site, editing it, and checking it back in.

But using the Get command in such a situation can still be useful. For example, suppose someone just updated the site's external style sheet. Pages you're editing use this style sheet, so you'd like to get the latest version. You don't want to edit the style sheet itself, so you don't need to check it out. If you use Get instead of checking out the pages, you can keep a reference copy on your computer without locking it for anyone else and without having to check it back in later.

Put, on the other hand, simply transfers the file on your local site to the remote site. If you're using the Check In/Check Out feature and you haven't also checked out the file, using Put is a bad idea. The remote site should be your reference copy; several rounds of revisions may have been made to a file since you last checked it out. Your local copy will be hopelessly out of date, and moving it to the server using Put destroys the most recent version of the file.

However, if you do have the file checked out, you can use Put to transfer your local copy to the server so it can be viewed by your site's visitors. For example, say you're updating the home page with 20 new news items. To keep your site "up-to-the-minute" fresh, you can Put the home page after you add each news item. Then the whole world will see each news item as soon as possible. When you're completely finished editing the home page, check it in.

Checking In Files

When you're ready to move a page you've edited back onto the server, you check it in. (You also check in *new* files you've created.)

To check in files, open the Files panel (press F8), choose the site you're checking into from the Site pop-up menu, and (using the Local Folder file list in the Files panel) select the files you wish to check in to the Web server. As always, you can click a folder to check it in, along with every file inside it.

The files you select should be files you've checked out, or brand-new files that have never been on the Web server. If you attempt to check in a file that someone else has checked out, Dreamweaver warns you with a message box. Click Cancel to stop the check-in procedure, so that you won't overwrite the checked-out file on the server. Dreamweaver also warns you if you try to check in a file that's older than the server copy. Again, unless you're sure this is what you want to do, click Cancel.

Tip: If you want to check the page you're currently working on into the remote site, use the toolbar in the document window (see Figure 17-9).

You can check in the selected files in any of the usual ways:

- Click the Check In files button on the Files panel (see Figure 17-11).
- Use the keyboard shortcut Ctrl+Alt+Shift+U (⌘-Option-Shift-U). (See page 733 to learn how to change the Dreamweaver shortcut to something less cumbersome.)

Note: The Site → Check In menu option checks in only the document you're currently working on, not any files you've selected in the Files panel.

Dreamweaver asks if you wish to also check in any dependent files (see Figure 17-8). You should transfer dependent files only if you first checked them out, or if the dependent files are new and have never been uploaded to the server. If you attempt to check in a dependent file that someone else has checked out, Dreamweaver warns you with a message box.

After you've clicked through all message boxes, Dreamweaver copies the files to the remote site. Once you've checked in a file, a padlock icon appears next to its name in the Files panel (see Figure 17-11); checking in locks the file so that you don't accidentally change the local copy. If you wish to modify the file in some way, check it out again (see page 629).

Note: Dreameaver's Site Report feature (page 600) lets you run a report to see which files are checked out and by whom. Skip it. On a large site, the report can take a long time to run, it isn't always accurate, and the operations you're most likely to perform on checked out files (like checking them back in) can't be accomplished from the Reports panel.

Synchronizing Site Files

As you may suspect, when you keep two sets of files—local folder and remote site—it's easy to lose track of which files are the most recent. For example, say you finish your Web site and move all the files to the Web server. The next day, you notice mistakes on a bunch of Web pages, so you make corrections on the copies in your local site. But in your rush to fix the pages, you didn't keep track of which ones you corrected. So although you're ready to move the corrected pages to the Web server, you're not sure *which* ones you need to transfer.

When you use the Check In/Check Out feature described on page 628, you avoid this problem altogether. Using that system, the version on the Web server is *always* considered the latest and most definitive copy—*unless* you or someone else has checked out that file. In that case, whoever checked out the file has the most recent version.

But if you're operating solo, for example, and don't use the Check In/Check Out feature, you may get good mileage from the Synchronize command, which lets you compare the remote and local sites and transfer only the newer files in either direction. (In fact, since the Synchronize command uses the Get and Put methods of transferring files, you may not get the results you expect if you synchronize your site while also using Check In and Check Out [as described in the box on page 632].)

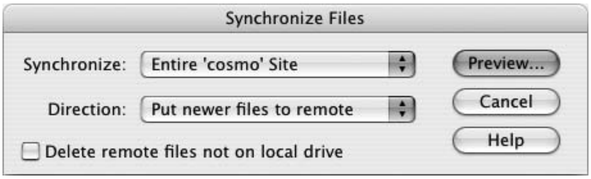
To synchronize your sites:

1. **Make sure the "Maintain synchronization information" checkbox is turned on in the Remote Info category of the Site Definition window (you'll make this choice when you're setting up a new site, as described in step 11 on page 614).**

   This option is turned on automatically when you set up the Remote information for a site (see Figure 17-1).

2. **Choose Site → Synchronize Sitewide.**

   Alternatively, you can right-click anywhere inside the Files panel. From the shortcut menu that appears, select Synchronize. In either case, the Synchronize Files dialog box appears (see Figure 17-12).



Synchronize Files

Synchronize: Entire 'cosmo' Site

Direction: Put newer files to remote

□ Delete remote files not on local drive

Figure 17-12:
Using the Synchronization command, you can copy newer files from your computer to the Web server, or get newer files from the remote site. (The Synchronization command isn't available if you're using Visual SourceSafe.)

3. **Using the Synchronize menu, specify the files to update.**

   You can either synchronize all files in the current Web site, or just files you've selected in the Local Folder list. This last option is good when you have a really big site and you want to limit this operation to just a single section of the site—one folder, for example. For site file-selection techniques, see page 588.

4. **Using the Direction pop-up menu, choose where you'd like to copy newer files.**

   You have three choices. *Put newer files to remote* updates the Web server with any newer files from your local site folder. It also copies any *new* files on the local site to the remote site. Use this option when you've done heavy editing to the local site and you want to move all new or modified pages to the Web server.

   Get newer files from remote does just the reverse: it updates your local site folder with any newer (or new) files from the remote site. Here's one instance where the synchronize feature comes in handy in team-design situations. If you've been out of the office for a while, click this option to download copies of the latest site files. (Note that this doesn't check any files out; it merely makes sure you have the latest files for your own reference. This is one example where synchronization works well with Check In/Check Out, since it refreshes your local copy of the site with the latest files, including graphics and external CSS style sheets that your checked-out pages may depend on.)

   Get and put newer files is a two-way synchronization. Any new files on the local site are transferred to the remote site and vice versa. The result is that both "sides" contain the latest files.

5. **Turn on the Delete checkbox, if desired.**

   The wording of this option reflects the option you selected in the previous step. If you're moving newer files to the remote site, it says "Delete remote files not on local drive." It's a useful option when, for example, you've spent the afternoon cleaning up the local copy of your site, deleting old, orphaned graphics files and Web pages, for example, and you want Dreamweaver to update the Web server to match.

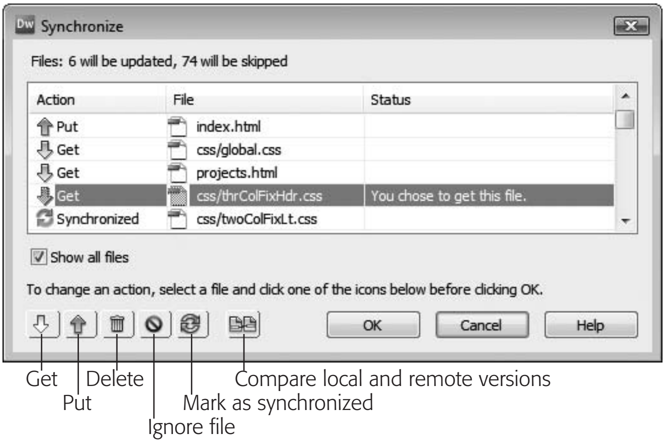
   If you chose to transfer newer files *from* the remote site, Dreamweaver lets you "Delete local files not on remote server." Use this feature when your local site is hopelessly out of date with the remote site. Perhaps you're working on the site with a team, but you've been on vacation for two months (this is, of course, a hypothetical example). The site may have changed so significantly that you want to get your local copy in line with the Web site.

Warning: Of course, you should proceed with caution when using *any* command that automatically deletes files. There's no Undo for these delete operations, and you don't want to accidentally delete the only copy of a particular page, graphic, or external Cascading Style Sheet.

   If you chose the "Get and put new files" option in step 4, the Delete checkbox is dimmed and unavailable. This option truly synchronizes the two; Dreamweaver copies newer files on the remote site (including files that exist on the Web server but not on your computer) to your local site, and vice versa.

6. **Click Preview to begin the synchronization process.**

   Dreamweaver connects to the remote site and compares the two sets of files—if your site is large, this comparison is a time-consuming process. When it finishes, the Synchronize preview window appears (Figure 17-13), listing which files Dreamweaver will delete and which it will transfer, and providing an additional set of options for working with the listed files.


Synchronize

Files: 6 will be updated, 74 will be skipped

Action	File	Status
Put	index.html	
Get	css/global.css	
Get	projects.html	
Get	css/thrColFixHdr.css	You chose to get this file.
Synchronized	css/twoColFixLt.css	

☑ Show all files

To change an action, select a file and click one of the icons below before clicking OK.

Figure 17-13:
The Synchronize window lets you preview any actions Dreamweaver intends to take to synchronize the files on your local and remote sites. You can change this action on a file-by-file basis. Turning on the "Show all files" checkbox lists all files, including ones Dreamweaver believes are identical on both the remote and local copies of the site: these files are marked Synchronized in the Action column.

7. **Change the action Dreamweaver takes on the listed files.**

   The preview box tells you what Dreamweaver plans to do with a file—get it, put it, or delete it. You can override these actions by selecting a file from the list and clicking one of the action buttons at the bottom of the window. For example, if you realize that Dreamweaver is going to delete a file that you *know* you need, select the file in the list and click the "Ignore file" button (the red circle with a line through it).

   Most of these options are useful only if you know Dreamweaver made a mistake: for example, when the program says you should get a file, but you know your local copy is identical to the server's copy. In that case, you could select the file and click the "Mark as synchronized" button, to tell Dreamweaver that they're identical. However, if you knew exactly which files were identical and which ones needed updating, you wouldn't need to use the synchronize feature in the first place, right?

   One option can come in quite handy. The "Compare local and remote versions" button lets you compare the code in the local file to the code in the remote file so you can identify exactly what differs between the two. You can use this, for example, to see exactly what changes someone else may have made to the remote copy of the file. This feature is described in detail on page 387.

8. **Click OK to proceed, or Cancel to stop the synchronization.**

   If you click OK, Dreamweaver commences copying and deleting the chosen files. If you want to stop this process after clicking OK, click the Cancel button in the Background File Activity window (see the box on page 623).

9. **Click Close.**

Tip: If you just want to *identify* newer files on the local site without synchronizing them (to run a report on them, for example), click the contextual menu in the top-right corner of the Files panel and choose Edit → Select Newer Local, (Windows users can right-click anywhere in the Files panel and choose Select → Newer Local from the pop-up contextual menu). Dreamweaver connects to the remote site and compares the files, and then, in the Files panel's Local Folder list, highlights files on the Local site that are newer than their remote counterparts.

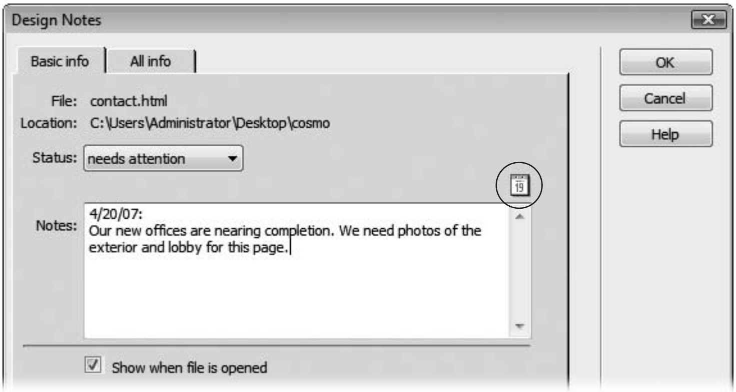
You can also identify newer files on the remote site: Choose Edit → Select Newer Remote from the Files panel's contextual menu (Windows users can right-click and then choose Select → New Remote). As with the Synchronization command, these options are unavailable if you're using Visual SourceSafe.

You can also identify files on your computer that you've either created or modified within a given date range, using the new Select Recently Modified command described on page 588.

Communicating with Design Notes

Lots of questions arise when a team works on a Web site: Has this page been proofread? Who is the author of the page? Where did this graphic come from? Usually, you must rely on a flurry of emails to ferret out the answers.

But Dreamweaver's Design Notes dialog box (Figure 17-14) eliminates much of that hassle by letting you attach information, such as a Web page's status or author, to a file.



File: contact.html
Location: C:\Users\Administrator\Desktop\cosmo
Status: needs attention
Notes: 4/20/07:
Our new offices are nearing completion. We need photos of the exterior and lobby for this page.
☑ Show when file is opened

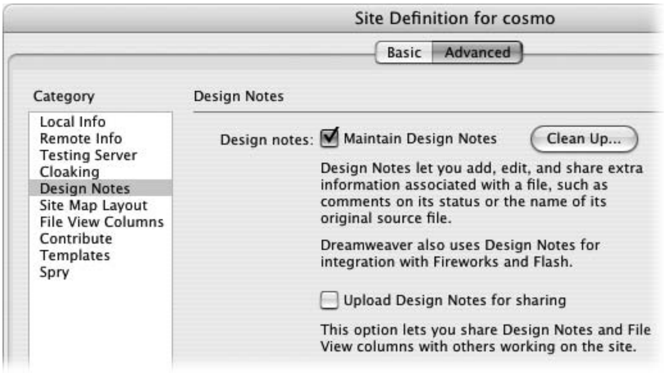
Figure 17-14: *If you want the Design Notes window to open whenever someone opens the page, turn on the "Show when file is opened" checkbox. This option makes sure no one misses an important note attached to a Web page. When the page is opened in Dreamweaver, the Design Notes window appears automatically. (This option has no effect when adding notes to GIFs, JPEGs, Flash movies, or anything other than a file that Dreamweaver can open and edit, such as a Web page or an external CSS style sheet.)*

You can open these notes (from the Files panel or from a currently open document), edit them, and even share them with others. In this way, it's easy to leave notes for other people—such as, "Hey Bob, can you make sure that this is the most recent photo of Brad and Angelina?" You can even add notes to files other than Web pages, including folders, images, Flash movies, and external Cascading Style Sheets—anything, in fact, that appears in the Files panel.

Setting Up Design Notes

You can't use Design Notes unless the feature itself is turned on. To find out if it is, open the Site Definition dialog box by double-clicking the site's name in the Manage Sites dialog box (choose Manage Sites from the Site menu or the pop-up menu in the Files panel). In the Category list, click Design Notes; as shown in Figure 17-15, two checkboxes pertain to the notes feature:

- **Maintain Design Notes.** This checkbox lets you create and read notes using Dreamweaver's File → Design Notes command (see page 640).
- **Upload Design Notes for sharing.** If you're using Design Notes as part of a team, turn on this checkbox, which makes Dreamweaver upload design notes to the remote site, so that your fellow team members can read them.



Design notes: ☑ Maintain Design Notes

Design Notes let you add, edit, and share extra information associated with a file, such as comments on its status or the name of its original source file.

Dreamweaver also uses Design Notes for integration with Fireworks and Flash.

□ Upload Design Notes for sharing

This option lets you share Design Notes and File View columns with others working on the site.

Figure 17-15:
The Clean Up button deletes any notes that were attached to now-deleted files. (To avoid stray notes files in the first place, always delete pages in Dreamweaver's Files panel, instead of on your desktop.) If you turn off the Maintain Design Notes checkbox, clicking Clean Up removes all Design Notes files for the site.

Note: Design Notes are especially useful for keeping track of pages that are built and maintained by a team of developers. But if you're a solo operator and still want to use them—maybe you're the type with a hundred Post-it notes taped to the edges of your monitor—then turn off "Upload Design Notes for sharing." You'll save time and server space by preventing Dreamweaver from transferring note files to the Web server.

Click OK to close the Site Definition dialog box. You can double-click another site in the Manage Sites dialog box to turn on its Design Notes feature, or click Done.

Adding Design Notes to a File

To add a Design Note to a document you're working on, choose your favorite method:

- Choose File → Design Notes.
- From the File Status menu in the toolbar, choose Design Notes (see Figure 17-9).
- Right-click (Control-click) a file in the Files panel (or an external object, such as a graphic or Flash movie, in the document window), and choose Design Notes from the shortcut menu.

In any case, the Design Notes window now opens (Figure 17-14). If you like, you can use the Status pop-up menu to let your team members know where the file stands. For example, is it ready to move to the Web server? Is it just a draft version? Or is there something wrong with it that requires specific attention? Dreamweaver provides eight different options: "draft," "revision1," "revision2," "revision3," "alpha," "beta," "final," and "needs attention." If these categories don't match your workflow—for example, you want a "needs proofing" flag—you can change them; see the box "Create Your Own Status Menu."

The note itself, which you type into the Note box, could be a simple question you have for the author of the page ("Are you sure 'Coldplay: Defining a New Musical Language for the Modern Age' is an appropriate title for this article?") or more information about the status of the page ("Still need studio shot of latest indoor mowers").

POWER USERS' CLINIC

Create Your Own Status Menu

The Status pop-up menu in Design Notes is a great feature. With a flick of the mouse, you can assign a status to a page or file, letting others know if a page is finished or just a rough draft. But the preset status options may not exactly fit your process. Your team may not use the terms "alpha" or "beta." Instead, you may have other stages you'd like to add, such as "copy edit," to signify that a page is ready to be proofread and tested.

With a little sly hacking, you can change the status categories to suit your needs. The file *Design Notes.htm* holds the key to the puzzle. On Windows the file is located in C:\Program Files\Adobe Dreamweaver CS3\configuration\Commands\Design Notes.htm. On a Mac the file is in Applications → Adobe Dreamweaver CS3 → Configuration → Commands → *Design Notes.htm*. Start by making a backup copy of the file; you can always return to it if something goes wrong.

Then open this file in a text editor like NotePad or TextEdit, or even within Dreamweaver's Code view.

Find line 29 in the file, which looks like this:

```
STATUS_ITEMS = new
Array("","draft","revision1","revision2",
"revision3", "alpha","beta","final","needs
attention");
```

The words between the double-quotes are the choices that appear in the Status menu. You can change or delete them as you see fit (if you delete one, be sure to delete the word, both sets of quotation marks, and the following comma). Then, after saving changes to the file, quit and restart Dreamweaver, where you'll see your new, improved Status pop-up menu ready for action.

To make sure you and your co-workers see the same choices, give each of them the modified *Design Notes.htm* file, and advise them to put it in their own Adobe Dreamweaver CS3 → configuration → Commands folders.

Tip: Click the calendar icon (circled in Figure 17-14) to pop the date into your note–a great way to keep a running tally of notes and the dates they were made.

When you click OK, Dreamweaver creates a file with all the note information in it. This file ends with the extension .mno and begins with the name of the file; for the file *index.html*, for example, the note would be called *index.html.mno*.

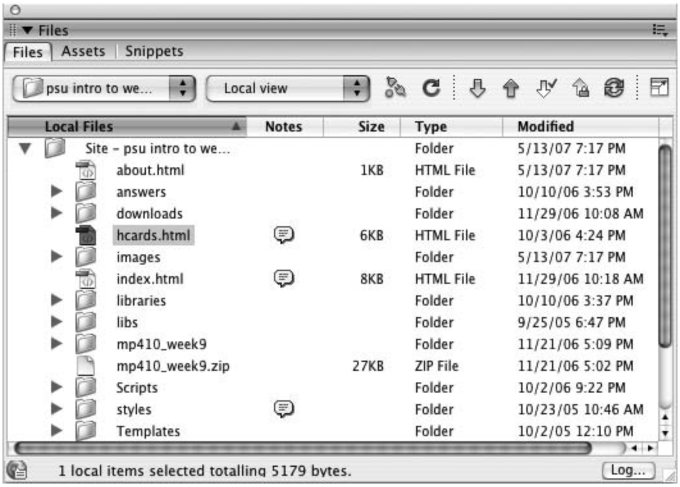
Dreamweaver stores notes in a folder called *_notes* that it keeps in the same folder as the page or file. For example, if you add notes to the home page, Dreamweaver stores the notes file in the *_notes* folder inside the root folder.

Viewing Design Notes

You can view Design Notes in a number of ways. If the note's author turned on "Show when file is opened" (see Figure 17-14), of course, the Design Notes window opens automatically when you open that page.

Otherwise, to look at a note, you have any number of options:

- Choose File → Design Notes.
- Choose Design Notes from the File Status drop-down menu in the document window's toolbar (see Figure 17-9).
- Double-click the small yellow balloon icon in the Notes column of the Files panel (see Figure 17-16). (This column is visible only if you've turned on this option in the Site Definition window, as described below.)



Local Files	Notes	Size	Type	Modified
Site - psu intro to we...			Folder	5/13/07 7:17 PM
about.html		1KB	HTML File	5/13/07 7:17 PM
answers			Folder	10/10/06 3:53 PM
downloads			Folder	11/29/06 10:08 AM
hcards.html	💬	6KB	HTML File	10/3/06 4:24 PM
images			Folder	5/13/07 7:17 PM
index.html	💬	8KB	HTML File	11/29/06 10:18 AM
libraries			Folder	10/10/06 3:37 PM
libs			Folder	9/25/05 6:47 PM
mp410_week9			Folder	11/21/06 5:09 PM
mp410_week9.zip		27KB	ZIP File	11/21/06 5:02 PM
Scripts			Folder	10/2/06 9:22 PM
styles	💬		Folder	10/23/05 10:46 AM
Templates			Folder	10/2/05 12:10 PM

1 local items selected totalling 5179 bytes.

Figure 17-16:
A yellow speech bubble in the Notes column of the Files panel indicates a Design Notes file. You can even add a note to a folder (in this case, the styles folder). The notes column is normally hidden: you can make it appear from the File View Columns category of the Site Definition window as described below.

- Right-click (Control-click) an embedded object, like a graphic or Flash movie, right in the document window, and choose Design Notes from the shortcut menu.
- Right-click (Control-click) a file in the Files panel and choose Design Notes from the shortcut menu.

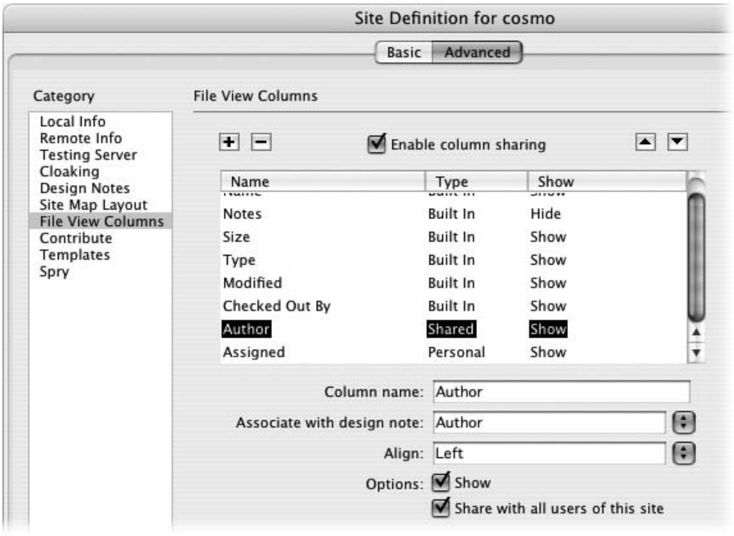
Organizing the Columns in the Files Panel

Columns in the Files panel identify a file's name, file size, modification date, type, and so on.

This may be more information than you're interested in—or it may not be enough. So remember that Dreamweaver lets you show or hide these various columns, change their order, or even create new columns with information retrieved from a file's Design Notes.

Tip: You can adjust the relative widths of these columns by dragging the dividing line between the column names. You can also sort all the pages listed in this window by clicking the relevant column's name. Clicking Modified, for example, sorts the files so that the newest appear first. Click a second time to reverse the sort, placing oldest files first.

When you're setting up a Web site in the Site Definition window, you can view the column setup by clicking the File View Columns category (Figure 17-17).



☑ Enable column sharing

Name	Type	Show
Notes	Built In	Hide
Size	Built In	Show
Type	Built In	Show
Modified	Built In	Show
Checked Out By	Built In	Show
Author	Shared	Show
Assigned	Personal	Show

Column name: Author

Associate with design note: Author

Align: Left

Options: ☑ Show

☑ Share with all users of this site

Figure 17-17:
If you're working with others, you might want to share columns you add. Turn on the "Enable column sharing" checkbox; then, you'll be able to see columns that others on your team have added, and they'll be able to see columns you've added (if you've turned on "Share with all users of this site" for each column, of course).

Once you're looking at the display shown in Figure 17-17, you can perform any of these stunts:

- **Reorder columns.** Click a column name in the Site Definition window to select it. Then click the up and down arrow buttons to move the column one spot to the left or right, respectively, in the Files panel.
- **Hide columns.** You may not care what date a file was last modified or whether it's a folder or Web page. If that's the case, hide the column by clicking its name in the Site Definition window and then turning off the Show checkbox (see Figure 17-17). (You can always return to the Site Definition window and turn the column back on.)

- **Share a column.** If you work with a team of designers, you may want to make newly added columns visible to them, too. (See Figure 17-17 for details.)
- **Adding Columns.** You can add informational columns of your own, as described next.
- **Deleting columns.** Click the column name, and then click the minus (–) button to delete the column. (Dreamweaver doesn't let you delete the built-in columns: Name, Notes, Type, Modified, and so on.)

"All Info" Design Notes in Column Views

Your Files panel offers columns for all the usual information bits: Name, Checked Out, and so on. But you may someday wish there were a column that showed each page's status, so that your Files panel could show you which files need proofreading, or who wrote each article, or which pages are being held until a certain blackout date.

You can indeed add columns of your own design, although the process isn't streamlined by any means. It involves two broad efforts: First, using an offshoot of the Design Notes feature described earlier, you set up the new columns you want displayed. Then, using the column-manipulation dialog box shown in Figure 17-17, you make the new columns visible in the Files panel.

Phase 1: Defining the new information types

You create new kinds of informational flags—primarily for use as new columns in the Files panel—using the Design Notes dialog box, described on page 637. Here's the rundown:

1. **Choose File → Design Notes.**

   The Design Notes window appears. (You can summon it in various other ways, too, as described on page 640.)

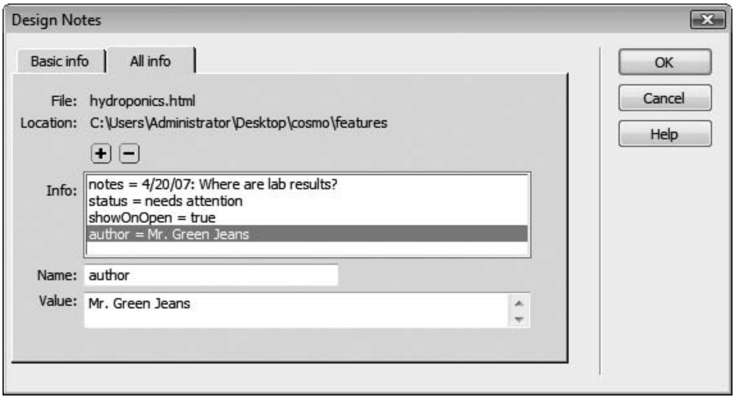
2. **Click the "All info" tab.**

   This peculiar window shows the programmery underbelly of the Dreamweaver Notes feature (see Figure 17-18). It turns out that it stores every kind of note as a name/value pair. If you used the main Notes screen (Figure 17-14) to choose Beta from the Status pop-up menu, for example, you'll see a notation here that says "status=beta." (*Status* is the name of the info nugget; *beta* is the value.) If you turned on the option called "Show when file is opened," you'll see "showOnOpen=true." And if you typed *Badly needs updating* as the note itself, you'll see "notes=Badly needs updating" on this screen.

   But those are just the built-in info types; you're free to create your own.

3. **Click the + button.**

   You may wonder why you'd do this; after all, you can type a lot of information in the Notes box under the Basic Info tab. The primary benefit of creating new types of notes is that you can display that information in the Files panel.



File: hydroponics.html

Location: C:\Users\Administrator\Desktop\cosmo\features

Info:
notes = 4/20/07: Where are lab results?
status = needs attention
showOnOpen = true
author = Mr. Green Jeans

Name: author

Value: Mr. Green Jeans

Figure 17-18: *Dreamweaver lets you create your own types of notes in the "All info" tab of the Design Notes window. This lets you add more information to a page, such as its author or designer. If you want to delete a note you've added, it's a simple matter of clicking on the note in the Info box and then clicking the minus (–) button.*

4. **Type the name of the new note in the Name field.**

   It may be *Author*, for example, so that you can note who wrote the text of each page. Or it could be *Artist*, if you wish to add a note to each image specifying who created it. Maybe you need a column called *Hold Until*, which lets you know when certain information is OK to publish online.

5. **Press Tab (to jump to the Value field); type the contents of the note.**

   You can enter the actual name of the author or artist—Jennifer Jones, for example—or the actual "Hold Until" date.

   Repeat steps 3–5 if you want to add more notes to the page or file.

Tip: Keep the value short–one or two words. Otherwise, the narrow Files panel column chops off the latter part of it. If you've got enough screen real estate, you can resize the columns by dragging the divider bars between column names.

6. **Click OK.**

   The dialog box closes.

Phase 2: Adding the column

Just creating a new note type gets you only halfway home; now you have to tell Dreamweaver that you want to see that information in the Files panel.

To add a column:

1. **Open the Site Definition window for the particular site and select the File Views category.**

   See page 564 for a reminder of how to edit a site definition. The File Views dialog box appears.

2. **Click the + button (Figure 17-17).**

   A new, untitled column is added to the list, complete with three fields that need filling in (they now say "untitled").

3. **In the Column Name box, type the column-heading name you want to appear in the Files panel.**

   Make it short and descriptive. If possible, it should match the note type (*Author, Artist, Hold Until,* or whatever).

4. **Press Tab. Type the name of the Design Note you wish to use for this column.**

   This is the name part of the name/value pair described in step 4 of the previous instructions. For example, if you added a note named Author to a file, you would type *Author* here. Capitalization matters; so if you named the Design Note *Author*, type it with a capital A.

   There's a pop-up menu here, too, but it always lists the same four options: Status, Assigned, Due, and Priority. If you choose Status, you'll get a column that reflects your choice from the Status pop-up menu. The other three options do nothing *unless* you created a matching note type in step 4 of the previous instructions. (It would be nice if this pop-up menu listed *all* of the note names you've created, so that you didn't have to remember them.)

   Before you wrap up the column-adding procedure, you can, if you wish, choose an alignment option for the text in the column (left, right, or center). Check to make sure that the Show checkbox is turned on (otherwise, your new column won't appear, and you've just defeated the purpose of this whole exercise). Finally, turn on "Share with all users of this site," if you like.

   The Share feature works like this. The next time you connect to the remote site, Dreamweaver uploads a file containing your newly defined column information. The next time another member of the team connects to the remote site, *his* copy of Dreamweaver downloads this file, so that his Files panel shows the same columns yours does.

Note: The column-sharing feature is very handy; it lets everyone working on a site share the same note information. But it works properly only if everyone on the team has the "Enable column sharing" checkbox turned on (see Figure 17-17).

5. **Click OK.**

   You should now see the new information column in your Files panel (You may need to widen the panel to see all of the columns. You can also click the Expand Files Panel button [Figure 17-1] to expand the Panel.)

5

Part Five: Dreamweaver CS3 Power

CHAPTER
18

Snippets and Libraries

You've finished the design for your company's new Web site. It looks great and your boss is ecstatic. But you've really only just begun. There are hundreds of pages to build before you launch. And once the site's online, you'll need to make endless updates to keep it fresh and inviting.

This is where Dreamweaver's Snippet and Library features come in, streamlining the sometimes tedious work of building and updating Web pages.

As you build more and more Web pages (and more and more Web sites), you may find yourself creating the same Web page elements over and over again. Many pages of a site may share certain common elements that are always the same: a copyright notice, a navigation bar, or a logo, for example. And you may find yourself frequently using more complex items, such as a pull-down menu listing all the countries your company ships products to, or a particular design you use for photos and their captions.

Recreating the same page elements time after time is tiresome and—thanks to Dreamweaver—unnecessary. Dreamweaver provides two subtly different tools for reusing common page elements: *Snippets* and *Library items*.

Snippets Basics

Snippets aren't fancy or complex, but they sure save time. A snippet is simply a chunk of code that you store away and then plunk into other Web pages. It could be HTML, JavaScript, or any of the other programming languages you may encounter. Dreamweaver comes with hundreds of snippets organized into different folders, like Footers (canned footer designs), Form Elements (useful form parts like pull-down menus), and JavaScript code (programming code for interesting effects like adding a random image to a page).

For example, say you always use the same table design to list the specifications for a product in your company's catalog. Each time you want to create a similar table, you could go through all the same steps to build it—or you could turn that table into a snippet and then, with a simple double-click, add it to page after page of your site.

You keep these code chunks in the Snippets tab of the Files panel (see Figure 18-1). You get to them in any of several ways:

- Choose Window → Snippets.
- Windows people can press Shift-F9. (There's no Mac keyboard shortcut for opening the Snippets tab, but you can create your own if you want, as described on page 733).
- Click the Snippets tab on the Files panel.

Above and beyond Dreamweaver's preinstalled snippets, you can quickly build a collection of your own.

Using Snippets

Snippets come in two varieties: those that are a simple block of code and those that wrap around whatever you've currently selected in the document. For example, in the Text folder of the Snippets tab, you'll find a snippet called Service Mark. Adding this snippet to a page instantly inserts the code *<sup>sm</sup>*, creating a superscript service mark (^{SM}) symbol.

But on occasion you may want to wrap code around something you've already typed. You may want to add an HTML comment to your page (a message that won't appear in a Web browser, but that you can use for helpful notes to yourself or other Web designers). The "Comment, multi-line" snippet (in the Comments folder) can help you quickly add such comments. It wraps whatever you've selected with opening (<!--) and closing HTML comments (-->). Adding an HTML comment is as easy as typing the comment, selecting it, and then inserting this snippet. (This may sound a lot like the Apply Comment button in the Coding toolbar described on page 376. The cool thing about this snippet is that it works in Design view, too, not just Code view.)

Note: Unfortunately, unless the snippet's description (visible in the Snippet Panel's *Description* column) specifies that the snippet wraps, there's no way to tell whether a snippet is intended to wrap around a selection. You either have to try the snippet or open the snippet in editing mode (see page 651) to find out. (While you've got the snippet open, you can add a note to its description indicating its ability, or inability, to wrap.)

To add a snippet to a Web page, click in the document where you want the item to go, or select the object you wish to wrap with a snippet. Then do one of the following:

- Double-click the name of the snippet on the Snippets tab of the Files panel.

- Select the snippet on the Snippets tab, and then click the panel's Insert button.
- Drag the snippet from the panel into the document window. (If the snippet is supposed to wrap a selection, drag the snippet *onto* the selected object.)

Snippets can be used in either Design or Code view (see page 370), but some snippets make sense only in Code view. For example, the JavaScript snippets that come with Dreamweaver typically have to be inserted in the <head> of a page, inside <script> tags. To use them, you must switch to Code view, insert the script tags, and then put the snippets inside.

Tip: To quickly insert a snippet you've recently used, select the snippet from the Insert → Recent Snippets menu. Better yet, create a keyboard shortcut for your favorite snippets and insert them with a quick keystroke as described on page 733.

Snippets simply dump their contents into a document; Dreamweaver doesn't step in to make sure that you're adding the code correctly. Unless you're careful—and have some knowledge of HTML—you may end up adding snippets that make your Web page unviewable. (For advice on how to avoid such pitfalls, see the box on page 653.)

Creating Snippets

Dreamweaver comes with a lot of snippets, and you many have no use for many of them. No problem—it's simple to create snippets of your own. Here's how:

1. **Create and select the code you wish to turn into a snippet.**

   You could, for instance, select a table in Design view, or select the opening and closing <table> tags (as well as all the code between them) in Code view. Or, if you wanted to save a pull-down form menu (see page 414) that took you half an hour to build, just click the form menu in Design view.

   If you make a snippet out of code that isn't visible in Design view, such as a JavaScript program or content that appears in the <head> of the page, you need to switch into Code view first and then select the code.

2. **Click the New Snippet button on the Snippets tab (Figure 18-1).**

   The Snippet window appears (Figure 18-2), displaying the code you selected in the Insert field.

Tip: If you skip step 1 and just click the New Snippet button, you can either type the code or paste a previously copied selection into the Insert box (see step 6).

3. **Title the snippet.**

   The name you type in the Name field appears in the Snippets tab. Make sure to give it an easily understood name.

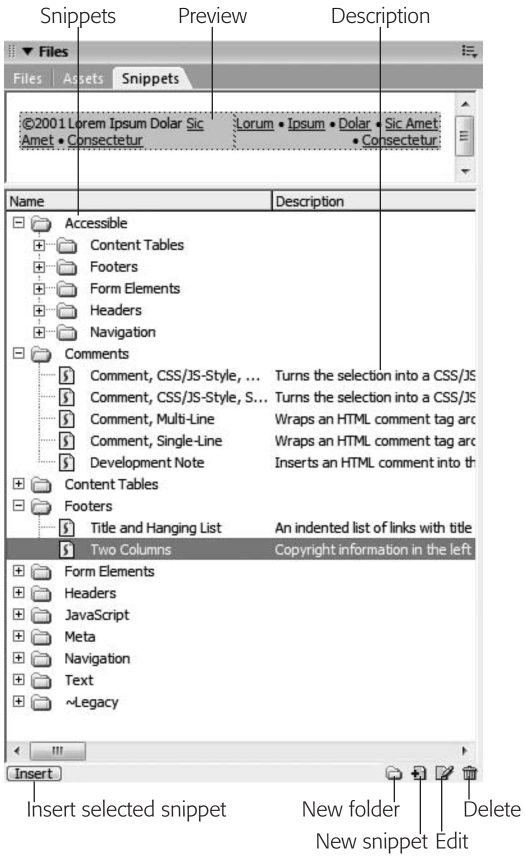

Snippets
Preview
Description
Files
Files
Assets
Snippets
©2001 Lorem Ipsum Dolar Sic Amet • Consectetur
Lorum • Ipsum • Dolar • Sic Amet • Consectetur
Name
Description
Accessible
Content Tables
Footers
Form Elements
Headers
Navigation
Comments
Comment, CSS/JS-Style, … Turns the selection into a CSS/JS
Comment, CSS/JS-Style, S… Turns the selection into a CSS/JS
Comment, Multi-Line Wraps an HTML comment tag arc
Comment, Single-Line Wraps an HTML comment tag arc
Development Note Inserts an HTML comment into th
Content Tables
Footers
Title and Hanging List An indented list of links with title
Two Columns Copyright information in the left
Form Elements
Headers
JavaScript
Meta
Navigation
Text
~Legacy
Insert
Insert selected snippet
New folder
Delete
New snippet
Edit

Figure 18-1:
The Snippets tab on the Files panel contains reusable chunks of code–snippets–which you can organize into folders. After selecting a snippet from the list, a preview appears in the Preview pane. In this example, you can see a preview of the snippet: a simple table with a colored background and dummy text. Snippets can have either a graphic preview (as in this example), called design preview, or a code preview, which is the raw code. Code previews are useful for snippets that aren't visible in Design view, such as JavaScript code. (When you create your own snippets, you specify the preview type.)

4. **In the Description field, type identifying details.**

   This step is optional, but useful. Use this field to provide a description of when and how to use the snippet and whether or not the snippet wraps a selection.

5. **Select a Snippet type.**

   "Wrap selection" makes the code wrap around a selection when you use the snippet in your Web pages. The "Insert block" option is for a snippet that's a single block of code inserted into the document—for example, a simple copyright notice, or a form menu.

6. **If necessary, add the code for the snippet.**

   If you initially selected code in the document window, it already appears in the "Insert before" field for a snippet that wraps around other code. For snippets that are just a single block of code, the code appears in the "Insert code" box.

If you're creating a wrapping snippet, then some code goes in the "before" field and some in the "after" field. For example, say you wanted to create a snippet that would let you set off a paragraph of text by adding a horizontal rule at the beginning of the paragraph and one at the end. In both the "Insert before" and "Insert after" fields, you'd type *<hr>*—the HTML code for a horizontal rule. (If you're creating XHTML pages as described on page 479, you'd type *<hr />* in both fields.)

7. **Select a "Preview type."**

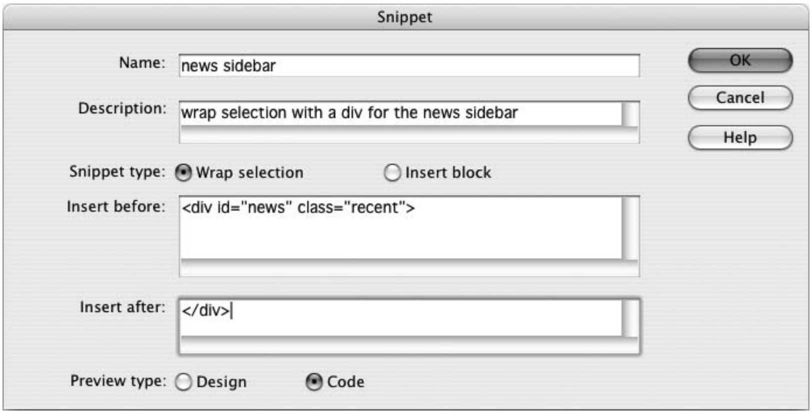
   The preview type determines how the snippet appears in the Preview pane of the Snippets tab (see Figure 18-1). *Design* means the snippet looks as it would in Design view—a snippet of a table appears as a table, for instance. *Code* means the code itself appears in the Preview pane (in that case, a snippet for a horizontal rule would preview like this: <hr>). Use Code preview for snippets that aren't visible in Design view, such as JavaScript code.

8. **Click OK.**

   Dreamweaver adds the snippet to the Snippets tab; you can then drop it in your Web pages using any of the techniques described on page 648.

If you need to go back and edit a snippet—change the code, type, description, or name—select the snippet in the Snippets tab and click Edit Snippet (Figure 18-1). You can also right-click (Control-click) the snippet name and then select Edit from the shortcut menu.

Whichever method you chose, the Snippet window (Figure 18-2) appears. Make your changes, and then click OK.



Name: news sidebar

Description: wrap selection with a div for the news sidebar

Snippet type: ● Wrap selection ○ Insert block

Insert before: <div id="news" class="recent">

Insert after: </div>

Preview type: ○ Design ● Code

Figure 18-2: *The Snippet window lets you create reusable chunks of HTML called snippets. For snippets that wrap around a currently selected object on the page–for example, a snippet that adds a link to any selected text or graphic–you put code in the two insert boxes. The code that appears before the selected object goes in the top box, and the code that goes after the object appears in the bottom box. In this example, the snippet wraps the current selection in a <div> tag (see page 313) with a predefined ID and class applied to it.*

Organizing Snippets

To keep snippets organized, you can create new folders to store them by category. To add a folder to the Snippets tab, click the New Folder button (see Figure 18-1). An untitled folder appears; type a name for it. If you select a folder before clicking New Folder, Dreamweaver creates the new folder *inside* that folder. You can move folders around by dragging them into other folders.

Note: To drag a folder or snippet to the top level of the Snippets list, you have to drag it all the way to the *bottom* of the tab, below any other folders. If you try to drag it to the top, Dreamweaver puts the folder or snippet inside the top folder in the list.

To move a snippet into or out of its folder, simply drag it. If you drag a snippet over a closed folder without releasing the mouse, that folder expands to reveal the folders inside, if any.

To delete a snippet, select it from the Snippets tab and then click the Delete Snippet (Trash can) button (see Figure 18-1). Quicker yet, press Delete.

Note: Having lots of snippets can slow down the Snippets panel, so it's best to remove any snippets you don't use (like a lot of the ones that came with the program, for example). If you don't want to permanently delete them, you can move them out of the main Adobe Dreamweaver CS3 → configuration → Snippets folder and store them in a separate folder on your hard drive. (For more on the configuration folder and how to find it, see the box on page 744.)

Built-in Snippets

Many of the snippets that come with Dreamweaver offer solutions to specific problems you may never encounter, like a page footer containing two lists of links and a copyright notice. In addition, many use older design techniques (like using tables to lay out content) that are best avoided. However, most Web developers will find at least a few snippets worth using. Here are some highlights:

- **Close Window Button.** When you create a pop-up window (page 517), this snippet lets you add a Close button to let people dismiss the window. The "Close Window Button" snippet (in the Form Elements folder) places a form button with the words Close Window on the window page, complete with the JavaScript necessary to close the window when your visitor clicks the button.
- **Dropdown Menus.** If you create a lot of forms for your sites (see Chapter 11), you'll find some useful snippets in the Form Elements folder, especially in the Dropdown Menus subfolder. For example, the "Numbers 1-12" snippet inserts a menu with the numbers 1–12 already coded into it—great for capturing credit card expiration dates on an e-commerce site. (To create an even more useful drop-down snippet, see the tutorial on page 659.)

- **Autoclear Textfield.** Ever seen a Web form with a text field that has some helpful instructions *inside* the field ("Type your name here," for example)? This text magically disappears when you click in the field, leaving you free to type as instructed. A snippet called "Textfield, Autoclear" (also in the Form Elements folder) supplies both the text field and the bit of JavaScript that performs this little trick.

TROUBLESHOOTING MOMENT

A Snippet of Caution

Snippets aren't as smart as other Dreamweaver features. Dreamweaver is usually good about warning you before you make a mistake, but it doesn't make a peep if you're incorrectly adding a snippet.

For instance, when you use one of the program's form snippets to add, say, a text field to a page, Dreamweaver doesn't check to see if you're really putting the snippet into a form. Dreamweaver doesn't let you know if the required <form> tag is missing, and certainly doesn't add it itself. Furthermore, if you're working in Code view, Dreamweaver lets you add snippets to the <head> or even outside the <html> tags altogether, which is useful when creating dynamic Web pages that include server-side programming code, but just creates messy and invalid HTML on normal Web pages.

Furthermore, snippets don't take advantage of Dreamweaver's site management features to keep track of links or paths to images. Suppose you create a snippet that includes an image. If you insert that snippet into another page, the image may not show up correctly. If you create a snippet that includes a link from one page to another on your site, that link is also unlikely to work in another page.

So it's best to create snippets without images or links–but there are workarounds. For instance, you can create snippets with fake links–use nothing but the # symbol for the link, for example–and update the link after you insert the snippet into a page. For images, you can use Dreamweaver's Image Placeholder object to simulate a graphic in a snippet (choose Insert → Image Objects → Image Placeholder). After adding the snippet to the page, update the placeholder with your real image file.

If you want to create reusable content that can keep track of links and images, see Dreamweaver's Library feature, described below.

Library Basics

Imagine this situation: You manage a relatively large Web site consisting of thousands of Web pages. At the bottom of each page is a simple copyright notice: "Copyright MyBigCompany. We reserve all rights—national, international, commercial, noncommercial, and mineral—to the content contained on these pages."

Each time you add another page to the site, you *could* retype the copyright message, but this approach invites both typographic errors and carpal tunnel syndrome. And if you must *format* this text too, then you're in for even more work.

Fortunately, Dreamweaver's Library can turn any selection in the document window (a paragraph, an image, a table) into a reusable chunk of HTML that you can easily drop into any Dreamweaver document. The Library, in other words, is a great place to store copyright notices, navigation bars, or any other chunks of HTML you use frequently.

So far, this description sounds pretty much like the snippets described in the previous section. But Library items have added power: Each Library item that you add to a Web page is actually only a copy, which remains linked to the original. Thanks to this link, whenever you update the original Library item, you get a chance to update every page that uses that item.

Suppose your company is bought, for example, and the legal department orders you to change the copyright notice to "Copyright MyBigCompany, a subsidiary of aMuchBiggerCompany" on each of the Web site's *10,000 pages*. If you had cleverly inserted the original copyright notice as a Library item, you could take care of this task in the blink of an eye. Just open the item in the Library, make the required changes, save it, and let Dreamweaver update all the pages for you (see Figure 18-3).

Compared to Snippets, Library items are much smarter. They possess the unique ability to update the same material on an entire site's worth of files in seconds, and can successfully deal with links and images. Unlike Snippets, however, Dreamweaver's Library feature is site-specific. In other words, each site that you've defined in Dreamweaver has its own Library. You can't use a Library item from one site on a page from a different site.

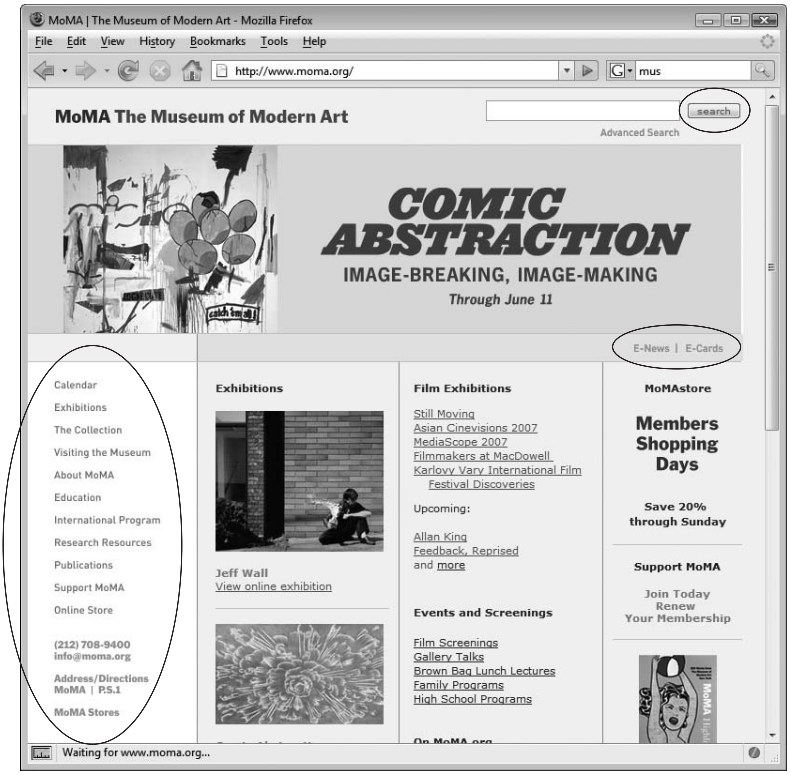


Figure 18-3: *The Museum of Modern Art's home page, which was created with Dreamweaver, takes advantage of Library elements. Many of the navigation options on the page (circled) are Library items. If the Museum decides to add or remove a navigation link, it can update the Library item to change every page on the site in one simple step (see page 657). In fact, since a Library item is a chunk of HTML, the Museum could decide to replace the left-hand navigation bar with a Flash movie, plain-text links (instead of graphics), or any other valid HTML code.*

Creating and Using Library Items

To create a Library item, start by opening the Library window. Choose Window → Assets, and click the Library Items button (it looks like an open book, circled in Figure 18-4) to reveal the Library category.

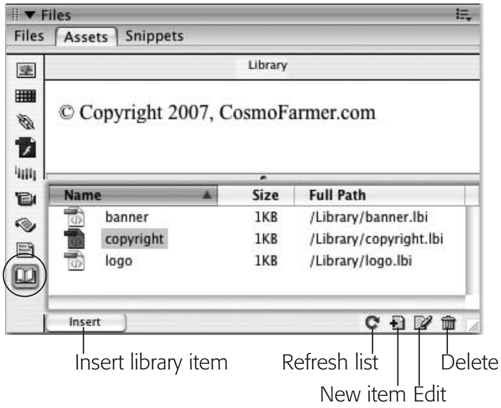
Now select the part of your document that you wish to save as a Library item: a blob of text, a graphic, or whatever.

Note, however, that Library items can contain only page elements that appear in the document window—in other words, only HTML from the <body> of a Web page. You can't include anything that appears in the <head> of a page, like Cascading Style Sheets, Dreamweaver Behaviors (Chapter 12), or meta tags. Furthermore, Library items must include a complete set of HTML tags—both an opening and closing tag—as well as all tags necessary to complete the original object. For example, Dreamweaver doesn't let you turn just a single cell, row, or column of a table into a Library item. If you try, Dreamweaver adds the *entire* table to the Library.

Tip: Use the Tag selector (see page 22) to make sure you select the precise tag information you want. To select *all* of the contents of a cell, click at the beginning of the content and drag until you've selected everything in the cell.

Next, add the selection to the Library. As you may expect, Dreamweaver provides several ways to do this:

- Drag the highlighted selection into the list of Library items.
- Click the New Item button (Figure 18-4).
- Choose Modify → Library → "Add Object to Library".



© Copyright 2007, CosmoFarmer.com

Name	Size	Full Path
banner	1KB	/Library/banner.lbi
copyright	1KB	/Library/copyright.lbi
logo	1KB	/Library/logo.lbi

Figure 18-4:
The Assets panel's Library category lists the name, file size, and location of each Library item in the currently opened site. When you select a Library item from the list, you see a small preview. In this example, the Library item "copyright" is a copyright notice.

The new item appears in the Assets panel, bearing the jaunty name "Untitled." Just type to replace that with a more useful name, such as *Copyright notice* or *Logo*.

(Avoid hyphens in your Library item's name. These tend to trip up the Firefox Web browser, as described in the box on page 659.) Your new Library element is ready to use.

Note: Even though you can't turn a CSS style into a Library item, you *can* turn HTML that has been styled with CSS into a Library item. For example, you can add to the Library a paragraph that has a CSS class style applied to it. When you attempt to add this paragraph to the Library, Dreamweaver warns you that the item may not look the same when you place it in other documents–because the style sheet information doesn't come along for the ride. To make sure the Library item appears correctly, make sure that you attach the same style sheet to any page where you use that item. External style sheets (see page 113) make this easy.

Adding Library Items to a Page

To add a Library item to a Web page, drag it directly out of the Assets panel's Library items listing onto your page. (The long way: Click to plant your insertion point in the Web page, click the Library item you want in the Assets panel, and then click the Insert button on the Assets panel, shown in Figure 18-4.)

Note: Library items (.lbi files) also appear in the Files panel in a site's Library folder. Dragging a Library item from the Files panel to a page, however, *doesn't* insert it into the page. It adds the name of the library item file (not its contents) with a link to the .lbi file–not something you want to do.

When you insert a Library item into a Web page (or turn a selected item *into* a Library item), it sprouts a light-yellow background color. The highlighting indicates that Dreamweaver intends to treat the Library item as a single object, even though it may be made of many different HTML elements. You can select it or drag it around, but you can't change it on the Web page. (Unfortunately, if you turn a nontransparent graphic into a Library item—like a logo, for example—Dreamweaver doesn't give you this helpful visual cue.)

Remember, too, that the placed Library item is linked to the original copy in the Library. The copy in your document automatically changes to reflect any changes you make to the copy in the Library, using the technique described next.

Tip: Sometimes you may want to sever the connection between the Library and a Library item you've already placed onto a Web page–to modify a copyright notice on a particular page, for example. Select the item on the page and then click "Detach from original" in the Property inspector (Figure 18-5). Dreamweaver removes the comment tags (see the box on page 659), thus breaking the link to the Library.

You can also insert the HTML of a Library item *without* maintaining a link to the Library by pressing the Ctrl (⌘) key when you add it to your document. Now Dreamweaver doesn't update the HTML on this page when you change the original Library file.

Don't use this method if the Library item contains images or document-relative links, however. Dreamweaver doesn't update the links with paths appropriate to the document's location when you insert the Library item in this way. In this case, first insert the Library item normally and then unlink it using the method described in this tip's first paragraph.

Editing Library Items

You'll appreciate the real power of Library items when it's time to make a change. When you update the file in the Library, all pages that you've graced with that item update themselves, too.

Start by opening the Library, as described on page 655. Then:

1. **Open the Library item that you want to edit.**

   You can do this by double-clicking the Library item in the Assets panel, by highlighting it and then clicking the Edit button (Figure 18-4), or by highlighting a Library item on a Web page and then clicking the Open button on the Property inspector (Figure 18-5). (You can also open the Library item file—an .lbi file—in the Library folder of your site's root directly from the Files panel.)

   Dreamweaver opens what looks like a normal Web page document, but it only contains the text, graphics, or other elements of the Library file.

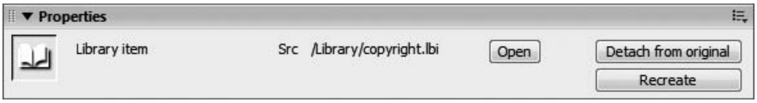


Figure 18-5:
The selected Library item (a .lbi file) is in the site's Library folder. (The path appears after the word "Src.")

2. **Edit away.**

   A Library item is only a selection of HTML; it's not a complete Web page. That means you shouldn't add *page* properties like the title or background color (Dreamweaver will actually let you do this, but that will add invalid HTML code to the Library item as well as every page that uses that Library item). Also, you can insert Library items only in the body of a Web page, so stick with objects that would normally appear in the document window, such as links, images, tables, and text. Don't add any code that appears in the head of a Web page, such as Cascading Style Sheets, meta tags, behaviors, or timelines.

   And since a Library item can't contain a style sheet, if the HTML in your Library item relies on a style, you'll have trouble previewing it correctly. Dreamweaver's Design Time Style Sheet tool comes in handy here. It lets you temporarily "add" a style sheet while designing a page, without actually adding the CSS code to the page. For more on this cool feature, turn to page 307.

Note: Don't turn any of Dreamweaver CS3's Spry widgets into Library items. For example, if you use the Spry Menu Bar (page 175) you might be tempted to turn the menu into a Library item that you could reuse on other pages of your site. Problem is, all Spry features combine HTML, JavaScript, and CSS code that are placed in different parts of a page's code. When you select the Spry widget on the page and turn it into a Library item, only the HTML comes along for the ride–the CSS which makes the widget look good, and the JavaScript which make the widget work, aren't included. The solution? Use Dreamweaver templates instead (see the next chapter).

3. **Choose File → Save.**

   Dreamweaver checks to see if there are any pages that use the Library item, and, if there are, it opens the Update Library Items window. A list of pages in the site that use that Library item appears.

4. **Click Update.**

   Dreamweaver opens the Update Pages window, updates the HTML in all the pages that use the Library item, and then lists all of the files that it changed.

   On the other hand, you don't necessarily have to click Update. Perhaps you have a lot of changes to make to the Library item, and you just want to save the work you've done so far. You're not done editing it yet, so you don't want to waste time updating pages you'll just have to update again. You can always update later (see the box on page 699); in that case, click Don't Update. (Once you're finished with the changes and save the file for the final time, *then* update the site.)

5. **Click Done.**

   As you can see, the Library is an incredible time-saver that greatly simplifies the process of changing common page elements.

Renaming Library Elements

To rename something in your Library, click its name on the Assets panel (Figure 18-4). Pause briefly, then click again, and the name highlights, ready to be edited. Type the new name and press Enter (Return).

If you've already added the item to your Web pages, Dreamweaver prompts you to update those pages. Click Update. Otherwise, the link between those pages and the Library breaks.

Note: If you accidentally click Don't Update, don't panic. Simply change the Library item back to its original name and then *re*-rename it. Don't forget to click Update this time!

Deleting Library Elements

You can delete unnecessary elements from your Library at any time, but do so with caution. When you delete something from the Library, Dreamweaver leaves behind every copy of it that you've already placed onto your Web pages—complete with links to the now-deleted Library item.

In other words, you won't be able to edit the copies on your Web pages until you break those links. If you do indeed want to edit them, you have to break the links manually on each page where the Library item appears by selecting the item and then clicking the "Detach from original" button (see Figure 18-5).

POWER USERS' CLINIC

Under the Hood of Library Items

Behind the scenes, Dreamweaver stores the HTML for Library items in basic text files. Those files' names end with the extension .lbi, and they stay in the Library folder inside your local site folder.

When you insert a Library item into a Web page, Dreamweaver inserts the item's HTML and adds a set of comment tags. These tags refer to the original Library file and help Dreamweaver remember where the Library item begins and ends. For instance, if you turned the text "Copyright 2007" into a Library item called *copyright* and inserted it into a Web page, Dreamweaver would add the following HTML to the page:

```
<!-- #BeginLibraryItem "/Library/
copyright. lbi" -->Copyright 2007<!--
#EndLibraryItem-->
```

It's important to avoid the use of hyphens when naming Library items. Why? Since HTML comments use hyphens, <!-- -->, some browsers, most notably Firefox, get tripped up by additional hyphens and respond by hiding the contents of a Library item, or displaying raw HTML code instead.

In addition, although you can't edit a Library item on a page in Design view, you can muck around with the code in Code view. In the example above, you could change 2007 to 2008 in Code view. Don't do it! Dreamweaver obliterates any changes you make the next time you update the original Library item. If you want to make a change to a Library item, edit the original Library item, or detach the item from the Library (as described in the Tip on page 656) and then edit it.

Now that you've been warned, here are the instructions. To get rid of a Library item, click it in the Assets panel and then do one of the following:

- Click the Trash can icon in the Assets panel.
- Press Delete.
- Right-click (Control-click) the item's name, and then choose Delete from the shortcut menu.

Tip: If you ever accidentally delete an item from the Library, you can recreate it, provided you've used it somewhere on one of the Web pages in the site.

Open the page containing the Library item, and then click the Library item to select it. Click Recreate on the Property inspector (Figure 18-5) to make it anew. A new Library item appears in the Library, using the name and HTML from the item you selected.

Snippets and Library Tutorial

In this tutorial, you'll do two things: First, create a useful form pull-down menu snippet, and, second, turn the *CosmoFarmer* copyright notice into a reusable Library item and add it to several pages in the site.

Note: You'll need to download the tutorial files from *www.sawmac.com/dwcs3/* to complete this tutorial. See the Note on page 39 for more details.

Once you've downloaded the tutorial files and opened Dreamweaver, define a new site as described on page 28: name the site *Snippets and Library* and select the Chapter18 folder (inside the MM_DWCS3 folder). (In a nutshell: choose Site → New Site. In the Site Definition window, click the Advanced tab, type *Snippets and Library* into the Site Name field, click the folder icon next to the Local Root Folder field, navigate to and select the Chapter18 folder, and then click Choose or Select. Finally, click OK.)

Creating a Snippet

1. **With your site freshly defined, make sure the Files panel is open.**

   If the panel isn't open, press the F8 key or choose Window → Files.

2. **In the Files panel, double-click the file, *snippet.html.***

   A page with several form pull-down menus opens. The page includes menus for the months of the year, names of U.S. states, and the numbers 1–31. These menus are useful for specifying dates when something needs to be done, states for shipping orders to, or simply for selecting a month for one's astrological sign. Dreamweaver's own Snippets don't include these useful menus, but, fortunately, you can add them yourself.

3. **Click the first form menu at the top of the page.**

   This menu appears to the right of the words "Months of the Year." You've selected the menu (and its underlying HTML code). To add this as a snippet you need to open the Snippets panel.

4. **Click the Snippets panel tab to the right of the Files panel, or choose Window → Snippets.**

   The Snippets panel (Figure 18-1) is your control center for adding, editing, and deleting Snippets.

5. **Click the New Snippet button at the bottom of the panel (Figure 18-1).**

   The Snippet window opens. Dreamweaver automatically copies the code for the menu into the window. You just need to name the snippet and add a few more details.

6. **Type *Month Menu* in the Name box, and *A list of month names, with numeric values* in the description box, as pictured in Figure 18-6.**

   The name and description appear in the Snippets panel. In this case, the description identifies what appears in the menu on the page (a list of month names) and what value someone submits when selecting a month from the list and submitting the form—in other words, the name/value pair for this form field. (See Chapter 11 for more information on how forms work.)

7. **Select the "Insert block" radio button.**

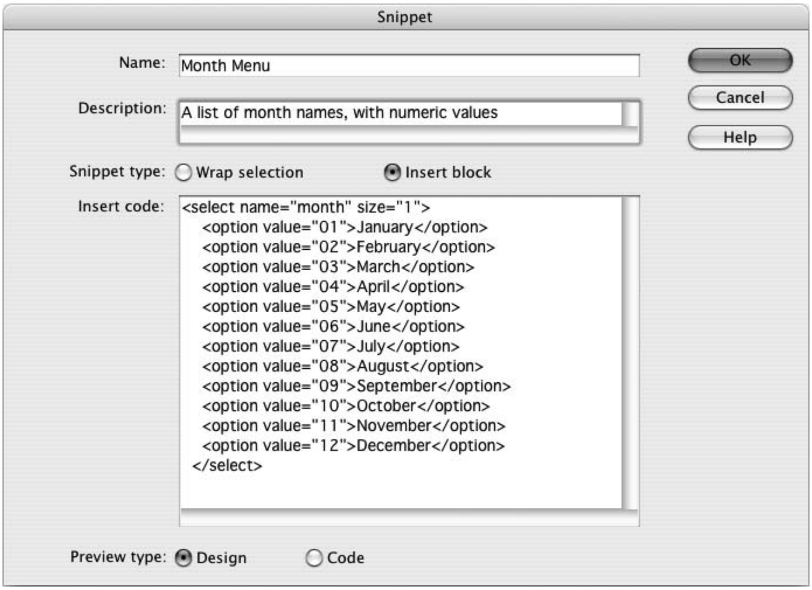
   This button identifies the snippet as a chunk of HTML that's simply plopped down on a page, as opposed to HTML that wraps around a selected graphic or text like a link or table cell might (if you wanted to do that, you'd select the "Wrap selection" button).

8. **Select the Design button at the bottom of the window.**

   You've just told Dreamweaver to display the snippet visually when it's selected in the Snippets panel. In other words, when you select this snippet in the panel, you see a preview of the form menu, not a bunch of HTML code.

9. **The window should now look like Figure 18-6. Click the OK button to create your new snippet.**

   The snippet should now appear in the Snippets panel, ready to be inserted into a page.



Name: Month Menu

Description: A list of month names, with numeric values

Snippet type: ○ Wrap selection ● Insert block

Insert code:

```
<select name="month" size="1">
   <option value="01">January</option>
   <option value="02">February</option>
   <option value="03">March</option>
   <option value="04">April</option>
   <option value="05">May</option>
   <option value="06">June</option>
   <option value="07">July</option>
   <option value="08">August</option>
   <option value="09">September</option>
   <option value="10">October</option>
   <option value="11">November</option>
   <option value="12">December</option>
 </select>
```

Preview type: ● Design ○ Code

Figure 18-6:
The HTML code for the snippet appears in the "Insert code" box. You can edit it, adding or removing HTML, or you can create code that wraps around anything selected on the page by choosing the "Wrap selection" button.

10. **Select the Files panel by clicking the Files tab or pressing the F8 key; then double-click the file *form.html*.**

    This opens a CosmoFarmer page. You'll insert the new snippet below the headline "What month were you born?" But first you need to create the form. Remember that snippets don't have smarts; that is, when you insert a snippet, Dreamweaver doesn't make sure the HTML is correct. In this case, the snippet is just a menu—for it to really function, it has to be part of a form, so you first need to insert a form field.

11. **Choose Insert → Form → Form.**

    A dashed red line appears on the page, indicating the outline of the form. Inside this area you can insert any form element you want, including your new snippet.

12. **Return to the Snippet panel once again by clicking the Snippets tab or choosing Window → Snippets.**

    Now for the moment of truth.

13. **Drag your new snippet—Month Menu—from the Snippets panel to anywhere inside the form's red outline.**

    Ta-da, Dreamweaver adds the new menu. Now, whenever you need to add a menu listing the months of the year, don't bother creating it from scratch. Just use the snippet! If you wish, you can create more snippets using the other menus on the *snippet.html* page.

Creating a Library Item

Now you'll see one way in which Dreamweaver's powerful Site Management tools can help you create and update your Web sites more effectively:

1. **In the Files panel, double-click the file *hydroponics.html*.**

    This is the same page you created in the tutorial for Chapter 9. What you're going to work on here is the copyright notice in the page's footer.

2. **Scroll to the bottom of the page and select the copyright notice.**

    Copyright information should be on every page of the site, so it makes a perfect candidate for a Library item. Notice that the copyright information is more than just text; it's actually a paragraph including a small image that's linked to the home page. The best way to select the entire paragraph is to click inside the text and then click the <p.copyright> tag in the Tag selector (Figure 18-7).

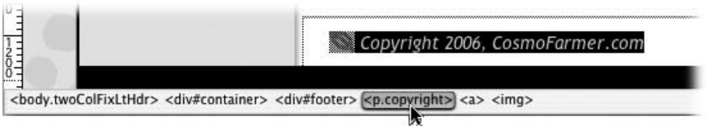

Copyright 2006, CosmoFarmer.com
<body.twoColFixLtHdr> <div#container> <div#footer> <p.copyright> <a> <img>

***Figure 18-7:** Click <p.copyright> to select the paragraph containing the site's copyright notice.*

3. **Choose Window → Assets, and then click the Library button.**

    The Assets panel opens and displays the Library category.

4. **Click the New Library Item button on the Assets panel (Figure 18-4).**

    A warning message appears, saying that the Library item may not look the same in other pages. Dreamweaver's trying to tell you that Library items can contain only HTML from the body of a Web page—not Cascading Style Sheets. (You can still include HTML, such as this paragraph, that's had a style applied to it, as long as you make sure that any *pages* to which you add the Library item have the appropriate style sheets.)

The text in this example *is* formatted using a style sheet, so, sure enough, it won't look the same in pages that don't have the same style sheet. In this exercise, however, this formatting isn't a problem, since all the pages in the site share the same linked external style sheet (see page 113).

Click OK to dismiss the warning. The copyright notice item appears in the Library list, with an "Untitled" naming rectangle next to it.

5. **Type *copyright* next to the new item on the Assets panel, and then press Enter.**

   You've just checked this standard blob of text into your Library. It's ready to use anywhere else on your site.

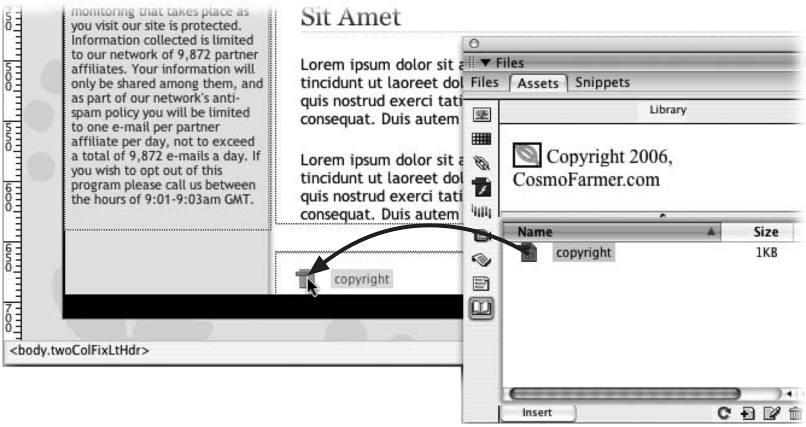
6. **In the Files panel, double-click the file called *index.html*.**

   Notice that this page is missing a copyright notice at the bottom of the page.

   You'll frequently jump between the Files panel and the Assets panel, so these keyboard shortcuts come in handy: the F8 key to open the Files panel, and the F11 key (Option-F11 on Macs) to switch to the Assets panel.

7. **Switch back to the Assets panel, and drag the copyright Library item to the bottom of the page, as shown in Figure 18-8.**

   You can recognize the newly inserted Library item by its yellow background. Click the text in the item and notice that you can't edit it; Dreamweaver treats it like a single object. (You may notice an extra space below the copyright you just added. That's an empty paragraph that was already in the footer. If you click in the empty space directly below the copyright and press the delete key, you'll remove the empty paragraph.)



monitoring that takes place as you visit our site is protected. Information collected is limited to our network of 9,872 partner affiliates. Your information will only be shared among them, and as part of our network's anti-spam policy you will be limited to one e-mail per partner affiliate per day, not to exceed a total of 9,872 e-mails a day. If you wish to opt out of this program please call us between the hours of 9:01-9:03am GMT.

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Copyright 2006, CosmoFarmer.com

Figure 18-8: *In addition to dragging a Library item into the document window, you can also insert the item by placing the insertion point in the document window and then clicking the Insert button on the Assets panel.*

8. **Add the footer Library item to one other page on the site: *feature1.html.***

   Open the page (by double-clicking its name in the Site window) and repeat step 7.

   (You can close and save the pages as you go, or leave them open. Leave at least one open at the end and go on to step 9.)

9. **Notice the mistake!**

   The copyright notice has the wrong date. The year 2006 is long gone! Oh, great—you'll have to change the date on every page. Fortunately, you've used a Library item, so you can easily make the change.

10. **Double-click the copyright item's icon** (**not its name**) **in the Assets panel.**

    The Library item opens up, ready for editing.

11. **Change 2006 to the current year. Choose File → Save.**

    The Update Library Items dialog box appears, listing all of the pages in the site that use the footer item.

12. **Click Update.**

    Dreamweaver opens the Update Pages dialog box and updates all the Web pages that use the footer item.

13. **Click Close to close the Update Pages dialog box.**

    And *now* if you open *index.html*, *feature1.html*, and *hydroponics.html*, you'll find that the copyright date is correct on all three.

    Now imagine that you just used this auto-update feature on a 10,000-page site. Sit back and smile.

CHAPTER 19

Templates

Some Web designers handcraft sites with loving care, changing layouts, colors, fonts, banners, and navigation from page to page. But that approach isn't always practical—or desirable. Consistency is a good thing. Web pages that look and act similarly reassure visitors; when only important material changes from page to page, readers can concentrate on finding the information they want. Even more importantly, a handcrafted approach is often unrealistic when you're designing on a deadline.

Here's where *templates* come in. Frequently, the underlying design of many pages on many Web sites is identical (see Figure 19-1). For instance, a company Web site with an employee directory may dedicate a single Web page to each employee. Each employee page probably has the same navigation bar, banner, footer, and layout. Only a few particulars differ, like the employee name, photo, and contact information.

Template Basics

Templates let you build pages that share a similar structure and graphic identity, quickly and without having to worry about accidentally deleting or changing elements. Templates come in very handy when you're designing a site for which other, less Dreamweaver-savvy individuals are responsible for adding new pages. If you use a template, these underlings can modify only the areas of a page that you, the godlike Dreamweaver guru, define.

Tip: Adobe Contribute, a simple, word processor–like program for updating Web sites, works very well with sites built using Dreamweaver templates. If you build sites that are updated by people who don't know the first thing about Dreamweaver or building Web pages, Contribute can help. You can find more information about this program at Adobe's Web site: *www.adobe.com/products/contribute*.

A new page based on a template—also called a template *instance*, or *child page*—looks just like the template, except that you can edit only certain areas of the page, called, logically enough, *editable regions*. In the example shown in Figure 19-1, one editable region includes the question-and-answer text area; the rest of the page remains untouched and is, in fact, locked.

A Dreamweaver template can be very basic: one or more areas of a page (the editable regions) can be changed, others can't (*locked regions*). But Dreamweaver also includes many subtle ways for controlling template instances. Here's an overview of the features you'll encounter when creating and using templates:

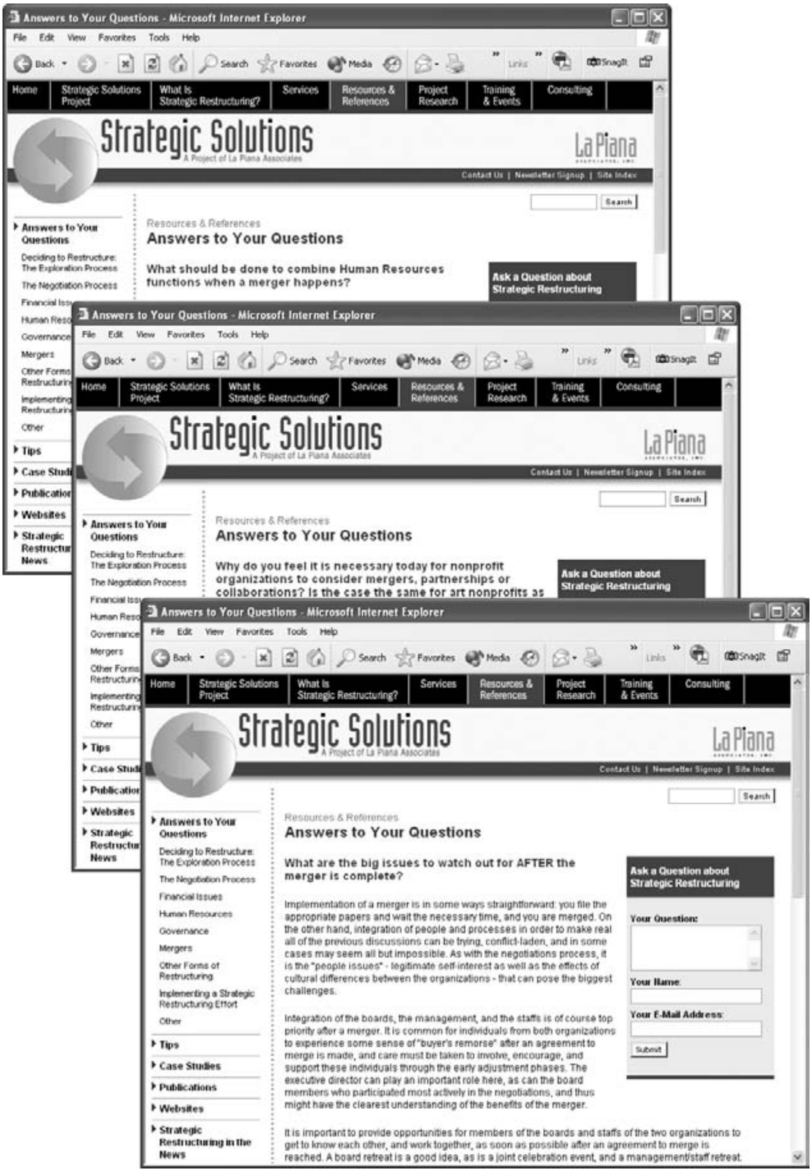
- **Editable regions.** These are the basic building blocks of a template. An editable region is a part of a page—a paragraph, the contents of a div, or a headline, for example—that people can change on each template instance. A template page can have multiple editable regions—for example, one in a sidebar area and another in the main content section of a page.

- **Editable tag attributes.** There may be times when you want to make a particular *tag* property editable. For instance, you might want to assign an ID to the <body> tag. Then, on each template-based page, you could apply an ID specific to a particular section of the site. For a template-based page that you save as part of an "About Us" section of the site, you could apply an ID with the name *about*. With that in place, you could use a descendent selector (like *#about h1)* to create a custom style for all headlines on that page. You'll see this technique in the tutorial on page 705.

  Or perhaps you've built a template that includes a photo with some complex formatting (left-aligned by a Cascading Style Sheet, perhaps). Turning the entire image into an editable region could pose problems: When someone creates a new page from the template and then inserts a new photo, all of the formatting information can get lost. Instead, you could make just the image's *Src* property editable. People would then be able to insert new images for each page without inadvertently ruining the photo's formatting. (You could also make the image's *alt* property editable and, if the *Width* and *Height* properties vary from image to image, you could make those attributes editable as well.)

- **Repeating regions and repeating tables.** Some Web pages include *lists* of items: catalogs of products, lists of news articles, albums of photos, and so on. Dreamweaver lets you define *repeatable* regions for pages like this.

  For example, a page of product listings can include a picture, name, and price for each product in a catalog, organized using a table with multiple rows (Chapter 7).


Answers to Your Questions - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites Media Links SnagIt
Home
Strategic Solutions Project
What Is Strategic Restructuring?
Services
Resources & References
Project Research
Training & Events
Consulting
Strategic Solutions
A Project of La Piana Associates
La Piana
Contact Us | Newsletter Signup | Site Index
Search
Answers to Your Questions
Deciding to Restructure: The Exploration Process
The Negotiation Process
Financial Issues
Human Resources
Governance
Mergers
Other Forms of Restructuring
Implementing a Strategic Restructuring Effort
Other
Tips
Case Studies
Publications
Websites
Strategic Restructuring in the News
Ask a Question about Strategic Restructuring
Submit

Resources & References

Answers to Your Questions

What should be done to combine Human Resources functions when a merger happens?

Resources & References

Answers to Your Questions

Why do you feel it is necessary today for nonprofit organizations to consider mergers, partnerships or collaborations? Is the case the same for art nonprofits as

Resources & References

Answers to Your Questions

What are the big issues to watch out for AFTER the merger is complete?

Implementation of a merger is in some ways straightforward: you file the appropriate papers and wait the necessary time, and you are merged. On the other hand, integration of people and processes in order to make real all of the previous discussions can be trying, conflict-laden, and in some cases may seem all but impossible. As with the negotiations process, it is the "people issues" - legitimate self-interest as well as the effects of cultural differences between the organizations - that can pose the biggest challenges.

Integration of the boards, the management, and the staffs is of course top priority after a merger. It is common for individuals from both organizations to experience some sense of "buyer's remorse" after an agreement to merge is made, and care must be taken to involve, encourage, and support these individuals through the early adjustment phases. The executive director can play an important role here, as can the board members who participated most actively in the negotiations, and thus might have the clearest understanding of the benefits of the merger.

It is important to provide opportunities for members of the boards and staffs of the two organizations to get to know each other, and work together, as soon as possible after an agreement to merge is reached. A board retreat is a good idea, as is a joint celebration event, and a management/staff retreat

Your Question:

Your Name:

Your E-Mail Address:

Figure 19-1: *These three Web pages are part of a section of a Web site dedicated to answering frequently asked questions. The pages each provide the answer to a different question, but are otherwise identical, sharing the same banner, navigation buttons, sidebar, and footer. This is a common scenario for Web sites that include news stories, employee profiles, product pages, or press releases. In fact, it's so common that Dreamweaver has a special feature–Templates–to help you build such pages.*

As the template builder, you may not know in advance how many products the page will eventually list, so you can't fully design the page. However, you can use Dreamweaver to define a row—or any selection of HTML—as a repeating region, so that page authors can add new rows of product information when needed.

- **Optional regions and editable optional regions.** Optional regions make templates even more flexible. They let you show or hide content on a page-by-page basis.

Suppose you create a template for your company's products. When some products go on sale (but others remain full price), you could add an *optional* region on the template that displays a big "On Sale!" logo. When you create a new product page, you could *show* the optional region for products that are on sale and keep it *hidden* for the others.

Editable optional regions are similar, but they have the added benefit of being editable. Maybe you're creating a template for an employee directory, giving each employee a separate Web page with contact information. Some employees also want their picture displayed on the page, while others don't (you know the type). Solution: Add an editable optional region that would let you show the space for a photo and add a different photo for each page. For the shyer types, you would simply hide the photo area entirely.

Furthermore, Dreamweaver can create *nested* templates, which inherit design elements from a master template. In this way, you can create a general unified design that's shared by other templates; this feature is described on page 687.

But facilitating page creation is only one of the benefits of templates. You'll also find that templates can greatly simplify the process of updating a Web site's design. Like Library items, pages based on templates retain a reference to the original template file. Any changes made to the template pass on to all pages created from it, which can save you hours of time and trouble when it comes time to update the look or structure of your site. Imagine how much time you'll save when your boss asks you to add "just one more" button to the site's navigation bar. Instead of updating thousands of pages by hand, you need to update only a single template file.

Creating a Template

The first step in creating a template requires building a basic Web page and telling Dreamweaver you'd like to use it as a template. You can go about this in two ways: build a Web page and turn it into a template, or create a blank, empty template file and add text, graphics, tables, and other content to it.

Turning a Web Page into a Template

The easiest way to create a template is simply to base it on a Web page in your current site folder. Although you can create templates based on Web pages that *aren't* part of the current local site, you may run into problems with links and paths to images, as described in a moment.

Once you've opened the Web page, just choose File → Save As Template or, on the Common tab of the Insert bar (see Figure 19-2), click the Templates button and then select Make Template from the menu. In the Save As Template window (Figure 19-3), the name of the current local site appears in the Site pop-up menu; meanwhile, all templates for that site show up in the Existing Templates field.

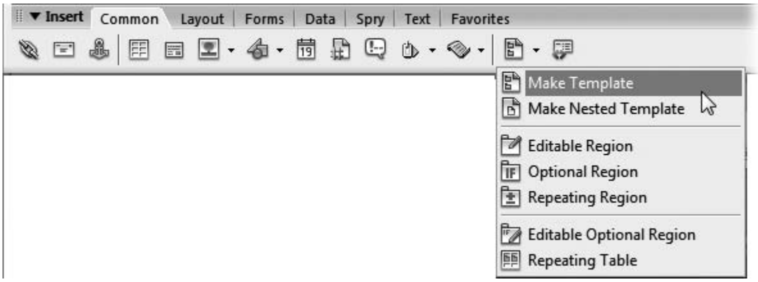
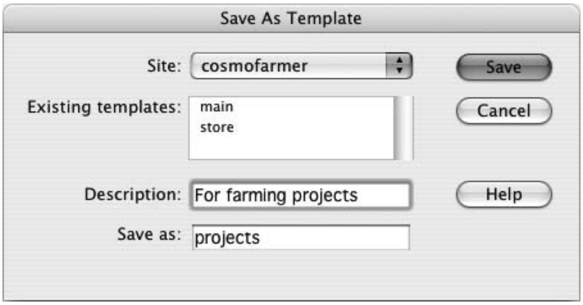


Figure 19-2:
The Templates menu on the Common tab of the Insert bar provides access to tools for creating templates and setting up a variety of Dreamweaver template features.



Save As Template

Site: cosmofarmer

Existing templates: main
store

Description: For farming projects

Save as: projects

Figure 19-3:
The Save As Template dialog box lets you save your template into any of the local site folders you've defined in Dreamweaver. Stick to your current local site to avoid broken links and similar problems.

Note: At this point, you could theoretically use the Site menu to save a template into any local site folder you've defined (see Chapter 15 for a discussion of local sites), but be careful with this option. If your page contains images and links and you save it as a template for another local site, Dreamweaver doesn't copy the images from the first site folder into the other one. As a result, the paths to the image files and links don't work correctly.

If you must use a page from one site as a template for another, copy the Web page *and graphics* into the new site's root folder, open the page from there, and then create a template as described here.

Dreamweaver includes a Description field for adding a brief note describing the template. This description appears when you're selecting a template as the basis for a new page you're creating. The description is very useful when *other* people are building a site using your templates and aren't sure whether templateA1, templateA2, or templateA3 is the correct choice; a simple "use this template for all FAQ pages" is much clearer.

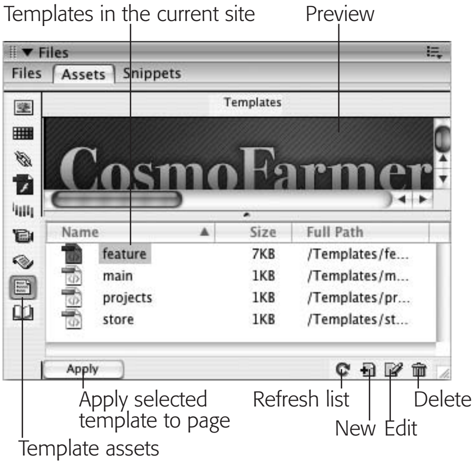
Finally, type a name for the new template, and then click Save. Choose Yes when Dreamweaver asks if you want to Update Links for the page. If you choose No, all page-relative links break, and all the images on the page appear as broken-image icons.

Warning: Avoid double hyphens in the names of your templates–for example, "Store -- Product." Since Dreamweaver uses HTML comments like this <!-- --> (see the box on page 674) to identify what template was used on a particular page, the extra hyphens trip up the Firefox Web browser, which mistakes them for other HTML comments.

Dreamweaver saves the page in the Templates folder of your local site root folder. It adds the extension .dwt to the file to indicate that it's a Dreamweaver template. (For dynamic Web pages, Dreamweaver adds the .dwt *before* the file's extension. For example, a PHP template may have a name like *maintemplate.dwt.php*.)

Building a Template from Scratch

It's easiest to create a Web page first and then save it as a template, but you can also build one from scratch. Open the Asset panel's Templates category by choosing Window → Assets and then click the Template assets icon (see Figure 19-4). Then click the New Template button at the bottom of the Assets panel. Once Dreamweaver adds a new, untitled template to the list, type a new name for it. Something descriptive like "press release" or "employee page" helps you keep track of your templates.



Name	Size	Full Path
feature	7KB	/Templates/fe...
main	1KB	/Templates/m...
projects	1KB	/Templates/pr...
store	1KB	/Templates/st...

Figure 19-4:
The Templates category of the Assets panel lists the name, file size, and location of each template in the current local site. The Apply button applies a template to the current open Web page. The Refresh Site List button updates the list of templates: If you've just created a template and don't see it listed, click this button. The New Template button creates a new blank template in the Templates folder. Select a template from the list and click the Edit Template button to open the template for editing.

After you've created a blank template for the site, you can open it by double-clicking its name in the Assets panel (or selecting its name and then clicking the Edit button at the bottom of the Assets panel). It opens just like any Web page, so that you can get busy designing it.

Defining Editable Regions

Your next task is to specify which parts of your template are locked and which are editable. By default, *everything* on a page is locked. After all, the main reason to use templates is to maintain a consistent, unchanging design and structure among pages. To make a template usable, you must define the area or areas you *can* change.

Adding a Basic Editable Region

To add an editable region to a template, start by selecting the part of the page you want to make changeable. You can designate as editable anything in the document window (that is, any HTML between the <body> tags).

Note: You can always add Cascading Style Sheets, JavaScript code, and meta tag information to the <head> of a template-based page. Any <head> content in the original template files stays put, however. For example, you can't remove an external style sheet applied to the template file from a page based on that template.

FREQUENTLY ASKED QUESTION

The Broken-Link Blues

Why aren't the links in my templates working?

When you created the link, you probably typed a path into the Property inspector's Link field–a recipe for heartbreak. Instead, always select the target Web page for a link by clicking the folder icon in the Property inspector, or by pressing Ctrl+L (⌘-L). In other words, when adding links to a template, always link to pages within the site by browsing to the desired file.

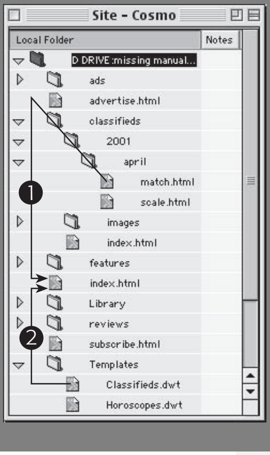
Dreamweaver saves templates in the Templates folder inside the local root folder; all relative links need to be relative to this location. (Absolute links, like those to other Web sites, aren't a problem; see page 153 to learn the difference.) The reason you should browse to, rather than type in, your links is so that Dreamweaver can create a proper relative link.

Imagine this situation: You create a template for your classified ads. You store all classified ads for April 2001 inside a series of folders like this: classifieds → 2001 → april, as shown in the site diagram here.

A link from a page in the *april* folder to the home page would follow the path marked 1 here. So when you create a link in your template, you can create a link to the home page by typing the path *../../../index.html*.

That choice is logical if you're thinking about the page (in the *april* folder) you'll create from the template–but it won't work. Dreamweaver stores templates in the Templates folder, so the correct path would be path 2, or *../index.html*. When you create a new page based on the template and save it in the *april* folder, Dreamweaver, in its wisdom, automatically rewrites all paths in the page so that the links function correctly.

The beauty of Dreamweaver is that you don't have to understand how all this works. Just remember to use relative links in your templates and create them by clicking the folder icon in the Property inspector.



Drag across your page to select the elements you wish to make editable, or, for greater precision, use the Tag selector (see page 22) to make sure you select the exact HTML you want.

Now tell Dreamweaver that you want to make the selected elements editable. You can use any of these techniques:

- In the Common tab of the Insert bar (Figure 19-2), select Editable Region from the Template menu.
- Choose Insert → Template Objects → Editable Region.
- Press Ctrl+Alt+V (⌘-Option-V).
- Right-click (Control-click) the selection and then choose Templates → New Editable Region from the shortcut menu.

FREQUENTLY ASKED QUESTION

When Save Won't Behave

I keep getting an error message when I save my template. What's going on?

If you add an editable region *inside* certain block-level elements like a paragraph, or a heading, Dreamweaver pops up a warning message when you save the template, explaining that you can't create additional paragraphs or headings inside this region on any pages you build from this template. This just means that you didn't select the <p> or heading tag when you made the region editable. Dreamweaver considers anything outside of the editable region locked, so you can't change those tags. Since it's improper HTML to have a paragraph, heading, or other block-level elements inside *another* paragraph, or heading, Dreamweaver doesn't let you add other block-level elements to the selection.

This characteristic may not be such a bad thing, however. Imagine you're creating a template that's to be used by other people building a Web site. You have a heading 1, maybe the title of the page you applied a style to, and you want to make sure it looks the same on every page. You wouldn't want anyone changing the heading tag, and possibly erasing the style. In addition, you don't want them to be able to change the heading 1 to a heading 2, or a heading 3; nor do you want them to completely erase the h1 tag and type paragraph after paragraph of their random thoughts. You just want them to type in new text for the page title. Selecting just the text inside the heading and turning it into an editable region does just that. Viva micromanagement!

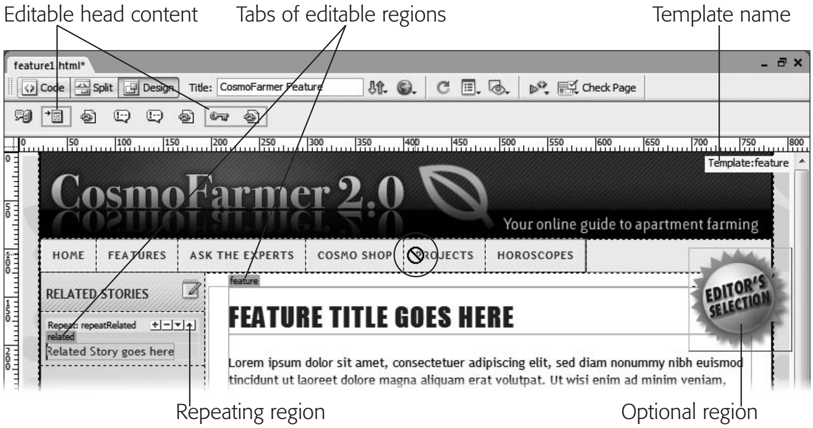
If this is in fact what you want to do, you can save yourself the bother of having to constantly see the warning box shown here each time you save the template by simply turning on the "Don't show me this message again" checkbox. However, if you made a mistake and *do* want to allow people to change the heading, or add more headings and paragraphs in this region, you need to do two things: First, unlock the editable region you created (see page 687); then, select the text *and* tag (the Tag selector [page 22] is the best way to make sure you've selected a tag), and then turn that into an editable region.

When the New Editable Region dialog box appears, type a name for the region (you can't use the same name twice) and then click OK—avoid hyphens in the name (see the Note on page xx). You return to your template, where the name you gave the region appears in a small blue tab above the editable region (see Figure 19-5).

Tip: If you use tables to lay out your pages (see Chapter 7), you'll often assign one table cell as the main area to hold the primary content of the page. For example, in the pages shown in Figure 19-1, the Frequently Asked Question and its answer appear in a single cell on the page. This cell makes a perfect editable region for a template. In the Tag selector, just click the <td> tag associated with that cell and use any of the techniques discussed here to convert the contents of that cell into an editable region.

If you use CSS, on the other hand, you can create a separate <div> tag (see page 313) for the main content area. In this case, select just the contents of the <div> tag, not the tag itself. Here's one instance where you want to avoid the Tag selector (page 22), which selects the entire <div>, tags and all. If you turn the <div> tag into an editable region, it's possible for someone modifying the page later to delete the tag entirely, which could wreak untold havoc on your CSS-based layout.

Fortunately, Dreamweaver has a handy shortcut for selecting just the contents of a <div> tag. Click anywhere inside the <div> tag, and then press Ctrl+A (⌘-A) or choose Edit → Select All. Next, turn this selection into an editable region, and the <div> tags will remain *outside* of the editable region, so no one can inadvertently delete a <div> tag that helps define the basic structure of a page.



Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam,

Figure 19-5:
This page is based on a template called feature, as you can tell from the little tab in the document window's upper-right corner. You can modify editable regions, which are labeled with small tabs. In this example, one editable region is called feature. An additional editable region (named related) appears within a repeating region (labeled repeatRelated) that lets you duplicate editable regions to form a list of items. Optional regions don't have any clear identifier on the page; you can identify them only in the Template properties window, as described on page 681. The title of any page created from a template is also editable. All other parts of the page are locked (circled); you can make changes only to the original template file.

POWER USERS' CLINIC

Under the Hood of Templates

Dreamweaver saves templates as HTML files in the Templates folder inside your current local site folder (see Chapter 15 for information on local sites). Each template bears the file name extension .dwt to distinguish it from regular Web pages.

The program treats files in the Templates folder differently from normal Web pages, so don't save anything but .dwt files there. In addition, since Dreamweaver expects the Templates folder to be in the local root folder of your site, don't move the Templates folder or change its name in any way (don't even change the capital T in Templates, even if you're a low-key type of person). If you do, your templates won't work.

As with Library items, Dreamweaver uses HTML comment tags to indicate the name of the template. If you inspect the HTML code of a template-based document (see Chapter 10), you'll see that, immediately following the opening <html> tag, Dreamweaver inserts a comment tag with the text "InstanceBegin" followed by the location and name of the template. Additional comment tags indicate areas of the page that you can modify, plus special template features like template parameters used for optional regions. For instance, the title of a page based on a template is always editable; its comment tag might look like this:

```
<!-- InstanceBeginEditable
    name="doctitle" -->
<title>My New Page</title>
<!-- InstanceEndEditable -->
```

The first comment indicates the editable region's beginning and also includes the editable region's name. When editing pages based on the template, you can change only the HTML between these comment tags. Everything else on the page is locked, even when you're working in Code view.

You may find that a single editable region is all you need—for example, a single area of the page (a section of a page enclosed by a <div> tag, for example) containing the text for a product review. However, if you need to edit *multiple* areas of a Web page, just add more editable regions to the template. For instance, when you create a template for an employee page, you can create editable regions for the employee's name, telephone number, and photo. If you change your mind and want to lock a region again, select the editable region and then choose Modify → Templates → Remove Template Markup. Dreamweaver removes the code that makes the region editable. You can do the same thing with other types of template regions, like repeating and optional regions.

Warning: You can rename an editable region by clicking the blue tab on the template page and typing a new name into the Property inspector. However, if you've already built pages based on this template, it's not a good idea. Because template-based pages use the name to identify editable regions, Dreamweaver can lose track of where content should go when you rename a region. See Figure 19-18 for a workaround.

Adding a Repeating Region

Some Web pages contain lists of items. A catalog page may display row after row of product information—picture, name, price, and description. An index of Frequently Asked Questions may provide a list of questions and the dates they were posted.

If you were to make a template for either of these pages, you would add an editable region to the area of the page where these lists appear. Just creating an editable region, however, wouldn't give you any ability to enforce (or easily update) the design of these lists, because *everything* within an editable region can be changed.

Fortunately, Dreamweaver provides a pair of template tools to overcome this problem: *repeating regions* and *repeating tables*. Both let you create areas of a page that include editable (and uneditable) regions that can be repeated any number of times (see Figure 19-6).

FREQUENTLY ASKED QUESTION

Hindered by Highlighting

I'm distracted by the tabs and background colors that Dreamweaver uses to indicate Library items and Templates. How do I get rid of them?

When you use Library items or Templates, you see blue tabs and yellow backgrounds to indicate editable regions and Library items. Although these visual cues don't appear in a Web browser, they can still make your page harder to read while you work in Dreamweaver. Fortunately, you can alter the background color of these items and even turn highlighting off altogether.

Choose Edit → Preferences, or press Ctrl+U (⌘-U). In the Preferences Category list, click Highlighting. To change the background color for editable regions, locked regions, and Library items, use the color box (see page 47) or type in a hexadecimal color value. To remove the highlighting, turn off the Show box next to the appropriate item.

Oftentimes, it's useful to keep highlighting on to help you keep track of Library items and editable regions. If you want to turn off highlighting temporarily, simply choose View → Visual Aids → Invisible Elements, or use the keyboard shortcut Ctrl+Shift+I (⌘-Shift-I) to toggle these visual cues off and on. This technique has the added benefit of hiding table borders, layer borders, and image maps, as well as other invisible elements.

Adding a repeating region is similar to adding an editable region. Select the area of the template page you wish to make repeatable, which usually contains at least one editable region. This could be a single list item (the <li> tag), a table row (<tr> tag), or even an entire <div> tag.

Tip: You can make a repeating region that *doesn't* include an editable region. For example, a template for a movie review Web page could include a repeating region that's simply a graphic of a star. A page author adding a new movie review could repeat the star graphic to match the movie's rating–four stars, for example. (There's just one caveat–see the Tip on page 693.)

Next, tell Dreamweaver that the selected elements are part of a repeating region. You can use any of these techniques:

- On the Common tab of the Insert bar (Figure 19-2), select the Repeating Region option from the Templates menu.
- Choose Insert → Template Objects → Repeating Region.
- Right-click (Control-click) the selection and choose Templates → New Repeating Region from the shortcut menu.

When the New Repeating Region dialog box appears, type a name for the region and then click OK. You return to your template, where the name you gave the region appears in a small blue tab above the editable region (see Figure 19-6). (See page 693 for a discussion of using a repeating region when building a new template-based page.)

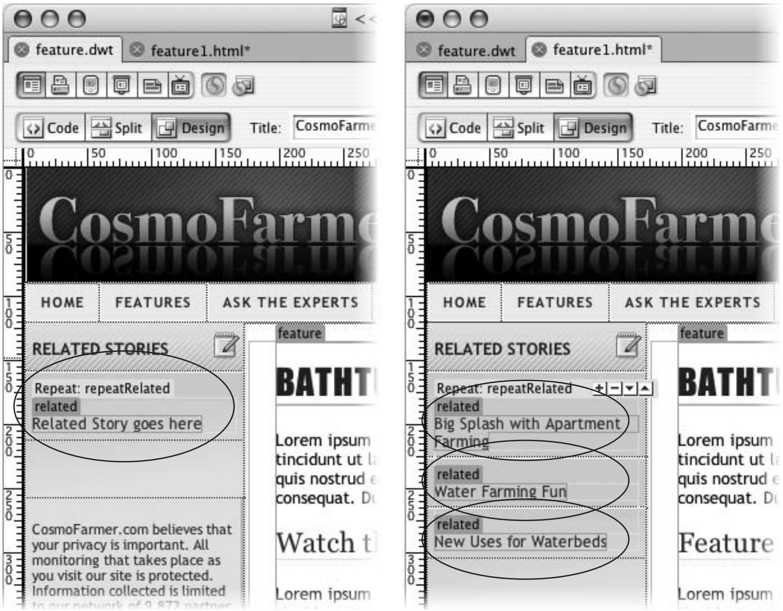


Figure 19-6:
A repeating region lets page authors add multiple selections of repeating information.

Left: In this example, the template has one repeating region, labeled repeatRelated (circled).

Right: A complete page based on this template includes three repeated editable regions (circled). If another page requires more related story listings, you could easily add additional rows to each list. However, the template still controls the basic design. Changing the repeating region's underlying HTML–for example, changing the list items to paragraphs in the uneditable part of the template page–automatically changes the same elements in all pages created from the template. From a design perspective, this strategy also means that page authors can't tamper with the design of a repeating region–just the content marked as editable.

Warning: Dreamweaver lets you name a repeating region with a name already in use by an editable region. But don't–multiple template areas with the same name make Dreamweaver act unpredictably.

Repeating Tables

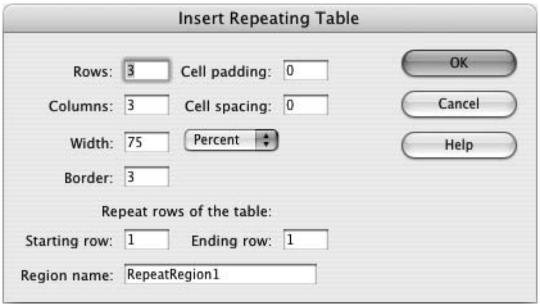
The *repeating table* tool is essentially a shortcut to creating a table with one or more repeating rows. If you had time on your hands, you could achieve the same effect by adding a table to a page, selecting one or more rows, and applying a repeating region to the selection. To use the repeating table tool:

1. **Click the template page where you wish to insert the table.**

   You can't insert a repeating table into an already defined editable, repeating, or optional region, as explained in the box on page 678. You must be in an empty, locked area of the template.

2. **On the Common tab of the Insert bar (Figure 19-2), select the Repeating Table option from the Templates menu.**

   Alternatively, you can choose Insert → Template Objects → Repeating Table. Either way, the Insert Repeating Table window appears (Figure 19-7).



Insert Repeating Table

Rows: 3 Cell padding: 0

Columns: 3 Cell spacing: 0

Width: 75 Percent

Border: 3

Repeat rows of the table:

Starting row: 1 Ending row: 1

Region name: RepeatRegion1

Figure 19-7:
The Insert Repeating Table dialog box lets you kill three birds with one stone: it adds a table to a page, turns one or more rows into a repeating region, and adds editable regions into each table cell inside the repeating region.

3. **Fill out the basic properties of the table.**

   The top part of the window lets you set up the basic structure of the table: rows, columns, cell padding, cell spacing, width, and border. Basically, it's the same information you'd provide when creating any table, as described on page 249. You usually start a repeating table with two rows—one for a heading, and another to contain the information you wish to repeat.

4. **In the "Starting row" box, type the number of the row where the repeating region should begin.**

   Often you'll have just one repeating row: one row of product information, for example. You may want to use the top row for labels indicating the information contained in the rows below. If that's the case, enter *2* at this step, leaving the first row as an uneditable part of the template.

   It's conceivable, however, that you may want each entry to take up *two* rows. The first would list Name and Description; the second would contain a cell for a photo and a cell for the price. You set up this effect in this step and the next.

5. **In the "Ending row" box, type the number of the last repeating row.**

   If you wish to repeat only a single row, enter the same number you provided for step 4. If you're creating a double repeating row, add 1 to the number you provided in step 4. For example, if you need three rows for each repeating entry, add 2 to the number from step 4.

6. **Type a name for this repeating region.**

   Don't use the same name as another template region. You'll run the risk of unpredictable results on template-based pages.

7. **Click OK.**

   Dreamweaver inserts a table into the page. A blue tab with the name of the repeating region appears (see Figure 19-6), as do blue tabs in each cell of each repeated row. These tabs indicate new editable regions—one per cell.

   Since these new editable regions have uninformative names like EditRegion4, you may want to rename them. Click the blue tab and type a new name in the Property inspector. (But do so *before* you create any pages based on the template—see the Warning on page 674.)

To remove a repeating region, select it by clicking the blue Repeat tab, and then choose Modify → Templates → Remove Template Markup. A more accurate way to select a repeating region is to click anywhere inside the region, and then click <mmtemplate: repeat> in the Tag selector (see page 22 for more on the Tag selector). Note that removing a repeating region doesn't remove any editable regions you added inside the repeating region. If you want to rename a repeating region, heed the Warning on page 674.

FREQUENTLY ASKED QUESTION

Editable Regions, Repeating Regions, and Errors

When I try to insert an editable region inside a repeating region, I get the following error: "The selection is already in an editable, repeating, or optional region." *What's that about?*

This error message essentially means you're trying to add a template region where it doesn't belong. It appears most often when you attempt to put a repeating or optional region inside an editable region. That kind of nesting is a no-no; anything inside an editable region can be changed on template-based pages, and as such, Dreamweaver can't touch it.

However, you may get this error message seemingly by mistake. For instance, it's perfectly OK to add an editable region inside a repeating region, and it's even OK to add a repeating region inside an optional region, and vice versa. But one day you select text inside a repeating region and try to turn it into an editable region, and boom–error message. What probably happened was, when you selected the text, Dreamweaver actually selected part of the hidden code used to define a template region (see the box, "Under the Hood of Templates" on page 674) and thought you were trying to put an editable region inside it. To avoid confusion, use the Tag selector to select the tag you wish to turn into an editable region. In the Tag selector, you can click <p> to select the paragraph inside the repeating region. Alternatively, go into Code view (see page 370), and then select whatever part of the code inside the repeating region you wish to make editable.

Making a Tag Attribute Editable

An editable region lets you change areas of HTML—like a paragraph, image, or entire table—on new pages you create from a template. However, when you're creating a template for others to make pages from down the line, you may want to limit these page authors' editing abilities. You may want to allow budding Web designers to change the source of an image used for a banner advertisement without letting them change the width, height, and class applied to the image. Or, you might want to use templates but still let others assign a class or ID to the <body> tag—a move that's normally forbidden on template-based pages. You can use Dreamweaver's Editable Tag Attribute to specify which *tag* properties your successors can change.

Note: Before making a tag attribute editable, first set that property to a default value in the template. Doing so inserts a default value and makes the attribute appear in the Editable Tag Attribute window (see steps 3 and 7 in the following instructions).

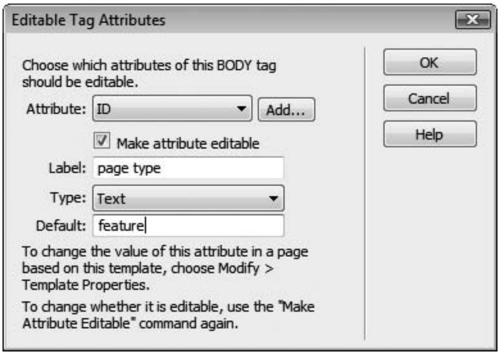
To make a tag attribute editable:

1. **Select the tag whose property you wish to make editable.**

   Using the Tag selector (see page 22) is the most accurate way.

2. **Choose Modify → Templates → Make Attribute Editable.**

   The Editable Tag Attributes window opens (Figure 19-8).



Editable Tag Attributes

Choose which attributes of this BODY tag should be editable.

Attribute: ID

☑ Make attribute editable

Label: page type

Type: Text

Default: feature

To change the value of this attribute in a page based on this template, choose Modify > Template Properties.

To change whether it is editable, use the "Make Attribute Editable" command again.

Figure 19-8:
Dreamweaver provides detailed control for template pages. To make just a single property of a single tag editable when pages are later based on your template, turn on the "Make attribute editable" checkbox. In this case, the "id" attribute of the body tag is editable, allowing page designers the freedom to apply different CSS styles to the body of each template-based page.

3. **Select an attribute from the menu or add a new attribute with the Add button.**

   Only properties you've already set for the selected tag appear in the Attribute menu. In other words, if you've selected an image, you probably see the *Src*, *Width*, and *Height* properties listed. But unless you've set the image's border, the *Border* property doesn't appear.

   To add a property, click the Add button. In the window that appears, type the appropriate property name. For example, to make the *alt* (alternative text) attribute of a graphic editable, you'd set the <img> tag's *alt* attribute by typing *alt* here. (If you're not sure of the attribute's name, check out Dreamweaver's built-in HTML reference, described on page 394.)

Note: If you want page editors to be able to change a CSS class or ID applied to the <body> tag on template-based pages–to apply different fonts, background colors, or any of the many CSS formatting options to each template-based page–you *have* to make the Class attribute editable. (See page 114 for more on CSS classes.)

4. **Make sure the "Make attribute editable" box is turned on.**

   If you decide that you no longer want to allow editing of this property, you can return to this dialog box and turn off editing, as described on the opposite page.

5. **Type a name in the Label field.**

   What you type here should be a simple description of the editable tag and property, which helps page authors correctly identify editable properties. For example, you could use *Product Image* if you're making a particular image's *source* (Src) property editable.

6. **Choose a value type from the menu.**

   Your choices are:

   - **Text.** Use this option when a property's value is a word. For example, you can change the image tag's *Align* property to *top, middle, baseline*, and so on. Or, when using Cascading Style Sheets, you could make a tag's *Class* property editable to allow page authors to apply a particular custom style to the tag—*content, footer*, and so on.
   - **URL.** Use this option when the editable property is a path to a file, like an image's *Src* property or a link's *Href* property. Using its site management tools, Dreamweaver keeps track of these paths and updates them when you move your pages around your site.
   - **Color.** If the property requires a Web color, like a page's background color, select this option. This option makes Dreamweaver's color box available to people who build pages from the template.
   - **True/False.** You shouldn't use this option. It's intended for Dreamweaver's Optional Regions feature (discussed on the opposite page), and it doesn't apply to *HTML* properties.
   - **Number.** Use this choice for properties that require a numeric value, like an image's *Height* and *Width* properties.

7. **Type a default value into the Default field.**

   This step is optional. The default value defines the initial value for this property, when people first create a page based on the template. They can then modify this value for that particular page. If you've already set this property in the template, its value automatically appears in this box.

8. **Click OK to close the window.**

   Dreamweaver adds code to the template page that allows page authors control of the attribute. Setting this attribute on pages created from the template is described on page 694.

If you later decide that you *don't* want a particular tag's property to be editable, Dreamweaver can help. Open the template file, select the tag with the editable attribute, and choose Modify → Templates → Make Attribute Editable. In the window that appears, turn off the "Make attribute editable" checkbox (Figure 19-8). Unfortunately, doing so doesn't remove *all* of the template code Dreamweaver added. Even after you turn off editing for an attribute, Dreamweaver leaves behind the parameter used to control the tag's property. To eliminate *this* extra code, see the box on page 688.

Adding Optional Regions

Templates provide consistent design. While consistency is generally a good thing, it can also get boring. Furthermore, there may be times when you'd like the flexibility to include information on some template-based pages but not on others.

Dreamweaver provides a fairly foolproof way to vary page design: *optional regions*. An optional region is simply part of a template page that you can hide or display on each template-based page (see Figure 19-9). When creating a new page based on the template, a page author can turn the region on or off.

Creating an optional region is a snap. Just select the HTML code you wish to make optional, and then do one of the following:

- On the Common tab of the Insert bar (Figure 19-2), select the Optional Region option from the Templates menu.
- Choose Insert → Template Objects → Optional Region.
- Right-click (Control-click) the selection and choose Templates → New Optional Region from the shortcut menu.

In the New Optional Region window, type a name (Figure 19-10). Make sure not to use the same name as any other region on the page, and—although Dreamweaver allows it—don't use spaces or other punctuation marks. (Following the rules for naming files as described on page 559 is the best method, and ensures that the optional region works properly.) Click OK to close the window and create the new optional region. Dreamweaver adds a light blue tab with the word "If," followed by the name you gave the region (Figure 19-9).

Locking Optional Regions

An optional region can include editable and repeating regions, *and* locked regions. For example, if you simply want to allow a page author to turn on or off a graphic ("This item on sale!!!!"), insert the graphic outside an editable region on the page,

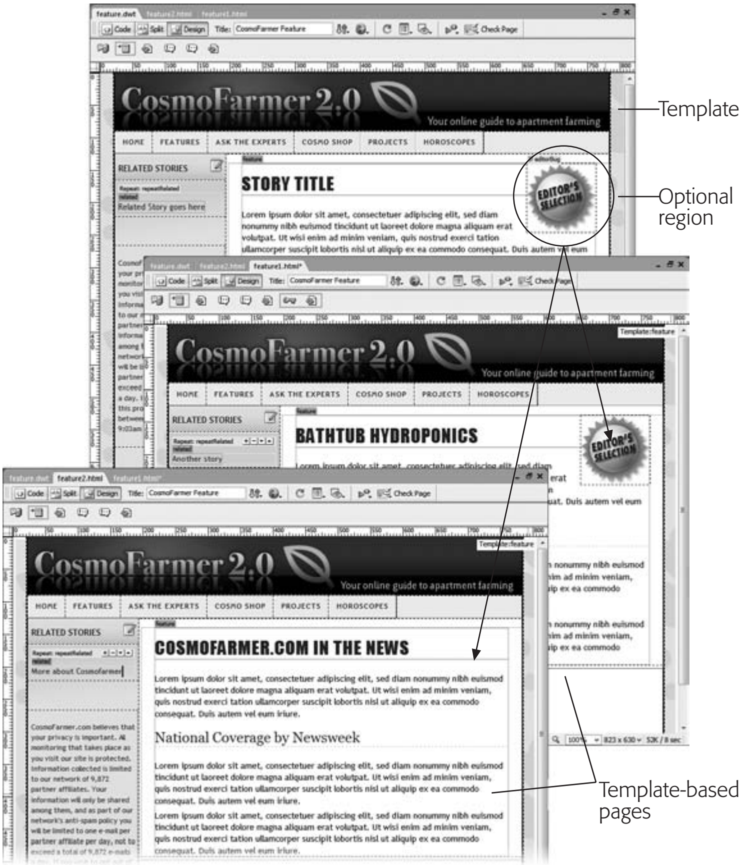
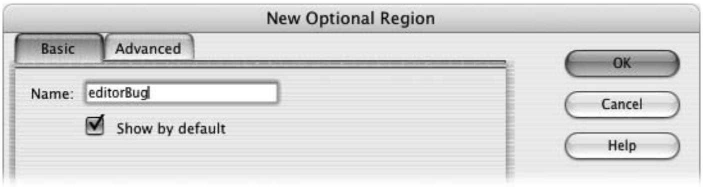


Figure 19-9: *Now you see it, now you don't. Optional regions let you show or hide content on a page-by-page basis. In these examples, the template page (top) has an optional region containing an "Editor's Selection" icon—indicated by the blue tab with the label "If editorBug" (circled). When creating a template-based page from this template, you can either display the optional region (bottom right) or hide it (bottom left).*


New Optional Region

Basic | Advanced

Name: editorBug

☑ Show by default

Figure 19-10: *The Optional Regions feature lets you show or hide specific content on template-based pages. Turning on "Show by default" tells Dreamweaver to display the region when a page author first creates a template-based page. Turn this box on if the optional region needs to show on most pages. You'll save someone the effort of turning the region on each time she creates a new template-based page.*

and then make it an optional region as described above. Since anything not inside an editable region is locked, a page author can't change the graphic or ruin its formatting—he can only make it visible or hidden.

Repeating Optional Regions

An optional region can also include repeating regions. For example, suppose you create a repeating region (see page 674) that lets a page author add row after row of links to a list of related articles. You could then turn this repeating region into an optional region, as described above, so that if a particular page had no related articles, the author could simply hide the entire "related articles" section of the page.

Optional Editable Regions

Dreamweaver's Optional Editable Region command inserts an optional region with an editable region *inside* it. To use it, click in the template at the spot where you'd like to add it, and then choose Insert → Template Objects → Optional Editable Region (alternatively, you can choose this option from the Templates menu on the Common tab of the Insert bar). The New Optional Region window appears; give it a name, and then follow the same steps outlined previously for an optional region.

This technique doesn't offer a lot of control; it's hard to insert HTML *outside* the editable region, for example. So if you want to have an image or table that's optional but *not* editable, it's usually better to just create the editable region as described on page 671 and turn it (and any other HTML you wish to include) into an optional region.

Note: The Optional Editable Region command doesn't let you name the editable region; instead you get a generic name like *EditRegion7*. You can select the editable region and change its name in the Property inspector, but do so *before* you build any pages based on this template (see the Warning on page 659).

Advanced Optional Regions

A basic optional region is a rather simple affair: It either appears or it doesn't. But Dreamweaver offers more complex logic for controlling optional regions. For example, maybe you want several different areas of a page to be either hidden or visible at the same time—perhaps an "On Sale Now!" icon at the top of the page *and* a "Call 1-800-SHIZZLE to order" message at the bottom of the page. When one appears, so does the other.

Because these objects are in different areas of the page, you have to create two separate optional regions. Fortunately, using Dreamweaver's advanced settings for optional regions, you can easily have a single region control the display of one or more additional areas of a page. Here's how to do it:

1. **Create the first optional region using the steps on page 681.**

   Give the region a name using the Basic tab of the New Optional Region window (Figure 19-10).

2. **Select the part of the page—an image, paragraph, or table—that you wish to turn into a second optional region.**

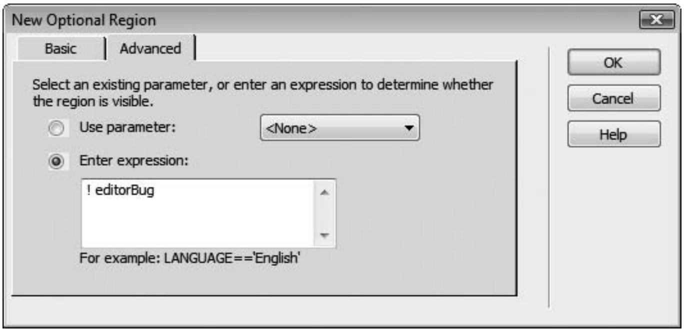
   In this case, you make the display of this region dependent on the optional region added in step 1. If the first region is visible on the page, this second region also shows.

3. **On the Common tab of the Insert bar (Figure 19-2), choose the Optional Region item from the Templates menu.**

   The New Optional Region window appears.

4. **Click the Advanced tab.**

   The optional region's advanced options appear (see Figure 19-11). In this case, you want the first optional region you created to control the display of this new region. So instead of giving this region a name, you'll simply select the name of the first optional region in the next step.



Select an existing parameter, or enter an expression to determine whether the region is visible.

○ Use parameter: <None>

● Enter expression:

```
! editorBug
```

For example: LANGUAGE=='English'

Figure 19-11: *The New Optional Region box lets you more precisely control the display of an optional region. You can make the region appear only when another region is visible, or use Dreamweaver's template expression language to create a more complex behavior. In this case, the selected region appears only when another region–named editorBug–is not visible (the ! is a programming equivalent of "is not").*

5. **Click the "Use parameter" button and select the name of the first optional region from the menu.**

   This step is what makes the first optional region control this region. If a page author displays the first region, this second region also appears.

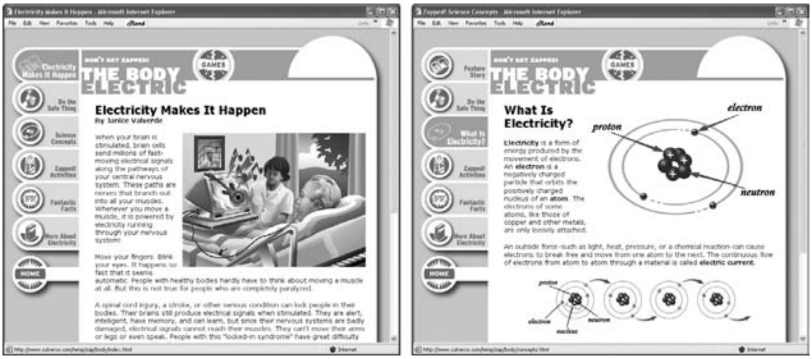
6. **Click OK to close the window and create the new optional region.**

   You can continue adding optional regions in this way, using the Advanced tab and selecting the name of the first optional region from the menu. This way, a single region can control the display of many other areas of the page.

Even fancier tricks

You can use these advanced controls for even more elaborate Web page stunts. For example, say your site is composed of several sections. When a visitor is in one section of the site, its navigation button is attractively highlighted and a secondary navigation bar miraculously appears, offering links to other pages in that section.

Using a template, you can add an optional region containing the highlighted section button. When you add the secondary navigation bar to the page, you make *it* an optional region controlled by the highlighted navigation button. Then, when you add a page to that section of the site, you simply show the optional region containing the highlighted button, causing the secondary navigation bar to appear as well (see Figure 19-12 for a look at how this works).



Electricity Makes It Happen

By Janice Valverde

When your brain is stimulated, brain cells send millions of fast-moving electrical signals along the pathways of your central nervous system. These paths are nerves that branch out into all your muscles. Whenever you move a muscle, it is powered by electricity running through your nervous system!

Move your fingers. Blink your eyes. It happens so fast that it seems automatic. People with healthy bodies hardly have to think about moving a muscle at all. But this is not true for people who are completely paralyzed.

A spinal cord injury, a stroke, or other serious condition can lock people in their bodies. Their brains still produce electrical signals when stimulated. They are alert, intelligent, have memory, and can learn, but since their nervous systems are badly damaged, electrical signals cannot reach their muscles. They can't move their arms or legs or even speak. People with this "locked-in syndrome" have great difficulty

What Is Electricity?

Electricity is a form of energy produced by the movement of electrons. An **electron** is a negatively charged particle that orbits the positively charged nucleus of an **atom**. The electrons of some atoms, like those of copper and other metals, are only loosely attached.

An outside force–such as light, heat, pressure, or a chemical reaction–can cause electrons to break free and move from one atom to the next. The continuous flow of electrons from atom to atom through a material is called **electric current**.

Figure 19-12:
An optional region on the page at left highlights the top navigation button. By turning on a different optional region (right), the navigation system can highlight the site's current section–"What is Electricity?" (the third button from the top).

Controlling regions with expressions

You can program even more complex behaviors using a basic *expression language*, loosely based on JavaScript, that Dreamweaver understands. For example, instead of having an optional region appear when another optional region is visible (as in the above example), suppose you want to have a region appear when another region is invisible. This arrangement can come in handy when you're creating a navigation bar. When a page is in a particular section, for instance, the navigation button for that section is highlighted, but the button isn't highlighted if the page is in another section.

In other words, you can build a single template for all the sections of a site, but control the appearance of the navigation bar separately for pages in each individual section (see Figure 19-12).

Here's how you'd control the navigation bar:

1. **Click the page where you wish to insert the navigation buttons.**

2. **Insert the highlighted ("You are in this section") navigation button.**

   This button could be a rollover image (see page 229),or just a single graphic. If you have multiple pages in the section, you probably also want to link this graphic to the main page for that section.

3. **Click next to the highlighted button and insert the plain ("You can go here") navigation button.**

   The button could also be a rollover image with a link to the main page for this section (for example, the main Products page).

4. **In the Property inspector, select the highlighted navigation button and link (if it has one).**

   This button appears on any template-based page for this section.

5. **On the Common tab of the Insert bar (Figure 19-2), choose Optional Region from the Template menu.**

   The New Optional Region window appears. Make sure the Basic tab is selected.

6. **Type the name of the section into the Name field. Click OK.**

   For example, if this section of your site advertises your company's products, you can call it *products*. Don't use any spaces or punctuation other than hyphens (-) or underscores (_) for the name. Also make sure the "Show by default" box is *not* turned on. Since you'll be building template-based pages for all the sections of your site, most pages you build will be in other sections of the site. Your work goes faster if this highlighted button starts out hidden. In the next steps, you'll make the plain navigation button appear by default.

7. **Use the Property inspector to select the plain button and link, and then click the Optional Region button on the Insert bar.**

   The New Optional Region window appears again, but this time you'll use the advanced options.

8. **Click the Advanced tab; select "Enter expression" (Figure 19-11).**

   You're going to type an *expression* in the Expression field. An expression is a programming statement that is either true or false. (For an obvious example, 2 is always equal to 2, but it's obviously false to say, "2 is equal to 4." In programming, you express equality using a pair of = signs. So 2==2 is true, but 2==4 is false.) The important thing to remember here is that when an expression is true, the optional region is visible; when it's false, it's hidden.

9. **Type an exclamation point (!) followed by the name you entered in step 6—*!products*, for example.**

   Dreamweaver's template expression language is based on the JavaScript programming language. An exclamation mark means "not," so this code means "*not products*." Translation into non-propeller-head language: when the *products* region (remember, that's the highlighted button) is *not* displayed, this region (button) appears on the page.

   The logic gets a little complicated, but have faith. When you add a new page based on this template, the optional region you added in step 6 is *not* visible (because you turned off the "Show by default" box). In other words, because the region—products in this example—is *not* showing, this region, the one with the plain navigation button, by default appears on the page. Turning the *products* region on (as described on page 694), *hides* the plain navigation button. In other words, the first optional region works like a light switch, alternately turning on one or the other navigation button.

10. **Click OK to close the window and add the additional optional region.**

    Repeat this process for each button in the navigation bar. Now your template is perfectly suited for displaying customized navigation bars for each section of your site. When you create a new template-based page, simply turn on the region for the particular section in which the page is located. (Hiding and showing optional regions is described on page 694.)

As you can see, optional regions are very powerful—and potentially confusing. But using even basic optional regions, you can exert a great deal of control over your template-based pages. For more information on template expressions and optional regions, take a look in Dreamweaver's built-in Help system. (Choose Help → Dreamweaver to open the Adobe Help system; then, in the search box, type *template expressions*, and then hit Enter (Return). The Dreamweaver Help system then lists several articles related to templates and template expressions [as well as a few articles completely unrelated to the topic!].)

Editing and Removing Optional Regions

After inserting an optional region, you can always return to the New Optional Region dialog box to change the region's name, alter its default settings, or use advanced options. To edit an optional region, first select it using one of these techniques:

- Click the region's blue tab in the document window (Figure 19-9).
- Click anywhere inside the optional region in the document window; click the <mmtemplate:if> tag in the Tag selector (see page 22 for details on the Tag selector).

When you select an optional region, an Edit button appears in the Property inspector. Click it to reopen the New Optional Region window. You can then change the region's properties.

To remove an optional region, select it using one of the techniques listed previously and choose Modify → Templates → Remove Template Markup. Dreamweaver removes most of the code associated with the optional region (but see the box "Understanding Template Parameters" on page 688).

Nested Templates

Large sites may have many different sections or types of pages. Each section of the site or type of page may have its own unique look. A Frequently Asked Questions page may have distinct areas for a question, an answer, and links to further resources, while a product page may have a picture, a product description, and ordering information. You could create different templates for each type of page, but even that may be more work than necessary.

While many pages in a site may have subtle differences, they usually share very basic design features. The overall structure of every page, for example, may be the

POWER USERS' CLINIC

Understanding Template Parameters

When you insert an optional region, Dreamweaver adds special code to the head of the Web page. Called a *template parameter*, this code is responsible for showing or hiding an optional region.

In fact, Dreamweaver uses parameters when you make a tag attribute editable, too. A typical parameter for an optional region might look like this:

```
<!-- TemplateParam name="SaleBug"
type="boolean" value="true" -->
```

The <!-- and --> are HTML comments that hide this code from a Web browser. TemplateParam tells Dreamweaver that the comment is actually part of the program's Template features–specifically, a template parameter.

A parameter is composed of three parts: name, type, and value. The name is the name you gave the editable region. The type–Boolean–indicates that the value of this parameter can be only one of two options: true or false. In this example, the value is "true," which simply means that the optional region called SaleBug is visible. (Don't worry; you don't have to actually edit this code by hand to turn optional regions on and off, as you'll see on page 694.)

In programming jargon, a template parameter is known as a *variable*. In simpler terms, it's just a way to store information that can vary. Dreamweaver reacts differently depending on this value: show the region if the parameter's true, or hide it if the parameter's false.

Editable tag attributes also use parameters to store the values you enter for the tag attribute. For example:

```
<!-- TemplateParam name="PageColor"
type="color" value="#FFFFFF" -->
```

On template-based pages, you can change the value of a parameter used for an editable tag attribute to change that tag's property (see page 694).

Unfortunately, when you delete an optional region from a template, or remove the ability to edit a tag attribute, Dreamweaver always leaves these parameter tags hanging around in the head of the template document. Keeping in mind that Dreamweaver adds these parameter tags directly before the closing </head> tag, you can find and remove unused parameter tags in Code view (see Chapter 10).

same: same logo, banner, and navigation bar. Even the basic layout may be the same. And there lies the problem with creating individual templates for each section: if you need to make a very basic sitewide change, like adding a new button to the site's overall navigation system or altering the banner, you need to edit *each* template individually, adding extra time, effort, and risk of making a mistake.

Good news—Dreamweaver offers a tool to solve just this problem: nested templates. A *nested template* is a template you make from another template, which then becomes the *master* template (see Figure 19-13).

Imagine a basic software company Web site with three sections: Support, Our Products, and Downloads. Each section has its own brand of information and specific layout needs. However, all three sections share the same banner and navigation.

To create a template system for this site, you must first create a very basic template that includes elements (including editable regions) shared by all pages—the master template. You can then create a nested template based on the master. On the nested template, you can add further design refinements and additional editable regions for the areas that can be changed on pages created from the nested template.

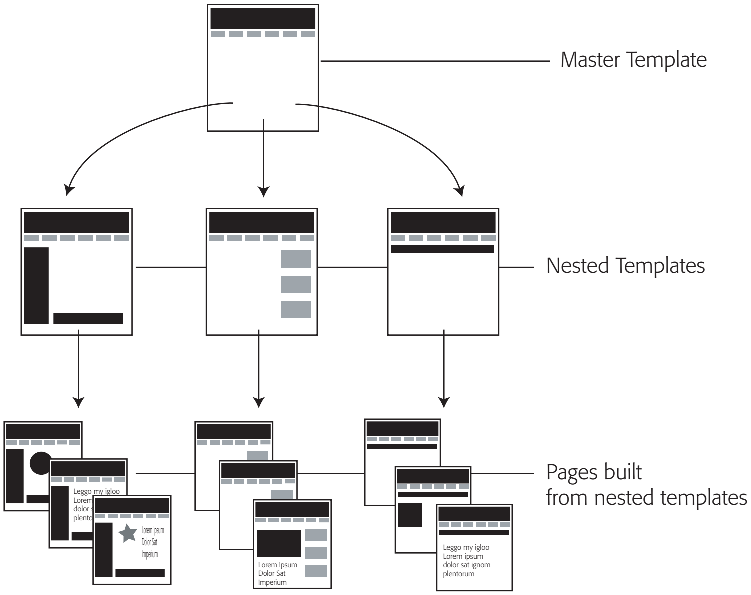


Figure 19-13:
Nested Templates (middle row) let you build templates that share common sitewide design elements while providing precise control for particular types of pages or sections of a Web site. A page built from a nested template (bottom row) contains both elements from a master template (top row)–like a banner and a sitewide navigation bar–in addition to elements specific to its nested template–like a section-specific secondary navigation bar. Changes you make to the master template are passed on to all pages of the site, including nested templates. Changes to a nested template, by contrast, pass on only to pages based on the nested template.

Yes, this process sounds complex—and yes, it is. But when the alternative is hours or days of manual template updating, you can see why serious Web designers are willing to spend the time to master any shortcut they can get.

To create a nested template:

1. **Build a template as described on page 701.**

   This page acts as the master template and controls all nested templates. It should include the basic elements shared by all nested template pages, like your logo and email links. Now is also the time to add editable regions in the areas the nested templates can change, like table cells to hold blocks of text and images.

2. **Name and save this template (File → "Save as Template"), and then close it.**

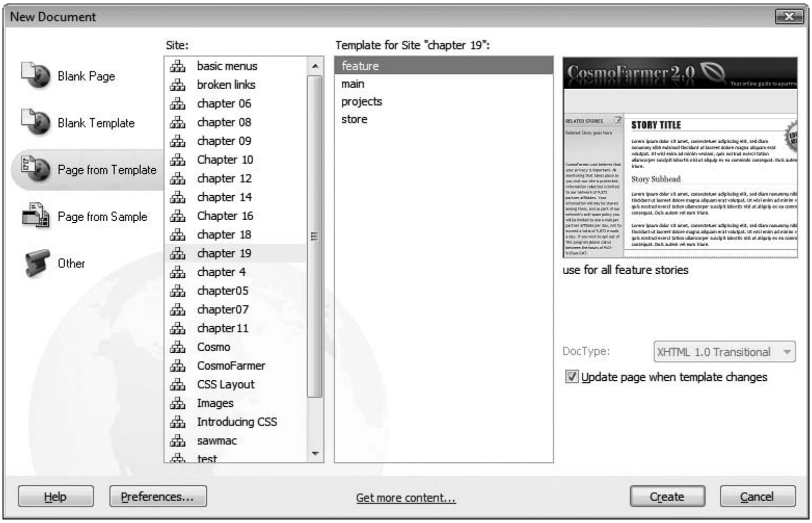
   Your template is safe on the hard drive.

3. **Choose File → New.**

   The window for creating new documents and template-based pages opens (see Figure 19-14).

4. **On the left side of the New Document window, click the "Page from Templates" button. In the Site list, select the Web site on which you're working.**

   You can open templates from any site you've defined in Dreamweaver, but this idea generally isn't a good one, as Figure 19-14 explains.



use for all feature stories

DocType: XHTML 1.0 Transitional

☑ Update page when template changes

Figure 19-14: *You can use the "Site" list to choose another site you've defined and reveal the list of templates it uses. However, choosing a template stored in a different site isn't a good idea. Dreamweaver doesn't copy any images on the template to the current site and can't translate relative links correctly. The result is broken links aplenty.*

5. **From the list of templates, select the name of the master template file you created in step 1.**

   Make sure the "Update page when template changes" box is turned on. Otherwise, the nested template doesn't update when you edit the master template.

6. **Click OK.**

   Dreamweaver creates a new template-based page. At this point, it's simply a basic Web page based on the original template. Next, you'll turn it into a *nested template*.

7. **Choose File → "Save as Template." Or, on the Common tab of the Insert bar (Figure 19-2), select Make Nested Template from the Templates menu.**

   The Save As Template window appears (see Figure 19-3).

8. **Type a name for the template and click the Save button.**

   Voilà! A nested template.

Customizing Nested Templates

When you first create a nested template, there's no difference between it and the master template. They share the same design, content, and template regions.

The next step is adding the design elements that are specific to pages built from that template. For example, you can add a special type of table for displaying a product photo, description, price, and other information. This table appears only in pages built from this nested template, not from the master template or any other nested template.

There are a few things you should keep in mind when planning your template development strategy:

- When creating pages from templates, you can add content only to an editable region. That's true not only for template-based pages, but for nested templates, too. If the master template has *no* editable regions, you won't be able to change anything on the nested template created from it.
- When working on a nested template, you can insert an editable region only into an editable region supplied by the master template. For example, say you've created a master template to provide a consistent banner and navigation bar to the site, all in a locked region of the master template. Then you add a large empty area at the bottom of the page and turn it into an editable region that you can customize to make specific layouts for each nested template. After creating a nested template from the master template, you can then add new editable regions to this open area. In fact, you can add any template region—repeating, optional, or editable—to this area.
- If, when working on a nested template, you insert a template region (editable, optional, or repeating) into an editable region supplied by the master template, pages based on the nested template can modify *only* those new regions. The rest of the editable region supplied by the master template isn't editable on the pages based on the nested template.

  Using the example in the previous paragraph, let's say you next add a repeating table to your nested template (see page 676 for more detail about repeating tables). When you create a page based on this nested template, you can change *only* the editable areas marked out in the repeating table. Of course, the other side of the coin is that if you add an editable region to the master template and then refrain from adding any particular template regions, all the HTML inside that region is editable in the nested template *and* in all pages based on the nested template.

Using Nested Templates

Here's an example of how you can use nested templates. Suppose you want to create a uniform design for your site where every page of the site has a logo as well as a sitewide navigation bar. Each page within one section of the site also has a sidebar containing a *secondary* navigation bar with navigation buttons for just that section. Finally, every page has a large content area to hold the information specific to that page.

Using nested templates, creating a Web site like this couldn't be easier. Create a master template containing the site banner and navigation bar. This template also includes editable regions for the sidebar and main content area.

Next, create a nested template for one *section* of the site, leaving the content area as it is. Since each page has its own content in this area, you don't need to do anything to this region. Then add the secondary navigation bar to the sidebar area. To lock this region so no one can tinker with the sidebar (in pages built from the nested template), add an empty editable region, or see the Tip on the next page. If you want, you can build similar nested templates for the other sections of the site.

Now you're ready to start building the pages of your site. Create a new page based on one of the section templates. Add text or graphics to the editable content area of the page. Should you need to change the site logo or add a button to the site-wide navigation bar, open the master template, make the changes, save the file, and let Dreamweaver update all the pages of your site with the new look. If you simply need to change the secondary navigation for one section of the site, then open the appropriate nested template, change the sidebar, save the template, and let Dreamweaver update all the section pages.

Tip: You can lock an editable region passed from a master template to a nested template, so that pages based on the nested template can't be changed in this region. In the nested template, go into Code view, and then locate the beginning of the editable region, which looks something like, <!-- InstanceBeginEditable name="regionName" -->. Then insert the text @@("")@@ directly after the -->.

If you find yourself typing this code often, think about creating a snippet (see page 647) containing the text @@("")@@.

Building Pages Based on a Template

Building a template is only a prelude to the actual work of building your site. Once you finish your template, it's time to produce pages.

To create a new document based on a template, choose File → New to open the New Document window (see Figure 19-14). Click the "Page from Template" button, and then, from the Site list, select the current site you're working on. All templates for the selected site appear in the right column. Select the template you wish to use, and then click Create.

Tip: If you don't want your new Web page linked to the template (so that changes to the template also affect the Web page), turn off the "Update page when template changes" checkbox. The result is a new page that looks just like the template, but has no locked regions; you can edit the entire page. This method is useful, for example, when you want to start with the general design and structure of a certain template when creating a brand-new design for another template. (Be aware that Dreamweaver remembers this choice the next time you create a new template-based page. In other words, future pages you create from a template will *also* be unlinked–unless you remember to turn the "Update page" box back on.)

A new Web page document opens, based on the template, bearing a tab in the upper-right corner that identifies the underlying template name. Dreamweaver outlines any editable regions in blue; a small blue tab displays each region's name (Figure 19-5).

Dreamweaver makes it painfully obvious which areas you aren't allowed to edit; your cursor changes to a "forbidden" symbol (a circle with a line through it) when it ventures into a locked area.

To add content to an editable region, click anywhere inside the editable region. You can type inside it, add graphics, or add any other objects or HTML you can normally add to a document. You can also change the document's title and add a Spry Menu bar (Chapter 5), Spry widgets (Chapter 12), Behaviors (Chapter 13), Cascading Style Sheets (see Chapter 4), and meta tag information (items that go in the <head> of an HTML document).

Working with Repeating Regions

Repeating regions work a bit differently than editable regions. In most cases, a repeating region includes one or more editable regions (which you can edit using the instructions above). However, Dreamweaver provides special controls to let you add, remove, and rearrange repeating entries (see Figure 19-15).

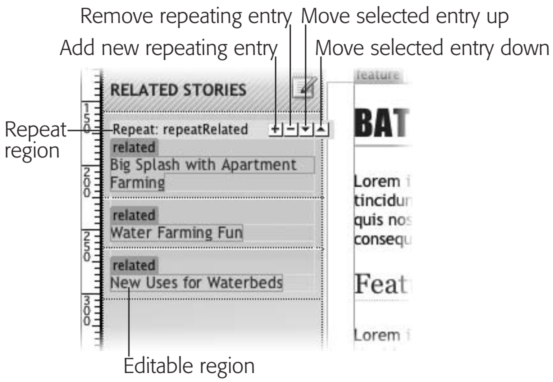


Figure 19-15:
Repeating regions are a great way to quickly add lists to your Web pages. Here, a list of links points to stories related to this Web page. Clicking the + button adds another row to this table, complete with an editable region for adding a new story title and link.

These regions are intended to let a page author add repeated page elements—like rows of product information in a list of products. To add a repeating entry, click the + button that appears to the right of the Repeat region's blue tab. You can then edit any editable regions within the entry. Click inside an editable region inside a repeating entry and click + again to add a new entry *after* it.

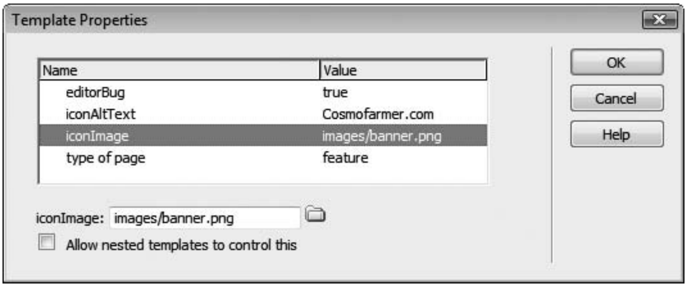
Deleting a repeating entry is just as easy. Click inside an editable region within the entry you wish to delete and click the - sign button.

Tip: You can create repeating regions that don't have any editable regions–for example, repeating a star several times to indicate the rating for a product. Although you can use the + button to repeat such regions, you can't delete those regions with the minus sign (-) button. In other words, you're stuck with any extras you've added. The only workaround is to add an editable region to the repeating region. Then Dreamweaver lets you remove any repeating regions you wish.

To rearrange entries in the list, click inside an entry's editable region. Click the up or down arrows to move the entry up or down in the list (to alphabetize it, for example).

Changing Properties of Editable Tag Attributes

Unlike editable or repeating regions, an editable tag attribute isn't immediately apparent on template-based pages. There's no blue tab to represent it, as there are for editable regions; in fact, nothing appears in Design view to indicate that there are *any* editable *tag* properties on the page. The only way to find out is to choose Modify → Template Properties to open the Template Properties dialog box (see Figure 19-16).



Name	Value
editorBug	true
iconAltText	Cosmofarmer.com
iconImage	images/banner.png
type of page	feature

iconImage: images/banner.png

□ Allow nested templates to control this

Figure 19-16: *The Template Properties window lets you control editable tag attributes and other parameters for optional regions. Depending on which parameter you select, the options at the bottom of the window change. In this case, the SRC property of an image tag has been made editable. You can click Dreamweaver's familiar "Browse for File" button to change the image tag's SRC property by selecting a new graphic file to display on the page.*

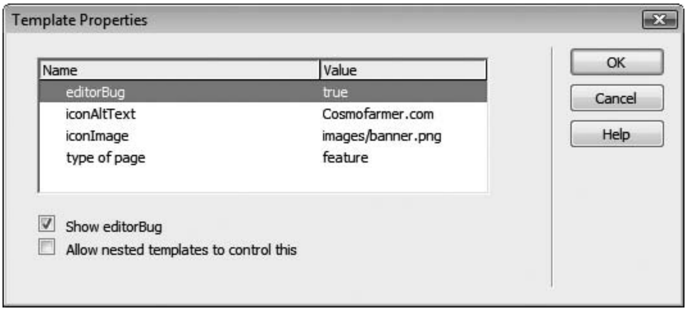
All editable tag attributes for this page appear in this window. In addition, all parameters defined for this page, including optional regions, appear here, as discussed in the box on page 688.

To change the value of a *template* property—in other words, to edit the property of an editable tag—select its name from the list and fill out the option that appears at the bottom of the window. For example, in the case of *color* properties, use the color box to pick a Web-compatible color. If the property is a path (like a link or an image's *source* property indicating the graphic file's location in the site), click the "select a file" folder icon to browse to select the file.

Once you've finished setting the editable properties for the page, click OK to close the window.

Hiding and Showing Optional Regions

As with Editable Tag Attributes, you use the Template Properties window to control the display of optional regions. On template-based pages, you can show or hide an optional region by choosing Modify → Template Properties to open this dialog box (see Figure 19-17). Next, select the name of the optional region. To make all page elements in the region appear, turn on the "Show" checkbox at the bottom of the window. To hide the optional region, turn off this box.



Template Properties

Name	Value
editorBug	true
iconAltText	Cosmofarmer.com
iconImage	images/banner.png
type of page	feature

☑ Show editorBug
□ Allow nested templates to control this

Figure 19-17: *The Template properties window displays optional regions as well as editable tag attributes. A Template property for an optional region–in this example, "editorBug"–has a value of either true or false. True lets people see the contents of the region on the page, while false hides the region. (The "Allow nested templates to control this" option is described in the box below.)*

FREQUENTLY ASKED QUESTION

Controlling the Nest

The Template Properties dialog box includes a checkbox labeled "Allow nested templates to control this." What does it do?

Imagine that you create a template and add several optional regions and editable tag attributes to it. You then use this template as a basic design for more refined templates for each section of your site. When you create one of these nested templates based on the master template, it has access to the Template Properties window, where page authors can modify any of the *template* properties created by the original, master template.

For example, to better identify each section of a site, you might assign a different class style to the <body> tag of a section's pages. The class might apply a different background color to each page within a section: blue for the products section, orange for the support section, and so on. In the master template, you make the <body> tag's *class* property editable. Now, when you create a nested template for the products section, you simply open the Template Properties dialog box, and then assign a class style with a blue page background. For the support section's nested template, apply a class that sets the background to orange. Now, when you create a template-based page for the support section, its background is orange, while a page for the products section has a blue background.

However, to let your site's color palette go really wild, you may want every page in the site to have its own unique background color, each defined by a different class style. (Disclaimer: Don't try this at home.) In this case, you'd want to let every page based on a nested template have an editable *class* property.

To do so, open the nested template, open the Template Properties window, select the property that should be editable in pages built from this template (*color* in this case), and turn on the "Allow nested templates to control this" checkbox. Now this property is uneditable in the nested template, but editable in all pages created from it.

You've probably realized by now that the phrase "Allow nested templates to control this" doesn't make much sense. Turning it on actually prevents the nested template from controlling the property. A better way to think of it is "Allow pages created from this template to control this property."

The bottom line: Turning on this box makes the attribute uneditable on that page. If it's a nested template, it lets the *Template* property "pass through" to all pages based on this template. In other words, you can't set the background color in the template, but page authors can change it in pages created from the template.

Applying Templates to Existing Pages

What happens if you create a Web page, and *then* decide you want it to share the look of a template? No problem. Dreamweaver lets you apply a template to any Web page in your site. You can even swap one template for another by applying a template to a page that's already based on a different template

To apply a template to a page you've already created:

1. **Choose File → Open to open the page you want to alter.**

   The Web page opens.

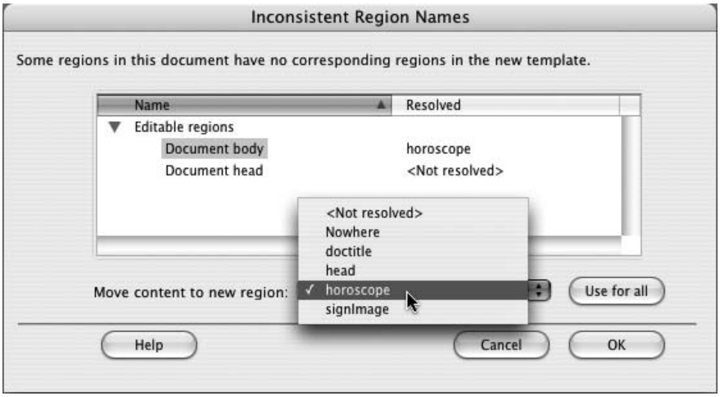
2. **Choose Window → Assets. Click the Assets panel's Templates button (see Figure 19-4).**

   The Assets panel appears and reveals a list of the site's templates.

Tip: You can also apply a template to a page by choosing Modify → Templates → "Apply Template to Page." Select the name of the template from the window that appears and skip to step 5.

3. **Click a template in the list on the Assets panel, and then click Apply.**

   The Inconsistent Region Names dialog box opens (Figure 19-18).


Inconsistent Region Names

Some regions in this document have no corresponding regions in the new template.

Name	Resolved
▼ Editable regions	
Document body	horoscope
Document head	<Not resolved>

Move content to new region: ✓ horoscope

Figure 19-18: *When you apply a template to a page you've already created, you must tell Dreamweaver what to do with the material that's already on the page. Tell it what to do by selecting one of the template's editable regions from a pop-up menu, which takes charge of all editable regions in your page.*

4. **In the list under "Editable regions," choose "Document body."**

   To the right, in the Resolved column, you see <Not resolved>. This is Dreamweaver's way of saying it doesn't know what to do with the contents of the current page. You need to pick one of the template's editable regions.

5. **From the "Move content to new region" menu, select an editable region.**

   If you want to keep the material, select the name of an editable region in which to place it from the list; otherwise, choose Nowhere, which, in effect, creates a new blank page based on the template.

Unfortunately, you can only select a single editable region. If the original has several content regions, then Dreamweaver merges them all into a single editable region.

6. **If "Document head" also appears in the window, select it and choose "head" from the "Move content to new region" menu.**

   This step preserves any special information you added to the head of your page, like Cascading Style Sheets, meta tags, custom JavaScript programs, and other information that goes in the <head> of the document. Unfortunately, the title of your original page is always replaced with the default title of the template. You have to reenter the title (see page 38) after you apply the template.

Warning: If you apply a template to a page that has Spry Widgets (Chapters 5, 11, and 12) or Dreamweaver Behaviors (Chapter 13) applied to it, be careful when you select this option. If the same behaviors already exist in the template code, Dreamweaver actually makes a duplicate copy of the JavaScript code in the <head> of the page. To get rid of the extra code, you need to go into Code view (Chapter 10) and manually remove it.

7. **Click OK.**

   Your new page appears.

Updating a Template

Templates aren't just useful for building pages rapidly; they also make quick work of site updates. Pages created from templates maintain a link to the original template file; you can automatically pass changes to a template along to every page built from it. If you used templates to build your site, you probably won't cry on your keyboard when the boss says you must add an additional button and link to the navigation bar. Instead of editing every page, you can simply open the template file, update the navigation bar, and let Dreamweaver apply the update to all the pages.

You update a template (and all the pages based on it) like this:

1. **Choose Window → Assets.**

   The Assets panel appears.

2. **Click the Templates button (see Figure 19-4).**

   A list of the site's templates appears.

3. **Double-click the template's name to open it.**

   Alternatively, you can select the template in the Assets panel, and then click the Edit button to open the original template (.dwt) file (see Figure 19-4).

   The template opens.

Tip: You can also open a template by double-clicking the appropriate template (.dwt) file located in the Templates folder in the Files panel.

4. **Edit the template as you would any Web page.**

   Since this is the original template file, you can edit any of the HTML in the document, including Cascading Style Sheets, meta tags, and layers. You can also add or remove editable regions (see page 674).

   Take care, however, to edit *only* the areas that you did *not* mark as editable regions. The reason: When you update your pages, any region marked as editable in a template file isn't passed on to pages based on that template. After all, the template is supposed to dictate only the design of those pages' *non*-editable regions.

Note: Be careful when you remove editable regions from a template. If you've already built some pages based on the template, Dreamweaver warns you when you save the template. As described below, you can either *delete* the content that was added to that region in each of the pages you created, or move it to another editable region in the page.

5. **Choose File → Save.**

   If you've already created pages based on this template, Dreamweaver opens the Update Template Files dialog box. It lists all the files that use the template.

6. **Click Update to update all files based on the template.**

   Dreamweaver automatically applies the changes you made to the pages based on the template. Then, the Update Pages dialog box opens. If you want to see a list of all files Dreamweaver changed while updating your site, turn on the "Show log" box.

   On a large site, this automatic update feature can be an incredible time-saver, but you may *not* want to click Update, at least not right now. Perhaps you're just saving some of your hard work on the template but aren't quite finished perfecting it—why waste your time updating all those pages more than once? In such a scenario, click the Don't Update button. Remember, you can always update the pages later (see the box on the opposite page).

7. **Click Close.**

   The Update Pages dialog box closes.

Remember that you need to update all your files even if you make a simple change to the template, like changing its name.

Updating Nested Templates

When you build a Web site using nested templates, you have multiple templates affecting your pages. The master template controls design elements of a nested template, which in turn controls pages based on the nested template. (You can even make nested templates *out of* nested templates, but for sanity's sake, you'd better not.) With this level of complexity, updates to nested templates can get confusing fast.

In a nutshell, here's how it works:

- If you edit a locked region in a master template and then update your site, not only does a nested template update, but so do all pages built from it.
- If you edit a locked region in a nested template and then update, those changes pass on to pages built from that nested template.

However, changes you make to an *editable* region of a master template don't pass on to any page. Neither do changes you make in editable regions of a nested template.

Note: Sometimes after making changes to a master template, Dreamweaver doesn't update pages based on nested templates. To safely verify that all template updates are correct, recreate the Site Cache (Site → Advanced → Recreate Site Cache), choose Modify → Templates → Update Pages, and then select the "Entire Site" option.

POWER USERS' CLINIC

Wait to Update

Whenever you modify and save a Library item or a template, Dreamweaver gives you the option of updating any pages in the site that are descended from it. Very often, you'll say Yes.

But there are times when you want to wait to update the site. If you're making a lot of changes to multiple Library items or templates, you may wish to wait until you've finished all your edits before letting the changes ripple through your pages. After all, it can take some time to update large sites with lots of pages.

Dreamweaver lets you update pages that use Library items and templates at any time. Just choose Modify → Library → Update Pages, or Modify → Templates → Update Pages. Both menu options open the same window, the Update Pages dialog box.

At this point, you can update pages that use a specific Library item or template by going to the "Look in" menu, choosing "Files that Use," and then selecting the appropriate name from the pop-up menu. If you would like to update all pages in the site, choose Entire Site, and then, from the pop-up menu, select the name of the local site. Turn on both the "Library items" and Templates checkboxes to update all pages.

To see the results of Dreamweaver's work, check the "Show log" box. This box presents a list of all the updated files.

Unlinking a Page from a Template

If you're confident that you won't be making any further changes to a page's template, and you'd like to be able to edit the page's locked regions, you can break the link between a page and its template by choosing Modify → Templates → "Detach from Template."

All the HTML in the page is now editable, just as on a regular Web page—which is what it is now. You've removed all references to the original template, so changes to the template no longer have any effect on this page.

Note: If you unlink a nested template from its master template, Dreamweaver removes only the code provided by the original master template. Any editable regions you added to the nested template remain.

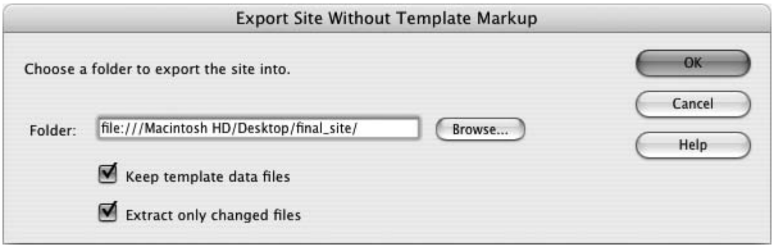
Exporting a Template-Based Site

The good news about Dreamweaver's sophisticated templating features is that they let you build complex Web pages that are easy to create and update. The bad news is that some behind-the-scenes code is necessary to achieve this ease of use. Dreamweaver's template features rely on HTML comment tags to identify editable, optional, and repeating regions, as well as nested template and editable tag attributes (see the box on page 674). Although this code is only for Dreamweaver's use and has no effect on how a Web browser displays the page, it does add a small amount to the size of your Web pages.

Fortunately, Dreamweaver includes a feature that lets you export an entire site into a new folder on your computer *without* any template markup code. It's a good last step before transferring a freshly completed Web site to a Web server.

1. **Choose Modify → Templates → Export Without Markup.**

   Dreamweaver uses the currently active site, so make sure you've got the site you wish to export selected in the Files panel. The Export Site Without Template Markup window appears (see Figure 19-19).


Export Site Without Template Markup

Choose a folder to export the site into.

Folder: file:///Macintosh HD/Desktop/final_site/

☑ Keep template data files

☑ Extract only changed files

***Figure 19-19:** Dreamweaver lets you strip out template code from template-based pages with the Export Site Without Template Markup command.*

2. **Click the Browse button, and then select a folder for the exported site.**

   Select a folder *other* than the current local site folder. You always want to keep the original files in the local folder, since they're the ones that keep the template markup, making future updates possible.

3. **Turn on the export options you want.**

   The Export window includes two options. The first, "Keep template data files," creates an XML file for each template-based page. In other words, when you export the site, there's one HTML page (without any special template code) and an XML file (which includes all the template code as well as the page content).

   Theoretically, you could then go back and choose the File → Import → "XML into Template" to recreate the page, complete with the original template information. However, in practice, you probably won't. For one thing, this process creates lots of additional files that you wouldn't want to move to the Web site. Also, when you want to work on the site to update and edit it, you should use the original files in the site's local folder anyway, since they still have the useful template code in them.

The "Extract only changed files" option speeds up the process of exporting a large template-based site. This option forces Dreamweaver to export only pages that you've changed since the last export. Unfortunately, it doesn't tell you *which* files it exported until after the fact. So, to make sure you get those newly exported files to the Web server, you need to keep track of changes by hand.

4. **Click OK to export the site.**

   Dreamweaver goes through each page of the site, stripping out template code and exporting it to the folder you specified.

It's a fine idea to perform an export after you've completed your Web site and are ready to move it to the Internet. You can then move the lean, clean exported files to the Web server.

You can use Dreamweaver's FTP feature to do the uploading (see page 620), but you need to create a new site and define the folder with the *exported* files as a local root folder. Whenever you need to add or update template-based pages, use the original site files, and then export the changed files. You can then switch to the site containing the exported files and transfer the new or updated files to the Web server.

Template Tutorial

In this tutorial, you'll create a template for the CosmoFarmer Web site. Then you'll build a page based on that template and enjoy an easy sitewide update courtesy of Dreamweaver's templates feature.

Note: You'll need to download the tutorial files from *www.sawmac.com/dwcs3/* to complete this tutorial. See the note on page 39 for more details.

Once you've downloaded the tutorial files and opened Dreamweaver, define a new site as described on page 28: Name the site *Templates,* and then select the Chapter19 folder (inside the MM_DWCS3 folder). (In a nutshell: Choose Site → New Site. In the Site Definition window, click the Advanced tab, type *Templates* into the Site Name field, click the folder icon next to the Local Root Folder field, navigate to and select the Chapter19 folder, and then click Choose or Select. Finally, click OK.)

Creating a Template

1. **Open the Files panel by pressing the F8 key.**

   Of course, if it was already open, you just closed it. Press F8 again.

2. **In the Files panel, find and double-click the page *main.html.***

   It's usually easier to start with existing Web page, and then save it as a template. For the purpose of getting to bed before midnight tonight, pretend that you've just designed this beautiful Web page.

3. **Choose File → Save As Template.**

   The Save As Template dialog box opens.

4. **In the description field, type *Use for main site pages*.**

   This description appears in the New Template window when you create a page based on this template.

5. **Name the template *Main*; click Save. In the Update Links window, click Yes.**

   Behind the scenes, Dreamweaver creates a new folder—Templates—in the site's root folder, and saves the file as Main.dwt inside it. A new template is born. You can see it in the Templates page of the Assets panel, as well as the new Template folder in the Files panel.

   The template is a model for other pages. But although they'll be *based* on its design, they won't be identical. The next step is to identify those areas of the design that'll change from page to page—the editable regions.

6. **Drag the "S" in the heading "Story Title" down and to the right until you've selected the two paragraphs and red subhead. Stop just after selecting the final period in the last paragraph.**

   You've just selected all the text in the page's main area. If the "Editor's Selection" graphic in the top right is also highlighted, you've selected too much. That graphic shouldn't be part of the editable region (it's actually an absolutely positioned div, whose HTML code is located *after* all the text in this div).

7. **Choose Insert → Template Objects → Editable Region.**

   The New Editable Region dialog box appears. Here, as in the following steps, you can also, from the Insert bar's Common tab, go to the Templates menu and choose the Editable Region option (Figure 19-2), or just press Ctrl+Alt+V (⌘-Option-V).

8. **Type *Story*; click OK.**

   A small blue tab, labeled *Story*, appears above the headline. So far, you've added one editable region—the most basic type of template region. Next, you'll explore some of the advanced templating features Dreamweaver offers.

9. **On the Web page's top right, click the Editor's Selection button.**

   This step places the cursor inside a <div> tag. You'll turn this div into an optional region so that it can be hidden on most pages, but displayed on special, select pages.

10. **On the top-left corner of the image, click the selection handle to select the div.**

    You can also use the Tag selector at the bottom of the document window: Click <div#selection>. Either way, the div is selected and you're ready to turn it into an optional region.

11. **Choose Insert → Template Objects → Optional Region.**

    The New Optional Region window appears.

12. **Type *editorBug* in the name field, turn off the "Show by Default" checkbox, and then click OK.**

    Since most pages *won't* display this graphic, you'll speed up your work by hiding it by default, and making it visible just on important pages. You see a blue tab labeled "If editorBug" below the text in the main part of the page: this part is the optional region, and represents where the HTML code with the graphic is located—because it's an absolutely positioned div (see page 343), its visual location on the page is different from its code.

    Next, you'll add a repeating region to the left sidebar, so that you can add links to multiple related stories. You'll then make the text editable, so that you can add story titles and links.

13. **In the left sidebar, click the phrase "Related story here."**

    This phrase is enclosed inside a <li> tag. Each time you want to add a new related story, you need to duplicate this tag. To do so, turn it into a repeating region, as follows.

14. **At the bottom of the window, in the Tag selector, click the <li> tag.**

    You've just selected the <li> tag and the text and link inside it. Because any particular story may have many related stories, you'll want to list multiple story titles per page (maybe more on some pages and less on others). So this spot is a perfect place for a repeating region.

15. **Choose Insert → Template Objects → Repeating Region. In the window that appears, type *repeatRelated*. Click OK.**

    Dreamweaver inserts a new repeating region with the familiar blue tab. The tab reads "Repeat: repeatRelated," indicating that it isn't any ordinary template region—it's a repeating region. However, turning a part of the page into a repeating region doesn't automatically make it editable. Since you want to edit the text and add new names to each page, you need to add an editable region *inside* this repeating region.

16. **Triple-click inside the text "Related story here" to select the dummy text and the link. Choose Insert → Template Objects → Editable Region. In the Name field, type *relatedStory*, and then click OK.**

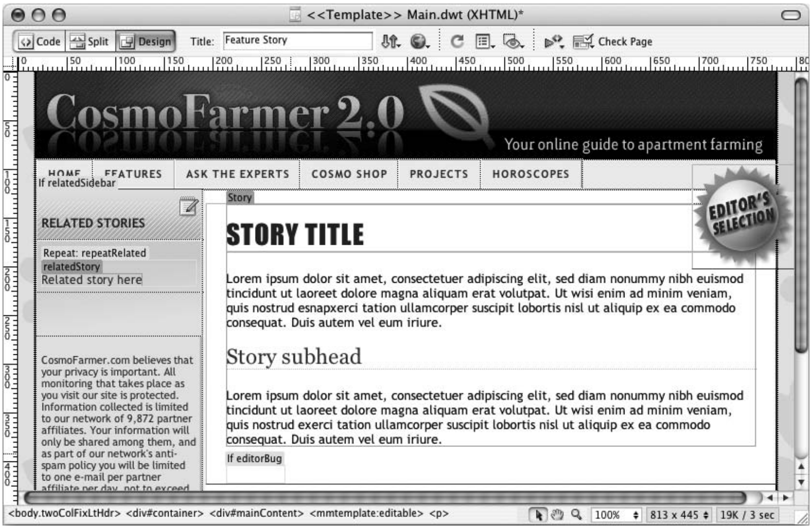
    Another blue tab, labeled "relatedStory," appears inside the repeating region. On template-based pages, you can now change this text, plus add additional story titles, easily. Of course, it's possible that one page may have no related stories; a page would look pretty weird if it had a "Related Stories" headline followed by an empty space. Fortunately, you can turn that headline and the repeating region you just added into *another* optional region. That way, you can show this area on any page that has related stories, but hide it on pages that have no related stories.

17. **In the left sidebar, click inside the headline "Related Stories." In the Tag selector at the bottom of the document window, click <div.related>.**

    This div contains both the headline and the unordered list of story links.

18. **Choose Insert → Template Objects → Optional Region; in the New Optional Region Window's Name field, type *relatedSidebar*, and then click OK.**

    The template should look like Figure 19-20. One last thing: You'll add an editable attribute to the <body> tag, so that you can add a unique ID to each template-based page. The ID defines which section of the site the page belongs to (Features, Projects, and so on).



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Lorem ipsum dolor sit amet, consectetuer adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure.

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<body.twoColFixLtHdr> <div#container> <div#mainContent> <mmtemplate:editable> <p>

Figure 19-20: *A template file. Depending on your Dreamweaver preference settings, you might also see a couple of gold shield icons representing the absolutely positioned div tag, and the mainContent div that's positioned using relative positioning (see page 338). For instructions on turning those gold shield icons off and on, turn to page 383.*

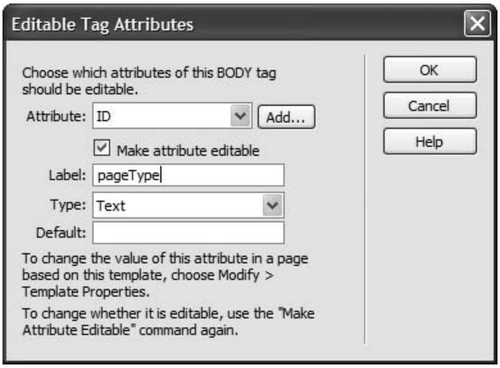
Note: If you're a conscientious computer veteran, you've probably already saved this template by now and noticed an annoying pop-up warning you that the *relatedStory* region is "inside a block tag." This is the same warning discussed on page 678 and below in step 22 on the opposite page. Don't worry about it–it's OK. If it bugs you, just turn on the "Don't show me this message again" checkbox.

19. **In the Tag selector, click <body.twoColFixLtHdr>. Choose Modify → Templates → Make Attribute Editable.**

    The Editable Tag Attributes window appears (Figure 19-21).

20. **Click the Add button, and then, in the pop-up window that appears, type *ID*. Click OK to return to the Editable Tag Attributes window.**

    You've just told Dreamweaver that you'd like to make the <body> tag's ID attribute editable. ID should now appear in the Attribute window.



Choose which attributes of this BODY tag should be editable.

Attribute: ID

☑ Make attribute editable

Label: pageType

Type: Text

Default:

To change the value of this attribute in a page based on this template, choose Modify > Template Properties.

To change whether it is editable, use the "Make Attribute Editable" command again.

Figure 19-21:
The Editable Tag Attributes window lets you make a specific property of a selected tag editable on template-based pages—in this case, the ID attribute for the <body> tag. Anyone building pages based on this template can add a unique ID to different pages on the site.

21. **Turn on the "Make attribute editable" checkbox. In the Label field, type *pageType*. Choose Text from the Type menu, and leave the Default value blank.**

    The window should look like Figure 19-20. The label helps you identify which property of which page element you're editing.

22. **Click OK to close the window. Choose File → Save.**

    If you haven't already encountered it (see the Note on the opposite page), Dreamweaver pops up an annoying message informing you that the editable region *relatedStory* is inside a block element (the <li> tag), and that anyone who uses this template can't add some types of content inside this region. Technically, this warning is false. You can add all sorts of content, even tables, divs, and multiple paragraphs inside an <li> tag. This irritating error is Dreamweaver's way of "helping" by pointing out what it believes must be an error on your part. But it's not an error, since you can add additional block-level elements such as headlines to a list item. To make it go away, turn on the "Don't show me this message again, you annoying program" box.

23. **Click OK to close the dialog box. Close this file.**

    Congratulations! You've created your first template.

Creating a Page Based on a Template

Now it's time to get down to business and build some Web pages. Look at the Files panel and make sure you've selected the site that you defined in step 1 at the beginning of this tutorial. Then proceed as follows:

1. **Choose File → New.**

   The New Document window opens.

2. **On the window's far left side, click the "Page from Template" button.**

   A list of all defined sites appears in the Site list.

3. **Make sure the site you defined for this tutorial is selected; also make sure the "Update page when template changes" checkbox is turned on.**

   If you don't turn on the "Update page" box, the new page doesn't link to the original template file—and doesn't update when you make changes to the template.

4. **From the templates list, select Main, and then click Create.**

   And lo, a new, untitled Web page document appears, one that looks (almost) exactly like the template (Figure 19-22).

5. **Choose File → Save. Save the file as *hydroponics.html* in the root folder. At the top of the document window, type *Bathtub Hydroponics* in the title field.**

   To indicate that it's your template's offspring, the document window has a yellow tab in the upper-right corner that reads Template: Main. You can see your editable and repeating regions indicated by blue tabs. Now it's time to add some content.

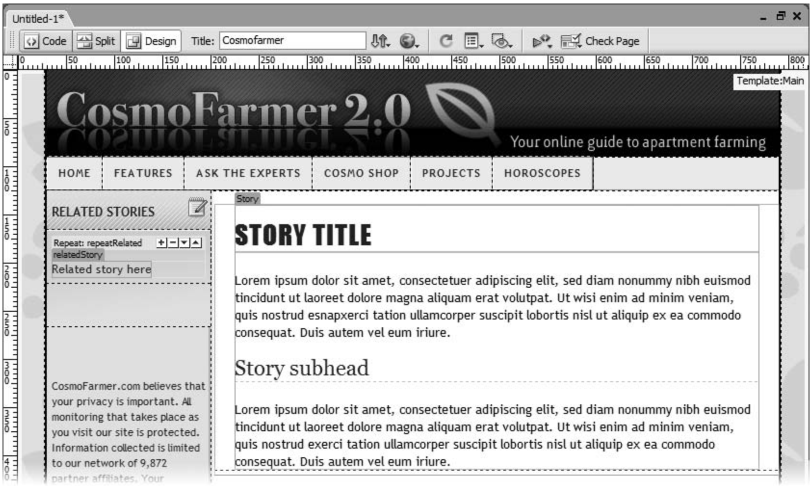


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***Figure 19-22:** In template-based pages, blue tabs identify editable areas of the page, and the yellow tab at the top right lists the template's name. Notice that the repeating region has small control buttons (+, -, and up and down arrows) and that one of the optional regions–the "Editor's Selection" graphic–is invisible. (Remember, you deselected the "Show by Default" option for this region.)*

6. **Choose File → Open; in the Open file window, click the Site Root button; navigate to the contents folder, and then double-click the file *feature.html*.**

   You can also open this file by double-clicking its name in the Files panel. The *feature.html* page contains the content for the new template-based page. It's just a matter of copying and pasting the text from one page to the other.

7. **Choose Edit → Select All; choose Edit → Copy. At the top of the document window, click the hydroponics.html tab to switch to the template-based page.**

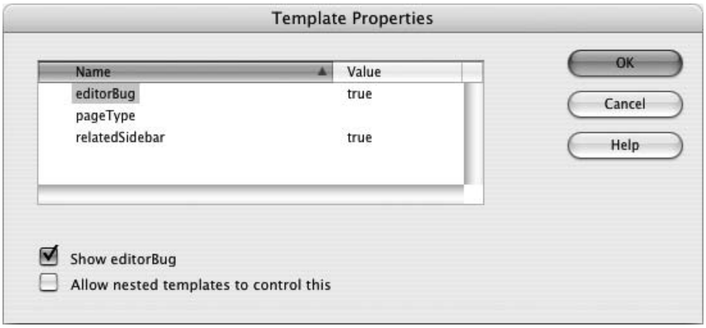
   Remember that you can add content only to an editable region. If you move your mouse over the banner, navigation, and footer areas of the page, you see a black "forbidden" symbol. You can't insert the cursor anywhere but inside an editable region.

8. **Click the Story editable region (in the headline "Story Title," for example). Choose Edit → Select All; choose Edit → Paste.**

   The dummy content is replaced with a CosmoFarmer feature story. It's such an important story that it deserves the "Editor's Selection" seal of approval. That region is one of the optional regions you added to the template. It's not showing up on this page, because in step 12 on page 703, you turned off the "Show by Default" option. To make it appear, you have to turn it on manually.

9. **Choose Modify → Template Properties.**

   The Template Properties window appears (see Figure 19-23). There are three items listed: The first is the optional region you wish to make visible; the second is the editable tag attribute for the <body> tag, and the third is the optional region for the sidebar's related stories area.



Name	Value
editorBug	true
pageType	
relatedSidebar	true

☑ Show editorBug

☐ Allow nested templates to control this

Figure 19-23: *The Template Properties window does double duty. Not only does it let you hide or show optional regions, it's also the place to set values for editable tag attributes.*

10. **In the properties list, select "editorBug," and then turn on the "Show editorBug" checkbox. Click OK to close the window.**

    The "Editor's Selection" button appears. Next you'll add a list of related stories.

11. **In the left sidebar, click the blue tab labeled "relatedStory."**

    You've just selected the text and the link in that editable region.

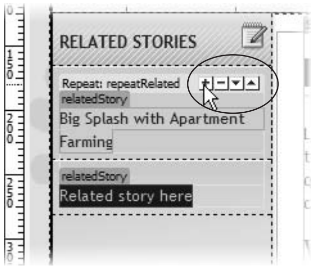
12. **Type *Big Splash with Apartment Farming,* and then link that text to the file *splash.html* in the root folder.**

    If you need a refresher on linking, turn to page 159. There are a few other related stories. Fortunately, you can add more entries using the repeating region controls.

13. **Click the + button just to the right of the blue "Repeat: repeatRelated" tab.**

    You've added another row to the page, as shown in Figure 19-24.

Tip: If a page has a lot of elements crowded together–tables, images, text, and so on–Dreamweaver sometimes can't display the small buttons that let you add and remove repeating entries. In this case, you can also use the Modify menu. Click a repeating region, and then choose Modify → Templates → New Entry After Selection to add a new row after the current row, or New Entry Before Selection to add a new row before the current one.



Big Splash with Apartment Farming

Related story here

Figure 19-24:
The control buttons to the right of repeating regions (circled) let you add, remove, and rearrange repeating entries. Here, clicking the + button adds another table row for inputting an additional celebrity name.

14. **Click the blue tab of the newly added "relatedStory" editable region, and then type *Water Farming Fun*. Link this text to *water_fun.html* in the site's root folder.**

    For now, you'll add just one more story to the list, though you can actually add as many stories as you want.

15. **Repeat steps 13 and 14 to add one more story: *New Uses for Waterbeds*. Link that text to *waterbeds.html*.**

    The "New Uses for Waterbeds" story happens to be one of the most visited Web pages on the site, so it had better get top billing.

16. **Select "New Uses for Waterbeds" (either select the text, or click the blue tab above the name), and then click the up arrow button next to the repeating region twice.**

    The up and down arrows (Figure 19-24) let you move a repeated region above or below other repeated regions.

    One last thing. Each page within a section of the site needs to be identified with an ID applied to the page's <body> tag. This ID controls particular CSS styles that affect how the navigation bar displays.

17. **Choose Modify → Template Properties.**

    The Template Properties window opens again (see Figure 19-23). You just need to specify an ID name.

18. **From the list of template properties, select pageType. In the pageType text box near the bottom of the window, type *feature*; click the OK button.**

    Notice that the Features button in the navigation bar turns black. This is kind of a "you are here" indicator, identifying the section of the site this page belongs to. (How's this magic done? Descendent selectors, of course. Basically, the link has a class named *.featurelink* applied to it; in the site's style sheet, there's a descendent selector named *#feature a.featurelink*. By setting the ID of the <body> to *feature*, the Features link becomes a descendent of the *#feature id*, and the style *#feature a.featurelink* kicks into action. For more on descendent selectors see page 285.)

19. **Preview this page in a Web browser (F12 [Option-F12]). Return to Dreamweaver, and save and close this Web page.**

    You'll create one more template-based page.

Creating Another Template-Based Page

Templates are useful only if you use them to build lots of pages. You'll build one more template-based page for this tutorial, and see how optional template regions let you create very adaptive Web pages.

1. **Choose File → New. In the New Document window, click the "Page from Template" button; from the templates list, select Main, and then click Create.**

   Another new Web page.

2. **Choose File → Save. Save the file as *planter.html* in the root folder. In the title field at the top of the document window, type *Make an Asparagus Planter*.**

   You'll add some already created content to this page.

3. **Repeat steps 6–8 on page 706. Use the file *project.html* located in the contents folder.**

   This article isn't an "Editor's Selection" (what a surprise) so it's OK to leave that button off this page. However, there aren't any related stories either. Instead of leaving the "Related Stories" section of the left sidebar empty, you'll just turn it off (remember you turned this area into an optional region earlier).

4. **Choose Modify → Template Properties; in the Template Properties window, select the relatedSidebar property; uncheck the "Show relatedSidebar" box.**

   While you're here, you might as well apply the appropriate ID for this page as well.

5. **From the list of template properties, select pageType. In the pageType field, type *project,* and then click OK to close the window.**

   Poof! The Related Stories headline and list disappear. In addition, the Projects button in the navigation bar changes color.

Note: If, at a later time, CosmoFarmer does add a story related to this Web page, the Related stories area can be made visible again, simply by choosing Modify → Template Properties, and then turning on the "Show relatedSidebar" checkbox.

6. **Preview the page in a Web browser.**

   While most of the page looks the same as the first template-based page you created, the use of optional regions let you hide areas of the page without having to create another template. Next you'll edit the template file and update the Web site.

Updating a Template

Now the fun begins. Remember, this page maintains a reference to the original template. In the final phase, you're going to make a few changes to the template. Choose Window → Assets to open the Assets panel, and then click the Template button to reveal the templates for this site (see Figure 19-4):

1. **Return to Dreamweaver, and in the Assets panel, double-click the Main template to open it.**

   The original template, the Main.dwt file, opens. To help market CosmoFarmer's sister publication, The National Exasperator, you'll insert a small ad in the left sidebar.

2. **In the left sidebar, click the empty space just above the paragraph that begins with "CosmoFarmer.com believes that."**

   You'll add an image here.

3. **Choose Insert → Image; select and insert the image *national_ex.gif*, which is located in the images folder.**

   When the Accessibility Options window appears, in the Alternate text field, type *Subscribe to the National Exasperator*. Now you'll just link this image to the National Exasperator Web site. (If you need a reminder on how to insert images, visit page 199.)

4. **In the Property inspector's link box, type *http://www.nationalexasperator.com/*.**

   You could of course continue to edit the template; add another button to the navigation bar, for instance, or update the copyright notice. But making just this one addition is enough to demonstrate the power of Dreamweaver templates, as you'll witness next.

5. **Choose File → Save.**

   The Update Template Files window appears. This is the moment of truth.

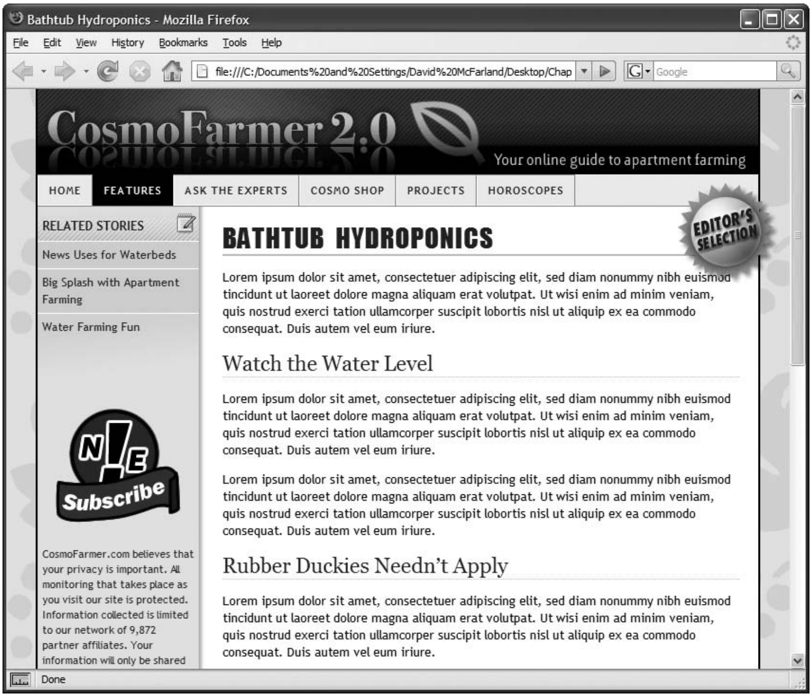
6. **Click Update.**

   Dreamweaver opens the Update Pages dialog box and updates the appropriate Web pages, adding the new image and link to each one. In this case, you based only two pages on the template, so Dreamweaver updates only two pages—as indicated by the list of changes Dreamweaver shows when it's finished.

Note: If, after you update pages based on a template, you don't see the number of updated pages listed in the Update Pages window, turn on the Show Log checkbox.

7. **Click Close to close the Update Pages dialog box. Finally, open the files *hydroponics.html* and *planter.html.***

   Notice that the National Exasperator graphic has been added to both pages (see Figure 19-25). This series of events happened because you changed the template to which the page was genetically linked. Ah, the power!


Bathtub Hydroponics - Mozilla Firefox
File Edit View History Bookmarks Tools Help
file:///C:/Documents%20and%20Settings/David%20McFarland/Desktop/Chap
Google
CosmoFarmer 2.0
Your online guide to apartment farming
HOME
FEATURES
ASK THE EXPERTS
COSMO SHOP
PROJECTS
HOROSCOPES
RELATED STORIES
News Uses for Waterbeds
Big Splash with Apartment Farming
Water Farming Fun
EDITOR'S SELECTION
N!E
Subscribe
Done

BATHTUB HYDROPONICS

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Watch the Water Level

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Rubber Duckies Needn't Apply

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***Figure 19-25:** The finished tutorial page, complete with a list of related stories, a National Exasperator ad, body copy, and the honorary "Editor's Selection" badge.*

CHAPTER

20

Automating Dreamweaver

One of Dreamweaver's greatest selling points is that it makes you more productive. You've experienced this firsthand if you've ever labored over tables in an HTML text editor. What once took many keystrokes now takes one click of the Insert bar's Table object.

If you're looking for even more ways to cut time off your day, Dreamweaver doesn't disappoint. In addition to its Snippets, Library, and Template features (see Chapters 18 and 19), the program offers two tools that let you automate common and time-consuming tasks: the History panel and the Find/Replace command.

The History Panel Revisited

As you work on a Web page, Dreamweaver keeps track of everything you do. You can see a list of your actions—your *history*—in the History panel. Each document has a separate history, which Dreamweaver discards when you close the document or quit the program.

You can use the History panel to quickly undo or redo multiple actions (see page 81), but that's only the tip of the iceberg. You can also use it to replay and record a series of actions you wish to repeat. If you've ever used macros in Microsoft Word or actions in Adobe Photoshop, you'll probably get the hang of this feature quickly.

To open the History panel, choose Window → History, or press Shift+F10 (see Figure 20-1).

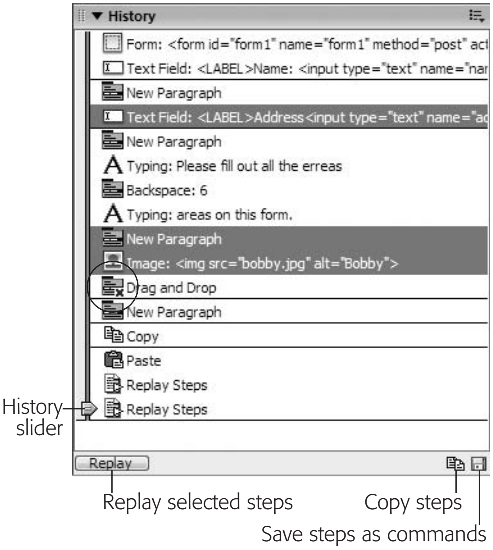

History
Form: <form id="form1" name="form1" method="post" act
Text Field: <LABEL>Name: <input type="text" name="nar
New Paragraph
Text Field: <LABEL>Address<input type="text" name="ad
New Paragraph
Typing: Please fill out all the erreas
Backspace: 6
Typing: areas on this form.
New Paragraph
Image: <img src="bobby.jpg" alt="Bobby">
Drag and Drop
New Paragraph
Copy
Paste
Replay Steps
Replay Steps
History slider
Replay
Replay selected steps
Copy steps
Save steps as commands

Figure 20-1:
The History panel lists every little step you've taken while working on the current document–even typos. You can replay one or more actions on the list, copy them for use in another document, or save them as a command in the Commands menu. If Dreamweaver can't replay an action, such as a mouse click, it appears with a red X next to it (circled). Furthermore, you can't replay two consecutive steps if you clicked or dragged in the document in between them (you'll see a solid line in the History list separating such steps). Dreamweaver merely replays the first selected step. The History slider indicates where you are in the document's history.

Replay Your Steps

To replay a step in the History panel, click the step's name to highlight it. You can also select multiple steps by using one of these methods:

- To select a group of consecutive steps, drag over them. You can drag your cursor across either the labels or icons. Take special care not to move your cursor onto the History slider on the left edge of the window, as clicking there undoes or redoes steps (page 83).
- You can also select consecutive steps by holding down the Shift key as you click down the list.
- To select steps that aren't consecutive, Ctrl-click (⌘-click) only the ones you want. For example, say you hit Return, typed *hello*, and then inserted a horizontal rule. If you wanted to omit the step where you typed *hello*, you could Ctrl-click (⌘-click) the other two. Dreamweaver ignores unselected steps.

Now, when you click Replay (see Figure 20-1), Dreamweaver replays the selected steps in an encore performance. For example, if you insert an image using the Common tab of the Insert bar (see page 200), that's recorded as one step. You could then add that image to your page again, later, simply by clicking where you want the image to appear and then replaying the "insert image" step. Unfortunately, you can't reorder the steps; they always play from the top of the list to the bottom.

Once you've created a series of steps, you can reuse it. For example, say you format a paragraph as a bulleted list and apply a custom style to it. Once Dreamweaver records these steps in the History panel, you can select more text and replay those steps to format it the same way. Now imagine that, instead of a two-step process, you have a 10-step chore that involves not only keystrokes, but multiple visits to the Insert bar and Property inspector—you can begin to see the power of this feature.

Tip: You probably know that you can repeat your last action by pressing Ctrl+Y (⌘-Y) or choosing Edit → Repeat. For example, if you type the word *hello* in the document window, pressing Ctrl+Y (⌘-Y) will type the word *hello* again. Unless you're Jack Nicholson's character in *The Shining*, this feature may sound less than useful, but used in combination with the History panel's Replay feature, it can be a real timesaver. When you use the History panel to replay several steps, you'll notice the last item in the History list becomes Replay Steps. Dreamweaver treats the replaying of all these steps as a *single action*. Now if you press Ctrl+Y (⌘-Y), you replay all of the steps again.

Exceptions and Errors

Unfortunately, Dreamweaver can't record and play back everything. The exceptions generally involve making changes in certain dialog boxes or moving objects with the mouse. For example, you can't record tasks you perform in the Modify Page Properties dialog box. And you're left to your own devices when you want to click, drag, or drop a graphic in the document window.

On the other hand, not everything you do with the mouse is off-limits to the History panel. It can track most common tasks, like clicking the Insert bar, choosing a menu item, or clicking in the Property inspector to set a property. Also, you can avoid using many mouse movements by using the equivalent keystrokes, which Dreamweaver *can* record. (See the box "Keyboard to the Rescue" below.)

If you take a step, such as a mouse drag, that Dreamweaver *can't* replay, a red X appears next to it in the History panel. A line between two actions also indicates a step that can't be repeated. This problem usually arises when you've clicked in the document window (to deselect an image, for example). One way you can avoid these non-recordable actions is to get into the habit of deselecting an object in the document window by pressing the keyboard's arrow keys instead.

FREQUENTLY ASKED QUESTION

Keyboard to the Rescue

If Dreamweaver can't track mouse movements, how can I replay an action that involves selecting something?

It's easy to use the mouse to make selections and move items around the screen, but you can do much of the same with the humble keyboard. That's a good thing, because if you can type it, Dreamweaver can record it.

To move up one line, for instance, press the up arrow key; to move down a line, press the down arrow. You can move to the top or bottom of the document window with the Page Up and Page Down keys, or move to the beginning or end of a line by pressing Home or End. Press Shift while pressing the right or left arrow key to select the object or letter to the right or left of the insertion point. Add the Ctrl (⌘) key to that combination to select one word at a time. Unfortunately, Dreamweaver doesn't record the keystrokes you use for moving between table cells (Tab and Shift-Tab). However, there's a workaround: to move from one cell to the cell on its right, press End, followed by the right arrow key. To move to the cell to the left, press Home, followed by the left arrow key. Arrow keys not only move the cursor but are also a helpful way to deselect an object that's currently highlighted on the page. Best of all, the History panel can track all of these keystrokes.

(You don't have to memorize all of this. You can print out a complete list of keyboard shortcuts, as described on page 733.)

Copying and Pasting Actions

Each document has its own history. So if you work on one page and then switch to another, the History panel changes to reflect only the actions you performed on the new document. The biggest drawback of this quirk is that you can't immediately replicate a series of steps you've made in one document by replaying them in another document.

For example, while working on your home page, you might click the Date object in the Insert bar to insert the current date (see page 70), and then choose a format for the date in the dialog box. Then, say you want to place the date on another page using the same format. But when you switch to that page and click Replay on the History panel, your steps aren't there!

Fortunately, there's a workaround: ye olde copy/paste routine. Select the steps you want to copy (see page 714 for selection techniques), and then click the "Copy selected steps" button (see Figure 20-1) on the History panel. (The regular copy shortcut, Ctrl+C or ⌘-C, *doesn't* work in this situation.) Now switch to the new document, select an object (or click to place the insertion point), and then choose Edit → Paste or press Ctrl+V (⌘-V).

Dreamweaver responds by playing the copied steps.

Save Steps as Commands

It's quick and easy to replay and copy steps to automate repetitive tasks, but if you close the document or quit Dreamweaver, your recorded actions disappear—and with them, any chance you had of replaying them in the future. What if you come up with a great sequence of steps that you'd like to use over and over again?

POWER USERS' CLINIC

Copy (and Study) Actions

Dreamweaver is relatively easy to customize, because the objects that appear in the Insert bar, the behaviors available from the Behaviors panel, and even the Property inspector are all–behind the scenes–combinations of HTML pages and JavaScript programs. If you understand JavaScript, you can add your own commands, behaviors, and objects.

When learning JavaScript, however, you may need all the help you can get. The History panel's Copy Steps feature is a good place to start.

To study how Dreamweaver's built-in commands, behaviors, and objects have been programmed, copy one or more actions using the method that's described above. Switch to a text editor like Notepad or TextEdit (Word will work, too), and then choose Edit → Paste.

What you see is the JavaScript code that Dreamweaver uses to carry out those actions. You'll find out, for example, that while you perceive adding a new paragraph to your Web page as a matter of hitting Enter, to Dreamweaver it looks like this: *dw.getDocumentDOM().newBlock()*.

The History panel also has a secret shortcut that lets you view the JavaScript code for each step, right inside the panel: Ctrl+Shift+click (⌘-Shift-click) anywhere inside the History panel (Ctrl+Shift+click [⌘-Shift-click] again to return to the normal, human-readable description for each step).

The solution: Before it disappears forever, turn it into a *custom command*. That way, Dreamweaver adds your command to the bottom of the Commands menu, and you can choose it from there whenever you want.

To save steps as a command, select the steps you want to copy (see page 714 for selection techniques), and then click the Save Steps button (its icon looks like a little floppy disk) on the History panel.

The "Save as Command" dialog box pops open. (If you've selected steps that Dreamweaver can't replay, such as mouse movements, a warning appears. Click Yes to continue without those steps; the valid steps work just fine.) Type a short, descriptive name, and then click OK. Now take a look at the Commands menu—sure enough, your command now appears at the bottom.

To use your custom command, simply select its name from the Commands menu.

Tip: If you decide you want to delete your command or change its name, choose Commands → Edit Command List. In the dialog box that appears, click the command's name to select it. Type a new name or click Delete.

Recording Commands

You can also create a command by telling Dreamweaver to watch and record your actions. This time, Dreamweaver doesn't *let* you perform mouse movements while you're recording, so you can be sure recorded commands will play back properly.

To record a command, make sure the relevant Web page document is frontmost, and then choose Commands → Start Recording, or press Ctrl+Shift+X (⌘-Shift-X). The cursor turns into a cassette-tape icon to indicate the command is recording. Now's your chance to do whatever you want Dreamweaver to memorize. (If you try to use the mouse to move or select anything in the document window, Dreamweaver complains with a dialog box.)

When you're finished, choose Commands → Stop Recording, or press Ctrl+Shift+X (⌘-Shift-X). Your cursor returns to normal, and Dreamweaver saves the sequence as a command, which you can replay by choosing Commands → Play Recorded Command.

Note, however, that this command disappears when you quit Dreamweaver or record another command. (Dreamweaver can only save one recorded command at a time.) If you want to preserve it for posterity, you have to save it to the Commands menu, like this:

1. **Choose Commands → Play Recorded Command.**

   The History panel lists this action as Run Command.

2. **Click the Run Command step in the History panel.**

   The step is highlighted to indicate you've selected it.

3. **Click the Save Steps button (its icon looks like a little floppy disk).**

   The "Save as Command" dialog box appears.

4. **Type a name for the command, and then click OK.**

   Dreamweaver adds your new command to the Commands menu, where it's ready for action in this or any future Dreamweaver session.

Find and Replace

You've probably encountered find-and-replace tools in word processing programs and even some graphics programs. As the name implies, the command finds a piece of text (*Webmaster*, for example) and then *replaces* it with something else (*Webmistress*). Like Microsoft Word, Dreamweaver can search and replace text in the body of your Web pages. But it also offers variations on this feature that enhance your ability to work within the tag-based world of HTML.

What's more, Dreamweaver lets you find and replace text on *every* page of your Web site, not just the current, open document. In addition, you can *remove* every appearance of a particular HTML tag, or search and replace text that matches very specific criteria. For example, you can find every instance of the word "Aardvark" that appears within a center-aligned paragraph. These advanced find-and-replace options are some of the most powerful—and underappreciated—tools in Dreamweaver's toolbox. If you learn how to use them, you can make changes to your pages in a fraction of the time it would take using other methods.

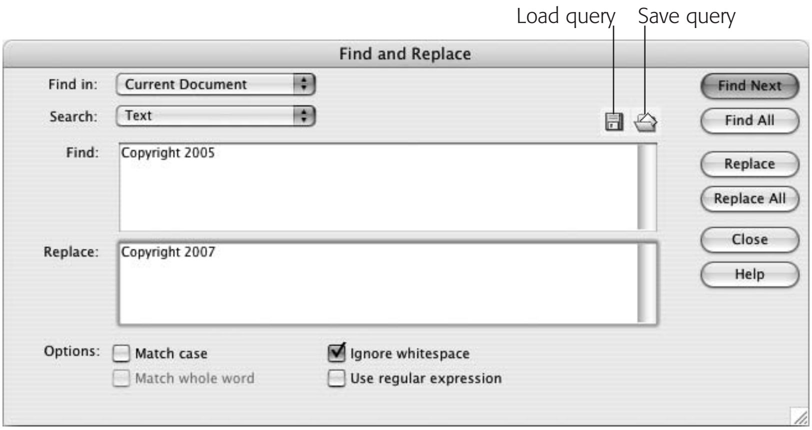
Tip: You can use "Find and Replace" to search an entire site's worth of files. This is powerful, but can also be slow, especially if some folders hold files you don't want to search–old archives, for example. You can use Dreamweaver's cloaking feature to hide files from find-and-replace operations. See page 626 for more details.

Find and Replace Basics

To start a search, press Ctrl+F (⌘-F), or choose Edit → "Find and Replace." The "Find and Replace" window opens (see Figure 20-2). Now all you have to do is fill in the blanks and set up the search.

Whether you perform a simple text search or a complex, tag-based search and replace, the procedure for using the "Find and Replace" command is basically the same. First, you need to tell Dreamweaver *where* to search (within text you've selected on the page, in a file, a folder, or an entire Web site). Next, tell it *what* to search for (text, HTML, or a particular tag with a specific attribute). Finally, you can decide what to replace the item with. This last step is optional; you can use the "Find and Replace" window as a way to locate an item on the page, or in your site, without actually changing it to anything.

Tip: After you've entered the "Find and Replace" criteria, click the Save Query button (see Figure 20-2). A Save dialog box appears; you can type in a name for your query, which Dreamweaver saves as a .dwr (Dreamweaver replace query) file. You can save this file anywhere on your computer. If it's a query you'll use for a particular site, you might want to save it with those files. To reuse a query, click the Load Query button and locate the .dwr file. After the search-and-replace criteria load, you can click any of the four action buttons–Find Next, Find All, Replace, or Replace All.



Find and Replace

Find in: Current Document

Search: Text

Find: Copyright 2005

Replace: Copyright 2007

Options: □ Match case ☑ Ignore whitespace □ Match whole word □ Use regular expression

Figure 20-2: *Dreamweaver's "Find and Replace" feature lets you replace text and HTML quickly and accurately. By using the Load Query and Save Query buttons, you can even save complex searches to use in the future.*

Basic Text and HTML Searches

Dreamweaver can either search all of the source code in a page or simply focus on text that appears in the document window.

- **A source code** search lets you find and replace any character in the code of a page, including words, letters, and symbols. This means *anything* you see in Code view, such as HTML, CSS, or server-side programming code used to create the dynamic database-driven sites described in Part 6 of this book.

- **Text** searches are more refined. They look only for text that appears within the body of a page. That is, Dreamweaver ignores HTML tags, properties, and comments when searching—in short, it ignores anything that doesn't appear as actual words in the document window. By using a text search when you want to change the word "center" to "middle," for example, you won't accidentally alter the center *alignment* option of a table cell—<td align="center">—by setting the alignment value of its HTML tag to "middle" (an invalid value that Web browsers would just ignore).

If you've used "Find and Replace" in other programs, the following routine will be familiar.

Phase 1: Determine the scope of your search

Using the "Find in" menu (see Figure 20-3), choose any of these options:

- **Selected Text.** Searches only the current selection of the Web page you're working on. This can be useful if you're working in Code view and you want to search the code in just a certain section of the page, such as the head of the document. It's also great when you're writing your own server-side programs (like those described in Part 6 of this book) and you want to search only one part of the code.
- **Current Document.** Searches the Web page you're working on.
- **Open Documents.** Searches all currently open Dreamweaver documents. This option is handy if you're working on a bunch of pages at the same time and realize you've made the same typo on each page.
- **Folder.** Search all Web pages in a particular folder. Dreamweaver also searches Web pages in all folders *within* the selected folder. You can use this option to search pages that aren't part of the current site.
- **Selected Files in Site.** To use this option, open the Site window and select files that you want to search in the local file list. (See page 588 for details.)
- **Entire Current Local Site.** Searches every Web page in the current site folder, including pages in folders *inside* the site folder. This option is invaluable when some basic piece of information changes throughout your site. For instance, use this when your boss's sex-change operation requires you to replace every instance of "Mark Jones" with "Mary Jones" throughout your company's site.

Warning: Using the "Find and Replace" command is one of the best ways to quickly make changes to an entire site, but it's also one of the easiest ways to wreck a site's worth of Web pages. Dreamweaver can't undo changes made by the "Find and Replace" command to files that aren't open on your computer. So be careful. If you plan on making extensive changes, make a backup copy of your files first!

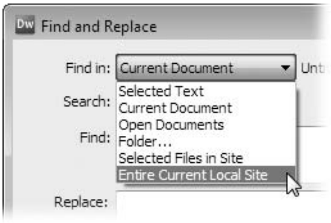


Figure 20-3:
The "Find and Replace" command is not limited to the current document. You can also search multiple Web pages, or even an entire site.

Phase 2: Specify what to search for

For your next trick, you'll tell Dreamweaver what you want to search for. Use the Search pop-up menu to choose one of these two options:

- **Text.** This makes Dreamweaver search for a certain word or phrase of text that appears in the *body* of the documents you've specified. Type the text you want to find into the Search field. If you're searching for a pattern in your text, enter a *regular expression* here and turn on the "Use regular expression" checkbox. (See the box on page 725 for more on regular expressions.)
- **Source Code.** Basic text searches are very useful, but they're limited to text that appears in the body of the page (what you see in the document window). If you want to search and replace code, you need the Source Code option.

  Source-code searches work identically to text searches, except that Dreamweaver searches *everything* within the file—text, HTML, JavaScript, CSS, and so on—and replaces any part of the file. Using this option, you could search for any instance of the tag <img src="mark_jones_photo.jpg">, for example, and then replace it with <img src="mary_jones_photo.jpg">.

  (If you're in Code view, Dreamweaver automatically selects the Source Code option.)

  As you fill in the Search field, be aware that some plain English words are also special words in HTML, JavaScript, or CSS. If you try to replace *table* with *desk* using a source-code find and replace, you'll completely destroy any <table> tags on the page.

  You can also enter a regular expression to search for patterns in your HTML source code (see the box on page 725).

Phase 3: Provide the replacement text

If you want to change the text that Dreamweaver finds, type the replacement text into the Replace box. It may be the word or words you'd like to swap in (for a Text search), or actual HTML code if you're performing a source-code search.

Tip: Dreamweaver won't let you create a new line in the search or replace boxes–for example, if you want to replace some source code with two lines of HTML. At least it won't let you do it the normal way. If you hit the Enter key, Dreamweaver begins the search rather than inserting a new line. If you want to add another line use Shift-Enter (Shift-Return).

If you just want to find the text without replacing it, then skip this step.

Tip: If you want to find the specified text and replace it with *nothing* (that is, deleting every occurrence of the text), leave the Replace field blank and perform a replace operation, described in Phase 5.

Phase 4: Choose the search settings

Dreamweaver gives you three options that govern its search and replace; some of them are quite complex:

- The **Match Case** option limits the Find command to text that exactly matches the capitalization you use in the Search field. If you search for the text *The End* with the Match Case box turned on, Dreamweaver finds a match in "The End is near," but not in "You're almost at the end." Use this trick to find every instance of *web* and replace it with *Web*.

- **Match Whole Word** searches for an entire word—not a portion of a larger word. For example, if you turn this option on, a search for *Rob* matches only "Rob," and not any parts of "Robert," "robbery," or "problem." If you don't select this option, Dreamweaver stops on "rob" in all four instances, and could cause serious pboblems if you also *replace* "rob" with something like "bob". (Note that if you selected the Match Case option, Dreamweaver would match *Rob* in "Rob" and "Robert," but *not* in "robbery" and "problem," since they don't include a capital R.)

- The **Ignore Whitespace** option treats multiple spaces, tabs, non-breaking spaces, and carriage returns as single spaces when searching. For instance, if you search for *the dog* and turn on this option, Dreamweaver matches "the   dog" as well as "the dog"—even if the multiple spaces are actually the HTML non-breaking space character *&nbsp;* (see page 68).

  Unless you have a good reason, always leave this option turned on. The HTML of a page can contain lots of extra spaces, line breaks, and tabs that don't appear in a Web browser or in Dreamweaver's document window. For example, in the HTML of a document, it's possible to have two lines of code that look like this:

  ```
  <p>This sentence will appear on one
  line in a Web browser</p>
  ```

  Even though this text would appear on a single line in the document window, a search for "one line" *without* the Ignore Whitespace box turned on would find no match. The carriage return after "one" is not an exact match for the space character in "one line."

Note: The Ignore Whitespace option can't be selected when the Use Regular Expression checkbox is turned on.

- The **Use Regular Expression** option is used for matching patterns in text. For a discussion of this advanced technique, see the box on page 725.

Phase 5: Take action

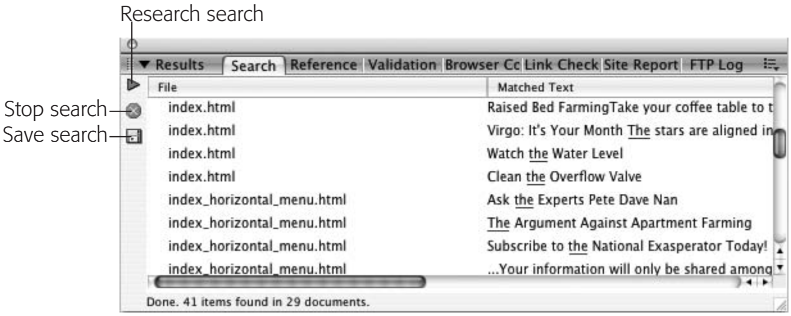
Finally, you're ready to set the search in motion by clicking one of the four action buttons in the "Find and Replace" window (see Figure 20-2):

- **Find Next** locates the next instance of the search term. If you're searching the current document, Dreamweaver highlights the matching text. If you're searching an entire Web site or a folder of pages, Dreamweaver opens the file *and* highlights the match. You can cycle through each instance of the search term by clicking this button repeatedly.

Tip: As in other programs (notably Microsoft Word), you can press Enter or Return to repeat the Find Next function. If you've clicked into the document window–or even closed the Find window–you can press F3 (⌘-G) to repeat the Find Next function.

- **Find All** locates every instance of the search terms, all at once, and shows them to you in a list in the Search tab of the Results panel (Figure 20-4). The name and location of each file (if multiple files are searched) appear to the left, and the matched text appears to the right. Dreamweaver displays part of the sentence in which the matched word or words appear. The exact match is underlined with a squiggly red line, so you can see the search in context and identify text you may *not* want to replace.

  Unlike the Find Next action, Find All doesn't automatically open any of the Web pages containing matches. Instead, to open a matched page, double-click its name in the results list. Only then does Dreamweaver open the Web page and highlight the match.



File	Matched Text
index.html	Raised Bed FarmingTake your coffee table to t
index.html	Virgo: It's Your Month The stars are aligned in
index.html	Watch the Water Level
index.html	Clean the Overflow Valve
index_horizontal_menu.html	Ask the Experts Pete Dave Nan
index_horizontal_menu.html	The Argument Against Apartment Farming
index_horizontal_menu.html	Subscribe to the National Exasperator Today!
index_horizontal_menu.html	...Your information will only be shared among

Done. 41 items found in 29 documents.

Figure 20-4: *The green-arrow button reopens the "Find and Replace" window. Click the red Stop button to abort the current search (for example, when you inadvertently begin a search for "the"). You can also save a rather useless XML file that provides a report of the results of the find-and-replace command (remember the old adage: Just because you can doesn't mean you should).*

- **Replace** locates the next instance of the search term *and* replaces it with the text in the Replace field, leaving the replaced text highlighted for your inspection.

You can use this button in combination with Find Next to selectively replace text. First, click Find Next. Dreamweaver locates and highlights the next match. If you want to replace the text, click Replace. If not, click Find Next to search for the next match, and repeat the cycle. This cautious approach lets you supervise the replacement process and avoid making changes you didn't intend.

- **Replace All** is the ultimate power tool. It finds every instance of the search term and replaces it with the text entered in the Replace field. Coupled with the "Find in Entire Local Site" option, you can quickly make sitewide changes (and mistakes—so back up all your files before you Replace All!).

  When you click this button, Dreamweaver warns that you can't undo this operation on any closed files. You can erase mistakes you make with the "Find and Replace" in *open* documents, by choosing Edit → Undo, but Dreamweaver *permanently* alters closed files that you search and replace. So be careful! (On the other hand, changes to open documents aren't permanent until you save those files.)

Tip: Before you take the plunge and click the Replace All button, it's a good precautionary step to click Find All first. This way you can be sure that you're going to change exactly what you *want* to change.

If you use the Find All or Replace All commands, the "Find and Replace" window closes, and the results of the search appear in the Search tab (see Figure 20-4). You can reopen the "Find and Replace" window (with all of your previous search criteria still in place) by clicking the green arrow on the Search tab—called the "Find and Replace" button—but only if you haven't selected anything else—like text on a page—first.

Advanced Text Searches

If you want greater control over a text search, you can use the "Find and Replace" command's *advanced* text search option, which lets you confine a search to text either inside or outside a specific tag.

For example, when Dreamweaver creates a new blank document, it sets the page's *Title* property to *Untitled Document*. Unfortunately, if you forget to change it, a site can quickly fill up with untitled Web pages. A basic text search doesn't identify this problem, because it searches only the body of a page; titles appear in the head. And a source-code search for *Untitled Document* would turn up the words "untitled document" *wherever* they appeared in the page, not just inside the <title> tag.

In cases like this, an advanced text search is your best choice. Simply set the "Find and Replace" command to search for *Untitled Document* whenever it appears within the <title> tag.

To use the advanced text search, you follow the same general routine as described on the previous pages. But before using one of the action buttons, you make a few additional setup changes to the dialog box.

POWER USERS' CLINIC

Turbocharge Your Searches

If you want to find the phone number 555-123-5473, no problem; just type *555-123-5473* into the search field. But what if you wanted to find any and every phone number–555-987-0938, 555-102-8870, and so on–on a Web page or in a site?

In such a case, you need to use *regular expressions*, the geeky name for a delightfully flexible searching language, carried over from early UNIX days, which consists of wildcard characters that let you search for patterns of text instead of actual letters or numbers. Each phone number above follows a simple pattern: three numbers, a dash, three more numbers, another dash, and four more numbers.

To search for a pattern, you use a variety of symbols combined with regular text characters to tell Dreamweaver what to find. For example, in the world of regular expressions, \d stands for "any number." To find three numbers in a row, you could search for \d\d\d, which would find 555, 747, 007, and so on. There's even shorthand for this: \d{3}. The number between the braces ({}) indicates how many times in a row the preceding character must appear to match. To finish up the example of the phone numbers, you could use a regular expression like this: \d{3}-\d{3}-\d{4}. The \d{3} finds three numbers, while the hyphen (-) following it is just the hyphen in the phone number, and \d{4} finds four numbers.

Here are some of the other symbols you'll encounter when using regular expressions:

- **.** (period) stands for any character, letter, number, space, and so on.
- **\w** stands for any letter or number.
- ***** (asterisk) represents the preceding character, zero or more times (and is always used after another character). This is best explained with an example: The regular expression colou*r, for instance, matches both colour and color–the * following the u indicates that the u is optional (it can appear zero times). This would also match colouuuuur (handy for those times when you've fallen asleep on the keyboard).

To see a complete list of the regular-expression characters Dreamweaver understands, launch the Dreamweaver online Help system (press F1) and search for the topic "Regular Expressions." A full-length discussion of regular expressions could–and does–fill a book of its own; check out *Mastering Regular Expressions* (O'Reilly) by Jeffrey E. F. Friedl or, for made-to-order regular expressions, check out *Regular Expression Recipes* (Apress) by Nathan Good.

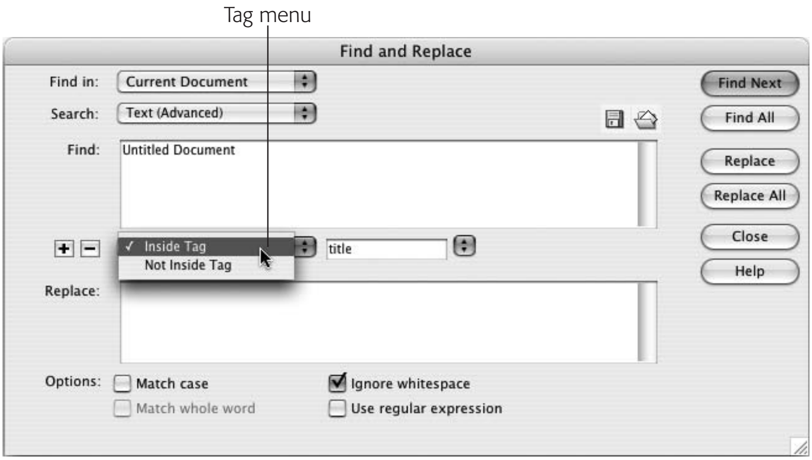
For an example of using regular expressions in Dreamweaver, see page 730.

Limiting the search by tag

Choose Text (Advanced) from the Search pop-up menu to make the expanded controls appear (see Figure 20-5).

Now, from the menu next to the + and – buttons, choose either Inside Tag or Not Inside Tag. For example, consider this line of code: "Stupid is as <strong>stupid </strong> does." The first instance of "stupid" isn't inside the <strong> tag, but the second one is.

Note: A more descriptive name for the first option would be *"Enclosed* By Tag"; Dreamweaver actually searches for text that's between *opening and closing* tags. In fact, an advanced text search using this option doesn't identify text that's literally inside a tag. For example, it won't find "aliens" in this line of code: <img src="ufo.jpg" alt="Aliens live among us.">, but it would find "aliens" in this one: <strong> Aliens live among us.</strong>. In the first example, *aliens* appears as part of the <img> tag, while in the second, *aliens* is enclosed by the opening and closing <strong> tags.



Tag menu

Find in: Current Document

Search: Text (Advanced)

Find: Untitled Document

✓ Inside Tag
Not Inside Tag

title

Replace:

Options: □ Match case ☑ Ignore whitespace □ Match whole word □ Use regular expression

Figure 20-5: *Use an advanced text search to limit your search to text that appears within a particular HTML tag. Or, conversely, use it to search for text that doesn't appear in a particular tag.*

Once you've specified whether you're looking for text inside or outside tags, you can choose a specific HTML tag from the Tag menu identified in Figure 20-5.

The menu lists all HTML tags—not just those with both an opening and closing tag. So the image tag (<img>) still appears, even though Dreamweaver doesn't identify text inside it.

Tip: A great way to search for text in both the title and body of a Web page is to choose the Inside Tag option and then select *html* from the Tag menu. That way, you can search for any text that appears within the opening <html> and closing </html> of the page–which, since those tags start and end any Web document, is *all* text on a page. This trick is handy when you want to change text that might appear in the body *and* the title of a page (for example, a company name).

Limiting the search by attribute

To limit the search further, click the + button (see Figure 20-6); yet another set of fields appears.

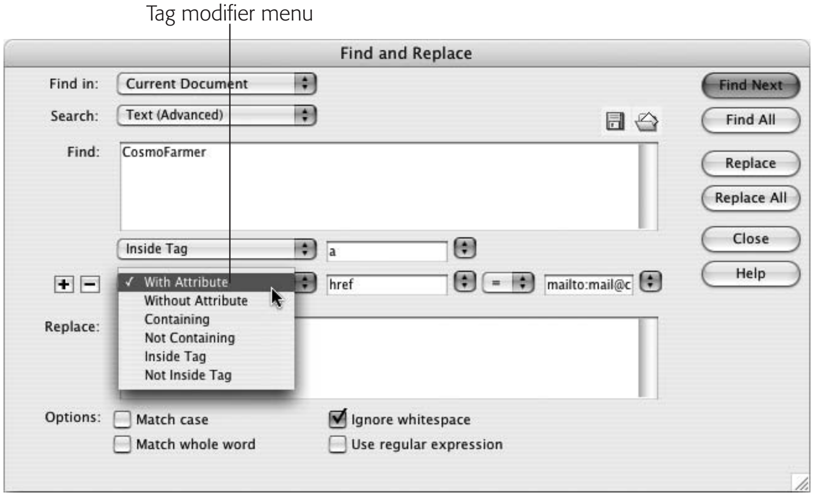
Using the Tag Modifier menu—next to the + and – buttons (Figure 20-6)—you can choose from any of six options that break down into three groups:

- **With Attribute/Without Attribute.** To limit the search, you can specify that a tag must either have (With Attribute) or not have (Without Attribute) a specific property.

  For example, say the following lines of code appear throughout a Web site:

  ```
  <p>For assistance, please email
  <a href="mailto:mail@cosmofarmer.com">
  CosmoFarmer.</a></p>
  ```

  Now, for the sake of argument, say you need to change it to read "For assistance, please email Customer Service." A basic text find-and-replace would



Find in: Current Document
Search: Text (Advanced)
Find: CosmoFarmer
Inside Tag a
With Attribute href = mailto:mail@c
Replace:
Options: □ Match case ☑ Ignore whitespace
□ Match whole word □ Use regular expression

Figure 20-6: *When you click the + button in the "Find and Replace" window, a new set of fields appears. Use these options to carefully hone your "Find and Replace" commands, and zero in on text that matches precise criteria.*

incorrectly change the word "CosmoFarmer" to "Customer Service" *everywhere* on the site.

However, an advanced text search using the With Attribute option would let you specifically target the text "CosmoFarmer" wherever it appears inside an <a> tag whose *Href* attribute is set to *mailto:mail@cosmofarmer.com*. You could then just change that text to "Customer Service" while leaving all other instances of "CosmoFarmer" alone. (To learn about the different HTML tags and attributes, use Dreamweaver's built-in code reference; see page 394.)

After you choose With Attribute, use the menu on the right to select *which* of the tag's properties you want to find. (Dreamweaver automatically lists properties that are appropriate for the tag you've specified.) For example, if you search inside a <table> tag, the menu lists such properties as *align, background, bgcolor*, and so on.

Advance to the next pop-up menu to choose a type of comparison: = (equal to), != (not equal to), > (greater than), or < (less than). These options are useful only when the property's value is a numeric amount, such as the *Width* property of a table cell. In this way, you could locate all table cells that are wider than 100 pixels (width > 100). (This setting has no effect on values that are words, such as *center* in this example: <td align="center">.)

Finally, type the value of the property in the last field. If you were searching for a black-colored background, the value would be *#000000* (the hex value for black; see page 47 for more on working with colors).

You can also click the menu and choose "[any value]"—a useful option when you want to find tags that have a certain property, but you're not interested in the property's value. For example, if you want to find all <table> tags with a background color (no matter whether the color's #336699, #000000, or #FFFFFF), choose the *Bgcolor* attribute and "[any value]."

- **Containing/Not Containing.** These options let you specify whether the tag contains (or does not contain) specific text or a particular tag.

  When you choose this option, a different set of fields appears. Choose either Text or Specific Tag from the menu to the right, and then either enter some text or select a tag in the last field in the row.

  For example, another solution to the problem above would be to search for the text "CosmoFarmer" wherever it appears inside a <p> (paragraph) tag that *also contains* the text "please email."

- **Inside Tag/Not Inside Tag.** These last two choices are identical to those described on "Limiting the search by tag". They let you specify whether the tag is inside—or not inside—a specific tag. Use these to limit a search, for example, to text that appears only within a <span> tag that's *inside* a Heading 1 (<h1>) tag.

If you like, you can add even more restrictions to your search, adding new rules by clicking the + button and repeating the setup just described. When you're really on a roll, it's even possible to add so many modifiers that the "Find and Replace" window actually grows past the bottom of your monitor. To remove a modifier, click the minus sign (–) button.

Advanced Tag Searches

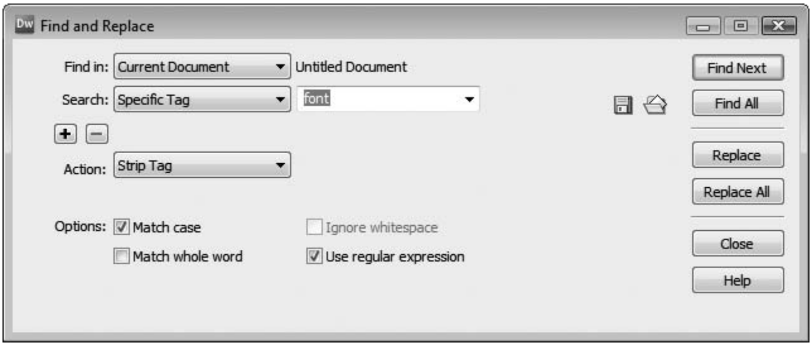
If you find the number of options an advanced text search offers overwhelming, you haven't seen anything yet. Dreamweaver's tag search adds more choices to help you quickly search for, and modify, HTML tags. You can use a tag search to strip out unwanted HTML tags (for example, if you're migrating an old site to CSS, you could remove the <font> tag), transform one tag into another (you could turn old-style *bold* [<b>] into the more widely accepted *strong* [<strong>] tag), and perform a host of other powerful actions.

In its basic outline, a tag search is much like the regular text search described on page 719. But this time, from the Search menu, you should choose Specific Tag.

Now a Tag menu appears next to the Search menu, and the dialog box expands to display a new set of fields (see Figure 20-7). Some of them are the same as the controls you see when performing an advanced text search (page 724), such as the Tag Modifier menu and the + button that lets you add additional restrictions to the search.

But a key difference here is the Action menu (Figure 20-8), which lets you specify the action Dreamweaver will perform on tags that match the search criteria when you click Replace or Replace All (if you intend to search, but not replace, then these options don't apply):

- **Replace Tag & Contents** replaces the tag, and anything enclosed by the tag (including other tags), with whatever you put into the With box to the right of this menu. You can either type or paste text or HTML here.



Find in: Current Document Untitled Document

Search: Specific Tag font

Action: Strip Tag

Options: ☑ Match case □ Ignore whitespace

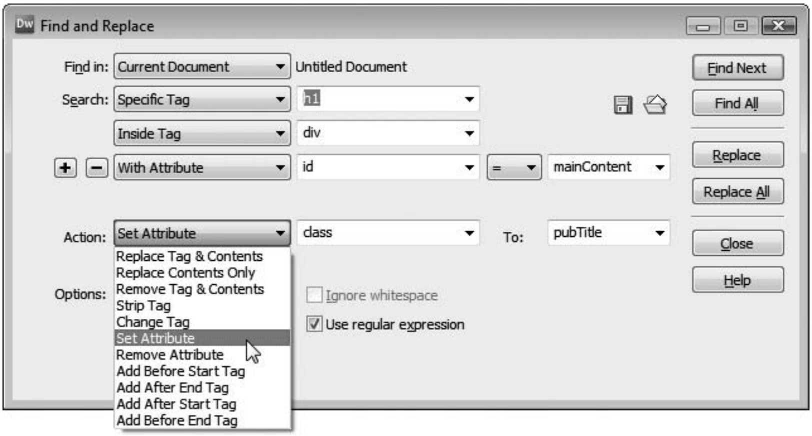
□ Match whole word ☑ Use regular expression

Figure 20-7: *It's a snap to remove tags when you use the Specific Tag option in Dreamweaver's "Find and Replace" command–just select the Strip Tag action. This option is handy if you're replacing old-style text formatting with Cascading Style Sheets. Use it to strip out unwanted <font> tags, for example.*

- **Replace Contents Only** replaces everything enclosed by the tag with text or HTML that you specify. The tag itself remains untouched.

Note: Depending on which tag you're searching for, you might not see all the actions listed here. For example, the <img> tag doesn't have both an opening and closing tag like the <p> tag, which surrounds text inside a paragraph, so you won't see any of the options such as "Replace Contents Only" that affect the content between an opening and closing tag.

- **Remove Tag and Contents** deletes the tag and *everything* inside.
- **Strip Tag** deletes the tag from the page, but leaves anything enclosed by the tag untouched. The outmoded <font> tag is a perfect candidate for this action.
- **Set Attribute** adds an attribute to the tag. For example, you could set the *Alt* property of an image this way (see the example in the next section).
- **Remove Attribute** removes an attribute from a tag. For example, you could remove the not-so-useful *Lowsrc* attribute from all image tags on your pages.



Find in: Current Document Untitled Document

Search: Specific Tag h1

Inside Tag div

With Attribute id = mainContent

Action: Set Attribute class To: pubTitle

Options: □ Ignore whitespace

☑ Use regular expression

Figure 20-8: *Once Dreamweaver finds a specific tag, it can perform any of 11 different actions on the tag or its contents.*

- **Add Before (After) Start (End) Tag.** The last four actions in the menu simply offer variations on the same theme. They each let you place content in a Web page just before or after the tag for which you're searching.

  To understand how these actions work, remember that most HTML tags come in pairs. The paragraph tag, for example, has an opening tag (<p>) and a closing tag (</p>). Say you searched for a paragraph tag; you could add text or HTML *before* or *after* the start tag (<p>), or *before* or *after* the end tag (</p>). (For an example of this action at work, see the box on page 732.)

A Powerful Example: Adding Alt Text Fast

You've just put the finishing touches on the last page of your brand-new, 1,000-page site. You sit back and smile—and then snap bolt upright when you notice you forgot to add an Alt description for the site's banner graphic (see page 209). This graphic, called *site_banner.gif*, appears on every single one of the 1,000 pages. With rising dread, you realize that you'll have to open each page, select the graphic, and add the *Alt* property by hand.

And then you remember Dreamweaver's advanced tag-based find-and-replace feature.

Here's what you do. Press Ctrl+F (⌘-F) to open the "Find and Replace" window. Set up the dialog box like this:

1. **From the "Find in" menu, choose Entire Current Local Site.**

   You want to fix *every* page on your site.

2. **From the Search pop-up menu, choose Specific Tag; from the pop-up menu to its right, choose "img."**

   You'll start by identifying every image (the <img> tag).

3. **On the next row, use the three pop-up menus to choose With Attribute, "src," and the equals sign (=).**

   This tells Dreamweaver to look for specific images—in this case, images with a *Src* attribute (the path that tells a Web browser where to find the image file on the Web server) with a specific value.

4. **Type *.*site_banner\.gif* in the box next to the = sign.**

   For this exercise, assume the graphic file is stored in a folder called *images* located in the root folder of the site. The name *site_banner.gif* is the name of the image file. The .* is the magic, and you'll learn its purpose in a moment (ditto the backslash hanging out before the second period).

5. **Click the + button.**

   Another row of Tag Modifier menus appears.

6. **From the new row of menus, choose Without Attribute and "alt".**

   You've further limited Dreamweaver's search to only those images that don't already have the *Alt* attribute. (After all, why bother setting the *Alt* property on an image that already has it?)

7. **From the Action menu, choose Set Attribute; from the Tag menu, choose "alt".**

   You've just told Dreamweaver what to do when you click the Replace or Replace All button. When Dreamweaver finds an <img> tag that matches the search criteria, it will then *add* an *Alt* property to that tag.

   In this example, you might type *CosmoFarmer* in the To field; you've just specified the Alt text for Dreamweaver to add to the image.

8. **Turn on "Use regular expressions".**

   Regular expressions, described on page 725, let you search for specific patterns of characters and, in this case, help you accurately identify the banner graphic file everywhere it appears.

   You know you're looking for the file *site_banner.gif* wherever it appears in the site. Unfortunately, if you just type *site_banner.gif* as the value of the *Src* property of step 3, Dreamweaver can't succeed in its task. That's because the *Src* attribute, the part of the <img> tag that includes the name of the file, varies from page to page. Depending on where a page is relative to the graphic, the Src might be *site_banner.gif*, *images/site_banner.gif*, or even *../../../images/site_banner.gif*. What you need is a way to match every *Src* attribute that *ends* in *site_banner.gif*.

   A simple regular expression, *.*site_banner\\.gif*, does the trick. The period stands for *any* character (6, g, or even %, for example), while the * (asterisk) means "zero or more times." When you add these codes to the graphic name, *site_banner.gif*, you instruct Dreamweaver to find every *src* value that ends in *site_banner.gif*.

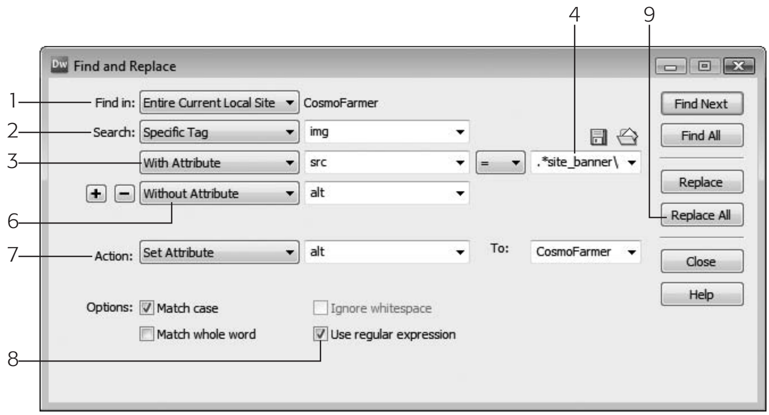
   Note the backslash before the last period: *\\.gif*. Since in the world of regular expressions, a period means "any character," simply using *site_banner.gif* would not only match *site_banner.gif*, but also *site_banner1gif*, *site_bannerZgif*, and so on—in other words, any character between *site_banner* and *gif*. The backslash means treat the next character literally; it's just a period with no special regular-expression power.

   The dialog box should look like the one in Figure 20-9.

9. **Click the Replace All button and sit back.**

   In a matter of moments, Dreamweaver updates all 1,000 pages.

   To test this out first, you might try a more cautious approach: Click the Find Next button to locate the first instance of the missing *Alt* property; verify that it's correct by looking in the Search box (see Figure 20-4); and then click the Replace button to add the proper Alt value. Double-check the newly updated



Find and Replace

Find in: Entire Current Local Site CosmoFarmer

Search: Specific Tag img

With Attribute src = .*site_banner\

Without Attribute alt

Action: Set Attribute alt To: CosmoFarmer

Options: ☑ Match case □ Ignore whitespace

□ Match whole word ☑ Use regular expression

Figure 20-9: *The numbers shown here correspond to the steps in this fictional example, in which you want to add an <alt> tag—for the benefit of people who can't, or don't want to, see graphics in their browsers—to every occurrence of the banner logo.*

FREQUENTLY ASKED QUESTION

Convenient Copyright Notices

I want to add a copyright notice to the bottom of each page in my Web site. Is there a way to automate this process so I don't have to edit every page in my site by hand?

You bet. Use Dreamweaver's "Find and Replace" command to add text or HTML to the bottom of any Web page. The trick is knowing how to use the command's Specific Tag option.

First, choose Edit → "Find and Replace" to open the "Find and Replace" window. Next, choose Entire Current Local Site from the "Find in" menu, and choose Specific Tag from the Search menu. Choose "body" from the Tag menu. Remember, the <body> tag in HTML encloses everything that appears inside a browser window; it's equivalent to what you see in the document window.

From the Action menu, choose Add Before End Tag. The end tag in this case is </body>. Since </body> marks the end of any content in a Web page, whatever appears directly before this closing tag will appear at the bottom of the Web page (you can probably see where this is going).

Now, in the text field next to the Action menu, type (or paste) the copyright notice you'd like to use on each page. You may want to first design the copyright message using Dreamweaver, and then copy and paste the HTML into this field.

Click Replace All. Dreamweaver handles the rest.

page to make sure everything worked as planned. You can continue updating pages one at a time this way, or, once you're sure it works correctly, press Replace All.

CHAPTER

21

Customizing Dreamweaver

Whether you're a hard-core HTML jockey who prefers to be knee-deep in Code view, or a visually oriented, drag-and-drop type who never strays from the document window, Dreamweaver lets you work whichever way you want.

By now, you're probably already using the Favorites tab on the Insert bar to store your most frequently used objects in one place, as discussed on page 170. But don't stop there. Dreamweaver also gives you the power to add, change, and share keyboard shortcuts—a simple way to tailor the program to your needs. If that's not enough of an efficiency boost, you can add features that even Adobe's engineers never imagined, from simple productivity add-ons like Quick-Link (see page 166) to advanced Server Behaviors to help power a complete e-commerce Web site. Dreamweaver's design allows amateur and professional programmers alike to write new features and functions using HTML, JavaScript, and XML (Extensible Markup Language). There are hundreds of these extras, called *extensions*, for you to explore. Best of all, you can try many of them for free.

Keyboard Shortcuts

As you use Dreamweaver, you'll hit the same keyboard shortcuts and travel to the same palettes and menus time and again. Perhaps your site uses a lot of graphics and Flash movies, and you're constantly using the keyboard shortcuts to insert them. But you may find that, after the thousandth time, Ctrl+Alt+F (⌘-Option-F) hurts your pinkie and uses too many keys to be efficient. On the other hand, the things you do all the time—like inserting text fields into forms or adding rollover images, for instance—may not have shortcuts at all, so you're forced to go to a menu.

To speed up your work and save your tendons, Dreamweaver comes with a keyboard-shortcut editor that lets you define or redefine shortcuts for most of the program's commands.

Dreamweaver stores keyboard shortcuts in sets. It's easy to switch between them—a useful feature when you share your computer with someone who likes different keystrokes.

Four sets come with the program:

- **Dreamweaver Standard**. When you first fire up Dreamweaver, this is the set that's turned on. It's the same set of keyboard shortcuts available in Dreamweaver 8 and it matches the keyboard shortcuts found in Fireworks.
- **Dreamweaver MX 2004**. Some keyboard shortcuts have changed since Dreamweaver MX 2004—for example, Shift-F5 instead of Ctrl-F5 now opens the Tag Editor window. But the changes are so minor, it's not really necessary to use this set.
- **BBEdit**. If you're a Mac user with a code-editing past, you may have spent a lot of time learning shortcuts for Bare Bones Software's popular BBEdit. If so, choose this set.
- **HomeSite**. Likewise, if you're adept at the Windows HTML text editor HomeSite, you may want to use its keyboard shortcuts.

You can access the shortcut sets from the Keyboard Shortcuts window. Choose Edit → Keyboard Shortcuts. Be patient—the sets can take some time to load. Once the dialog box appears, you can switch sets by choosing a new one from the Current Set menu (see Figure 21-1).

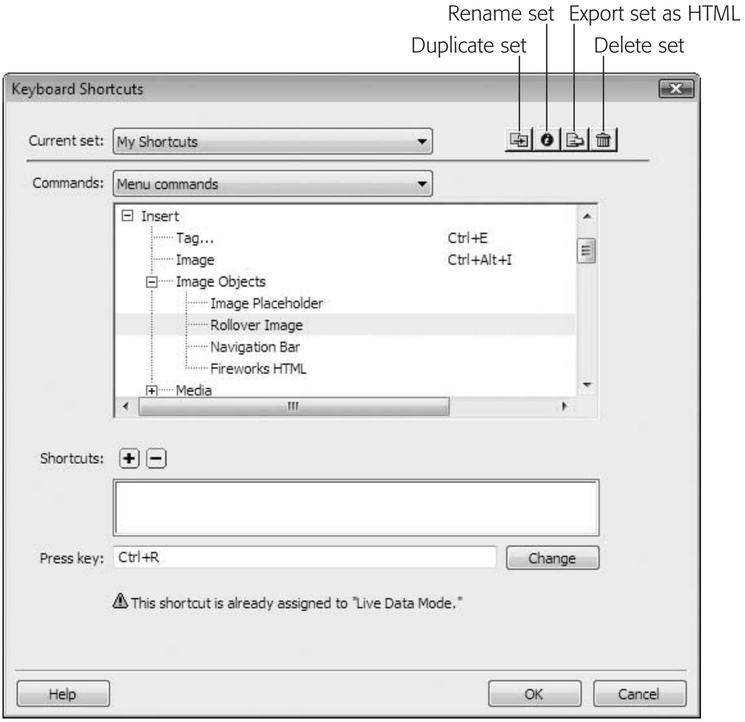
Make Your Own Shortcut Set

What if you want a set that *combines* BBEdit shortcuts with your most-used Dreamweaver ones? Or, you're a radical individualist who wants to remap *every* command to the keys of your liking? You can easily create keyboard shortcut sets that fit the way you work. Dreamweaver doesn't let you alter any of the four standard sets, so if you want to create your own, the first step is to make a copy of an existing one.

To do so, choose Edit → Keyboard Shortcuts (on the Mac, it's Dreamweaver → Keyboard Shortcuts). In the Keyboard Shortcuts window, use the Current Set pop-up menu to choose the set you wish to copy, and then click the Duplicate Set button (see Figure 21-1). Dreamweaver asks you to name the new set; do so, and then click OK.

You can delete or rename any set you create—once you figure out that the button in the Shortcuts window with the cryptic icon is the Rename Set button (see Figure 21-1). The Trash Can button, of course, lets you delete a set.

Tip: Dreamweaver lets you delete the four main keyboard shortcut sets. If you want one of them back, don't worry. The actual file isn't gone. You just need to edit a file called *mm_deleted_files.xml* in your Dreamweaver configuration folder. Remove the line that lists the keyboard shortcut set you want to get back and save the file. Then quit and restart Dreamweaver. (Note that each account holder on Windows and Mac OS X maintains a separate Configuration folder. See the box on page 744.)



Current set: My Shortcuts

Commands: Menu commands

```
⊟ Insert
    Tag...                         Ctrl+E
    Image                          Ctrl+Alt+I
  ⊟ Image Objects
      Image Placeholder
      Rollover Image
      Navigation Bar
      Fireworks HTML
  ⊞ Media
```

Press key: Ctrl+R

⚠ This shortcut is already assigned to "Live Data Mode."

Figure 21-1: *The Keyboard Shortcuts window lets you select or duplicate a shortcut set, as well as add and remove keyboard shortcuts for every menu item in Dreamweaver. You can also create keyboard shortcuts for Snippets (see page 647). When you attempt to create a shortcut that another command's already using, Dreamweaver warns you. If you wish, you can ignore the warning and reassign the keys to the new command.*

Changing Keyboard Shortcuts

Once you've created a new set, you can select any command and alter its shortcut. Start by choosing Edit → Keyboard Shortcuts (Dreamweaver → Keyboard Shortcuts) to open the Shortcuts window, if it's not already open. Then:

1. **From the Commands pop-up menu, choose the command type.**

   Dreamweaver organizes shortcuts into four (Macintosh) or seven (Windows) primary categories. These categories don't always make sense: For example, Copy and Paste appear under the Code Editing category, even though you use them at least as frequently while editing a document in the visual Design view. In addition, you'll find quite a few commands listed under multiple categories (you only need to change a keyboard shortcut once for these redundant listings).

Browse to see which commands have (or could have) keyboard shortcuts associated with them:

- **Menu commands** are the commands in Dreamweaver's menus, such as Insert → Image.
- You might presumably use the **Code editing** commands when editing HTML code. However, you could just as easily use them in Design view. They include Cut, Paste, and "Move to Top of Page," to name a few.
- **Document editing** commands are for selecting text and objects on a page, as well as previewing a page in a Web browser.
- **Files panel options menu** (Windows only) are the commands available when you right-click on a file in the Files panel.
- **Site panel** (Windows only) are the commands available from the contextual menu at the top right of the Files panel, such as Site → New Site. (On the Mac, many of these commands are listed in the Menu Commands category.)
- **Site window** (Windows only) are an odd assortment of commands that apply to situations like closing a window, quitting the application, or canceling FTP. (On the Mac, these commands are listed in the Document Editing group.)
- **Snippets** are reusable code pieces that you select from the Snippets panel, as discussed in Chapter 18.

2. **In the list below the Commands menu, click the command whose keyboard shortcut you want to change.**

   You'll find menu commands grouped by menu name: commands in the File menu, like Open and Save, fall under File. Click the + (Windows) or flippy triangle (Mac) next to the menu name to display the list of commands hidden underneath (see Figure 21-1).

   If the command already has a keyboard shortcut, it appears in the right-hand column. If it doesn't have a shortcut, you see an empty space.

3. **Click inside the "Press key" field, and then press the new keystroke.**

   Unless you're assigning the shortcut to an F-key or the Esc key, you must begin your shortcut with the Ctrl key (⌘-key). For example, the F8 key is a valid shortcut, but the letter R isn't; press Ctrl+R (⌘-R) instead.

Note: Some keyboard shortcuts may already be in use by your operating system, so assigning them in Dreamweaver may have no effect. For example, in Windows, Ctrl+Esc opens the Start Menu, while in Mac OS 10.4 (Tiger), Dashboard uses the F12 key.

Of course, many commands already have shortcuts. If you choose a key combination that's in use, Dreamweaver tells you which command has dibs. You can pick a different key combination, or simply click the Change button to reassign the shortcut to your command.

FREQUENTLY ASKED QUESTION

Sharing Shortcuts

How do I share my keyboard set with other people?

Dreamweaver stores your keyboard shortcuts as XML files–but in Dreamweaver finding them can be tricky. These files are in different locations depending on your operating system. Each keyboard set lives in an XML file; the file's name ends with the extension *.xml*.

In Windows XP, you'll find the custom keyboard set on your main hard drive in Documents and Settings → [Your Name] → Application Data → Adobe → Dreamweaver 9 → Configuration → Menus → Custom Sets. In Windows Vista, they're in *C:\Users\[your user name]\AppData\Roaming\Adobe\Dreamweaver 9\Configuration\Menus\Custom Sets.*

In Mac OS X, these files are squirreled away in your Home folder → Library → Application Support → Adobe → Dreamweaver 9 → Configuration → Menus → Custom Sets.

You can copy these files and place them in the Custom Sets folder on other computers. Once you've done so, Dreamweaver fans on those machines can use the Keyboard Shortcuts window (Edit → Keyboard Shortcuts or, on the Mac, Dreamweaver → Keyboard Shortcuts) to select the new set, just as though it had been created in that copy of Dreamweaver.

4. **Click the Change button.**

   Dreamweaver saves the new shortcut in your custom set.

   Repeat from step 1 if you want to make other keystroke reassignments. When you're finished, click OK to close the dialog box.

What if a command you use often doesn't have a shortcut at all? It's no problem to create one. As a matter of fact, Dreamweaver lets you assign *two* keyboard shortcuts to every command—one for you, and one for your left-handed spouse, for example.

To give a command an additional shortcut (or its first):

1. **Choose the command.**

   Follow the first two steps of the preceding instructions.

2. **Click the + button next to the word "Shortcuts".**

   The cursor automatically pops into the "Press key" field.

3. **Press the keys of your additional shortcut, and then click the Change button again.**

   Repeat from step 1 if you want to make other keystroke reassignments; when you're finished, click OK.

Deleting shortcuts is just as easy. Simply click the command in the list, and then click the minus sign (-) button next to the word "Shortcuts".

Create a Shortcut Cheat Sheet

Unless your brain is equipped with a 400-gig hard drive, you'll probably find it hard to remember all of Dreamweaver's keyboard shortcuts.

Fortunately, Dreamweaver offers a printable cheat sheet for your reference. At the top of the Shortcuts window, there's a handy "Export Set as HTML" button. (It's labeled with a cryptic icon; see Figure 21-1.) Click this button to name and save a simple HTML page that lists all of the commands and keyboard shortcuts for the currently selected set. Once you've saved the file, print it out or use it as an online reference—a great way to keep a record of your shortcuts for yourself or a team of Web page designers.

Dreamweaver Extensions

While keyboard shortcuts give you an easy way to access frequently used commands, they're not much help if the command you want doesn't exist. Suppose, for example, that you use Dreamweaver's Open Browser Window behavior (page 519) to load a new Web page into a window that's exactly 200 × 300 pixels. But what if you wanted the window to be centered in the middle of the visitor's montior? Dreamweaver's behavior doesn't do that. What's a Web designer to do? You could go to the Adobe site and request the new feature (*www.adobe.com/cfusion/mmform/index.cfm?name=wishform&product=12*) in hopes that the bustling team of programmers will add the command to the next version. But you'd have to wait—and there's no guarantee that Adobe would add it.

The legions of hard-core Dreamweaver fans have taken this feature wish-list issue into their own hands. As it turns out, amateur (and pro) programmers can enhance Dreamweaver relatively easily by writing new feature modules using the basic languages of the Web: HTML, JavaScript, and XML. (In fact, HTML forms, JavaScript programs, and XML documents constitute much of the program. The objects in the Insert bar, for example, are actually HTML pages stored within Dreamweaver's Configuration folder, and all of Dreamweaver's menus have actually been written as an XML file.)

Because of this "open architecture," you can add new functions and commands—called *extensions*—to Dreamweaver by downloading the work of all of those programmers. A Dreamweaver extension can take many forms and work in a variety of ways to change how the program works. It can be an icon on the Insert bar, a behavior listed on the Behaviors panel, or a command in the Commands menu. It might even be an entirely new floating window, like the Property inspector, that you use to alter some aspect of your page.

Best of all, whereas programming ability may be required to *create* extensions, none at all is necessary to use them. You can download hundreds of extensions from the Web and install them on your computer for free. In addition, many sophisticated extensions, like those for creating e-commerce sites, are commercially available.

Note: Extensions have been around for many versions of Dreamweaver. Unfortunately, each version of Dreamweaver added a few kinks for extension developers, so not all extensions out there work with Dreamweaver CS3. (Many extensions that were compatible with Dreamweaver 8 *do* work with Dreamweaver CS3.) Most extension developers list which versions of Dreamweaver their extensions work with, and you can also check for version compatibility on the Dreamweaver Exchange (see Figure 21-2).

Browse the Exchange

The largest collection of extensions awaits you at the Adobe Exchange Web site, where you'll find hundreds of free and commercial extensions. Although some come from Adobe itself, the vast majority are written by an army of talented Dreamweaver users.

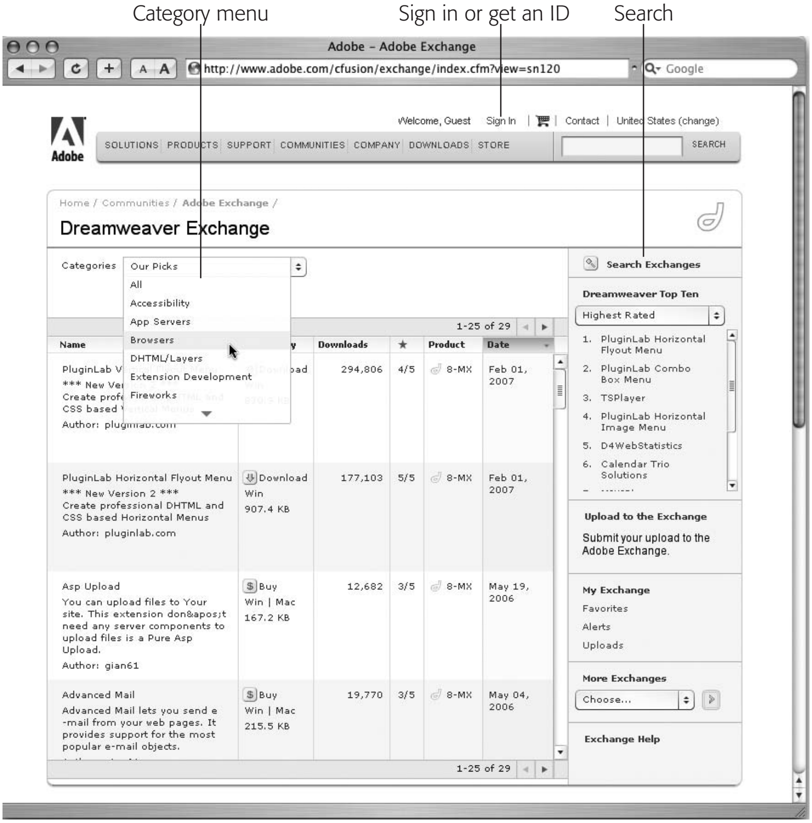
Using the Exchange is a straightforward process:

1. **In your Web browser, go to *www.adobe.com/exchange/dreamweaver*.**

   You can also get there from within Dreamweaver by choosing Commands → Get More Commands.

2. **Log in (see Figure 21-2).**

   You can *browse* the site without logging in, but to *download* any of the extensions, you need to get a free Adobe ID and sign in, using the Exchange Sign In form.



Name	y	Downloads	★	Product	Date
PluginLab V *** New Ve Create profe CSS based Author: pluginlab.com	ad	294,806	4/5	8-MX	Feb 01, 2007
PluginLab Horizontal Flyout Menu *** New Version 2 *** Create professional DHTML and CSS based Horizontal Menus Author: pluginlab.com	Download Win 907.4 KB	177,103	5/5	8-MX	Feb 01, 2007
Asp Upload You can upload files to Your site. This extension don&apos;t need any server components to upload files is a Pure Asp Upload. Author: gian61	$ Buy Win | Mac 167.2 KB	12,682	3/5	8-MX	May 19, 2006
Advanced Mail Advanced Mail lets you send e -mail from your web pages. It provides support for the most popular e-mail objects.	$ Buy Win | Mac 215.5 KB	19,770	3/5	8-MX	May 04, 2006

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1. PluginLab Horizontal Flyout Menu
2. PluginLab Combo Box Menu
3. TSPlayer
4. PluginLab Horizontal Image Menu
5. D4WebStatistics
6. Calendar Trio Solutions

Submit your upload to the Adobe Exchange.

Figure 21-2: *You can peruse the Dreamweaver Exchange freely, check out the offerings, and even buy commercial third-party extensions. However, if you want to download one of the free extensions, you must get an Adobe ID and log into the site. Unfortunately, the marketing machine must be appeased, so you'll need to provide personal information and face a (fortunately optional) survey of your Web development habits.*

3. **Browse the extensions.**

   Once you've logged into the site, the home page highlights new and popular extensions. Overall, however, you may find the Exchange site a bit confusing and difficult to use. (For example, the entire site is in Flash, so Mac visitors can't use their browser's Back button to travel back to earlier screens.)

   Near the top of each page, you'll see a pop-up menu that lists different categories of extensions: Accessibility, DHTML/Layers, Navigation, Productivity, Flash media, Scripting, Tables, Text, eCommerce, and so on. When you choose a category, you go to a page listing all of the extensions within that category (see Figure 21-2).

   If you're looking for a *particular* extension, the Search command is your best bet. Click the Search Exchanges button (see Figure 21-2). On the Search page, type the extension's name or a few descriptive words into the Search Extensions field. Select Dreamweaver Exchange from the exchange menu (Adobe has exchanges for many products, including Fireworks, Flash, and Photoshop), and then click Search.

4. **Click an extension's name to go to its Web page.**

   On an extension's page, you'll find lots of information about the extension, such as a description of how it works, a button to either purchase or download the extension, information about which version of Dreamweaver and which operating system (Windows or Mac) it's compatible with, and buttons to add the extension to Favorites and Alerts lists. The Favorites option lets you create a personal list of the extensions you like best; the Alerts list feature means you'll receive an email whenever the extension is updated (see Figure 21-3).

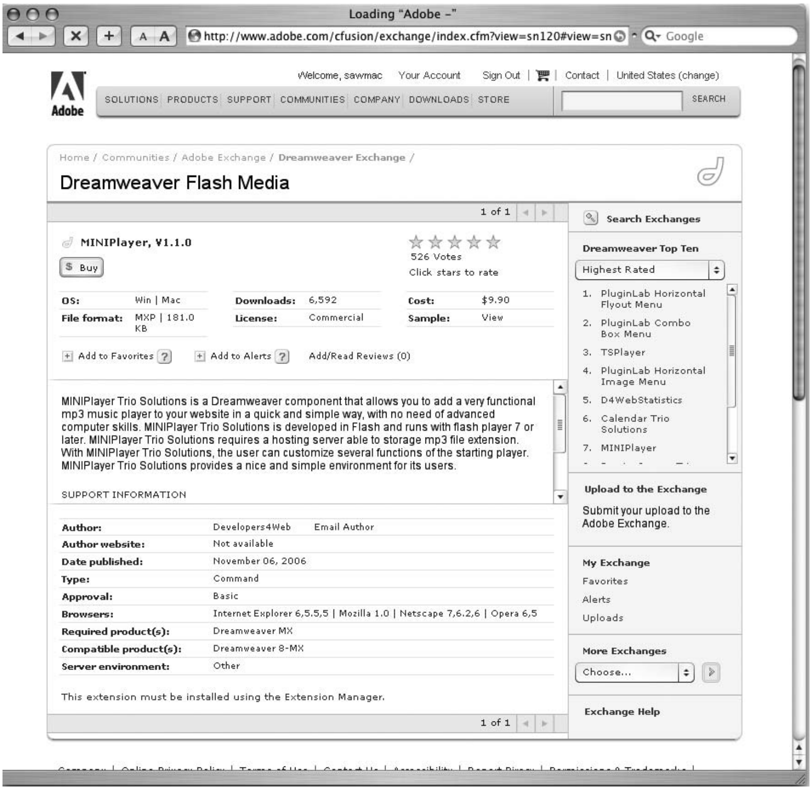
Find a Good Extension

How do you figure out which extensions are worth checking out? First, you can find some recommendations of the best ones scattered through this book in special boxes labeled Extension Alert (see page 166 and page 543, for instance).

The Exchange also provides information to help you separate the wheat from the chaff. Adobe tests each new extension before posting it. Extensions that pass a basic set of tests—it installs OK, it works, it doesn't blow up your computer—get a Basic approval rating. Some extensions also pass a more rigorous test that determines if the extension works in a way that's "Dreamweaver-like." In other words, these extensions are designed to look, feel, and act like the program, so that you won't need to learn a new interface. These extensions get an Adobe Approved rating, indicated by the word "Adobe" in the approval section of an extension's details page.

Of course, these approval ratings only let you know if an extension works; they don't tell you whether it's *useful*. As an extra aid, Dreamweaver aficionados (including you) can rate each extension on a scale of 1 (worst) to 5 (best) (see

Figure 21-3). An extension's average rating gives you a good indication of how handy it is. When you're browsing the Exchange, look for the column labeled with a star to the right (see Figure 21-2). Click the header to organize the extensions from most to least recommended.


Loading "Adobe –"
http://www.adobe.com/cfusion/exchange/index.cfm?view=sn120#view=sn
Google
Adobe
Welcome, sawmac | Your Account | Sign Out | Contact | United States (change)
SOLUTIONS | PRODUCTS | SUPPORT | COMMUNITIES | COMPANY | DOWNLOADS | STORE
SEARCH
Home / Communities / Adobe Exchange / Dreamweaver Exchange /
1 of 1
$ Buy
Add to Favorites ?
Add to Alerts ?
Add/Read Reviews (0)
Search Exchanges
Dreamweaver Top Ten
Highest Rated
Upload to the Exchange
My Exchange
Favorites
Alerts
Uploads
More Exchanges
Choose...
Exchange Help

Dreamweaver Flash Media

MINIPlayer, V1.1.0

☆☆☆☆☆ 526 Votes
Click stars to rate

OS:	Win | Mac	Downloads:	6,592	Cost:	$9.90
File format:	MXP | 181.0 KB	License:	Commercial	Sample:	View

MINIPlayer Trio Solutions is a Dreamweaver component that allows you to add a very functional mp3 music player to your website in a quick and simple way, with no need of advanced computer skills. MINIPlayer Trio Solutions is developed in Flash and runs with flash player 7 or later. MINIPlayer Trio Solutions requires a hosting server able to storage mp3 file extension. With MINIPlayer Trio Solutions, the user can customize several functions of the starting player. MINIPlayer Trio Solutions provides a nice and simple environment for its users.

SUPPORT INFORMATION

Author:	Developers4Web Email Author
Author website:	Not available
Date published:	November 06, 2006
Type:	Command
Approval:	Basic
Browsers:	Internet Explorer 6,5.5,5 | Mozilla 1.0 | Netscape 7,6.2,6 | Opera 6,5
Required product(s):	Dreamweaver MX
Compatible product(s):	Dreamweaver 8-MX
Server environment:	Other

This extension must be installed using the Extension Manager.

1. PluginLab Horizontal Flyout Menu
2. PluginLab Combo Box Menu
3. TSPlayer
4. PluginLab Horizontal Image Menu
5. D4WebStatistics
6. Calendar Trio Solutions
7. MINIPlayer

Submit your upload to the Adobe Exchange.

Figure 21-3: *Each extension has its own page in Adobe Exchange that provides information about the extension and its developer. A helpful voting mechanism (1–5 stars) lets you know what other people think of the extension.*

Other Extension Sources

Unfortunately, the glory days of totally free extensions are over. You can still find plenty of extensions offered free of charge, but many developers have realized they can't survive by giving away their work. The upside is that there are more excellent, polished, well-documented commercial extensions than ever—many even with customer support. Here are a few highlights:

- **WebAssist** (*www.webassist.com*) is one of the largest and most professional extension development companies. A former Dreamweaver product manager is at the helm, and they offer a wide variety of high quality extensions. (There are even a few free extensions to choose from.)
- If PHP or ASP (see page 751) is your bag, then you'll find an impressive collection of extensions at **Felix One** (*www.felixone.it/extensions/dwextensionsen.asp*).

- **Project Seven** (*www.projectseven.com*) offers free extensions and several excellent commercial extensions for creating animated Dynamic HTML and CSS menus, scrolling text areas, CSS-based page layouts, photo galleries, and more.
- **Trent Pastrana** (*www.fourlevel.com*) sells extensions for building photo galleries, whiz-bang DHTML effects (like menus that slide onto the page), or scrollers that move text up and down (or left and right) across a Web page.
- **Trio Solutions** (*http://components.developers4web.com/*) sells lots of inexpensive Dreamweaver extensions that let you use Dreamweaver to add CSS-style calendars, insert Flash music players into a page, and much more.

Download and Install Extensions

Once you've found a great extension, download it to your computer. You can save the downloaded file anywhere on your computer, but you might want to create a special folder. That way, if you ever need to reinstall Dreamweaver, you can quickly find and add your collection of extensions.

A downloaded extension file's name ends with *.mxp*, which stands for Macromedia Exchange Package (from the days before Adobe bought Macromedia). That's a special file format that works with the Extension Manager—the program, described next, that actually installs the extension into Dreamweaver.

Extension Manager

To add or remove a Dreamweaver extension, you use the Extension Manager, a standalone program that's integrated with Dreamweaver. It's designed to manage extensions for many Adobe programs (not just Dreamweaver): you can install extensions, turn them on and off, and remove them. This feature can be quite handy if you also use Adobe's Flash or Fireworks programs—you have a single access point for managing all your extensions.

You can launch the Extension Manager from within Dreamweaver by choosing Help → Manage Extensions, or Commands → Manage Extensions (see Figure 21-4).

To add an extension:

1. **Download an extension package (*.mxp* file) from the Exchange or another Web site.**

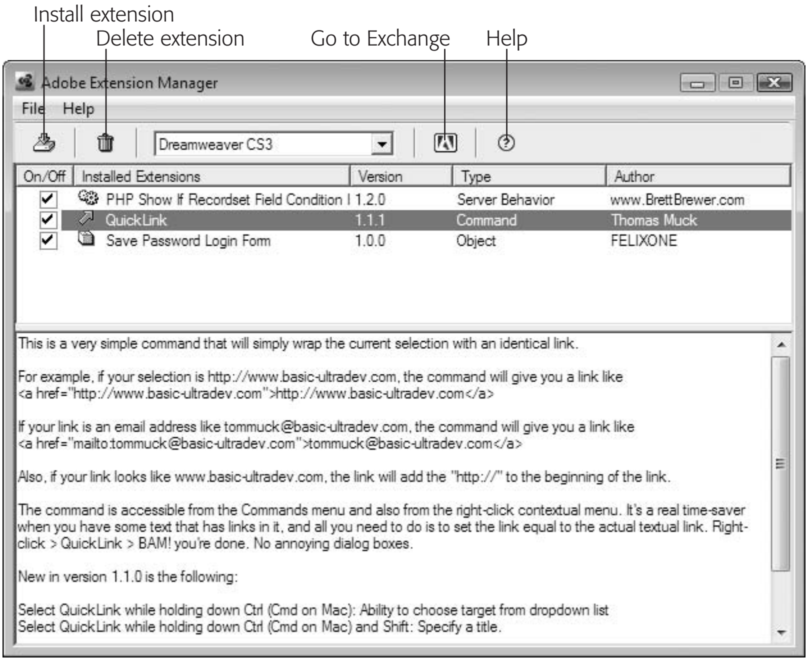
   See instructions on page 740.

2. **From Dreamweaver, choose Help → Manage Extensions (or Commands → Manage Extensions).**

   The Extension Manager launches. It lists all currently installed extensions (see Figure 21-4).

3. **Choose Dreamweaver CS3 from the pop-up menu.**

   Since the Extension Manager handles extensions for several different programs, you need to specify which program you're using. If you don't have any other Adobe products installed on your machine, Dreamweaver CS3 is the only option.



On/Off	Installed Extensions	Version	Type	Author
☑	PHP Show If Recordset Field Condition I	1.2.0	Server Behavior	www.BrettBrewer.com
☑	QuickLink	1.1.1	Command	Thomas Muck
☑	Save Password Login Form	1.0.0	Object	FELIXONE

This is a very simple command that will simply wrap the current selection with an identical link.

For example, if your selection is http://www.basic-ultradev.com, the command will give you a link like
<a href="http://www.basic-ultradev.com">http://www.basic-ultradev.com</a>

If your link is an email address like tommuck@basic-ultradev.com, the command will give you a link like
<a href="mailto:tommuck@basic-ultradev.com">tommuck@basic-ultradev.com</a>

Also, if your link looks like www.basic-ultradev.com, the link will add the "http://" to the beginning of the link.

The command is accessible from the Commands menu and also from the right-click contextual menu. It's a real time-saver when you have some text that has links in it, and all you need to do is to set the link equal to the actual textual link. Right-click > QuickLink > BAM! you're done. No annoying dialog boxes.

New in version 1.1.0 is the following:

Select QuickLink while holding down Ctrl (Cmd on Mac): Ability to choose target from dropdown list
Select QuickLink while holding down Ctrl (Cmd on Mac) and Shift: Specify a title.

Figure 21-4: *The Extension Manager window lists each extension you've installed, along with its version number, type, and author. If you select an extension from the list, a description appears in the bottom half of the window.*

4. **Choose File → Install Extension.**

   You can also click the Install Extension button. The Select Extension window appears, listing the folders on your hard drive.

5. **Navigate to and select the extension package (*.mxp* file) you wish to add.**

   A disclaimer appears with a lot of legal text. In brief, it frees Adobe from liability if your computer melts down as a result of installing the extension.

6. **Click Accept in the Disclaimer window.**

   A message may appear that asks you to quit and restart Dreamweaver. If so, follow the directions.

Tip: You can also install an extension simply by double-clicking the *.mxp* file after you download it, which saves you a few steps.

To remove an extension, select it from the list and choose File → Remove Extension, or click the Trash Can button.

Note: If you install a lot of extensions, Dreamweaver may take longer than usual to load; it needs to process every extension file as it opens. If you want to temporarily turn off an extension (as opposed to deleting it), open the Extension Manager and turn off the box next to the extension's name. To turn it back on, simply turn the box on again. You may need to restart Dreamweaver to make the extension available again.

Make Your Own Extensions

The Exchange is a great resource for finding useful extensions. But what if you can't find the extension you need? Create your own.

Writing extensions requires in-depth knowledge of JavaScript and HTML. But when you create a command that lets you complete a weekly task in a fraction of the time it previously took, the effort may just be worth it. For more information, choose Help → Extending Dreamweaver. The Adobe Web site also offers help at the Dreamweaver support center: *www.adobe.com/support/dreamweaver/extend.html*.

POWER USERS' CLINIC

The Secret Life of Extensions

Where do extensions go? The basic answer is: inside the Dreamweaver Configuration folder. But Dreamweaver actually supplies you with multiple configuration folders: the main folder located with the program itself, and account-specific folders for each user account on a computer. Windows and Macs let multiple users have an account on a single computer–one for you, your spouse, and your pet ferret, say. Of course, you may be the only one using your computer, so in that case there'd be just one additional configuration folder.

On a Windows machine, the main configuration folder is located in *C:\Program Files\Adobe\Adobe Dreamweaver CS3\configuration* (assuming the C:\ drive is your main drive). On a Mac, you can find it here: *Applications → Adobe Dreamweaver CS3 → configuration*. The individual account configuration folders are located in folders dedicated to each user. In Windows XP: *C:\Documents and Settings\[your user name]\Application Data\Adobe\Dreamweaver 9\Configuration*. In Windows Vista: *C:\Users\[your user name]\AppData\Roaming\Adobe\Dreamweaver 9\Configuration*. On a Mac: *Volume Name → Users → [your user name] → Library → Application Support → Adobe → Dreamweaver 9 → Configuration*. (Yes, the individual user folders refer to Dreamweaver 9, but it's really Dreamweaver CS3).

Some changes you make to Dreamweaver are recorded in your personal configuration folder, such as when you add an extension, delete a keyboard shortcut set (see page 733), or save a workspace layout (see page 27).

The main Configuration folder holds many of the files that control the look and operation of the program. For instance, the entire menu structure, including menu items and submenus, is described in a file called *menus.xml*. When Dreamweaver starts, it reads this file and uses the information inside it to draw the menus on the screen.

The Configuration folder holds many subfolders, each with a special purpose. For example, the Objects folder contains files that tell Dreamweaver which icon buttons appear on the Insert bar and how each one works.

Depending on the type of extension you've downloaded–command, object, behavior, or whatever–the Extension Manager stores the file (or files) required by the extension in one or more folders inside the Configuration folder. Because all of the files inside the Configuration folder are crucial to the way Dreamweaver works, don't delete the folder or any of the files inside it. In fact, because the Extension Manager automatically makes any required changes to the Configuration folder, there's no reason for you to even look inside it.

(The only exception is when you want to copy your keyboard shortcut set to another computer. See page 737.)

6

Part Six: Dynamic Dreamweaver

CHAPTER

22

Getting Started with Dynamic Web Sites

So far in this book, you've learned to build and maintain Web sites using Dreamweaver's powerful design, coding, and site management tools. The pages you've created are straightforward HTML, which you can immediately preview in a Web browser to see a finished design. These kinds of pages are often called *static*, since they don't change once you've finished creating them (unless you edit them later, of course). For many Web sites, especially ones where you carefully handcraft the design and content on a page-by-page basis, static Web pages are the way to go.

But imagine landing a contract to build an online catalog of 10,000 products. After the initial excitement disappears (along with your plans for that trip to Hawaii), you realize that even using Dreamweaver's Template tool (Chapter 19), building 10,000 pages is a lot of work!

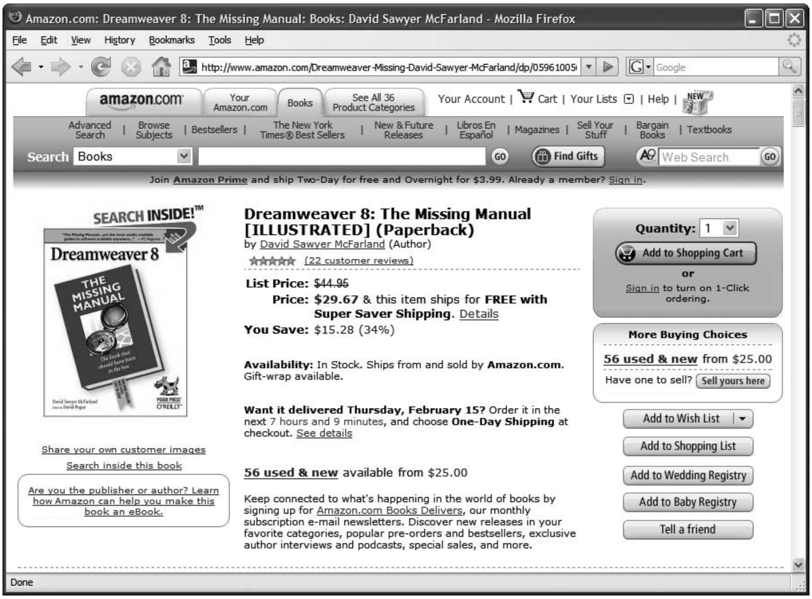
Fortunately, Dreamweaver offers a better and faster way to deal with this problem. Its dynamic Web site creation tools let you take advantage of a variety of powerful techniques that would be difficult or impossible with plain HTML pages. With Dreamweaver, you can build pages that:

- Display listings of products or other items like your record collection, your company's staff directory, or your mother's library of prized recipes.
- Search through a database of information and display the results.
- Require login so you can hide particular areas from prying eyes.
- Collect and store information from visitors to your site.
- Personalize your visitors' experience: "Hello Dave, it's been a while since you've visited. Did you miss us?—Hal."

Visit Amazon.com, for example, and you'll find more books than you could read in a lifetime. In fact, you'll find more products—DVDs, CDs, and even outdoor lawn furniture—than could fit inside a Wal-Mart. In just an hour, you could browse through hundreds of products, each with its own Web page. Do you really think Amazon hired an army of Web developers to create each Web page for every product they sell? Not a chance.

Note: Luckily you aren't limited to *either* "static" *or* "dynamic" Web pages. Web sites frequently contain both–static pages for custom designs and handcrafted content, and dynamic pages for mass production of a thousand catalog pages.

Instead, when you search for a book on Amazon.com, your search triggers a computer program, running on what's called an *application server*, which searches a large database of products. When the program finds products that match what you're searching for, it merges that information with the HTML elements that make up the page (banner, navigation buttons, copyright notice, and so on). You see a new Web page that's been created on the spot—perhaps for the first time ever (Figure 22-1).



Amazon.com: Dreamweaver 8: The Missing Manual: Books: David Sawyer McFarland - Mozilla Firefox

http://www.amazon.com/Dreamweaver-Missing-David-Sawyer-McFarland/dp/05961005

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Dreamweaver 8: The Missing Manual [ILLUSTRATED] (Paperback)
by David Sawyer McFarland (Author)
(22 customer reviews)

List Price: ~~$44.95~~
Price: **$29.67** & this item ships for **FREE with Super Saver Shipping**. Details
You Save: $15.28 (34%)

Availability: In Stock. Ships from and sold by **Amazon.com**. Gift-wrap available.

Want it delivered Thursday, February 15? Order it in the next 7 hours and 9 minutes, and choose **One-Day Shipping** at checkout. See details

56 used & new available from $25.00

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Quantity: 1

Sign in to turn on 1-Click ordering.

More Buying Choices
56 used & new from $25.00
Have one to sell?

Are you the publisher or author? Learn how Amazon can help you make this book an eBook.

Figure 22-1:
An infinite number of monkeys couldn't create all the Web pages for all the products Amazon sells. The solution? A dynamic Web site, which takes your programmed instructions (cooked up with a little help from Dreamweaver), and automatically creates pages made up of content chunks pulled from a database. That's the way to go if you've got a site with loads of pages that all present similar information.

Dynamic Web sites are usually the realm of professional programmers, but Dreamweaver can simplify routine tasks like viewing information from a database and adding, updating, and deleting data. Even if you don't have a programmer's bone in your body, this chapter and the next few give you the basics.

Pieces of the Puzzle

You may be thinking, “Yeah, that sounds fantastic, but so did that time-share in the Bahamas. What’s the catch?”

The catch is that dynamic Web sites are more complex and require more technologies to get off the ground. Simple static Web sites require only the computer you use to build them, and a Web server to dish them out. In fact, as you can see by previewing your site from your own computer with a Web browser, you don’t even need a Web server to effectively view a static Web site.

Dynamic Web pages, by contrast, require more (see Figure 22-2). Not only is there a Web server that handles requests for Web pages, two other types of servers enter the equation: an *application server* and a *database server*.

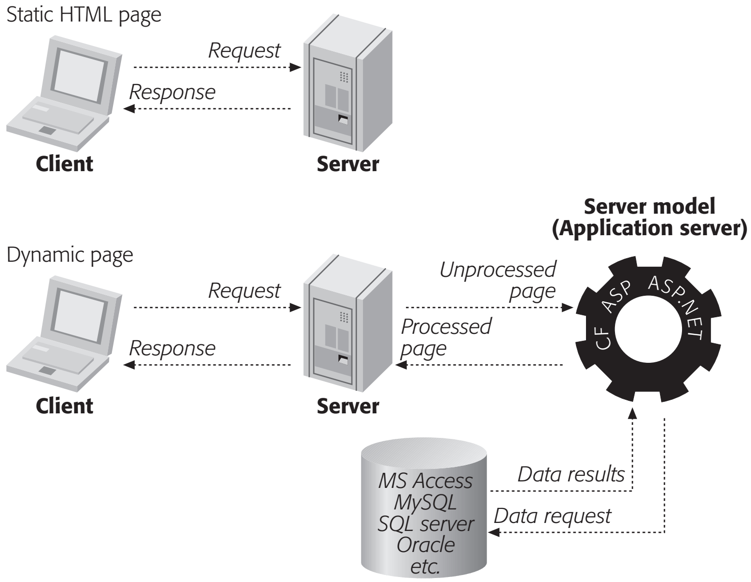


Figure 22-2: *Top: The technology behind a Web site that uses plain old static HTML pages is straightforward: When you come to the site, the Web server sends your computer (the client computer) the Web pages, graphics, and other elements of the page.*

Bottom: When you come to a dynamic page, on the other hand, the Web server must communicate with an application server, which in turn communicates with a database server. The final results come back to you through the Web server.

You’ll still be using a lot of HTML (and CSS) to build a dynamic site—for example, to provide the layout, add banner graphics, and navigation bars. But you’ll augment this mix with some form of programming code. The application server processes this code and sends a complete HTML page to the Web server, which, in turn, sends that onto the visitor. In many cases, the programming code requires the application server to retrieve information from a database, and then merge it with the HTML of a page.

Note: In this context, a *server* refers to software that dishes out particular types of information–Web pages, database queries, or a program’s output. It doesn’t necessarily mean a separate computer; Web hosting firms can (and frequently do) have Web, database, and application servers all running happily together on a single machine.

Because dynamic Web sites require more technology, you can't just open a dynamic page in your Web browser as you can a regular Web page. You must view a dynamic page through a Web server that has an appropriate application server running.

You also have to set up a database, and connect that database to your application server. Although this can be quite complex, it's not difficult to set up a basic Web server, application server, and database on your own computer, so that you can build and test database-driven Web pages. It's also easy to connect to other computers that are already configured to serve up dynamic, database-driven Web pages.

And once you or your company's system administrator have set up the Web server and other assorted components, Dreamweaver can easily create complex Web pages that access databases, and let you build powerful Web applications, all without ever learning any programming.

Note: The term *Web application* refers to Web pages that work together to complete a task. All the various pages that come together to form an online shopping site–which lets visitors do things like search a database of products, view individual product pages, and add products to a shopping cart–would be considered a Web application.

FREQUENTLY ASKED QUESTION

The Dynamic Duo

How does a dynamic Web site differ from dynamic HTML?

Dynamic is a word that's thrown around a lot in Web circles, and it has a variety of uses.

For starters, *dynamic* sometimes refers to the power of JavaScript. For example, Dreamweaver CS3's Spry Framework uses JavaScript to create interactive page elements such as the Spry menu bar discussed on page 175, or the animated effects described on page 511. The result is sometimes called "Dynamic HTML," because the elements on the page *change*.

However, in this section of the book, *dynamic* refers to any Web page that's processed by an application server–pages that undergo some form of transformation on the Web server's side of the Internet, like connecting to a database, or collecting information from a form.

What's important to remember is that JavaScript, used for Dynamic HTML, Spry, and Dreamweaver Behaviors (Chapter 13), is a *client-side* programming language. It runs in someone's Web browser, and is limited to changing the way a Web page looks and behaves *after* it's been downloaded over the Internet.

Dynamic Web sites, on the other hand, use *server-side* programs–those that run on an application server, out there on the Web somewhere. The dynamic part (responding to a form or accessing a database, for example) happens *on the Web server*. The visitors to your site never see any programming code, and their computers never have to run the program. They merely enjoy the results of the application server's hard work: a finished HTML page.

Even so, there are literally hundreds of combinations of Web, application, and database servers, and Dreamweaver doesn't work with all of them. However, it's capable of working with five of the most popular and powerful combinations, using seven different programming languages!

Understanding Server Models

In Dreamweaver lingo, the different application servers combine with a programming language to create a *server model*. Dreamweaver recognizes several server models, including ASP and .NET (pronounced "a-s-p" and "dot net"), ColdFusion, PHP, and JSP. Each server model has its own set of unique requirements, and its own methods of performing identical tasks.

Each server model also works with one or more programming languages. For example, you can create an ASP page using either VBScript or JScript. In some cases, the server model understands only a single programming language: JSP pages, for instance, use the Java programming language. And to make things just a bit more confusing, PHP can refer both to a programming language named PHP *and* to the application server. Likewise, CFML, or ColdFusion Markup Language, is a programming language, and ColdFusion server is an application server. If your head is hurting trying to make sense of all this, just keep this in mind: An application server processes programming code and carries out various actions, like talking to a database or spitting out a Web page.

Which server model you use depends on which resources you have available: which type of Web server hosts your site, the operating system it uses, and which application server is available. If you're hosting your site on Linux or Unix, you'll most likely end up using PHP; if you're hosting on Windows, meanwhile, you've already got access to ASP and probably .NET. It all comes down to what you have on your computer, what your company uses, or (if you're using a Web hosting service) what the host computer understands. Here's a brief description of each server model.

PHP

PHP (PHP Hypertext Preprocessor) is a programming language that was created specifically for building dynamic Web pages. It's the most popular and widely available option at Web hosting companies—in other words, when it comes time to place your finished Web site on the Internet, you're most likely to find a Web hosting company that supports PHP. (PHP is also quite often the least expensive hosting option.) The *PHP interpreter*—that's the application server—works in conjunction with a variety of Web servers, including Microsoft's Internet Information Server (IIS), but was initially created for the Apache Web server. PHP can also work with a variety of different database servers, but Dreamweaver understands only the MySQL database server (which is also available at nearly every Web hosting company).

Note: Because Apache, PHP and MySQL are so commonly used together, you may encounter the abbreviation frequently used to describe them–AMP.

Apache, PHP, and MySQL are free (one of the reasons they're so popular), and you can find simple installation programs that let you install all three programs on your own desktop computer. The tutorials for this section of the book use the PHP server model.

.NET

.NET is a Microsoft server technology. It's actually an entire suite of technologies intended to integrate many activities over the Internet.

.NET is also called ASP.NET because it was created as a replacement for Microsoft's older ASP (Active Server Page) technology. .NET can be programmed in numerous languages, including Microsoft's VB.NET, C# (pronounced "see sharp"), and JScript.NET, as well as more than 20 other languages. Dreamweaver recognizes only the C# and VB languages.

.NET runs in conjunction with Microsoft's Internet Information Server (IIS) Web server. IIS comes with Windows XP Professional and some versions of Windows Vista. Unfortunately, it doesn't come with Vista Home Basic, the most common version of Vista. You can find the .NET framework at *http://msdn2.microsoft.com/en-us/netframework/*.

.NET can work with a variety of different databases, with Microsoft's SQL Server being the most common.

ASP

ASP (Active Server Pages) used to be one of the most common ways to start building database-driven Web sites. It's a bit long in the tooth now, and is probably not the best choice if you're just starting with database-driven sites. ASP understands two different programming languages: VBScript and server-side JavaScript, both of which Dreamweaver speaks fluently. ASP also works with Microsoft's Web server—IIS.

ASP can work with a variety of databases. For small projects, you can use Microsoft Access (the database program that comes with some versions of Microsoft Office), since it's fairly easy to use. For more demanding projects, where you need to store lots of data, and many people will access your site, Microsoft's SQL Server is a better choice.

ColdFusion

ColdFusion is an application server from Adobe (the maker of Dreamweaver) that's programmed using CFML (ColdFusion Markup Language). ColdFusion works in conjunction with several different Web servers, including IIS and Apache, and uses its own programming language, which resembles HTML. For this reason, some Web designers find it easier to learn than other programming languages.

The downside is that this application isn't free. You *can* download a developer's edition—a free version that runs on your computer—so you can build and test ColdFusion Web pages. But if you want to host the Web site on the Internet, you have to either buy the ColdFusion Server package (which isn't cheap) or find a Web hosting company that offers ColdFusion hosting. Fortunately, in recent years, more and more Web hosting companies have started offering ColdFusion as an option, at rates that are close to or match regular hosting plans.

The Developer Edition of ColdFusion is available for download at *www.adobe.com/go/devcenter_cf_try*.

Like ASP and ASP.NET, ColdFusion works with many different databases.

JSP

JSP (JavaServer Pages) is based on Sun's popular Java programming language. It requires a Java application server, like Adobe's JRun server.

This approach isn't for the faint of heart, however, since setting up a Java Server and connecting it to a database can be tricky. Java is one of the more difficult languages to learn, too. If you don't have a knowledgeable guide, you're better off starting with a simpler technology like PHP.

A widely used version of JSP is Tomcat, available at *http://jakarta.apache.org/*. It's open source (that is, polished by a worldwide population of volunteer programmers), free, and it works with the Apache Web server and many different databases.

Picking a Server Model

With so many choices, you're probably wondering which server model to choose. If you've never built a dynamic Web site before, your best bet is PHP. You can easily set up a fully operational Web server (Apache), application server (PHP), and database server (MySQL) on your desktop computer, and quickly begin building dynamic pages with Dreamweaver.

In fact, since this is the easiest method, this book's tutorials concentrate on building PHP pages. Once you get the hang of Dreamweaver's dynamic Web-building tools, you can always try any of the other server models to build your sites. (However, switching a single site from one server model to another is difficult and not recommended.)

However, when you're building a real-world Web site, the final decision on which server model to use may be out of your hands. You may be working for a company that's already using ColdFusion for its Web site. Or, if you've already got a Web site up and running, but want to add some database-driven content, you have to use what's installed on that server. If your site is currently hosted at a Web hosting company, you should contact the company to find out which operating system, Web server, and databases it uses. If they're Windows-based, odds are that they use IIS, meaning that you can use ASP, or ASP.NET, and either Access or SQL Server databases. On the other hand, if they're a Unix operation, you'll most likely find the Apache Web server, PHP, and MySQL database.

Fortunately, the tools Dreamweaver provides for the different server models are largely the same. Essentially, you start to build dynamic Web pages using the same techniques you've learned in the earlier sections of this book. For the heavy lifting (like retrieving data from a database or password protecting a Web page), you'll turn to Dreamweaver's menu-driven database tools. They'll help you add the programming code necessary to make an application server do all the server-side magic you need to work with databases and generate dynamic Web pages. Once you learn Dreamweaver, you can build pages for any of the server models with which it works.

Dynamic Web Sites: The Setup

Now that your head is spinning, and you're considering some noble career alternative like farmer, firefighter, or carpenter, it's time to set up Dreamweaver to work with an application server and database.

You can do this setting up in several different ways. One involves using what Dreamweaver calls a *testing server*. Remember how you can create a Web site on your own computer (the *local site*) before posting it online for all to see (the *remote site*)? Here, the concept is similar. When building Web applications, it's again a good idea to keep all the "work in progress" pages on your own computer. After all, you don't want to fill up an active online database with test data, or put half-finished product pages on the Internet. But because dynamic Web sites require an application server and database, it's a good idea to create a *testing server* for storing and previewing dynamic pages in progress: a real Web server, application server, and database running on your own computer.

Then, when you've finished the site, you can transfer the pages to the remote site using Dreamweaver's built-in FTP feature (see page 610). If you're working in a group setting with other Web developers, you can set up the testing server on a machine that's part of your group's local network. Each developer can then connect to the testing server and retrieve files to work on. (Using Dreamweaver's Check-In/Check-Out feature [see page 628] is a good idea when you're working with a group of people on the same site.)

Note: You can always use your remote site as a testing server, as long as it has one of the application servers and databases that Dreamweaver works with. While this method is an easy way to get started, you must contact your Web host to see what application server it uses, and whether it can handle databases. In addition, you should have a fast Internet connection to the server. Otherwise, testing your dynamic pages may just test your patience.

Finally, whenever you work on dynamic files directly on a live Web server, be aware that mistakes you make along the way may affect a database that *other* dynamic pages use. If, while hurriedly trying to complete your Web site, you accidentally create a page that deletes records from your database, important information may no longer be available on your Web site. So whenever possible, the testing server should be separate from the server where the finished and perfected site resides.

In the next four chapters, you'll be building a dynamic Web site using PHP and a MySQL database. The concepts you learn work for all of the other server models as well, though some of the details may be different. Significant differences among various server models are mentioned where applicable.

To get started with the tutorials in this section of the book, you need to install Apache, PHP, MySQL, and a database-administration tool called phpMyAdmin. Don't worry, it's a lost easier than it may sound. There are several simple installers available for both Windows and Macs that make this step a snap. Because the procedure differs between Windows and Mac, each operating system has its own set of instructions below.

Setting Up a Testing Server for Windows

A quick way to install a testing server on Windows is to use software called *XAMPP*. XAMPP is free and works on both Windows XP and Windows Vista. It's basically a simple installer for putting Apache, PHP, and MySQL on your computer.

1. **Download the software at: *www.apachefriends.org/en/xampp-windows.html#641*.**

   Select the Installer option under the Basic Package. You may be taken to a page that presents you with a bunch of different download locations. Just click one of the download buttons, and then save the file to your desktop. Once downloaded, the installer works like most Windows installers.

   At the time of this writing, a direct link to the installer for the latest version of XAMPP (1.6.1) is located at: *www.apachefriends.org/download.php?xampp-win32-1.6.1-installer.exe*.

Warning: If you're already running Microsoft's IIS Web server on your computer, you must turn it off before continuing. XAMPP and IIS can't run together on the same computer without a fair amount of tinkering.

2. **Double-click the .exe file you downloaded.**

   A window opens, asking you to select the language you'd like to use.

3. **Choose a language from the menu, and then click OK.**

   A Setup Wizard window appears, ready to step you through the setup process.

4. **Click the Next button.**

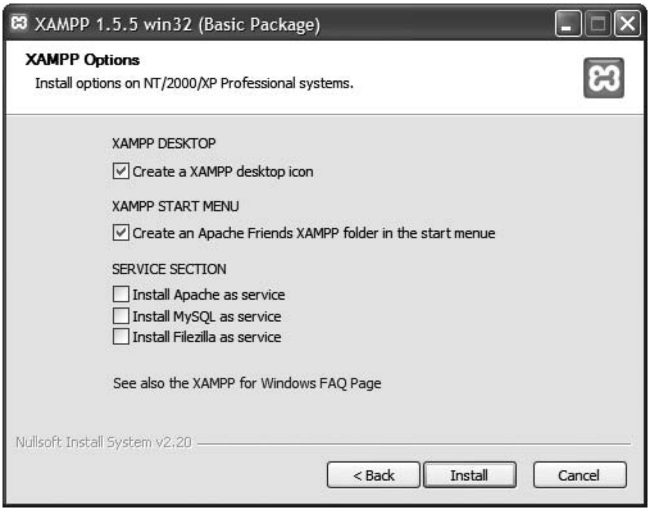
   The installer suggests putting the application on your main drive at C:\XAMPP. (The exact location the installer recommends may vary: Previous versions of the installer recommended C:\Program Files\XAMPP.) You can pretty much install it anywhere, but putting it in the Program Files folder on your main drive (usually C:\Program Files) where other programs are installed is usually a good idea.

5. **Click the Next button once again.**

   The XAMPP Options window appears (Figure 22-3). In most cases, it's fine to leave all the window's checkboxes just as you see; see Figure 22-3 for details.

6. **Click Install.**

   The installer places all the files onto your system. This process takes a while, since a lot of programs and files are being installed.



XAMPP 1.5.5 win32 (Basic Package)

XAMPP Options

Install options on NT/2000/XP Professional systems.

XAMPP DESKTOP

☑ Create a XAMPP desktop icon

XAMPP START MENU

☑ Create an Apache Friends XAMPP folder in the start menue

SERVICE SECTION

☐ Install Apache as service

☐ Install MySQL as service

☐ Install Filezilla as service

See also the XAMPP for Windows FAQ Page

Nullsoft Install System v2.20

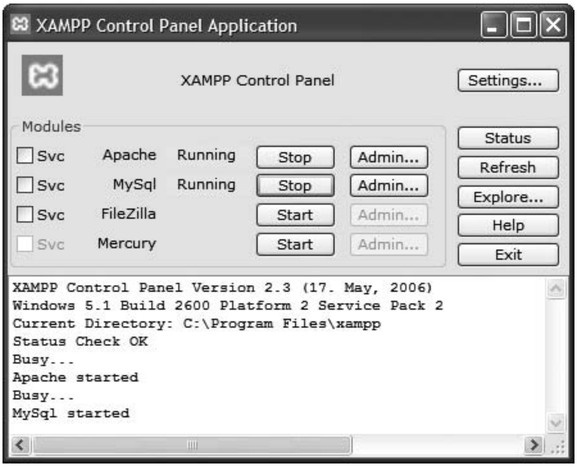
Figure 22-3:
If you plan on doing a lot of development, day in and day out, you might want to turn on the "Install Apache as service" and "Install MySQL as service" checkboxes. A service starts up every time you turn on your computer, so Apache, PHP, and MySQL are always running. However, if you won't be building database sites frequently, or you don't have a lot of RAM in your computer, don't turn on these boxes (you'll just have to manually start the servers when you wish to build dynamic pages, using the XAMPP control panel described on the next page).

7. **Finally, click the Finish button.**

   A window appears "congratulating" you (way to double-click the installer program!), and asking whether you wish to start the XAMPP Control panel.

8. **Click Yes, to open the XAMPP Control Panel** (**see Figure 22-4**).

   The XAMPP Control Panel lets you start and stop the Apache Web server and MySQL database server.



XAMPP Control Panel Application

XAMPP Control Panel

Modules

☐ Svc Apache Running

☐ Svc MySql Running

☐ Svc FileZilla

☐ Svc Mercury

```
XAMPP Control Panel Version 2.3 (17. May, 2006)
Windows 5.1 Build 2600 Platform 2 Service Pack 2
Current Directory: C:\Program Files\xampp
Status Check OK
Busy...
Apache started
Busy...
MySql started
```

Figure 22-4:
In this figure, both Apache and MySQL are currently running, as indicated by the word Running to the right of their names. Click the Stop buttons to turn the servers off. You can open the Control Panel by clicking the XAMPP Control Panel shortcut on your desktop.

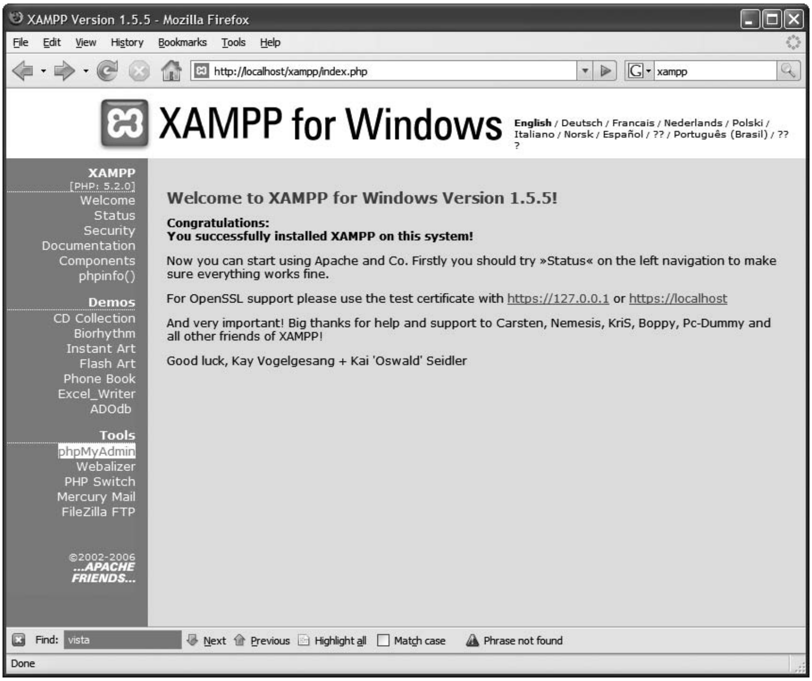
9. **If the buttons to the right of Apache and MySQL say Start, click them to start the Web server and the MySQL database server.**

You probably get a Windows security alert about both MySQL and Apache: Click the Unblock button in both cases. This action allows the two servers to run, and tells the Windows firewall protection service that everything is OK.

If Apache and MySQL are already running, these buttons say Stop. (Clicking them turns off the Web server and MySQL.) Whenever you start Apache, PHP automatically starts as well. At this point, you should have a complete testing server running on your machine. You just need to make sure it's working.

10. **To do so, launch a Web browser, and, in the Location bar, type *http://localhost/*.**

    You encounter a page that lists a bunch of languages; click the language you prefer, and you're taken to a kind of Web-based control panel for XAMPP (Figure 22-5).



Welcome to XAMPP for Windows Version 1.5.5!

Congratulations:
You successfully installed XAMPP on this system!

Now you can start using Apache and Co. Firstly you should try »Status« on the left navigation to make sure everything works fine.

For OpenSSL support please use the test certificate with https://127.0.0.1 or https://localhost

And very important! Big thanks for help and support to Carsten, Nemesis, KriS, Boppy, Pc-Dummy and all other friends of XAMPP!

Good luck, Kay Vogelgesang + Kai 'Oswald' Seidler

Figure 22-5:
Once installed, you can view your XAMPP home page from http://localhost/xampp/. From the left-hand list of links, you can access helpful programs and information, such as phpMyAdmin (for working with the MySQL database) and phpinfo() for finding out more about the server setup.

Once you've installed XAMPP, you'll see a shortcut called XAMPP Control Panel on your desktop. Double-click this icon to control the servers you've just installed—you can turn the servers off and on, as well as turn them into services (which launch each time you start up your computer).

Note: To uninstall XAMPP, just go to the location where you installed XAMPP (like C:\XAMPP\ or C:\Program Files\XAMPP\) and run the program named Uninstall.exe. This action, however, deletes any databases you created, and destroys any Web pages that you placed on the server. To prevent this process, just follow these steps: First, use phpMyAdmin to export any database you wish to save (you can find instructions at *http://php.about.com/od/learnmysql/ss/mysql_backup_3.htm*), and then make a copy of the files located in the C:\Program Files\XAMPP\htdocs folder.

For more information on XAMPP, including even more detailed installation and setup instructions, visit *www.apachefriends.org/en/xampp-windows.html*.

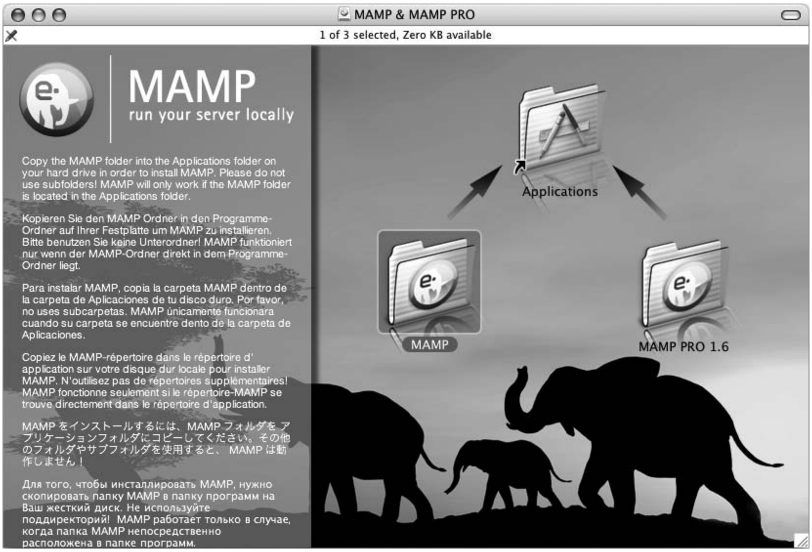
Setting Up a Testing Server for Mac OS X

Although XAMPP comes in a Mac OS X version, it's not really the best choice for Mac people. XAMPP for Mac isn't as well updated as its Windows counterpart, and the initial setup isn't very Mac-like. MAMP, which is also free and easy to install, is a better option.

1. **Download the software at: *www.living-e.com/products/MAMP-PRO/download.php*.**

   Under the heading Installation Packages, you should see a link for MAMP and MAMP Pro 1.6 (or whatever the current version is). It's a big download, so it takes a while to complete. (MAMP is free, but the download also includes the commercial product, MAMP Pro, which makes administering MAMP easier. You don't need MAMP Pro for this tutorial, and you don't have to install it either.)

   Once downloaded, the file (named something like MAMP_1.6_universal.dmg.zip) unzips itself, and appears in the list of volumes in a Finder window. In addition, the window pictured in Figure 22-6 should appear. (You may need to double-click the .zip file to unzip its contents.)



Copy the MAMP folder into the Applications folder on your hard drive in order to install MAMP. Please do not use subfolders! MAMP will only work if the MAMP folder is located in the Applications folder.

Kopieren Sie den MAMP Ordner in den Programme-Ordner auf Ihrer Festplatte um MAMP zu installieren. Bitte benutzen Sie keine Unterordner! MAMP funktioniert nur wenn der MAMP-Ordner direkt in dem Programme-Ordner liegt.

Para instalar MAMP, copia la carpeta MAMP dentro de la carpeta de Aplicaciones de tu disco duro. Por favor, no uses subcarpetas. MAMP únicamente funcionara cuando su carpeta se encuentre dento de la carpeta de Aplicaciones.

Copiez le MAMP-répertoire dans le répertoire d' application sur votre disque dur locale pour installer MAMP. N'outilisez pas de répertoires supplémentaires! MAMP fonctionne seulement si le répertoire-MAMP se trouve directement dans le répertoire d'application.

MAMP をインストールするには、MAMP フォルダを アプリケーションフォルダにコピーしてください。その他のフォルダやサブフォルダを使用すると、 MAMP は動作しません！

Для того, чтобы инсталлировать MAMP, нужно скопировать папку MAMP в папку программ на Ваш жесткий диск. Не используйте поддиректорий! MAMP работает только в случае, когда папка MAMP непосредственно расположена в папке программ.

***Figure 22-6:** Installing MAMP is just a matter of downloading a DMG (disk image) file, unzipping it, and dragging the MAMP folder into your Applications folder.*

2. **Drag the MAMP folder (not the MAMP Pro folder) into your Applications folder (see Figure 22-6).**

   That's it! You've just installed the world's most popular and powerful Web server (tell your IT guys that the next time they say it'll take two weeks for them to fix your email problem).

Now, you need to start the Web server.

3. **In Applications → MAMP, start the MAMP program, and then click the Start Servers button if a red light appears to the left of either Apache or MySQL (see Figure 22-7).**

   The MAMP program (see Figure 22-7) lets you start and stop the Web and MySQL servers, as well as set preferences for how each server works.

   At this point, you have a functioning Web server, database server, and application server on your Mac. (PHP starts automatically whenever you start Apache.) You need to take care of one last thing before seeing if the server works; step 4 has the details.

Tip: Since you'll frequently access the MAMP program to turn the Web server on and off, it's a good idea to add it to the OS X Dock.

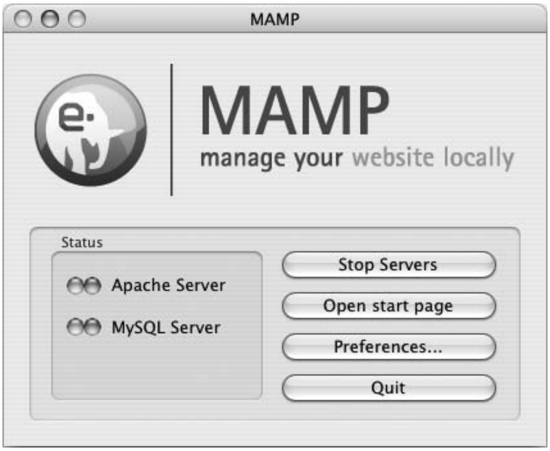
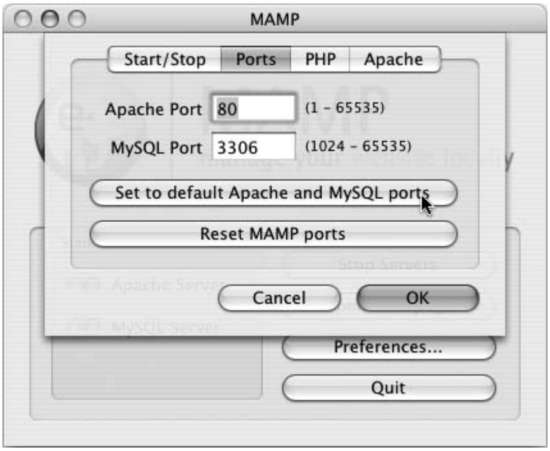


Figure 22-7:
When the servers are running, a green button to the left of Apache Server and MySQL Server lights up. To stop the servers, click the Stop Servers button. A red light next to either server indicates that the server is turned off.

4. **In the MAMP program, click the Preferences button, and then click the Ports tab (see Figure 22-8).**

   Ports are virtual entryways that manage how other computers access different server programs on your Mac. For example, you can assign a Web server to a particular port number, and then all requests for Web pages are directed to that port. By convention, port 80 is reserved for Web servers; Web browsers therefore normally request Web pages over that port.

   When you visit *www.cosmofarmer.com*, you're really visiting port 80 of the server that's hosting *www.cosmofarmer.com*. Port 3306 is most commonly used for MySQL. However, out of the box, MAMP uses ports 8888 and 8889 for Apache and MySQL, respectively. Unfortunately, this system means you need to tack on the port number whenever you request a Web page from your testing server. So instead of typing *http://localhost/* into a Web browser, to go to the home page for your local server, you must type *http://localhost:8888/*. This is a bit of a pain. Fortunately, it's easy to change.



Apache Port 80 (1 - 65535)

MySQL Port 3306 (1024 - 65535)

Figure 22-8:
After installing MAMP it's a good idea to set Apache and MySQL to their normal port settings of 80 and 3306. You can't do this setting, however, if you don't have administrator privileges for your computer. In that case, you have to stick to the 8888 and 8889 port settings that MAMP ships with. When you visit a Web page running on your local server, you have to add the port, like this: http://localhost:8888/my_cool_page.php.

5. **Click the "Set to default Apache and MySQL ports" button (see Figure 22-8), and then click OK.**

   You need administrator privileges to make these port changes, so you're prompted to enter your administrator's password. (If you're not using an administrator's account, see Figure 22-8.) Now it's time to see if everything worked.

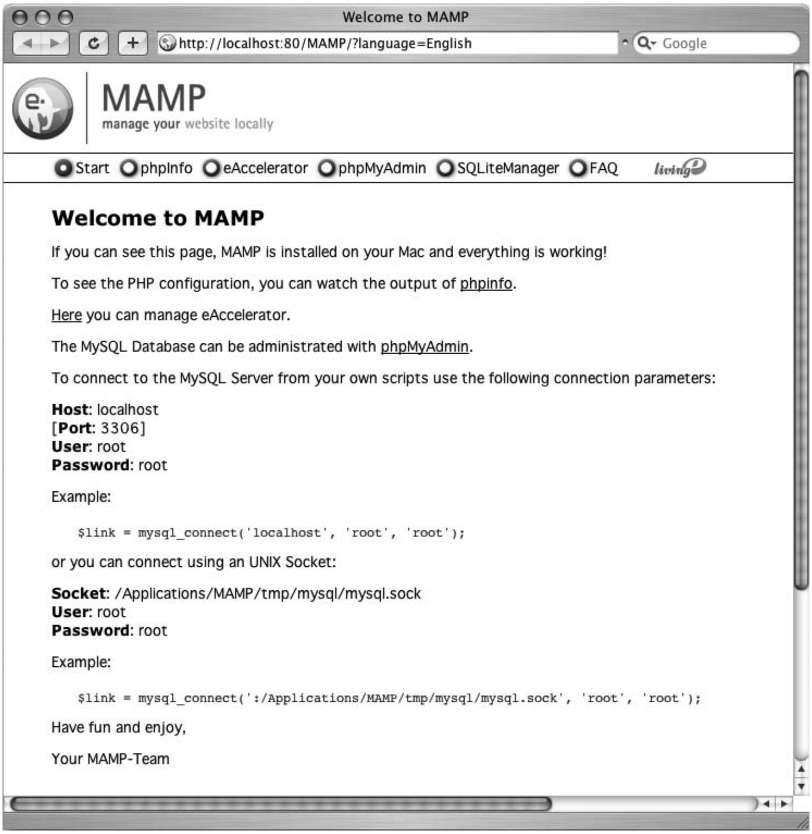
Note: Mac OS X ships with a version of Apache already installed. If you have it running when you install MAMP, you can't set the MAMP Apache port to 80. In this case, turn off Apache on your Mac by opening System Preferences. Click the Sharing tab, and then turn off the Personal Web Sharing checkbox. Now you can complete steps 4 and 5 above to set up MAMP's Apache on port 80.

6. **In the MAMP program window, click the "Open start page" button (see Figure 22-7).**

   The home page for your new MAMP installation appears (see Figure 22-9). If you see the page, you know everything is set up correctly—you're actually viewing this page through an active Web server on your own computer (pretty cool and geeky stuff). From this page you can access phpMyAdmin, a Web-based tool for managing a MySQL database (you'll be using phpMyAdmin to help set up the database for the tutorials).

   You can find a helpful forum for asking questions and learning more about MAMP at *http://forum.mamp.info/index.php?c=2*.

To remove MAMP, simply drag the MAMP folder into the trash; but first remember to remove any Web page files you've created in the *htdocs* folder, and back up your MySQL database if you want to keep the data in it. You can learn how to back up a MySQL database at *http://php.about.com/od/learnmysql/ss/mysql_backup_3.htm*.



Welcome to MAMP

If you can see this page, MAMP is installed on your Mac and everything is working!

To see the PHP configuration, you can watch the output of phpinfo.

Here you can manage eAccelerator.

The MySQL Database can be administrated with phpMyAdmin.

To connect to the MySQL Server from your own scripts use the following connection parameters:

Host: localhost
[**Port**: 3306]
User: root
Password: root

Example:

```
$link = mysql_connect('localhost', 'root', 'root');
```

or you can connect using an UNIX Socket:

Socket: /Applications/MAMP/tmp/mysql/mysql.sock
User: root
Password: root

Example:

```
$link = mysql_connect(':/Applications/MAMP/tmp/mysql/mysql.sock', 'root', 'root');
```

Have fun and enjoy,

Your MAMP-Team

Figure 22-9:
The MAMP home page gives you access to a few useful tools, including phpMyAdmin, which you'll use for working with MySQL databases. You can always get to the MAMP homepage by typing its URL in a Web browser: http://localhost/MAMP; or, in the MAMP controller program, clicking the Open Start Page button (Figure 22-7).

Localhost and the Htdocs Folder

If you followed the previous instructions and installed a testing server on your computer, you've already visited a Web page at either *http://localhost/xampp* or *http://localhost/MAMP* (the home pages for XAMPP or MAMP). You may be wondering, what's this *localhost* thing? For a computer, "localhost" is just another way of saying "me." When you instruct a browser to go to *http://localhost*, you're merely telling it to look for a Web server running on the same computer as the Web browser. Normally, when you visit a Web site, you type a Web address like *http://www.google.com/*. That sends your Web browser out over the Internet looking for a Web page located on some computer identified as *www.google.com*. When you've set up a Web server on your own computer, and you wish to view the Web pages you've placed there, the Web browser need look no further than your own computer.

But once the browser asks the local Web server to give it a Web page, where does the Web server find that page on your computer? When working with static Web pages (like the ones you built earlier in this book), you can keep your Web site files pretty much anywhere you want: on your desktop, in your Documents folder, on an external hard drive, and so on. Dynamic pages, on the other hand, work only with a Web server, and must reside in a particular location on your computer in order for the Web server to find them.

That folder is called the *site root* folder (you may also hear it referred to as the *document root)*. The exact name and location of the site root folder varies from system to system. For example, different Web hosting companies have different setups, and might name the folder *htdocs*, *webdocs*, or *public_html*. XAMPP and MAMP both use a folder named *htdocs* as the site root folder. For XAMPP users, that folder is located in the *htdocs* folder in your XAMPP installation (C:\Program Files\xampp\htdocs, for example); for MAMP folks, head over to Applications → MAMP → htdocs.

In the case of XAMPP, if you type *http://localhost/my_page.html* into your browser, the browser requests a file named *my_page.html* from the Web server running on your computer. The Web server then looks inside C:\Program Files\xampp\htdocs for a file named *my_page.html*; if it finds it, the server sends the file back to the browser. On a Mac running MAMP, the Web server would look in Applications → MAMP → htdocs for the file *my_page.html*.

Note: If you don't specify a particular file—for example, you just surf to *http://localhost/*—the Web server looks for a "default file" (usually named *index.html* or *index.php*) as described on page 560.

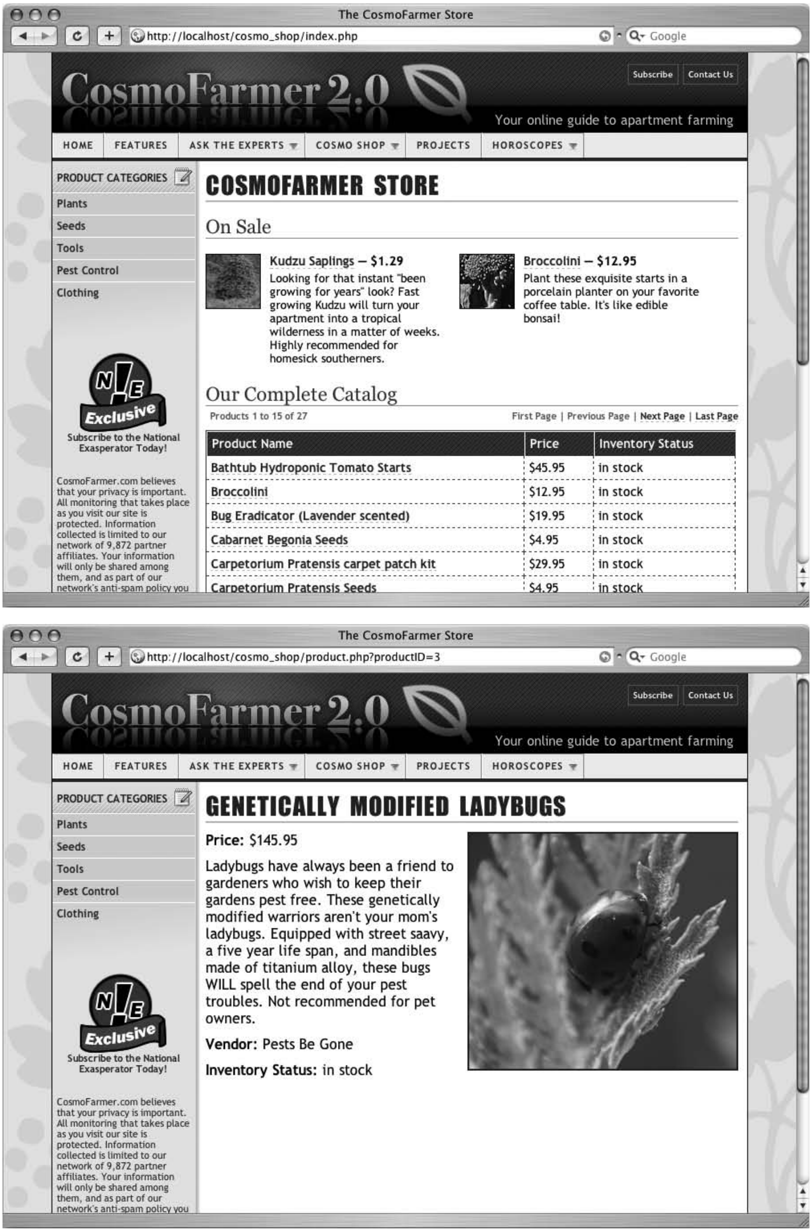
Remember, when you're working on a dynamic, database driven site, you need to keep your Web site files inside the site root folder for your testing server. If you don't, Dreamweaver doesn't let you start building database-driven pages.

Tip: You can also put your site files in a folder *inside* the site root folder. If you placed a folder named *store* in the *htdocs* folder, you could visit a Web page named *products.php* inside that folder by browsing to *http://localhost/store/products.php*.

Setting Up Dreamweaver

To learn how to use Dreamweaver's dynamic features, you'll be building a small Web application for CosmoFarmer.com (see Figure 22-10). In fact, you'll turn the site's online store into a group of dynamic Web pages that retrieve information from a database, and merge it with existing HTML code.

Before you begin building the page, download the tutorial files. As always, you can find them at *www.sawmac.com/dwcs3/*; click the Tutorials link to go to the tutorials page and download the files. If you've done any of the previous tutorials, you've already downloaded the necessary files. The files for this section of the book are inside the *php_dynamic* folder, which is located inside the *MM_DWCS3* folder. Inside the *php_dynamic* folder you'll find another folder named *cosmo_store*, and a file named *cosmofarmer.sql*.



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Product Name	Price	Inventory Status
Bathtub Hydroponic Tomato Starts	$45.95	in stock
Broccolini	$12.95	in stock
Bug Eradicator (Lavender scented)	$19.95	in stock
Cabarnet Begonia Seeds	$4.95	in stock
Carpetorium Pratensis carpet patch kit	$29.95	in stock
Carpetorium Pratensis Seeds	$4.95	in stock

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GENETICALLY MODIFIED LADYBUGS

Price: $145.95

Ladybugs have always been a friend to gardeners who wish to keep their gardens pest free. These genetically modified warriors aren't your mom's ladybugs. Equipped with street saavy, a five year life span, and mandibles made of titanium alloy, these bugs WILL spell the end of your pest troubles. Not recommended for pet owners.

Vendor: Pests Be Gone

Inventory Status: in stock

Figure 22-10: *Whenever you need to display lots of similar information, dynamic Web pages may be the answer. Dynamic pages at the CosmoFarmer online store list many different products. Because all the product information is stored in a database, it takes only two dynamic pages to display a complete list of products (top), as well as detailed information for each individual product (bottom).*

To begin, move the *cosmo_store* folder into the newly installed Web server's root folder. If you followed the previous directions, the root folder on Windows should be in C:\Program Files\xampp\htdocs, while the root folder for Macs is in Applications → MAMP → htdocs. Place *cosmo_shop* inside the *htdocs* folder. To make sure you've set this up right, open a Web browser, and then, in the Address bar, type *http://localhost/cosmo_shop/*. If a Web page appears, your Web server is set up correctly.

The first step in working on this dynamic Web application is defining a new site. The process of defining a dynamic site, as outlined in the following steps, is slightly different than for static sites, but no harder:

1. **Start Dreamweaver, and then choose Site → New Site.**

   The Site Definition window opens. Because there are more things to keep track of when setting up a dynamic site, it's easiest to use Dreamweaver's Site Wizard.

2. **If it isn't already selected, click the Basic tab at the top of the window.**

   First, you need to give this new site a name.

3. **Type *Cosmo Shop* in the first box, and *http://www.cosmofarmer.com/cosmo_shop/* in the second box.**

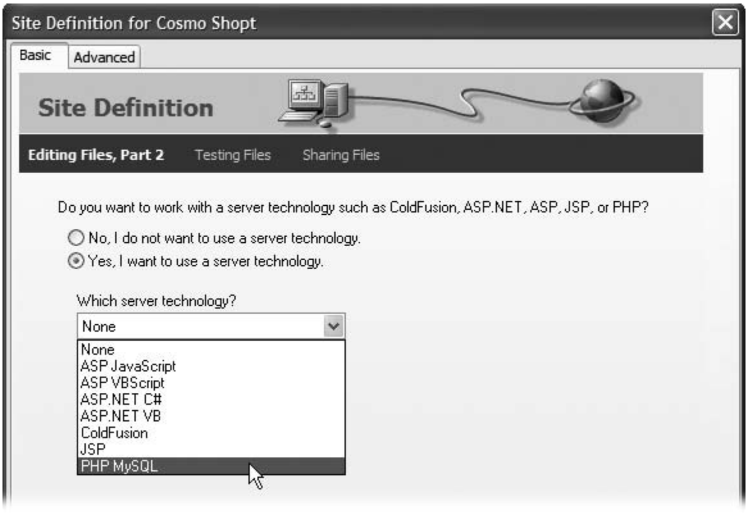
   You've just told Dreamweaver the name you want to use while working on this site, and the URL of the Web site. In this case, you're actually just working on one part of the CosmoFarmer site, the store, which is located in a folder (*cosmo_shop*) within the main site. In a real-world scenario, you'd type the address of your Web site.

4. **Click Next.**

   The next screen lets you choose whether you're building a static or dynamic Web site.

5. **Select "Yes, I want to use a server technology," and then, from the pop-up menu, choose "PHP MySQL" (see Figure 22-11). Click Next to proceed.**

   In the next step, you'll tell Dreamweaver where your local files are, and where you intend to put the files for the testing server.



Site Definition for Cosmo Shopt

Do you want to work with a server technology such as ColdFusion, ASP.NET, ASP, JSP, or PHP?

○ No, I do not want to use a server technology.

● Yes, I want to use a server technology.

Which server technology?

None

Figure 22-11:
When building a dynamic site, you must choose one of seven different server models. There are actually only five different application servers, but since Dreamweaver lets you use two different languages for both ASP and ASP.NET, there are two server models for each of those application servers.

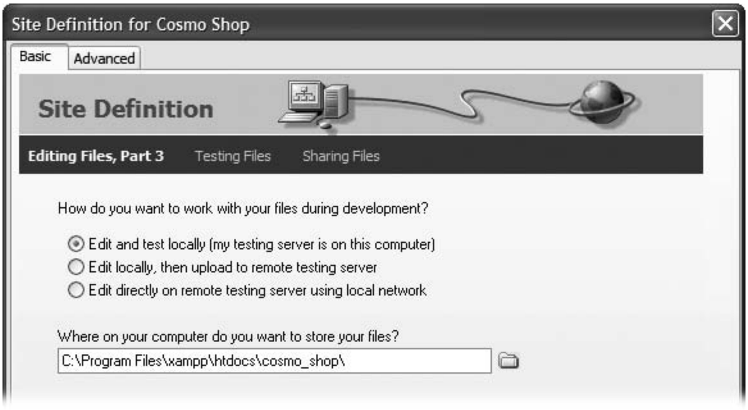
6. **Select "Edit and test locally"** (see Figure 22-12).

   Dreamweaver provides three ways to work with dynamic Web page files and a testing server.

   "Edit and test locally" is a good choice when you've set up a Web and application server on your computer (as you've done in this tutorial). Essentially, you're working on Web pages located on a functioning Web server. In this way, you preview the pages running on a real Web server, so you can immediately test out all the nifty dynamic stuff.

   Use the other two options when the testing server is located on another computer. This computer may be one on your local network or a full-fledged Web server running on the Internet that you connect to using FTP.

   "Edit locally, then upload to remote testing server" is a good option if you already set up a Web site with a Web hosting company, and you can't run a testing server on your computer—for example, if you're building ASP pages but you're on a Mac.



Site Definition for Cosmo Shop

Basic | Advanced

Site Definition

Editing Files, Part 3 | Testing Files | Sharing Files

How do you want to work with your files during development?

● Edit and test locally (my testing server is on this computer)
○ Edit locally, then upload to remote testing server
○ Edit directly on remote testing server using local network

Where on your computer do you want to store your files?

C:\Program Files\xampp\htdocs\cosmo_shop\

Figure 22-12: *Dreamweaver provides different ways to work with dynamic Web page files on a testing server. If you don't have a working Web server on your computer, but do have an account with a Web hosting company that recognizes one of Dreamweaver's server models, you can use that server to test your files. Choose the second option: "Edit locally, then upload to remote testing server." This method is a bit laborious–you edit the pages on your computer; then, when you test them (a simple F12 [control-F12] to see if they'll work), Dreamweaver connects to your Web server, uploads the file, launches your Web browser, and loads the page from your Web site. But it's one way to get started building dynamic Web sites.*

People don't use the last option often, but if your company happens to have its own in-house Web server, to which you can connect over a local network, then you can use this option. But, in general, it's best not to work on a live Web server—your works-in-progress might be viewable by anyone with a Web browser. In addition, if more than one person is working on the Web site at the same time, you should use some kind of version control system to make sure no two people are working on the same file at the same time (Dreamweaver's Check In/Check Out system is one method—see page 628).

The next step involves telling Dreamweaver where to find the files for the Web site.

7. **Click the folder at the right side of the middle of the window; navigate to and select the cosmo_shop folder on the Web server. Click Next.**

   If you're following along using XAMPP, you'll find the *cosmo_shop* folder at C:\Program Files\xampp\cosmo_shop; MAMP folks can find it at Applications → MAMP → htdocs → cosmo_shop.

8. **Type *http://localhost/cosmo_shop/* in the box, and then click Test.**

   Dreamweaver may have already filled in this box. If the test server is running on your computer, the URL begins with *http://localhost/* and ends with the folder that contains the Web pages. In this case, the URL is *http://localhost/cosmo_shop/*.

Note: If you're running MAMP and can't change the port Apache uses as described on page 760, you need to add the port number 8888 to the URL, like this: *http://localhost:8888/cosmo_shop/*.

If you get an error message when you click Test, you've probably entered the wrong URL. You can make this mistake when the folder following *localhost* in the URL is not actually in the site root folder of the testing server, or the Web server isn't running (to start the XAMPP Web server, see page 757; MAMP people turn to page 759).

9. **Click Next. Click No, and then click Next one more time.**

   If you were planning to move this site onto a Web server connected to the Internet, you would select Yes at this stage, and provide all the information needed to move your site files to the Internet as described in Chapter 17. But since this tutorial is just an exercise, you won't be putting it up on a live Web server.

10. **Click Done.**

    Dreamweaver has successfully set up your site. You're now ready to learn about databases, and set up a new database using the MySQL server.

Creating a Dynamic Page

Once you've set up an application server and a database server, you're ready to connect to a database, retrieve information, and display it on a Web page.

You already know how to handle the first step: Design an HTML page to display the database information. Dynamic pages differ from regular HTML pages in a couple ways. For starters, the name of a dynamic file doesn't end with .html. Depending on which server model you use, dynamic pages end in .php (for PHP pages), .asp (ASP), .aspx (.Net), .cfm or cfml (Cold Fusion), or .jsp (JavaServer

Pages.) The file extension you use is important: A Web server uses it to identify the type of page requested. If a Web server gets a request for an .html file, it simply finds it and sends it to the Web browser. But if it gets a request for a page that ends in, say, .php, it will send the page to the application server to sort out all the messy programming.

The good news is that the basic process of creating a new, blank, dynamic page is the same as with a regular HTML page:

1. **Choose File → New to open the New Document window. Select the Blank Page category; from the Page Type list, choose a dynamic page type (PHP, ASP VBScript, ColdFusion, or whatever).**

2. **From the Layout list, choose a layout (or none if you wish to start with a fresh, blank page), and then click the Create button.**

   When you save the file, Dreamweaver automatically adds the proper extension: .asp for ASP pages, .aspx for ASP.NET, .cfm for ColdFusion, .jsp for JSP, or .php for PHP pages.

3. **Right-click (Control-click) in the Site panel; choose New File from the shortcut menu.**

   Dreamweaver creates a file in the correct server model format, with the proper extension.

Note: Just renaming a file in the Sites panel (from *about.html* to *about.asp*, for example) does *not* give the file the code necessary to apply the correct server model to the page. This fact holds true for ASP, .NET, and JSP pages. (However, PHP and ColdFusion pages don't start life within any special code, so you could start with a .html page, change the extension to .php, and then add PHP programming.) More importantly, changing the file's extension (from .asp to .php, for example) doesn't change the page to the new server model, either, and usually ends up "breaking" the page.

Once you've created the page, you can then use any of the page-building tools described in this book—Cascading Style Sheets, Spry Widgets, Library items, or whatever—to design the page. Even though the file's officially a PHP page, it still contains lots of HTML. Unlike a plain-vanilla HTML page, though, this one can also contain the server-side programming code that lets the page communicate with a database.

Finally, you can also edit the newly created page using either Design view or Code view. But before you can add dynamic content to a page, you need to create a connection to a database.

Databases: A Quick Introduction

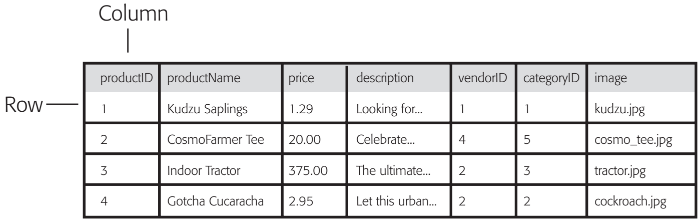
Simply put, databases store information. You encounter them every day in one way or another, whether charging a dinner on a credit card or calling Moviefone to get local movie listings.

A database is like an electronic filing cabinet that stores related information. At home, you might have a filing cabinet to store the bits and pieces of your life. You might have a filing folder labeled Insurance, in which you keep information about the various insurance policies you carry. Other folders might contain information on phone bills, car service records, and so on. Databases work more or less the same way, as the following sections explain.

Tables and Records

Databases have an electronic equivalent to filing folders: tables. A *table* is a container that holds information about a set of similar items. In the *CosmoFarmer* online store database, one table stores information on all the products for sale on the site.

This "Products" table tracks certain information—the name of the product for sale, its price, a short description, and a few other items. Each piece of information, like price, is stored in a column. All the information for each product (all the columns taken together, in other words) makes up a single *record*, which is stored in a row (see Figure 22-13).



productID	productName	price	description	vendorID	categoryID	image
1	Kudzu Saplings	1.29	Looking for...	1	1	kudzu.jpg
2	CosmoFarmer Tee	20.00	Celebrate...	4	5	cosmo_tee.jpg
3	Indoor Tractor	375.00	The ultimate...	2	3	tractor.jpg
4	Gotcha Cucaracha	2.95	Let this urban...	2	2	cockroach.jpg

Figure 22-13:
This diagram shows part of the Products table's structure, and information for four records. Each row in a table represents a single record, or item, while each piece of information for a record is stored in a single field, or cell.

If you were designing a database, you'd try to model a table on some real-world item you needed to track. If your database was used for generating invoices for your business, you might have a table called Invoices in which you'd store information such as the invoice number, date, and so on. Since your customers are another source of data that needs tracking, you'd also create a table called Customers to store the information about them.

Tip: If you're designing a database to track a business process that you already track on paper, a good place to start is with the paper forms you use. If your company uses a personnel form for collecting information on each employee in the business, you've got a ready-made database table. Each box on the form is the equivalent of a category column in a table.

In addition to the Products table, CosmoFarmer also tracks the vendors who manufactured the products. (After all, after they run out of inventory, the online store staff will need to order more products from their vendors.) Because a product and a vendor are really two different things, the database has a *second* table, called Vendors, that lists all the companies that make the products for sale on the Web site.

Note: Some databases are extremely picky about the names you give your tables and database columns (also called fields). For example, you can't have a database column named Date in an Access database.

You might think, "Hey, let's just put all that information into a single table." After all, you could consider the vendor's information part of the information for each product. While it seems like this method might simplify things (because you'd have one table instead of two), it can actually create a lot of problems.

Imagine a scenario where CosmoFarmer stores both product and vendor information in a single table: CosmoFarmer begins selling a hot new item, *Kudzu seeds*, from Seeds R' Us. All the product information, including the name and price of the plant, as well as the phone number and mailing address for Seeds R' Us, are stored in a single table row. Next month, Seeds R' Us offers another new product, Eucalyptus Saplings, as part of its "invasive plant of the month club." But, in the meantime, Seeds R' Us has moved locations and changed its phone number. So when someone at CosmoFarmer adds the new plant to the Products database, she adds the new phone number and address as part of the new plant's record.

Now the database contains *two* sets of contact information for Seeds R' Us—one for each plant. Not only does this redundant data take up extra space, but the contact information in one record is now wrong.

You could run into an even worse problem when deleting a record. Suppose that the online store decides to discontinue the two plants from Seeds R' Us. If a *CosmoFarmer* staffer removes those two records from the database, she also deletes any contact information for Seeds R' Us. If the *CosmoFarmer* staff ever decide to stock up on kudzu again, they have no way of contacting the vendor.

So you can see why it's prudent to keep separate classes of information in different tables. With two tables, when Seeds R' Us moves, you have to update only the information in the Vendors table, without touching the Products table at all. This way, if the staff deletes a product, they still have a way of contacting the vendor to learn about new products.

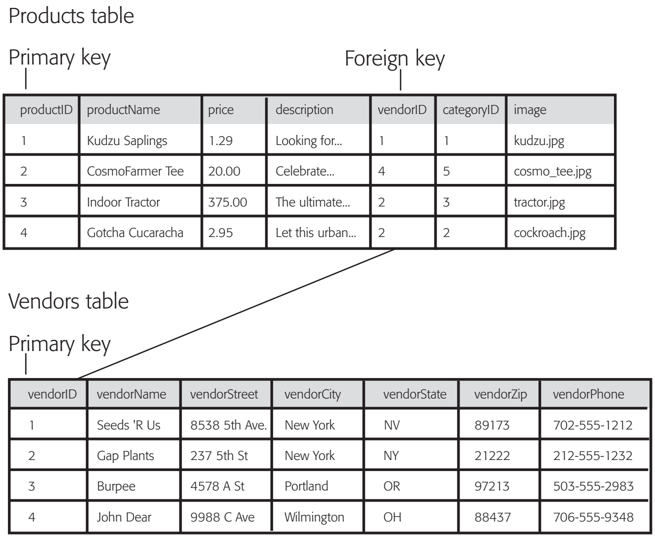
You may be wondering, with a setup like this, how to tell which vendor makes which product. All you have are two distinct tables—one with just product information and one with just vendor information. How do you make the connection?

Tip: For a great book on database design, check out *Database Design for Mere Mortals* (Addison-Wesley Professional) by Michael J. Hernandez. For concise, online introductions to database design, visit *www.geekgirls.com/databases_from_scratch_1.htm* and *www.campus.ncl.ac.uk/databases/design/design.html*.

Relational Databases

To connect information between tables, you create a *relationship* between them. In fact, databases that use multiple related tables are called *relational databases*.

The most common way to connect tables is by using what's called a *primary key*—a serial number or some other unique identifying flag for each record in the table. In the case of the *CosmoFarmer* database, the Products table includes a field named *productID*, the product's identification number (see Figure 22-14). Whenever a product is added to the database, it's assigned a new number (usually by the database server itself). If you're building a database that contains a table about employees, you might use an employee's Social Security number as a primary key, or an internal employee ID number based on your company's own cryptic method of identifying employees.



productID	productName	price	description	vendorID	categoryID	image
1	Kudzu Saplings	1.29	Looking for...	1	1	kudzu.jpg
2	CosmoFarmer Tee	20.00	Celebrate...	4	5	cosmo_tee.jpg
3	Indoor Tractor	375.00	The ultimate...	2	3	tractor.jpg
4	Gotcha Cucaracha	2.95	Let this urban...	2	2	cockroach.jpg

vendorID	vendorName	vendorStreet	vendorCity	vendorState	vendorZip	vendorPhone
1	Seeds 'R Us	8538 5th Ave.	New York	NV	89173	702-555-1212
2	Gap Plants	237 5th St	New York	NY	21222	212-555-1232
3	Burpee	4578 A St	Portland	OR	97213	503-555-2983
4	John Dear	9988 C Ave	Wilmington	OH	88437	706-555-9348

Figure 22-14:
Each table in your database should have a primary key–a column that contains a unique identifier for each record in a table. To relate information from one table to another, people often add an additional column with information pertaining to another table. In this case, a column called vendorID in the Products table contains a primary key from the Vendors table. To determine which vendor distributes, say, the Gotcha Cucarache, look at the fifth column in the Products table, which identifies the vendor's ID number as 2. When you check the Vendors table, you see that vendor 2 is Gap Plants. A column that contains the primary key of another table is called a foreign key.

The Vendors table has a primary key named, not so creatively, *vendorID*. This key is generated automatically whenever a new vendor is added to the database.

To join these two tables, you'd add another column called vendorID to the Products table (see Figure 22-14). Instead of storing *all* the contact information for a vendor within the Products table, you simply store the vendor's ID number. To find out which vendor makes which product, you can look up the product in the Products table, find the vendor's ID number in the vendorID column, and use *that* information to look up the vendor in the Vendors table.

While this hopscotch approach of accessing database tables is a bit confusing at first, it has many benefits. Not only does it prevent the kinds of errors mentioned earlier, it also simplifies the process of adding a new product from a vendor. When Seeds R' Us adds a third plant to their collection, a store staff person determines whether any of Seeds R' Us' info has changed (by checking it against the Vendors table). If not, she simply adds the information for the new product, and leaves the vendor's contact info untouched. Thus, relational databases not only prevent errors, they also make data entry faster.

Databases, of course, can be much more complicated than this simple example. It can take many tables to accurately hold the data needed to run a complex e-commerce site such as Amazon.com. In some cases, you may already be working with a previously created database, so you won't have to worry about creating one or even learning more than what's described above. For the tutorials in this section of the book, you'll use the already created *CosmoFarmer* database.

Loading a Database

You need to install the data for the CosmoFarmer store in your new MySQL server. That process requires a few steps. First you'll create a new database; next, you'll load the data into this new database; finally, you'll create a new *user* for the database (a special account that you'll use for accessing and updating the database). The following steps lead you through everything.

1. **In any Web browser, type *http://localhost/xampp* (*http://localhost/MAMP* if you're on a Mac).**

   This action takes you to the main XAMPP (or MAMP) page on the new testing server. You'll use a program called phpMyAdmin to administer the MySQL server.

2. **Click the phpMyAdmin link.**

   In XAMPP, this link is located in the left-hand list of links under the Tools category. The MAMP homepage lists phpMyAdmin in the top navigation bar.

Tip: Since you'll frequently use phpMyAdmin to work with the MySQL database, it's a good idea to bookmark this page, so you can quickly return to it whenever you need.

3. **In the "Create new database" box, type *cosmofarmer* and then press the Create button (see Figure 22-15).**

   This step actually creates a new database on the MySQL server. In addition, it takes you to a new page that includes a row of buttons for working with the new database.

   Next you'll load an SQL file that creates the required tables, and adds the actual data to the database. SQL stands for Structured Query Language, and it's the language you use to communicate with databases: to read, edit, update and generally manipulate the structure and information in a database. You'll learn more about how to use SQL on page 793.

4. **In phpMyAdmin's top navigation bar, click the Import button.**

   Doing so takes you to a page that lets you type in an SQL query (see page 793) or load a text file that has SQL commands in it. You'll do the latter—load a text file that contains all the SQL necessary to create the tables and data for the database.

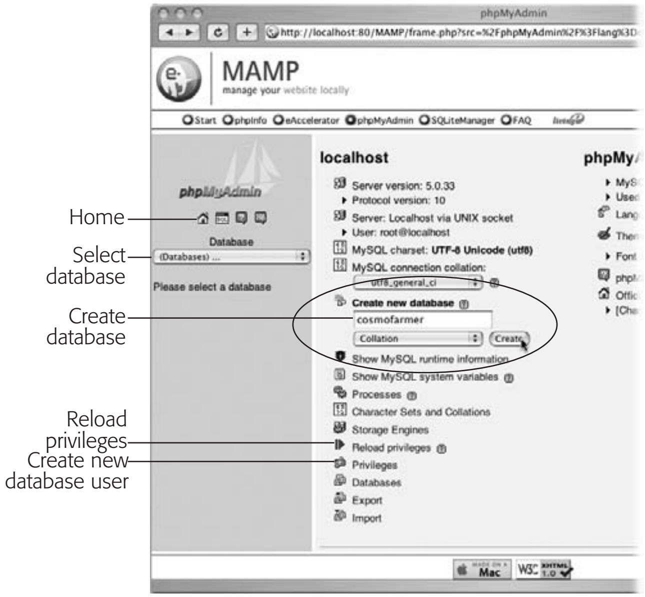


Figure 22-15:
The phpMyAdmin main page. Here you can create a new database, select an already created database to work with, and handle many administrative tasks for MySQL.

5. **Click the Browse button in XAMPP or the Choose File button in MAMP (circled in Figure 22-16). In the File Upload window that appears, navigate to and select the file *cosmofarmer.sql* in the *php_dynamic* folder you downloaded with the tutorial files.**

   As explained in the previous step, this file contains all the goodies that will appear in your database.

6. **Click the Go button (Figure 22-16, lower-right corner).**

   The MySQL server slurps down the SQL file, and executes the instructions found within it. The result? Four new tables are created, and a bunch of data is added to them. Your last step in prepping the database: Create a new MySQL user that has permission to add to and update the CosmoFarmer database.

7. **Click the link at the top of the page labeled *Server: Localhost*.**

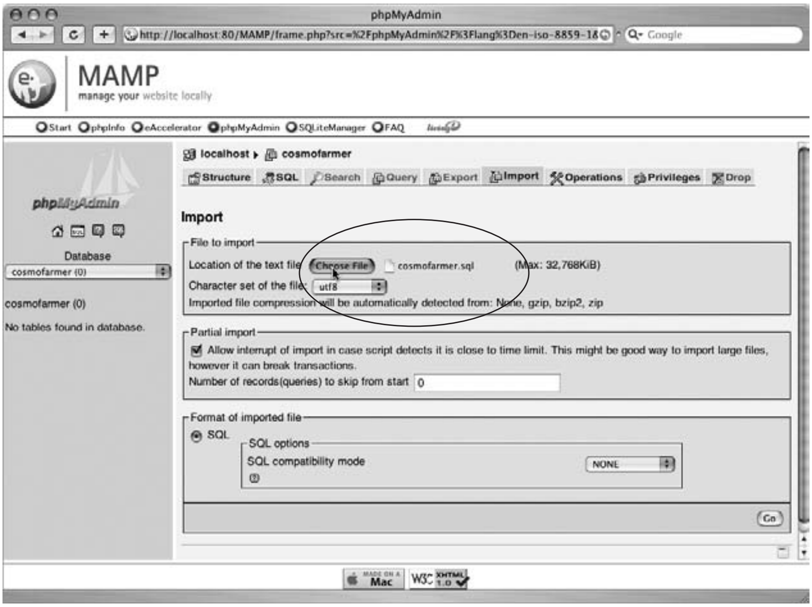
   Alternatively, you can click the small house icon in the left sidebar (see Figure 22-15). In either case, you return to the main phpMyAdmin page.

8. **In the middle column of links, click the Privileges link (see Figure 22-15).**

   This step opens the User page. From here, you can edit current users (for example, change a user password), and add new users.

9. **Click the "Add a new user" link.**

   The link appears under the list of current users. Clicking it opens the "Add a new User" page (see Figure 22-17).



Import

File to import

Location of the text file: Choose File cosmofarmer.sql (Max: 32,768KiB)

Character set of the file: utf8

Imported file compression will be automatically detected from: None, gzip, bzip2, zip

Partial import

☑ Allow interrupt of import in case script detects it is close to time limit. This might be good way to import large files, however it can break transactions.

Number of records(queries) to skip from start 0

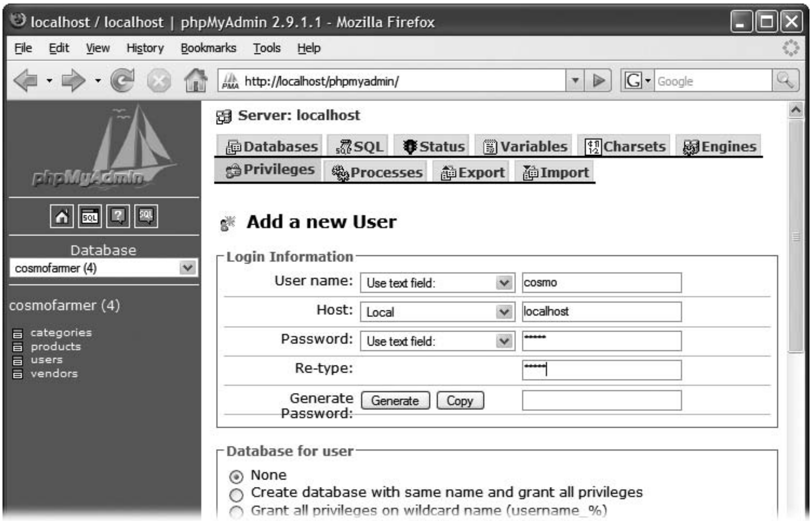
Format of imported file

● SQL

SQL options

SQL compatibility mode NONE

Figure 22-16: *phpMyAdmin lets you load an SQL file, and execute the SQL code inside the file. Translation: Talk to the database server and tell it to create tables and fields, and add data to them. This way is great for replicating data from another database. In fact, phpMyAdmin can help you export all the tables and data from any database to which it has access.*



Add a new User

Login Information

User name: Use text field: cosmo

Host: Local localhost

Password: Use text field: ******

Re-type: ******

Generate Password: Generate Copy

Database for user

● None

○ Create database with same name and grant all privileges

○ Grant all privileges on wildcard name (username_%)

Figure 22-17: *To create a new database user, just supply a name, choose where the user can access the database from (usually localhost), and then type a password.*

10. **Type *cosmo* for the user name and *localhost* for the Host. In the password field, type *cosmo*, and in the re-type box, type *cosmo* again. The screen should look like Figure 22-17.**

    This step creates a user whose name is *cosmo,* whose password is *cosmo,* and who can access the database only locally from the server. This means someone out on the Internet can't try to log in to the MySQL server using the cosmo account; only local access—for example, PHP pages being run on the same computer—is allowed.

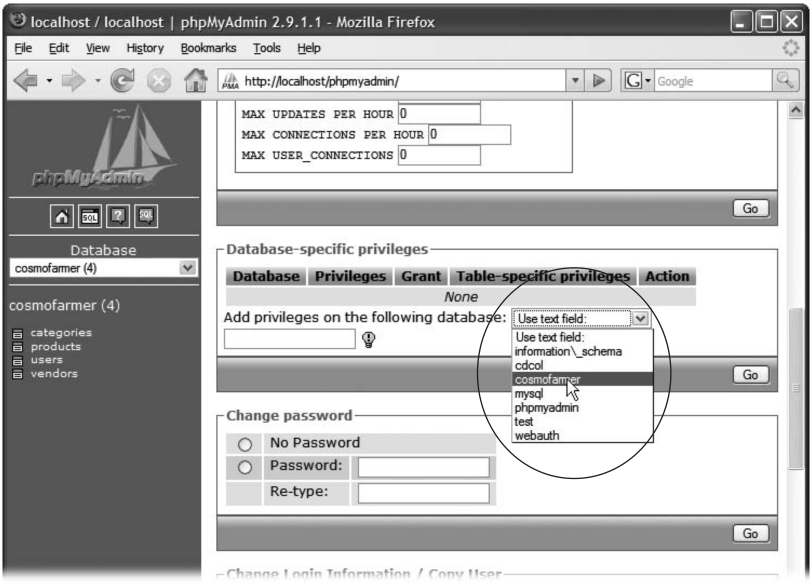
In general, it's a very bad idea to make a password the same as a user name, or to use any word that could be found in a dictionary, since it doesn't take much imagination for a hacker to figure this out and suddenly gain control of your database. But for this example application, it's best to keep things as simple as possible, so you can quickly get to the more interesting stuff (actually using Dreamweaver, for instance!).

11. **Scroll to the bottom of the page, and then, in the lower-right corner, click the Go button.**

    You've created the new user, cosmo, and now phpMyAdmin has taken you to another Web page so that you can tweak that user's privileges. In MySQL, you can limit which users have access to which databases, and how much power they have to work with the databases they do have access to. You could give a user the ability to read, update, and add data to a database, but prevent him from changing the structure of the database by adding or deleting tables. At this point, the cosmo user doesn't have any privileges, so you need to make sure cosmo can access the CosmoFarmer database.

12. **Scroll down the page to the "Database-specific privileges" section; select *cosmofarmer* from the database menu (circled in Figure 22-18).**

    This step takes you to yet another page, where you can specify what the user can and cannot do to the CosmoFarmer database.


localhost / localhost | phpMyAdmin 2.9.1.1 - Mozilla Firefox
File Edit View History Bookmarks Tools Help
http://localhost/phpmyadmin/
Google
phpMyAdmin
Database
cosmofarmer (4)
cosmofarmer (4)
categories
products
users
vendors
Go
Go
Go

```
MAX UPDATES PER HOUR 0
MAX CONNECTIONS PER HOUR 0
MAX USER_CONNECTIONS 0
```

Database-specific privileges

Database	Privileges	Grant	Table-specific privileges	Action
None				

Add privileges on the following database: Use text field:

Change password

○ No Password
○ Password:
Re-type:

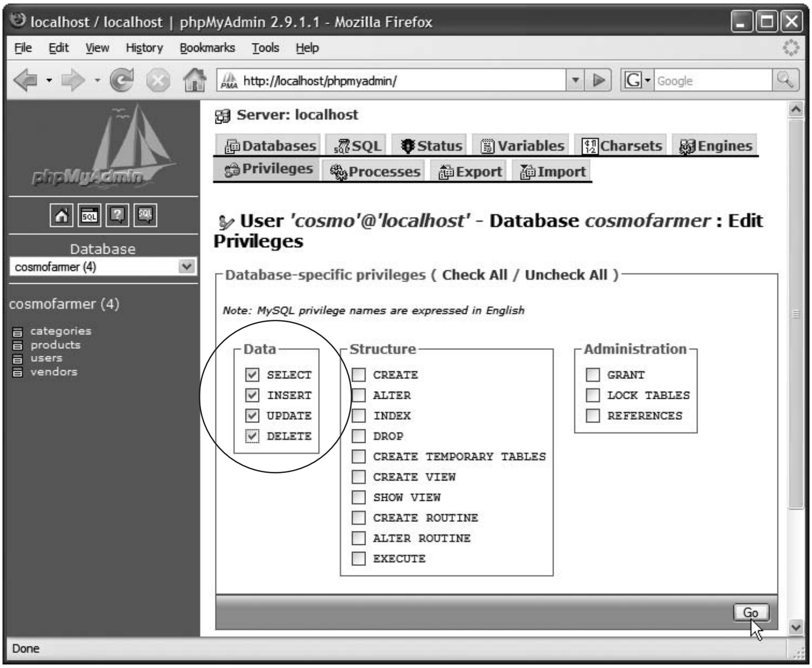
Change Login Information / Copy User

***Figure 22-18:** The MySQL database server can have dozens, even hundreds, of databases running on it at the same time. Usually, only the main MySQL administrator account, called the root user, can access all the databases. Individual users, like the cosmo user you just created, are frequently allowed to access only a single database.*

13. **In the Data column, turn on all the checkboxes—Select, Insert, Update, and Delete (circled in Figure 22-19). In the lower-right corner, click the Go button.**

You can give a user many different ways of interacting with a database, including some complex administrative functions that have the potential of wreaking havoc on the database. It's best to limit these "access privileges" to the minimum number each user needs. In this case, all the cosmo user needs to do is select (meaning retrieve data from the database), insert (put data into the database), update (edit data in the database), and delete (remove data from the database).

There's just one final step in setting up this new user: You must "flush" the database's privileges. Although it sounds like a high school prank, flushing privileges just means telling MySQL to activate the new user and its privileges.



User *'cosmo'@'localhost'* - Database *cosmofarmer* : Edit Privileges

Database-specific privileges (Check All / Uncheck All)

Note: MySQL privilege names are expressed in English

Data
☑ SELECT
☑ INSERT
☑ UPDATE
☑ DELETE

Structure
☐ CREATE
☐ ALTER
☐ INDEX
☐ DROP
☐ CREATE TEMPORARY TABLES
☐ CREATE VIEW
☐ SHOW VIEW
☐ CREATE ROUTINE
☐ ALTER ROUTINE
☐ EXECUTE

Administration
☐ GRANT
☐ LOCK TABLES
☐ REFERENCES

Figure 22-19: *This page lets you limit user access to just those functions the user needs for the task at hand. In this case, you use the cosmo user account in your PHP pages to access the database for routine database tasks such as adding, editing, deleting, and retrieving information from the database.*

14. **On the left sidebar, click the Home icon to return to the main phpMyAdmin page; once there, click the "Reload privileges" link in the middle list of options (see Figure 22-15).**

Alright, let's take stock of what you've done: set up the database, added the data, and created a new user. Wow. That was a lot of work, and you've barely touched Dreamweaver in this tutorial. Don't worry, all the hard work is behind you. Now it's time to use Dreamweaver to build the site.

Note: In many cases, when you set up an account with a Web hosting company, they supply you with an already created database and a user account for that database. Frequently, the database is named after your domain name or your account name with the Web host. When setting up MySQL on your machine as part of your testing environment, you should use the same user name and database name supplied by your Web hosting company. That way, when you've perfected your site on the testing server, you can simply transfer it to your Web host's server and the database connections should work perfectly.

Connecting to a Database

You've already defined a new site (back on page 762), so Dreamweaver knows that you'll be working on PHP pages, and knows the location the Web server's root folder. Now, you need to tell Dreamweaver how to connect to your newly created database. Fortunately, Dreamweaver makes this a snap.

1. **Return to Dreamweaver. From the Files Panel (Window → Files), double-click the file *index.php*.**

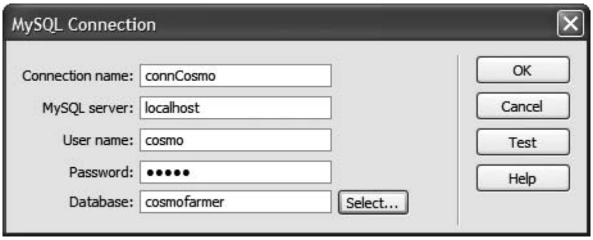
   The main page for the online store opens; this is a dynamic PHP page, which you need to have open in order to connect Dreamweaver to a MySQL database.

2. **Open the Databases panel by choosing Window → Databases.**

   The Application panel group opens. This is the control center for building dynamic Web pages.

3. **At the top left of the panel, click the plus sign (+) button. From the pop-up menu, choose MySQL connection.**

   The MySQL Connection window opens (see Figure 22-20). In this dialog box you let Dreamweaver know which database to connect to, where it's located, and the user name and password of the account that can access the database.


MySQL Connection

Connection name: connCosmo
MySQL server: localhost
User name: cosmo
Password: •••••
Database: cosmofarmer

Figure 22-20:
Setting up a Dreamweaver-to-MySQL-database connection requires just a few easy steps.

4. **In the "Connection name" box, type *connCosmo*.**

   You can use any name you want as long as it doesn't start with a number and doesn't contain any characters other than letters, numbers, and the underscore character. In this case, *conn* is a helpful indicator that this is a database connection, and makes identifying it easier if you ever need to look into the underlying code of the page.

Next, you'll tell Dreamweaver where the database is located.

5. **In the MySQL server box, type *localhost*.**

   In this case, both the Web server and MySQL are set up on the same computer (namely, yours). So when a dynamic page running on the testing server tries to connect to the MySQL database, the application server needs to look only on the same computer—"localhost"—to find the database.

   In many cases, the MySQL server provided by your Web hosting company is also located on the same server, so when you start building "real" PHP pages to put up on your own site, you can use *localhost* when creating the connection locally. This attribute is helpful, because it means you can develop your sites locally on your computer, move them onto the Internet, and they should be able to connect to the database without a problem.

   However, some Web hosts put their databases on separate machines dedicated to just that one task. In this case, the database connection on your local computer differs from the one you must put up on the Web server. You would need to edit the database connection, and replace *localhost*, which works for development and testing on your own computer, with the address of the MySQL server—this might be something like *mysql.webhost.com* or it might even be a basic IP address like *192.168.1.2* (don't use http://, or anything besides the server's address).

   Your Web hosting company can supply this information. Unfortunately this means that you need to change the connection file Dreamweaver creates to include the new address. Here's how: Before uploading your site, open the connection file. Do this either from the Databases panel (double-click the connection name to open it) or by looking in a folder name *Connections,* located in the local root folder of your site. In that folder you'll find a file named after the connection name you supplied when you created the connection—in this tutorial, that's step 4 above. So in this case the name of the connection file is *connCosmo.php*. Double-click this file, and then change *localhost* to the address of your Web host's MySQL database server. Then upload this file to your site (see page 620 for information on uploading Web files).

   You can then open the connection file again, and then change the database address back to *localhost.* This lets you continue to work and test on your local computer—just make sure you don't upload this file to the Web server, or you'll wipe out the connection file that you customized for your Web server, and your dynamic pages won't be able to connect to the database.

   This all assumes, of course, that the database and user name you set up on your testing server is the same as the one you use at your Web hosting company (see the Note on page 776). If not, you need to change the user name and password in the connection file before you transfer it to your Web server.

   Okay, with all *that* out of the way, back to our regularly scheduled programming: the MySQL Connection dialog box.

6. **Type *cosmo* in the user name box, and *cosmo* in the password box.**

This is the MySQL user name and password you created earlier when you set up the database.

7. **Click the Select button.**

   The Select Database window appears. This lets you pick which database you wish to connect to. In this case it's the CosmoFarmer online store database.

   If you get an error instead, check that you spelled *localhost* correctly, and that you supplied the right user name and password.

8. **Select *cosmofarmer*, and then click OK.**

   The dialog box closes, and *cosmofarmer* appears in the Database box at the bottom of the window. Click the Test button.

   A window saying "Connection was made successfully" should appear.

9. **Click OK to close the window that appeared when you tested the connection; click OK once more to close the MySQL Connection box.**

   Behind the scenes, Dreamweaver creates a small PHP file and stores it in a folder called Connections in your site's root folder. Whenever you create a dynamic page that communicates with the database, Dreamweaver adds a line of code pointing to this connection file. (The file's name reflects the connection name you typed in step 4—here it's *connCosmo.php*.)

Note: Don't delete the Connections folder. This folder holds a script that lets your pages connect to your database. If, while cleaning your site, you throw this folder away, you'll break the database connection for all your site's dynamic pages. If this happens, recreate the connection by following steps 3–9.

Exploring the Databases Panel

The Databases panel (Figure 22-21) lets you do more than just connect databases to your site. It also lets you explore a database's structure and data. By clicking the + sign buttons (flippy triangles on Macs), you can view any of three lists:

- **Tables** lists all the tables in the database (see page 768). Expanding a table displays all the columns for that table. You'll use this option most often.
- **Views** lists all *views* stored in the database. A view is a selection of data in the database—a slice of its data. Unless you've created views using the database systems tools, this list is empty. Only version 5 and later of MySQL support this feature.
- **Stored Procedures** lists programs that access and manipulate information in the database. Stored procedures are kept right in the database, so they run faster than similar code in a Web page. (Some database systems—like Access and most versions of MySQL—don't recognize this feature.)

Tip: To get a quick peek at the data in a database table, in the Databases panel, right-click (Control-click) the table's name. From the shortcut menu, choose View Data. A window appears, displaying a table of data extracted directly from the database!

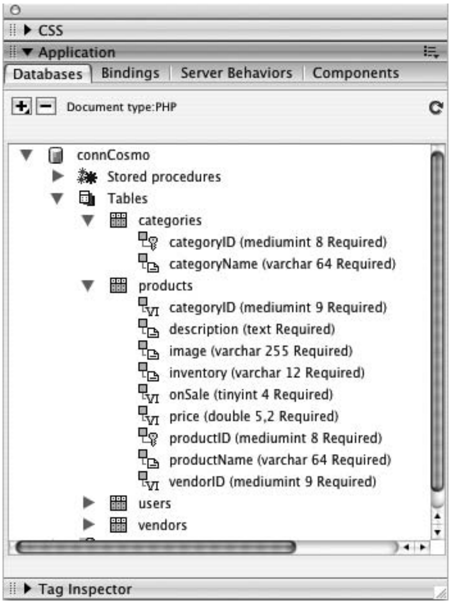

CSS
Application
Databases
Bindings
Server Behaviors
Components
Document type:PHP
connCosmo
Stored procedures
Tables
categories
categoryID (mediumint 8 Required)
categoryName (varchar 64 Required)
products
categoryID (mediumint 9 Required)
description (text Required)
image (varchar 255 Required)
inventory (varchar 12 Required)
onSale (tinyint 4 Required)
price (double 5,2 Required)
productID (mediumint 8 Required)
productName (varchar 64 Required)
vendorID (mediumint 9 Required)
users
vendors
Tag Inspector

Figure 22-21:
The Application panel group contains four panels for working with dynamic database-driven Web sites. The Components tab contains advanced features for use with ColdFusion, JSP, and ASP.NET Web sites. (It doesn't have any effect on the ASP or PHP server models.)

In this chapter, you've laid the foundation for a dynamic Web site. In the next chapter, you'll start adding data from a database to the page you created in the preceding tutorial—and building a real, dynamic Web application.

FREQUENTLY ASKED QUESTION

Parenthetical Puzzler

In the Databases panel, I see some weird information in parentheses next to the column names–mediumint 8 Required, *for example. What's that about?*

You're right–there's a notation next to each column name. For example, Figure 22-21 shows a column called *categoryID*, which is followed by *(mediumint 8 Required).*

The information in parentheses denotes the *type* of data in that column. In this instance, it's an *integer* (a whole number like 1, 3, or 5), it's *8* bytes of data long (meaning it can be a very, very large number), and it's *required* (meaning that every new record *must* have a value stored in this field). Within each of these categories, there can be subtypes like time stamp, decimal number, and so on. Different databases recognize different data types, so there's quite a long list of possible data types for all the server models Dreamweaver supports.

These notations may appear cryptic, but they can come in handy. For example, if you're creating a form for updating or inserting a record in a database (as described in the next chapter), the data type and length can help you figure out what kind of information you're looking for and how long it should be, and help you when you're adding Spry Validation to your form (as described on page 422).

The categoryName column pictured in Figure 22-21 contains text (that's what "varchar" stands for) and is 64 characters long. It's also "required," meaning you can't add a record to the categories table and leave the categoryName field empty. So if you're creating a form to add records to this table, you want to create a required text field that accepts at most 64 characters (you learned how to do this back on page 409).

CHAPTER

23

Adding Dynamic Data to Your Pages

What sets a database apart from a mere pile of facts is its ability to selectively retrieve information. After all, when you visit Amazon.com, you don't want to see every piece of information on every single book and product they sell. You probably want to see just a list of books on a certain subject or by a particular author, and then view more detail about the books that pique your interest.

This chapter shows you how to use Dreamweaver to display database information on your Web pages. Because these concepts can be tricky, you may prefer to get some hands-on experience by completing the tutorial on page 821 before reading the rest of the chapter.

Retrieving Information

Since databases can contain lots of information, you need a way to find just the data that you want to display on a particular Web page. Even though your company keeps information about its products, customers, suppliers, and so on in one database, you may be interested only in, say, an alphabetical list of all your customers. After securing that list, you might want to display a particular customer's contact information, or perhaps the list of products that person bought.

Understanding Recordsets

To retrieve specific information from a database, you start by creating what's called a *recordset.* A recordset—also called a *database query*—is a command issued to a database asking for particular information: "Hey Database, show me all the customers listed in the Customers table." It's the heart of many database operations that you'll perform in Dreamweaver (and a piece of jargon you can't escape in the dynamic Web page business).

Recordsets let you retrieve specified columns in a database. They can also sort records alphabetically or in numerical order, as when viewing a list of products from least to most expensive. In addition, a recordset can zero in on a specific record based on information submitted by a visitor to the site or on information provided in a URL. In essence, recordsets let you winnow down massive amounts of database information in a fraction of a second—a powerful benefit, indeed.

Note for ASP.NET Users: Dreamweaver uses the term "DataSet" instead of "recordset" to refer to database queries in ASP.NET.

Creating Recordsets

Querying a database can be quite simple or extremely complex. Dreamweaver provides tools to get the novice database developer up and running quickly, while also supplying what's necessary to create more advanced recordsets. Whatever your level of expertise, you start by opening (or creating) a Web page to display database information on; then you open the Recordset dialog box using one of the following methods (each of which assumes you've set up a server model, as described in Chapter 22):

- On the Data tab of the Insert bar, click the Insert Recordset button (see Figure 23-1).

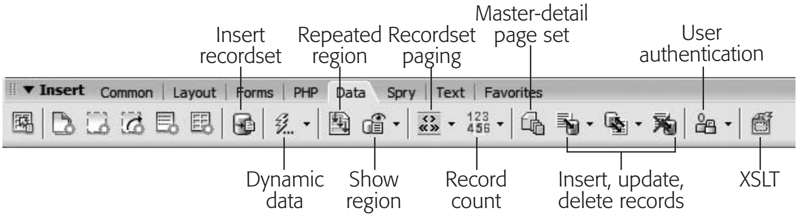
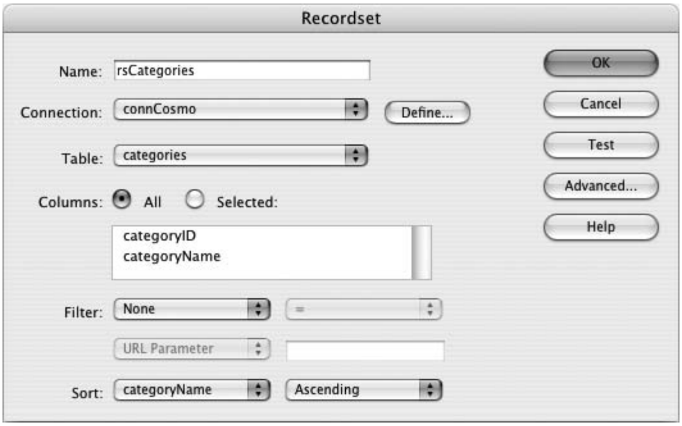


Figure 23-1: *The Data tab of the Insert bar provides one-click access to many powerful "application objects," which automate common dynamic Web page-building tasks. Actually, the first six buttons don't require dynamic Web pages: the first is for inserting data from a text file (described on page 266), while the next five are Spry Data objects (see page 476). (The Insert, Update, and Delete records buttons are discussed in the next chapter; the User Authentication features are discussed in Chapter 25; and the last option, XSL Transformation, is presented in Chapter 26.)*

- Choose Insert → Data Objects → Recordset.
- On either the Bindings or Server Behaviors panels in the Application panel group, click the + sign button (see Figure 23-9), and then select Recordset from the menu that appears.

Whichever technique you choose, the Recordset dialog box opens (Figure 23-2). This box lets you create a database query or recordset, and provides both simple and advanced modes of operation.



Recordset

Name: rsCategories

Connection: connCosmo

Table: categories

Columns: ● All ○ Selected:

categoryID
categoryName

Filter: None =

URL Parameter

Sort: categoryName Ascending

Figure 23-2: *The Recordset window lets you retrieve data from a database. The main window (pictured here) lets beginners search and sort databases for specific information. Advanced options let seasoned database programmers take advantage of Dreamweaver's dynamic page-building abilities.*

To create a simple query, make sure you're in the *Simple* mode. (If a button labeled Simple appears at the right edge of the dialog box, click it to make it say Advanced. Now you're in Simple mode.)

1. **In the Name field, type a name for the recordset.**

   You can use any name you want, as long as it doesn't start with a number and doesn't contain any characters other than letters, numbers, and underscores (_).

Tip: A common technique is to begin the name with *rs* (*rsProducts*, for example). The *rs* helps you identify the recordset when you're working in Code view.

2. **From the Connection menu, select a database connection.**

   The menu lists all of the database connections you've defined for the site. If you haven't yet created a connection, you can do so now by clicking Define and following the instructions for creating database connections on page 776.

3. **From the Table menu, select the table that'll supply the data.**

   Information in a relational database is usually distributed among different tables, each of which holds information about a particular type of item, such as customer data or product data (see page 769). For example, to get a list of customers from a database, you'd select the Customers table (or whatever its name happens to be).

Note: To retrieve data from more than one table at a time, you need to create an *advanced* recordset (see page 793).

4. **To select columns from which you want to extract data, click the All or Selected button. If you choose Selected, then click the columns you wish to select.**

   By default, Dreamweaver highlights the All button, but you may not want to get data from *all* the columns in your table. For example, suppose your table contains lots of detailed information for each product your company sells. You may want to create a basic listing of all your products that simply displays names, prices, and descriptions. For this list, you don't need all of the details like SKU number, sizes, inventory status, and so on. Therefore, just select the three columns you're interested in.

   To select multiple columns, Ctrl-click (⌘-click) their names in the list in the Recordset dialog box.

   It's always best to limit your recordset to just those columns whose information you need. The more data you retrieve, the more you make the application and database servers work, and the more you slow down your site, especially when the database is large.

5. **Choose a Filter option, if you like.**

   In many cases, you don't want to retrieve *every* record in a table. For example, if you're looking for a phone number of a particular customer in your database, you don't want the details on every one of your customers. *Filters* let you limit the records retrieved by a recordset. (Details on the next page.)

6. **Choose a Sort option, if desired.**

   Data from a database may not appear in any particular order. Dreamweaver's sort options let you sort information based on a particular column. For example, maybe you're creating a recordset that gathers the title and release date for every CD you own. You might want to sort the results in alphabetical order by the title of the album, or chronologically by the date they were released.

   To sort database records, choose a column to sort by from the first Sort menu (Figure 23-2). Then select the sort order: either Ascending (A–Z, 0–10, earliest to latest) or Descending (Z–A, 10–0, latest to earliest).

   The Simple recordset mode lets you sort by only one column. That means, to continue with the previous example, if you want to sort records by date (so the most recent CDs appear first) and *then* by name (so CDs with the same date are then listed in alphabetical order), you have to use the Advanced mode (see page 793).

   To view the results of the recordset, click Test to open the Test SQL Statement window, which contains all records that match that query. If there are more than 25 matches, you can see the next group of results by clicking Next 25 at the bottom of the window. When you're done looking at the test results, click OK to return to the Recordset window.

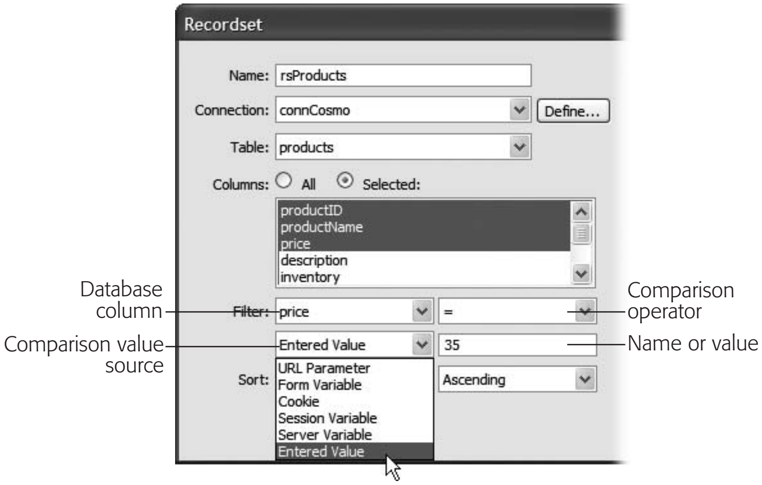
If the test results look right, click OK to close the Recordset window and add the code into the currently opened page.

Note: Unlike a database connection, which is listed in the Databases panel and is available to every page on the site, a recordset is specific to a particular page. (See page 798 to learn how to reuse recordsets on other pages.)

Filtering Information

Although you may have selected a limited number of columns when creating a basic recordset, the final results of the recordset still include *all* of the records within the table. That's fine when you want a list of all items in a database, like when you're creating a list of all your company's products. But it's not so useful when you want a particular subset of those records, like a list of just the red toupees your company sells, or when you want details on a *single* record—the "Flaming Inferno 78B toupee," for example.

To have Dreamweaver cull specific records from a table, use the Filter option in the Recordset window (see Figure 23-3). A *filter* lets you compare the information in one database column with a particular value and then select records that match—in other words, whenever you apply a filter to a recordset you're simply searching through the database for particular records. Suppose, for example, that your products database table contains a column named *price* that contains a product's price. To find all products that cost less than $35, you'd create a filter that looks for all records where the price column holds a value of less than 35.



Recordset

Name: rsProducts

Connection: connCosmo

Table: products

Columns: ○ All ● Selected:

productID
productName
price
description
inventory

Filter: price =

Entered Value 35

Sort: Ascending

Figure 23-3: *Filters let you limit the number of records retrieved by a recordset. Dreamweaver gives you three ways to apply filters to your records: information supplied in a URL; via a form submitted by a visitor to your site; or simply based on what you type into the recordset. Using a filter, a recordset can identify and retrieve data for a single record in the database, or a collection of records.*

Using the Filter feature in the Recordset dialog box takes only a few steps:

1. **Create a recordset as described on page 782.**

   To create a filter, you must fill out the four form fields of the Recordset window's Filter options—three menus and one text field.

2. **From the first Filter menu, select a column name.**

   This is the column from the database that Dreamweaver compares to a particular value. In the previous example above, you'd select "price" from the menu to indicate the table's price column (see Figure 23-3).

3. **From the next menu, choose a comparison operator (< or >, for example).**

   To find products whose prices are less than $35, for example, you'd use the < (less than) operator. To find an exact value (all products that are exactly $35), use the = sign. Comparison operators are described below.

4. **Using the third Filter pop-up menu, select a source for the comparison value.**

   A filter compares the information in a table column against some other value. There are many different sources for such a comparison value. For example, on a Search page, you could create a form that allows visitors to type in a search term and click a Search button. In this case, the comparison value would come from a form. To set up this arrangement, you, the designer, would select Form Variable from this menu.

   For complete information on selecting a source for a comparison value, see the section "Getting Comparison Values" on the next page.

5. **Into the lower-right Filter box, type a name or value.**

   The value for this field depends on the source you selected in the last step; type in the name of the form variable, cookie, session variable, or whatever. The one exception: If you selected Entered Value in the previous step, type a specific value in this field. For instance, to compare the "price" column to a specific value, you'd select Entered Value and then type a number into the text field. The Recordset window would then look like Figure 23-3.

6. **Complete the Recordset window by choosing a sort option (if desired) and then clicking OK.**

   You can test the recordset and filter by clicking Test. If you selected anything other than Entered Value from the source menu, a message prompts you to type in a test value for the source—URL parameter, form variable, and so on.

Comparison Operators for Filters

Dreamweaver provides many different ways to compare information from a database column with information from another source, such as a form, cookie, or simply a value you type into the Recordset window. The type of comparison you choose also depends on the type of data you're comparing: text or numbers.

Comparing text values

You'll often want to create recordsets that find database matches to particular words. For example, a recordset could filter a list of products to find only those records whose descriptions contain the word "green," or you could filter a database of clients to search for a record for "Craig McCord."

Dreamweaver provides the following types of text comparisons:

- **Equality.** To check whether the information in a column is *exactly* the same as another value, select the = sign from the comparison menu.
- **Inequality.** To find records that don't match a particular piece of text, select the <> (doesn't match) operator from the menu. You would use this, say, if you wanted to search a database of clothing for items that do *not* match a particular phrase (like "winter" in the Season column).
- **Begins With, Ends With, and Contains.** The last three comparison operators are ideal for locating one or more words within text. For example, a database of movies might have a column containing a short review of each movie. To locate reviews that included the words "horrible acting," you could choose the Contains option, which will find any movie that includes the phrase "horrible acting" anywhere in its review.

  The Begins With and Ends With options are more selective. The former finds records only when the text at the very beginning of a particular record matches; the latter works only when the text appears at the end. You probably won't use these options very often, but they could come in handy if you wanted to search a database for people whose names are Bob or Bobby, but not Joe-Bob. In this example, you'd use the "Begins With" option, and use Bob as the comparison value.

The other comparison operators (<, >, <=, >=) aren't very useful for searching text in a database. They're intended for comparing numbers, as described next.

Comparing numbers

Filters are particularly useful for numbers: finding products that cost less than $35, albums that were released in 1967, products with more than 3,000 items in stock, and so on. If you've taken basic algebra, these options for comparing numbers should be familiar: = (equal to), <> (not equal to), < (less than), > (greater than), <= (less than or equal to), or >= (greater than or equal to).

Getting Comparison Values

By now it should be clear that the Filter option of the Recordset window lets you compare data from one column with some other value. But you're probably wondering where this "some other value" comes from. It depends on which option you selected from the third drop-down menu—the Comparison Value Source menu (see Figure 23-3).

The most straightforward option is the last item in the menu: Entered Value. After selecting it, you simply type the value into the field to the right of the menu. This could be a number, a letter, or one or more words. So, to create a recordset that will find a product whose price is more than $50, you'd select the price column, the > (greater than) comparison symbol, and the Entered Value source option, and then type *50* into the value field.

Unfortunately, this kind of recordset is rather limited. The comparison value you specify (50) is hardwired into the recordset, making it very inflexible. What if a visitor wanted to see products that cost more than $15, $30, or $100? No joy. This recordset is limited to what you, the designer, entered as a value.

You're better off creating the filter on the fly from information you get when the visitor's Web browser requests the recordset. In this way, you can create very flexible recordsets that are capable of searching databases for a variety of different pieces of information, not just the *one* value selected by a programmer. (After all, how good a search engine would Google be if the *programmers* determined what the search criteria were? No matter what you searched for—*Web design, Used cars*—it would always find Web sites about Java, Burning Man, and Diet Coke.)

Dreamweaver can also draw a filter value from a form, cookie, or even a link's URL. The process is always the same: From the filter's Comparison Value Source menu (Figure 23-3), select the source you want, and then type the name of the appropriate source item. For example, if you select Form Variable from the source menu, type the name of the form field in the box to the right.

In most cases, you must depend on an additional Web page to provide the source of these values. For example, a search function on a Web site usually requires more than a single page: one (or more) pages containing a Search field and a Submit button to send the information, and another that displays the results of the search. In this example, the form on one page sends information (the search terms) to another page (the results page), which uses the form information to search the database. In essence, Dreamweaver uses the words typed into the search form on one page to create the recordset on another page.

The two most common ways to pass information from one page to another are forms and URLs. (Three advanced sources—cookies, session variables, and application variables—are discussed on page 901.)

Form variables

A *form variable* is simply the information that a visitor types into a form field (or the value of a selected radio button, menu item, or checkbox). Forms are discussed in depth in Chapter 11, but their use in recordset filters is straightforward:

1. **Create a form page.**

   It can include a text field, pop-up menu, or some other form element. Make sure you *name* the form element. For use in a *simple* recordset filter, you're limited to a single form variable. Using an *advanced* recordset (see page 793), you can use information from more than one form field to filter the data in a recordset.

   If you wanted to give your site's visitors a chance to look at differently priced products, for example, you could create a menu that included the values 10, 50, 100, 500, and so on. People could then choose one of those options to look at products below the selected price. (Also be sure to give the menu a name, such as "price," as described on page 414.)

Tip: Name the form field the same as the database column you're filtering. For example, if you're searching a table's *productName* column, name the form field *productName*. If you do, Dreamweaver automatically fills out the correct form field name in step 6 below.

2. **Set the Action property of the form (see page 402).**

   You'll want it to point to the results page.

Note: For these steps to work, the form's method must be set to *Post* in the Property inspector (see page 403). If *Get* is selected, the form information appears in the URL when the form is submitted, and that information isn't available as a form variable. (You can, however, use the Get method in conjunction with the URL parameters option discussed next.)

3. **Open (or create) the results page.**

   This page displays the results of the recordset that's created using information from the form. This page needs to be a dynamic page using the server model you've chosen—ASP, PHP, and so on. (See page 766 for information on how to create a new dynamic page.)

4. **Add a recordset to the page, using the directions on page 782.**

   You'll also create a filter using a form variable.

5. **From the Filter menu, select a database column. Then choose a type of comparison, as described on page 785.**

   All of this is the standard filter-creation routine.

6. **From the source pop-up menu, select Form Variable. In the box to the right of the source menu, type the name of the form field that contains the value for comparison.**

   In keeping with the previous example, you'd type *price* into the box, since that's the name of the menu on the form page.

7. **Add a sort option, if you like, and then click OK to create the recordset.**

   Remember that this kind of recordset's results depend upon information sent from a form. If a visitor just stumbles across the results page without using a form, the recordset most likely produces no results (for a workaround to this problem see the box on page 791). That's why you should link to this kind of page only by using a form's *Action* property (see page 402).

URL parameters

In your Web travels, you've probably encountered URLs that look kind of strange, along the lines of *www.cosmofarmer.com/cart.php?productID=34&quantity=4*. Everything up to the *?* probably looks familiar, but you might be wondering what the *?productID=34&quantity=4* means.

Forms aren't the only way to pass information to a dynamic Web page; URLs can do it, too, thanks to information tidbits called *parameters*. Dynamic Web sites can read parameters and use them to create a recordset, among other things. (In fact, using the Get method for a form puts the form's information into the URL.)

You yourself can manually add a URL parameter to a link, but it's even more common to dynamically create a URL parameter from another recordset. This is a common technique when you want to link from a long list of items (such as a store's catalog of products) to a single, dynamic page that displays information about a single item (such as the name, description, price, and photograph of a single product).

When a URL parameter is sent along with a link to a dynamic page, that page can use the URL parameter as a filter to search a database. To identify a single record in a database, for instance, the URL could contain a number identifying the record's *primary key* (see page 769 for a definition). You'll find an example of this trick in the tutorial on page 818.

The steps for using URL parameters to filter recordsets are similar to those for form variables. You need two pages, one with a link containing the URL parameter and another containing the recordset.

Tip: It's possible to add a link with a URL parameter on the *same* page as the recordset. For example, you could have several text links like "Products under $10" and "Products under $100" that link to the same page but have different URL parameters.

Creating a link with a URL parameter

Dreamweaver provides several ways to create a link that contains a URL parameter. The simplest way is to first highlight the item you wish to turn into a link—usually text or a graphic. Then, in the Property inspector's link box, type the link followed by a ?, a parameter name, an =, and the value (for example: *products.php?category=7*).

However, you'll probably find it easier to browse for the file and let Dreamweaver write all the complex stuff. To do so, just follow these steps:

1. **Highlight the item you wish to turn into a link.**

   In other words, select a graphic or text on the page.

2. **Click the folder icon (browse button) on the Property inspector.**

   The Select File window appears. (For more on creating links, see Chapter 5.)

3. **Browse to and select the page containing the recordset.**

   This is the page that displays the results of the database search.

4. **Click the Parameters box in the lower-right corner of the Select File window.**

   The Parameters window appears (see Figure 23-4).

TROUBLESHOOTING MOMENT

The Default Value for a Filter Source

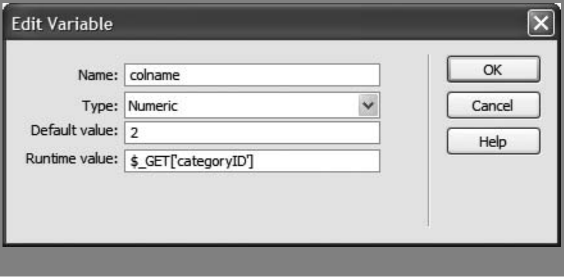
There's a problem with using a variable source of information for a filter. If the filter requires information from a form or URL parameter, what happens if someone comes to the page without first filling out the form or clicking a link with a URL parameter? In most cases, the recordset is empty, and the page displays no records. You can, however, set a *default* value for the form variable or URL parameter, so that at least some records always appear.

Using the steps outlined on page 782, create a basic recordset; include a filter using a form variable or URL parameter. Then click the Advanced button in the Recordset window.

Now you get a more complex view of the recordset. In the Variables list, there's a single entry: *colname.* Select *colname* and click the Edit button to open the Edit Variable window. The "Default value" box indicates the value that will be used for filtering the recordset if none is supplied (in other words, when no form or url variable is provided by the Web browser). The value Dreamweaver supplies is *-1,* which probably won't match anything in your database. Change this value to something that will. For example, if you're filtering on a primary key (to identify one record in the database), just type a value that you KNOW exists in the primary key field for one particular record. For example, *1.*

You could type a value that matches *all* the records in the database. For example, if the recordset is used to find products under a certain price, type a value (price) that's larger than the most expensive product in the database. This way, the recordset retrieves all items under that price–in other words, all the products. (This trick also works for the other sources discussed on page 897: cookies, application variables, and session variables.)

One last word of warning. If you switch back to the basic recordset view by clicking the Simple button, Dreamweaver resets the recordset variable to the default value of *-1.* In other words, if you change the default value in the advanced view, *don't* switch back to the basic recordset view.

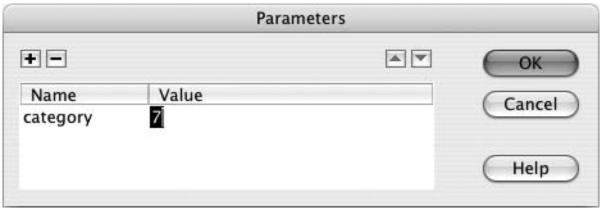

Edit Variable

Name: colname

Type: Numeric

Default value: 2

Runtime value: $_GET['categoryID']


Parameters

Name	Value
category	7

Figure 23-4:
The Parameters window lets you add URL parameters to a link. Recordsets can then use these pieces of information to filter a database query, as discussed on page 785.

5. **Click in the space below the Name column and type the name of the URL parameter.**

   What you're creating here is a name of your choosing that describes the data you're searching for. Avoid spaces and any punctuation characters for the name, since you're likely to run into troubles when you try to use such a name in the recordset filter. One approach is to use the name of the table column that you'll be filtering on when you create a recordset. For example, say you create a link that will lead to a page listing all of the products in a certain category (for instance, plants). Each product might have a column named *categoryID* which identifies the category the product belongs to. In this case, name the parameter *categoryID*.

6. **Click the space below the Value column and then type the value for the URL parameter.**

   This is the value that the filter in the recordset uses to match records in the database.

   Usually this is a simple value like *17, blue*, or *yes*. But you can also use spaces and punctuation marks in the value—for example, *Bob Jones*, in order to search for "Bob Jones" in the database. However, you need to make sure Dreamweaver's Preferences are set accordingly: choose Edit → Preferences (Dreamweaver → Preferences); click the Code Rewriting category and make sure the "Encode using &#" option is selected (the "Encode using %" option also works, but it can have trouble with some characters from some languages). Either of these options rewrites invalid characters in a form that works in a URL. For example, a space is converted to *%20.*

Note: Forms using the Post method don't suffer from any of these problems and can accept all types of punctuation and space characters.

7. **Click OK to close the Parameters window. Click OK to close the Select File window and apply the link.**

Creating the recordset for the results page

Once you've created the link, you need to create an appropriate recordset for the results page. Here's how:

1. **Open (or create) the results page.**

   This page displays the results of the recordset created using information from the URL parameter.

2. **Add a recordset to the page, using the directions on page 782.**

   You'll also create a filter using a URL parameter.

3. **From the Filter menu, select a database column. Choose a type of comparison, as described on page 786. From the source menu, select URL Parameter. In the box to the right of the source menu, type the name of the URL parameter.**

   This is the name supplied in step 5 of the previous instructions.

4. **Add a sort option, if you like; click OK to create the recordset.**

Like form variables, this recordset depends on information included in the URL of a link. If a visitor just stumbles across the results page without using a link with a URL parameter, the recordset most probably produces no results. Because of this, make sure you link to this kind of page only via a link with a parameter. Otherwise, modify the default value for the URL parameter in the recordset, as described in the box on page 791.

Tip: Using URL parameters (as opposed to form variables) for retrieving records has an added benefit: since the parameter is embedded in the URL–*http://www.cosmofarmer.com/products.php?productID=20,* for example–you can bookmark or email a link that matches a particular results page. In this way, you could bookmark, say, a page displaying all the products under $50. Then when you want to see if any new products (under $50) have been added to a site, you don't have to search the site again; merely revisit the bookmarked page.

Advanced Recordsets and SQL

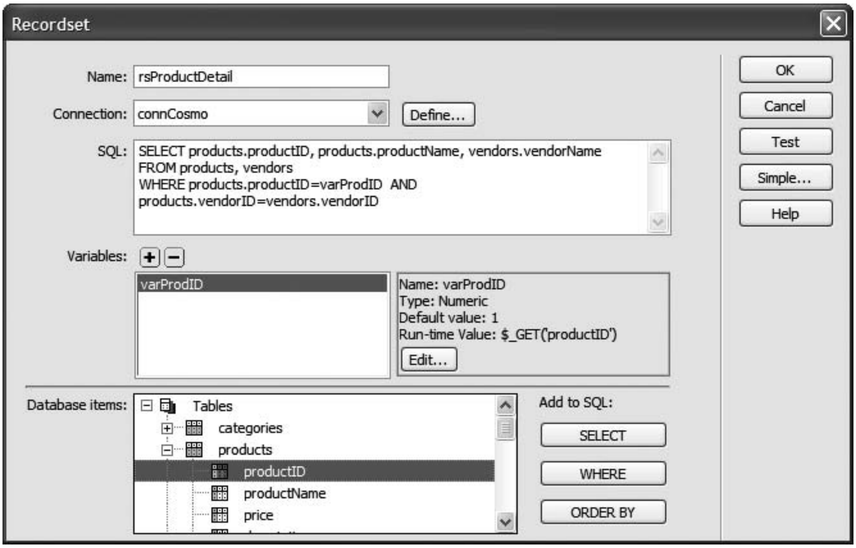
Sometimes you'll need more power than Dreamweaver's simple recordset tool gives you. For example, say you're building an online classified ads system. On one page, you want to present various pieces of information: the name of the sale item, its price, who's selling it, and how to contact the seller, for example. In order to store this kind of information, your database has two tables—one containing the ads themselves and one containing information about the sellers.

To present all this information, you need to simultaneously access both tables. In addition, you need to connect the records of those two tables so that each item for sale is associated with the correct seller—John Smith is selling the Whirligig 2007, for example. There's only one way to create this kind of complex query: using the advanced options of the Recordset window.

To display these options, insert a recordset using the steps described on page 782. Then, in the Recordset window, click the Advanced button. The Advanced Recordset window should appear (see Figure 23-5). (If you see a Simple button, then you're looking at the advanced options.)

Unfortunately, putting together advanced database queries is not as easy as most other operations in Dreamweaver. The Advanced Recordset window is basically just a way of typing in commands, using a database programming language called *SQL* (Structured Query Language, pronounced "ess-cue-ell"). SQL is a standard language that most database servers use to access, update, delete, and add information to a database.

To create an advanced recordset, type an SQL statement in the window's SQL box.



Name: rsProductDetail

Connection: connCosmo

SQL:
```
SELECT products.productID, products.productName, vendors.vendorName
FROM products, vendors
WHERE products.productID=varProdID  AND
products.vendorID=vendors.vendorID
```

Variables:

varProdID

Name: varProdID
Type: Numeric
Default value: 1
Run-time Value: $_GET('productID')

Figure 23-5: *The Recordset window's advanced options aren't for the uninitiated. You need to have a good grasp of SQL–the standard database programming language–to make complex recordsets.*

SQL: the very basics

SQL lets you communicate with a database in order to find, add, update, and delete records. SQL even lets you do more advanced database work, such as adding new tables to a database and even deleting tables and databases. In the context of the Advanced Recordset window, you need to understand only how SQL *retrieves* information. After all, a recordset is just a selection of data pulled from the database.

To make an SQL query (called an SQL statement), you must first specify:

- **Which columns of data you want to retrieve.** For example, item price, item name, seller name, and seller contact information.
- **Which tables will supply this data.** In the earlier example, the information is stored in two tables: Ads and Sellers.
- **How the search should be limited.** You might just want products that are less than $10 or whose seller is Zachariah Smith. Or you might want to let visitors to your site make these choices themselves, via a form.
- **The sort order.** You could sort items using the Price column to view a list of items from least to most expensive, for example.

Only the first two pieces of information are absolutely necessary. A very basic SQL statement would look like this:

```
SELECT itemPrice, itemName
FROM ads
```

SELECT is an SQL keyword that specifies columns of data for retrieval; FROM indicates which database table contains them. This statement instructs the database server to look inside the Ads table and retrieve information from two columns: itemPrice and itemName. The result is a list of the price and the name of each item in the Ads table of the database.

UP TO SPEED

Getting Your Feet Wet in SQL

SQL isn't difficult to pick up. While you can create very complex SQL queries, a basic SQL statement is straightforward. Once you've reached the limits of Dreamweaver's basic recordset, you may want to expand your skills beyond this simple tool.

A great place to start learning how to write SQL statements is in Dreamweaver itself. After you create a simple recordset (see page 782), click the Advanced button. The SQL statement for the simple query appears in the SQL box.

This chapter introduces the very basics of SQL. For a more complete introduction, check out SQLCourse.com (*www.sqlcourse.com*). Or pick up a book like *SQL Queries for Mere Mortals* (Addison-Wesley Professional) by Michael Hernandez, *SQL in a Nutshell, 2nd Edition* (O'Reilly) by Kevin Kline, or *Sams Teach Yourself SQL in 10 Minutes* (Sams) by Ben Forta.

Note: SQL keywords are usually written in all caps–SELECT, for example. This is just a convention, not a hard-and-fast rule; "select" would also work. But since it's easier to identify the keywords if they're capitalized, it's best to stick with this convention.

Of course, you may not always want *every* record in a table. You may want to limit the search to a select number of items, such as products under $10. The WHERE keyword lets you do just that:

```
SELECT itemPrice, itemName
FROM ads
WHERE itemPrice < 10
```

Now the SQL statement retrieves only the price and the name of products that cost less than $10. Finally, SQL can sort records into order. In this example, you could also sort all the results from least to most expensive, like this:

```
SELECT itemPrice, itemName
FROM ads
WHERE itemPrice < 10
ORDER BY itemPrice ASC
```

The ORDER BY keywords indicate which column Dreamweaver should use to sort the records. Specifying the prodPrice column sorts the items by price. ASC is short for *ascending*, meaning that the records appear in low-to-high price order. (DESC sorts records into *descending* order, Z–A, or high-to-low.) You can even sort by multiple columns. If, for example, you wanted a list of all products sorted by price and *then* alphabetically by product name, you would simply change the above ORDER BY keyword to read like this:

```
ORDER BY prodPrice ASC, prodName ASC
```

In this way, all the products that were the same price (for example, $10) would then be presented in alphabetical order (A–Z).

Using the Data Tree view

Although you need to know SQL to use the Recordset window's advanced options, you can get a little help from the data tree in the "Database items" list at the bottom of the window (see Figure 23-5). This area of the window functions just like the Databases panel and lets you view the tables, columns, views, and stored procedures in the database (see page 778).

Click the + (arrow) button next to the word Tables to see a list of all tables in the database. Click the + (arrow) next to a table name to see all the columns within that table. This technique is very helpful when you're building an SQL statement, because you may not remember the exact names of every table and column in your database.

To build an SQL statement, you can select a column name and click one of the three buttons—SELECT, WHERE, or ORDER BY. The SQL command and column name then appear in the SQL box.

Suppose, for example, you wanted to create the following SQL statement:

```
SELECT productID, productName
FROM products
```

To build this statement using the data tree, click the + button next to the table named Products, which expands to show a list of all columns. Then click the column named productID and click SELECT. Next, click the productName column, and then click SELECT again.

Actually, when you use the Data Tree to insert SQL, Dreamweaver doesn't exactly write it the same as listed above. What you would get after following the previous instructions is:

```
SELECT products.productID, products.productName
FROM products
```

Dreamweaver inserts what are called "qualified" column names. For example, *products.productID* indicates the productID column from the products table. When you build a SQL query that involves more than one table, fully qualifying the column name by tacking on the table name as well is a good practice. If the same column name appears in both tables then your SQL won't work—for example, say the Products and the Vendors table both had a column called *name*. They each refer to different types of data—the item for sale, and the name of the vendor. Without differentiating the two columns (by "pointing to" them, for example as *products.name* and *vendors.name*) the database won't know which column you mean and you'll end up with a SQL error when you try to test the recordset.

Although these buttons can save you time, they don't check whether the SQL statement is valid. Unless you've got a decent grasp of SQL, you can easily create a statement that generates errors when the test server runs it.

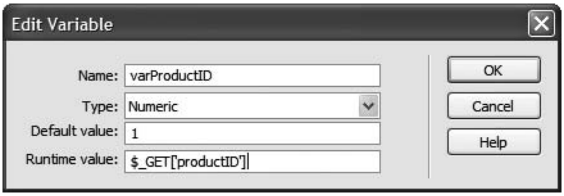
Creating variables for filtering data

Variables let you filter data using information from sources such as forms, URLs, cookies, session variables, and application variables. If you use the filtering option in the basic Recordset window, Dreamweaver creates a variable for you—but in the advanced Recordset window, you must create them yourself.

To add a variable for use in an SQL query, follow these steps:

1. **In the Recordset window, click the + button next to Variables (see Figure 23-5).**

   The Edit Variable window opens (see Figure 23-6).



Name: varProductID
Type: Numeric
Default value: 1
Runtime value: $_GET['productID']

Figure 23-6: *This dialog box lets you create variables to customize how an SQL statement works. You're not limited to just using variables in the filter part of an SQL statement (the WHERE clause) either. You can include a variable as any part of the statement. For example, one variable might determine the order of a sort operation: ASC or DESC.*

2. **In the Name box, type a name for the variable.**

   The name shouldn't include spaces or other punctuation marks.

Tip: As with database connections and recordsets, it's a good idea to add a prefix to the variable's name so you can more easily identify it in Code view. For example, you could begin the variable name with *var*–varPrice, for instance–just as you'd begin a recordset name with *rs* (rsProducts, for example).

3. **Choose a data type from the Type menu.**

   Your options are Numeric, Text, Date, and Double. If the variable is going to be used as part of a filtering operation, then the type you choose depends on the type of data stored in the column you're filtering on. For example, if the variable is used as part of a search on the name of a product, choose Text.

   The numeric and text options are, of course, for numbers and text. Use Date when the variable contains a date type. This isn't just any old date, however—it's the type of date defined by your database system. Each database has a different approach to this setting (to find out how MySQL handles date types visit http://dev.mysql.com/doc/refman/5.0/en/date-and-time-types.html). Finally, the Double option is reserved for numbers that are stored with two decimal places—mostly monetary values like 10.25 or 9.99.

Tip: You can easily determine the type of data stored in a column using the Databases panel, as described in the box on page 778.

4. **Type a value in the "Default value" box.**

   A default value comes in handy when the form, URL, cookie, session variable, or application variable is empty. The recordset uses the default value to filter the database records. See page 791 for more on when and why this might happen.

5. **Press Tab to jump to the "Runtime value" column; type the appropriate code.**

   The exact code depends on the server model you selected. For example, to retrieve the value of a form field named *price* you'd type *$_POST['price']* for PHP or *Request.Form("price")* for ASP. The best way to learn how to create variables is to use Dreamweaver's filter tool in the Recordset window (see instructions on page 785), and then switch to the advanced Recordset window, select the variable, and click the Edit button. The proper code for collecting information from forms, URLs, cookies, and so on appears in the variables' "Runtime value" field.

Note: Keep in mind that if you add more than one SQL variable in the advanced Recordset window, you can't switch back to the simple view.

Once you create a variable, you can include it in your SQL statement. Since variables help filter information, you'll often add them to the SQL *WHERE* keyword. For example, if you create a variable named *varPrice* that retrieves information from a form, you can add it to the SQL statement like this:

```
SELECT ads.itemPrice, ads.itemName
FROM ads
WHERE itemPrice < varPrice
```

In this example, whatever information is passed from the form is stored in the *varPrice* variable and compared to the price stored in the *itemPrice* column of the database.

If you ever need to edit a variable, just select its name from the Variables list in the advanced Recordset window and then click the Edit button. That reopens the Edit Variable window (Figure 23-6).

Reusing Recordsets

Recordsets are created on a page-by-page basis. In other words, when you create a recordset, it's added only to the current document. If you create another Web page that requires the same recordset, you must add the proper code to the new page. You can do this either by recreating the recordset—a potentially laborious process—or by simply copying the recordset from one page and pasting it into another.

Here's how:

1. **Open the Bindings panel by choosing Window → Bindings.**

   Ctrl+F10 (⌘-F10) also works. You can also copy and paste from the Server Behaviors panel.

2. **Right-click (Control-click) the name of the recordset you wish to copy; choose Copy from the shortcut menu that appears.**

   In the Server Behaviors panel, recordsets appear like this: *Recordset (rsName)*, with the name of the recordset inside the parentheses.

Now switch to the document that'll receive the pasted recordset. Right-click (Control-click) in the Bindings (or Server Behaviors) panel, and then choose Paste from the shortcut menu.

Tip: If you need a recordset that's similar to a recordset you've already created—but not identical—you can copy the original recordset, paste it into a new document, and then edit it, following the instructions in the next section.

Editing Recordsets

What if you have to edit a recordset? Maybe you forgot an important column of information when you originally created the recordset, or perhaps you want to modify a recordset you copied from another page. The process is easy: simply open either the Bindings panel (Ctrl+F10 [⌘-F10]) or Server Behaviors panel (Ctrl+F9 [⌘-F9]) and double-click the name of the recordset you wish to edit.

The Recordset window appears, looking just as it did when you first created the recordset (see Figure 23-2). Make any changes to the recordset, and then click OK.

Note: If you change the name of a recordset while editing it, Dreamweaver displays a message indicating that you need to use "Find and Replace" (see page 718) to locate and update every instance of the recordset's name. Dreamweaver opens the "Find and Replace" window for you when you click OK, but it's up to you to make sure the changes are correct.

This is another reason why beginning a recordset with "rs" (*rsProducts*, for example) is a good idea. If you've named a recordset simply "products," you could end up finding and replacing not only the name of the recordset, but also any other cases where the word "products" appears in the page.

The safest (although slowest) way to change a recordset's name is to recreate it. Of course, that's extra effort—a good argument for making sure you're satisfied with a recordset's name when you *first* create it.

Deleting Recordsets

If you add a recordset to a page and later realize that the page isn't using any of the information retrieved by the recordset, you should delete it. Each recordset forces the database server to do some work. Unnecessary recordsets only make your Web pages work harder and more slowly.

You can delete a recordset using either the Bindings or Server Behaviors panel. Just select the name of the recordset in either panel and click the minus sign (-) button at the top of the panel (pressing Delete on your keyboard has the same effect). However, if you've added dynamic data from that recordset to the page (described next) and you then delete the recordset, Dreamweaver won't remove references to the deleted recordset. In most cases, this breaks the functionality of the page and it won't work when viewed in a browser. You'll need to make sure you delete that dynamic information (as described on page 802) and remove any server behaviors that rely on that recordset from the Server Behavior panel.

Adding Dynamic Information

Once you've created a recordset, it's a snap to add dynamic information to a Web page. In fact, Dreamweaver provides several ways to add information. Start in the document window by clicking the spot where you wish to add the dynamic information. Then do one of the following:

- Choose Insert → Data Objects → Dynamic Data → Dynamic Text.
- Click the Dynamic Data button in the Data tab of the Insert bar and then select Dynamic Text from the menu (see Figure 23-7).

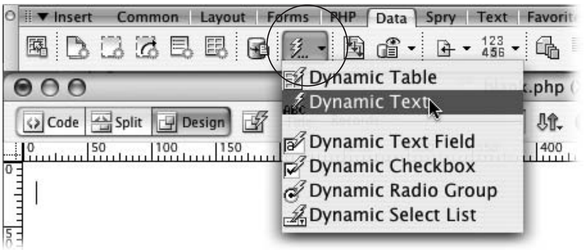
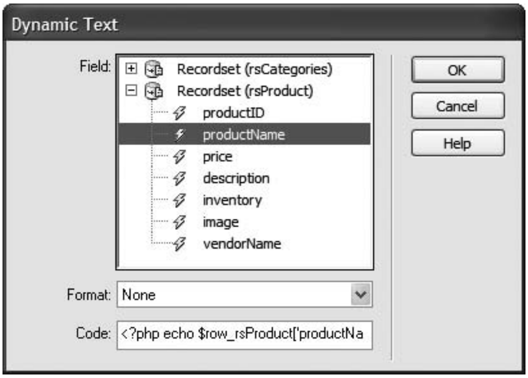


Figure 23-7: *The Dynamic Data button (circled) on the Insert bar's Data tab lets you add a variety of dynamic data to your Web page—from form fields filled in with information retrieved from a database, to a complete table based on a recordset.*

Either way, the Dynamic Text window appears (see Figure 23-8), listing the recordsets on the current page. Click the + sign button next to the recordset you wish to get information from. This expands to show all columns retrieved in that recordset. Pick the database column (also called Field) containing the information you wish to add to the page. You can pick only one column at a time, but you can repeat this process to add multiple columns to the page.

Note: *Dynamic Text* is a bit of a misnomer. This tool can also insert dates, numbers, and dollar values—not just text.

The format menu lets you format the data, like making a date appear as *January 17, 2008*. Formatting is discussed in depth in the "Formatting Dynamic Information" section below.



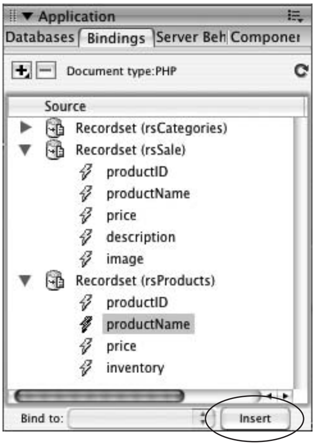
Format: None

Code: <?php echo $row_rsProduct['productNa

Figure 23-8:
After you select a database field to add to a page, Dreamweaver displays the necessary code in the Code box. This is the programming code that makes the data appear on your page. Dreamweaver writes this code using whichever programming language is compatible with the server model you've chosen.

The Bindings Panel

The Bindings panel (Figure 23-9) provides two other ways to put data from a recordset onto a page. (It's called Bindings because the panel provides a mechanism to "bind" or attach data from a database to a particular spot on a Web page.) Recordsets appear in the Bindings panel of the Application panel group. To open this panel, choose Window → Bindings or press Ctrl+F10 (⌘-F10).



Document type:PHP

Figure 23-9:
The Bindings panel lists all the different types of dynamic data you can add to your page. Recordsets (and the columns of data they've retrieved) appear here, but so do URL, Form, Cookie, and Session variables, as described on page 897.

To add data from the Bindings panel to a page, click in the document window where you wish to insert the dynamic data. Then select the column you wish to add in the Bindings panel, and click Insert (circled in Figure 23-9). But the best and fastest method is to just drag a column's name from the Bindings panel directly into the document window—into a paragraph or table cell, for example. You'll probably use this method most of the time.

After adding dynamic information to a page, it looks something like this: *{rsProducts.prodName}*. The information in braces indicates the name of the recordset (rsProducts) and the name of the data column (prodName). (You can make "real" data appear—instead of this code—when you use Dreamweaver's Live Data view, as described on page 812.)

Formatting Dynamic Information

Suppose a database includes a column for a product price and the raw information is listed in a pretty clunky format—something like *8* or *10.99*. But on your Web page, you want prices properly formatted with a dollar sign and two decimal places, like *$8.00* or *$10.99*.

Dreamweaver includes many different formatting options for numbers, dates, and text. You can choose a formatting option when using the Insert Dynamic Text window (Figure 23-8). You can also apply, remove, or change a formatting option using the Bindings panel.

To set a format using the Bindings panel (Ctrl+F10 [⌘-F10]), proceed as follows:

1. **In the document window, click the dynamic item you wish to format.**

   A down-pointing arrow appears under the Format column in the Bindings panel.

2. **In the Bindings panel, click the down-pointing arrow under the Format column and then select a formatting option from the menu (Figure 23-10).**

   Pick an option that's appropriate to the selected piece of data: Currency formatting for the price of a product, for example. If you try to apply a formatting option that isn't appropriate for the selected item (Currency to a text description, say), the page may produce an error when previewed on the testing server.

Tip for PHP users: Dreamweaver doesn't include date, currency, or number formatting options for the PHP/MySQL server model. Help is available in the form of a free extension called PHP Server Formats. Run, don't walk, to *www.tecnorama.org/document.php?id_doc=51* and download this extension now! For more information on what extensions are and how they work see page 738.

You can also format selected dynamic data just as you would other text on a page by applying CSS styles, headings, bulleted lists, and so on.

Deleting Dynamic Information

Dynamic information added to a page behaves like a single object. Just click to select it. You can also drag it to another location on the page, copy and paste it, remove it from a page by selecting it and pressing Delete, and so on.

If you remove all the dynamic information from a page, and don't plan on using any information from the recordset, make sure you delete the recordset, too, as described on page 799. Even though you may not display any dynamic information on the page, if a page contains a recordset, it must still communicate with the database server, slowing down your pages.

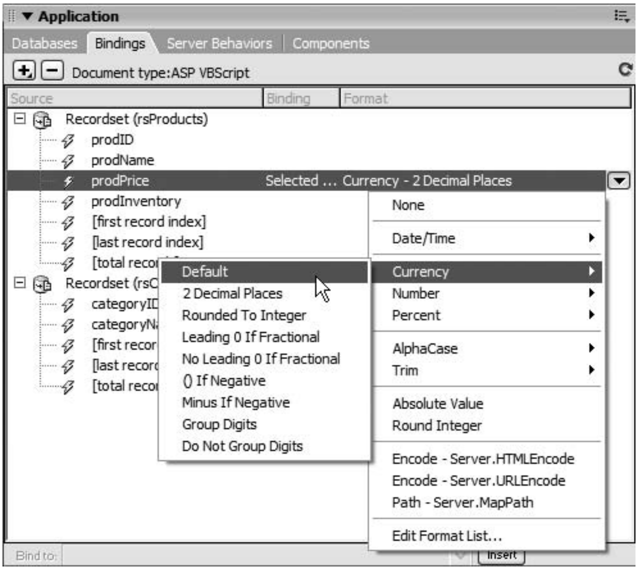


Figure 23-10:
The options shown here (for the ASP/VBScript server model) include a dizzying array of choices, including 19 date and time formats. One of them, "Encode – Server.HTMLEncode," may come in handy if your database stores HTML code (this option is called "Encode – HTMLEncode" in other server models). For example, maybe you've created a bulletin board whose messages are stored in a database. When you're adding one of those messages to a page, applying the "Encode – Server.HTMLEncode" format ensures that Web browsers don't render any code in a message as part of your page. Instead, any HTML in that dynamic text appears to visitors as code. Similarly, if there's any chance a data field might store a bracket like this <, the Encode formatting option prevents a Web browser from thinking that the opening bracket is the start of an HTML tag–a situation that could make your page not appear at all!

Dynamic data is also listed in the Server Behaviors panel—you can remove it just like you would any other server behavior, by selecting it from the Server Behaviors panel and then clicking the minus (-) button (see Figure 23-14).

Displaying Multiple Records

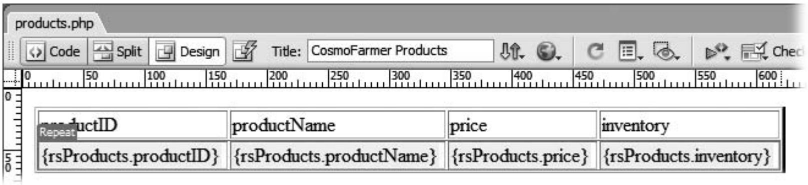
Often, you'll want to create a Web page that displays multiple records, such as a page that lists all the products in your company's catalog.

So far, the techniques you've learned for inserting dynamic data only insert information from a single record. Even if you've created a recordset that retrieves a thousand records, you'll still just see information from the very first record in the recordset when you simply drag data from the Bindings panel onto a dynamic Web page. There's a bit of extra programming that's required if you want to see information from more than one record (like a long list of all company employees) on a single page. Fortunately, Dreamweaver provides two tools for displaying multiple records: the Dynamic Table and Repeat Region objects.

Creating a Repeating Table

HTML tables (see Chapter 7) are meant to display data. The columns and rows of tables provide tidy compartments for individual pieces of information. It's not surprising, then, that in database terminology, *row* often refers to a single record in a database, and *column* indicates a single type of information in a record. Where a row and column meet, they form a "cell" that holds one piece of data from a single record.

Dreamweaver's Dynamic Table tool lets you display the results of a recordset in an HTML table. The top row of the table includes the name of each database column to identify the data in the rows below. The bottom row includes the actual dynamic data—one database column per table column (Figure 23-11).



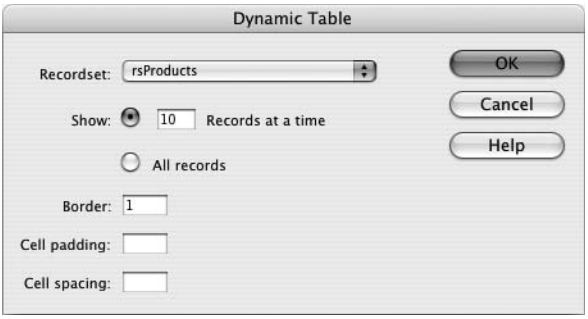
productID	productName	price	inventory
{rsProducts.productID}	{rsProducts.productName}	{rsProducts.price}	{rsProducts.inventory}

Figure 23-11: *Although the Dynamic Table tool creates a table that displays multiple records, you see only one table row's worth of dynamic data. The Repeat tab that appears above the row indicates that this row will repeat, once for each record in the recordset. To see the effect, use Live Data view as described on page 812).*

The magic of this tool is that it can duplicate a row for each record in the recordset. In other words, the table displays multiple records, one per table row. Here's how to use it:

1. **Create a recordset (see page 782). In the Data tab of the Insert bar, select Dynamic Table from the Dynamic Data button menu** (see Figure 23-7).

   You can also choose Insert → Data Objects → Dynamic Data → Dynamic Table. Either way, the Dynamic Table window opens (see Figure 23-12).



Recordset: rsProducts

Show: ● 10 Records at a time

○ All records

Border: 1

Cell padding:

Cell spacing:

Figure 23-12: *The Dynamic Table tool lets you quickly create a table to display all or some of the records in a recordset. This easy-to-use tool isn't available if you're using either of the ASP.NET server models. Instead, ASP folks need to use an ASP.NET datagrid–a more complex, but more versatile tool. For more information, check out www.adobe.com/devnet/dreamweaver/articles/data_grids.html.*

2. **From the Recordset menu, choose the recordset you'd like to use.**

   Since a page can contain more than one recordset, you have to indicate which records you want to display.

3. **Using the Show radio buttons, specify the number of records you wish to display.**

   You can show all of the records on a single page by clicking the All Records button. However, if your recordset is huge—if you're creating a Web page to display company employees and your company has 10,000 employees, say—a single page with all of that information could be very large and difficult to navigate. In this case, you should display only a handful of items at a time.

If you type *10* in this box, you see at most 10 records when previewing the page. (If you choose this method, make sure to add a Recordset Navigation bar, as described on page 807, to let visitors page through the list of results.)

4. **Set the Border, Cell Padding, and Cell Spacing values for the table.**

   These HTML table properties are described on page 254, All you're creating here is a plain old HTML table. You can dress it up later in Design view by changing the border, cell padding, cell spacing, background cell color, and other table properties.

Note: If you insert a repeating table and then later alter the recordset used in this table–for example, by adding a column of information to your query–Dreamweaver doesn't update the repeating table as a result of this change. In fact, if you remove a column of information from a query, you get an error when you try to preview the repeating table. If you edit the recordset and change the number of columns it retrieves (see page 799), it's usually easiest to delete the current repeating table and then replace it with a new repeating table.

5. **Click OK.**

   Dreamweaver inserts a table into the page. The top row contains the names of each column from the recordset—one name per table cell. You can, and probably should, edit these names to make them more understandable. After all, *productID* may not mean anything to your visitors.

   The bottom row of the table contains the dynamic data from the recordset and represents one record. Each table cell in that row simply holds dynamic text for each field in the recordset. You can select each of these placeholders and style them as you would any dynamic text—for example, using the Property inspector's style menu to apply a CSS style. The table row has a Repeat Region object applied to it, which you can edit or delete as described in the next section.

Creating a Repeat Region

While the Repeating Table is easy to use, it doesn't provide the flexibility you might require. For example, what if your dynamic information needs to be presented in a bulleted list (one record per bulleted item) or in individual paragraphs (one paragraph per record)? In these cases, you need to create a *repeating region*—a chunk of HTML that repeats once for each record in a recordset.

Here's an example that can help you understand how to use the Repeat Region object. Imagine you're creating a directory to list your company's staff. This page would include the name, telephone number, email address, and department of each employee. Of course, all of this information is stored in a table in a database—one column for each piece of information, and one record for each employee.

In Dreamweaver, you create the basic design of the page, and then add a recordset that retrieves the required information about each employee in the company. The page layout presents each employee's information in a single paragraph, so the finalized page has many paragraphs—one for each employee.

Since this is a dynamic page, you can't predict how many paragraphs you'll need. After all, your company may hire many new employees, which would add records to the database. To allow for this uncertainty, create a single paragraph by adding the dynamic information you want in it, following the steps on page 800. Then tell Dreamweaver to *repeat* that paragraph using information from each record the recordset retrieves.

Just follow these steps:

1. **Using the Bindings panel or one of the techniques described on page 800, insert dynamic text onto the page.**

   You should put these items together on the page, maybe in a single paragraph, in a bulleted or numbered list, or in a div tag (see page 313).

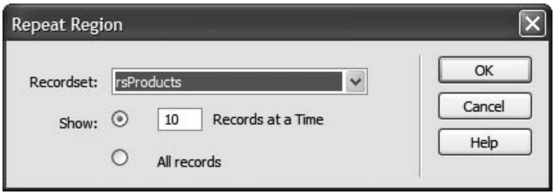
2. **Select the dynamic text and any HTML code you wish to repeat.**

   For example, select the paragraph (click the <p> in the document window's Tag selector) containing the dynamic data. If you're using a bulleted list to present this information, select the list item (<li> tag) containing the dynamic data. For data in a table row, select the table row (<tr> tag).

Note: You need to be very precise when selecting the HTML used in a repeating region. If you aren't, the page may not look or work as you expect. For example, if you select the dynamic data in a bulleted list, but don't actually select the <li> tag representing the list item, when you insert a repeating region, the records will repeat within a single bulleted list. In other words, you'll end up with a bunch of words (data from multiple records) as part of a single bullet. Use the Tag selector (see page 22) to accurately select an HTML tag.

3. **In the Data tab of the Insert bar, click the Repeated Region button (see Figure 23-1).**

   You can also choose Insert → Data Objects → Repeated Region. Either way, the Repeat Region window appears (Figure 23-13).



Recordset: rsProducts

Show: ● 10 Records at a Time

○ All records

Figure 23-13:
In a Repeated Region that reveals only a limited number of records at a time (in this case, 10), add a Recordset Navigation bar (see the next page). Otherwise, visitors to the page see the first 10 records of a recordset, but have no way to view additional records.

4. **From the Recordset menu, choose the recordset you want the page to work with.**

   Since it's possible to have more than one recordset per page, be sure to select the recordset whose data is included in the area you're going to repeat.

5. **Choose the number of records you wish to display.**

   If you decide not to use the "All records" option, make sure that you add a Recordset Navigation bar, as described below, to let visitors page through the list of results.

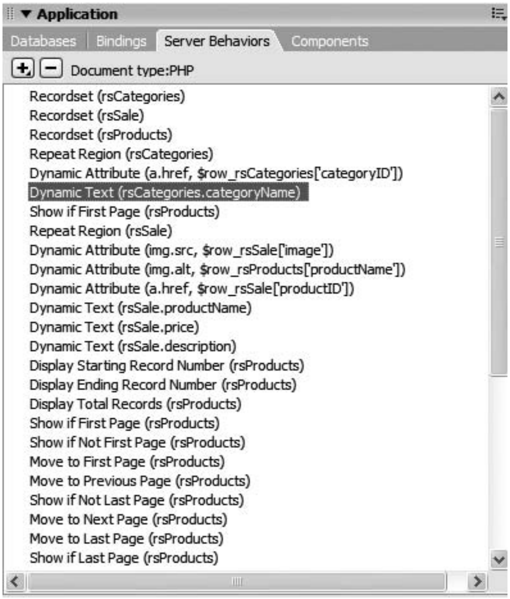
6. **Click OK.**

   Dreamweaver adds the proper programming code to the Web page.

Editing and Removing a Repeat Region

If you selected the wrong recordset, or you want to increase the number of records displayed at a time, you can easily change a repeating region. Simply open the Server Behaviors panel (Ctrl+F9 [⌘-F9] or Window → Server Behaviors) and double-click Repeat Region from the list. In the Repeat Region window (Figure 23-13), make any changes and then click OK.

To remove a Repeat Region, open the Server Behaviors panel (see Figure 23-14). Select Repeat Region from the list and click the minus sign (–) button (or press the Delete key).



Recordset (rsCategories)
Recordset (rsSale)
Recordset (rsProducts)
Repeat Region (rsCategories)
Dynamic Attribute (a.href, $row_rsCategories['categoryID'])
Dynamic Text (rsCategories.categoryName)
Show if First Page (rsProducts)
Repeat Region (rsSale)
Dynamic Attribute (img.src, $row_rsSale['image'])
Dynamic Attribute (img.alt, $row_rsProducts['productName'])
Dynamic Attribute (a.href, $row_rsSale['productID'])
Dynamic Text (rsSale.productName)
Dynamic Text (rsSale.price)
Dynamic Text (rsSale.description)
Display Starting Record Number (rsProducts)
Display Ending Record Number (rsProducts)
Display Total Records (rsProducts)
Show if First Page (rsProducts)
Show if Not First Page (rsProducts)
Move to First Page (rsProducts)
Move to Previous Page (rsProducts)
Show if Not Last Page (rsProducts)
Move to Next Page (rsProducts)
Move to Last Page (rsProducts)
Show if Last Page (rsProducts)

Figure 23-14:
The Server Behaviors panel lists every dynamic element you add to a page, from recordsets to repeat regions. Even when you drag a column from the Bindings panel to add dynamic data to a page, you create a server behavior. In this example, the highlighted element Dynamic Text (rs.Categories. categoryName) represents data from a recordset that will appear somewhere on the Web page. You can delete any server behavior by selecting it from the list and then clicking the minus (-) button.

Recordset Navigation

Dreamweaver's Repeating Region tool lets you display multiple database records on a single Web page. But a recordset with large amounts of data—like 1,000 employee records—can quickly choke a Web page. A large amount of information takes a long time to download and forces visitors to scroll for many screens to see it all.

Fortunately, the tool also lets you limit the number of records displayed at once. Of course, this limit presents its own set of problems: how do visitors see additional records, and how do you let them know where they are among all the records in the recordset?

To solve this dilemma, Dreamweaver comes with two handy commands for adding navigation to a recordset—and providing useful feedback about the recordset.

FREQUENTLY ASKED QUESTION

A Little Less Repetition

I applied the Repeat Region object, and when I preview the page, the same record is repeated over and over. That's not what I wanted to do! What's going on?

This can happen when you apply a Repeat Region object and inadvertently select the wrong recordset from the Repeat Region window (see Figure 23-13)—a mistake that's easy to make if you've included more than one recordset on a page.

The Repeat Region object adds programming code that steps through each record of a recordset. So, in practice, the Repeat Region object should get the information from the first record in a recordset and write it to the Web page, then go to the second record and add *its* info to the page. This process should continue until it's either gone through all the records in the recordset or reached the limit specified in the "Records at a Time" box.

However, if the information you want repeated is retrieved by a different recordset from the one selected in the Repeat Region window, this system breaks down. Instead, the code continues to cycle through each record from the selected recordset, but doesn't cycle through each record from the recordset containing the dynamic information you want repeated. The result: you get the same information over and over again. The first record of the recordset (the one you want repeated) is repeated for each record in the *other* recordset (the one you don't want repeated).

In other words, to ensure that Repeat Region works, select the recordset whose data is contained in the area you want *repeated*.

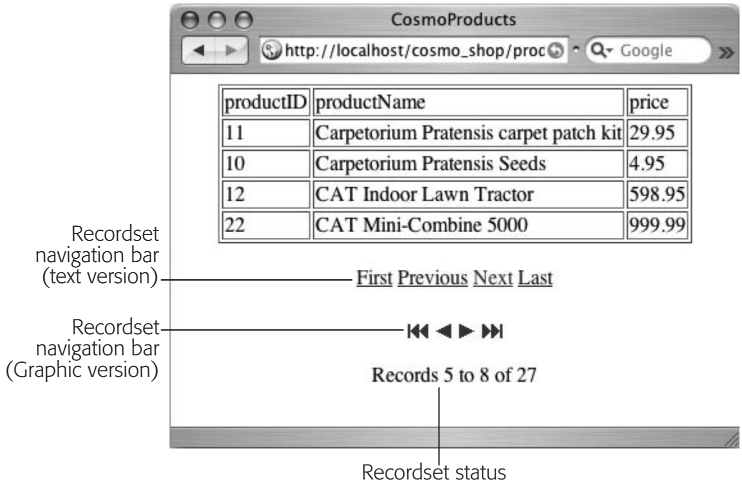
Recordset Navigation Bar

Suppose a page contains a recordset that retrieves 100 records from a database, but the repeating region on the page limits the display to 10 records at a time. In this case, you should insert a Recordset Navigation Bar to add either text links or graphic buttons to a page. These navigation bars let your audience view the next 10 records in the recordset, jump to the last records in the recordset (see Figure 23-15), jump back to the first record, or move to previous records in the recordset.

To add a Recordset Navigation bar, follow these steps:

1. **Click in the document window at the location where you want to insert the navigation bar. In the Data tab of the Insert bar, click the Recordset Paging button and then select Recordset Navigation Bar from the menu (see Figure 23-16).**

   You can also choose Insert → Data Objects → Recordset Paging → Recordset Navigation Bar. In either case, the Recordset Navigation Bar window appears.



productID	productName	price
11	Carpetorium Pratensis carpet patch kit	29.95
10	Carpetorium Pratensis Seeds	4.95
12	CAT Indoor Lawn Tractor	598.95
22	CAT Mini-Combine 5000	999.99

First Previous Next Last

Records 5 to 8 of 27

Recordset navigation bar (text version)

Recordset navigation bar (Graphic version)

Recordset status

Figure 23-15: *Dreamweaver's Recordset Navigation Bar object prevents information overload by letting Web page visitors step through easily digested pages of information. The Recordset Status message also keeps visitors informed about how many records are available.*

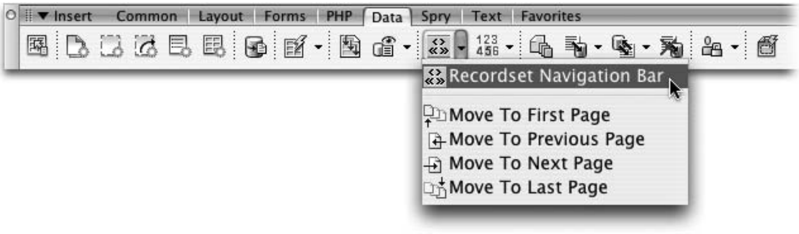


Figure 23-16: *The Recordset Paging button lets you insert a navigation bar for navigating the records returned in a recordset. In addition, if you want to build your own recordset navigation system, you can individually apply server behaviors like "Move to First Record" and "Move to Next Record". These server behaviors are discussed on page 906.*

2. **From the Recordset menu, select the recordset to navigate.**

   If the page contains more than one recordset, select the one that you used when you made the dynamic table or added the repeating region.

3. **Select whether to use text or graphic buttons for the navigation bar.**

   If you select Text, Dreamweaver proposes the words First, Previous, Next, and Last to indicate the navigation controls. (You can edit them later.) The graphic buttons resemble standard DVD player controls, representing forward and backward. If you select this option, Dreamweaver copies the four GIF files into the folder with the dynamic Web page. Later, you can replace these graphics with ones you create.

FREQUENTLY ASKED QUESTION

Behaviors That Serve You Well

What's the difference between Dreamweaver Behaviors (Chapter 13) and a server behavior?

Both are prewritten programs created by Dreamweaver's engineers. They differ mainly in where the programs run and what they attempt to accomplish.

A Dreamweaver Behavior is a JavaScript program that runs in a Web browser. It usually affects the interaction between a visitor and a Web page. For instance, the Swap Image behavior makes the Web browser exchange one image for another when a visitor mouses over a link. The behavior itself runs in the visitor's Web browser, and anyone can see the program by looking at the page's source code in the browser.

A server behavior, on the other hand, always runs on the *application server*—that is, on the Web-server side of the Internet. Instead of JavaScript, server behaviors can be written in a variety of different languages—VBScript, PHP, C#, Java, and so on, depending on the server model (page 751) your site uses. Server behaviors specifically let you create connections to databases and display, edit, and delete information from databases. Furthermore, since these programs run on the application server, your site's visitors never see the actual programming code. All they see if they look at the source of the page is plain-old HTML (the results of the server program).

In a nutshell, Dreamweaver Behaviors add interactive elements to a Web page, like rollovers and JavaScript alert boxes. Server behaviors supply the programming code you need to build sophisticated database-driven Web sites.

4. **Click OK to insert the navigation bar.**

   Dreamweaver inserts a table, consisting of one row and four columns, into the document window. Each cell contains one text or graphic navigation button. You can change the alignment and any other property of the table to fit your design (see Chapter 7 for more information on working with HTML tables).

Tip: If you use the Recordset Navigation bar frequently, you may long to replace the DVD-control graphics that Dreamweaver displays. Just create your own graphics and name them FIRST.gif, LAST.gif, PREVIOUS.gif, and NEXT.gif (make sure you capitalize them inconsistently just like Adobe has done). Place these graphic files in the C:\Program Files\Adobe\Adobe Dreamweaver CS3\configuration\Shared\UltraDev\Images folder (Applications → Adobe Dreamweaver CS3 → Configuration → Shared → UltraDev → Images folder.

Recordset Navigation Status

When you're viewing hundreds of records, it's nice to know where you are and how many records there are in all. The Recordset Navigation Status tool adds just such information to your pages, as shown in Figure 23-15. Dreamweaver presents the status message in the form of "Records 1 to 10 of 18," indicating which records the visitor is currently viewing and the total number of records.

Here's how to add a Recordset Navigation Status message:

1. **Click in the document window at the location you want to insert the status message. In the Application tab of the Insert bar, click the Record Count button (circled in Figure 23-17).**

You can also choose Insert → Data Objects → Display Record Count → Recordset Navigation Status. In either case, the Recordset Navigation Status window appears.

2. **Select a Recordset from the menu.**

   If the page contains more than one recordset, select the one that you used when you inserted the Recordset Navigation bar.

3. **Click OK to close the window and insert the status message.**

   The Recordset Navigation Status message is simply text with the three dynamic text items (see page 800 for more on dynamic text). Change the words "Records," "to," and "of" to anything you like, such as in "Products 1-10. 149 total products retrieved."

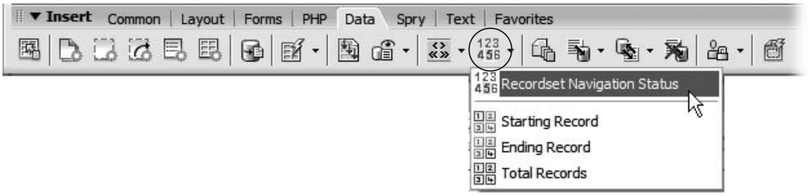


Figure 23-17: *Use the Record Count menu to insert status information about a recordset, including the helpful message ("Records 1 to 10 of 18") provided by the Recordset Navigation Status server behavior.*

You can easily build you own recordset navigation status bar using the last three options in the Record Count menu in the Data tab (see Figure 23-17). Just click in the document window where you'd like to insert the recordset status information and then select an option from the Record Count menu.

The Starting Record option will display the number of the first record in a repeated region. The exact number will depend on where the visitor is within the recordset navigation. For example, say you added a repeated region that displays 10 records at a time; you then add a recordset navigation bar (page 807) so visitors can view all of the records in the recordset by paging through 10 records at a time. On the first page the starting record number is 1, but when someone clicks the "next page" button in the recordset navigation bar, the starting record on that page will be 11. In other words the starting record number is the "11" in "Showing records 11 to 20 of 100."

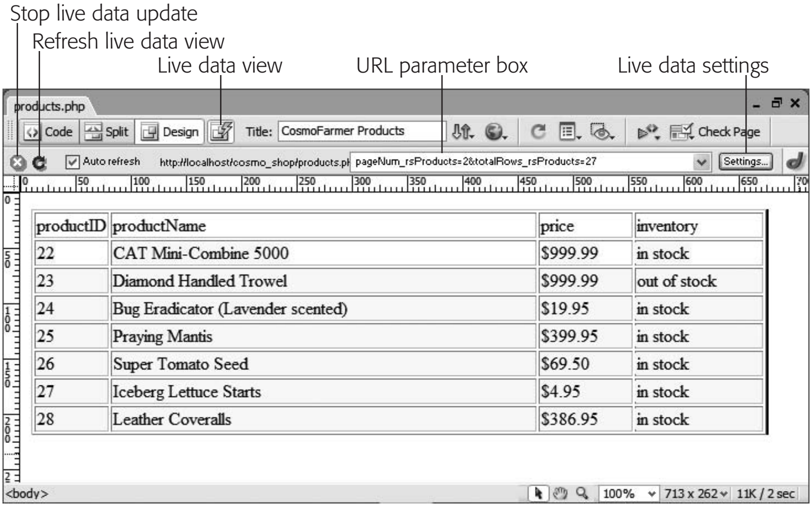
The same is true with the Ending Record option. It displays the number of the last record displayed on the page. Again, the exact value will depend on the recordset and which page of records is being viewed. The ending record number is the "20" in "Showing records 11 to 20 of 100."

Finally, the Total Records option is simple: it's just the total number of records retrieved in a recordset. This is a useful option that you'll find yourself using even without a recordset navigation bar. For example, say you wanted to know how many employees were listed in your database. Create a recordset that retrieves every employee (in other words, don't use a filter [page 785]) and then use the Total Records option from the Record Count menu.

Viewing Live Data

After you add dynamic information to a Web page, you see something like this in the document window: *{rsProducts.productID}*. That gives you an idea of what the information is—in this example, the database column productID from a recordset named rsProducts—but it doesn't show any real database information, which can make designing a page more difficult. You're especially far from seeing the actual result when a page contains a repeating region: what appears as a single row of dynamic text actually shows up as multiple rows or records when someone views it in a Web browser.

Fortunately, you can preview a page with real database records directly in Dreamweaver. In addition to Design view and Code view, Dreamweaver includes a view for working with dynamic information: Live Data view. When viewing a dynamic page in Live Data view, Dreamweaver contacts the testing server, retrieves recordset data from the database, and displays it in the document window, as shown in Figure 23-18.



productID	productName	price	inventory
22	CAT Mini-Combine 5000	$999.99	in stock
23	Diamond Handled Trowel	$999.99	out of stock
24	Bug Eradicator (Lavender scented)	$19.95	in stock
25	Praying Mantis	$399.95	in stock
26	Super Tomato Seed	$69.50	in stock
27	Iceberg Lettuce Starts	$4.95	in stock
28	Leather Coveralls	$386.95	in stock

Figure 23-18:
This is the Live Data view of the dynamic table pictured in Figure 23-11. In Live Data view, you can update the data displayed on the page by clicking the Refresh Live Data view button. Turn on "Auto refresh" if you want Dreamweaver to update the Live Data view automatically whenever you make a change to a dynamic element of the page (but avoid it if your connection to the testing server is slow). Also, if refreshing the data takes too long–or if when switching into Live Data view Dreamweaver seems to have stopped working–you can click the Stop Live Data Update button to halt the current update.

To turn the Live Data view on or off, click the Live Data View button on the toolbar, choose View → Live Data, or press Ctrl+Shift+R (⌘-Shift-R). It may take a few seconds for the document window to change, since Dreamweaver must contact the testing server and retrieve information from the database. After a moment, the Live Data toolbar appears (see Figure 23-18), complete with tools for refreshing the displayed data, changing settings for the Live Data view, and adding URL parameters to test recordset filters.

Note: If you're using Microsoft's IIS Web Server and an Access database, you may get an error when you turn on Live Data view. The probable cause: a permissions problem that prevents IIS from controlling the database. You can find instructions for fixing this problem on Windows XP at *www.sawmac.com/missing/dw8/iis_trouble.php*.

With the Live Data view turned on, it's much easier to see what your page looks like when viewed on the Web. You can continue to work on a Web page in this view just as you would in Design view. You can add text and graphics, modify page properties, and even format dynamic data, as described on page 802.

However, when you're working with a repeating region, you can only select, delete, or format the *first set* of dynamic data items. For instance, as you can see in Figure 23-18, a dynamic table displays repeating rows of database records. If you wanted to apply a Cascading Style Sheet style to the name of each product listed, you would click the item in the first row of dynamic data—in this example, "CAT Mini-Combine 5000"—and apply the style to it. To see the style applied to the other records, click the Refresh button in the Live Data View toolbar.

Live Data View Settings

Some recordsets depend on information provided by a form or URL. Often when you use the filter option, for instance, a recordset searches a database for records that match information from a form or URL.

This feature can come in handy for pages that provide detailed information about a single record. Frequently, for these types of pages, the URL might appear something like this: *product.php?productID=38*, where the name of the page (*product.php*) is followed by a URL parameter that includes a name (*productID*) and value (*38*). The recordset then looks for the product whose ID (*productID*) matches 38.

Because pages like this can't show up properly without a little outside help, you need to provide extra information in the Live Data View Setting window, like this:

1. **In the Live Data toolbar, click the Settings button (see Figure 23-18).**

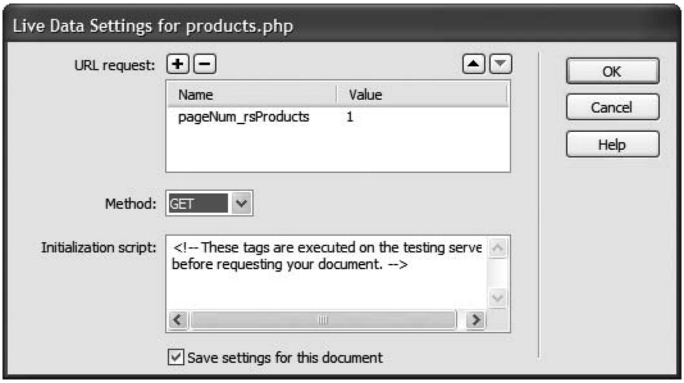
   You can also choose View → Live Data Settings. Either way, the Live Data Settings window appears (Figure 23-19).

2. **Click the + button to add a new name and value pair.**

   Dreamweaver refers to each name value pair in this window as a "URL request," but essentially it means either a form variable (see page 788) or a URL parameter (see page 789).

3. **Click the Name column and type a name for the new "URL request" item.**

   If the "URL request" is being used to filter data in a recordset, you would use the name you used when you created the filter in the Recordset window (see step 5 on page 786).



Live Data Settings for products.php

URL request:

Name	Value
pageNum_rsProducts	1

Method: GET

Initialization script: <!-- These tags are executed on the testing serve before requesting your document. -->

☑ Save settings for this document

Figure 23-19:
The Live Data Settings window lets you define information that the dynamic page needs to operate correctly. For example, the page may include a recordset that uses information contained in the URL to search records in a database. The Initialization Script section of the window stores temporary code that the application server executes before viewing the page in Live Data view. Use this advanced option for setting the session and application variables that the application server uses to process the page (see page 897).

4. **Click the Value column and type a value.**

   This may be a number or text, but the value must retrieve at least one record from the database, according to the filter options you set up in the recordset. For example, if you created a filter to find products under a certain price, you might type *price* as the name of the URL request and *10* as its value.

5. **From the Method menu, select either GET or POST.**

   If the filter in your recordset uses a form variable, select POST; if the filter uses a URL parameter, select GET.

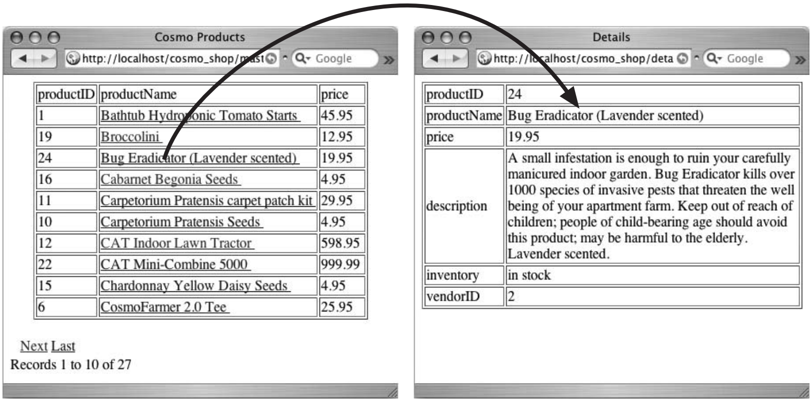
6. **Click OK to close the Live Data Settings window.**

   If you haven't turned on the Auto Refresh button, you must click the Refresh button in the Live Data toolbar (see Figure 23-18) to see the new results. In addition, if you selected the GET method in step 5, a URL Parameter box appears in the Live Data toolbar. You can change the values of the URL parameter directly in this box.

Note: The Recordset Navigation Bar and Status message objects react differently, depending on which records in a recordset are displayed. To see this effect in action, add a new URL request item named *pageNum_rsProducts* in the Live Data Settings window. Set the value to something other than 0. Click OK to return to the Live Data view. You can change this value directly in the URL parameter box in the Live Data View toolbar (see Figure 23-18) to see how the page reacts with different offset values.

Master Detail Page Set

When you build a database-driven Web site, you often want to give your visitors both an overview and a detailed view of information. Usually, it takes two separate Web pages to do the job: one that lists limited information about all the records in a recordset, and one that links to a second page with detailed information about a single record. Dreamweaver calls these *master* and *detail* pages and gives you a tool for making quick work of this task. Figure 23-20 shows you how these pages work together.


Cosmo Products
http://localhost/cosmo_shop/mast
Google
Details
http://localhost/cosmo_shop/deta
Google

productID	productName	price
1	Bathtub Hydroponic Tomato Starts	45.95
19	Broccolini	12.95
24	Bug Eradicator (Lavender scented)	19.95
16	Cabarnet Begonia Seeds	4.95
11	Carpetorium Pratensis carpet patch kit	29.95
10	Carpetorium Pratensis Seeds	4.95
12	CAT Indoor Lawn Tractor	598.95
22	CAT Mini-Combine 5000	999.99
15	Chardonnay Yellow Daisy Seeds	4.95
6	CosmoFarmer 2.0 Tee	25.95

Next Last
Records 1 to 10 of 27

productID	24
productName	Bug Eradicator (Lavender scented)
price	19.95
description	A small infestation is enough to ruin your carefully manicured indoor garden. Bug Eradicator kills over 1000 species of invasive pests that threaten the well being of your apartment farm. Keep out of reach of children; people of child-bearing age should avoid this product; may be harmful to the elderly. Lavender scented.
inventory	in stock
vendorID	2

***Figure 23-20:** Here's an example of Dreamweaver's Master Detail Page Set. The screen on the left represents a master page–a list of items retrieved from a recordset. Clicking a link on this page opens a detail page (right), which displays the details of a single record.*

The Master Detail Page Set object automates the process of creating dynamic tables and recordset navigation bars, as well as adding many different server behaviors to your pages. In fact, there's nothing this tool does that you can't do (albeit more slowly) with the other tools you've learned about in this chapter.

Note: The Master Detail Page Set object isn't available for the ASP.NET server model.

To create a Master Detail Page set, follow these steps:

1. **Create two Web pages—one for the master page and another for the detail page.**

   They can be new, blank pages or existing pages that require the dynamic information from the database. It helps to use descriptive names for these pages, such as *productIndex.php* and *productDetails.php*. (Save each page with an extension appropriate for the server model you're using: .asp, .aspx, .cfm, .php, or .jsp.)

2. **Open the master page—the one listing all the records—and add a recordset to it.**

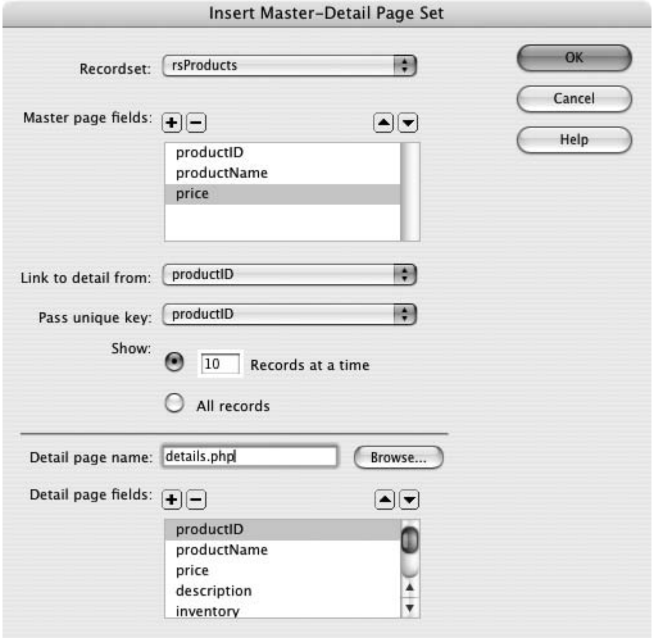
   This recordset must include not only all the columns to be displayed on the master page, but also all the columns to appear on the detail page. Both pages use the same recordset, so this one recordset must retrieve *all the* information you want on both pages. Also, make sure you select the primary key for the table (the ID used to identify each record). Even if you won't display this key on the page, you need it to link the master page to a detail page.

3. **In the Data tab of the Insert bar, click the Master Detail Page Set button (see Figure 23-1).**

   You can also choose Insert → Data Objects → Master Detail Page Set. Either method opens the Insert Master-Detail Page Set window (see Figure 23-21).

4. **From the Recordset pop-up menu, chose the name of the recordset you created in step 2.**

5. **Select the fields (database columns) you wish to appear on the master page.**



Insert Master-Detail Page Set

Recordset: rsProducts

Master page fields:

productID
productName
price

Link to detail from: productID

Pass unique key: productID

Show: ● 10 Records at a time

○ All records

Detail page name: details.php

Detail page fields:

productID
productName
price
description
inventory

Figure 23-21:
The Insert Master-Detail Page Set window lets you quickly create two common types of dynamic pages: one that lists many records in a database, and another that shows detailed information about a single database record. Unfortunately, this tool is not available in the ASP.NET server model in Dreamweaver.

You'll probably remove a bunch of columns from the "Master page fields" box, since most of the information is reserved for the detail page. To remove a column, click its name to select it and then click the minus (–) button. (If you accidentally delete a column, click the + button to add it back.) You can also change the order of the columns by selecting a column name and then clicking the up or down arrow buttons. The order the fields are listed in the box dictates the order in which they appear on the master page.

6. **From the "Link to detail from" pop-up menu, choose a column.**

   Here you're determining which item on the master page is linked to the detail page. In Figure 23-20, each product's name has a link to the detail page. If you're creating a staff directory, you might select the column that contains each staff member's name. In this way, visitors can click a name to see a page with that staff person's details.

7. **Using the "Pass unique key" field, select a column.**

   Choose a column that uniquely identifies a single record in the database, such as a product identification number or Social Security number. In most cases, this is the *primary key* in a database table (see page 769 for more on primary keys). You must add the "unique key" column to the recordset you create in step 2 for it to appear in this menu.

8. **Select how many records you wish to show.**

   You can either type a number into the "Records at a time" box or select "All records."

9. **Click Browse. Select the detail page you created in step 1.**

   In this step and the next, you're defining the detail page and what information appears on it.

10. **Select the fields you wish to display on the detail page.**

    The process is the same as step 5, but in this case, you'll probably include most, if not all, of the columns. After all, the detail page is where most of the information for an individual record shows up.

11. **Click OK to close the window and create the pages.**

    It may take a few moments for Dreamweaver to complete this step. It's adding a lot of code to both the master and detail pages.

Once completed, you can (and should) modify the tables, format the dynamic items, and design the page to your liking. Because the Master Detail Page Set tool just automates the process of adding repeating regions, recordset navigation bars, and other server behaviors, you must edit those items individually on the page. In other words, you can't return to the Insert Master-Detail Page Set window (Figure 23-21) to alter items on either page. For example, if you decide to remove a piece of dynamic information from the detail page, you must make this change on the detail page itself.

While the Master Detail Page Set tool makes building these types of pages a snap, it does have its drawbacks. The primary problem is that Dreamweaver uses the same recordset for both the master and detail pages. This can slow down the works, because even though you may want to display only a few columns of data on the master page (the productID, productName, and price fields in Figure 23-20), the recordset added to the page must retrieve *all* of the information the detail page needs. The database server is doing a lot of extra work retrieving unused data. However, there is a workaround: after creating the master and details pages, return to the *master page*, edit the recordset, and then select *only* the fields that that page uses. (Editing recordsets is described on page 799.)

Although the master-detail page set makes quick work of creating these types of pages, you can do all the same tasks using the tools you've already learned—repeating regions, recordset navigation bars, and so on—with the added benefit of greater design flexibility. For an example of creating a more complex master and detail page set by hand, complete the tutorial at the end of this chapter.

Passing Information Between Pages

Every now and then, you'll want to pass a piece of information from one page to another. The master-detail page set described in the previous section uses this concept: a link on the master page not only points to the detail page, but also passes along a unique ID used to create a filtered recordset on the detail page. In other words, the master page lists a bunch of records from a database. Each record not only links to the detail page, but also passes along its unique ID. The link might be something like *productDetails.php?productID=7*.

The information after the ? in the URL is a *URL parameter*, which the detail page uses to build a recordset. In this example, the detail page would find only one record—the one whose *productID* is 7—and display its details on the page. The key to the success of the master-detail page set, then, is the ability to pass information to another page and then use that information to filter a recordset (see page 785 for details on filtering database records).

Dreamweaver can pass information to other dynamic pages using either of two tools: the Go To Detail Page and Go To Related Page server behaviors.

Note: These two tools are available only for the ASP and JSP server models. For the other server models, several developers have created extensions to fill the gap. The free PHP Missing Tools extension by Felix One (*www.felixone.it/extensions/freeextdetailen.asp?IDProdotto=FX_PHPMissing*) includes both the Go To Detail Page and Go To Related page server behaviors for PHP. In addition, Deng Jie has created Go To Detail page extensions for ColdFusion, and ASP.NET. You can find these at the Adobe Exchange (see page 742)–just search for "Go To Detail Page." (These extensions work identically to the ones that come with Dreamweaver, so the following instructions still work.)

Go To Detail Page

A detail page, logically enough, is intended to provide more details on a single database record. To retrieve details on only one record, the detail page must include a recordset that filters the records of a database table based on some unique identifier, usually a record's primary key. For example, if every ad in a database of advertisements had its own unique ad ID, to find information on just a single ad you simply search for the one record that matches a particular ID number—in other words, you create a recordset that filters the data based on that ID number.

The Go To Detail Page server behavior provides a way to pass information to a detail page in the URL of a link—for example, *productDetails.php?productID=4*. In this way, when the detail page loads, it can use this URL variable—productID, in this example—to filter the database to retrieve the requested record (see page 789 for tips on using a URL variable to filter recordsets).

In many cases, you use this server behavior in conjunction with a repeating region (page 805) on a page that lists multiple database records. In other words, you use this behavior on a master page. Then you link each record in the list to the same page—the detail page—but pass along a different, unique ID for each record.

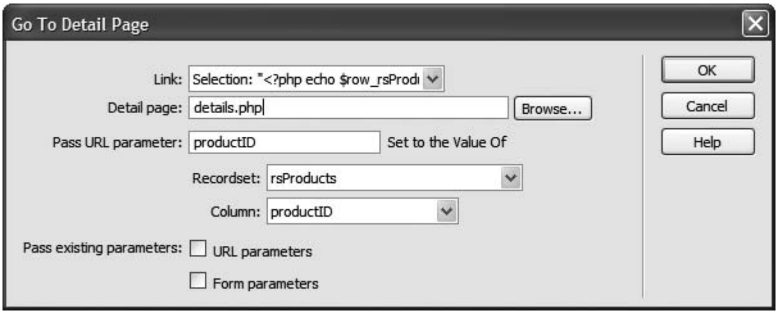
To use this server behavior, first add a recordset to the page. The recordset provides the information that's passed to the detail page (usually a record's primary key). Frequently, you'll also add a repeating region, or use Dreamweaver's Repeating Table command (page 803). Here's the whole process:

1. **Select an item on the page (graphic or text) to serve as a link to a detailed page.**

   Since you frequently use this server behavior in conjunction with a repeating region, you could select a piece of dynamic text within the repeating region. For example, on a page that lists many products, you could select the name of the product.

2. **Make sure the Server Behaviors panel is open (Ctrl+F9 [⌘-F9]). Click the + button; from the pop-up menu, choose Go To Detail Page.**

   The Go To Detail Page window appears (Figure 23-22). Skip the Link pop-up menu. (ASP and JSP users can also use either the Go To Detail Page button on the Data tab of the Insert bar or choose Insert → Data Objects → Go To → Detail Page to reach the Go To Detail Page window. If you've downloaded one of the extensions mentioned in the Note on page 818, you'll only find the Go To Detail Page option in the Server Behaviors panel.)



Go To Detail Page

Link: Selection: "<?php echo $row_rsProdı

Detail page: details.php

Pass URL parameter: productID Set to the Value Of

Recordset: rsProducts

Column: productID

Pass existing parameters: □ URL parameters

□ Form parameters

Figure 23-22: *The Go To Detail Page server behavior can pass information from a recordset to another page by adding a URL parameter to a link.*

3. **Click Browse and select the detail page.**

   You're choosing a dynamic page, of course.

   Keep in mind that this server behavior doesn't actually *do* anything to the detail page, like adding a recordset to it. This behavior merely links to that page, passing along some additional information in the URL. In other words, to take advantage of the data passed along in the link, you need to add a recordset to the detail page that uses the URL variable. (You can also use the URL variable in other ways, as described on page 899.)

4. **Type a name into the "Pass URL parameter" box.**

   This is the name of the URL variable: For example, it's the word *productID* that appears in the URL *detail.php?productID=8.* Often, your best bet is to use the same name as the database column you select in step 6 below. But at the very least, the name should contain only letters and numbers, without spaces or other punctuation (because it's transmitted in the URL).

5. **From the Recordset pop-up menu, choose a recordset.**

   This is the recordset containing the information to be included in the URL.

6. **From the Column pop-up menu, select a database column.**

   This should be a primary-key field. This will be the *value* of the URL variable. In the example URL, *detail.php?productID=8,* it's the number 8. The actual number, of course, will be based on the primary key value for the particular record.

7. **If you want to pass on URL variables and form variables already present on the page, turn on the "URL parameters" and "Forms parameters" boxes.**

   For a discussion of these options, read the following section.

8. **Click OK to close the window and add the link.**

   Dreamweaver adds a link with all the programming that your site's server model needs.

Once you've completed these steps, open (or create) the detail page and add a recordset that uses the URL variable.

Go To Related Page

The other Dreamweaver tool for passing information between pages is the Go To Related Page server behavior. It takes information that's been passed to a page (in the form of URL parameters or Form parameters) and passes it onto yet another page.

Here's how you might use this feature. Suppose your Web site sells expensive manufacturing equipment. On a detail page, which lists the specifications for a particular machine, you include a link to a page with a larger photo of the machine. When the visitor clicks the "click for larger photo" link, the photo page retrieves and displays the proper photo.

But how does the photo page know which photo to display? An easy way would be to pass along the ID for the product, information that's included in the URL on the detail page.

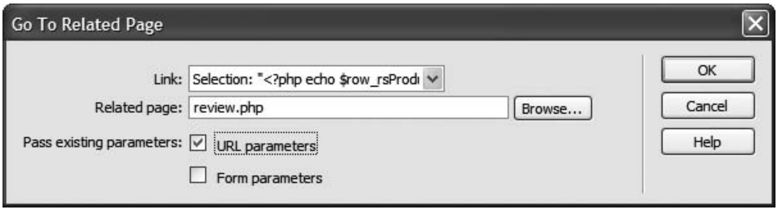
The Go To Related Page server behavior is ideal for this situation. It simply links to another page, passing along any URL parameters or form information already processed by the page. To use it:

1. **Select the graphic or text that will serve as the link to another page.**

   This could be text like "Click for larger photo," or "See a related review." Make sure the Server Behaviors panel is open (Ctrl+F9 [⌘-F9]).

2. **Click the panel's + button; from the pop-up menu, choose Go To Related Page.**

   The Go To Related Page window appears (Figure 23-23). Ignore the Link pop-up menu.



Go To Related Page

Link: Selection: "<?php echo $row_rsProd

Related page: review.php

Pass existing parameters: ☑ URL parameters

□ Form parameters

***Figure 23-23:** This server behavior links from one page to another and passes along information contained in the URL, or data that was already sent to the first page as a form.*

3. **Click Browse. Select the page to which you want to pass the URL or form variables.**

   In order for the linked page to take advantage of these variables, you need to add a recordset and use the variables to filter the results. You can also add these variables to your Bindings panel, as described on page 897, and use them as dynamic text elements on the page, or even bind them to form elements.

4. **Turn on the appropriate boxes.**

   The "URL parameters" box passes along any URL variables to the linked page. For example, suppose you add this behavior to a Details page, creating a link to a page named *moreInfo.php*. When someone comes to the detail page, the URL might be *productDetails.php?productID=9* (depending on which record they're viewing). When the visitor clicks the link, the URL becomes *moreInfo.php?productID=9*. In other words, the *productID=9* from the detail page is sent along to the *moreInfo.php* page.

   The "Form parameters" box does the same thing for form variables. For example, when someone fills out and submits a Search form, the information travels to a Results page, which displays the results of that search. You could then preserve the form information submitted to the results page and pass it along to another page.

5. **Click OK to close the window and apply the server behavior.**

   To edit one of these behaviors, double-click its name in the Server Behaviors panel; to delete one, select it in the panel and press the – button or Delete.

Tutorial: Displaying Database Info

In this tutorial, you'll continue the work you started in the last chapter. Displaying the products available from CosmoFarmer's online store requires two dynamic pages. The first displays a list of all products available on the site. From that page, visitors can jump to a detailed description of an item for sale by clicking its name. You'll learn how to create both basic and advanced recordsets, and take advantage of some of Dreamweaver's built-in application objects.

This tutorial assumes you've done all of the setup work described in Chapter 22. If you haven't, turn to page 754 and follow the instructions for preparing the application server, database, and Dreamweaver for this project. (Also make sure you have XAMPP or MAMP up and running, as described on pages 757 and 759.)

Creating a Recordset

You'll start by opening an existing page and adding a recordset to it:

1. **Open *index.php* in the root folder of the local site you defined in the previous chapter.**

   Either choose File → Open and navigate to and select *index*, or double-click the file name in the Site Files panel.

The basic structure of this page is already complete. It was built using CSS layout, the Spry navigation bar, a table, Cascading Style Sheets, and the other HTML features you've already learned. There's nothing dynamic about this page yet, so you'll need to create a recordset and insert database information into the page.

2. **Open the Bindings panel (Windows → Bindings or Ctrl+F10 [⌘-F10]).**

   The Bindings panel is your command and control center for retrieving and using information from a database. It lets you create new recordsets and add dynamic data to a page.

3. **Click the + button in the Bindings panel and then choose Recordset.**

   You can also use the Server Behaviors panel (click the + button on that panel and then select Recordset); click the Insert Recordset button on the Data tab of the Insert bar (see Figure 23-1); or choose Insert → Data Objects → Recordset. Choose whichever method feels easiest for you. In any case, the Recordset box should now be on the screen. (Make sure you're using the *simple* mode—you should see a button labeled Advanced—as shown in Figure 23-24.)

   Next, select the information you want to retrieve.

4. **Type *rsProducts* into the Name box.**

   Since Dreamweaver lets you connect to more than one database, you must now indicate *which* database connection you want it to use.

5. **From the Connections pop-up menu, select "connCosmo."**

   This is the name of the connection you created in the last chapter.

   The *CosmoFarmer* database contains several tables. For this page, you'll create an index of all products for sale. That information is in the Products table.

6. **From the Tables menu, choose "products." Click Selected.**

   You don't need to retrieve *all* the information from the Products table. Since this dynamic page will present a listing of all of the products, you need only basic information, like the name of the product, its price, and its inventory status. More details about each product will appear on a second page, to be created later in this tutorial.

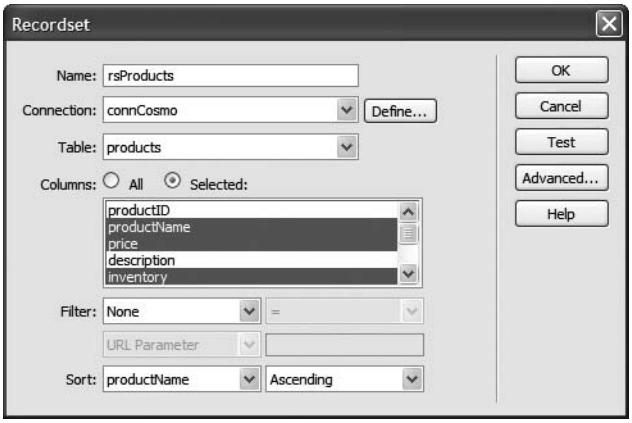
7. **In the Columns list, Ctrl-click (⌘-click) "productName," "price," and "inventory."**

   These are the columns of data you want to get from the database.

   You don't have to filter this recordset (meaning you're not trying to search the database for a particular product), so you can ignore these controls in the dialog box—but it would be nice if the product names appeared in alphabetical order.

8. **From the first Sort pop-up menu, choose "productName." From the second menu, choose Ascending.**

The Ascending option makes certain the records start with products whose names begin with A and end with names that begin with Z. The Recordset window should look like Figure 23-24.



Name: rsProducts

Connection: connCosmo

Table: products

Columns: ○ All ● Selected:

productID
productName
price
description
inventory

Filter: None =

URL Parameter

Sort: productName Ascending

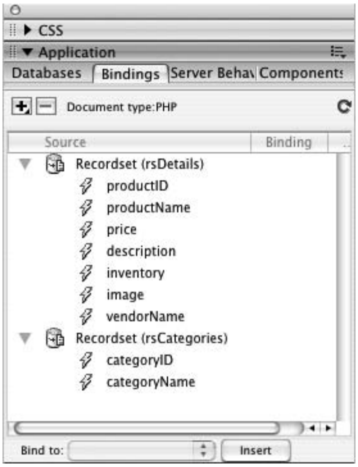
Figure 23-24:
Recordsets let you retrieve information from a database, so that you can display it on a page. This simple recordset will retrieve the product name, price, and inventory status of every product in the CosmoFarmer database.

9. **Click OK to close the Recordset dialog box.**

   The new recordset appears in the Bindings panel. To see the database columns in the recordset, you need to expand the recordset list.

10. **In the Bindings panel, click the + icon (flippy triangle on Mac) next to the Recordset icon.**

    The Bindings panel should look like Figure 23-25. There's already an HTML table on the page—below the CosmoFarmer Online Store headline—waiting for the product information.



Recordset (rsDetails)
- productID
- productName
- price
- description
- inventory
- image
- vendorName

Recordset (rsCategories)
- categoryID
- categoryName

Figure 23-25:
The Bindings panel provides a list of a page's recordsets and data fields. You can use these fields to add dynamic text to a page.

11. **In the document window, click inside the table cell directly below the one labeled Product.**

    In this cell, you'll add the name of the item for sale.

12. **In the Bindings panel, click "productName" and then click Insert.**

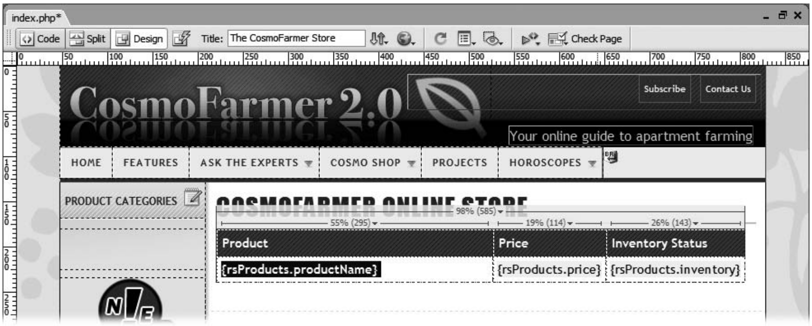
    You've just added dynamic data to the page. For the moment, it looks like *{rsProducts.productName}*. You can apply formatting to dynamic data just as you would to regular HTML text—apply a style, change the font, make it bold, and so on.

13. **Make sure *{rsProducts.productName}* is selected in the table cell on the page, and then click the B button in the Property inspector.**

    Now you'll add both the price and inventory status to the page. There's an even easier way to insert recordset data.

14. **From the Bindings panel, drag "price" to the empty cell (on the Web page)—below the cell with the label "Price." Repeat this step by dragging "inventory" into the third empty cell ("Inventory Status") on the page.**

    At this point, your page should look like Figure 23-26.



Product	Price	Inventory Status
{rsProducts.productName}	{rsProducts.price}	{rsProducts.inventory}

***Figure 23-26:** After you add dynamic information to a page, it appears with a blue background. Here, three pieces of dynamic data appear on the page from the rsProducts recordset: rsProducts.productName, rsProducts.price, and rsProducts.inventory. To change this background color, choose Edit → Preferences (Dreamweaver → Preferences). Click the Highlighting category and change the Live Data View colors at the bottom of the window.*

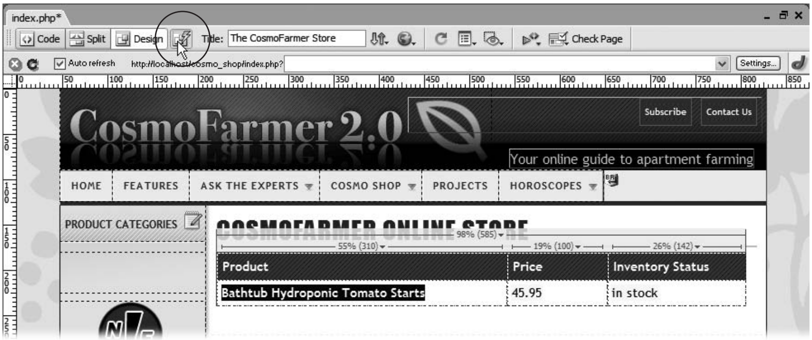
Live Data View and Creating Repeating Regions

When you add dynamic data to a page, it doesn't look like much. All you see is the recordset and column name between braces ({rsProducts.productName}, for example). Not only can this interfere with your design, it certainly doesn't give you a clear picture of what your Web page is actually going to look like.

Thank goodness for Dreamweaver's Live Data view:

1. **Click the Live Data View button in the document window's toolbar** (circled in Figure 23-27).

   Dreamweaver connects to the testing server and database to retrieve the data requested by the recordset (this may take a few seconds). For the first time, you get to see the page as it will appear on the Web. But there's a problem: only one item is listed. This page is meant to show listings for *all* products. To show more products, you have to add a repeating region—a part of the page that repeats for each record in a recordset.



Product	Price	Inventory Status
Bathtub Hydroponic Tomato Starts	45.95	in stock

Figure 23-27: *When you click the Live Data View button (circled) in the document toolbar, Dreamweaver pulls data from the database and displays it in the document window. In addition, a second toolbar appears between the document and the document toolbar that lets you control various Live Data view settings.*

2. **Click the Live Data View button again to turn it off.**

   Dreamweaver runs a little more quickly when Live Data View is off, so it's generally a good idea to only turn it on when you really want to get an accurate view of the page in Design view.

3. **Move your cursor to the left of the phrase "Bathtub Hydroponics Tomato Starts" (you want your cursor to be over the left edge of the table); click when the right-pointing arrow appears.**

   That's how you select the bottom row of the table. (For other methods of selecting a table row, see page 252.) Since this row displays the info for a single product, it's a perfect candidate for a repeating region, where an additional row appears in the table for each product.

4. **On the Data tab of the Insert bar, click the Repeated Region button** (see Figure 23-1).

   The Repeat Region dialog box (Figure 23-13) appears, so that you can select which recordset to use (if the page has more than one) and how many records to display. In this case, since you have only one recordset, you just have to tell Dreamweaver how many records to show.

5. **In the "Records at a Time" box, type *10.* Click OK.**

   You don't know how many products the *CosmoFarmer* store offers at any time. If it were a lot, you wouldn't want to show them all on a single page—a thousand listings would make a pretty long Web page. In this case, just list ten records at a time.

   If the database has more than ten products, you need to provide a way for people to see the other items. You'll do that next.

6. **Click to the right of the table that lists the products. Then, in the Data tab of the Insert bar, click the Recordset Paging button and select Recordset Navigation Bar from the menu** (see Figure 23-16).

   The Recordset Navigation dialog box appears. There's only one thing to do here.

7. **Make sure the Text button is selected; click OK.**

   Dreamweaver plops a table containing four columns onto the page. The columns contain links that let visitors navigate the product listings.

   The table will look better with some CSS style applied to it.

8. **In the document window, select the table. From the class pop-up menu in the Property inspector, choose "paging".**

   For techniques on selecting a table, see page 252.

9. **Click at the end of the headline "CosmoFarmer Online Store" and then press Enter to create a new, empty paragraph; choose Recordset Navigation Status from the Record Count menu (see Figure 23-17). Click OK when the Recordset Navigation Status window appears.**

   Dreamweaver inserts something that looks like this: *Records {rsProductsFirst Record} to {rsProductLastRecord} of {rsProductsTotalRecords}*. That's placeholder code for this notation: "Records 1 to 10 of 27." If you click the Live Data View button, that's what you'll see.

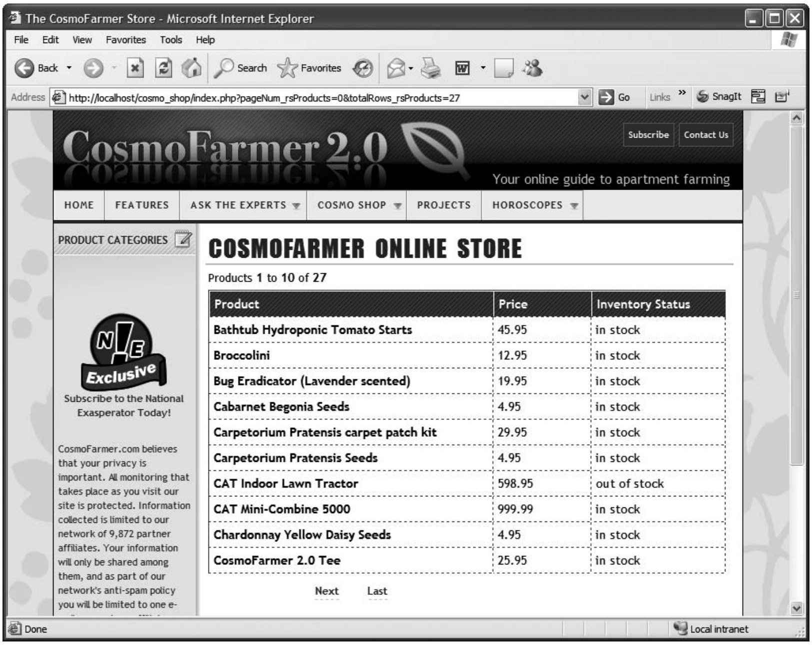
   Now to rework the message a little bit.

10. **Select the word Records and change it to Products; select each of the placeholders (*{rsProducts.FirstRecord},* and so on) and then click the B button in the Property inspector to make them bold.**

    You can add or remove any of the non-dynamic text in the navigation status bar. Now to see the results of your hard work.

11. **Press F12 (Ctrl-F12) to preview the page in your Web browser.**

    You may get a warning message titled "Update Copy on Testing Server." Even though when you first defined the site you told Dreamweaver that you're running the testing server on your own computer, it somehow thinks that the testing server is on another computer. Turn on the "Don't show me this message again" checkbox and click OK. The page opens in a Web browser displaying ten records (see Figure 23-28).


The CosmoFarmer Store - Microsoft Internet Explorer
File Edit View Favorites Tools Help
Back Search Favorites
Address http://localhost/cosmo_shop/index.php?pageNum_rsProducts=0&totalRows_rsProducts=27
Go Links SnagIt
CosmoFarmer 2.0
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Your online guide to apartment farming
HOME FEATURES ASK THE EXPERTS COSMO SHOP PROJECTS HOROSCOPES
PRODUCT CATEGORIES
N!E Exclusive
Done
Local intranet

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COSMOFARMER ONLINE STORE

Products 1 to 10 of 27

Product	Price	Inventory Status
Bathtub Hydroponic Tomato Starts	45.95	in stock
Broccolini	12.95	in stock
Bug Eradicator (Lavender scented)	19.95	in stock
Cabarnet Begonia Seeds	4.95	in stock
Carpetorium Pratensis carpet patch kit	29.95	in stock
Carpetorium Pratensis Seeds	4.95	in stock
CAT Indoor Lawn Tractor	598.95	out of stock
CAT Mini-Combine 5000	999.99	in stock
Chardonnay Yellow Daisy Seeds	4.95	in stock
CosmoFarmer 2.0 Tee	25.95	in stock

Next Last

Figure 23-28: *Building dynamic Web pages in Dreamweaver is easy. In just a few short steps–all right, 25 steps–you can create pages for viewing database records. (You can click the Next link at the bottom of the page to jump to the next set of product listings.)*

Editing a Recordset and Linking to a Detail Page

Now that the main products listings page is complete, you need to create a link to the name of each product that, when clicked, opens a page with the details for that item. How does the detail page know which product to display? The link for each product will have some additional information—the product's ID number—tacked on to the end. In other words, while all of the product links will point to the same page, they'll pass some additional information which will help the detail page know which product to display.

Unfortunately, Dreamweaver doesn't provide a simple, one-click method to add a URL parameter to tell a detail page which recordset's details to display. You'll have to create that yourself, but first you need to add a primary key to the product's recordset.

1. **Open the Server Behaviors panel by pressing Ctrl+F9 (⌘-F9), or clicking the Server Behaviors tab in the Application panel group.**

   A list of all the different server behaviors appears; these were added when you created a recordset, put dynamic text on the page, and used Dreamweaver's other dynamic-page-creation tools. (Server behaviors are discussed in depth in Chapter 25.)

   Instead of adding another server behavior at this point, you can edit one you've already created: the recordset. When you first added this recordset, an important piece of information was missing—the product's ID number. (Actually, it was omitted from the tutorial intentionally, so that you'd now have this engaging educational opportunity to learn how to edit a recordset.)

Each product has its own ID number, which you'll use to tell the Details page which item to display.

2. **Double-click "Recordset (rsProducts)" in the Server Behaviors panel to open the Recordset dialog box.**

   You'll just add one additional column to the recordset.

3. **Ctrl-click (⌘-click) "productID" in the columns list, and then click OK.**

   You've just added one additional column (productID) to the recordset. Now the recordset not only retrieves the name, price, and inventory status for each product, but also its unique ID number.

4. **In the document window, select the dynamic data containing the product's name: "{rsProducts.prodName}."**

   A simple link to an already created Web page doesn't work here. Since the page containing a product's details is dynamic—it changes based on which product is being viewed—you need one of Dreamweaver's server behaviors.

   Unfortunately, Dreamweaver's PHP Server Model doesn't include the handy Go To Detail Page server behavior that you can find in some of the other server models. This means you'll have to create the link the long way. (There's a very handy extension named "PHP Missing Tools" which adds the Go To Detail Page server behavior for PHP. See page 818 for the details.)

5. **In the Property inspector, click the "Browse for file" icon.**

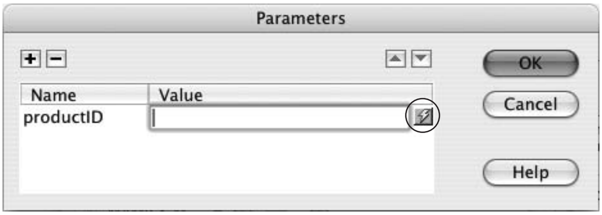
   The Select File window appears. This is the same process as creating a regular link.

6. **Locate and select the file *product.php,* located in the site's root folder.**

   This is the page that will display the detailed records of each product. Next, you'll add a little dynamic information to the link, so that each product's unique ID number can be passed along to the details page.

7. **Click the Parameters button on the right side of the Select File window (it's just to the right of the URL box).**

   The Parameters window opens (see Figure 23-29).



Name	Value
productID	

***Figure 23-29:** The Parameters window lets you tack on dynamic information to the end of a link. In this way, you can pass information (for example, a product's ID number) off to another dynamic page that uses that information to display dynamic information.*

8. **Type *productID* in the Name column and then click the dynamic value button under the Value column (circled in Figure 23-29).**

   The Dynamic Data window appears (see Figure 23-30).

   ProductID is the name that will be added to the link. It will help the details page identify the purpose of the value (which you'll select next).

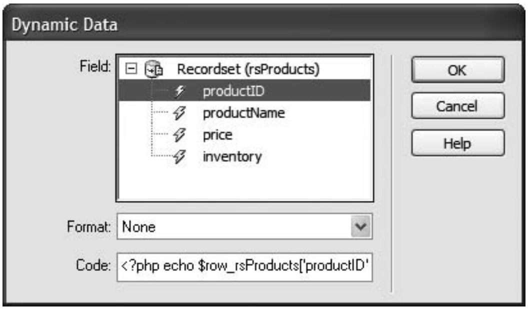


***Figure 23-30:** The Dynamic Data window lets you select data from a database recordset to be used as part of the URL of a link.*

9. **Expand the Recordset list (click the plus or arrow buttons to the left of the Recordset); select productID, and then click OK to close the Dynamic Data window.**

   This step selects the productID column from the recordset. In other words, this indicates that each link should have the unique ID for a particular product.

10. **Click OK to close the Parameters window, and finally click the OK (Windows) or Choose (Mac) button in the Select File window to finish creating the link.**

    You've just created a dynamic link. Now, let's preview it.

11. **Press the F12 (Ctrl-F12) key to preview the page in your Web browser. Click the Bathtub Hydroponic Tomato Starts link.**

    The detail page loads…without any details! You'll get to that step in a moment. In the meantime, look at the URL in your Web browser's address bar. It should look something like this: *http://localhost/cosmo_shop/product.php?productID=1.* Notice the *?productID=1* tagged onto the page *product.php.* That's the information the details page needs in order to retrieve the proper product information. The two pieces of information—*productID* and *1*—are what's called a *key/value pair.* The key *(productID)* tells the details page which field to look in, while the value *(1)* identifies a particular product with an ID of 1. Hit your browser's back button and click a different product's link and you'll see that the ID number is now different.

Note: Sometimes when you preview a Web page from Dreamweaver, the page won't display the changes you just made. The browser has cached (see page 607) the old file, and isn't displaying your recent changes. Just press your browser's reload button when this happens. Internet Explorer is particularly prone to this problem.

12. **Save and close this page.**

Building the Detailed Product Page

In this part of the tutorial, you'll build a detail page that displays all the details for a particular product. In addition, you'll create an advanced recordset that combines information from two separate database tables:

1. **Open the file called *product.php* in the root folder of the site.**

   Either choose File → Open and navigate to and select *product.php,* or double-click the file name in the Files panel.

   Since this page displays the details for a product, it must retrieve data from the database. To set this up, start by creating a recordset.

2. **Click the Insert Recordset button on the Data tab of the Insert bar (see Figure 23-1).**

   You can also choose Insert → Data Objects → Recordset. Or click the + button on either the Bindings panel or Server Behaviors panel, and then select *recordset* from the pop-up menu. In any case, the Recordset dialog box should now be open.

   The *CosmoFarmer* database contains several database tables—one for product information, one for vendor information, one that lists the different product categories, and one that contains user information (user names and passwords). The details page will list not only information from the Products table (such as the product's name and price) but also the name of the product's vendor. Unfortunately, the Products table only contains the vendor's ID number, not its name, so the recordset must incorporate information from both tables. Because the basic panel of the Recordset dialog box doesn't let you retrieve information from more than a single database table, you have to use the advanced setting.

3. **Click the Advanced button on the right side of the Recordset window.**

   The Advanced Recordset dialog box appears.

   Unfortunately, this isn't one of the areas in which Dreamweaver is particularly user-friendly. It helps to understand SQL (see page 793)—or you can just take the following steps.

4. **In the Name field, type *rsDetails.* From the Connection menu, choose "connCosmos."**

   In the next few steps, you'll create an SQL query—essentially a line of programming code that asks the database for particular information that matches specific criteria. In this case, it's the information for a particular product.

5. **Click the + icon (flippy triangle) next to the word Tables in the Database Items list (at the bottom of the dialog box).**

   It expands to reveal the four tables of the database: Category, Products, Users, and Vendors.

6. **Click the + icon (flippy triangle) to expand the Products table.**

Your job is to select the information from this table that you want to display on the page.

7. **Select "productID"; click the Select button to the right.**

   Notice that Dreamweaver writes *SELECT products.productID FROM products* in the SQL box. This is SQL code for selecting a particular column of data from a table. You can now choose the other pieces of information.

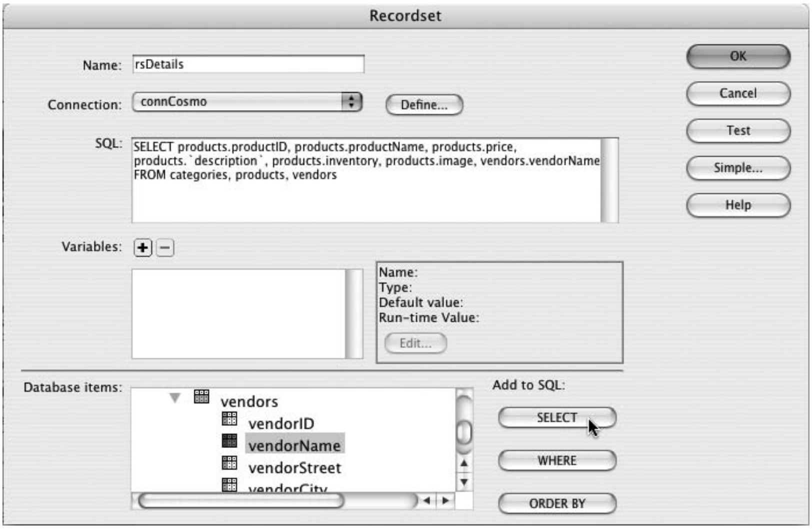
8. **Repeat step 7 for the following items in the Products table: productName, price, inventory, description, image.**

   These are all the items you need to retrieve from the Products table. Now you can choose data from the Vendors table.

Tip: If you understand SQL, you can bypass this point-and-click approach and simply write a SQL query directly in the SQL box.

9. **Click the + icon (flippy triangle) to expand the Vendors table. Repeat step 7 for the vendorName item in that table.**

   The dialog box should now look like Figure 23-31. Congratulations, you've just created a SQL query.



Recordset

Name: rsDetails

Connection: connCosmo

SQL:

```
SELECT products.productID, products.productName, products.price,
products.`description`, products.inventory, products.image, vendors.vendorName
FROM categories, products, vendors
```

Variables:

Name:
Type:
Default value:
Run-time Value:

Database items:

- vendors
  - vendorID
  - vendorName
  - vendorStreet
  - vendorCity

Add to SQL:

Figure 23-31: *The Recordset window's advanced mode lets you use a data tree (the bottom half of the window) to build an SQL statement. By selecting a column name and clicking either the SELECT, WHERE, or ORDER BY buttons, you can get Dreamweaver to do some of the heavy lifting. Unfortunately, you still need to understand a little bit of SQL to create functioning database queries using these advanced options. See page 793 for a brief introduction to SQL.*

But there's a problem here: Because of this query's structure, it retrieves *all* the records for both tables (click the Test button to see for yourself). To remedy the situation, you must do two things: first, combine information from two tables so that you get the vendor information for the corresponding product; and second, retrieve only the information for the particular product specified by the link you created in the last part of this tutorial.

10. **Click inside the SQL box after the word "vendors." Press Enter or Return.**

    You'll have to dive into typing out SQL code.

11. **Type *WHERE products.vendorID = vendors.vendorID*.**

    This little bit of code is called a *WHERE clause*, and it helps filter information in a database. In this instance, you've created what's called a *join*—a statement that joins two or more tables together. When you retrieve product information, you also want to retrieve the name of the vendor who manufactures that product. By matching the vendor ID from the Products table to the identical vendor ID in the Vendors table, the database can produce the proper vendor name.

    If your eyes are glazing over, go get a cup of coffee before plunging ahead.

12. **Click the + button to the right of the word Variables.**

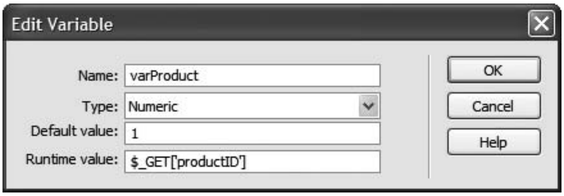
    The Edit Variable window appears (see Figure 23-32).

    You're about to expand on the WHERE clause you just wrote. Not only do you need to get the details of a product (plus the vendor's name), you also want to retrieve just a single record—the particular product whose details the visitor wants to review.

13. **Click in the Name box and type *varProduct*. Type *1* for "Default value." And, type *$_GET['productID']* for the "Runtime value."**

    The Edit Variable box should now look like Figure 23-32. Look back to step 8 in "Editing a Recordset and Linking to a Detail Page" (page 829). Remember that the ID number for the product is embedded in the URL that links to this page. In other words, when someone clicks a link on the main product listings page, the ID number for the product is passed along like this: *product.php?productID=12*.

    In this step, you're retrieving that information from the URL—that's the *$_ GET ['productID']* part—and storing it in a variable that you'll use in the rest of the SQL query.

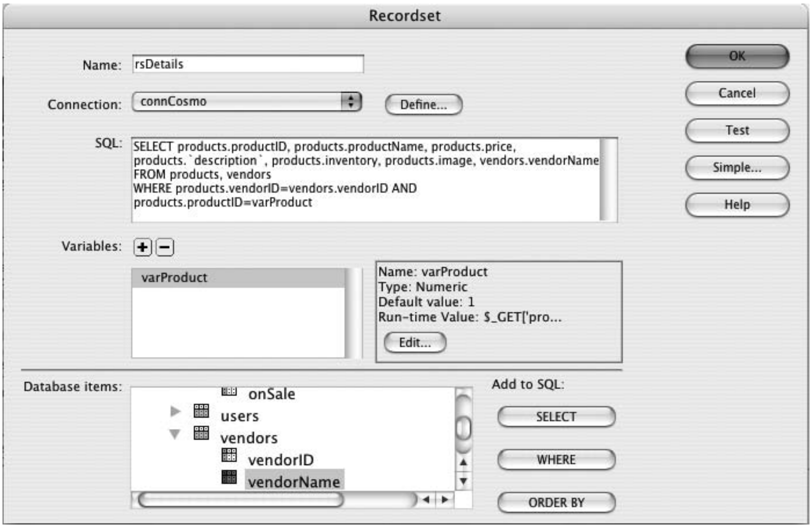


Name: varProduct
Type: Numeric
Default value: 1
Runtime value: $_GET['productID']

Figure 23-32:
When you add a variable to an SQL query you're letting that query respond to information from another source. In this example, information that's sent with the URL that's used to link to this page provides the unique ID number for each product. Because that URL will "vary" ("variable", get it?) the recordset will produce different results–the specific details for one product.

14. **Click OK to add the new variable. In the SQL box, click at the end of the WHERE clause (after vendors.vendorID) and type *AND products.productID = varProduct*.**

    The Recordset window should now look like Figure 23-33.



Name: rsDetails

Connection: connCosmo

SQL:

```
SELECT products.productID, products.productName, products.price,
products.`description`, products.inventory, products.image, vendors.vendorName
FROM products, vendors
WHERE products.vendorID=vendors.vendorID AND
products.productID=varProduct
```

varProduct

Name: varProduct
Type: Numeric
Default value: 1
Run-time Value: $_GET['pro...

Figure 23-33:
In the Recordset window's advanced mode, you can create highly detailed SQL queries that can retrieve and merge information from multiple database tables.

15. **Click the Test button to see if the SQL query works.**

    A Test SQL Statement window opens, containing a single record. Hallelujah: It includes not only product details but also the vendor's name. (If Dreamweaver spits out an error message instead of a record, there's probably a typo somewhere in the SQL. Either try to identify the problem, or delete the SQL query and start again at step 5 above.

16. **Click OK to close the window. Choose File → Save to save your changes.**

Filling in the Details

Now all you need to do is add the information retrieved in the recordset to the page:

1. **In the document window, select the words "Product name."**

   You'll add the name of the product here.

2. **Open the Bindings panel.**

   Either press Ctrl+F10 or click the Bindings tab in the Application panel group.

3. **In the Bindings panel, click the + icon (flippy triangle) next to the recordset to display all the columns retrieved in the recordset. Select "productName," and then click Insert.**

   The placeholder for the dynamic data—*{rsDetails.productName}*—appears in the document window. Next, you'll try the drag-and-drop method of inserting dynamic data.

4. **In the Bindings panel, drag "description" into the empty, blank line just below the product name.**

   Now it's just a matter of adding the additional data to the page.

5. **Continue adding content to this page using these same steps.**

   Add the price, vendor name, and inventory status in the appropriate places in the document window.

   To finish off this page, add a photo to the page.

6. **Click just to the left of the product description (just before {rsDetails.description}), Choose Insert → Image.**

   The Insert Image window appears. You've encountered this dialog box many times before when you inserted a graphic (see Chapter 6). However, in this case, you'll retrieve the image's file name from the database.

7. **Select the Data Sources radio button.**

   In Windows, this button is at the top of the Insert Image window; on a Mac it's at the bottom. At this point, depending on whether you're using Windows or a Mac, you'll either see the Select Image Source window or the Dynamic Data window (see Figure 23-34).

   A list of all of the different data items from the recordset appears. See the item labeled "image"? The database stores the *name* of the image file for each product in the database. But the image file itself isn't stored there. Although some databases do let you store the actual image data—called binary data—in a database, if you merely want to display an image on a Web page, that's a big waste of database space and processing power. A better method, and the one used here, is to just store the name of an image file that's already in the Web site (for example, in a folder named *images*). In the next two steps, you'll craft a path to an already existing file on the Web server.

8. **Select "image".**

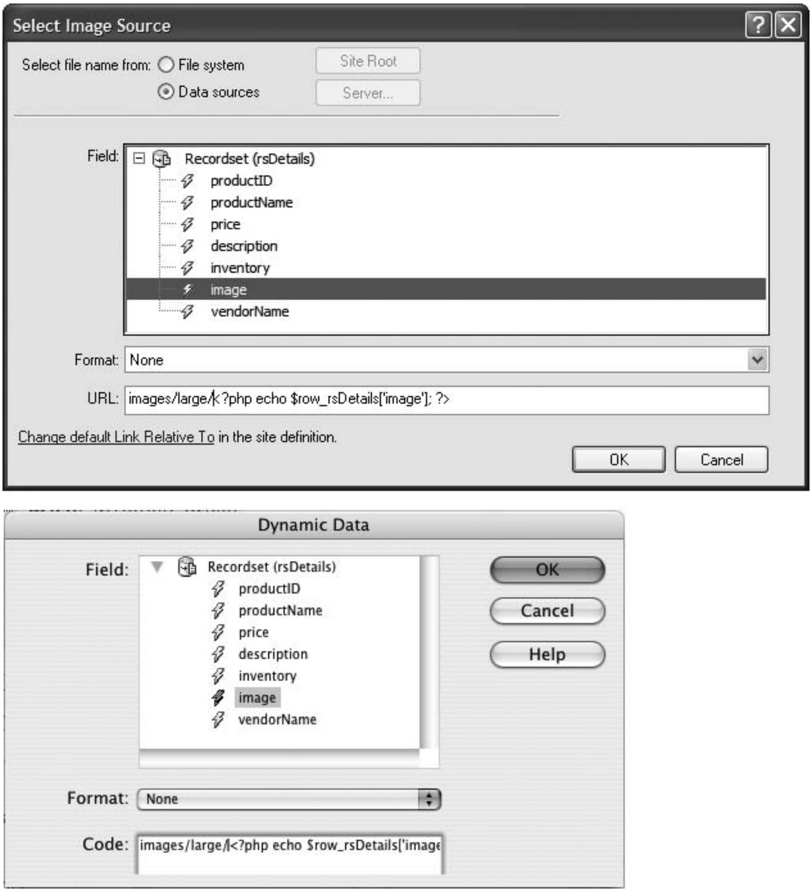
   At the bottom of the window (in the URL box [Windows] and the Code box [Mac]), you'll see some PHP programming code that looks like this: <?php echo $row_rsDetails['image']; ?>. It looks scary, but it simply prints whatever is stored in the image column for the particular recordset. Since the image column in this table stores the name of a file, this code would print something like *tomatoes.jpg*. This is the value that will appear as the src property of the image—in other words, specifying where a Web browser should look for the file. (You learned about the src property in Chapter 6.)

Tip: One benefit of this only-store-the-file-name-in-the-database approach is that you can store different size images for the same record in different locations, yet still use the same recordset field for each. For example, say you had a dynamic page that displays thumbnails of all the products in your database. And you also have a page that displays a larger picture of the same product. Use the same file name in each case (*tomato.jpg* for example) but store the thumbnail file in one location (perhaps *images/small/*) and the larger file in another folder (*images/large/*). When you want to insert a thumbnail you could use the database field used to store the image, but add the appropriate path (for example, *images/small*). When you want to insert the larger image you could use the same database field (*image,* for example) but supply the path that points to the larger file (*images/large/*).

For the CosmoFarmer store, the images are actually stored inside a folder named large, which is inside the images folder. (Thumbnails for each image are stored in the small folder.) So for the image to appear correctly, you need to add a little additional information to this window.

9. **In the URL (Code) box, click before the text** ***<?php*** **and type** ***images/large/*** **as pictured in Figure 23-34.**

   Don't omit the forward slash after the word large. You'll then have this code: *images/large/<?php echo $row_rsDetails['image']; ?>*.



Select Image Source

Select file name from: ○ File system ● Data sources

Field: Recordset (rsDetails)
- productID
- productName
- price
- description
- inventory
- image
- vendorName

Format: None

URL: images/large/<?php echo $row_rsDetails['image']; ?>

Change default Link Relative To in the site definition.

Dynamic Data

Field: Recordset (rsDetails)
- productID
- productName
- price
- description
- inventory
- image
- vendorName

Format: None

Code: images/large/<?php echo $row_rsDetails['image

Figure 23-34: *Paths for links and images needn't be hardwired into a Web page. You can craft custom paths and links using information retrieved from a database. A good technique when working with images and a database is to store just the name of the image file in the database. Then, when you insert an image using a data source from a database, you select the field that contains the file name and then precede the PHP code that appears in the URL (Windows, top) or Code (Mac, bottom) box with the information necessary to create a complete path to the image.*

10. **Click OK. (If the Image Tag Accessibility Attributes window appears, just click OK to dismiss it.)**

    A little square icon appears in the document window. This is an image placeholder icon, and represents the space where an image will appear when the page is viewed in a Web browser. Next you'll add a style to this graphic.

11. **Make sure the little square icon is still selected (if not, click it), and then choose *productImage* from the Class menu.**

    The image placeholder floats to the right side of the page. One last thing to do: because you're a Web design expert (or at least an aspiring expert), you know that images should always have their *alt* property (page 209) set. But since the exact image that appears will vary based on which product is being viewed—it might be a tomato or a picture of an indoor lawn mower—how can you specify alt text that matches the picture? As with most things in this section of the book, the answer is, "You do it dynamically, of course!"

    To set alt text dynamically you need to use the Tag inspector window.

12. **Make sure the image placeholder is still selected, and then choose Window → Tag Inspector (or press F9).**

    The Tag inspector is a kind of super Property inspector. It lets you set every conceivable HTML property for a particular tag (not just the most common ones listed in the Property inspector).

13. **Click the "Show List View" button (the icon with A-Z on it), and click the empty area to the right of "alt".**

    You could just type the alt text here, but notice that our friend, the lightning bolt icon, appears. This is your clue that we can access some dynamic data.

14. **Click the lighting bolt icon to open the Dynamic Data window.**

    The Dynamic Data window works just like the Dynamic Text window pictured back in Figure 23-8. It let's you insert information from a field in a recordset. In this case, the appropriate text description for each product's photo is the product's name.

15. **Click *productName* in the Dynamic Data window; click OK.**

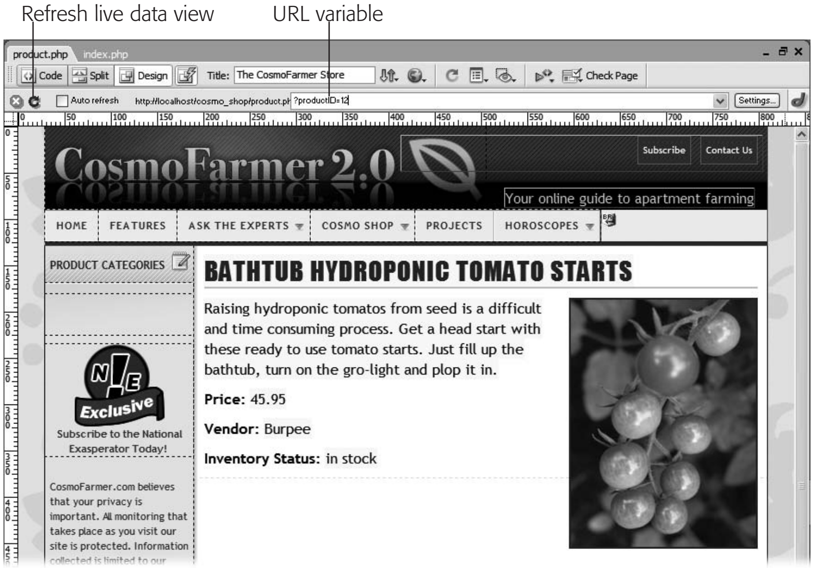
    Now whenever the page is viewed, the alt text for the image will match the product's name. Time to see how it looks.

16. **Click the Live Document View button. If everything looks good (Figure 23-35), choose File → Save.**

To see the results of your hard work, open the *products.php* page in Dreamweaver and then press the F12 key (option-F12) to preview the page in a browser. Now click a link to see the details for that product.

Operators Standing By

One final touch would make the products page perfect. Each product sold at the *CosmoFarmer* online store belongs to a category—plants, seeds, pest control, and so on. Shoppers might find it useful to view a list of products in a particular category they're interested in—just the plants, for instance.



Refresh live data view

URL variable

BATHTUB HYDROPONIC TOMATO STARTS

Raising hydroponic tomatos from seed is a difficult and time consuming process. Get a head start with these ready to use tomato starts. Just fill up the bathtub, turn on the gro-light and plop it in.

Price: 45.95

Vendor: Burpee

Inventory Status: in stock

CosmoFarmer.com believes that your privacy is important. All monitoring that takes place as you visit our site is protected. Information collected is limited to our

Figure 23-35: *You can preview additional records by modifying the URL that appears just below the document toolbar. In the box just to the right of product.php?, type: productID=12. The information for the product with ID number 12 appears (you may need to press the Refresh button to see the new record). Try other numbers to view other products.*

Since category information is stored in the database, you can use this info to create such a feature. In this final part of the tutorial, you'll add a category navigation bar along the left side of the products page, so that when a visitor clicks a category name, a list of the products within that category appears:

1. **Open the *products.php* page.**

   This is the page to which you add the category links. The first step is to add a new recordset that retrieves all of the category names from the database.

2. **Open the Bindings panel (press Ctrl+F10, or click the Bindings tab in the Application panel group), click the big + button, and then select Recordset from the pop-up menu.**

   You can also click the Insert Recordset button on the Insert bar's Data tab (see Figure 23-1); choose Insert → Data Objects → Recordset; or click the + button on the Server Behaviors panel and then select Recordset from the pop-up menu. In either case, the Recordset dialog box opens. (You may need to click the Simple button to switch the Recordset dialog box out of advanced mode.)

3. **Type *rsCategories* into the Name box.**

   The *CosmoFarmer* database includes a table with the names of each category of products sold. You'll use this table to dynamically generate the list of category names.

4. **From the Connections pop-up menu, select "connCosmo."**

   This is the same connection you've used throughout this tutorial. In this case, you're going to retrieve information from a different table in that database.

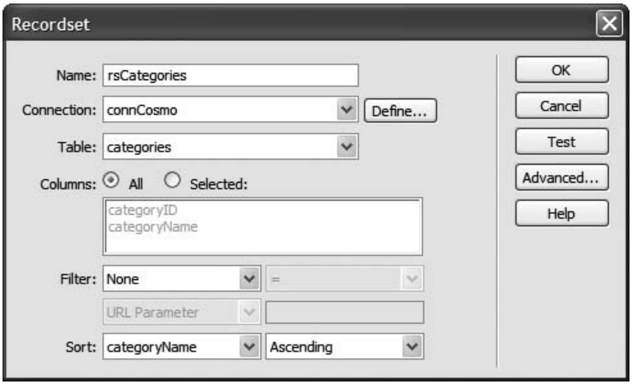
5. **Select Categories from the Table menu.**

   The Categories table is very basic: just a name and ID number. The Products table identifies a category by using a Category ID number—the table's categoryID field. You may wonder why a separate table is even necessary. Why not just store the category name with the product information?

   This design has two advantages. First, because the table is just a list of category names, you can easily retrieve an alphabetized list of those names by creating a recordset. That ability is useful, for example, when you want to add a list of categories to a page—as in these tutorial steps. In addition, the separate category table makes changes to categories easier. If you decide you want to change a name—say "Pest Control" to "Pest and Weed Control"—you need to update it only in one record in the Category table. If "Pest Control" were stored in the Products table, you would have to change the name to "Pest and Weed Control" in potentially hundreds of records.

6. **Make sure the All radio button is selected, and then choose "categoryName" from the Sort box.**

   At this point, the dialog box should look like Figure 23-36.



Recordset

Name: rsCategories

Connection: connCosmo

Table: categories

Columns: ● All ○ Selected:

categoryID
categoryName

Filter: None | =

URL Parameter

Sort: categoryName | Ascending

Figure 23-36: *By storing all the product category names in a single table, you can build a dynamic category navigation bar with the help of a simple recordset.*

7. **Click OK to apply the recordset to the page.**

   Now the page has two recordsets—one to retrieve product info, the other to retrieve the list of categories. You'll add the category name to the page next. The Bindings panel should look like Figure 23-37. The list of category links will appear in the left-hand sidebar on the page; currently the text "Product Categories" appears in that space. You'll add the links below that. However, to make the job easier, you'll first hide the style sheets that create the design for this page.

8. **Choose View → Style Rendering → Display Styles.**

   Doing so turns off the Display Styles option and temporarily hides the style sheets applied to this page. Why? Sometimes, the styles you create can make such a drastic change to the look of the page that it's hard to select, edit, and

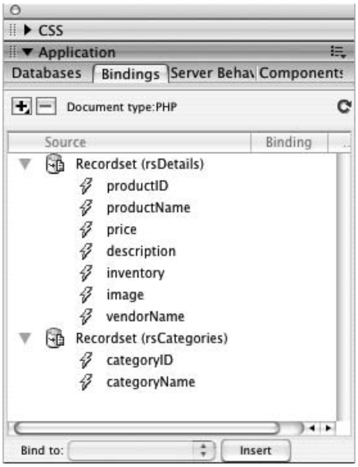


Figure 23-37:
The Bindings panel displays all recordsets currently applied to a page. To hide the recordset's field names, click the minus (–) sign (arrow on the Mac) to the left of the recordset icon.

insert text and other HTML in Dreamweaver's Design view. This left-hand sidebar is a good example. The list of category links will be a bulleted list of names, but the current styles hide the telltale sign of a list item (the actual bullet) and make it hard for you to see exactly where to place your cursor at the beginning of a list item. (Bulleted lists are discussed on page 92, and you can learn more about Dreamweaver's style rendering options on page 304.)

9. **Scroll down the page a bit, until you spot the empty bullet that appears below the "Product Categories" headline and directly above the National Exasperator logo (the "N!E" graphic).**

   That's an empty bulleted item—you'll place the category name there.

10. **From the Bindings panel, drag "categoryName" just to the right of the bullet.**

    This adds the dynamic text for the category name to the page. Next, you'll add a repeating region so that *all* the category names appear.

11. **In the Tag selector at the bottom of the document window click the <li> tag.**

    The Tag selector (page 22) is the most accurate way to select an HTML tag. When working with Dreamweaver's Repeat Region server behavior you have to be particularly careful that you've selected exactly what you want to repeat for each record in a recordset. In this case, you want each category name to appear as its own bulleted item in the list—that means the <li> tag (or list item) needs to be selected before applying the Repeat Region server behavior.

12. **On the Data tab of the Insert Bar click the Repeated Region button (see Figure 23-1).**

    The Repeat Region window appears.

13. **Select "rsCategories" from the menu. Click the All records radio button, and then click the OK button to create the repeating region.**

    If you preview the page at this point, you see a list of categories along the left side of the page. To make this list a functional navigation bar, you'll add a link to the category name.

14. **Select the dynamic text *{rsCategories.categoryName}* in the document window. In the Property inspector, click the "Browse for file" icon.**

    The Select File window appears. This is the same process as creating a regular link.

15. **Locate and select the file *category.php,* located in the site's root folder.**

    This is the page that will display the list of products within a particular category. You'll next add a little dynamic information to the link, so that each category's unique ID number can be passed along.

16. **Click the Parameters button on the right side of the Select File window (it's just to the right of the URL box).**

    The Parameters window opens.

17. **Type *categoryID* in the Name column and then click the Dynamic Value button (the lightning bolt) under the Value column.**

    The Dynamic Data window appears (see Figure 23-30).

    categoryId is the name that will be added to the link. It will help the details page identify the purpose of the value (which you'll select next).

18. **Expand the *rsCategories* recordset list (click the plus or arrow buttons to the left of the Recordset); select categoryID and then click OK to close the Dynamic Data window.**

    This step selects the *categoryID* column from the recordset. In other words, this indicates that each link should have the unique ID for a particular category.

19. **Click OK to close the Parameters window and, finally, click the OK (Windows) or Choose (Mac) button in the Select File window to finish creating the link.**

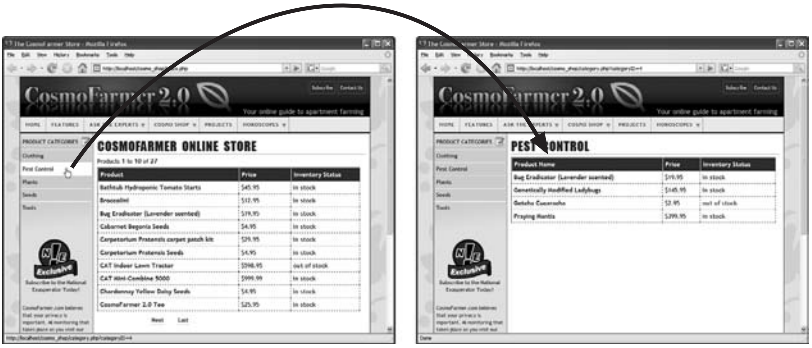
    You've just created a dynamic link. Since the hard work is now done, you can turn the style sheets back on.

20. **Choose View → Style Rendering → Display Styles.**

    The document window returns to all of its green and blue glory. Now, let's preview the page.

21. **Press F12 (Option-F12). When the page opens, click any of the category names at the left side of the page.**

    A new page should open, listing all of the products within a particular category, as shown in Figure 23-38.



COSMOFARMER ONLINE STORE

Products 1 to 10 of 27

Product	Price	Inventory Status
Bathtub Hydroponic Tomato Starts	$45.95	in stock
Broccolini	$12.95	in stock
Bug Eradicator (Lavender scented)	$19.95	in stock
Cabernet Begonia Seeds	$4.95	in stock
Carpetorium Pratensis carpet patch kit	$29.95	in stock
Carpetorium Pratensis Seeds	$4.95	in stock
CAT Indoor Lawn Tractor	$598.95	out of stock
CAT Mini-Combine 5000	$999.99	in stock
Chardonnay Yellow Daisy Seeds	$4.95	in stock
CosmoFarmer 2.0 Tee	$25.95	in stock

PEST CONTROL

Product Name	Price	Inventory Status
Bug Eradicator (Lavender scented)	$19.95	in stock
Genetically Modified Ladybugs	$145.95	in stock
Getcha Cucaracha	$2.95	out of stock
Praying Mantis	$299.95	in stock

Figure 23-38:
URL parameters aren't just used to link to a page with the details of a single record. You can use URL parameters to pass any information that can be used to search a database. In this case, the link on the products page (left) provides an ID number to the categories page (right), so that just the products within a particular category appear.

Congratulations! You've just built two powerful, complex, dynamic Web pages (and probably watched three presidential administrations pass). As you can see, Dreamweaver has an impressive array of tools for building dynamic pages. And even though there were some twists and turns to negotiate, you never once had to resort to the dreaded Code view.

CHAPTER

24

Web Pages that Manipulate Database Records

Just displaying database information on a Web page is useful, but you may be more interested in using the Web to *collect* information from your site's visitors (see Figure 24-1). Maybe something as simple as an online registration form will do the trick. Other times, you may have something more ambitious in mind—like a full-fledged e-commerce system that doesn't pay the bills unless it provides a way to collect product orders and credit card numbers.

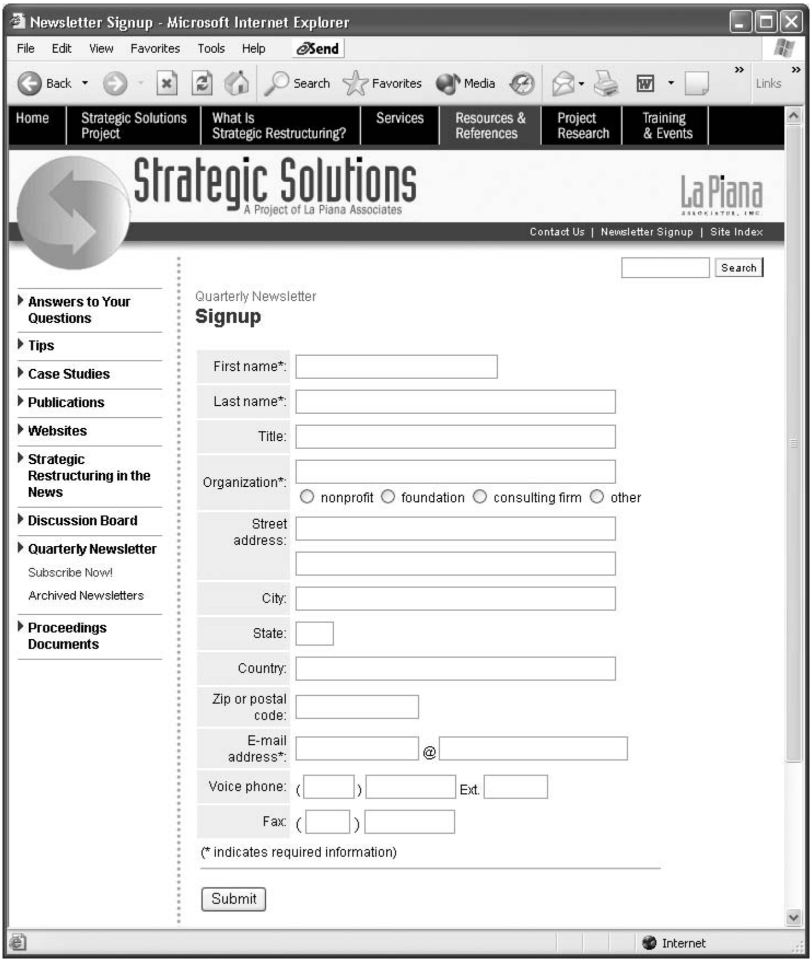
Once you've got data in the database, clearly you need a way to update and delete that information. After all, prices change, products are discontinued, and you may suddenly want to remove any record of "Harvey the Wise Guy" from your site's online guestbook. Thankfully, Dreamweaver makes changing information in a database simple and painless.

Tip: You may feel more comfortable learning these concepts by *doing* them. If so, turn to the tutorial on page 867 before reading this next section.

Adding Data

As noted in Chapter 11, the primary method of collecting information over the Internet is the *HTML form*. Its basic elements—text boxes, radio buttons, pop-up menus, and so on—can collect a wide assortment of data. But to funnel this information into a database, you need to either write your own program or simply use Dreamweaver's built-in tools. With its Record Insertion Form wizard and Insert Record server behavior, Dreamweaver makes adding data a simple process.

Warning: You might not want just anyone adding, editing, or deleting database information. To control access to these types of pages–or any page, for that matter–use Dreamweaver's User Authentication server behaviors, as discussed on page 887.


Newsletter Signup - Microsoft Internet Explorer
File Edit View Favorites Tools Help Send
Back Search Favorites Media Links
Home | Strategic Solutions Project | What Is Strategic Restructuring? | Services | Resources & References | Project Research | Training & Events
Strategic Solutions
A Project of La Piana Associates
La Piana
Contact Us | Newsletter Signup | Site Index
Search
Answers to Your Questions
Tips
Case Studies
Publications
Websites
Strategic Restructuring in the News
Discussion Board
Quarterly Newsletter
Subscribe Now!
Archived Newsletters
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Internet

Quarterly Newsletter

Signup

First name*:	
Last name*:	
Title:	
Organization*:	○ nonprofit ○ foundation ○ consulting firm ○ other
Street address:	
City:	
State:	
Country:	
Zip or postal code:	
E-mail address*:	@
Voice phone:	( ) Ext.
Fax:	( )

(* indicates required information)

Submit

***Figure 24-1:** Whether you're looking to accept credit cards on an e-commerce site or gather sign-up information for an online newsletter, Dreamweaver simplifies the process of creating forms that funnel info into a database.*

Dreamweaver's Record Insertion Form Wizard

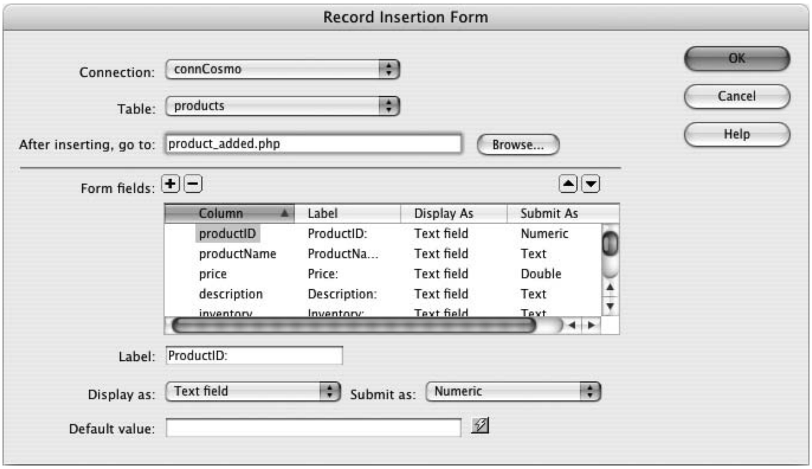
Dreamweaver's Record Insertion Form wizard is the quickest way to build a page for adding records to a database. It builds a form, creates a table, and then adds all the necessary programming code in just a couple of steps. To use it:

1. **Create a new Web page, and save it to your site (or open a dynamic Web page that you've already created).**

Make sure the page uses the extension (.asp, .aspx, .cfm, .php, .jsp) that matches the server model (page 751) of your site. (See page 766 for info on creating new dynamic pages.)

2. **In the document window, click where you want the form to appear. Choose Insert → Data Objects → Insert Record → Record Insertion Form Wizard.**

   You can also select Record Insertion Form Wizard from the Insert Record menu on the Insert bar's Data tab. Either way, the Record Insertion Form window opens (Figure 24-2).



Connection: connCosmo

Table: products

After inserting, go to: product_added.php

Form fields:

Column	Label	Display As	Submit As
productID	ProductID:	Text field	Numeric
productName	ProductNa...	Text field	Text
price	Price:	Text field	Double
description	Description:	Text field	Text
inventory	Inventory:	Text field	Text

Label: ProductID:

Display as: Text field Submit as: Numeric

Default value:

***Figure 24-2:** When creating a form, it's a good idea to remove columns that the database creates for its own use, such as record ID numbers. Here, the column productID is a unique ID number created by the database. Whenever someone adds a new record, the database creates a new, unique product ID number. You wouldn't want anyone to tamper with this number, so leave it off the form.*

3. **From the Connection menu, select the database connection.**

   Dreamweaver needs a place to put the data your forms are collecting. If your site works with several databases, select the connection for the database to which this form will add information. (Database connections are described on page 776.)

4. **From the Table menu, choose a table.**

   A list of all tables available in the database appears in this menu. Dreamweaver lets you insert data only into a single table at a time. You can, however, add multiple record insertion forms to a single page. So it's possible to create one "add data" page that contains separate insert record forms for each table in the database. You would still have to input records one at a time for each table, but at least your visitors would have to visit only a single page in order to add a record to any table. (Of course, if your database has 20 tables, it would be a good idea to create several "add record" pages so you don't end up with one gigantic Web page containing 20 different forms.)

Tip: You can use Dreamweaver CS3's new Spry Tabs to display multiple insert forms on a single page without wasting a lot of precious screen real estate. The tutorial starting on page 867 shows how.

5. **Click the Browse button. Navigate to your Web site, and then select a file.**

   Choose the page your visitors will see after adding a record to the database. It could simply be a page saying, "Thanks for signing up with our Web site." Or if the insertion form adds a new employee to your company's employee database, you could choose the page that lists all the employees (including the one just added to the database). If you want people to be able to add multiple records, one right after the other, you might also select the record insertion form itself; that way, once visitors add one record, they'll return to the form again, ready to continue the very pleasant work of data entry.

Note for ASP.NET Users: On ASP.NET pages, you also have the option of specifying an "error page," which appears when the addition to the database fails for some reason.

   You can also change how the menu item for each database column is formatted on the page, as follows.

6. **In the "Form fields" box, select a database column, and change its settings, if you like.**

   Your options include:

   - **Remove the field.** Click the minus (-) button to remove the field from the form. It doesn't appear on the final form page, and users can't manually submit a value for this field. You should remove any fields that the database automatically fills out, such as a primary key field (see page 769). (If you accidentally delete a field, click the + button to add it back.)

Tip: Use the up and down arrow buttons (see Figure 24-2) to rearrange the order in which the fields appear in the form on the Web page.

   - **Label** is the text Dreamweaver adds next to the form field on the page. It identifies what someone should type in the field, like First Name. Dreamweaver just uses the name of the column in the database—fName, for instance—so it's usually best to change this text to something more understandable.

   - The **"Display as" menu** lets you select the *type* of form element you want to use to collect the column's information. If the column is someone's first name, select Text Field. This selection will add a text box, where visitors can type their names, to the form. On the other hand, if people are supposed to choose from a limited number of choices (*U.S. Postal Service, FedEx–2 day,* and *FedEx–next morning,* for example), you might select Radio Group instead.

     Radio buttons or pop-up menus can also ensure consistency and rule out typos. On a form that asks visitors to indicate the state they live in, you could offer a pop-up menu that lists the 50 states. If you provided a text box instead, your visitors would be able to type in every conceivable abbreviation and misspelling. (For a description of the different types of form elements, see page 404.)

Note: Dreamweaver can also create *dynamic* menus, which display data taken from a database. See page 860.

- The **"Submit as" menu** is automatically determined according to how you've set up your database. It tells Dreamweaver what kind of data the field contains: text, number, date, and so on. Dreamweaver figures this information out correctly, so you don't need to change anything.

- The **"Default value" text box** lets you preload a form field with information. It's actually the same as a text field's *initial value*, as described on page 410. You can also add a dynamic value generated by your server model's programming language. If you had a field called *date*, then you could automatically add today's date to the field by typing <*?php echo date(*"Y-m-d") ?> (in the PHP/MySQL server model).

  Depending on what type of field you selected from the "Submit as" menu, the Default value text box might be replaced with one of three different types of controls: For a checkbox, radio buttons provide the simple choice of either checked or not checked; if you selected Menu or Radio Group, a Properties button appears, which lets you set the options that appear in the drop-down menu or radio group on the Insert form—the process is the same as adding a dynamic menu or dynamic radio button group, as described on page 858.

  In most cases, you'll change the label of every column. But for now, leave the other options alone.

7. **Click OK to close the window and create the form.**

   Dreamweaver inserts a table, form, and all of the form elements you specified. At this point, the page is complete and ready to accept information. Unfortunately, Dreamweaver doesn't let you return to this window to make any changes. (If you quickly realize that you made a mistake, you can always use Ctrl+Z [⌘-Z] to undo the operation, and then reapply the Insert Record Form wizard.)

To ensure your form works correctly and doesn't produce any errors when it's submitted, add form validation. The powerful new Spry validation tools make this easy (see page 421).

Warning: Once you've added the form, don't rename any form fields. You'll break the script responsible for inserting the record. If that happens, see page 849 for information on updating the Insert Record server behavior.

Using the Insert Record Behavior

Dreamweaver's Record Insertion Form wizard makes quick work of adding the table, form, and programming code required to create a Web page for adding data to a table. At times, though, you might want a more customized approach. Perhaps you've already designed a form that you'd like to use, or created a beautiful table design for your form. Rather than relying on Dreamweaver's rather pedestrian table and form design, you can supercharge your own design with the Insert Record server behavior.

To build a page for adding database records, start by creating a Web page for your server model (ASP, PHP, ASP.NET, or whatever). Add a form to the page (see Chapter 11). Make sure it has one form field for every column to which you wish to add data. Every time a visitor fills out the form, the database acquires a new record.

In some cases, you don't include certain form fields. For example, a database table's primary key (a unique identifier for each record) is usually generated automatically by the database for each new record. In this case, you wouldn't add a field for this column.

In other cases, you might add *hidden* fields (see page 417) that aren't set by someone filling out the form. Suppose someone signs up for your online newsletter, and you want to store the date of registration. Instead of letting the visitor fill out the date, add a hidden form field with the current date.

Once you've created the form, add the Insert Record server behavior like this:

1. **Choose Window → Server Behaviors to open the Server Behaviors panel.**

   The keyboard shortcut is Ctrl+F9 (⌘-F9). You can also use the Insert Record menu (see Figure 24-3).

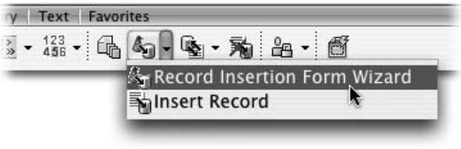


Figure 24-3:
The Insert Record menu (found on the Insert bar's Data tab) lets you use either an automated wizard (Record Insertion Form wizard) or a basic server behavior (Insert Record) to add a record to a database.

2. **Click the + button on the panel, and then select Insert Record.**

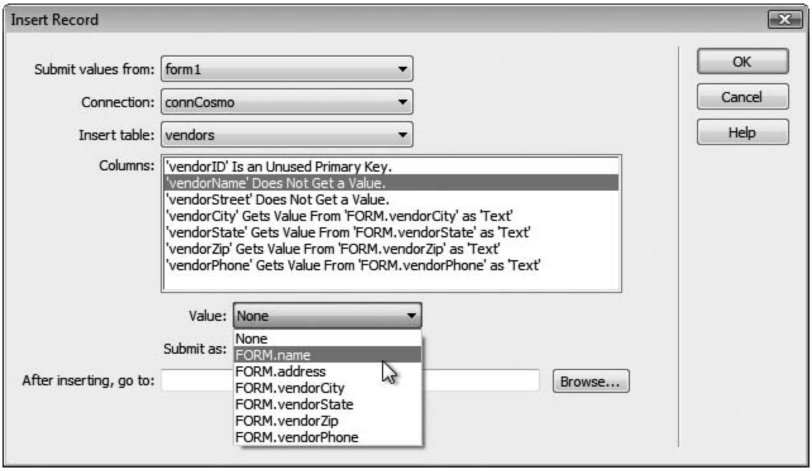
   The Insert Record window opens (see Figure 24-4). It's very similar to the Insert Record Form window, but one key difference is that you must manually associate a form element with the correct database column. (Another difference is that you can't define default values for each form element in this window. You can, however, still apply default values to a form field using the Property inspector, as described on page 857.)

3. **Choose the name of the form that will collect the information for the new record.**

   If there's only a single form on your Web page, you don't have an option here. However, if you have multiple forms (like a search box at the top of the page, as well as the form used to insert a new record), make sure you select the name of the form used for adding data to the database.

4. **Choose a database connection and table.**

   They're the same options described in steps 3 and 4 for the Insert Record Form tool (see page 845). You're telling Dreamweaver which database to use and which table to add data to.



Insert Record

Submit values from: form1

Connection: connCosmo

Insert table: vendors

Columns:
'vendorID' Is an Unused Primary Key.
'vendorName' Does Not Get a Value.
'vendorStreet' Does Not Get a Value.
'vendorCity' Gets Value From 'FORM.vendorCity' as 'Text'
'vendorState' Gets Value From 'FORM.vendorState' as 'Text'
'vendorZip' Gets Value From 'FORM.vendorZip' as 'Text'
'vendorPhone' Gets Value From 'FORM.vendorPhone' as 'Text'

Value: None

Submit as:

After inserting, go to:

Figure 24-4: *The Vendors database table contains a column named vendorName. To ensure that the correct data is stored in the database, from the Value menu, choose the corresponding form field–in this example, FORM.name. (The actual name of the form field is "name;" Dreamweaver, for whatever reason, tacks on FORM at the beginning.) (You may not have to worry about selecting anything; see the Tip below.)*

5. **From the Columns list, select a database column. Choose the name of the form field that collects data for that column.**

   For the form's information to end up in the proper database columns, you must tell Dreamweaver which form field will collect the data for which database column. You can let Dreamweaver choose the proper type from the Submit As pop-up menu. As with step 6 on page 846, this choice depends on how your database is set up (which Dreamweaver can figure out).

Tip: You need to perform step 5 only if the names of the form fields *differ* from the names of the columns in the database. If you name a form field *productName*, and there's also a database column named *productName*, Dreamweaver automatically connects the two in the Insert Record window.

6. **Click the Browse button, and then select a Web page.**

   This step is the same as step 5 on page 846, and indicates which page someone sees after adding a new record to the database.

7. **Click OK to close the window and apply the server behavior.**

   The page is now capable of adding information directly to the database.

If you change the name of a form field, add a form field, or wish to change any of the settings for this behavior, you can edit the Insert Record server behavior by double-clicking Insert Record on the Server Behaviors panel. This selection opens the Insert Record window once again.

Updating Database Records

Maybe someone made an error while entering data into the database. Maybe the price of your product changes. Or maybe you want to provide a way for your Web visitors to update their email addresses. In any case, the time will come when you have to edit an online database.

Creating *Update Record Forms* in Dreamweaver is very similar to creating Insert Record Forms. Both require an HTML form that your audience can fill out and submit. The primary difference is that an update form is *already* filled out with information from the database. It's like a combination of an Insert Record Form and a record detail page (such as the one created by the Master Detail Page set described on page 814).

The first step in creating an update form is to add a *recordset* to the update page (page 782). The recordset will retrieve the data that appears in each field of the update form.

The recordset should contain only a single record—the one to be updated. Therefore, you must use a form or URL parameter to filter the recordset (see page 785 for more on filtering). For example, on a page listing company employees, you could add an Edit button that would link to the page containing the update form. If you added a Go To Detail Page server behavior (see page 818) to the employee listing page, you could then pass the ID for a specific employee to the update page. In turn, the update page would use that ID to filter the database for a single record, and display the employee information in the form. (If all of this sounds confusing on paper, try the tutorial starting on page 867, which takes you step by step through the process.) After you add the recordset to the update form page, you have two options for building an update form. You can either let Dreamweaver automate the process with its Insert Update Record Form wizard, or build a form yourself, and then add the Update Record server behavior. The following pages cover both methods.

The Update Record Form Wizard

Dreamweaver can automate most of the steps involved in creating an update form:

1. **Open a dynamic page with a recordset already added.**

   Remember, the recordset should contain only a single record—the one to update. So you must add a filter when you create the recordset (see page 787 for more on filtering recordsets).

2. **In the document window, click where you wish the insertion form to appear. Choose Insert → Application Objects → Update Record → Record Update Form Wizard.**

   You can also, from the Update Record menu on the Insert bar's Data tab, select Record Update Form Wizard (Figure 24-5). Either way, the Record Update Form window opens (Figure 24-6).

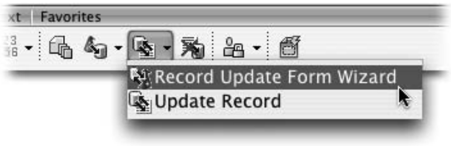
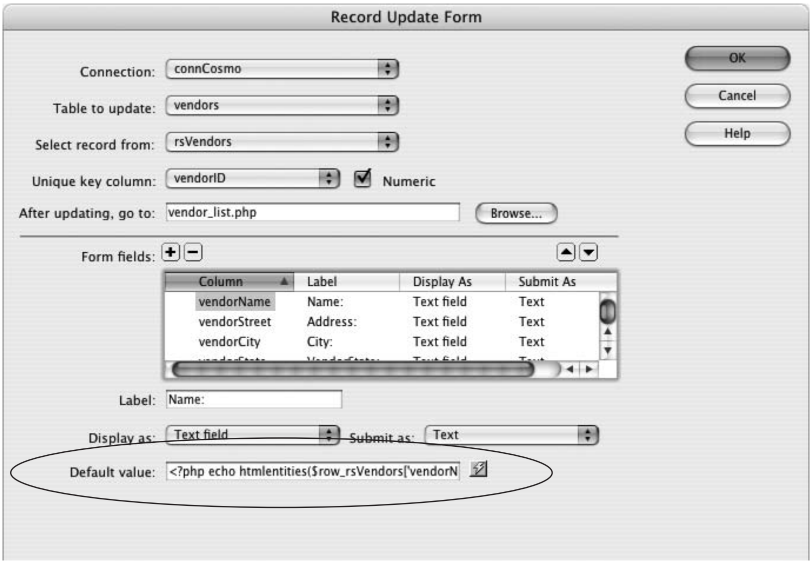


Figure 24-5:
The Update Record menu's wizard can create a no-frills Update Record Form.



Connection: connCosmo

Table to update: vendors

Select record from: rsVendors

Unique key column: vendorID ☑ Numeric

After updating, go to: vendor_list.php

Form fields:

Column	Label	Display As	Submit As
vendorName	Name:	Text field	Text
vendorStreet	Address:	Text field	Text
vendorCity	City:	Text field	Text
vendorState	VendorState:	Text field	Text

Label: Name:

Display as: Text field Submit as: Text

Default value: <?php echo htmlentities($row_rsVendors['vendorN

Figure 24-6: *A form field's default value is the information visible when the form first appears on the Web page. In the case of an update form, each form element is already filled out with information from the database. After all, this page is meant for editing data that already exists, not for adding a new record. When using the Update Record Form wizard, Dreamweaver is smart enough to fill out the "Default value" (circled) for each form field using the proper information from the database.*

3. **From the Connection menu, select the database connection.**

   If your site works with several databases, select the connection for the database to which this form will add information.

4. **From the "Table to update" menu, choose a table that matches the recordset you created in step 1.**

   A list of all tables available in the database appears in this menu. You can edit data only from a single table at a time, so select the table that matches the filtered recordset.

Tip: You can include multiple update forms on a single page, so it's possible to create one page that lets you update all the different tables in a database. You'll need to add filtered recordsets for each table you wish to update, and provide links that identify which table you're updating. In one case a URL may include the primary key for one table (update.php?productID=2, for example). Meanwhile, another link passes a different primary key (update.php?categoryID=1) to the same page in order to update a record in a different table.

One way to keep a page like this from appearing overly cluttered with forms is to use the "Show if Recordset Not Empty" server behavior (see page 908). Select one update form, apply the server behavior, and in the "Show if Recordset Not Empty" dialog box, select the recordset that matches the update form. In this way, the page only ever displays one form—the one used to update the record from the specified recordset.

5. **In the "Select record from" menu, make sure the recordset you created earlier is selected.**

   The recordset should be selected already. If it's not, you must have created another recordset first.

6. **In the "Unique key column" pop-up menu, make sure the table's primary key column is selected. If the column contains a number—and it usually does—verify that the Numeric checkbox is turned on.**

   The "Unique key column" is used to identify which record to change during the update process. (For a description of primary keys, see page 769.)

7. **Click the Browse button; navigate to the Web site, and then select a file.**

   This file represents the page that will appear after a record has been updated. A good technique is to select a page that lists the details of the record that's being edited (like the detail page in the master/detail pages discussed on page 814).

   Then, after updating the page, the visitor immediately sees a page showing the changes.

8. **If you like, change a column's settings.**

   After clicking a row in the Form fields list, you can change the Label, Display As menu, and Submit As properties of the database column, the same as when inserting a record as described on page 846. If the table includes a Description column that might hold a fair amount of text, then select Text Area from the Display As menu. This way, the form includes a larger text box that can display all of the description.

   Don't change the Submit As option, which determines what kind of data to submit—text, a number, and so on—because Dreamweaver automatically gets this information from the database. In addition, you would rarely change the Default Value property. Since this represents the data pulled out of the database for a particular record, modifying the default value *always* changes that information in the database.

Note: Sometimes you might want to change the Default Value for a column. Say a table includes a column to track the date a record was last updated. In this case, you would make the Default Value show the current date (instead of the date already stored in the database). When someone updates a record, the database automatically records the current date in the "last update" field.

   To delete a field so it doesn't appear in the form, click the Remove (minus sign [–]) button. For example, you might want to remove the primary key column—the column you selected in step 5. Since the key identifies the record, letting someone edit this could cause problems to your database, such as overwriting data for another record. Fortunately, Dreamweaver is aware of this potential problem; when you use the Update Record Form wizard, Dreamweaver doesn't create an editable form field for the primary key. Instead it simply displays the number on the page for your reference.

9. **Click OK to close the window.**

   Dreamweaver inserts a table, form, and all the form elements you specified.

Note: If you get the following error–"Please choose a unique key from the selected Recordset, or Click Cancel"–then the recordset you added to the page didn't include the table's primary key. You should cancel the Update wizard, edit the recordset, and then click the "All" button next to the word Columns. Then reapply the Record Update Form wizard.

Once you click OK to close the Record Update Form dialog box, you can never again return to it. From now on, you make any changes by editing the Update Record server behavior, as described next. You're also free to use any of Dreamweaver's editing tools to format the table, labels, and form elements any way you wish.

Note: After using the Update wizard, don't change the name of the form or its fields. Because the program that updates the database relies on these names, changing them stops the update code from working.

The Update Record Server Behavior

Dreamweaver's Record Update Form wizard makes it delightfully easy to add the table, form, and programming code required to create a Web page for editing database records. But when you need more flexibility—if you've already designed a form that you'd like to use or created a table design for your form—the Update Record server behavior lets you keep your own beautiful design and give it the power to update a database.

You must start with a page that has a filtered recordset, as described on page 849. Then add a form to the page (see Chapter 11). Make sure the form has one form field for every database column to be edited. Don't include a form field for the database table's primary key. (Allowing anyone to change the primary key could have disastrous effects on your database.)

Tip: Giving your form fields the same names used for the database table's columns speeds up the process of adding the Update Record server behavior.

At this point, the form is full of empty fields. If you preview the page, none of the data you retrieved from the recordset appears. To fill the form with data, you must *bind* data from the recordset to each form field, as follows:

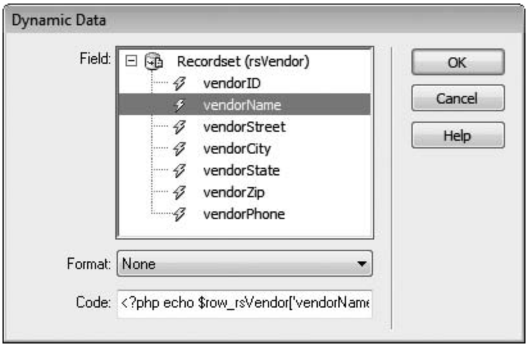
1. **In the document window, select the form field.**

   Just click the form field to select it.

Note: These instructions apply to text and hidden fields. Information on binding data to radio buttons, checkboxes, and menus appears on page 858.

2. **In the Property inspector, click the dynamic data button (the lightning bolt) to the right of the Init Val box.**

   The Dynamic Data window appears (Figure 24-7).



Dynamic Data

Field:

- Recordset (rsVendor)
  - vendorID
  - vendorName
  - vendorStreet
  - vendorCity
  - vendorState
  - vendorZip
  - vendorPhone

Format: None

Code: <?php echo $row_rsVendor['vendorName

Figure 24-7:
The Dynamic Data window lets you add information from a recordset to form fields, so parts of a form can be pre-filled out. This ability is exactly what you want when updating information already in the database. In fact, the Dynamic Data window displays and lets you use additional data sources (like URL variables) that you've added to the page (see page 897).

Tip: You can also bind data from a recordset to a form field by dragging the database column from the Bindings panel (see page 801), and then dropping it onto the form field.

3. **Click the + button next to the recordset used for the update page.**

   A list of all columns retrieved by the recordset appears.

4. **Select the name of the table column you wish to bind to the form field. Click OK.**

   You should ignore the Format menu and Code box. The form field is now set to display information from the recordset.

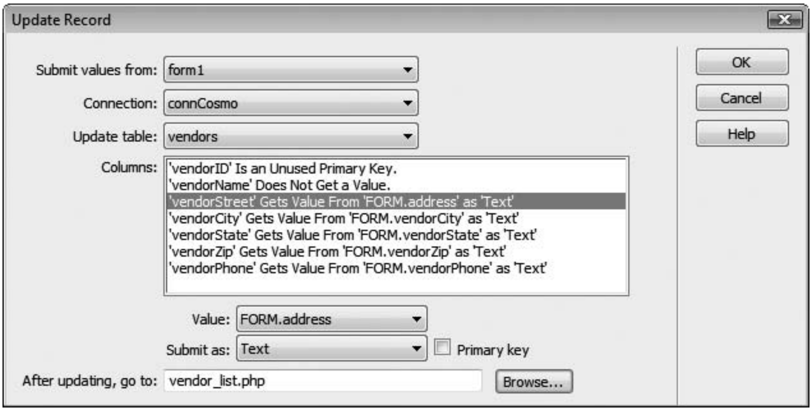
Once you've created the form and added recordset information to each field, add the Update Record server behavior:

1. **Choose Window → Server Behaviors to open the Server Behaviors panel.**

   The keyboard shortcut is Ctrl+F9 (⌘-F9).

2. **Click the + button on the panel, and then select Update Record.**

   The Update Record window opens (see Figure 24-8).



Update Record

Submit values from: form1

Connection: connCosmo

Update table: vendors

Columns:

'vendorID' Is an Unused Primary Key.
'vendorName' Does Not Get a Value.
'vendorStreet' Gets Value From 'FORM.address' as 'Text'
'vendorCity' Gets Value From 'FORM.vendorCity' as 'Text'
'vendorState' Gets Value From 'FORM.vendorState' as 'Text'
'vendorZip' Gets Value From 'FORM.vendorZip' as 'Text'
'vendorPhone' Gets Value From 'FORM.vendorPhone' as 'Text'

Value: FORM.address

Submit as: Text ☐ Primary key

After updating, go to: vendor_list.php

Figure 24-8:
The Update Record window is very similar to the Record Update Form window (Figure 24-6). The main difference is that here you must manually associate a form element with the correct database column.

3. **From the "Submit values from" menu, select the name of the form.**

   It's possible to have multiple forms on a single page: a form for editing a record and a form for searching the site, for example. Select the name of the form used for editing data.

4. **Select the database connection and the table you want to update.**

   They're the same as described in steps 3 and 4 for the Record Update Form wizard on page 850. They tell Dreamweaver which database to use, and which table to update data to.

5. **Select a form element from the list, and then, from the Column menu, select the matching database.**

   For the form's information to end up in the proper database columns, you must tell Dreamweaver which database column you want to store the selected form field's information.

Tip: If you use the name of your database columns to name the form fields too, Dreamweaver automatically associates the two, so you can skip this step.

   From the Submit As menu, let Dreamweaver choose the proper type. As with step 6 on page 846, this choice depends on how your database is set up (which Dreamweaver can figure out).

6. **Click the Browse button; navigate to the Web site, and then select a file.**

   This file represents the page that appears after a record has been updated. A good technique is to select a page that lists the details of the record that's being edited (like the detail page in the master/detail pages, discussed on page 814).

7. **Click OK to close the window and apply the server behavior.**

   The page is now capable of editing information from the database.

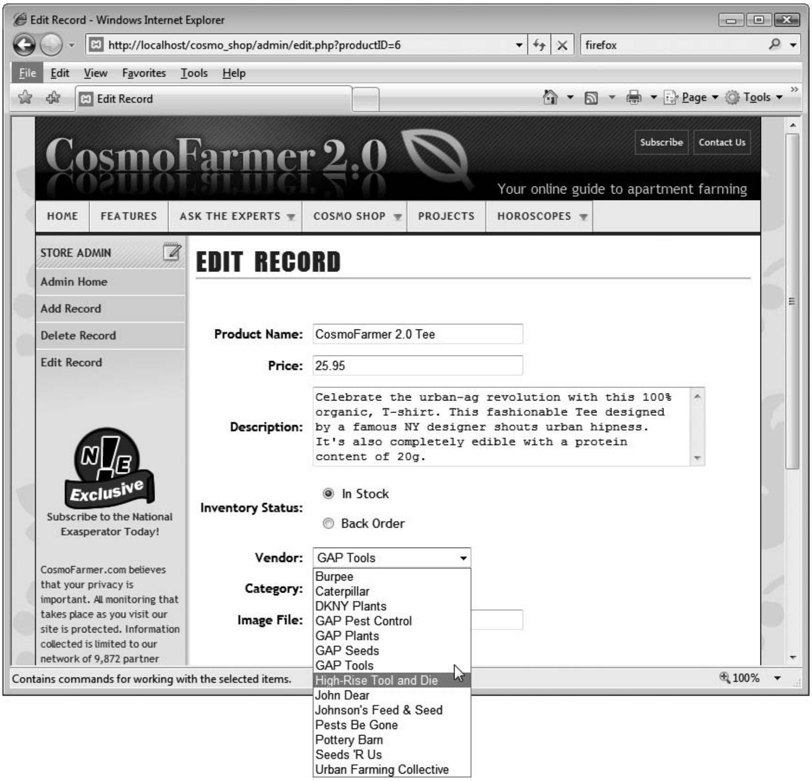
As with any server behavior, double-clicking its name on the Server Behaviors panel—in this case, Update Record—opens the behavior's dialog box so you can make changes to its properties.

Dynamic Form Fields

Form fields don't necessarily have to be empty. For example, the record update forms covered in the previous section are already filled out with data pulled from the database. Likewise, you don't necessarily have to manually create the options in a pull-down menu; they could come from information in a database.

Imagine a scenario where you create an Employee Directory section for your company's Web site. On the Insert New Employee page, you build a pop-up menu that lets the Human Resources department select a department for the new employee.

You, the designer, *could* create a menu like this department list by manually typing the name of each department. But what if the names of the departments change, or new departments are added? You'd have to reopen the page and edit the form field each time. But if you opted for a dynamic menu instead, the page would build the Departments pop-up menu automatically by retrieving the current list of departments from the database. Figure 24-9 shows a similar example of a form pull-down menu that's been dynamically created.


Edit Record - Windows Internet Explorer
http://localhost/cosmo_shop/admin/edit.php?productID=6
firefox
File Edit View Favorites Tools Help
Edit Record
Page Tools
CosmoFarmer 2.0
Subscribe
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PROJECTS
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STORE ADMIN
Admin Home
Add Record
Delete Record
Edit Record
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Exclusive
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Contains commands for working with the selected items.
100%

EDIT RECORD

Product Name: CosmoFarmer 2.0 Tee

Price: 25.95

Description: Celebrate the urban-ag revolution with this 100% organic, T-shirt. This fashionable Tee designed by a famous NY designer shouts urban hipness. It's also completely edible with a protein content of 20g.

Inventory Status: ● In Stock ○ Back Order

Vendor: GAP Tools

Category:

Image File:

Burpee
Caterpillar
DKNY Plants
GAP Pest Control
GAP Plants
GAP Seeds
GAP Tools
High-Rise Tool and Die
John Dear
Johnson's Feed & Seed
Pests Be Gone
Pottery Barn
Seeds 'R Us
Urban Farming Collective

CosmoFarmer.com believes that your privacy is important. All monitoring that takes place as you visit our site is protected. Information collected is limited to our network of 9,872 partner

Figure 24-9: *Dynamic form fields come in handy with update forms. Form fields are already filled out with database information that's ready to be edited. Menus can also be dynamically generated from records in a recordset. In this case, the menu (shown open) lists records retrieved directly from a database table containing the product categories for the CosmoFarmer online store.*

In essence, a dynamic form field is a form element whose value, labels, or other settings come from dynamic data in the Bindings panel. The dynamic data can come from a recordset (as with an update form), a form or URL parameter, or even a cookie or session variable (see page 901).

Whenever you wish to use a dynamic form field, start by creating a form. Add all form fields that might include dynamic content. (Not all the fields have to be dynamic, however. In the employee directory example discussed earlier, only the Department menu on the Insert New Employee form would be dynamic. The other fields for entering an employee's information would be empty.)

Next, add a recordset, request variable, session variable, or application variable to the Bindings panel (see page 897 for information on those last three choices). Then, finally, attach the dynamic data to the form field. The process for binding dynamic data depends on the type of form field.

Dynamic Text Form Fields

Any form field that accepts typing—text, text area, and password fields—can be dynamic. For example, if a site requires a user login, you could include a "remember me" feature, so that when a visitor who's previously signed in returns to the site, the user name and password are already filled out.

Tip: If you like the idea of a "remember me" feature for password-protected pages, try the free Save Password Login Form extension, which works with ASP, ASP.NET, PHP, and ColdFusion. You can find it on the Adobe Exchange Web site (see page 738).

You can add dynamic data to a text field (also called *binding* data to the field) using any of the methods described below. (Remember, you must first have added the form field to the page and added the dynamic data to the Bindings panel, which means adding a recordset to a page, as described on page 782, or creating additional data sources [like cookies or session variables], as described on page 897.)

- In Design view, drag the dynamic data item from the Bindings panel, and drop it onto the form field.
- In Design view, select the text field. In the Bindings panel, select the dynamic data item, and then click the Bind button.
- Select the text field. In the Property inspector, click the dynamic data button (the lightning bolt). The Dynamic Data window appears (see Figure 24-7); select the dynamic data item from the list, and then click OK.
- In the Server Behaviors panel, click the + button, and then select Dynamic Form Elements → Dynamic Text Field. In the window that appears, you see a text field menu. Select the text field to which you wish to add dynamic data; then click the lightning bolt button to open the dynamic data window. Select the dynamic data item from the list, and then click OK. (Insert → Data Objects → Dynamic Data → Dynamic Text Field works, too.)

Note: You can bind dynamic data to a *hidden* field (page 417) using the same steps.

After binding the data to the field, the name of the data item appears inside the field—{rsDetails.adName}, for example. If you're using Live Data view (page 812), the actual data from the database appears inside the field.

Note: Dreamweaver lets you format dynamic data in a form field just like dynamic text you add to a page, as described on page 802. Be careful with this option, though. If the form is submitting to a database, data may sometimes have to be in a certain format. For example, prices are often stored as numbers inside a database. But using Dreamweaver's currency format, you can make a price appear as $34.00 in a form field. When your visitor submits the form, the $ sign goes along for the ride, causing the database to spit out a horrible error message upon encountering this nonnumeric character.

To remove dynamic data from a text field, just select the field, and then, in the Bindings panel, click the Unbind button. (Deleting the contents of the field's Init Value box in the Property inspector also works.)

Dynamic Checkboxes and Radio Buttons

With a text field, you can dynamically change the *value* of the field. With checkboxes and radio buttons, however, you can control only their status (checked or unchecked) dynamically.

You can use this value to select one radio button in a group based on a value in the database. As part of a product ordering system, shoppers could select a particular shipping option: USPS, FedEx, or UPS. But after reviewing her orders, what if someone changes her mind and chooses a different shipping option? When she returns to the order page, you'd want the Shipping Option radio button to reflect the choice she had made earlier. In other words, you want the page to read the shipping option for the order from the database, and highlight the radio button that matches. (See an example of this in the "Building a Page for Editing Database Records" section of the tutorial starting on page 875.)

Dynamic radio buttons

You add dynamic radio buttons like this:

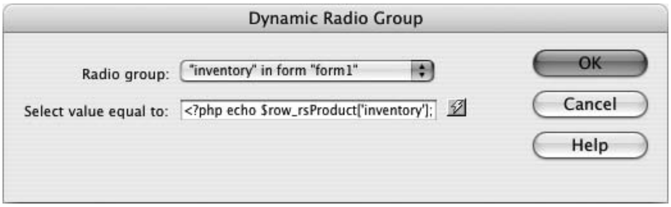
1. **Add a group of radio buttons to the page.**

   You should have as many radio buttons as there are possible values stored in the database column. Remember, if you wish to create a group of related radio buttons, you must give every button in the group the same name (see page 411).

   Note, too, that the value of each radio button must also exactly match the values stored in the database. If a Shipping column in the database stores *USPS*, *FedEx*, or *UPS*, then the radio group should have three buttons. Each button would share the same name—*shipping*, for instance—but their checked values would match the different values stored in the database: USPS, FedEx, and UPS. Capitalization counts, so if the value in the database is UPS, the radio button value must be UPS, not Ups, ups, or UpS.

2. **Open the Server Behaviors panel (Window → Server Behaviors). Click the + button, and then select Dynamic Form Elements → Dynamic Radio Group.**

   The Dynamic Radio Group window appears (see Figure 24-10).



Radio group: "inventory" in form "form1"

Select value equal to: <?php echo $row_rsProduct['inventory'];

Figure 24-10: *The Dynamic Radio Group window lists the values of each button in the group. By selecting a button from the list, you can change its value in the Value field.*

3. **From the first menu, choose the radio button group.**

   If your form has more than one group of radio buttons, select the one you wish to be dynamic.

4. **Click the dynamic data button (the lightning bolt) to the right of the "Select value equal to" field.**

   The Dynamic Data window opens (see Figure 24-7). Select the dynamic data item for this radio group. In a nutshell, the radio button whose value matches the dynamic data is selected. If no radio buttons contain the same value, then no buttons are selected.

Note: You set the "Select value equal to" field only once per radio group (not once per button in the group).

5. **Click OK to close the window.**

   Dreamweaver adds a Dynamic Radio Buttons server behavior to the page.

Dynamic checkboxes

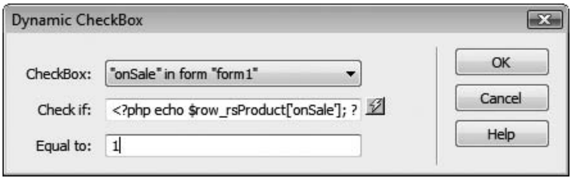
Dynamic checkboxes work almost the same way:

1. **Add a checkbox to the page.**

   This process is described on page 411.

2. **Open the Server Behaviors panel (Window → Server Behaviors); click the + button, and then select Dynamic Form Elements → Dynamic CheckBox.**

   The Dynamic CheckBox window appears (Figure 24-11).



CheckBox: "onSale" in form "form1"

Check if: <?php echo $row_rsProduct['onSale']; ?

Equal to: 1

Figure 24-11: *The Dynamic CheckBox server behavior lets you control whether or not a checkbox is turned on, based on information from a database, cookie, URL parameter, or other piece of dynamic data.*

3. **If the form has more than one checkbox, select a checkbox from the first menu.**

   Select the checkbox you wish to control dynamically.

4. **Click the dynamic data button (the lightning bolt) to the right of the "Check if" field.**

   The Dynamic Data window opens (see Figure 24-7). Select the dynamic data item for this checkbox.

5. **Type a value into the "Equal to" box.**

   If the value from the dynamic data (previous step) matches the value you provide here, the checkbox is turned on. (If the checkbox is part of an update form, this should match the value you gave the checkbox from step 1.)

6. **Click OK to close the window.**

   Dreamweaver adds a Dynamic CheckBox server behavior to the page.

To *remove* the dynamic properties from a group of radio buttons or a checkbox, open the Server Behaviors panel (Window → Server Behaviors). Among the list of server behaviors, you see the dynamic radio button or checkbox behavior. It looks something like "Dynamic Radio Buttons(group_name)" or "Dynamic Check Box(checkbox_name)"—where *group_name* or *checkbox_name* is replaced with whatever name you gave the buttons or checkbox. Select it, and then click the Remove (minus sign [–]) button. (Pressing the Delete key does the same thing.)

Dynamic Menus and Lists

Dynamic menus and lists are among the commonest form elements. You can use them for more than just update forms. Even a form used to add information to a database can use a dynamic form to display a list of options stored in the database. They save you the effort of having to rebuild traditional menus or lists every time your company opens a store in a new state, adds a new employee department, or adds a new category to its product line.

To create a dynamic menu or list, proceed as follows:

1. **Create a form, and then add a menu or list to the page.**

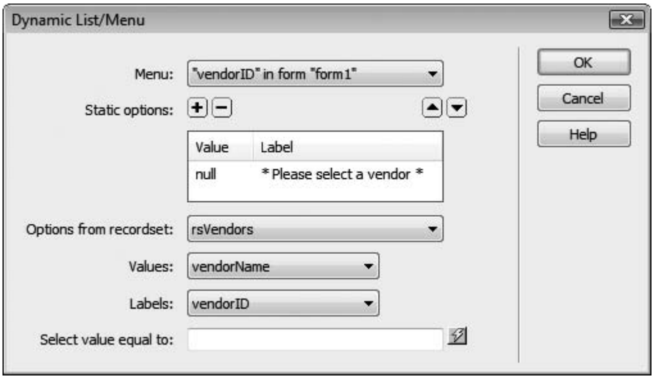
   For example, choose Insert → Form, and then Insert → Form Objects → List/Menu. This process is the same as adding a menu or list, as described on page 414. Don't add any items to the list, though. That's the whole point of this exercise: Dreamweaver builds the menu or list automatically.

2. **Add a recordset to the page, which includes the information you wish to appear in the menu or list.**

   Perhaps you want to create a menu listing the different categories of products your company sells—books, DVDs, CDs, lederhosen, clogs, and so on. If the database has a table containing the categories, you could then create a recordset that retrieves the name of each category. (In most cases, you also retrieve a primary key, like the category ID field. The name of the category appears in the menu, while the primary key is the value submitted with the form.)

3. **In the document window, select the menu or list, and then, on the Property inspector, click the Dynamic button.**

   The Dynamic List/Menu window opens (see Figure 24-12). The name of the menu or list you selected appears in the Menu box.



Dynamic List/Menu

Menu: "vendorID" in form "form1"

Static options:

Value	Label
null	* Please select a vendor *

Options from recordset: rsVendors

Values: vendorName

Labels: vendorID

Select value equal to:

Figure 24-12: *Dreamweaver simplifies the process of creating automatically generated menus like the one pictured in Figure 24-9. Using information pulled from a database, you never have to create another menu by hand.*

4. **If you like, add some static options to the menu or list.**

   A *static option* is simply a value and a label that you enter by hand—menu or list items, appearing at the top of the list, that don't change. This option doesn't come from the recordset you created.

   You could use this feature for options not likely to change—Amazon.com may begin to sell electronics, hors d'oeuvres, and dermatology services, but chances are good that books will always be among its categories. You can also use it to provide clear instructions about operating this menu: "Pick a state," or "Choose an option from this list," for example. Of course, this step is optional. (Adding static options works just like it does in a regular menu's List Values box, as described on page 414.)

5. **From the Options From Recordset menu, choose the recordset you created in step 2.**

   You've just told Dreamweaver where the items to be listed in the menu are coming from.

6. **From the Values menu, choose a table column; choose another column from the Labels menu.**

   Menu and list items consist of a *label* (what someone actually sees in the menu) and a *value* (the information that's transmitted when the form is submitted). Using the example in step 1, you would select *categoryID* (or whatever is the name of the recordset's primary key) from the Value menu, and *categoryName* from the Label menu. If the label and value are the same, choose the same table column from both menus.

7. **If you want your menu to have one item preselected, then click the dynamic data button (the lightning bolt). In the Dynamic Data window (Figure 24-7), select a dynamic data item.**

   This step is optional and most frequently used for an update form. Suppose you create a form for updating information on your catalog of products. When the update page loads, all the form fields would already be filled out with information about a particular product. The menu that lets you specify the product's category, therefore, should have the name of the category that matches the database record displayed and preselected.

8. **Click OK.**

   Dreamweaver adds a Dynamic List/Menu server behavior to the page.

You can remove the dynamic menu or list by selecting and deleting it. To leave the menu but remove its *dynamic* properties, open the Server Behaviors panel (Window → Server Behaviors). Here, you see the dynamic list/menu behavior; it's listed as "Dynamic List/Menu(menu_name)," where *menu_name* is the name you gave the menu or list. Select it, and then click the Remove (minus sign [–]) button or press the Delete key.

To edit the behavior, just select the menu in the document window, and then, once again, in the Property inspector, click the Dynamic button.

Deleting Records

Dreamweaver's Delete Record server behavior lets you build pages that let people remove records from a database. Depending on which server model you use, the method of adding this server behavior varies. The Dreamweaver server behavior for ASP and JSP is the same, while the server behavior for PHP, ASP.NET, and ColdFusion offers a bit more flexibility.

Deleting Records for ASP and JSP

The setup is similar to using the Update Record server behavior, in that you must create a page with a recordset that retrieves a single record—the item to delete. This page is just like a detail page, as described on page 414. Another page must link to the delete page, and provide the proper key for filtering to a single record on the delete page.

One way you can do this is by adding a link—Delete This Record, perhaps—on a record detail page. The link should pass the primary key for the condemned record to another page (the "Go to Detail Page" server behavior described on page 818 can help with this). This page—the delete page—would include a recordset that retrieves the file to be deleted. To confirm the deletion, the page might say something like, "Are you sure you wish to delete this record?" (Adding some dynamic text from the recordset, such as a name column, will help identify the record.)

A delete page differs from a regular detail page because it includes a form with a single Submit button, and a Delete Record server behavior.

To create a delete page, proceed as follows:

1. **Create a dynamic page containing a filtered recordset.**

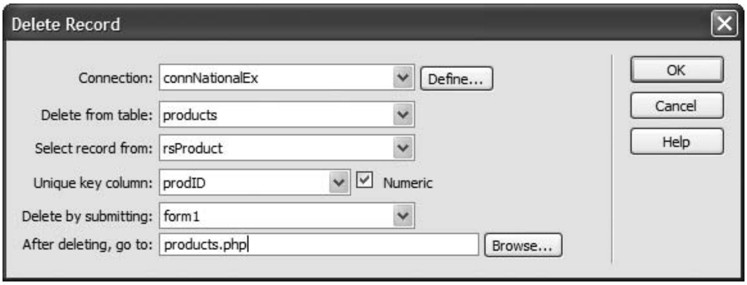
   As noted above, the recordset should retrieve a single record—the one to be deleted. However, you don't need to retrieve *all* the columns for the record. At a minimum, the recordset must retrieve the record's primary key, since the Delete Record server behavior needs it to know which record to remove. But beyond that, you should probably include some identifying information on the delete page, so that your visitor can make sure she's really deleting the right record. If the page deletes an employee from the database, consider putting the employee's name on the page as one final check.

2. **Add a form to the page with a single Submit button (see page 401).**

   Change the label of the button so that it reflects the action it will perform—Delete This Record, for example.

3. **Open the Server Behaviors panel (Window → Server Behaviors). Click the + button, and then select Delete Record.**

   The Delete Record window appears (see Figure 24-13).



Delete Record

Connection: connNationalEx

Delete from table: products

Select record from: rsProduct

Unique key column: prodID ☑ Numeric

Delete by submitting: form1

After deleting, go to: products.php

***Figure 24-13:** Dreamweaver's Delete Record server behavior simplifies the process of removing information from a database.*

4. **From the Connection menu, select a database. From the "Delete from table" menu, select the table with the record to be deleted.**

   These steps should be familiar by now; the table you select should be the same one you used when creating the detail recordset for this page.

5. **From the "Select record from" menu, select the recordset you added to this page.**

   This step specifies the recordset on the page (if there's more than one) that Dreamweaver should use for specifying the record to be deleted.

6. **From the "Unique key column" menu, choose the table's primary key. If it's a number, make sure the Numeric box is also turned on.**

The "Unique key column" identifies which record to delete. (For a description of primary keys, see page 769.) Make sure you retrieved this primary key information when you created the recordset, or the server behavior doesn't work.

7. **Select the name of the form that contains the Delete button.**

   Unless the page has more than one form, the name of the form you created in step 2 should automatically appear here.

8. **Click the Browse button; navigate to the Web site, and then select a file.**

   This file represents the page that will appear after a record has been deleted. This could either be a page with a confirmation message ("The Record has been successfully deleted") or a page that lists the remaining records in the database.

9. **Click OK.**

   Dreamweaver inserts the code necessary to delete a record from the database.

Deleting Records for PHP, ASP.NET, and ColdFusion

Deleting a record using ASP or JSP is straightforward. For the other server models, the Delete Record server behavior offers a bit more flexibility, and you can implement it in a variety of ways. You don't have to add a recordset to a page to delete a record, nor do you have to add a form with a delete button.

The main requirement: The page with the Delete Record server behavior must have some way to retrieve the primary key for the record you wish to delete. This can be a form, a URL, a cookie, a session variable, or any of the other data sources discussed on page 897.

On a page that lists the details of a particular record, you could include a link to a delete page and pass the ID of that record in the URL (see "Passing Information Between Pages" on page 817). The delete page could then use the ID number in the URL to delete the record, and then send the visitor off to another page—perhaps a page verifying that the record was successfully deleted.

Note: Because of this flexibility, under the PHP, ASP.NET, and ColdFusion server models, you could place a Delete Record server behavior on a blank dynamic page. All the page would do is delete the specified record, and then go to another page on the site.

There are many ways, therefore, that you could delete a record in this server model. Here's a method that would provide the same experience as the ASP and JSP models discussed above—that is, a delete page that lets people confirm the item they wish to delete by clicking a button on a form:

1. **On one of the pages in your site, add a link to the delete page.**

   On a page that provides the details of a single record, you could add a link to the delete page—maybe the word "Delete" or a button with a picture of a trash can.

Alternatively, you could add a "delete this record" link as part of a repeating region (see page 805). In this way, you would have multiple records on a single page, each with its own link to the delete page. In both cases, you'd attach the record's primary key to the link, as described on page 817.

Note: Unfortunately, Dreamweaver doesn't provide a tool for deleting more than one record at a time.

2. **Create a dynamic page—the delete page—containing a filtered recordset.**

   This recordset should retrieve a single record—the one to be deleted. As mentioned for the ASP and JSP models, you don't need to retrieve *all* the columns for the record. At a minimum, the recordset must retrieve the record's primary key, since the Delete Record server behavior needs it to know which record to remove. You may want to include some identifying information, such as the name of the item to be deleted, so that your visitors can see what they're about to delete.

3. **Add to the page a form consisting of a single Submit button (as described on page 418).**

   When you create the button, change its label to reflect what it does—Delete This Record, for example.

4. **Select the form. Then, in the Property inspector's Action box, type the page's file name.**

   If the page is called *delete.php*, type *delete.php*.

   The *Action* property indicates where the form should be sent (see page 402). In this case, when the visitor clicks the Submit button, the form information goes *back* to the same page.

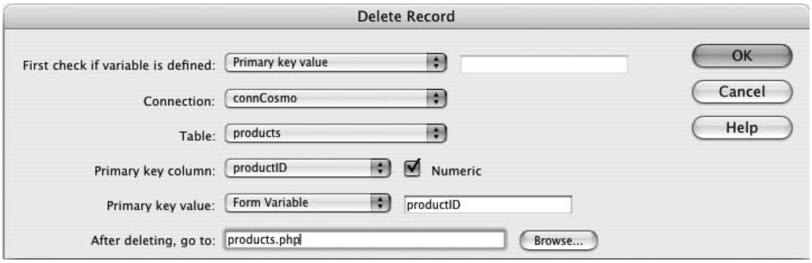
   This kind of trickery is common in dynamic pages. When your visitor clicks the Delete button, the form is sent to the same page—but this time the form doesn't show up. Instead, the Delete Record server behavior (which you're going to add in step 6) deletes the record, and then sends the visitor off to another page.

5. **Add a hidden field to the form (page 417). Name this field whatever you wish, but bind (attach) to it the primary key from the recordset you created in step 2.**

   This hidden field is what tells the Delete Record server behavior which record to delete. (For instructions on binding dynamic data to a form field, see page 855.)

6. **Open the Server Behaviors panel (Window → Server Behaviors). Click the + button, and then, from the list of server behaviors, select Delete Record.**

   The Delete Record window appears (Figure 24-14). This window differs slightly among ASP.NET, PHP, and ColdFusion. However, the basic steps described here are the same.



First check if variable is defined: Primary key value

Connection: connCosmo

Table: products

Primary key column: productID ☑ Numeric

Primary key value: Form Variable productID

After deleting, go to: products.php

Figure 24-14: *The Delete Record window for PHP differs slightly from its .NET and ColdFusion counterparts. .NET lets you specify an error page so that visitors see a different page if the delete action fails; ColdFusion lets you specify a user name and password for the database.*

7. **From the "First check if variable is defined" menu, choose "Primary key value."**

   This step may seem like putting the cart before the horse, because you won't define the primary key value until step 10 below. However, this option lets you control *when* the record is deleted, by making sure the proper variable is defined *before* the server behavior deletes the record. In this case, the record doesn't go away until the visitor clicks the Delete button, causing the server to send a form variable containing the record's primary key.

   This precaution is necessary; without this option, the record would be deleted whenever the page loads. Since the page really serves two functions—letting visitors confirm that they wish to delete the record, and actually deleting the record from the database—you need to make sure the visitor has first visited the page, and *then* clicked the Submit button you added in step 3.

8. **From the Connection menu, select a database. From the Table menu, select the table with the record to be deleted.**

   These steps should be familiar by now. The table you select should be the same one you used when creating the detail recordset for this page.

9. **From the "Primary key column" menu, select the table's primary key.**

   This tells Dreamweaver which database field contains the unique key that identifies which record to zap from the table.

10. **From the "Primary key value" menu, select Form Variable. In the box just to the right of that menu, type the name of the hidden field you added in step 5.**

    This step is the final piece of the puzzle. It tells the server behavior where to find the ID number for the doomed record. In this case, the form with its hidden field supplies the ID number.

11. **Click the Browse button; navigate to the Web site, and then select your confirmation page.**

    The confirmation page appears after a record has been deleted. It's a page you've created in advance—either a page with a confirmation message ("The Record has been successfully deleted"), or a page that lists the records of the database—a *master* page.

12. **Click OK.**

    Dreamweaver inserts the code necessary to remove a record from the database.

As with any of the other server behaviors that change content in a database, you should carefully control who has access to the delete page. Going to work one morning and finding that someone has deleted all the products from your company's e-commerce site is enough to ruin your whole day. Dreamweaver's User Authentication behaviors, discussed in the next chapter, can help.

If you ever need to change any of the properties of the Record Delete action, such as picking a different page to go to after a record is deleted, you can go to the Server Behaviors panel, and then double-click Delete Record. The Delete Record window opens; make any changes, and then click OK.

Tutorial: Inserting and Updating Data

In this tutorial, you'll continue working on CosmoFarmer's online store. You'll work on two administrative pages that allow employees of CosmoFarmer to add new products to the database, and to edit products already in the database.

This tutorial assumes you've already completed the tutorials for Chapters 22 and 23. If not, turn to page 754, follow the instructions for preparing the application server, database, and Dreamweaver for this project. Then turn to page 821 and build the product catalog pages.

Adding an Insert Product Page

Start by opening a page that's already been created:

1. **Open the file named *add.php* in the admin folder of the local site you defined in Chapter 22.**

   This page contains three Spry tabbed panels like the ones you learned about on page 458. Instead of having several Web pages, each dedicated to inserting one record into one database table, you can collect all the insert forms on a single page. Clicking a tab opens the tabbed panel with the appropriate insert form.

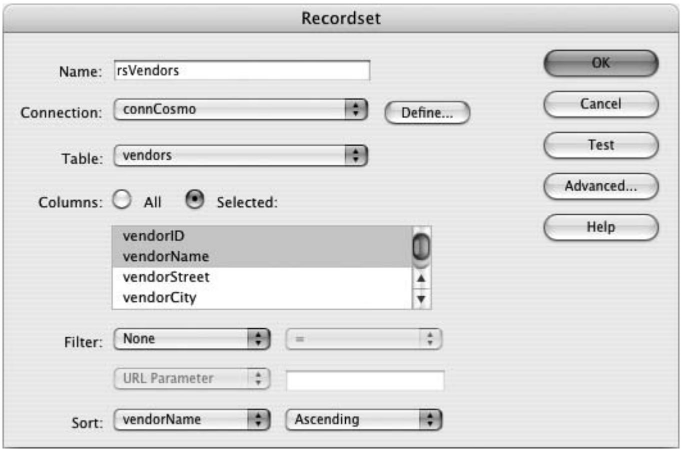
   You'll also notice that this page is stored inside a folder named *admin.* Pages for adding and editing the online store's products shouldn't be accessible to the public; you wouldn't want just anyone adding products—"The Electric Whoopee Cushion, by Mr. Hacker," for example—to the store. Accordingly, these pages are kept in a folder reserved for administrators of the Web site. (In the next chapter, you'll learn how to password-protect these pages.)

   Each new product requires an ID number for the vendor who manufactures the product. The database for these products actually contains several tables: Products, Vendors, and Category. Information about each vendor (name and contact info) is in the Vendors table, while information on each product (price, description, and so on) is in the Products table. A third table contains a list of product categories, which you used in the last tutorial to create the category navigation bar.

To keep the Vendors and Products tables connected, so that you know which vendor manufactures which product, the Products table includes a field containing the vendor's ID number. Whenever you add an item to the Products table, then, you also need to insert the vendor's ID number. One way would be to have a CosmoFarmer employee type the vendor *number* each time a product is added to the page. But that approach is prone to error, since the employee needs to remember which number belongs to which vendor: "Is Gap Plants vendor 2 or 3?" A better method is to provide a pull-down menu that lists the name of each vendor, but which submits the vendor's number when the product is added to the database. To make this kind of dynamic menu, start by creating a recordset.

2. **Make sure the Bindings Panel is open (Window → Bindings). In the Bindings Panel, click the + button, and then select Recordset.**

   Or use any of the methods described on page 782 to add a new recordset; for example, choosing Insert → Data Objects → Recordsets*;* clicking the + button in the Server Behaviors panel, and then choosing Recordset (Query); or using the Recordset button on the Insert bar's Data tab. Either way, the Recordset window opens. Make sure that the simple recordset options show up (see Figure 24-15). Next, you'll define this recordset's properties.



Recordset

Name: rsVendors

Connection: connCosmo

Table: vendors

Columns: ○ All ● Selected:

vendorID
vendorName
vendorStreet
vendorCity

Filter: None =

URL Parameter

Sort: vendorName Ascending

Figure 24-15:
When creating this recordset, make sure you're using the window's Simple options. If you see a button labeled Advanced, you're in the right place. (If that button's missing, click the Simple button to access the basic recordset options.)

3. **In the Name box, type *rsVendors*. From the Connection menu, select connCosmo. From the Table menu, select "vendors."**

   These three steps set up the name, database, and table required for the recordset. For a recap of creating recordsets, turn to page 782.

4. **Click the Selected radio button; from the Columns list, select vendorID and vendorName.**

   You can do this step by holding down the Ctrl (Option) key while clicking the name of each column. Finally, pick an order for sorting the list of vendors.

5. **From the Sort menu, choose vendorName. Make sure that in the Order menu, Ascending is selected.**

   The Recordset window should now look like Figure 24-15.

6. **Click OK to close the window and insert the recordset in the page.**

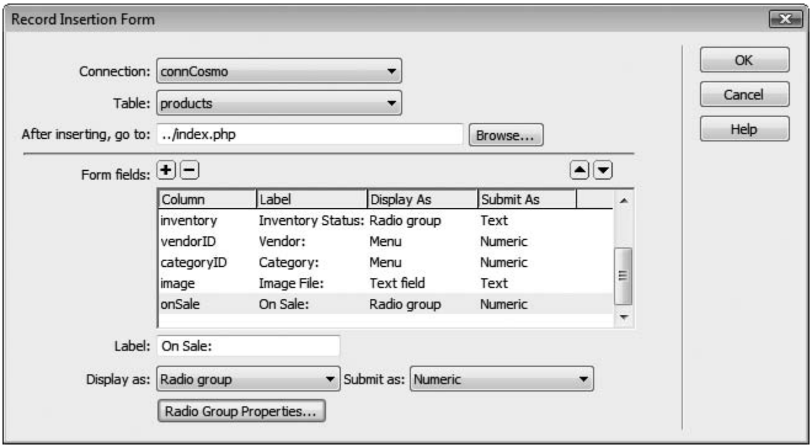
   Each product also belongs to a particular category. In the Products table in the database, the category is represented by a number, but the category names are stored in the Categories table. This situation is the same as vendors, so you'll create a dynamic menu for inserting the proper category name.

7. **Add another recordset to the page by following steps 2–6: Name the recordset rsCategories, select the "category" table, choose the All columns radio button, and then sort by CategoryName.**

   You've just added a second recordset to this page. Now you're ready to add a form for inserting a new record. The page contains three Spry tabbed panels. You'll add a form for inserting new products into the database via the tab that's visible when you open the page—the Add Product tab.

8. **Click the empty area of the gray box directly below the Add Product tab. Choose Insert → Data Objects → Insert Record → Record Insertion Form Wizard.**

   (Other methods of inserting this wizard are discussed on page 844.) The Record Insertion Form window opens (Figure 24-16). Next, you'll tell Dreamweaver which database to connect to, and which table will receive data from the form.



Record Insertion Form

Connection: connCosmo

Table: products

After inserting, go to: ../index.php

Form fields:

Column	Label	Display As	Submit As
inventory	Inventory Status:	Radio group	Text
vendorID	Vendor:	Menu	Numeric
categoryID	Category:	Menu	Numeric
image	Image File:	Text field	Text
onSale	On Sale:	Radio group	Numeric

Label: On Sale:

Display as: Radio group Submit as: Numeric

Figure 24-16: *While you can manually create a form and program it to insert a new record in a database, Dreamweaver's Record Insertion Form wizard makes the task a snap.*

9. **From the Connection menu, choose "connCosmo." From the Table menu, choose "Products."**

   You can insert data into only one table at a time. In this case, you've selected the Products table because it holds all the information for each item at the store. After information is added to the database, Dreamweaver redirects the visitor to another page. You'll set this up next.

10. **Click the Browse button. In the site's root folder, select the file *index.php*.**

    After adding a new product to the database, your staff is taken to the Products page (the one you created in the previous chapter). Since the newly added product is part of the database, browsing the products catalog reveals the newly added item.

Tip: You could also choose *add.php* for Step 10 if you wanted to quickly add multiple product records. Then, after one product was inserted into the database, the administrator would return to the product insertion form again, ready to input the next product.

11. **In the "Form fields" list, select "productID." Click the Remove (minus sign [–]) button to remove this field.**

    In some cases, the database itself fills in certain fields. For instance, every product in the database has its own unique ID—the table's primary key, which is generated by the database. When a new record is added, the database creates a new, unique number and stores it in the productID column. Since you don't want anyone entering the wrong information here, you should remove it from the form Dreamweaver is about to create.

12. **Select the productName column. In the Label field, change the label to "Product Name:".**

    The label you type here doesn't affect your database in any way. It's just the text that visitors see next to the form field. (You'll do the same thing with each field, to make the labels reader-friendly.)

    You don't need to change any of the other options such as "Display as" or "Submit as." You'll often change the "Display as" option, which changes what type of form element—like a checkbox or menu—Dreamweaver displays (you'll see this in the next step). However, you'll probably never change the "Submit as" option, which determines how Dreamweaver submits the data to the database. Dreamweaver figures this out correctly based on the design of your database.

13. **Select the "description" column. From the "Display as" menu, choose "Text area".**

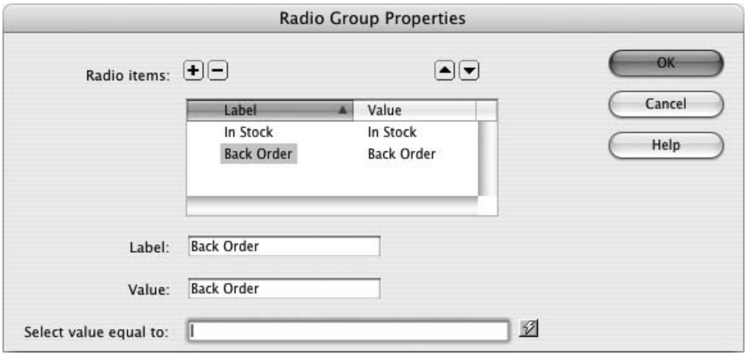
    The label for this column is fine, but since a description may be anywhere from several sentences to several paragraphs, it's a good idea to provide a large text box for collecting the product description. A regular text box is just one line, so changing the "Display as" option to a "Text area" (a multiline text box) provides plenty of space to accept visitor input (see page 408 for more information on multiline text boxes).

14. **Select the inventory column, and then, in the Label field, change the label to "Inventory Status:".**

    The database tracks a product's inventory status: whether the product is in the warehouse or on back order with the manufacturer. You could let a store administrator type in the correct status, but that would take time, and, besides, he might make a mistake. (It wouldn't do for shoppers to see that the "Kudzu seeds" are on "Gack Order.") So you'll simplify the process by adding radio buttons.

15. **From the Display As menu, choose Radio Group, and then click the Radio Group Properties button.**

    The Radio Group Properties window appears (Figure 24-17). Here you're going to add the radio buttons you want to appear on the form. Remember, the value of each button must match the data stored in the database (see page 858).



Label	Value
In Stock	In Stock
Back Order	Back Order

Label: Back Order

Value: Back Order

Select value equal to:

Figure 24-17: *Use the Radio Group Properties window to add radio buttons to a form. Radio buttons make data entry faster and less error-prone.*

16. **In the Label field, replace "button1" with In Stock. Type *In Stock* in the Value field as well.**

    The label is what appears on the page, while the value is the information that gets stored in the database. You need to add one more button.

17. **Click the + button to add another radio button; repeat step 15, but type Back Order for the label and value of the second button.**

    The window should look like Figure 24-17.

18. **Click OK to close the Radio Group Properties window.**

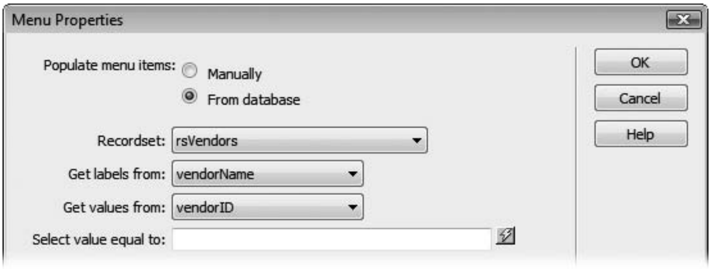
    Again, in an effort to speed up data entry and make sure the form is filled out correctly, the next two fields will be pull-down menus. First, you'll create a dynamic menu to display the list of vendors, as follows.

19. **Select the vendorID column, and then change its label to "Vendor:".**

    This column only stores a number; the vendor's name and contact information are stored in a different table. To make entering this information easier, you'll make a dynamic menu that lists all of the vendors' names. When somebody chooses a name from the menu, the appropriate *vendorID* number is submitted to the database.

20. **From the "Display as" menu, choose Menu. Then click the Menu Properties button.**

    The Menu Properties window opens (see Figure 24-18). Use this window to build the menu.



Menu Properties

Populate menu items: ○ Manually ● From database

Recordset: rsVendors

Get labels from: vendorName

Get values from: vendorID

Select value equal to:

Figure 24-18: *Dreamweaver can create dynamic pull-down menus (also known as pop-up menus) that get their labels and values from a database.*

21. **Click the "From database" radio button. Make sure that in the Recordset menu, "rsVendors" is selected.**

    You're telling Dreamweaver that the items to be listed in the menu are actually coming from a database query. In fact, they come from the recordset you created at the beginning of this tutorial—rsVendors.

22. **From the "Get labels from" menu, choose "vendorName." Then, from the "Get values from" menu, choose "vendorID."**

    The labels—the text that appears in the menu—are the names of each vendor. The value that's submitted with the form, meanwhile, is the vendor's ID number.

    You can skip the "Select value equal to" field. It's useful if you want a particular value to be preselected when the form loads, which is usually the case when you're *updating* a record in the database, since you need to display the current database information in order to update it.

23. **Click OK to close the window.**

    The product category is another instance where a pull-down menu makes sense. You'll follow the same procedure to add a pop-up menu listing the names of all the categories available at the store.

24. **Select the categoryID column, and then change its label to "Category:".**

    The next few steps should feel familiar.

25. **Repeat steps 20–23; use the "rsCategories" recordset, retrieve the label from the "categoryName" field, and set the value to "categoryID."**

    For the final field, you'll change the label and manually enter a default value.

26. **Select the image column, and then change its label to "Image File:".**

    Because not every product has an image, you'll change the default value to point to a graphic that's already been created—one used to indicate that no graphic is available.

27. **In the "Default value" box, type *none.gif*.**

    Finally, each product can be marked as "On Sale" or not.

28. **Select the onSale category, and then change the label to "On Sale:".**

    Either the product is on sale or it isn't. This kind of yes or no option is best represented by radio buttons.

29. **From the "Display as" menu, choose Radio Group, and then click the Radio Group Properties button.**

    Numbers in the database represent a product's sale status: If the onSale field has a value of 1, the product is on sale; if the value is 0, the product isn't on sale. Because 1 and 0 might not make sense to anyone using this Web page to add a product to the database, you'll use plain language words as labels.

30. **In the Label field, replace "button1" with *Yes*. Type *1* in the Value field as well.**

    Just one more button to add.

31. **Click the + button to add another radio button; repeat step 30, but type *No* for the label and *0* for the value of the second button. Click OK to close the radio button window.**

    At this point, the Record Insertion Form window should resemble Figure 24-16.

Note: Dreamweaver doesn't provide any way to return to the Insert Record Form wizard. If you accidentally close the window and insert the form before completing each of the steps in this section of the tutorial, you have to finish the form manually. Unless you're really sure how to do that, your best bet is to delete the form from the page, remove all server behaviors except for rsVendors and rsCategories, and then start at step 8 on page 869. Practice makes perfect, right?

32. **Click OK again to insert the form.**

    Dreamweaver adds a table, a form, and all the programming code necessary to add a new product to the database. The form has a blue background—one of Dreamweaver's signals that this form is special—and indicates that this form uses one of Dreamweaver's server behaviors (see Figure 23-26 on page 824 for information on how to hide or change this color).

33. **Choose File → Save.**

    You're nearly finished. You just have to finish up the design and take it for a test drive.

Finishing the Insert Form

To make your form ready for prime time, you'll spruce up its appearance and test it:

1. **Select the table containing the form fields.**

   The fastest method is to click anywhere inside the table and then, in the Tag selector, click the <table> tag (the one farthest to the right in the Tag selector). For other table selection techniques, see page 252.

2. **In the Property inspector, from the Align pop-up menu, choose Default.**

   The Default option aligns the table to the left without adding bandwidth-hogging HTML code. In addition, a little extra space is added around and inside each cell in a table. You'll remove that next.

3. **With the table still selected, in the Property inspector's CellPad, CellSpace, and Border boxes, type *0*.**

   You could repeat this step with the tables used for the two sets of radio buttons. In addition, if you don't like the way the buttons appear one on top of the other, you can move them. At this point, the labels, form fields, and tables in the form are fully editable. You could, for example, remove the labels and radio buttons from the table, place them side by side, and delete the small table.

   Now you'll apply a style to the table to improve its appearance.

4. **In the Property inspector, from the Class menu, choose insertForm.**

   The text inside the table should now be formatted to better match the site's style.

5. **Select each of the table cells in the left-hand column, and then, in the Property inspector, click the "Header" box.**

   You can select the cells by clicking the top cell, and then dragging down until all the cells in the left column are selected; Ctrl-clicking (⌘-clicking) each cell works as well. For other methods for selecting table cells, see page 253.

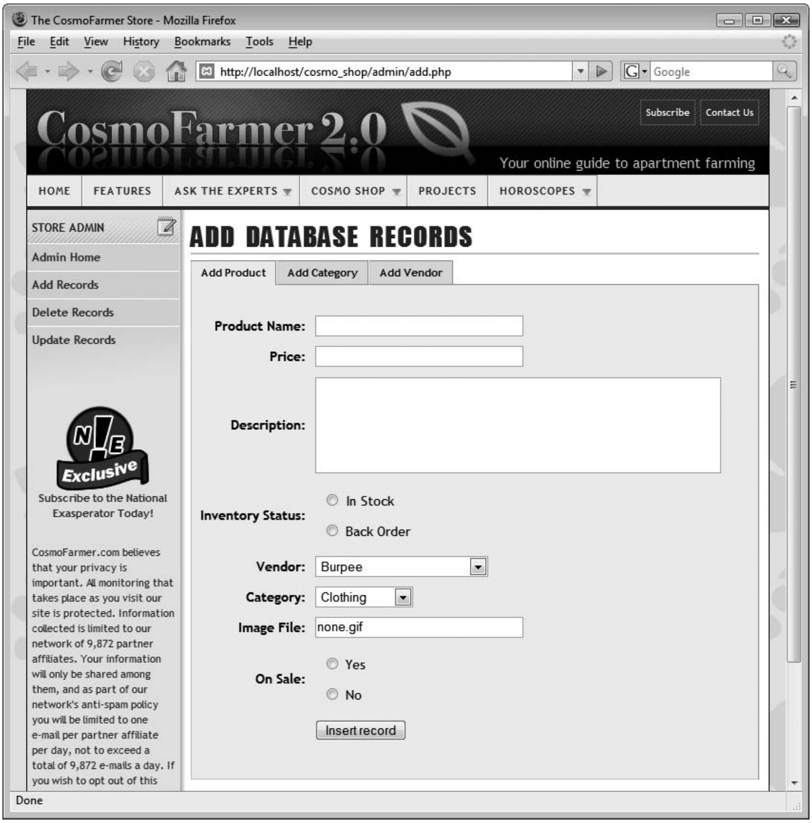
   The finished page should resemble Figure 24-19. Now you're ready to take the page for a spin.

6. **Press F12 (Ctrl-F12) to preview the page in a Web browser. Type information into each of the fields, and then click the "Insert record" button.**

   If you filled out all the fields correctly, you should see the product page you built in the last chapter. Click the category name of the new product you just added, or navigate through the product pages until you find the newly added item.

Note: If, when you submit the form, you get a page full of errors, you may be attempting to preview the page using a temporary file. See the Note on page 150 for an explanation.

You can enhance this page in many ways. For example, you can make sure that no one at CosmoFarmer accidentally inserts a new product without a price, a description, or any of the other required pieces of information; just add Dreamweaver CS3's new Spry Validation tools discussed on page 421. In addition, you could use the Insert Record Form wizard to add insert forms in the Add Category and Add Vendors tabbed panels. (See page 458 for information on how to work with Spry tabbed Panels.)



ADD DATABASE RECORDS

Product Name:

Price:

Description:

Inventory Status: ○ In Stock ○ Back Order

Vendor: Burpee

Category: Clothing

Image File: none.gif

On Sale: ○ Yes ○ No

CosmoFarmer.com believes that your privacy is important. All monitoring that takes place as you visit our site is protected. Information collected is limited to our network of 9,872 partner affiliates. Your information will only be shared among them, and as part of our network's anti-spam policy you will be limited to one e-mail per partner affiliate per day, not to exceed a total of 9,872 e-mails a day. If you wish to opt out of this

Figure 24-19: *No database-driven site would be complete without a way to add new records to the database. Use forms like this one to collect newsletter sign-up information, collect order and payment details, or just create an online guest book.*

Building a Page for Editing Database Records

If employees at CosmoFarmer type the wrong information for a particular product and have no way to correct it, they could be in a lot of trouble. After all, they'd be losing money hand over fist if the site were selling those $598 CAT Indoor Lawn Tractors for only $5.98. That said, here's how to add an update-record page to the site.

Linking to the update page

An update page is very much like an insert-record page; the only difference is that the form is already filled out with information about a particular record. First, you have to tell the update page which product it's supposed to update. To do so, you must add a link to the product-details page you built in the last chapter.

1. **In the local site's root folder, open the file named *product.php*.**

   This page lists details for a particular product. As you may recall from last chapter, this page is itself accessed from the *index.php* page, which displays a listing of all products in the database. By clicking the name of a product on that page, the *product.php* page retrieves and displays information on just that product.

Now you need to create a link on this page that, when clicked, takes a visitor to an update page for the particular product.

2. **Click to the right of the Inventory Status line, and then hit Enter (Return) to create a new, blank paragraph. Type *Edit This Information*. Select the text you just typed, and then, in the Property inspector, next to the Link field, click the "Browse for File" button (the little folder icon).**

   The standard Open File dialog box appears. (If you installed the extension described on page 818, you could also use the Go To Detail Page server behavior.)

3. **In the admin folder, navigate to and select the file called *update.php*, but don't close the window yet.**

   You need to add some additional information, which identifies the product that needs updating, to the end of the URL.

4. **Click the Parameters button to open the Parameters window. Click the name column, and then type productID.**

   The Parameters button lets you add a URL parameter to the end of a link, letting you pass information on to another page. In this case, you're passing on a dynamic piece of data—the product ID number for the item currently displayed on the Product Details page.

5. **Press Tab twice to hop to the Value column. Click the dynamic data button (the lightning bolt).**

   The Dynamic Data window opens. Here you can select data that you've already added to the Bindings panel, such as columns from a recordset.

6. **From the rsDetails recordset, select the item "productID," and then click OK.**

   (You may need to click the + button to the left of the word Recordset to see this option.) The link is nearly complete.

7. **Click OK to close the Parameters window. Click OK once again to close the Select File window and apply the link.**

   When you're all done, the Property inspector's link box should look like this:

   ```
   admin/edit.php?productID=<?php echo $row_rsDetails['productID']; ?>
   ```

8. **Choose File → Save.**

Note: You probably wouldn't want a link like this to appear for the average visitor to your site. After all, customers shouldn't be changing information on the products you sell. In the next chapter on page 917, you'll learn how to hide this link from unauthorized eyes.

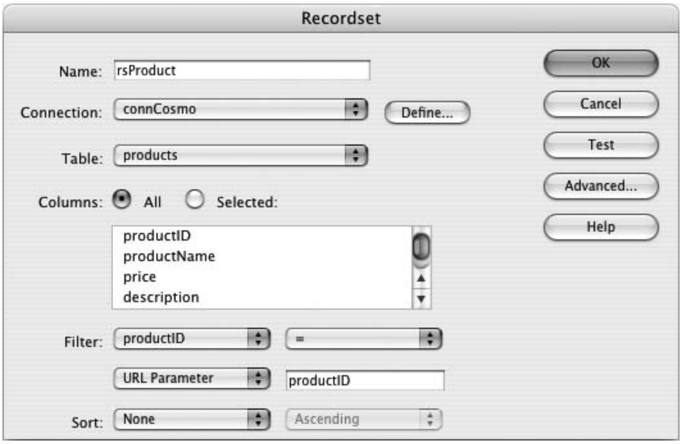
Creating the update page

Now that the initial legwork is out of the way, you're ready to build the actual Record Update Form. To start, you'll add a filtered recordset to retrieve information for the product to be updated:

1. **In the admin folder, open the file *edit.php*.**

2. **Add a recordset, using any of the methods described on page 782. For example, choose Insert → Data Objects → Recordset.**

   The Recordset window opens. Make sure the simple options are displayed, as shown in Figure 24-20.



Recordset

Name: rsProduct

Connection: connCosmo

Table: products

Columns: ● All ○ Selected:

productID
productName
price
description

Filter: productID =

URL Parameter productID

Sort: None Ascending

***Figure 24-20:** When you filter on a table's primary key (productID, in this case) using the = operator, the recordset never retrieves more than one record.*

3. **In the Name field, type *rsProduct*; from the Connection menu, choose connCosmo, and from the Tables menu, select Products. Leave the All button selected.**

   Next, add a filter to the recordset. This filter ensures that the recordset retrieves only a single record—the product you wish to update.

4. **From the Filter menu, select productID. From the Comparison menu, select =. From the Source menu, choose URL Parameter. Finally, make sure the last field in the Filter area of the window says productID.**

   After you selected productID, Dreamweaver most likely filled in the other three options for you. When creating a filtered recordset, Dreamweaver assumes you'll use a URL parameter with the same name as the selected field. The Recordset window should now look like Figure 24-20. In essence, it instructs the recordset to retrieve only the record whose productID matches the number passed in the URL parameter named productID (that's the name you supplied as part of the link in step 4 on page 876).

5. **Click OK to close the window and add the recordset to the page.**

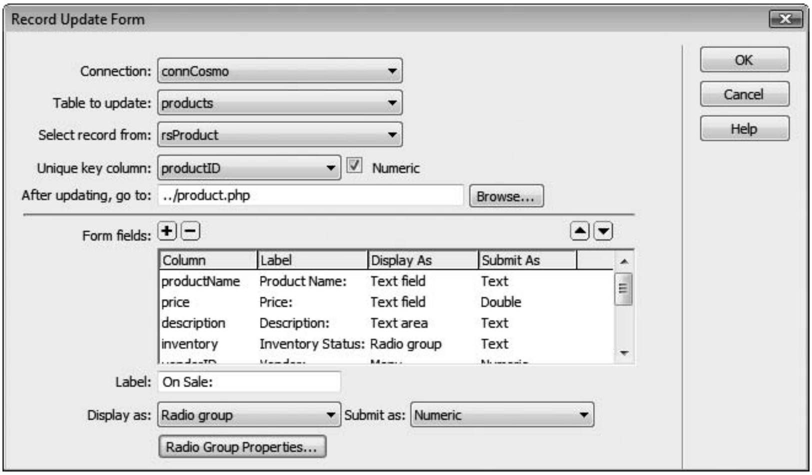
   Next, you'll create two more recordsets—a listing of all vendors and a listing of product categories. You'll use them to create dynamic menus, just as you did on the insert form.

6. **Follow steps 2–7 from the "Adding an Insert Product Page" part of this tutorial (see page 868) to create new rsVendors and rsCategories recordsets.**

   (You can also copy those recordsets from the insert product page as described on page 798). The hard part's behind you. You can now use Dreamweaver's Update Record Form tool to finish the page.

7. **Click directly underneath the green line of the Edit Record headline. Choose Insert → Data Objects → Update Record → Record Update Form Wizard.**

   The Record Update Form window opens (see Figure 24-21). Next, you'll specify the recordset and fields the form should update.



Record Update Form

Connection: connCosmo

Table to update: products

Select record from: rsProduct

Unique key column: productID ☑ Numeric

After updating, go to: ../product.php

Form fields:

Column	Label	Display As	Submit As
productName	Product Name:	Text field	Text
price	Price:	Text field	Double
description	Description:	Text area	Text
inventory	Inventory Status:	Radio group	Text

Label: On Sale:

Display as: Radio group Submit as: Numeric

***Figure 24-21:** Dreamweaver's Record Update Form wizard makes very quick work of creating pages to update records in a database.*

8. **From the Connection menu, select connCosmo. Make these selections for the next three menus: "products" in the "Table to update" menu, "rsProduct" in the "Select record from" menu, and "productID" in the "Unique key column."**

   Next, you need to specify which page appears after someone updates the record. Since the update page lets you edit a single product, it makes sense that after submitting any changes, you should see the newly updated information on that product's detail page.

Note: As with the Insert Record Form wizard, once you close the Update Record Form wizard window, there's no way to return to it (see the Note on page 873).

9. **Click the Browse button. In the Select File window, navigate to and select the file *product.php*. Click OK to choose the file.**

Now you must specify which fields appear in the form. You also need to change which type of form element they should use, and edit their labels. This process is very similar to the Insert Record form; it's summarized in the following steps.

10. **In the "Form field" list, select "productID"; click the Remove (minus sign [–]) button to remove this field from the list.**

Since productID is a primary key generated by the database, no one should be allowed to change it.

Next, you'll change the text label that appears next to a couple of the fields.

11. **Select the "productName" form field, and then change its label to "Product Name."**

Next, you'll provide some more room for lengthy descriptions of each product.

12. **Select the "description" column. From the Display As menu, choose Text Area.**

As with the insert product page, inventory status information is better displayed with a simple pair of radio buttons. You'll add those now.

13. **Select the "inventory" column. Change the label to "Inventory Status:", from the Display As menu, choose Radio Group.**

You now need to give Dreamweaver a bit of information about the radio buttons you wish to add to the page.

14. **Click the Radio Group Properties button.**

The Radio Group Properties window appears (Figure 24-17). You need to add the radio buttons you want to appear on the form. The value of each button must match the data stored in the database.

15. **In the Label field, replace *button1* with *In Stock*. Type *In Stock* into the Value field, too.**

The label appears on the page, while the value is stored in the database. You need to add one more button.

16. **Click the + button to add another radio button; repeat step 15, but type *Back Order* for the label and value of the second button.**

The window should look like Figure 24-17, except that the "Select value equal to" box is filled with the programming code necessary to select the correct button. Since this is an update form, one of the buttons should *already* be selected when the page loads—information stored in the recordset determines which button is selected.

17. **Click OK to close the Radio Group Properties window.**

Again, in an effort to speed up data entry and make sure the form is filled out correctly, the next two fields will be pull-down menus. First, you'll create a dynamic menu to display the list of vendors.

18. **Select the vendorID column, and then change the label to "Vendor:". From the Display As menu, choose Menu; click the Menu Properties button.**

    The Menu Properties window opens (see Figure 24-18).

19. **Click the "From database" radio button, make sure "rsVendors" is selected in the Recordset menu, and then, from the "Get labels from" menu, choose "vendorName." Now, from the "Get values from" menu, choose "vendorID."**

    Leave the "Select value equal to" field as is. Dreamweaver automatically selects the appropriate choice, based on which vendor manufactures the product.

20. **Click OK to close the Menu Properties window.**

    You need to repeat the process for the product categories menu.

21. **Select the "categoryID" column, and then change the label to "Category:". From the Display As menu, choose Menu; click the Menu Properties button.**

    The Menu Properties window opens.

22. **Click the "From database" radio button, make sure "rsCategories" is selected in the Recordset menu, and then choose "categoryName" from the "Get labels from" menu. Now, from the "Get values from" menu, choose "categoryID." Click OK to close the Menu Properties window.**

    As with the previous menu, Dreamweaver automatically adds the correct code to make sure the category for the product being edited is correctly selected when this update page loads.

23. **Select the image form field, and then change its label to "Image File:".**

    Finally, you'll provide a way to indicate whether a product is on sale.

24. **Select the "onSale" category, and then change the label to "On Sale:".**

    Either the product is on sale or it isn't. You can best represent this kind of yes or no option by radio buttons.

25. **From the Display As menu, choose Radio Group, and click the Radio Group Properties button.**

    Numbers in the database represent the sale status of a product: if the onSale field has a value of 1, the product is on sale; if the value is 0, the product isn't on sale. Because 1 and 0 might not make sense to anyone using this Web page to add a product to the database, you'll use plain language words as labels.

26. **In the Label field, replace *button1* with *Yes*. Type *1* in the Value field as well.**

    Just one more button to add.

27. **Click the + button to add another radio button; repeat step 30, but type *No* for the label and *0* for the value of the second button. Click OK to close the radio button window.**

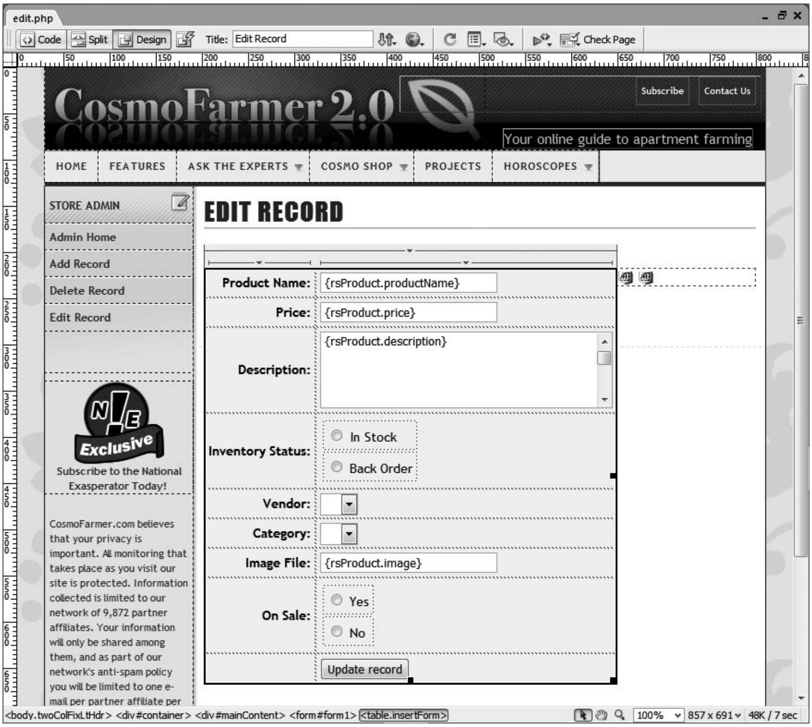
    At this point, the Record Update Form window should resemble Figure 24-21.

28. **Click OK to close the Record Update Form window.**

    Dreamweaver inserts a table, form, form fields, and programming code to the update page. All that's left are some final cosmetic touches.

29. **Repeat steps 1–5 from the "Finishing the Insert Form" part of this tutorial (page 873).**

    Doing so properly formats the form and adds the necessary form validation behavior. Your finished page should resemble Figure 24-22.



CosmoFarmer.com believes that your privacy is important. All monitoring that takes place as you visit our site is protected. Information collected is limited to our network of 9,872 partner affiliates. Your information will only be shared among them, and as part of our network's anti-spam policy you will be limited to one e-mail per partner affiliate per

Product Name:	{rsProduct.productName}
Price:	{rsProduct.price}
Description:	{rsProduct.description}
Inventory Status:	○ In Stock ○ Back Order
Vendor:	
Category:	
Image File:	{rsProduct.image}
On Sale:	○ Yes ○ No

Figure 24-22: *When you're working in Design view, Dreamweaver highlights dynamic areas of the page–like this update form–in light blue. In Live Data view (see page 812), the same areas change to yellow. If you'd like to hide this coloring, open the Preferences window (Edit → Preferences [Dreamweaver → Preferences]), select the Highlighting category, and then turn off the two Live Data checkboxes.*

30. **Save this page and close it.**

    To get a feel for what you've done, it's time to test your application.

31. **In the root folder (the *cosmo_shop* folder), open the *index.php* page. Press F12 (Option-F12) to preview it in a browser.**

    The page lists the products in the database. Take a close look at one product in particular.

32. **Click the name of any product in the list.**

    A details page for that product appears.

33. **Click the Edit This Information link near the bottom.**

    The Update Product page appears, with the form already completed.

34. **Change some of the information on the form, and then click the "Update record" button.**

    Voilà! You're taken back to the details page for this product listing, which proudly displays the freshly edited content.

Creating and Linking to the Delete Page

Obviously, if a vendor stops manufacturing a product, or the staff at CosmoFarmer decides to discontinue an item, you need a way to remove a product listing from the database.

Adding a link on the details page

To begin, you must provide a link to delete the product. A good place for this would be on the details page of each product. Since you've already added an Edit This Information link to this page, you must now add a Delete This Product link:

1. **Open the file *product.php*.**

   Add a link that leads to a delete page.

2. **Near the bottom of the page, click to the right of the text you added earlier: Edit This Information. Press the Space bar, followed by the | character and another space; type *Delete This Product*.**

   Now you'll link this phrase to the delete page.

Note: It's easy to accidentally click into the "Edit This Information" link. Doing so will make any text you type a part of that link. If you're in this situation, just delete the new text you typed, click the <a> in the Tag selector at the bottom of the document window, and then press the right arrow key. This moves the insertion point to the right of the link.

3. **Select the text "Delete This Product," and then, in the Property inspector, click the "Browse for File" button (the little folder icon). In the admin folder, navigate to and select the file *delete.php*, but don't close the window yet.**

   You need to add the information that lets the delete page form know which product it should delete.

4. **Follow steps 4–7 in the "Linking to the update page" part of this tutorial (page 876).**

   Doing so creates a link that not only goes to the delete page, but also passes along the ID number of the product to be deleted.

5. **Save and close this page.**

You'll probably find yourself needing to use the same recordset on several pages on a site. For example, on the product detail page you created in the last tutorial, you created a filtered recordset which retrieved information on a single product (based on an ID number passed in the URL). You recreated that same recordset on the update record page you created on page 877. You'll also need it for the delete page (in order to select a single product to delete). Instead of recreating that recordset yet again, you'll just copy it from another page.

6. **Open the file *edit.php*.**

   You'll copy the recordset from the Bindings panel, so make sure it's open (Window → Bindings).

7. **Right-click (Option-click) on the rsProduct recordset, and then, from the pop-up menu, choose Copy.**

   You can also select the recordset in the Bindings panel, click the contextual menu that appears in the panels' top-right corner, and then select Copy. Either way, you've copied the programming code necessary for the delete page.

Creating the delete page

You've just created a link to the delete page; now you need to make the delete page do its stuff:

1. **Open the file *delete.php*.**

   This is where you'll paste the recordset that you copied a moment ago.

2. **Make sure the Bindings panel is open. Right-click (Control-click) in the empty area of the panel; from the shortcut menu, choose Paste.**

   Dreamweaver pastes all the programming code to create a recordset. This method is a fast way to reuse a recordset.

3. **In the Bindings panel, expand the recordset listing by clicking the small + button (arrow on Macs) to the left of the recordset.**

   Don't click the *large* + button, which lets you add additional recordsets. You just want to see an expanded listing of recordset columns so you can add some dynamic data to the page.

4. **Drag the productName column from the Bindings panel and drop it onto the document window, just to the right of the text "Product to delete."**

   This action inserts dynamic data into the page. When this page appears in a Web browser, the name of a product appears in bold type.

5. **Click the empty space just below the name of the product. Choose Insert → Form → Form.**

   A red, dotted line—the boundaries of the form—appears on the page. You need to set the form's *action* property (a URL to the page that collects the form information).

6. **In the Property inspector, click the action box, and then type *delete.php*.**

   Now when this form is submitted, its contents will be sent…to itself! This is a common maneuver with dynamic pages, which often do double duty depending on how you access them. In this case, when the form is submitted, the programming code (which you'll add in a minute) receives the request to delete a particular product. Instead of displaying the page and form again, it merely deletes the record from the database, and then redirects the browser to a different page (see page 864 for more detail on how this works).

7. **Choose Insert → Form → Button. (If the "Input Tag Accessibility Attributes" window appears, click Cancel to close it.) In the Property inspector, change the value to Delete.**

   Currently the button's label says Submit, but a more descriptive term like Delete would be better.

8. **In the Property inspector, change the Value box to read Delete.**

   This button, when clicked, removes one product from the database. However, you need to identify the product as well. A hidden form field containing the product's ID number will do the trick.

9. **In the document window, click to the right of the button you just added, and then choose Insert → Form → Hidden Field.**

   When you view the Web page, you don't see a hidden field, but it provides useful information when the form is submitted. In this case, it needs to supply the product ID.

10. **With the hidden field selected, change its name in the Property inspector from "hiddenField" to "productID".**

    This step and the next are similar to adding a parameter to the end of a URL (for example, to link from a list of records to a detail page for a single record). The only difference is that instead of placing the product's ID number in a URL, it's now embedded within a form. Now you need to add the product ID that's retrieved from the database.

11. **In the Property inspector click, the lightning bolt to the right of the value box.**

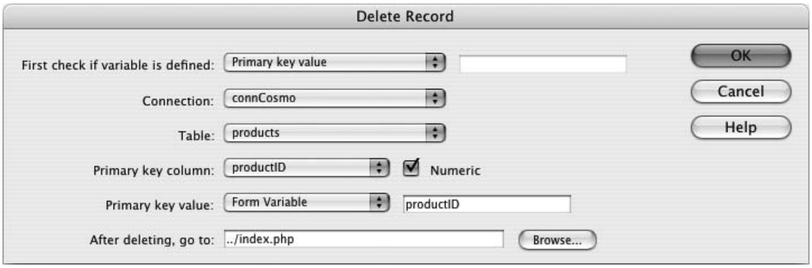
    The Dynamic Data window opens, displaying the rsProduct recordset.

12. **From the list of fields, select "productID", and then click OK to close the Dynamic Data window.**

    Now when someone views this page, the doomed product's ID number is stored in this hidden field.

13. **Open the Server Behaviors panel (Window → Server Behaviors). Click the + button, and then select Delete Record.**

    The Delete Record window appears (see Figure 24-23).



Delete Record

First check if variable is defined: Primary key value

Connection: connCosmo

Table: products

Primary key column: productID ☑ Numeric

Primary key value: Form Variable productID

After deleting, go to: ../index.php

Figure 24-23: *The Delete Record behavior adds all the necessary programming code to remove a record from the database. All you need to make it work is a recordset that retrieves a single record–and a form with a Delete button and a hidden field containing the record's primary key value.*

14. **From the first menu, select Primary Key Value.**

    This step tells the server behavior that it shouldn't delete the record until it's given a primary key value (you define when this happens in steps 17 and 18 below).

15. **From the Connection pop-up menu, choose connCosmo.**

    Now tell Dreamweaver which table the record belongs to.

16. **From the "Table" menu, choose "products."**

    This menu indicates the table containing the record that is to be deleted. You next have to specify the primary key (see page 769) of the record to delete.

17. **From the "Primary Key Column" menu, select "productID," and make sure the Numeric box is checked.**

    Now you need to let the server behavior know where the primary key value will be coming from. In this case, the ID number for the product to be deleted is embedded in a hidden form field named productID.

18. **From the Primary Key Value field, choose Form Variable, and make sure *productID* appears in the box to the right.**

    To finish filling out this window, you'll just tell Dreamweaver which page should appear after someone deletes the record.

19. **In the Property inspector, click the "Browse for File" button. In the root folder (cosmo_store), navigate to and select the file *index.php*.**

    The Delete Record window should now look like Figure 24-23.

20. **Click OK.**

    Dreamweaver adds the Delete Record server behavior to the page. You've done it! Now you need to test it out.

21. **Save and close this page. Open the *index.php* page. Press the F12 key (Option-F12) to preview it in a browser.**

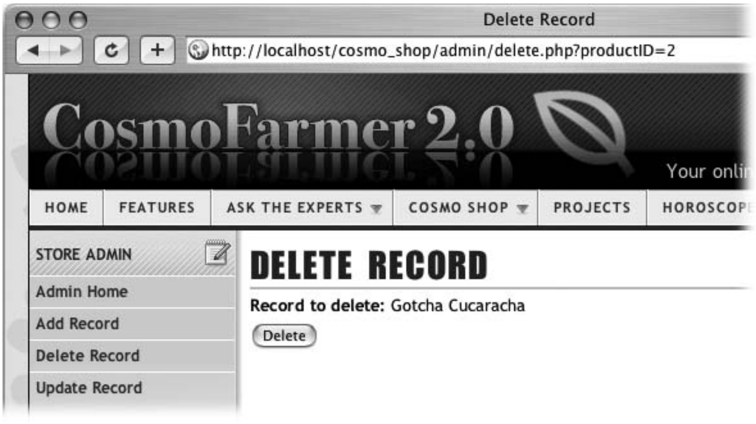
    The page lists the products in the database. Take a closer look now at a specific item.

22. **Click the name of any product in the list.**

    A details page for that product appears.

23. **Click the Delete This Product link near the bottom.**

    The Delete Product page appears (see Figure 24-24). Notice that both the product name and a Delete button appear.



Record to delete: Gotcha Cucaracha

Figure 24-24:
When you first access the page (from a link on a product details page), it displays the confirmation shown here. But when the Delete button is clicked, the page is reloaded, and a Delete command is sent to the database.

24. **Click the Delete button to remove the item.**

    Don't worry, you can always insert more products later!

    In any case, you'll note that that the product is no longer listed in the Product listings.

Of course, in the real world, you wouldn't want just anybody deleting, adding, or editing products on an e-commerce Web site. So in the next chapter, you'll learn how to keep prying eyes and mischievous fingers away from your coveted insert, update, and delete pages.

CHAPTER

25

Advanced Dynamic Site Features

Dreamweaver's basic database capabilities are impressive. But there may come a time when you need to dig deeper into the program to build successful Web applications. Dreamweaver's advanced features let you, the mere mortal, do things that the pros do every day, like password-protect pages; display (or hide) content based on database results; and access information from forms, cookies, and URLs.

Password-Protecting Web Pages

Although Dreamweaver lets you create Web pages that can add, edit, and delete records from a database, your e-business wouldn't last very long if just *anyone* could remove orders from your online ordering system or view credit card information stored in your customers' records. And certainly your company's executives wouldn't be happy if someone accessed the staff directory database and changed the boss's title from, for example, CEO to Chief Bozo. For these and other reasons, Dreamweaver provides a simple set of tools for locking your pages away from prying eyes.

The User Authentication server behaviors can password-protect any page on your site. With this feature, you can limit areas of your site to registered users only, allow customers to access and update their contact information, create maintenance pages accessible only to administrators, or personalize Web pages with customized messages ("Welcome back, Dave").

Note for ASP.NET Users: Dreamweaver doesn't provide any User Authentication behaviors for ASP.NET. If you want to add these to your ASP.NET pages, you'll have to program them yourself or try a commercial extension like ASP.NET Authentication Suite from WebXcel (*www.webxel-dw.co.uk*).

To password-protect pages on your site, you'll need to get several elements in order:

- A database table containing visitors' login information.
- A registration form for adding new visitors. (This is an optional step, but it's frequently useful when you want to automate the process of adding user login information to the database.)
- A login form.
- One or more pages that need to be password-protected.

The Users Table

To password protect your Web pages, your database must hold several pieces of information about the people who can access those secret pages. For example, each visitor must have a user name and password to type in when he attempts to log into your site. If the name and password match a record in the database, then he's logged into the site and can access password-protected pages.

You might also need to include a field in the record for assigning an *access level* to each person. This way, your site can have multiple sections, accessible by different groups of people. Dreamweaver provides tools not only to require a proper name and password, but also to allow access to only those with the proper clearance level.

For example, if your site has a members-only section that affords registered visitors extra content or special features, you could assign the level of "member" to everyone who registers and give them access to these pages. However, you want only your site's administrators and staff to be able to update a product database or retrieve sales records, so you would give these users a level of "administrator" for access to these areas.

At a minimum, then, your database needs a users table with three fields (user name, password, and access level). You can either use a standalone table or incorporate this information into another table. For example, if you require people to provide their names, addresses, email addresses, and so on when registering with your site, you could include the three login fields in this table. For an e-commerce system, login information could be stored in the table holding customer information.

Tip: Most database systems let you assign a default value to a column. That way, when someone creates a new record and supplies no information for the column, the application enters the default value instead.

For starters, it's a good idea to assign a default value for the access-level field. You can set your database to assign the lowest access level—"guest," say—whenever someone creates a new user record. In this way, if you use a Web form for collecting and creating a new member, you can omit a form field for assigning an access level. This method is a good security precaution, as adept (and malicious) Web surfers could submit a fake form with a higher access level, potentially granting them access to sensitive areas of your site.

Creating a Registration Form

Once you've added a users table to your database, you'll need a way to add new members. If you plan to use password protection for sensitive pages that only your site's staff should access, you probably *shouldn't* create a Web form for adding new administrative members. You'd run the risk of someone finding the form and adding herself to the list of administrators. In such cases, you're better off adding the proper login records in the database system itself—using phpMyAdmin, Microsoft Access, SQL Server, or MySQL Monitor, for example.

Note: If you do create a Web form for adding new members with a high access level, password-protect this form! Otherwise, anyone stumbling upon it could add new administrative members–and from there, Pandora's box would be open.

On the other hand, if you want to let *lots* of people sign up as members of your site, you might want to add a registration form that adds them to the list of the site's members *automatically*. This setup would free you from the headache of manually assigning user names and passwords for everyone who wants to become a member.

If the site already includes a form for collecting visitor information, you can simply add the proper user fields to this form. Say your site includes a "Sign up for our email newsletter" page that collects a visitor's name, email address, and other contact information. You could add a field called *user name* and another called *password*.

Tip: It's common to use an email address as a person's user name for password-protected pages. If you're already collecting an email address, exclude the user name field from the form.

When the visitor submits the form, the Web application adds all of these fields to the database. (To add records to a database using a Web form, see page 843.) While the process of creating a new member for password-protected pages is basically the same as adding a new record to a database, there's one additional step: you must make sure that every visitor has a unique user name.

Dreamweaver's Check New User Name server behavior ensures that each user name submitted in the form is unique. If the name already exists, the server won't add the new record to the database and will redirect the visitor to another page. To apply this server behavior, follow these steps:

1. **Add an insert-record form to a dynamic page.**

   The form should include fields for a user name and password. You might also add a field for an access level, if that's how you've structured your site. However, for a form that's accessible to the public, it's best to use the database to set a default value for this; see the Tip on the opposite page. (You'll need to use Dreamweaver's Insert Record server behavior. Creating insert-record forms is described on page 844.)

2. **Make sure the Server Behaviors panel is open (Window → Server Behaviors). Click the Add (+) button and, from the pop-up menu, choose User Authentication → Check New Username.**

   You can also use the User Authentication menu on the Application tab of the Insert Bar (see Figure 25-1). Either way, the Check New Username window appears (see Figure 25-2).

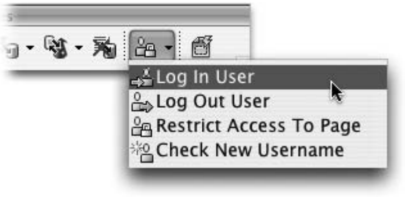
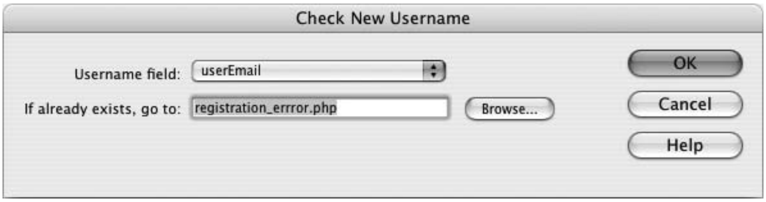


Figure 25-1:
Dreamweaver provides access to all user-authentication server behaviors from the Application tab of the Insert bar.



Username field: userEmail

If already exists, go to: registration_errror.php

Figure 25-2:
When adding a new person to your database, the Check New Username server behavior lets you verify that the user name isn't already in use by another person.

3. **Select the name of the database field that stores each user name.**

   Note that this is the name of the column in the *database*, not the name of the form field on the Web page. This field doesn't necessarily need to be named "userName." It could be "login" or something else.

4. **Click Browse and select a Web page.**

   Here, choose the page that will open if the user name is already assigned to someone else. This page (which you should create before applying this behavior) should include a note to your visitor, clearly spelling out the problem (the user name just supplied is already in use and therefore unavailable). To make re-entering information easier for your guest, you should include the insert form on this page as well, or provide a link back to the registration-form page.

5. **Click OK to close the window and add the server behavior to the page.**

   Now when someone fills out the registration form, this behavior will kick in and make sure that no one else has the same user name.

Note: Registering a new member doesn't automatically log him into the site. He'll still need to go to a login page (described next).

After inserting the server behavior, Dreamweaver lists it in the Server Behaviors panel. If you wish to change any of its properties, double-click its name in the panel to reopen the Check New Username window (Figure 25-2). To delete the behavior, select it in the Server Behaviors panel, and then click the Remove (minus sign [-]) button.

Creating the Login Page

To access a password-protected page, your visitor must first log into the site using a Web form. This simple Web form should contain just two fields—a user name field and a password field—and a Submit button.

When someone attempts to log in, the values she types into the form are compared with the user name and password columns in the database. If there's a match, then she's transported to another page—often the main page of a password-protected area of the site. If there is no matching record, then the visitor is carted away to a page of your creation—an "Access Denied!" page or maybe just the original login page.

To create a login page:

1. **Add a Web form to a dynamic Web page.**

   If your site includes password-protected pages aimed at a general audience of Web visitors, you could place this form on your home page. Or you could create a dedicated login page (remembering to provide links to this page throughout your site). However, if you're creating a login for administrators, you might want to put the login form out of the way, so that it isn't noticed by the average visitor.

   Either way, the form should contain only a user name field, a password field, and a single Submit button. Naming the fields "username" and "password" (rather than keeping Dreamweaver's factory-set field names) will help with step 3.

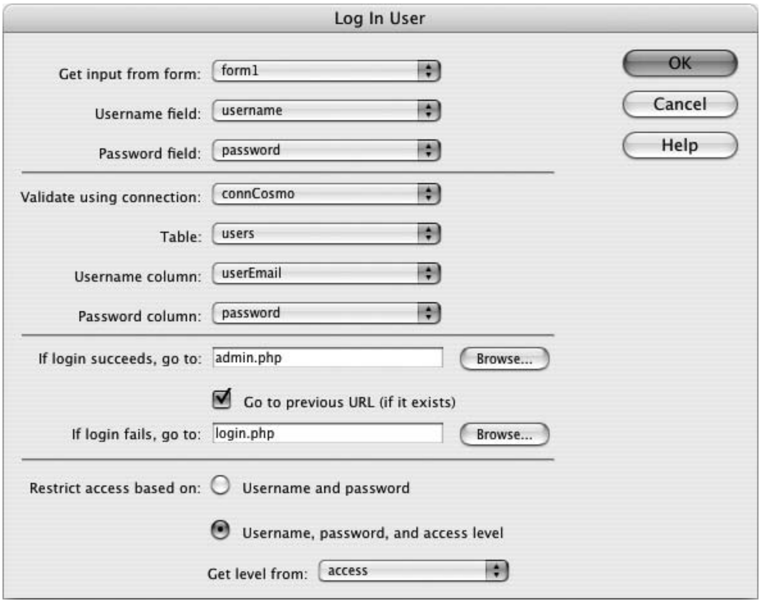
2. **Open the Server Behaviors panel (Window → Server Behaviors). Click the + button and choose User Authentication → Log In User.**

   You can also use the Data tab of the Insert bar (see Figure 25-1) or choose Insert → Data Objects → User Authentication → Log In User to open the Log In User window (see Figure 25-3).

3. **From the first three menus, select the names of the login form, the form field for collecting the user name, and the password field, respectively.**

   You're telling Dreamweaver which form (if the page has more than one) and which fields to use for comparison to the users table in the database.

Tip: Dreamweaver automatically makes these first three menu selections for you if the following things are in place: you've got just one form on the page; the first field on that form is the user name field; and the second field is the password field.



Log In User

Get input from form: form1

Username field: username

Password field: password

Validate using connection: connCosmo

Table: users

Username column: userEmail

Password column: password

If login succeeds, go to: admin.php Browse...

☑ Go to previous URL (if it exists)

If login fails, go to: login.php Browse...

Restrict access based on: ○ Username and password

● Username, password, and access level

Get level from: access

Figure 25-3: *Dreamweaver's Log In User server behavior gives visitors a way to log into your Web site, so they can visit password-protected pages. There are quite a few items to fill out here, but they're all straightforward. The last option lets you use access levels to limit pages of the site to particular groups of visitors—administrators, for example.*

4. **From the "Validate using connection" menu, choose the name of the database connection.**

   This should be the database that contains the table with user login information.

5. **From the Table menu, choose the name of the users table.**

   This is the table described on page 888, which includes the username, password, and access level for anyone attempting to log in.

6. **From the "Username column" menu, select the database column that stores names. From the "Password column" menu, choose the database column for passwords.**

   The User Authentication server behavior will search these two database columns for a record that matches the values your visitor types into the form.

7. **To the right of the "If login succeeds" field, click the Browse button; navigate to and select a page from your site.**

   Most of the time, this will be the main page for a password-protected area of the site. If the site contains a members-only section, then, after logging in, the visitor would arrive at the Members page. If you're adding features for administering the site—adding, deleting, and editing database info, for example—create a main Administrators page with links to all of the database administration pages.

8. **Turn on the "Go to previous URL" checkbox.**

This option is a little confusing, but very convenient. Imagine a visitor stumbling across a password-protected page (you'll learn how to protect pages in the next section). He simply comes across a link to a password-protected page and clicks it. Of course, since he hasn't logged in, he's denied access to the page and sent to another page. At this point, you're probably redirecting him to the login page, so he can log in and continue clicking his way through your site.

That's where this feature comes in handy. By turning on this box, you permit the login form to take the visitor *back* to the page he couldn't get past at the outset. In other words, the visitor tries to access a password-protected page (*any* password-protected page in the site); he's not logged in, so he's sent to the login page. After successfully logging in, he's taken directly to the page he first tried to access (*not* the page you specified in step 7). This is very convenient for visitors who bookmark password-protected pages in your site, since it saves them the hassle of having to log in and then navigate to the page they wanted in the first place!

Note for PHP Users: While the "Go to Previous URL" option is convenient, it won't remember URL parameters from the previous page (this limitation is an issue in the PHP/MySQL server model only). For example, say you try to visit a page used for updating a record in a database: *update_record.php?recordID=2.* If the page is password protected and you're not logged in, then you'll be sent to a login page. After successfully logging back in, you'll be returned to *update_record.php,* but the URL parameter *recordID=2* won't be available. In other words, returning to the previous URL won't end up giving you the page you wanted–for example, an edit form for record number 2.

9. **To the right of the "If login fails" field, click Browse; navigate to and select a page from your site.**

   This page, which you need to create in advance, should explain that the user name and password were not correct. Since the visitor may have just made a typo, it's polite to either include another login form on this page or a link back to the login page.

10. **If the database includes a column for storing an access level, select the "Username, password, and access level" radio button.**

    This option not only lets folks log into the site, but also tracks their access levels. In this way, you can limit areas of your site to people with the proper access level—administrators, for example.

11. **From the "Get level from" pop-up menu, select the name of the database column that contains visitors' access levels.**

    Dreamweaver lists all of the columns in the table you selected in step 5. If the table doesn't have a column for this information, go to your database application and add it, or deselect the Access Level radio button. (Even if you don't currently have plans for offering different levels of access, it's a good idea to keep this option in mind. In the future, you may very well want to add special pages for administrators or Super Premium Members. Without an access level, anyone who has a user name and password will be able to visit those pages.)

12. **Click OK to close the window and apply the behavior to the page.**

You can edit or delete this behavior by double-clicking its name in the Server Behaviors panel.

POWER USERS' CLINIC

Logging In: Behind the Scenes

The Log In User server behavior checks to see if the user name and password submitted by a form matches a user name and password in the database. If it does, the behavior generates two session variables (see page 903): MM_Username and MM_UserGroup for the PHP/MySQL server model and MM_Username and MM_UserAuthorization for the other server models. The first one (MM_Username) stores the user name of the logged-in visitor; the second (Mm_UserGroup or MM_UserAuthorization) stores the visitor's access level. (The MM stands for Macromedia, since these server behaviors were written before Adobe owned Dreamweaver.) The variables follow visitors from page to page of the site, until they log out, close the browser, or don't do anything on the Web site for at least 20 minutes.

The password-protection scripts use these session variables to allow or deny access to a page. But you can take advantage of these variables in other ways. You can add MM_Username to the Bindings panel (see page 897), for example. You can then add it to your pages, like other dynamic data, for customized pages: "Welcome back Kotter176@aol.com."

Furthermore, since each user name is unique–just like a primary key–you can use the session variable to filter records in a recordset (see page 785). You could use this technique, for instance, when a logged-in visitor wishes to see all of his contact information. Create a recordset that filters the user table by the session variable.

You can also use the MM_UserGroup (PHP) or MM_UserAuthorization variable to control the display of certain areas of a page. For example, while regular members of your Web site might see a simple listing of products on a dynamic catalog page, administrators might see additional items like "Edit this product" and "Delete this product" buttons. The tutorial at the end of this chapter has an example of this scheme in action (see page 917).

The Log Out User Behavior

Dreamweaver's Log *Out* User server behavior lets someone log out by clicking a link. Thereafter, her Web browser won't be able to load any password-protected pages in the site until she logs back in.

This setup is useful when a visitor shares her computer with others, maybe at the library or at school, because it provides a sense of security that she has the ability to log out. (It's not absolutely necessary, though; her computer destroys the cookie used to identify the session variable used to keep track of her login status, anyway, as soon as she quits her browser. Furthermore, if a certain amount of time passes without any activity—usually 20 minutes—the Web server automatically destroys the session variable, effectively logging out the visitor. Again, though, a logout link can be reassuring to your audience.)

To add a Log Out server behavior:

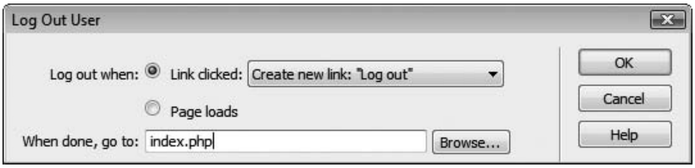
1. **Open a dynamic page.**

   Note that since this adds programming code to the page, it works only on dynamic pages. You can't add a logout link to a static HTML page. So if you want to provide this option on all pages of your site, you'll have to save each page in your site as a PHP, ASP, Cold Fusion, JSP, or other dynamic page that matches your server model.

2. **Click the page where you'd like to add a logout link.**

3. **Open the Server Behaviors panel (Window → Server Behaviors). Click the + button and, from the pop-up menu, choose User Authentication → Log Out User.**

   Alternatively you can use the Application tab of the Insert bar (see Figure 25-1) or choose Insert → Application Objects → User Authentication → Log Out User. In any case, the Log Out User window appears (see Figure 25-4).



Log out when: ● Link clicked: Create new link: "Log out"
○ Page loads
When done, go to: index.php

Figure 25-4: *To add a logout function to text or an image that's already on a page, simply select it and then apply the Log Out User server behavior.*

4. **Select one of the two radio buttons.**

   There are two ways a visitor can be logged out. You can log her out when a page loads or when she clicks a link. You'd use the first method when you want to automatically log someone out when she reaches a specific page. For example, say you create an online testing application, where students would sit at a computer and answer page after page of questions. When students reach the last page of the quiz—maybe a page summarizing their results—you could automatically log them out. The next student sitting down at the same computer would have to log in, preventing the testing application from thinking the new test taker is the same person as the previous student.

   The second method lets visitors log themselves out by clicking a link, so the menu starts out reading, "Create new link: 'Log out'," which adds a new link with the words "Log out" to the page. After adding the behavior, you can then edit the page and change *Log out* to any text you like, or even add a graphic button to the link.

Tip: You can also first add some text like "Quit system," select it, and then apply the Log Out User server behavior. Dreamweaver will automatically use that text, instead of its standard "Log Out" text, when creating the link.

5. **Click Browse; navigate to and select a page from your site.**

   Good choices for this page are the login page—so the next visitor can log in—or the home page.

6. **Click OK.**

   You've just applied the link and server behavior.

Protecting Individual Pages

To password-protect a Web page, apply the “Restrict Access to Page” server behavior. You have to do this for each page you wish to protect, and you can only apply it to dynamic Web pages. In other words, you can’t password-protect regular HTML files, text files, graphics, or any other file that isn’t first processed by the application server.

Note: Although some Web servers let you password-protect an entire folder’s worth of files, Dreamweaver doesn’t provide any tools to do so. (If your site runs on an Apache Web server, however, you can use .htaccess files to password-protect an entire folder. You’ll find a quick tutorial at *www.freewebmasterhelp.com/tutorials/htaccess/3*, and a free online tool for creating these files at *www.webmaster-toolkit.com/htaccess-generator.shtml*. Visit *http://apache.org/docs/howto/htaccess.html* for more information.)

The “Restrict Access to Page” behavior works like this: When someone attempts to load a password-protected page, programming code in the page determines whether he’s already logged in. If the page also requires a particular access level—administrators only, for instance—it checks to see whether the visitor has the proper clearance as well; if so, the browser displays the page. If the visitor isn’t logged in, however, or doesn’t have the proper access level, then he’s redirected to another page—like an “Access Denied” page or back to the login page.

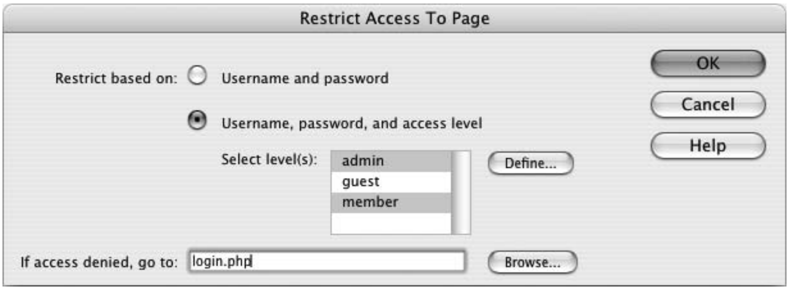
To apply this server behavior, follow these steps:

1. **Open the dynamic page you wish to protect.**

   It must be a dynamic page that uses the site’s server model (see page 751).

2. **Open the Server Behaviors panel (Window → Server Behaviors). Click the + button and choose User Authentication → “Restrict Access to Page”.**

   The “Restrict Access to Page” window appears (see Figure 25-5).



Restrict Access To Page

Restrict based on: ○ Username and password

● Username, password, and access level

Select level(s): admin, guest, member

If access denied, go to: login.php

Figure 25-5: *If you want to give access to more than one group, you can Ctrl-click (⌘-click) more than one level in the Select Levels list to highlight them simultaneously.*

3. **Turn on one of the two radio buttons.**

   If you want to allow access to anyone in the users table, then select the Username and Password button. However, if you want to limit the page to visitors with a particular access level, then turn on the second button.

The first time you use this behavior, you'll have to define the different access levels, so click Define. You must type in each access level exactly as it appears in the database—*admin*, *member*, and *guest*, for example. Capitalization counts.

You need to define these access levels only once. Dreamweaver will remember these settings for other dynamic pages in the same site.

4. **Click Browse; navigate to and select the page people will see if they aren't logged in.**

   It's often a good idea to simply dump unregistered visitors onto the login page. That way, if they're legitimate customers, they can simply log in and return to the page. (Dreamweaver can help with this. See step 8 on page 892.)

5. **Click OK to apply the link and server behavior.**

Like the other server behaviors, Dreamweaver lists the "Restrict Access to Page" behavior in the Server Behaviors panel after it's applied. If you wish to change any of its properties, double-click its name in the panel. To delete the behavior, select it in the Server Behaviors panel and then click the minus (-) button.

Additional Data Sources

So far, you've been using Dreamweaver's dynamic page-building features to retrieve information from databases to build catalog pages, product detail pages, and other pages that require database-generated content. But at times, you'll want to collect data from other sources and add them to your page. For example, when someone logs into a site (see the Log In User server behavior on page 891), her user name travels along with her from page to page in what's called a *session variable*. Using the Bindings panel, you can capture this session name and then use it on a Web page.

Similarly, you can create *cookies* to store small pieces of information on a person's computer—such as a counter tracking how many times he's been to your site—and use Dreamweaver's Bindings panel to add that information to a Web page.

The Bindings panel lets you access these sources of data, as well as information submitted from form fields and embedded in URLs. Each server model understands different types of dynamic data, but most recognize the ones listed below.

Note for ASP.NET Users: Dreamweaver doesn't let you add any of these additional data sources to the Bindings panel.

Regardless of the type of dynamic data you wish to add, the process of accessing these data sources is essentially the same. It differs only among server models.

For PHP and ColdFusion

1. **Click the + button in the Bindings panel and then select the proper variable type: URL, Form, Cookie, or whatever (see Figure 25-6).**

   A window appears for the particular type of data source.

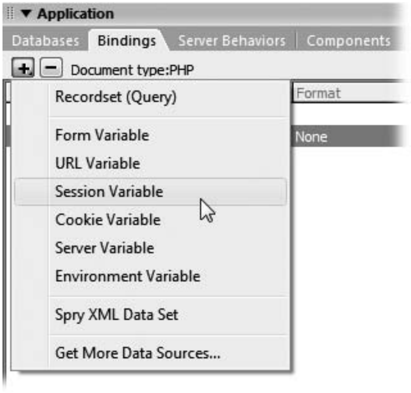


Figure 25-6:
Recordsets aren't the only type of data you can add to the Bindings panel. You can add the names of cookies, session variables, form fields, and other sources of data to the Bindings panel, then drag them onto the page. The XML Dataset option is new in Dreamweaver CS3 and is part of the Spry data tools discussed on page 476.

2. **Type the name of the variable in the Name field.**

   Capitalization matters; *username*, *UserName*, and *USERNAME* are all different variables. Find a system you're comfortable with (all lowercase, all uppercase, or mixed case) and stick with it.

3. **Click OK.**

   Dreamweaver adds the variable to the Bindings panel.

Note: These steps don't actually *create* the variable; they only let you find out what's stored in a variable that's already been created, and then use it on a Web page. For example, adding a cookie variable in the Bindings panel doesn't actually create a cookie on a visitor's system. (For information on creating cookies, see page 901.)

For ASP

1. **Click the + button in the Bindings panel. Depending on the type of dynamic data you're interested in, select either Request Variable, Session Variable, or Application Variable.**

   In ASP, Request Variable covers a wide range of data sources, including form variables, URL variables, cookies, and server variables, so there's an extra step you must perform. After selecting Request Variable to open the Request Variable window (see Figure 25-7), choose a type of variable from the Type menu.

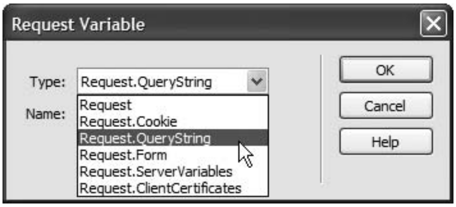


Figure 25-7:
The Request Variable window (for the ASP server model only) lets you add a wide variety of variable types for use in an ASP page. "Request.QueryString" is ASP's way of referring to a URL variable.

2. **Type the name of the variable into the Name field.**

   Capitalization doesn't matter. To ASP, *username*, *UserName*, and *USERNAME* are all the same.

3. **Click OK.**

   Dreamweaver adds the variable to the Bindings panel.

For JSP

For JSP pages, Dreamweaver supplies tools for adding only form, URL, and session variables:

1. **Click the + button in the Bindings panel and then select either Request Variable or Session Variable.**

   Depending on the choice, either the Request Variable or Session Variable dialog box appears.

2. **Type the name of the variable into the Name field.**

   Here again, capitalization matters, so *username*, *UserName*, and *USERNAME* are all different variables.

3. **Click OK.**

   Dreamweaver adds the variable to the Bindings panel.

After you add the variable to the Bindings panel, you can drag it to your Web page; any of the techniques for adding recordset data to a page also work (see page 800), and you can use them whenever the Dynamic Data window appears (see Figure 24-7), for example, as the content of a form field.

Tip: You can drag data sources listed in the Bindings panel into Code view, as well. Once you've got your programming chops sharpened, this trick is helpful for quickly adding data to your own server-side programs.

URL Variables

Some URLs include information tagged onto the end of the name of a Web page, like this: *http://www.cosmofarmer.com/product.php?productID=10&action=delete*. The information following the ? is known as a *query string*, and it provides additional information to a dynamic page.

In most cases, this information comes in the form of one or more name/value pairs, which Dreamweaver refers to as *URL variables*. In this example, there are two URL variables: the first is named *productID* and its value is *10*; the second is named *action* and its value is *delete*. URL variables are often used to transfer specific information for use in a recordset. You saw an example of this in the tutorial in Chapter 23: the number of a particular product was passed in a URL to the product details page, which used this number to retrieve details on a particular item.

You can also add a URL variable to the Bindings panel, and then include it in a Web page or use it anywhere you'd use a dynamic data source. For example, you can use it as a parameter added onto the end of a link to hand off the information to another page.

Keep in mind that a page that links *to* the page using the URL variable must include the proper query string in the link. For example, say you add a URL variable named "username" to the page *crop_circles.html*; the page uses the query string to personalize the page: "Welcome, [username]". For this to work, you then need to link to the *crop_circles.html* page with the query string attached to the URL, like this: *crop_circles.html?username=bob*.

You can add a URL variable to a link using the methods described on page 790.

Tip: Don't use this method for accessing private or sensitive data. For example, suppose you used a URL variable as a method for accessing the personal data of one of your customers, like this: *customer_data.asp?customerID=78*. A nefarious visitor could just change the number in the URL to, say, 79 to view all of the personal data for customer number 79.

Form Variables

You can also add information from *forms* to the Bindings panel and use them on your page. If you add a form on one page, you can then collect that information on the page the form submits to (the same page specified in the form's *Action* property, as described on page 402). In other words, the page receiving the form data can display that information on the page *or* use it in some other fashion—such as inserting the information into the database, or creating a cookie or session variable.

If you're mainly using forms in conjunction with Dreamweaver's Insert Record and Update Record server behaviors, you won't generally take advantage of form variables. Those two behaviors work by collecting data from a form, adding or updating a database record, and then redirecting the Web browser to another page. The page the visitor finally sees never has access to the form information, so you can't add any form variables to that page.

However, adding a form variable to the Bindings panel can come in handy when you create a search page. For example, suppose you've created a page for searching a database. The search form lets the visitor type in a name—of an author or musician, for instance. You could then create a search *results* page that looks in the database for any records that match the search term. On that page, along with the database results, you could add text like "Search Results for: [search_term]", where *search_term* would be the word the visitor typed into the form. Just add the form variable to the Bindings panel and then drag it to the spot in the search page where you wish it to appear.

Note: If you use the GET method for submitting a form, the names and values of each form field are included in the URL. In this case, they're considered URL variables, so if you wish to add any of these fields to the Bindings panel, use the URL variable method instead. (For the difference between GET and POST, see page 403.)

Cookies

One problem with Web servers is that they have no memory.

Suppose, for example, that a site has a particularly long and annoying Flash movie that welcomes visitors with an ear-pounding, seizure-inducing multimedia display. Even if the designer was kind enough to include a "Skip this nauseating display" button, the Web server won't remember that you clicked it the *last* time you were there.

To overcome this limitation, most Web browsers can store *cookies*—small text files containing specific information—that Web servers create and read. In the example above, the Web server could drop a cookie onto your computer when you click the "Skip intro" button. The next time you visit the site, the Web server reads the cookie and kindly ushers you past the Flash movie and directly to the home page.

You can use cookies to store information on visitors' computers, too. They're a great way to store customer ID numbers, the number of visits to a particular page, and other bits of identifying information.

Cookies play by a few rules:

- A single cookie is stored on just one browser and one computer at a time. If you log onto a site that adds a cookie to your computer, and then log on again later from the public library, that computer won't have access to the cookie. In fact, if you use a different Web browser on the *same computer*, the Web server won't be able to read the original cookie from the other browser. (A variation: In some corporations, a Web browser stores cookies on a network server. This kind of cookie *can* be accessed by a particular browser—Internet Explorer, for example—on different computers on the network.)
- Only the domain that created the cookie can read it. *You* can't create dynamic pages that read a cookie set by Amazon.com, for example. Fortunately, that means other Web sites can't read the cookies you set on your visitors' computers, either.
- Web browsers limit the size of a cookie to 4 KB and only allow a limited number of total cookies (usually 300), per computer so that hard drives won't crumble under their weight.

You can add a cookie to the Bindings panel using the method described on page 897. Unfortunately, Dreamweaver doesn't provide any tools for creating cookies (you can submit feature requests for the next version of Dreamweaver on the Adobe Web site at *www.adobe.com/cfusion/mmform/index.cfm?name=wishform*). Several third-party developers have risen to the occasion, however:

- **PHP developers.** Dreamweaver Extension developer Felice Di Stefano has developed a free cookie extension for the PHP server model. It includes server behaviors for adding and deleting cookies from a PHP page. In addition, it can set a cookie to the value of a form field, or redirect a visitor to another page if a specific cookie doesn't exist, or if it matches a particular value. You can find it at the Adobe Exchange (page 738) or at *www.felixone.it*.

POWER USERS' CLINIC

Adding and Deleting Cookies Using PHP Pages

While Dreamweaver doesn't provide a tool for adding the scripts necessary to create and delete cookies with PHP pages, it isn't difficult to add the code yourself. (Dreamweaver can easily retrieve cookie information, as described on page 901.)

First, decide which page should add the cookie. The script will run when a visitor's browser *requests* the page, sending the cookie to the browser before the page content. Thus, you could add a script like this at the beginning of a page that receives and processes form information. For example, if someone registers at your site, your script can store the name he enters in the registration form as a cookie on his computer. When he returns to the site, the home page can then read the cookie and display a message like "Welcome back, Bob."

To add a cookie, put the following code above the <!DOCTYPE> declaration in the HTML code of the page.

```
<?php setcookie("name_of_cookie", "value_
of_cookie", time( )+2419200); ?>
```

Remember to include the opening <?php and closing ?>, which tell the application server that everything in between is programming code and not HTML. Replace *name_of_cookie* with whatever name you wish to give the cookie: *username*, for example. Also replace *value_of_cookie* with whatever you want to store in the cookie. In many cases, this will be a dynamic value–information from a recordset, a URL variable, or a form variable, for example. Using the steps described on page 897, add the appropriate dynamic data to the Bindings panel, and then drag it into the code, replacing the text (including the quote marks) "value of cookie".

Finally, you can set the amount of time the cookie stays on the visitor's computer. That's the *time( )+2419200* in the code above. Essentially you're saying that the cookie should stick around for a certain number of seconds (2419200) after the current moment (time( )). In this case, 2419200 is 30 days or about 1 month. If you wanted the cookie to stick around for an hour use 3600; for 1 day, use 86400.

PHP is a little persnickety about where you place this code: It has to come before all the code in the page, with the exception of other PHP code. If there's even just a single blank line (not within the <?php ?> tags), you'll end up with the much dreaded "Headers already sent" error.)

You can, however, place the code *after* other PHP code at the beginning of the file. For example, if you want to set the value of a cookie using information retrieved from a recordset, then you need to place the cookie code *after* the recordset code.

You may also want to delete a cookie at some point. For example, on an e-commerce site, you could use a cookie to store items a visitor adds to her shopping cart. When she wants to empty her cart–after she purchases everything in it, for example–you could simply delete the cookie. Just assign no value and a time in the past (no kidding) to the cookie you wish to delete, like this:

```
<?php setcookie('name_of_cookie', '',
time( )-3600); ?>
```

- **JavaScript cookies.** You can also use JavaScript to set cookies. This technique works with any type of page—even nondynamic pages. The only catch is that the visitor's browser must both understand JavaScript and have JavaScript enabled (most do). Dreamweaver comes with two Snippets for setting and reading cookies using JavaScript. They're in the cookies folder of the JavaScript folder in the Snippets panel. See Chapter 18 to learn about Snippets. For the king of JavaScript cookie creators, check out WebAssist's Cookies Toolkit at *www.webassist.com/professional/products/productdetails.asp?PID=109* (this is a commercial product that runs around $50 and also includes tools for adding cookies using server-side tools for PHP, ASP, and ColdFusion).

Session Variables

Web servers don't know or care whether the person requesting your company's home page just placed a $10 million order or is a first-time visitor. Of course, *you* probably care, and so do most Web applications, which need to follow visitors as they travel through a site. For example, in a typical e-commerce site, people use a "shopping cart" to store items they're interested in purchasing. For this to work, however, you need to track each shopper's movement from page to page.

To make this possible, most Web servers recognize what are called *session variables*. A session variable is created by the Web developer (or, more accurately, by a dynamic Web page that creates the variable) and follows the visitor from page to page. This type of variable lasts, logically enough, for a single *session*: if the visitor closes the browser, the session ends and the variable disappears. Most Web servers also add a limited time that the variable sticks around—usually 20 minutes. In other words, if the visitor doesn't hit any page in the site for 20 minutes, the Web server assumes that he's no longer around and destroys the session variable.

Note: Session variables take up resources from the Web server. That's why a Web server gets rid of them as soon as it can. Creating lots of session variables for a busy Web site can slow down the server.

When it creates a session variable, the Web server sends a cookie to the visitor's machine. The cookie contains a unique number (not the actual data contained in the variable), which the server uses to keep track of each visitor. When that person requests a page, the Web server reads the cookie with the unique ID. It can then retrieve session variables for that individual. For this reason, session variables won't work if the visitor's Web browser doesn't accept cookies. (PHP, however, has a built-in method for maintaining session information even when cookies aren't turned on.)

Note: Dreamweaver itself creates session variables when you use the User Authentication server behaviors. See page 894 for a discussion of these session variables and how you can use them.

You may be wondering how cookies and session variables differ, and when you'd want to use one over the other. The difference is that cookies can last between visits. If you want access to a piece of information when a visitor comes back tomorrow, or next week, or next month, use a cookie. For example, you'd use a cookie to remember a selection someone made from a previous visit, such as "Skip this crazy Flash Intro."

Session variables, on the other hand, provide better security. The actual information stored in the session variable stays on the Web server, while cookies exist as text files on a visitor's computer and can be opened and read by anyone with access to the computer. Accordingly, if you need to keep track of a confidential piece of information (someone's bank-account password, for example), you'd use a session variable.

POWER USERS' CLINIC

Adding and Deleting Session Variables Using PHP Pages

While Dreamweaver doesn't provide a simple wizard for adding the code necessary to create and delete session variables with PHP pages, it isn't difficult to add it yourself. (Dreamweaver does, however, make quick work of retrieving session variables; see page 903.)

The procedure is much like the one for adding cookies (see the box on page 902)—for example, here again, the script will run when a visitor requests the page. When people register at your site, therefore, the email address they enter in the registration form could be stored as a session variable.

To add a session variable, you must do two things. First, add this code near the top of the file:

```
<?php if (!isset($_SESSION))  session_
start(): ?>
```

This code simply alerts PHP that you wish to use session variables on this page (if you omit this line, you won't be able to set or read session variables). As when setting a cookie, there can't be any HTML or even empty space before this line or you'll get a "Headers already sent" error. Next, you set the session variable.

```
<?php $_SESSION['name_of_variable'] =
'value_of_variable'; ?>
```

Replace *name of variable* with whatever name you wish to give the session variable: *email*, for example. Also replace *value of variable* with whatever you want to store in the session variable. In many cases, this will be a dynamic value, like information from a recordset, a URL variable, or a form variable. Using the steps described on page 897, add the appropriate dynamic data to the Bindings panel, and then drag it into the spot in the code in the previous column just after the = sign (in this case, omit the set of quote marks: ''). As with cookies, *where* you place the session-creating code determines *when* it kicks in. So if you want to set a session with a value from a recordset, place the session code after the code that creates the recordset.

You may also want to delete a session variable to conserve server resources. (Dreamweaver's Log Out User server behavior uses this method to log a visitor out of a site.) To delete a server variable, add this code to the beginning of a page:

```
<?php unset($_SESSION['name_of_
variable']); ?>
```

To delete all session variables for a particular individual in one fell swoop, use this code:

```
<?php
if (!isset($_SESSION))
session_destroy();
?>
```

You can add a session variable to the Bindings panel using the method described on page 897.

Unfortunately, as with cookies, Dreamweaver doesn't provide any tools for creating or destroying session variables. To find third-party extensions that work with session variables, try the Adobe Exchange (*www.adobe.com/exchange*). Click the Dreamweaver link, and search using the term *session*.

Note for PHP Users: Felice Di Stefano has developed a free session extension for the PHP server model. It includes server behaviors for adding and deleting session variables from a PHP page. You can find it at the Adobe Exchange or at *www.felixone.it*.

Server Variables

Web servers collect and produce lots of information, much of which is hidden from the everyday Web surfer (and even the everyday Webmaster). Some of that information is obscure, but some can come in handy. For example, you can find out which Web browser the visitor is using, or which language the browser uses. While the exact list of server variables differs by Web server, here are some useful variables that work on many Web servers:

- **HTTP_USER_AGENT.** Information about the browser visiting the page. Unfortunately, you don't get a neat little summary like *Firefox 2 for Windows*. Instead, browser info is usually rather long-winded, like: *Mozilla/5.0 (Windows; U; Windows NT 6.0; en-US; rv:1.8.1.2) Gecko/20070219 Firefox/2.0.0.2*. To decipher this confusing jumble of information, visit *http://en.wikipedia.org/wiki/User_agent#Example_user-agent_strings*.

- **REMOTE_ADDR.** The IP address of the computer requesting the Web page. It'll look something like 65.57.83.12. Depending on the visitor's setup, this could be the exact address of the computer. (Big Brother, where art thou?)

  Knowing this address has its uses. If someone frequently causes problems on your site—posts phony information to registration forms, say, or submits offensive messages to a message board—one potential solution is to prevent submissions to your database from that particular IP address. (However, since many users' IP addresses frequently change, this isn't a foolproof solution.)

- **HTTP_REFERER.** This is the URL of the page that *leads* to the current page. For example, say you click a link on page A to get to page B. Page B's HTTP_REFERER server variable would be A.

  You could use this knowledge to create the ultimate Back button. Simply add the HTTP_REFERER server variable to the Bindings panel. Then add a link to whatever you wish to be the Back button—graphic or text—and use the server variable as the link. When visitors click this link, it will take them back to whichever page brought them there in the first place.

For a list of server variables for use with the Apache Web server (the server most commonly used with PHP), visit *www.php.net/reserved.variables*. For a list of server variables supported by Microsoft's IIS Web server, visit the Microsoft Developer's Network site at *http://msdn2.microsoft.com/en-us/library/ms524602*.

Advanced Server Behaviors

In addition to the server behaviors described already, you'll find two other sets of behaviors that come in handy on dynamic Web pages.

Tip: You can download many more third-party server behaviors from the Adobe Exchange. Click the + button in the Server Behaviors panel and choose Get More Server Behaviors. Dreamweaver launches your Web browser and connects to the Dreamweaver Exchange site.

Not all extensions listed here work with Dreamweaver CS3. On the other hand, many of the server behaviors for Dreamweaver 8 also work with Dreamweaver CS3.

Recordset Paging

This set of five different behaviors lets you add links for jumping to different records in a recordset (straight to the last record, for example). In fact, Dreamweaver makes use of these same behaviors as part of its Recordset Navigation Bar object (page 807). You'll use these for moving through a long list of records, like a complete listing of products in a database.

To begin, add a recordset to a page. It should contain multiple records, since jumping to the *next* record when there's only one doesn't make much sense. The page could also contain a repeating region, so that several records appear.

You can add the recordset-paging server behaviors from the Server Behaviors panel, or from the recordset-paging menu on the Application tab of the Insert bar (see Figure 25-8):

- **Move to First Page** adds a link that jumps to the first record in the recordset.

Note: In ASP and JSP, you'll see the word "Record" instead of "Page" in this example and the following ones. For instance, you'll see "Move to First Record" instead of "Move to First Page".

- **Move to Previous Page** adds a link that jumps to the record before the current record. If you use a repeating region, it jumps to the previous *set* of records. For example, say you create a repeating region that displays five records at a time. If the page currently displays records 6–10, clicking a link with this server behavior applied to it causes records 1–5 to appear.

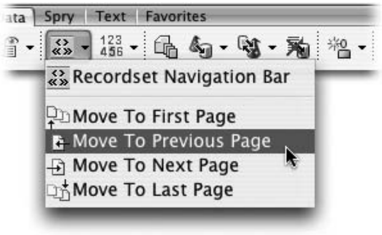


Figure 25-8:
You can create your own recordset navigation controls using the recordset-paging server behaviors.

- **Move to Next Page** adds a link that jumps to the next set of records in the recordset

- **Move to Last Page** adds a link that goes to the last set of records in the recordset.

- **Move to Specific Record** adds a link that goes to a single record based on information passed in the URL. (This option is available only in the ASP and JSP server models.)

Using any of the first four behaviors involves the same steps:

1. **Create a recordset and add dynamic content to the page.**

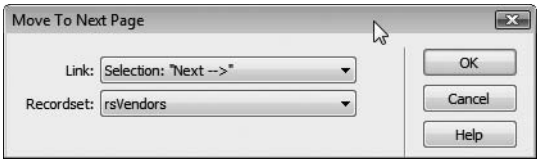
   For example, you could create a list of all the products your company sells. The recordset should contain at least enough records to span several pages. (You wouldn't use any of these behaviors if you displayed *all* of the records on a single page.)

2. **Click the page where you wish to insert the link.**

   You can also select an item on the page—text or a graphic—that you'd like to turn into a link.

3. **From the Server Behaviors panel, click the + button. Select Recordset Paging, and then choose a behavior from the submenu.**

   The window for the particular server behavior appears (see Figure 25-9).



Move To Next Page

Link: Selection: "Next -->"

Recordset: rsVendors

Figure 25-9:
The recordset-paging behaviors can add a new link, or add a link to text or an image you've selected on the page. You can also use the menu to select any link already on the page. That's usually not a good idea, however, since Dreamweaver will erase whatever link was previously applied.

4. **Choose a recordset from the Recordset menu.**

   This is the recordset the behavior will move through.

5. **Click OK.**

   Dreamweaver adds the server behavior to the page and adds its name to the Server Behaviors panel.

The "Move to Specific Record" behavior, available in the ASP and JSP server models, works a bit differently. It doesn't add a link to the page; it simply forces the page to display a particular record when the page is requested. It does this by looking for a URL parameter that specifies a particular record in the recordset. In general, this isn't a good approach, since it requires the database server to retrieve many records just to display a single item from the database, which is a waste of server resources. On a busy site, that could mean a slowdown. You're better off creating a detail page (see page 814), which simply retrieves one record from the database.

Show Region Server Behaviors

At times, you'll want to display different information on a page based on the results of a recordset. For example, if a visitor searches your site's database of products for a product you don't sell, the search results page should say something like, "Sorry, we don't carry alligator skin bicycle seats." But if someone searches for a product you do sell, then the page should present the relevant details for that product. The Web page displays different text depending upon whether the search item was in the recordset.

Dreamweaver provides three sets of server behaviors that let you display any selection of HTML based on the results of a recordset (Figure 25-10):

- **Show If Recordset Empty.** If the recordset retrieves no records, this behavior will make the selected HTML appear in the browser window.

  This behavior comes in handy for a search page. On the search results page, apply it to some text like "We're sorry, your search retrieved no results," and you've got yourself a friendly solution for searches that turn up empty. This sever behavior is also handy for any page that displays detailed information about a single record, such as a detail page (page 814) or an update record page (page 849). Both of those depend on retrieving data from the database and are most often accessed using a URL variable like *product_details.php?productID=14*. If someone visits a page like that without the URL variable (for example, *product_details.php*) then they'll end up with a blank page. Use the Show If Recordset Empty behavior to list a message like "No product specified. Click here for a list of products."

- **Show If Recordset Not Empty.** If the recordset retrieves *any* records, this behavior will cause the selected HTML to appear in the browser window: a list of search results or details on a specific database record, for example. You'll often use this server behavior along with the Show If Recordset Empty server behavior. In this case, select the stuff you want to appear when a record is found: from the previous examples, you'd select all the HTML and code displaying the details of the record, or the record update form.

- **Show If First Page.** This server behavior, like the next three, works in conjunction with recordset-paging behaviors. It makes the selected HTML appear when the page displays the *first* record of a recordset, which comes in handy when you want to let people step through several pages of records.

- **Show If Not First Page** is the opposite of the previous one. If the page *does not* contain the first record in a recordset, then the selected HTML appears.

  Dreamweaver makes use of this behavior in its Recordset Navigation Bar (see page 807). In that case, if the page displays anything *except* the first set of records in a recordset, the First Item and Previous Page links appear. If the page *does* display the first item in a recordset, those links are hidden. (After all, you can't very well view the Previous Page if you're on page 1.)

- **Show If Last Page** functions just like the Show If First Page behavior, but for the last record in a recordset.
- **Show If Not Last Page** functions just like the Show If Not First Page behavior, but for the last record in a recordset. Dreamweaver uses this behavior to hide or show the Next Page and Last Item links in the Recordset navigation bar on the last page of records (page 807).

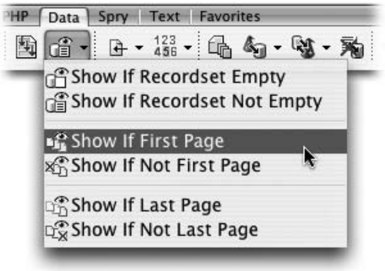


Figure 25-10:
The Show Region server behaviors are available on both the Application tab of the Insert bar and the Server Behaviors panel.

You can use these behaviors to show any selected object on the page—a paragraph of text, an image, a table, and so on. Your page can contain any combinations of these behaviors, and you can use any behavior two or more times to display multiple areas of a page. For example, maybe you'd like two things to appear when the recordset successfully retrieves a record: a graphic in the page's sidebar and a message in the main area of the page. You'd apply the Show If Recordset Is Not Empty server behavior twice; once for each selection of HTML (the graphic and the message).

You'll often use these behaviors in pairs. For example, a search results page should include both the Show If Recordset Empty behavior to display a "no results" message, and a Show If Recordset Not Empty behavior to display the search results.

To apply any of these behaviors:

1. **Create a dynamic page containing a recordset.**

   This could be a search results page or a master page that lists many records from the database.

2. **Select the HTML you wish to show based on a recordset outcome.**

   For example, when applying a Show If Recordset Is Empty server behavior to a search result page, select the message that should appear if the search returns no results.

3. **Open the Server Behaviors panel (Window → Server Behaviors). Click the + button, select Show Region, and choose one of the six behaviors from the submenu.**

   A window looking like Figure 25-11 appears. While the title of the window varies depending on which behavior you selected, each of the six behaviors has just this one option.

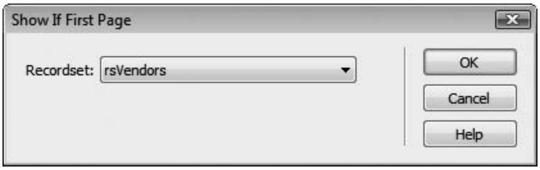


Figure 25-11:
Regardless of which of the Show Region server behaviors you apply, there's only one option to choose: the recordset whose results control the display of the region.

Note: The last four behaviors–Show If First Page, Show If Not First Page, Show If Last Page, and Show If Not Last Page–work only on pages that also have one of the recordset-paging server behaviors (discussed on page 906) applied.

4. **Select the name of the recordset from the menu and then click OK.**

   The recordset you select should be the one whose results you're interested in. For example, on a search results page, you'd select the recordset you created to perform the search.

After applying one of these behaviors to a selection of HTML, a gray line appears around the selection, and a gray tab appears bearing the words "Show If." That's the area that will appear if the given recordset condition is met (for example, if the page is displaying the last record of the recordset).

To remove a Show Region server behavior, select its name in the Server Behaviors panel and click the minus (-) button (or press the Delete key). Doing so removes the gray tab and outline. Now the affected HTML will appear regardless of the recordset results.

Note for PHP Users: An extension called PHP Show If Recordset Field Condition Is True (available for free on the Adobe Exchange site) lets you display part of a page when a field from a recordset matches a certain condition. Suppose, for example, that you have a products database with a field that records whether a particular item is for sale. If the item is indeed for sale, then you can use this behavior to display a large "For Sale" graphic on the product's detail page.

Tutorial: Authentication

In the tutorial at the end of Chapter 24, you created Web pages that could add, delete, and update records in the *CosmoFarmer* database. But you wouldn't want to allow just anyone who visits the Web site to access these pages, let alone delete products from the site. So in this tutorial, you're going to learn how to password-protect these sensitive, mission-critical Web pages.

The following steps assume that you've worked through the tutorial in Chapter 24 and have all of the completed files ready to go. You'll build on them in the following steps.

Building a Login Page

The first step is to create a login page—a simple form with fields for a user name and password. After a successful login from this page, an administrator will be able to access the administration pages:

1. **Open the file *login.php* in the admin folder of the site.**

   This page will contain the form for typing in an administrator's user name and password. You'll add the form next.

2. **Click in the empty space directly below the headline "Administrator Login." Choose Insert → Form → Form.**

   Dreamweaver adds a red dashed line to the page, indicating the beginning and ending <form> tags.

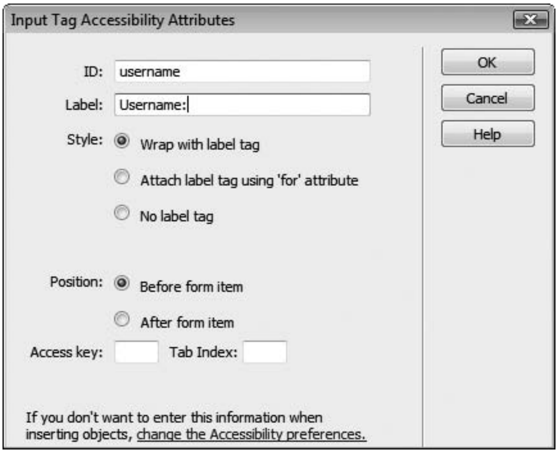
3. **In the Property inspector, type *login* as the name of the form.**

   While this step isn't required, it's good to get into the habit of assigning your forms descriptive names. Next, you'll add a box for entering a user name.

Note: The next steps assume you have the Form Accessibility feature turned on (see page 404). To make sure this is in fact the case, open the Preferences window by choosing Edit → Preferences (Dreamweaver → Preferences), select the Accessibility category, and make sure the "Form Objects" checkbox is turned on.

4. **Choose Insert → Form → Text Field.**

   The Input Tag Accessibility Attributes window appears (Figure 25-12). You'll add a label that will appear next to the form field on the page.



Input Tag Accessibility Attributes

ID: username

Label: Username:

Style: ● Wrap with label tag

○ Attach label tag using 'for' attribute

○ No label tag

Position: ● Before form item

○ After form item

Access key: Tab Index:

If you don't want to enter this information when inserting objects, change the Accessibility preferences.

Figure 25-12:
Dreamweaver's Accessibility features let you add helpful controls–including a descriptive label–to form elements. Setting the ID adds an ID property to the field (see step 3 on page 405), which is useful for adding CSS or using JavaScript to control the field. In addition, Dreamweaver uses the ID you supply for the field's name.

Note: You can also use the Forms tab of the Insert bar to add forms and form objects to your page, as described on page 401.

5. **In the ID box type *username*; in the Label box, type *Username:*; select the "Wrap with label tag" and "Before form item" buttons, and then click OK.**

   Dreamweaver inserts a text field with a descriptive label.

6. **In the Property inspector, choose Paragraph from the Formatting menu.**

   This wraps a paragraph tag around the label and form field. You now need to add a password field.

7. **Click to the right of the form field you just inserted and press the Enter (Return) key to add a new paragraph.**

   The routine for adding the next form field is the same.

8. **Choose Insert → Form → Text Field. In the window that appears, type *password* in the ID box, type *Password:* in the label box, and then click OK.**

   This inserts another form field and label.

9. **Select the new form field and, in the Property inspector, turn on the Password radio button.**

   By turning this form element into a password field, anything your visitors type in the field will be displayed like this **** or this ••••, hiding the secret password from nosy passersby watching over their shoulders.

   To complete the form, you'll add a Submit button.

10. **In the document window, click to the right of the password field and press the Enter (Return) key. Choose Insert → Form → Button.**

    The Accessibility window appears yet again. In this case, however, you don't need to add a label, since text will appear directly on the button.

11. **Click Cancel to close the Accessibility window and insert a Submit button. Select the new button and change its value to Login in the Property inspector.**

    The form is complete. Now it's time to let Dreamweaver do its magic.

12. **Choose Window → Server Behaviors to open the Server Behaviors window.**

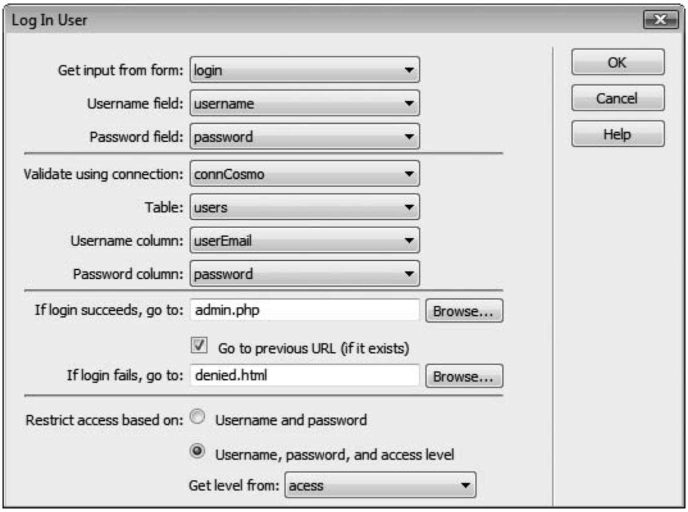
    Alternatively, you can use the keyboard shortcut Ctrl+F9 (⌘-F9).

13. **Click the + button and choose User Authentication → Log In User.**

    The Log In User window appears (see Figure 25-13). The first three items should already be filled out: the name of the form, the name of the user name field, and the name of the password field. If you had more than one form on the page, or additional fields inside the one form, you'd have to tell Dreamweaver which form and which fields to use for collecting the login information.

14. **From the "Validate using connection" pop-up menu, select "connCosmo".**

    This indicates which database contains the login information. You also need to specify which table and columns contain the user name and password.



Log In User

Get input from form: login

Username field: username

Password field: password

Validate using connection: connCosmo

Table: users

Username column: userEmail

Password column: password

If login succeeds, go to: admin.php Browse...

☑ Go to previous URL (if it exists)

If login fails, go to: denied.html Browse...

Restrict access based on: ○ Username and password

● Username, password, and access level

Get level from: acess

Figure 25-13:
Before visitors can access password-protected pages, they first need to log into the site. Dreamweaver's Log In User server behavior makes adding this feature a snap.

15. **From the Table menu, select Users. From the "Username column" pop-up menu, choose "userEmail". From the "Password column" pop-up menu, choose "password."**

    You've just established the basic logic of the login behavior: Whatever a visitor types into the two form fields is compared with data stored insides the Users table in the *CosmoFarmer* database.

    Next, you need to specify what happens when there's a match—when your visitor types a valid user name and password into the form—and what happens when the visitor types in an invalid user name or password.

16. **Click the Browse button to the right of the "If login succeeds, go to" field. In the Select File window, navigate to and select the file *admin.php* inside the admin folder. Click OK.**

    You've just chosen the page that will appear if the login is successful; your visitor's browser will display an administration page. (For the purposes of this tutorial, it doesn't matter if the "Go to previous URL" checkbox [see step 8 on page 892] is turned on.)

17. **Click the Browse button to the right of the "If login fails, go to" field. In the Select File window, navigate to and select the file *denied.html* inside the admin folder. Click OK.**

    This, of course, is the "access denied" page that will appear when somebody types in an invalid user name or password.

    Because this section of the site is for administrators only, you'll add an additional layer of security by restricting administrative pages using an access level as well as a password and user name. In this way, you'll also be able to have other password-protected pages—such as a special "paid subscribers" section—for registered visitors, without letting them access administrative areas of the site.

18. **Select the "Username, password, and access level" button. From the "Get level from" pop-up menu, choose "access".**

    The database table includes a special field for defining the access privileges of each registered member. For example, each administrator record in the *users* table also includes the value *admin* in the Access field.

19. **Click OK. Save this file. Press F12 (Option-F12) to preview it in your Web browser.**

    You'll now try out your newly created login page.

20. **In your Web browser, type anything you want in the two fields; click Submit.**

    Unless you've just made an incredible guess, you just typed in a user name and password that doesn't exist in the database. If the technology gods are smiling, an "Access Denied" page appears.

    Now try it again.

21. **Click the "Try logging in again" link to return to the login page. Type *dibble@cosmofarmer.com* in the Username field and *sesame* in the Password field; submit the form.**

    This time, you're in; the browser takes you to the main administration page. Here, you can jump to the pages you created earlier for adding, updating, and deleting products.

Tip (Important!): *sesame* is simply an awful password. Don't ever use it, or any word you can find in a dictionary, as a password. The reason? Web vandals often launch so-called "Dictionary attacks," in which they run through different terms pulled from a dictionary until they find a match.

The login script works just fine—you end up at the right page when you type in a valid user name and password. However, none of those other pages are protected yet. You can go to any of them, even if you haven't logged in. In the next part of this tutorial, you'll lock down each admin page, so only logged-in administrators can access them.

Password-Protecting the Administration Pages

The password-protection features offered by Dreamweaver require you to add a server behavior to each page you wish to protect:

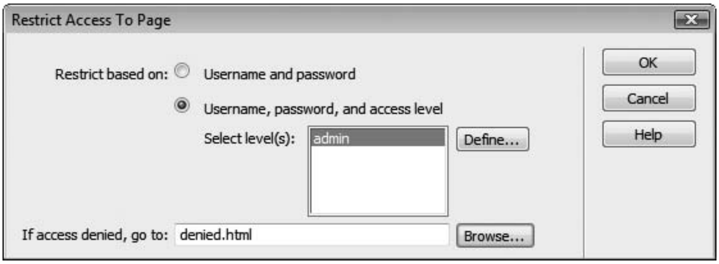
1. **Open the file *admin.php* in the admin folder.**

   This page is the main jumping-off point for adding, deleting, and updating products. It should be accessible only to administrators, so you'll add password protection to it.

2. **Make sure the Server Behaviors window is open (Window → Server Behaviors). Click the + button and choose User Authentication → Restrict Access To Page.**

   (Alternatively, you can use the User Authentication menu in the Insert bar, as pictured in Figure 25-1.)

The Restrict Access To Page window appears (see Figure 25-14). Since you want to limit access to administrators only, make sure the page is restricted to those with the proper access level.



Restrict Access To Page

Restrict based on: ○ Username and password

● Username, password, and access level

Select level(s): admin

If access denied, go to: denied.html

Figure 25-14: *Administrative pages can be reserved for those with the access level "admin," while regular subscribers to CosmoFarmer would have access to pages intended for subscribers.*

3. **Select the "Username, password, and access level" radio button.**

   You want to specify which type of user has access to this page, but first you must tell Dreamweaver what the different levels *are*.

4. **Click Define to open the Define Access Levels window. In the Name field, type *admin*. Next, click OK to close the window.**

   The word *admin* appears in the "Select levels" box. If you had other areas of the site with different access privileges, such as a subscriber area of the site only paying subscribers could access, you could continue to add levels by repeating this step.

5. **Click Browse; select the *denied.html* file in the admin folder and then click OK. Click OK again to close the Restrict Access To Page window.**

   To finish this page, you'll add a "Log out" link.

6. **Select Log Out (the last link in the left navigation bar on the page).**

   You'll turn this text into a "Log out" link.

7. **On the Server Behaviors panel, click the + button and then select User Authentication → Log Out User.**

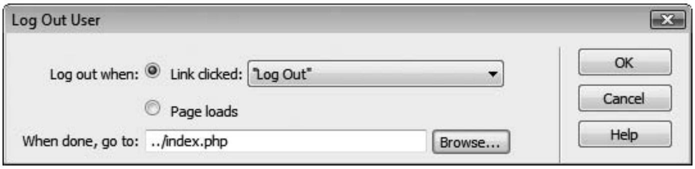
   Again, this option is also available from the Insert bar, as pictured in Figure 25-1. In any case, the Log Out User window appears (see Figure 25-15). The first radio button should already be selected. The text "Log Out" appears in the menu.

   These are the proper settings; you're simply adding the logout script to the words you selected on the page.

   Next, you'll tell Dreamweaver which page to go to after the visitor logs out.

8. **Click the Browse button; navigate to and select the file *index.php* in the root folder of the site, and click OK.**

When people log out, they'll simply end up at the main products page. Since they're no longer logged in as administrators, they won't be able to access any of the administrative pages without logging back in. The Log Out User window should now look like Figure 25-15.



Log Out User

Log out when: ● Link clicked: "Log Out"

○ Page loads

When done, go to: ../index.php

Figure 25-15: *This server behavior lets you offer visitors the polite option of logging out from your site. It destroys the session variables that track the login status of a visitor.*

9. **Click OK to close the Log Out User window.**

   Now it's time to test the result.

10. **Choose File → Save; press F12 (Option-F12) to preview the page in your browser.**

    One of two things will happen: either you'll end up on the Access Denied page, or you'll see the *CosmoFarmer* administration page.

    If you quit your Web browser after the previous section of this tutorial, or never logged in to begin with, the Restrict Access To Page server behavior is working: It doesn't recognize you as a registered administrator and denies you access to this page. Click the "Try logging in again" link to go to the login page. Type *dibble@cosmofarmer.com* in the Username field and *sesame* in the Password field, and submit the form. You're now logged in and are taken to the admin page.

    However, if you logged in following the instructions from the previous section in this tutorial, and you haven't quit your Web browser in the meantime, you're still logged in. In this case, the Restrict Access To Page server behavior is again doing its job. You're allowed onto this admin page, because you *are* a registered administrator.

11. **Click Log Out.**

    The site logs you out and takes you to the main products page. To make sure you really are logged out, you'll open the administration page again.

12. **Return to Dreamweaver and the *admin.php* page. Press F12 (Option-F12) to preview the page again.**

    You're immediately redirected to the Access Denied page. You're not logged in, so you can't see the administration page. Hooray! The page is successfully protected from snoops.

Note: Some browsers will "cache," or store, the previously viewed administration page, so you might not actually see the Access Denied page. In this case, reload the page by clicking your browser's refresh button.

Of course, the most vulnerable pages (the update-, delete-, and add-product pages) are still accessible to everyone. You need to lock down those pages as well.

13. **Open the *add.php* page and repeat steps 2–5 on page 914.**

    Repeat this step for all other dynamic pages (*delete.php* and *edit.php*) in the *admin* folder, with the exception of *login.php*. (After all, *that page* should be visible to those who haven't yet logged in.)

    If you want, you can also add a Log Out link to each of these pages by repeating steps 6–9 on page 915.

Now all of the administrative pages in the site are password protected. Only authorized administrators who log into the site can add, edit, or delete records from the database.

Displaying a Portion of a Page to Logged-In Users

Even though unauthorized users can't access any of the pages that can change the database, they can still see the links you added to the Product Details page in the last chapter—"Edit this Information" and "Delete this Product." Nothing particularly earth-shattering will happen if they click them—unauthorized users will just end up at the Access Denied page—but even that's not very elegant. Wouldn't it be tidier if those links didn't even *show up* except to people logged in as administrators?

You'll set that up next:

1. **Open the *product.php* page.**

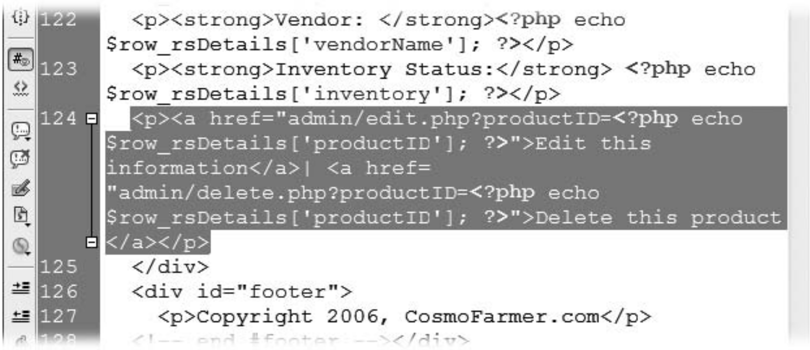
   You'll be doing a little painless programming in the Code view at this point.

2. **In the document window, click inside the text "Edit this Information"; in the Tag selector, click the <p>.**

   You've just selected the paragraph containing the two links. This paragraph should appear only to administrators.

3. **Choose View → Code.**

   The document window switches into Code view (see Figure 25-16).



```
  <p><strong>Vendor: </strong><?php echo
$row_rsDetails['vendorName']; ?></p>
  <p><strong>Inventory Status:</strong> <?php echo
$row_rsDetails['inventory']; ?></p>
  <p><a href="admin/edit.php?productID=<?php echo
$row_rsDetails['productID']; ?>">Edit this
information</a>| <a href=
"admin/delete.php?productID=<?php echo
$row_rsDetails['productID']; ?>">Delete this product
</a></p>
  </div>
  <div id="footer">
    <p>Copyright 2006, CosmoFarmer.com</p>
  <!-- end #footer --></div>
```

Figure 25-16: *When you enter Code view, whatever you had selected in the document window is highlighted in the code. The HTML code outlined here includes the Edit and Delete product links you wish to hide from unregistered visitors.*

4. **Click at the beginning of the selection, just before the opening <p>.**

   The insertion point is now at the start of the paragraph. You'll add some programming code here.

5. **Type *<?php if (isset($_SESSION['MM_UserGroup']) && $_SESSION['MM_UserGroup']=='admin') { ?>*.**

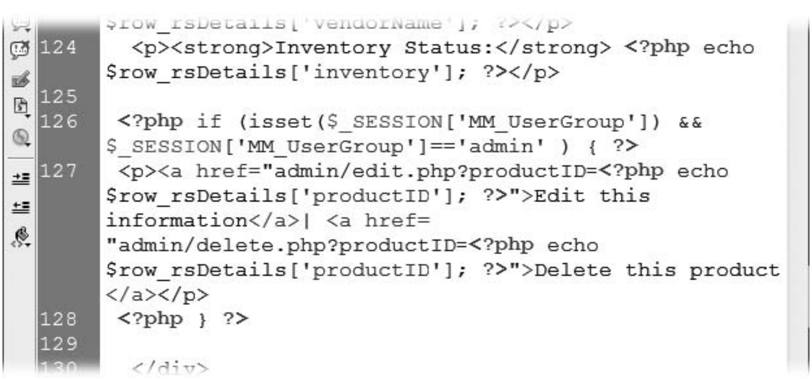
   The opening <?php tells the application server that some PHP code is coming. In other words, this isn't HTML—it's a program that the application server must process. The IF part of this code indicates what's called a *conditional statement*. In this case, it means, "*if* this person is logged in with an access level of 'admin', *then* the paragraph will appear on the page."

   To determine if the visitor is logged in with the proper access level, the code sneaks a peak at a session variable called MM_UserGroup. As mentioned on page 894, when someone logs into the site, the server behavior creates a session variable called MM_UserGroup. This variable follows the visitor around the site and contains a word that indicates what level of access he has. The programming you just added first checks to see if the session variable exists (that's the *isset* weirdness) and then verifies that the session variable is "admin", which indicates that the visitor is logged in as an administrator. If all of that is true, the paragraph letting the visitor access the edit and delete links appears.

6. **Click to the right of the closing </p> tag (just after "Delete this product") and type *<?php } ?>*.**

   This code concludes the conditional statement. In other words, all of the HTML between the first line of code you added in the previous step and this final *<?php } ?>* will appear *only* if the user is logged in as an administrator.

   The code should now look like Figure 25-17. You need to do one last thing on this page.



```
$row_rsDetails['vendorName']; ?></p>
  <p><strong>Inventory Status:</strong> <?php echo
$row_rsDetails['inventory']; ?></p>

 <?php if (isset($_SESSION['MM_UserGroup']) &&
$_SESSION['MM_UserGroup']=='admin' ) { ?>
 <p><a href="admin/edit.php?productID=<?php echo
$row_rsDetails['productID']; ?>">Edit this
information</a>| <a href=
"admin/delete.php?productID=<?php echo
$row_rsDetails['productID']; ?>">Delete this product
</a></p>
 <?php } ?>

  </div>
```

***Figure 25-17:** Here's the finished code that hides the "Delete this Product" paragraph from unregistered users.*

7. **Stay in Code view, and scroll to the top of the page. Place your cursor after the very beginning of the file, before the very first line, which begins with <?php.**

   Next, you'll add a little code that lets the page access the session variables.

8. **Type *<?php session_start( ); ?>* and press return to move the existing code after this onto the next line. The first two lines in Code view should now look like this:**

   ```
   <?php session_start(); ?>
   <?php require_once('Connections/connCosmo.php'); ?>
   ```

   The code you just added makes PHP turn on its magical session-handling powers. Now this page will be able to "see" any session variables set for the current visitor—such as whether the visitor is logged in and if he or she is an "admin" user.

9. **Choose File → Save; press F12 (Option-F12) to preview the page.**

   Because you logged out earlier, the links should now be invisible. To see them, you must log in and return to the product details page.

10. **Go back to Dreamweaver and open the *login.php* page. Press F12 (Option-F12) to preview the page. Type *dibble@cosmofarmer.com* in the Username field and *sesame* in the Password field. Click Submit.**

    You're now logged in and taken to the main administration page. If you return to a product details page, the links will miraculously return.

11. **Click the Store button in the top navigation bar on the page to go to the product listings page. Click the name of any product to see its details.**

    Voilà! The links are back. You can freely edit or delete any product in the database. If you return to the administration page and click the Log Out button, you won't see these links until you log back in.

You could also use this trick to add "Log out" links to every page on the site, but only make them visible if the visitor is logged in. With very little programming experience, you can use Dreamweaver's server behaviors together (and perhaps bring in server behaviors from extension developers) to build sophisticated database-driven Web sites.

Now go forth and electrify your sites!

CHAPTER
26

Server-Side XML and XSLT

XML is everywhere. You'll find it used in countless files on your computer; for everything from tracking information in your iTunes music library to providing the structure and options in Dreamweaver's menus. On the Web, XML is used to broadcast newsfeeds, and provide product, pricing, and availability information from Amazon.com and eBay using a technology known as Web Services.

So what exactly is XML? XML, or Extensible Markup Language, is a tag-based language, somewhat like HTML, used to organize data in a clear, easy to understand way so that different computers, operating systems, and programs can quickly and easily exchange data.

Dreamweaver CS3's Spry XML Data Set tools (covered in Chapter 12) let you work with XML on the "client-side." Translation: someone visiting your site downloads a Web page, some Spry JavaScript programming, and an XML file; then, thanks to some fancy JavaScript magic, the Web page can display and interact with the XML data in a variety of ways. For example, you can publish a table of data that the visitor can sort dynamically, simply by clicking a particular column's header (see page 493 for more about this trick).

Note: For a detailed introduction to XML, go to page 477.

The tradeoff with the client-side approach is that it forces a visitor's Web browser to download the entire XML file. If the file is large, that can take a fair amount of time, since the browser downloads the whole enchilada (even the stuff you never intend to display). In addition, a Spry Data Set can only use an XML file that's stored on the same Web server as your Web page. In other words, you can't access the RSS feed (an XML format for broadcasting news, blog posts, and other information) of CNN.com or your favorite blogger.

Fortunately, you can use Dreamweaver's server-side XML and XSLT tools to overcome these limitations. The program's XSLT server behavior produces regular HTML out of XML and XSLT style sheets. (Hang in there: more in a moment on what XSLT is all about.) And, fortunately, since Dreamweaver handles all of the complex programming required to make this happen, it's no more difficult for you than building a dynamic Web page.

Understanding the Technologies

Although XML is very much like HTML in many ways, it doesn't have any inherent formatting capabilities. Unlike with HTML, where an <h1> tag is at least displayed differently—bolder and bigger—than other text, a Web browser doesn't know how to display an XML tag. XSLT and XPath are two complementary (and very complex) languages that let you define how XML tags should look. Fortunately, even though these languages are hard to master, Dreamweaver takes care of the entire process. All you need to know is how to use Dreamweaver's Design view to create cool-looking Web pages.

XPath provides the means to identify particular elements or tags in an XML file (see Figure 12-12 on page 483). In other words, it's like a set of directions for specifying a particular piece of information in an XML file.

XSLT is the magic dust that transforms an XML document into an HTML document. In fact, it's used to create any number of different types of documents for Web browsers, palmtops, printers, and so on, out of a single XML file. XSLT stands for Extensible Style Language Transformations, which is just a really weird name for a programming language that converts XML tags—<event>Halloween Social</event>, for example—into something else, like the code a Web browser understands—<h1>Halloween Social</h1>. In a nutshell, that's what Dreamweaver's XML tools do: They use XSLT to transform XML into HTML.

Note: Because XSLT adds formatting to XML, much like Cascading Style Sheets add formatting to HTML, you'll often see an XSLT file referred to as an *XSLT style sheet*.

Think of it this way: XPath is used to identify the XML tags that XSLT transforms into HTML. XSLT does the actual conversion to HTML, but XPath tells XSLT which tags to convert. They work hand in hand to get the job done. And, fortunately, that's all you need to know. In fact, it's more than you need to know to use Dreamweaver to turn XML into great-looking Web pages.

Tip: Dreamweaver includes built-in reference material covering XML and XSLT. See page 394 for more on Dreamweaver's Reference panel.

Creating Dynamic Pages with XSLT and XML

Dreamweaver's XSLT server behavior processes all of those "X" files and produces nothing but clean HTML for your visitors. To take advantage of this feature, you'll need to set up an application server, as described in Chapter 22, so that you can run ASP, PHP, JSP, .NET, or ColdFusion pages with the necessary programming code.

Next, you need to either have an XML file in your site, or know the URL of an XML file out on the Web that you'd like to use—for example, *http://www.cosmofarmer.com/feed.xml*. One option is to create an entire page that's an XSLT file—it will contain all the HTML for the general look of the page, and the XML information you wish to display. But this is generally an inefficient technique, since the server has to process the entire file (plain HTML and all) and you can't take advantage of Dreamweaver templates to enforce the look of your site.

Note for PHP Users: For server-side XSLT to work, the version of PHP you're using must have XSLT support. PHP 5 has this capability built in, but PHP 4 requires extra work to get this going. Unfortunately, many Web hosting companies still use PHP 4, and many of those don't offer XSLT support. So before moving ahead with your XML-fueled dynamic-page-creation efforts, call or email your Web hosting company to see if their PHP installation supports XSLT.

A better method is to create what's called an *XSLT fragment*, which lets you add a "chunk" of formatted XML to just one part of a dynamic page. For example, say you want to list the top 10 headlines from CNN.com's RSS feed on your home page. Using Dreamweaver, you can transform the newsfeed from XML into HTML code. Of course, that won't be the only thing you want on your home page. Most of the page will consist of information related to your site. In this case, you only need to dedicate a fragment of the page—like a sidebar on the right edge of the page—to these headlines.

Note: RSS and Atom (a competing standard) are simply two different XML-based formats used to identify document information–like an author's name, a title, or a brief article description–and provide a link to a complete article on a Web site. These formats are commonly used on news sites and blogs to provide readers with a syndicated news feed. RSS stands for "Rich Site Summary" or "Really Simple Syndication" (depending on whom you ask). Atom is a newer standard that competes with RSS but pretty much does the same thing. For more information on RSS, see *www.w3schools.com/rss/default.asp*, and for Atom, see *www.atomenabled.org/developers/syndication/*.

The process for creating and inserting an XSLT fragment is simple: create the fragment, add and format XML information, open a dynamic page, and then insert the XSLT fragment into it. When your visitors view the dynamic page, the application server will process the XSLT fragment and add its contents to the rest of the page.

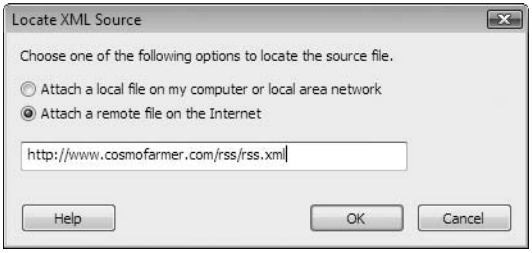
Here's how to create and use an XSLT fragment:

1. **Choose File → New.**

   The New Document window appears.

2. **Click the Blank Page button on the left side of the window. From the Blank Page list, select XSLT (Fragment), and then click the Create button.**

   The Locate XML Source window appears (Figure 26-1). Because XSLT is meant to make an XML file look great, you need to tell Dreamweaver which XML file to use. You have two choices when working with server-side XSLT: select a local file or type the URL of an XML file out on the Web.



Locate XML Source

Choose one of the following options to locate the source file.

○ Attach a local file on my computer or local area network

● Attach a remote file on the Internet

http://www.cosmofarmer.com/rss/rss.xml

Figure 26-1:
You can use either an XML file stored locally on your own site, or type the absolute URL of an XML file on the Web, such as the location of an RSS feed from a blog or news Web site.

3. **Select either "Attach a local file…" or "Attach a remote file on the Internet."**

   If the XML file is on your site, choose the first option. Select the second option if the XML file is on another Web site.

4. **If you're using an XML file on your site, click the Browse button to locate the file. Otherwise, type an absolute URL—*http://www.the_site.com/xml_file.xml*, for example—in the box. Click OK.**

   If you're pointing to a file out on the Internet, you *must* use a full, absolute URL including the *http://* part (Dreamweaver helps you out by adding *http://* to the box when you select the "Attach a remote file" button). Dreamweaver finds the file in your local site (or looks for the file out on the Internet), reads its contents, and displays the file's tags and properties in the Bindings panel. At this point, jump to page 926 to learn how to add XML data to the page.

   Although Dreamweaver claims that it's "attaching" the XML file to the XSLT document, it's really just adding a comment tag to the XSLT file, like this: <!--DWXMLSource="news.xml" -->. This comment helps Dreamweaver know which XML file to use with the XSLT document—so don't delete it. Technically, you actually attach an XSL file to an XML file to make this whole process work (as described below).

Note: If you want to try this out for fun, you can load an XML file from Wired.com. Use this URL: *http://www.wired.com/news/feeds/rss2/0,2610,,00.xml*.

5. **Save the new XSLT style sheet fragment.**

   Make sure the file ends in the extension .xsl. In addition, make sure you save it in the same folder as the dynamic page you wish to attach the XSLT style sheet fragment to. Otherwise, if the style sheet contains links, graphics, and other linked elements, they may not show up when the XML file is viewed.

Note: One way to get around this limitation of needing to store everything in the same folder is to use root-relative or absolute URLs (see page 153) for links, and to add graphics and external CSS files to your XSLT style sheet. Of course, taking these steps is probably more work than simply saving the XSL file in the same folder as your dynamic Web page.

6. **Add XML elements to the XSLT style sheet as described on page 926.**

   You can also add regular Web page content—like images, tables, CSS styles, and so on—to the page, and format the XML just as you would text on any other dynamically generated page. Once you've finished the design of your XSLT fragment, you then add it to your dynamic Web page.

Note: Because the XSLT fragment will be part of a larger Web page, you won't be able to see the effects of that page's CSS styles as you format your XML data. Fortunately, if you're using external CSS style sheets, you can use Dreamweaver's Design Time Stylesheets feature to temporarily attach, preview, and use the same CSS styles you're using on your final Web page. See page 307 for instructions.

7. **Open the dynamic page that you wish to add the XSLT fragment to.**

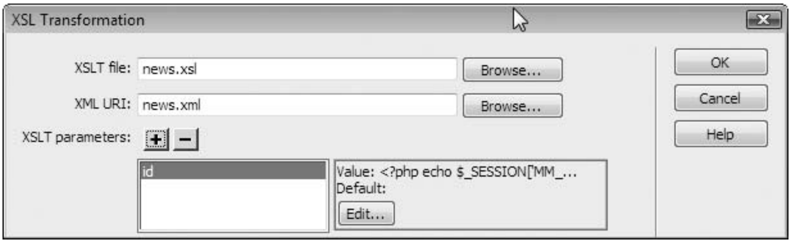
   This must be a dynamic page using the same server model as your site—for example PHP, ASP, or ColdFusion. Because the XML transformation magic occurs via programming that Dreamweaver inserts in the page, you can't add an XSLT fragment to a regular Web page (an .html file).

8. **Click where you wish to insert the XSLT fragment.**

   The spot you pick could be inside a table cell or within another layout region—such as a sidebar—on your page. The XSLT fragment will be added to this spot, just like a Dreamweaver Library item (see page 653)—that is, it will just be a chunk of HTML inside your page.

9. **Make sure the Server Behaviors panel is open (Window → Server Behaviors), click the + button, and then select XSL Transformation.**

   The XSL Transformation window appears (see Figure 26-2). Next, you select the XSL file you created earlier.



XSLT file: news.xsl

XML URI: news.xml

XSLT parameters: id

Value: <?php echo $_SESSION['MM_...

Default:

Figure 26-2: *The XSL Transformation window lets you attach an XSLT style sheet to a dynamic page. You can also send special information–XSLT parameters–to the style sheet that affects the display of the page (this process is described on page 939).*

10. **Click the top Browse button to open the Select XSLT File window. Navigate to and select the XSL file you created; click OK (Choose on the Mac) to choose the file, and then close the Select XSLT File window.**

    This tells Dreamweaver which fragment to use. In addition, Dreamweaver should automatically fill out the path to the XML file (it reads the comment inserted in the XSLT file identifying which XML file to use—see the Note below). If the XML file path doesn't appear, you can click the Browse button next to the XML file box and select the proper XML file yourself. In addition, if you're using XML from another Web site, you'll see the URL of that file, and the Browse button will disappear.

    The "XSLT parameters" option lets you pass information to the XSL file that can be used to alter how the XML file is displayed. This advanced feature is discussed on page 939.

11. **Click the OK button to close the window and insert the fragment.**

    Dreamweaver displays the XSLT fragment in your Web page. If you've set up a testing server (see page 754), you can preview the effect by pressing F12 (Option-F12).

You can't directly edit the fragment inside the dynamic Web page. Dreamweaver treats it like a single element on the page. To make changes to the fragment—to add graphics, change links, or reformat the XML—you must open the XSL file and make changes directly to it.

Note: Dreamweaver adds additional folders and files to your site when you use the XSLT server behavior. These additions contain the necessary programming code to successfully embed XML data into a Web page. That means when you're moving everything to your Web server–the dynamic page, the XSLT fragment file, and the XML file–you also need to upload these files, which you'll find stored in a folder named *includes* in your site's local root folder. Upload this folder to your Web server. (See Chapter 17 for instructions on using Dreamweaver's FTP tool.)

Inserting and Formatting XML

Now you know the basics of creating and using XSLT style sheets. But how do you actually add and format XML data? Dreamweaver makes this process easy, and if you've used the program's database tools, you already know how to do it: just use the Bindings panel. Once you create an XSL file and attach the XML file to it, Dreamweaver reads all of the tags in the XML file and adds them to the Bindings panel (see Figure 26-3).

You can drag any element in the Bindings panel into your XSLT style sheet page, just as you'd drag information from a database recordset. That means you can place XML information in a table cell, a footer, or a banner—anywhere you can place regular HTML elements on a page.

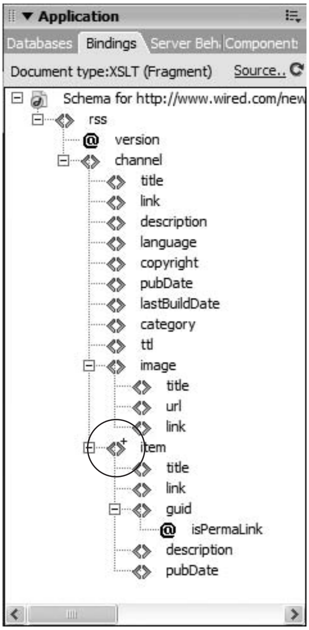
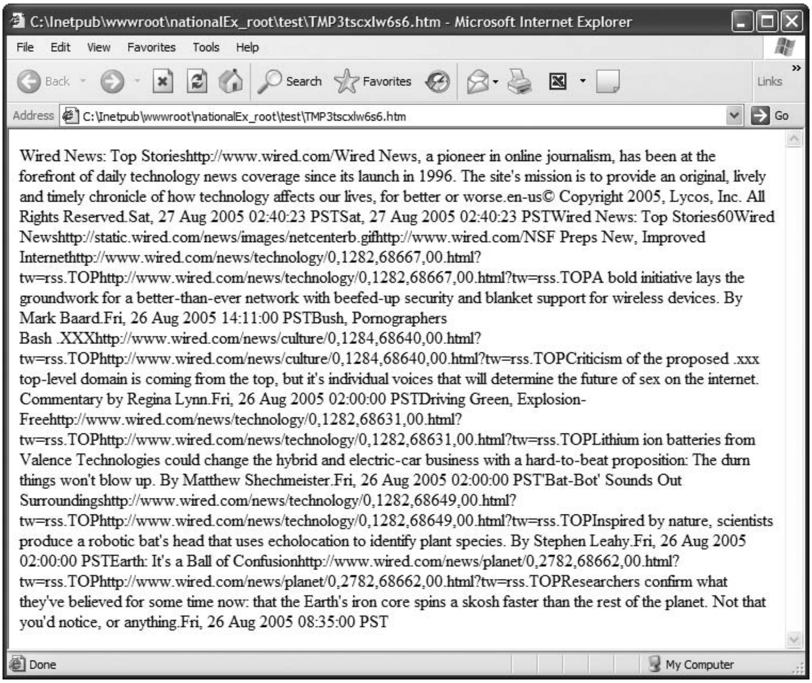


Figure 26-3:
When using Dreamweaver's XSLT tools, the Bindings panel lists all the tags and properties in the XML file you're formatting. Dreamweaver includes a few visual clues about the XML file: < > represents an XML tag and is the most common icon you'll encounter; the @ represents a tag property (also called an attribute; for example, in the tag <item id="154">, "id" is an attribute); and next to some tags, you'll see a small + (circled in this image) or a ?. The + indicates that the tag is repeated multiple times; in the XML for an RSS feed, each news item in the feed will have its own tag. The ? (not shown here) means the tag is optional, and it appears next to tags inside of other repeated tags (the ones with the +).

You should keep a couple things in mind when inserting XML using this dragging method:

- Only the contents of the XML tags and properties are inserted, not the tags or property names themselves. For example, in Figure 26-3, dragging the <title> tag that appears inside the <channel> tag onto a document just prints the text inside this tag, not the tag itself. This is a good thing: You don't usually want to include the tags: <title>An Important Story</title>. Instead, you just want the text: An Important Story.

- Dragging a tag that includes *other* tags often results in a hard-to-read mess. That's because Dreamweaver includes text from each of the nested tags, as well. For example, dragging the root element—"rss"—from the Bindings panel pictured in Figure 26-3 adds the simple label {rss} to the page in Dreamweaver's Design view. But when the page is actually viewed in a Web browser, you'll end up with one long paragraph composed of the text from all of the tags—the channel, the title, the description, and so on, as well as each of the repeated "item" tags as pictured in Figure 26-4. Dreamweaver treats this as a single big blob. To get around this, drag tags that don't include other nested tags. (Nested tags are called *child* tags.) For example, in Figure 26-3, the "title" tag that appears directly inside the "channel" tag doesn't have any tags inside it. Likewise, a repeating tag—item, for example—includes tags that don't have any children: "title," "link," "description," and "pubDate." These are all good candidates for adding to a document.


C:\Inetpub\wwwroot\nationalEx_root\test\TMP3tscxlw6s6.htm - Microsoft Internet Explorer
File
Edit
View
Favorites
Tools
Help
Back
Search
Favorites
Links
Address
C:\Inetpub\wwwroot\nationalEx_root\test\TMP3tscxlw6s6.htm
Go
Done
My Computer

```
Wired News: Top Storieshttp://www.wired.com/Wired News, a pioneer in online journalism, has been at the
forefront of daily technology news coverage since its launch in 1996. The site's mission is to provide an original, lively
and timely chronicle of how technology affects our lives, for better or worse.en-us© Copyright 2005, Lycos, Inc. All
Rights Reserved.Sat, 27 Aug 2005 02:40:23 PSTSat, 27 Aug 2005 02:40:23 PSTWired News: Top Stories60Wired
Newshttp://static.wired.com/news/images/netcenterb.gifhttp://www.wired.com/NSF Preps New, Improved
Internethttp://www.wired.com/news/technology/0,1282,68667,00.html?
tw=rss.TOPhttp://www.wired.com/news/technology/0,1282,68667,00.html?tw=rss.TOPA bold initiative lays the
groundwork for a better-than-ever network with beefed-up security and blanket support for wireless devices. By
Mark Baard.Fri, 26 Aug 2005 14:11:00 PSTBush, Pornographers
Bash .XXXhttp://www.wired.com/news/culture/0,1284,68640,00.html?
tw=rss.TOPhttp://www.wired.com/news/culture/0,1284,68640,00.html?tw=rss.TOPCriticism of the proposed .xxx
top-level domain is coming from the top, but it's individual voices that will determine the future of sex on the internet.
Commentary by Regina Lynn.Fri, 26 Aug 2005 02:00:00 PSTDriving Green, Explosion-
Freehttp://www.wired.com/news/technology/0,1282,68631,00.html?
tw=rss.TOPhttp://www.wired.com/news/technology/0,1282,68631,00.html?tw=rss.TOPLithium ion batteries from
Valence Technologies could change the hybrid and electric-car business with a hard-to-beat proposition: The durn
things won't blow up. By Matthew Shechmeister.Fri, 26 Aug 2005 02:00:00 PST'Bat-Bot' Sounds Out
Surroundingshttp://www.wired.com/news/technology/0,1282,68649,00.html?
tw=rss.TOPhttp://www.wired.com/news/technology/0,1282,68649,00.html?tw=rss.TOPInspired by nature, scientists
produce a robotic bat's head that uses echolocation to identify plant species. By Stephen Leahy.Fri, 26 Aug 2005
02:00:00 PSTEarth: It's a Ball of Confusionhttp://www.wired.com/news/planet/0,2782,68662,00.html?
tw=rss.TOPhttp://www.wired.com/news/planet/0,2782,68662,00.html?tw=rss.TOPResearchers confirm what
they've believed for some time now: that the Earth's iron core spins a skosh faster than the rest of the planet. Not that
you'd notice, or anything.Fri, 26 Aug 2005 08:35:00 PST
```

Figure 26-4:
If you use an XML tag that's too high up on the food chain—that is, one that has other tags nested inside of it—you can end up with a large chunk of hard-to-read text.

You can also insert XML into a Web page by choosing Insert → XSLT Objects → Dynamic Text or by clicking the Dynamic Text button on the Insert bar's XSLT panel (see Figure 26-5). Either method opens the XPath Expression Builder window (Figure 26-6). An XPath Expression is just a way of identifying a particular element—called a *node*—inside an XML file (see Figure 12-12 on page 483).

To add the dynamic text, select the XML tag or property you wish to insert. In the Expression box in the bottom half of the window, you'll see the XPath code required to locate your selection. For example, in Figure 26-6, the expression is *rss/channel/description*. This is shorthand for "Find the description tag, which is inside the channel tag, which is located inside the rss tag." In other words, this expression lists the order in which the tags are nested (in this sense, it's very much like the document window's Tag selector [see page 22]).

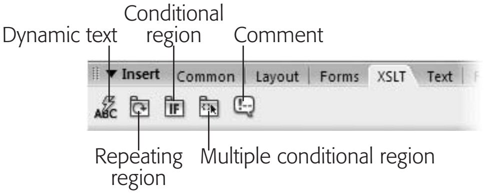
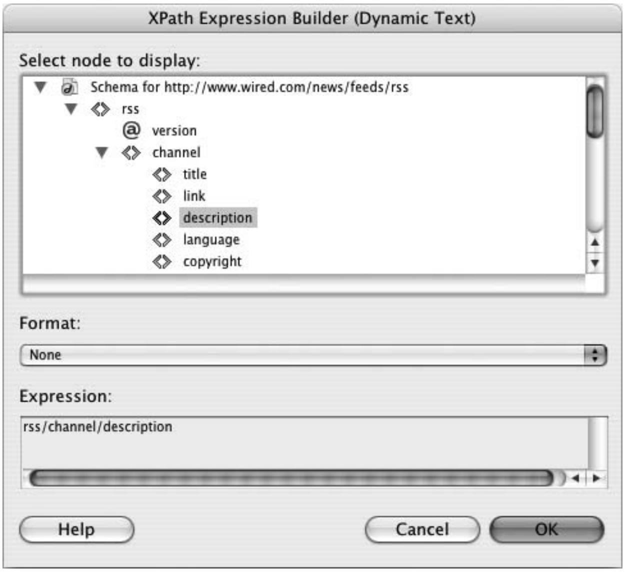


Figure 26-5:
Dreamweaver's XSLT tab includes five buttons for adding XSLT objects. The Comment object just inserts an XSL comment—like an HTML comment (see page 376)—so you probably won't use it much, if ever.



Format: None

Expression: rss/channel/description

Figure 26-6:
Use the Format drop-down menu to apply a format to the XML data. Unfortunately, the formats are aimed almost entirely at formatting numbers–adding a $ sign to currency data, for example–so they won't do anything for text-only XML data.

Dreamweaver also lets you apply some formatting options to the selected text using the Format menu. Almost all of the options have to do with formatting numbers, so if you're inserting text that's actually a numeric value, these formatting controls can come in handy. For example, say you add a tag that's used to indicate a price: <price>3.25</price>. Selecting any of the currency options will add a $ sign in front of the number when it's displayed on the page. If you're dealing with big sums of money—<price id="Trump Tower">34589585</price>—then the "Currency group to 3 digits, 2 decimal places" is a good option. Then, the output would be something like this: $34,589,585.00. Again, all but two of the options are for formatting numbers, and the two that help format text aren't very useful.

After selecting a tag and setting a formatting option (if desired), click OK to insert the dynamic text. Dreamweaver adds a placeholder to the page; it has a blue background and displays the XPath expression inside of curly brackets, like this: {rss/channel/title}.

Tip: You can summon the XPath Expression Builder window again by double-clicking any dynamic XML text placeholder on the page.

Click an XML text placeholder to select it. You can then apply a CSS style to it, format it as a header or paragraph, or drag it to another spot on the page, just as you would any other HTML element.

Inserting a Repeat Region

XML files frequently contain the same tag repeated multiple times. For example, an XML file that's a list of employees might use the tag <employee> to begin each employee listing. For every employee in the company, the <employee> tag will appear once. The XML might look something like this:

```
<companyInfo>
<company>
<name>Big Co.</name>
<phone>555-3333</phone>
</company>
<employeeList>
<employee id="485734">
<name>Mark</name>
<phone>555-3333 x405</phone>
</employee>
<employee id="38753">
<name>Jane</name>
<phone>555-3333 x406</phone>
</employee>
</employeeList>
</companyInfo>
```

If you added the <name> tag inside the first <employee> tag to an XSLT style sheet, attached that XSL file to a dynamic page, and then previewed it in a Web browser, you would see just a single name: the first employee name in the XML file. But just as with recordsets, you usually want to display multiple XML records. The answer is Dreamweaver's XSLT Repeat Region object. To use it:

1. **Insert elements that appear within a tag that is repeated multiple times.** (**Use any of the methods described on page 926.**)

   The Bindings panel lets you know if an XML tag is repeated multiple times: check for a tiny + symbol floating just above the right side of the <> icon in the panel (see Figure 26-3).

   So, in the above employee list example, you wouldn't insert the <name> tag that appears inside the <company> tag, since <company> appears only once in the file. You would, however, insert the <name> tag and perhaps the <phone> tag inside the <employee> tag, since these are both "children" of a tag that's repeated twice in the document.

Note: This example points out a sometimes confusing aspect of XML: Tags with the same name may appear as children within different kinds of tags. The <name> tag, for instance, appears both within the <company> and <employee> tags, but obviously refers to two different things–the name of a business and the name of a person.

Articles in a Web feed are another case. For example, the RSS standard (see page 923) requires that each news item delivered in an RSS XML document be surrounded by an <item> tag with the following children: <title>, <link>, and <description>. Therefore, for an RSS feed, the elements you'd want to add to the page (and repeat once for each news item) would be <title>, <link>, and <description>.

2. **Select (by dragging, for example) the XML placeholders and any other content that you want to be repeated once for each instance in the XML file.**

   At the very least, this includes the XML placeholders you inserted in step 1, but may also include other HTML elements, such as a graphic that's repeated once for each item or a <div> tag that contains the XML data you're repeating. You can select only elements that are together: You can't, for instance, select an XML element at the top of the page and another at the bottom of the page, and use the same Repeat Region object.

Tip: You can, however, include multiple repeat regions on a page, so you could repeat the same XML data in several locations on a page by adding multiple Repeat Region objects.

3. **Choose Insert → XML Objects → Repeat Region, or click the Repeating Region button on the XSLT tab (see Figure 26-5).**

   The XPath Expression Builder window appears (see Figure 26-7). This is a similar window to the one that appears when you insert dynamic text (Figure 26-6). However, instead of a format menu, the window includes a "Build Filter" option.

4. **Select the repeating tag.**

   This tag will always have a + to the right of its <> icon, and is usually the parent tag of the tags you inserted in step 1. So, in the employee list example above, you would select the <employee> tag; in the case of an RSS feed, it would be the <item> tag.

5. **Build a filter to limit the information retrieved from the XML file.**

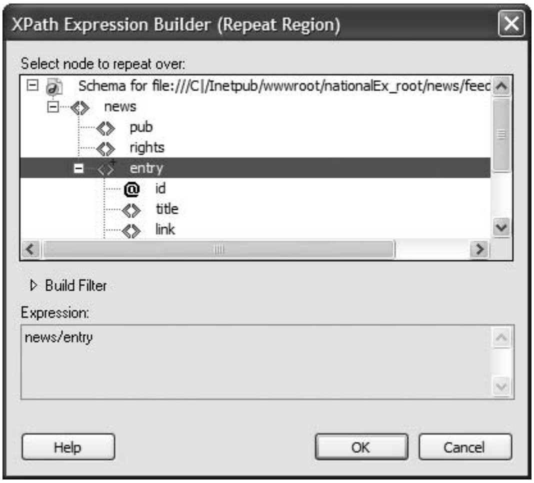
   An XSLT filter works similarly to filters on recordsets (see page 785). It's a way to select only certain information from the XML file. For example, you might want to select only employees whose last name is Smith, or product tags that have only an <instock> XML tag containing the word "true." Filters are discussed on page 932.

6. **Click OK to insert the repeat region.**

   Dreamweaver adds a gray border around the repeating elements and adds a gray tab labeled "xsl: for-each." (If you don't see these, make sure invisible elements are turned on: View → Visual Aids → Invisible Elements.)

You can see the effect by pressing F12 (Option-F12): Dreamweaver translates all of that XSLT gobbledygook into a temporary HTML file. But to see the final presentation, you need to attach the XSLT style sheet to a dynamic page (steps 8–11 on page 925) and preview it in a browser.

If you want to edit the repeat region, click the gray tab to select it and, in the Property inspector, click the lightning-bolt icon to open the Repeat Region window again (Figure 26-7).


XPath Expression Builder (Repeat Region)
Select node to repeat over:
Schema for file:///C|/Inetpub/wwwroot/nationalEx_root/news/feec
news
pub
rights
entry
id
title
link
Build Filter
Help
OK
Cancel

Expression:

news/entry

Figure 26-7:
Display repeating XML data using the XPath Expression Builder for repeat regions.

To remove a repeat region, right-click (Control-click) on the gray "xsl: for-each" tab and select "Remove Tag: <xsl:for-each>." You can also click anywhere inside the repeat region, right-click (Control-click) on "xsl: for-each" in the Tag selector (see page xx), and then choose Remove Tag. Don't try to remove the tag by hand in Code view: The code used to specify the tags inside the region also must be changed; Dreamweaver does this automatically and accurately.

Building a repeat-region filter

If the XML file you're using has lots and lots of repeating items, or you just want to hone in on a single item, you can build an XSLT filter that lets you search and select XML elements that match certain criteria. Say you want to display only employee tags with a "department" property whose value is "marketing." Fortunately, Dreamweaver lets you create very complex filters. In a nutshell, to filter a repeat region:

1. **Follow steps 1–4 on page 930 to insert a repeat region.**

2. **In the XPath Expression Builder (Repeat Region) window, click Build Filter to display the filter tools (see Figure 26-8), and then click the + button to add a filter.**

   You build a filter by first selecting a tag that contains the information you wish to compare to a certain value.

3. **Click in the Filter By column and, from the pop-up menu, select a tag.**

   This menu lists the repeating tag, its parent tag, its parent's parent tag, and so on, up the food chain, until it reaches the top (root) element. You'll just leave it as the repeating tag you selected in step 4 on page 931 (finish reading these steps and then read the following note to understand why this is the case).

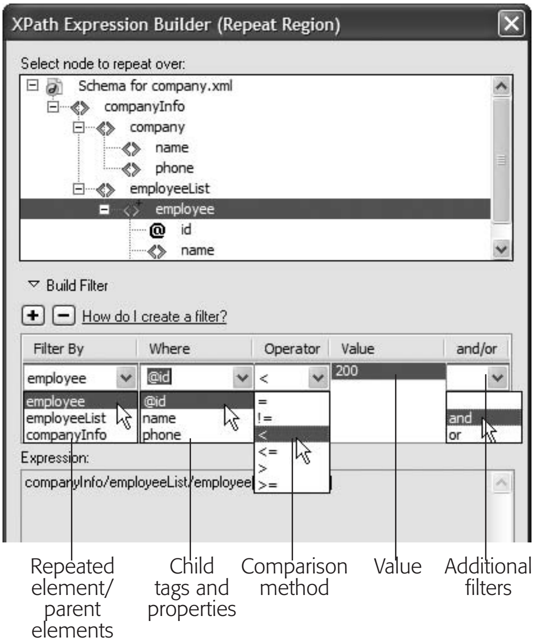


Figure 26-8:
Limit the XML data displayed by creating a filter that includes only XML tags that match certain criteria. Here's an example using the employee list XML code on page 930.

Note (hold onto your thinking caps): A filter lets you select criteria that each repeated region is tested against. If it passes the test, then the XML data is displayed. For example, the "id" property of the <employee> tag will vary with each employee listing. In a repeated region, the only elements that change are either a property of the tag that's repeated or the contents of other tags inside the repeated tag. That's why you should always select the repeated tag from the Filter By menu; the parent (and grandparent, and so on) of the repeated tag doesn't change with each region that repeats. If the parent has a property named "version," that property value will be the same whenever the filter is applied to a repeat region. In other words, the filter will either always be true or never be true, and you'll either get all of the XML data or none of the XML data from the repeated tags. Dreamweaver includes a more flexible tool for displaying or hiding information based on some "test" or condition: conditional regions (see page 934).

4. **Click in the Where column, and select an option from the pop-up menu.**

   This menu lists any properties of the repeated tag, and all the repeated tag's child tags. In the employee list code (page 930), for example, each <employee> tag has a property named "id" and child tags called <name> and <phone>. So in this case, those options are listed in the "Where" menu. Tag properties begin with an @ symbol, so in this example, the "id" property is listed as "@id" in the menu (see Figure 26-8).

   To continue with the employee list example, if you want to display only employees whose employee IDs are below a certain number (perhaps to list the company's first 200 employees), then choose "@id" from the menu.

Note to Power Users: If you're up on your XPath expressions (and who isn't?), you can actually click in the Where column and type your own path to identify tags and properties located deeper in the tag structure.

5. **Select a comparison method from the Operator menu.**

   Your options are = (equal to), != (not equal to), < (less than), <= (less than or equal to), > (greater than), and >= (greater than or equal to). If the property or tag you selected in step 4 contains a number, you can use any of these *comparison operators*. So if you want to find employees whose IDs are below 200, then select <.

   For properties and tags that contain text (<department>marketing</department>, for example) stick to either the = or != options. That way, a repeat region shows only employees who are either in the "marketing" department (use the = sign) or not in it (use the != operator).

6. **Type a comparison value in the Value box.**

   The value is what you're testing against. If you're looking for employee IDs that are below 200, type *200*; for <department> tags that contain the word "marketing" type *marketing*.

7. **If you want to add more filters, select either "and" or "or" from the "and/or" menu, click the + button to add another filter, and then repeat steps 4–7.**

   This lets you add additional conditions that must be met in order to select XML data to include in the repeat region. Say you want to display employees who are both in the marketing department *and* are one of the first 200 employees. In that case, select the "and" option and add another filter. Or suppose you want to display a list of employees who are *either* in the marketing department *or* the finance department: Select "or" and add a filter where the <department> tag is equal to "finance".

   The ability to add multiple filters lets you build up complex filters that either let you narrow the number of regions that are repeated (by adding more and more *and* options) or that include more and more data from the XML file (by using additional *or* filters).

8. **After adding one or more filters, click the Close button to create a filtered repeat region.**

   Dreamweaver inserts the repeat region into the XSLT style sheet. You can edit or remove this region as described on page 932.

Inserting a Conditional Region

At times, you may want to display a part of a page only if certain conditions are met. The "Filter" feature of the Repeat Region tool (see page 932) offers some help, since it can display select XML data when a tag's property or contents pass a particular test: an *id* property that's less than 200, for example. But there are other occasions when the filter doesn't help. Say you want to display only the last item in a repeat region; there's no tag or property containing this information, so a filter won't work.

Note: If you use Dreamweaver templates, this problem may sound familiar. It's the same concept as a template optional region (see page 681).

Or maybe you want to display a graphic or another part of a page only when a certain XML property appears. Suppose an XML document listing products has a tag like this: <product stock="in">. The product tag's "stock" property serves to indicate whether a product is available (in which case, it's value is "in") or when it's not ("out"). In such cases, you can use a conditional region to display an "out of stock" button next to each product that's not available.

To use a conditional region:

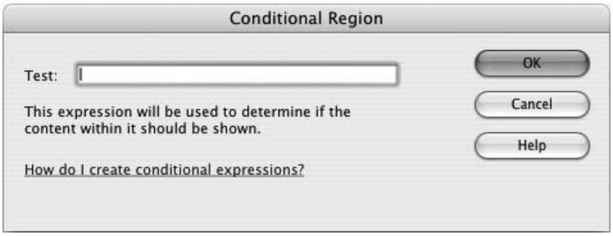
1. **Select the part of the page—either the XSLT file or XSLT fragment—you want to display if a condition is true.**

   A simple example is an "out of stock" or "on sale" graphic. But you could also select XML data placeholders: Maybe you want to display just the first five items inside a repeat region. In this case, select all the XML placeholders inside the repeat region (you need to add the repeat region first).

Note: Many Web designers find it useful to place conditional regions inside of repeat regions, since this lets them fine-tune the display of information on a per-item basis. For example, in a repeating list of products, showing an "on sale" graphic only for those products that are actually on sale.

2. **Choose Insert → XSLT Objects → Conditional Region or click the Conditional Region button in the XSLT tab (see Figure 26-5).**

   The Conditional Region window opens (see Figure 26-9).


Conditional Region

Test:

This expression will be used to determine if the content within it should be shown.

How do I create conditional expressions?

Figure 26-9:
The Conditional Region window lets you show or hide content on your page based upon certain conditions in the XML or XSL files.

3. **Type a test condition in the Test box.**

   "But what am I supposed to type?" you're asking. This is the tricky part, since Dreamweaver doesn't really give you much help. Your test condition can actually be a number of different things, many of which can be quite complex. Here are a few examples:

   - **An XPath expression followed by some kind of comparison.** For example, say you're working with the XML document on page 930. You've created a repeat region listing all of your company's employees, and you want an "employee of the month" graphic to appear in the listing, but only next to the employee whose ID is, say, 38753. To make that happen, the condition you'd type would be *@id=38753*. @id refers to the "id" property (@ is used before a property name) of the repeated tag (<employee>, in this example.) Likewise, if you wanted to highlight all employees named Jane (that is, the text inside the <name> tag is *Jane*), the condition would be *name='Jane'*. (Note that whenever you're testing whether a tag has text inside it—as opposed to just numbers—you must place quotes around the word, like this: 'Jane'.)

- **The position of an item in a repeated region.** When applying conditions to content that comes from a repeat region, you can access an item's position using position( ). So if you wanted to have the selected page elements inside a repeat region appear only when the first item is displayed, you could type *position()=first( )*; for the last item, the condition would be *position()=last( )*. And if you wanted to limit the repeat region to just 5 items (if you want to show only the first 5 headlines from a newsfeed, say), you could use this expression: *position( )<=5*.
- **An XPath expression to determine if a tag or property exists.** You can also just enter an XPath expression for a particular *node* (page 484) in the document. If the node exists, then the selected element is displayed; otherwise, it's hidden. For example, say you have a repeat region that contains some optional tags. Again, using the employee list example, imagine that some employees have their own offices. For those employees, you might add an XML tag called <office> that includes the office number, like so: <office> Room 222</office>. You'd like to include the text "Office:" followed by the actual office number in your final Web page. However, if someone doesn't have an office (meaning that her entry in the XML file has no <office> tag), you don't want the word "Office:" to appear. To make that happen with a conditional region, type *Office:* somewhere inside the repeat region (perhaps on a line below the employee phone number); next, drag the <office> tag from the Bindings panel to the page, and then select both the text and the XML placeholder. Finally, add a conditional region as described on page 934 and simply type *office* as the condition. Now "Office:" and the office number will appear only for <employee> tags that have an <office> tag inside them.
- **Tag or property values that begin with one or more particular characters.** Say you want to display only those employees whose names begin with 'M.' You can do this easily with the starts-with( ) function. In the Conditional Region box, you'd type *starts-with(name, 'M')*. Translated from XSLT-speak, this means any <name> tag whose contents start with the letter M will appear on the final Web page; so <name>Mark</name> and <name> Mary</name> would match, but <name>Andrea</name> wouldn't.

4. **Click OK to insert the conditional region.**

Dreamweaver adds a gray border around the page elements you selected in step 1 and adds a gray tab labeled "xsl:if" to indicate the conditional region. (If you don't see these, make sure invisible elements are turned on by choosing View → Visual Aids → Invisible Elements.)

You can still edit the page elements inside the conditional region's gray border: You can edit, add, or remove text, images, and XML placeholders.

If you want to edit the conditional test, click the gray "xsl:if" tab to select the conditional region, and then change the test listed in the Property inspector.

To remove a conditional region, right-click (Control-click) the gray "xsl:if" tab, and then select "Remove Tag <xsl:if>". You can also click anywhere inside the conditional region, right-click "xsl:if" in the Tag selector (see page 22), and then choose "Remove Tag".

Using Multiple Conditional Regions

A conditional region is pretty straightforward: It either shows or hides part of the page based on the results of a simple test. But what if you want to display one thing if the condition is true, but show different stuff if the condition is false? Say you have two graphics called "In Stock" and "Out of Stock" that need to appear next to each product name in a repeat region. You can use two conditional regions: the first to display the "In Stock" image if the product tag's stock property is set to "in" (<product stock="in">) and another for out-of-stock products (<product stock="out").

Note: If you've ever done any computer programming, you'll recognize the upcoming maneuver as a variation on the venerable "if-then-else" statement.

But using conditional regions in that way requires far too much work on your part. Fortunately, Dreamweaver's Multiple Conditional Region tool makes it easy to deal with these "either/or" situations. Here's how to use it:

1. **Select the part of the page you want to display if a condition is true.**

   This could be a graphical button with the text "In Stock" printed across it. This step is the same as a conditional region described on page 934. In fact, most of the steps are the same.

2. **Choose Insert → XSLT Objects → Multiple Conditional Region or click the Multiple Conditional Region button in the XSLT tab (see Figure 26-5).**

   The Multiple Conditional Region window opens. Except for its title, this window is identical to the Conditional Region window (see Figure 26-9).

3. **Type a test condition in the Test box.**

   For instance, *@stock="in"* would cause the region to display if the value of the repeating tag's *stock* property was "in." For more examples, see page 935.

4. **Click OK.**

   Dreamweaver inserts three different sections of XSL code, each marked with their own gray tab: "XSL:choose", "XSL:when", and "XSL:otherwise". The "XSL:when" section contains the actual condition or test you set in step 3.

The "XSL:otherwise" section is the part of the page that will display if the test *isn't* true. Dreamweaver adds "Contents goes here" to that area.

5. **Select and delete "Content goes here" and then add the page elements you wish to display if the test from step 3 isn't true.**

   This is the alternative to the content selected in step 1—for example, an "Out of Stock" icon.

You can edit the contents of either the "XSL:when" or "XSL:otherwise" sections. To edit the test, either click the gray "XSL:when" tab or click anywhere inside the "XSL:when" section and use the Tag selector (see page 22) to select the <xsl:when> tag. The Property inspector displays the test condition; edit it, and then press Enter or Return.

Removing a multiple conditional region is a bit trickier. You can't just right-click (Control-click) the gray "XSL:choose" tab and then select "Remove Tag <xsl: choose>" to remove all of the multiple conditional region code. You must remove each of the three sections separately. To do so, follow the same process as required when removing a conditional tag, as described on page 937.

Advanced XSLT Tricks

XSLT is a complex language with lots of bells and whistles—and just as many pitfalls. It's all too easy to head ambitiously into Code view and, with just a few keystrokes, completely break your XSLT style sheet. But since Dreamweaver's XSLT tools take you only so far, you'll undoubtedly find yourself wanting to dip into the code. Here are a couple of examples to help your explorations go a little more smoothly.

Sorting Data in a Repeat Region

The Repeat Region feature normally works by spitting out data that it retrieves from an XML document in the order it appears in the XML file. But what if you want that information sorted in a particular way—employees listed in alphabetical order, for example. Dreamweaver doesn't have a visual tool to let you accomplish this common goal. Fortunately, adding the code yourself is pretty easy:

1. **Click inside a repeat region and then click the "Code" or "Split" buttons in the document window's toolbar.**

   Alternatively, you can choose View → Code or View → "Code and Design". Doing so drops you into the scary world of XSLT code. Don't look too hard—you might go blind.

2. **Locate the beginning of the repeat region.**

   What you're looking for is something like this: <xsl:for-each select="company-Info/employeeList/employee">, where the stuff in quotes after "select" is the XPath expression pointing to the repeating tag. You need to add your new code directly after this tag.

3. **Click immediately after the closing bracket (>), hit Enter, and then type *<xsl: sort select="xml_tag_to_sort_on" data-type="text" order="ascending" />*.**

   Replace *xml_tag_to_sort_on* with the XML tag inside the repeat region that you wish to use as the basis for sorting. For example, pick a tag used for a name or a price.

Note: Don't forget the forward slash at the end of the sort tag: />. The tag you're adding is an *empty tag* (meaning there's no accompanying closing tag). In XML, these types of tags must be "self closed" using the forward slash (see page 479 for details).

   The value for *data-type* can be either "text" or "number." Pick the one that matches the type of data contained in the XML tag you're using as a sorting key—use "text" if you're sorting names and "number" if you're sorting prices.

   Depending on how you want to sort the data—smallest number to largest, or largest number to smallest—type either *ascending* or *descending*, respectively, for the *order* property. "Ascending" gets you smallest number to largest, or A–Z; "descending" results in largest number to smallest, or Z–A.

Using XSLT Parameters

The Repeat Region's filter feature is very useful. With it, you can winnow down a mass of XML data to a smaller collection of useful facts. But what if you wanted the data retrieved from the XML file to *change* based on information from a database or information submitted by a visitor? Say you've already created an employee list page, and now you want to create separate pages for each employee (kind of like the master-detail pages described on page 814). You could create an XSLT style sheet for each employee, thereby filtering the XML file based on the employee's ID number. But that's a lot of work. A better approach is to use an *XSLT parameter*.

XSLT parameters provide a way of passing information from an outside source to the XSLT style sheet; the parameters can affect how the XSLT style sheet processes and displays the XML file. You've already encountered one way to pass a parameter to an XSLT style sheet—the XSL Transformation server behavior (see Figure 26-2). You can use the server behavior to pass either a value you manually enter, a dynamic value pulled from a database, or any of the other sources of data accessible in dynamic Web pages (see page 897). In this way, you could present a separate page for each employee simply by passing the employee's ID number to the XSLT style sheet (instead of manually creating separate XSLT files for each employee).

For this maneuver to work, you need to string together several different concepts involving both dynamic pages and XSLT files that you've already learned in this book. Here's an example of how to use XSLT parameters to dynamically filter XML data:

1. **Create an XSLT fragment as described on page 923.**

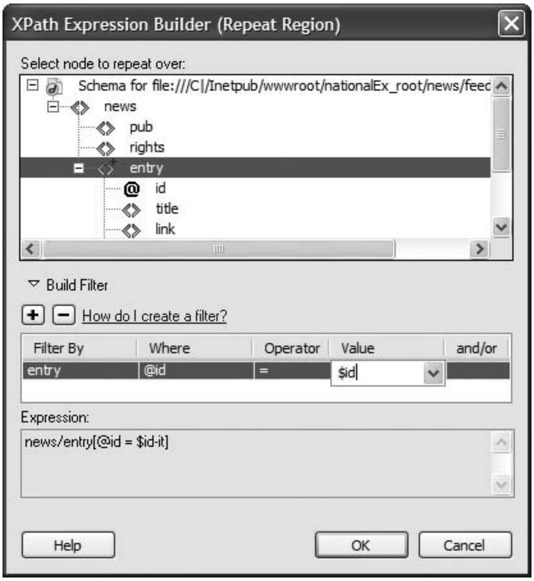
   You'll eventually include this fragment on a dynamic page (PHP, ASP, or whichever server method you're using) to display the final, filtered data.

2. **Follow steps 1–5 on page 930 to insert a repeat region and create a filter.**

   With this technique, all the steps in creating a filter are the same as those on page 932, except for entering the value in the Value box, as explained in the next step.

3. **In the filter's Value box type *$your_param* (see Figure 26-10).**

   Change *your_param* to a name you'd like to use for the parameter. For example, if you want to filter for an ID that matches a particular value, then you'd type *$id*. You must include the $ sign, but you can come up with whatever name you like. It helps if it's descriptive, like *$id, $name,* or *$price.* It also has to follow a few rules: use only numbers and letters, always start the name with a letter (not a number), don't use spaces, and stay away from punctuation marks, except for hyphens and underscores.



XPath Expression Builder (Repeat Region)
Select node to repeat over:
Schema for file:///C|/Inetpub/wwwroot/nationalEx_root/news/feec
news
pub
rights
entry
id
title
link
Build Filter
How do I create a filter?
Help
OK
Cancel

Filter By	Where	Operator	Value	and/or
entry	@id	=	$id	

Expression:

```
news/entry[@id = $id-it]
```

Figure 26-10: *You can use an XSLT parameter as a filter value. The parameter always begins with the $ sign and lets you dynamically filter the contents of an XML file.*

   Unlike a static value that you type into the Value box, like *38, Dave,* or *marketing,* a parameter can be different each time the XSLT style sheet does its magic. But to get it to work, you need to dip (just a bit) into Code view.

4. **Click the "Code" or "Split" button to view the XSLT code. Locate the line** <xsl:template match="/">, **and then click just before the opening bracket** (<).

   In XSLT, you first need to tell the style sheet that you'll be using a parameter.

5. **Type** *<xsl:param name="your_param"/>.*

   Replace *"your_param"* with the text you typed in step 3. Note that you leave off the $ sign. Also, make sure you include the forward slash before the final bracket, like this: />.

You're done with the XSLT style sheet. It's all primed to have dynamic data sent to it. The next steps involve adding the XSLT fragment to a dynamic page.

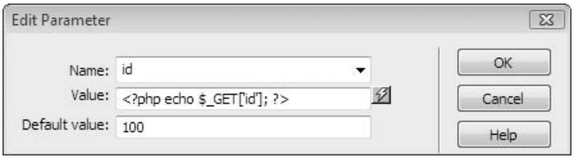
6. **Repeat steps 8–10 on page 925.**

   This step is the same process as adding any XSLT fragment to a dynamic page—that is, using the XSL Transformation server behavior.

   In the next step, you add the XSLT parameter.

7. **In the XSL Transformation window, click the + button next to the label XSLT Parameters (see Figure 26-2).**

   The Edit Parameter window opens (Figure 26-11).



Name: id
Value: <?php echo $_GET['id']; ?>
Default value: 100

Figure 26-11: *While inserting the XSLT server behavior, you can add one or more parameters that let you pass information to the XSLT fragment. That way, you can control which data from the XML file is displayed on the Web page.*

8. **In the Name box, type the name you used in steps 3 and 5 above (don't include the $ sign).**

   The value you enter here defines the name of the parameter that the dynamic page will pass off to the XSLT style sheet. Next (and this is the magic part), you'll add the value.

9. **Click the lightning-bolt icon to the right of the Value box to open the Dynamic Data window.**

   This is the same Dynamic Data window you've encountered with dynamic pages (see Figure 24-7). Don't get it confused with the XSLT Dynamic Text box (Figure 26-6). Here, "dynamic" refers to any of the many sources of dynamic information you've used when creating database-driven pages—recordsets, URL variables, form variables, cookies, session variables, and so on. (For a recap on creating recordsets, see page 782; the other types of dynamic data can be added to the Dynamic Data window as described on page 897.)

10. **Select a source from the Field list and then click OK.**

    What you select here is the crucial part of the puzzle. You're telling the dynamic page where to get the information that will be passed off to the XSLT style sheet. To use the employee list example again, you would need to identify where the ID number used to select just a single employee comes from. Here are a few examples:

    - **Recordsets.** You could use the value from a field in a recordset. For this to work, you'll need to add a recordset (pgae 782) to the dynamic page first.

- **Form fields.** One way to pass a value to a page is via a form. For example, you could add a form to a separate Web page. The form submits to this dynamic page (the one with the XSL Transformation) and includes a form menu that lists every employee's name (and includes the employee ID in the menu's value column—see page 414 for more on form menus). When a visitor selects a name from the menu, the employee ID is submitted to the dynamic page, which turns it into an XLST parameter and hands it off to the XSLT style sheet for use in the repeat region filter. (Turn to page 897 to see how to add a form field name to the dynamic data window.)

- **URL variables.** You can apply the same idea to URL variables, but instead of getting the employee ID from a menu, you'd attach it to a link to the dynamic page. For example, you might use a URL variable that looks something like this: *employee.php?id=15*. (Turn to page 897 to see how to add a URL variable to the Dynamic Data window.)

These are just a few examples. You can use dynamic data from any dynamic source: cookies, session variables, and so on.

11. **Type a value in the "Default value" box.**

This is the value the dynamic page will use if the source you picked in step 10 doesn't come through—for example, if the dynamic page is accessed without adding a URL variable (in which case you'd be passing just *employee.php*, instead of *employee.php?id=15*). Entering a default value will ensure that the XSLT style sheet has some value to work with. If, as in this example, you're using this technique to dynamically control XML filtering, the default value should match at least one record in the XML file.

12. **Click OK to close the Edit Parameter box, and then click OK once again to close the XSL Transformation window.**

Dreamweaver adds the new server behavior and the new parameter to your page.

Note: If you want to remove or change the XSLT parameter, just re-open the XSL Transformation window by double-clicking its name in the Server Behaviors panel.

13. **Provide a way to pass the dynamic data to the page.**

For example, if you selected a URL variable as the data source for step 10, you would add links to other pages on your site that would point to the page with the XSL Transformation—*products.php?sku=10294* or *employee.asp?id=15*, for example.

Hopefully, by this point, your brain hasn't completely melted. As you can see, XML, XSLT, and all of the other X's can be pretty X-hausting.

7

Part Seven: Appendixes

APPENDIX
A

Getting Help

Hard as it may be to believe, even this book may not answer all your questions about Dreamweaver. Fortunately, a wide range of other resources awaits when a particular feature doesn't work for you.

Getting Help from Dreamweaver

There's plenty of assistance built right into the program, from beginner tutorials to a complete browser-based help system. You can also access Dreamweaver's electronic help system and online support center from the Help menu.

What's New

If you want a comprehensive overview of Dreamweaver CS3's new features, select the "What's New in Dreamweaver" option from the Help menu. The Help system launches and you can access a categorized list of new features that includes short descriptions and links to more detailed discussions in the electronic help system. Unfortunately, they neglected to put references to the appropriate pages in this *Missing Manual*.

Detailed Assistance

For detailed information on specific features of the program, turn to the Dreamweaver Help system. This electronic guide includes information on all the program's features. While the documentation is much better than in previous versions of the program, its coverage sometimes lacks detail. Choose Help → Dreamweaver Help or press F1 to open this help system.

Adobe also has a more interactive version of their help system online—it's called LiveDocs. This Web-based reference includes much of the same content you'll find in the program's help system, with one notable addition: the ability to leave comments. It's a great way for Dreamweaver fans to point out problems in the documentation, clarify confusing explanations, and share undocumented tips and tricks.

To get to this tool from within Dreamweaver, choose Help → Help Resources Online. This opens a browser window and connects to Adobe's Web site, so you need to be connected to the Internet. The Web page that loads includes links to "livedocs" for Dreamweaver, and, if you're the programming type, developer guides for the Spry framework, as well as two guides for extending Dreamweaver's features with your own Extensions (see page 738 for more on Extensions).

Tip: If you're the type who'd rather print out an entire manual and read it offline, you can download PDF files of the documentation on the Web page that appears when you choose Help → Help Resources Online.

If you're interested in writing your own Web code, Dreamweaver's Reference window (select Help → Reference or Window → Reference, or press Shift-F1) provides in-depth information on HTML, CSS, JavaScript, ASP, JSP, ColdFusion, and Web accessibility.

Getting Help from Adobe

You can also get more up-to-date and personalized support from Adobe, ranging from technical notes on the Adobe Web site to pay-as-you-play support plans.

Adobe Web Site

www.adobe.com/support/dreamweaver/

The Dreamweaver support page (also available from Help → Dreameaver Support Center) is your command center for finding help from Adobe. You can click the Contact Customer Service or Contact Technical Support links to create an ominous sounding "Customer Service Web Case" to request support and track your support requests. In addition, the Support Center page lists the top support issues and recent Dreameweaver-related documents that have been added by the support team. You can also search the vast database of technical notes (short articles on specific, tweaky problems) that just may hold the answer you're seeking.

For tutorials and in-depth articles on using Dreamweaver, turn to Adobe's Developer Center—choose Dreamweaver Developer Center from the Help menu. This site includes sample database applications, video tutorials, and in-depth articles. It's worth checking out frequently.

Paid Support

www.adobe.com/support/programs/dreamweaver/

If you have deep pockets, then you can also turn to three levels of personalized, fee-based support, ranging from $39 for a single incident to the whole-hog luxury of the Gold Support program (for pricing on this option you are instructed to "contact your Adobe reseller"—watch out!). For more information on these programs, go to the Web page whose address appears above. Each program has its own phone number, so read the Web site to determine the type of support (Bronze to Gold) that you need. If you have just a single nagging question, the single-incident help program gets you an Adobe technician who will work with you to resolve the issue. But at $39, make sure you've tried to answer the question yourself first using one of the free resources listed in this appendix. Customers in the U.S. and Canada should call 1-866-MYADOBE to order this service.

The Forums

Adobe provides both online forums that you get to with a browser and newsgroups that require newsgroup-reading software like the software built into Outlook Express. To get to either of these, choose Help → Adobe Online Forums or visit *www.adobe.com/cfusion/knowledgebase/index.cfm?id=tn_12606*. The forums are a terrific source of information, offering almost real-time answers on Dreamweaver and related Web design techniques. Adobe sponsors several forums and newsgroups. Of most interest to average Dreamweaver users are the General Discussion forum—for answers to basic questions—and the Application Development forum, where people discuss Dreamweaver's dynamic Web page features. If you're struggling with Dreamweaver's new Spry tools, the Dynamic HTML General Discussion forum is a good place to seek help. Odds are one of the many knowledgeable experts who always seem to be hanging around will come back with an answer, sometimes within minutes. (If you're new to forums, *www.adobe.com/support/forums/using.html* explains how to use them.)

You can access the Web forums for Dreamweaver directly on this page: *www.adobe.com/cfusion/webforums/forum/index.cfm?forumid=12*.

Help from the Real World

If Adobe doesn't have the answer, there's probably a Web site somewhere that does. In fact, you're likely to find more honest critiques of the program on some of these sites. Here are two of the best non-Adobe sites for answers.

DMX Zone

www.dmxzone.com/

The DMX Zone includes tutorials, extensions, and Adobe-related news. It also offers "Premium Content," a subscription-based service that provides more in-depth information on Dreamweaver.

Community MX

www.communitymx.com

Another subscription service (it's so hard to find free help these days). This site has lots of material for all things MX (Dreamweaver once had "MX" in its name), including Flash and other Adobe programs. It does have some free content as well, and it's updated regularly.

Help Creating Your Own Extensions

If you're excited by the possibilities of the Dreamweaver extensions (discussed in Chapter 21), you may want to have a go at creating your own. You should be well versed in JavaScript and have an interest in programming. To help you out, Dreamweaver includes a *detailed* electronic help system covering every aspect of extension development. Choose Help → Extending Dreamweaver, which launches an electronic help system. You can view its table of contents or use a search feature.

In addition, you'll need to learn Dreamweaver's advanced programming interface (API). An API lets you use JavaScript to communicate with and control Dreamweaver. It's not for the faint of heart, however; take a look by choosing Help → API Reference.

Finally, after creating your extension masterpiece, you can submit it to the Dreamweaver Exchange to show off your programming talent to the world. This Web page has more information on how to do that: *www.adobe.com/cfusion/exchange/upload/*.

APPENDIX

B

Dreamweaver CS3, Menu by Menu

Dreamweaver CS3: The Missing Manual is quite complete; in its pages, you'll find descriptions of every major Dreamweaver function (and most minor ones). In the interests of completeness, however, here's a quick reference to every command in every menu—and the answer to the occasional "What does that mean?" mystery.

File Menu

The commands in the File menu control the open Dreamweaver document as a whole. They also include basic file functions like saving and quitting:

- **New.** Opens the New Document window, which lets you select a new, blank document among many different types, from basic HTML pages to dynamic pages like ASP or PHP. This window also lets you access templates you've created for your site.
- **Open.** Opens the standard Open File dialog box so you can choose an existing Dreamweaver document to open. You can set the Show pop-up menu to show only specific types of documents—only HTML or style sheets, for example. The Preview button displays a thumbnail image of the document, if one's available.
- **Browse in Bridge.** Bridge is Adobe's file manager program. It's like the Microsoft Explorer or Mac Finder. Bridge is a way to browse, find and open documents. It's part of Adobe's graphic heritage and works best with image files—in other words, Photoshop and Illustrator files, *not* Dreamweaver documents.

- **Open Recent.** Displays a submenu that lists the 10 most recently opened documents. Selecting a document from the list opens it. The last option in this menu, "Reopen Documents on Startup," is kind of cool. If you quit Dreamweaver when any documents are still open (and this option is checked), those documents automatically reopen the next time you start up Dreamweaver.
- **Open in Frame.** Opens an existing HTML page within one frame of a frameset. To make this command available, you must first click inside a frame to select it—not just in the Frameset document. The Select HTML file dialog box opens and lets you navigate to the file you wish to insert into the frame. You can also choose to make the file's URL relative to the document or the root folder, as described in Chapter 5. (See note about frames in the box on page 163.)
- **Close.** Closes the open Dreamweaver document. If you have unsaved changes, Dreamweaver gives you the opportunity to save them.
- **Close All.** Closes *all* currently open documents. If you have unsaved changes, Dreamweaver gives you the opportunity to save them.
- **Save (Save Frameset/Save Frame).** Saves any changes you've made to your document. The Save command is dimmed if you haven't made any changes to the document since the last time you saved it.

Note: If you're working on a frames-based document, this command may say Save Frameset or Save Frame, depending on what's selected.

- **Save As (Save Frameset As/Save Frame As).** Saves a copy of the current document under a new name, closing the original version and leaving the new version onscreen. Here again, if you're working on a frames-based document, this command says either Save Frameset As or Save Frame As, depending on what's selected.
- **Save All.** Saves changes to all the open documents.
- **Save to Remote Server.** Lets you save the current file to *any* site for which you've defined a remote site. In other words, if you use Dreamweaver's FTP feature to move your files to a Web server (see Chapter 17), this option lets you directly access that Web server. In fact, it lets you access any Web server for any Web site you've defined in Dreamweaver. Because of this behavior, this option can be risky. You can accidentally save a file into the wrong Web site, or in the wrong folder of the right Web site. Therefore, it's generally better to use the Files panel and its "Put Files" button—see page 620.
- **Save as Template.** Saves the current document as a template file with the suffix .dwt. The "Save as Template" dialog box appears, so you can specify the template's file name, and indicate which site it belongs to. Dreamweaver automatically saves all template documents in a Templates folder in the selected site's folder. Templates are discussed in Chapter 19.

- **Revert.** Undoes any changes you've made to the document since the last time you saved it. Edit → Undo is often a better choice; it might take a few more steps to undo all the changes you've made, but it can actually undo changes *past* your last save. So if you're one of those gotta-save-it-every-5-seconds types, the Undo command is for you.
- **Print Code.** Prints the code (that is, what you see in Code view) of the current document.
- **Import.** Lets you import data from other sources into your Dreamweaver document, such as XML data into a Template document, HTML generated by Microsoft Word, or tabular data from a spreadsheet program like Microsoft Excel. (Use the submenu to specify which.)
- **Export.** Extracts tabular data, Cascading Style Sheet styles, or template data as XML from your Dreamweaver document, for use in other applications.
- **Convert.** Converts more modern technologies such as Cascading Style Sheets into code that's understandable by older browsers. In addition, you can convert older HTML pages into a variety of more modern formats like HTML 4.01 Strict and two forms of XHTML. Unfortunately, it's kind of hit-or-miss: this feature can't always update older files to more modern standards.
- **Preview in Browser.** Opens the current document in your Web browser. By selecting Edit Browser List, you can add new browsers to, or delete browsers from, your browser list, or specify a preferred browser.
- **Check Page.** Checks the current page for a variety of problems, such as broken links, code that's incompatible with various browsers, accessibility limitations, and invalid HTML or XML code. These same tools are available from the Results panel for checking an entire site's worth of files—choose Window → Results, and then click an appropriate tab—like the Link Checker to check links.
- **Compare with Remote/Compare with Testing.** Lets you use a third-party code-comparison tool to see how a local copy of a page differs from either the remote copy (on the Web server) or a copy on your testing server. This lets you see exactly what code differs between two copies of the same page. This feature is discussed on page 387.
- **Design Notes.** Opens the Design Notes window (Chapter 17), where you can add additional information about the document, set the status, and choose to have the Design Note appear whenever the document is opened.

Note: To use Design Notes on your site, you must make sure that in the Site Definition window's "Design notes" section, the Maintain Design Notes option is selected.

- **Exit/Quit.** Exits Dreamweaver. If any of your open Dreamweaver documents have unsaved changes, the program prompts you to save them before quitting.

Edit Menu

The Edit menu applies common document changes like copying and pasting:

- **Undo.** Undoes the most recent change made to your document. You can choose this command repeatedly to move progressively backwards through your changes, even *after* you've saved the document.
- **Redo (Repeat).** Restores whatever changes you just made by using the Undo command. Selecting Redo multiple times moves you progressively forward through changes you've undone. If you've just performed an operation other than Undo, Repeat appears instead of Redo. This property lets you repeat the last action. For example, if you just pressed Delete, the Repeat command presses it again.
- **Cut.** Deletes the selected text or objects from the document, and copies them to the invisible Macintosh or Windows Clipboard so they can be pasted elsewhere. (The Clipboard holds only one selection at a time.)
- **Copy.** Copies the selected text or object to the Clipboard so it can be pasted elsewhere—without disturbing the original.
- **Paste.** Places the most recent selection from the Clipboard into your document at the insertion point.
- **Paste Special.** Opens the Paste Special window, which lets you choose how you wish to paste the Clipboard into your document. Options range from Text Only for just plain text to increasingly more elaborate options, which force Dreamweaver to attempt to preserve various levels of formatting, such as styles, bold, italics, bulleted lists, and so on.
- **Clear.** Deletes the selected text or objects from the document without placing it on the Clipboard.
- **Select All.** Selects everything in the document so you can make document-wide changes in one fell swoop.
- **Select Parent Tag.** Increases the current selection to include everything within the *parent tag*, including its content. If you had a table cell selected, this command would increase the selection to the entire table *row*. Choosing the command a second time would increase the selection to include the entire table. In short, this command ensures that any changes you make apply to the entire tag.
- **Select Child.** Decreases the current selection to include everything within the child tag, including its contents. If you selected a table row, choosing this command would decrease that selection to include only the first table *cell* and its contents.
- **Find and Replace.** Opens the "Find and Replace" window, which you can use to search the document—or entire site—for a specific word, tag, or source code, and replace it with something different (see page 718). This command lets you make such changes either en masse or one instance at a time.

- **Find Selection.** This command lets you find another instance of the current selection. Say you've selected the word "Mothball" on the page. With this command, you search the page for another example of "Mothball."
- **Find Next.** Uses the most recent search settings from the "Find and Replace" window to search the current document, highlighting the next instance of the requested search item.
- **Go to Line.** Opens the Go To Line dialog box. Type a number, and Dreamweaver positions the cursor at the beginning of the specified line of code. (Available only in Code view.)
- **Show Code Hints.** Immediately displays any code hints (overriding the delay set in the Preferences window) available for the current tag. Code Hints, described in Chapter 10, provide a pop-up menu of tag properties appropriate for the current tag (available only in Code view, and when using the Insert Tag command [Ctrl-T]).
- **Refresh Code Hints.** Doesn't seem to do much of anything.
- **Code Hint Tools.** When working in Code view, lets you access Dreamweaver's color picker, "Browse for File" button, and list of fonts so you don't have to type things like *#FF6633, ../../images/dog.gif*, or *Arial, Helvetica, sans-serif*, every time you use a color, link to a file, or want to use a font.
- **Indent Code.** Adds one indent before the selected line of code. (Available only in Code view.)
- **Outdent Code.** Removes one indent from the selected line of code. (Available only in Code view.)
- **Balance Braces.** When you're editing a script in Code view, this command helps you check for unbalanced braces (that is, an introductory "{" without a closing "}") by highlighting the matching tags enclosing the selected code. It doesn't do anything for plain HTML, but if you're writing a JavaScript program or using a dynamic programming language like PHP or ASP, it can help identify missing braces—a common source of programming errors. Works with ( ) as well.
- **Repeating Entries.** Lets you cut, copy, paste, and delete repeating regions in templates. Repeating regions are described in Chapter 19.
- **Code collapse.** Hides a selection of code in Code view, so you need to see only the code you're interested in working on. This feature is discussed on page 379, and since the same options are available more directly from the coding toolbar, you can skip these menu options.
- **Edit with External Editor.** If you haven't already specified an external HTML code editor, such as BBEdit or Notepad, to use when editing large amounts of source code, this command opens the Preferences window so that you can find and select one on your hard drive. Once you've specified an editor, this command opens the current document in that editor.

- **Tag Libraries.** Lets you modify the way Dreamweaver writes code for various types of tags: HTML, ColdFusion, ASP, and so on. You can create new tag libraries for working with other types of tag-based languages, or modify the ones that ship with Dreamweaver.
- **Keyboard Shortcuts.** Opens the Keyboard Shortcuts window, and shows you all Dreamweaver's current keyboard shortcuts. You can create a new set of shortcuts for specific sites or programs, or export the settings to HTML to share with others. (You must duplicate the factory settings before you can add or delete your own shortcuts.) Details are in Chapter 21. (In Mac OS X, this option appears under the Dreamweaver menu.)
- **Preferences.** Opens the Preference window, which is full of options that customize the way Dreamweaver works. There are 20 categories of preferences, including the color and format of different HTML tags, shorthand for CSS styles, and the order in which panels appear on the screen. (In Mac OS X, this option appears under the Dreamweaver menu.)

View Menu

The View menu controls the document window's appearance. A checkmark in the menu lets you know which view you're in:

- **Zoom In.** Zooms in on the document in 50 percent increments. If you're looking at a document at normal size (100 percent), selecting this option zooms in to 150 percent; selecting it again zooms in to 200 percent.
- **Zoom Out.** Zooms out from the document in 50 percent increments.
- **Magnification.** Lets you choose from a list of magnification levels from the absurdly small and illegible 6 percent all the way to a ridiculously large, land-of-the-giant-pixels 6,400 percent.
- **Fit Selection, Fit All, Fit Width.** Additional magnification options that zoom in or out, depending of the size of the document or selected element.
- **Code.** Displays the file's source code.
- **Design.** Displays the file's visual design.
- **Code and Design.** Splits the document window into two panes: source code on top, visual design at the bottom. You can adjust how much of each pane is visible by dragging the center divider up or down.
- **Switch Views.** Switches between the Code and Design views.
- **Refresh Design View.** Updates the Design view to reflect changes you've made directly to the source code in either Code view or split (Code and Design) view.
- **Head Content.** Opens a new menu bar in the main document window that contains shortcuts to accessing the file's Head contents. You can use these menu items to highlight your document's Title tags, meta tags, and scripts, and then, in the Property inspector, edit their content.

- **Noscript Content.** When inserting JavaScript code into the document window, you can also include what's called "Noscript" tags—information that appears in browsers that don't understand JavaScript (of which there are very few), or which have their JavaScript turned off. After selecting this option, all information inside noscript tags appears in the document window. To hide this information, select this menu option again.
- **Table Mode.** Lets you switch between the standard Table view, Expanded Tables view and something called Layout Table view. Layout Table view is a holdover from earlier versions of Dreamweaver. This view is intended to make creating table-based layouts easier, but more often creates hard-to-edit HTML. Layout Table View used to appear front and center in the program, but the Adobe engineers have hidden it away in this menu, so that those who used the tool in the past can continue to use it. But don't you be tempted to use it! CSS is a far superior way of laying out Web pages (see Chapter 9 for the details).
- **Visual Aids.** Lets you summon onscreen symbols that represent typically invisible page elements like image maps, anchors, and borders.
- **Style Rendering.** Lets you hide or show the effect of all style sheets on a page, or selectively display the formatting changes caused by a style sheet that's applied for a particular media—for example, screen only or printer only.
- **Code View Options.** Lets you adjust the appearance of your HTML code in Code view. You can turn on (or off) options that wrap lines of text to fit in the document window, add line numbers, highlight invalid HTML, turn on syntax coloring, or indent lines of code.
- **Rulers.** When you choose Show, Dreamweaver displays rulers along the top and left sides of the document window. Using the options you find here, you can choose your ruler units: pixels, inches, or centimeters. You can also reset the orientation of the two rulers so that both start from zero in the screen's upper-left corner.
- **Grid.** Places a grid of vertical and horizontal lines over the document window to use as a guide when building your layouts. Selecting Edit Grid opens the Grid Setting dialog box, where you can adjust your grid's colors, spacing, behaviors, and line appearance.
- **Guides.** Shows, hides, locks, and erases user-added guidelines that have been dragged from a ruler onto the page. Also controls options for guides, and displays guidelines that mark the visible area of a Web browser window on monitors of different resolutions.
- **Tracing Image.** Adjusts the document's background tracing image. You can load a new tracing image, make a current one visible, or adjust its position.
- **Plugins.** Lets you "play" browser plug-ins within the document window to test embedded media. You can choose to play a document's plug-ins one at a time, or all at once, to simulate how the page will look to your viewers.

- **Display External Files.** You can insert images and other files from your own or other Web sites on the Internet. When you insert an image, for example, instead of selecting a file from your site, you can type or paste an absolute URL (page 154) to a graphic located on the Internet. Dreamweaver even displays the image in Design view, but only if this option is checked. Because it depends on an Internet connection to display the image, pages with links to external files may take longer to display in Dreamweaver (since it has to get the images and files over the Web). If you have lots of external images and files, and your pages open sluggishly in Dreamweaver, uncheck this option.

- **Hide Panels (Show Panels).** Hides all open panels. If panels are already hidden, the command says Show Panels instead, and restores the panels to their original positions.

- **Toolbars.** Displays toolbars for use with Dreamweaver. Select Document from the submenu to display the Toolbar menu at the top of the document window. This menu offers common commands like the document's View settings, page title, file management options, code navigation options, and browser preview. The Standard toolbar option displays a toolbar with common buttons for common commands, such as opening files; closing files; and cutting, copying, and pasting content. The Style Rendering toolbar lets you toggle style sheets off and on like the Style Rendering menu described earlier in this section.

Insert Menu

The Insert menu adds selected page elements to the document at the insertion point's position. The commands listed here correspond to the buttons on the Objects panel:

- **Tag.** Opens the Tag Chooser window, which provides access to all the tags—not only HTML, but any tag Dreamweaver has stored in its Tag Library (see entry under the Edit menu on page 954). You can insert any tag and set any of its properties from this window. However, Dreamweaver doesn't make sure you're inserting the tag correctly, so you should understand HTML (or the tag language you're using) before trying this option.

- **Image.** Inserts an image file, such as a JPEG, PNG or GIF, into the document. The Select Image Source window appears, and lets you navigate to the file you want on your hard drive. You can choose to make the URL for the file relative to either the document or the Site Root.

- **Image Objects.** Lets you insert placeholder graphics, rollover images, or HTML from Fireworks. These options are discussed in Chapter 6. Avoid the Navigation Bar listed here—it's left over from earlier versions of Dreamweaver and it's just plain bad. You're much better off using the new Spry Navigation Bar discussed in Chapter 5.

- **Media.** Inserts other types of media files, including Flash, Shockwave, Generator Applets, Plug-ins, and Active X. In most cases, the standard Select File window appears, which you can use to navigate to the desired file. This menu also lets you insert Flash text, Flash buttons, and the Image Viewer Flash element (an old and clunky Flash-based slideshow tool).

- **Table.** Inserts a new table into the document. The Insert Table dialog box appears, and lets you format the table by specifying the number of rows and columns; the table width; measurements for cell padding, cell spacing, and the table border; and whether or not and where to include table headers.

- **Table Objects.** Provides methods to insert tabular data (see the Import entry under the File menu on page 951) and add other table-related tags such as the <th>—table header—tag into the page. The tag options listed under this menu item assume you understand HTML and let you just insert the tags, without making sure you're doing it correctly.

- **Layout Object.** Lets you insert absolutely positioned divs, regular divs, table layout cells, and table layout tables. This menu also includes the new Spry Widgets like the Spry Navigation bar discussed in Chapter 5, and the Spry panel widgets discussed in Chapter 12.

- **Form.** Inserts Form Objects—the <form> tag, text fields, buttons, checkboxes, or lists—into the document. (If you haven't already inserted the <form> tag, Dreamweaver prompts you to do so.)

- **Hyperlink.** Inserts a link. The Insert Hyperlink dialog box lets you specify the text that should appear inside the link, the file to link to, as well as many other link options such as target and tab index.

- **Email Link.** Creates a new email link at the insertion point. The Insert Email Link dialog box appears; specify both the email address and the link's text (such as "Click to email me").

- **Named Anchor.** Inserts a named anchor for adding links *within* a page. See page 167.

- **Date.** Inserts the current date into the document. The Insert Date dialog box lets you format the appearance of the day of the week, the date, and the time. You can also elect to have the date automatically updated each time the document is saved.

- **Server-Side Include.** Opens a Find File window, from which you select a file that's dynamically added to the content of your page. Works only with special server setup, such as the dynamic server-driven pages discussed in Part 6 of this book.

- **Comment.** Inserts an HTML comment into your page. This comment isn't viewable in Web browsers, but in Dreamweaver's Design view, it appears as a little gold shield. Use these to leave notes for yourself and others about specific information about a page. For example, a comment indicating where an ad should be placed can help someone updating the page.

- **HTML.** Menu including lots of specific HTML tags, such as a horizontal rule, frames, text objects (many of which are also available under the Text menu), script objects for JavaScript, and head tags that go in the *head* portion of a Web page—including meta tags such as keywords and descriptions used by some search engines.
- **Template Objects.** When working on a template file, this menu option lets you insert many of Dreamweaver's template features, such as Optional, Editable, and Repeating Regions.
- **Recent Snippets.** Lists the most recently inserted snippets. Selecting a snippet from the list inserts it into the document. Snippets are discussed in Chapter 18.
- **Spry.** Inserts any of the new Spry objects introduced in Dreamweaver CS3, including the Spry Navigation bar (Chapter 5), Spry Form Validation Widgets (Chapter 11), and Spry Data and Layout widgets (Chapter 12).
- **XSLT Objects** (visible only when working on an XSL file). Inserts various objects for converting XML data into a Web browser–readable format. This feature is discussed in Chapter 26.
- **Customize Favorites.** Lets you add your favorite objects from the Insert panel into a special "favorites" tag, so your most common objects, images, divs, rollovers, tables, can be just one click away. See page 170 for more information.
- **Get More Objects.** Opens the Adobe Exchange for Dreamweaver Web site in your browser. There you can search for and download new extensions and objects to add new features to your copy of Dreamweaver. Use the Commands → Manage Extensions command to add downloaded extensions to Dreamweaver.

Modify Menu

You can use the commands in the Modify menu to adjust the properties of common document objects: like links, tables, and layers:

- **Page Properties.** Opens the Page Properties window, where you can specify document-wide attributes—such as the page title, background and link colors, page margins, and background image—or select a *tracing image* to use as a reference for designing the page.
- **Template Properties.** Opens the Template Properties window, where you can modify settings for various template features, such as controlling the visibility of optional regions, the properties of editable attributes, and the values of any template expressions you've created. Available only when you're working on a template-based page, as described in Chapter 19.
- **Selection Properties.** When this item is selected (as indicated by a checkmark in the menu), the Properties inspector palette is on the screen; you use it to edit the current settings for selected page elements. This command is the same as choosing Window → Properties.

- **CSS Styles.** Controls the display of the CSS Styles Panel. A checkmark tells you that the panel is open. This item has the same effect as choosing CSS Styles from the Window menu.

- **Edit Tag.** Opens a dialog box with detailed options for the HTML tag that's active in the current document. This advanced feature is for the true HTML geek—it gives access to *all* the properties for a specific tag (not just the ones Dreamweaver displays in the Property inspector). But skip this option: The Tag inspector, which provides a less intrusive panel with all the same options, is better. Choose Window → Tag Inspector to open it.

- **Quick Tag Editor.** Lets you edit an HTML tag without leaving Design view. If nothing on the page is selected, the Quick Tag editor prompts you to enter a new HTML tag at the insertion point (by choosing from the alphabetical menu). But if text or an object is already selected when the Quick Tag Editor is opened, the window displays the selection's HTML tags for editing.

- **Make Link.** Turns a highlighted page element (graphic or text) into a link. The standard Select File dialog box appears; choose the document you want to open when someone clicks the link.

- **Remove Link.** This command is available only when a link is selected or the insertion point is inside a link. Remove Link deletes hyperlinks by removing the <a href> tag from the selected text or image.

- **Open Linked Page.** Opens the linked page in a new document window. This command is available only when a link is selected or the insertion point is inside a link. (You can, however, hold down the Ctrl key [⌘] and double-click a link to open the page to which it's linked.)

- **Link Target.** Sets a link's target and defines whether the linked page appears in the same browser window or a new one. You can choose from blank, parent, self, or top targets, or manually define the target in the Set Target dialog box. This command is available only when a link is selected or the insertion point is inside a link. (See Chapter 5 for details on links.)

- **Table.** Opens a list of options for modifying a selected table. You can adjust the number of rows and columns, add row or column spans, or completely clear cells' defined heights and widths (see Chapter 7).

- **Image.** Opens a list of options for modifying a selected image, including optimizing it in Fireworks, or using one of the new built-in image-editing tools, such as the crop, resample, and sharpen tools. See page 219.

- **Frameset.** Offers options for splitting the current page into *frames*. Or choose the Edit No Frames Content command to create alternative Web-page material that can be read by older browsers that don't support frames. Frames aren't used much any more, and they're best avoided by the professional Web designer.

- **Arrange.** Lets you change the Z-index (the front-to-back order) of overlapping absolutely positioned elements. You can choose to send one element in front of another absolutely positioned element, send it to the back, and so on. You can also tell Dreamweaver to prevent overlapping elements altogether. If two or more layers are selected, you can also choose from one of this menu's alignment options to align things like the tops of two elements. See Chapter 9 for more on absolutely positioned elements.

- **Convert.** Don't use this menu! It's meant to take a table-based layout and turn it into a layout using CSS absolute positioning. It doesn't work well at all. Better to recreate your design using the CSS layout techniques described in Chapter 9. The other option—converting absolutely positioned elements to table layout—produces awful HTML and no benefit (unless you're building a "Retro Web Design Circa 1998" Web site).

- **Navigation Bar.** Skip this option. It's meant to help edit the navigation bar available from the Insert → Image Objects (see "Image Objects" on page 956). The Spry Navigation bar discussed in Chapter 5 is far superior.

- **Library.** Lets you add selected document objects to the site's Library file (Chapter 18). You can also update the current document, or multiple documents, to reflect any changes you've made to a Library object.

- **Templates.** These commands affect *template* documents (Chapter 19). Using these commands, you can apply a pre-existing template to the current page, separate the page from its template, or update the page to reflect changes made to its template. If the open document is a template file, you can use this menu to create or delete editable regions (remove template markup), and update all site files based on that template. You can also use this menu to add repeating template regions and editable tag attributes.

- **Timeline.** The submenu provides options for adding or deleting timelines, animation frames, objects, or behaviors. This feature is a bit archaic and adds lots of JavaScript code to your page. If you're still interested, you can download a chapter from an earlier edition of this book, which discusses how to use this feature: *www.sawmac.com/missing/dwmx2004/DWmx_Ch12.pdf*.

Text Menu

As you can guess, the commands in the Text menu format and modify the document's text:

- **Indent.** Adds one level of indentation to everything within the current block-level element (paragraph, headline, bulleted list).

- **Outdent.** Removes one level of indentation from everything within the current block-level element.

- **Paragraph Format.** Applies a paragraph format, such as Heading 1, Heading 2, or preformatted text, to all the text in the current block-level element. You can also go to the submenu, and choose None to remove the paragraph formatting.

- **Align.** Aligns text in the selected paragraph to the left margin, center, or right margin of the document. If the paragraph is inside a table cell or layer, Dreamweaver aligns it with the left, center, or right of that cell or layer.

- **List.** Turns the selected paragraph into an ordered, unordered, or definition *list*. You can edit the list's format by selecting the submenu's Properties option.

- **Font.** Lets you choose from a list of common font combinations for application to the selected text. When displaying text, your visitor's browser moves down the list of assigned paragraph fonts until it finds one installed on its system (Chapter 3). You can create your own combination of paragraph fonts by going to the submenu, and choosing Edit Font List.

- **Style.** Applies predefined text styles—such as Bold, Italic, or Strikethrough—to the selected text.

- **CSS Styles.** Lets you create new CSS (Cascading Style Sheet) styles, and then apply them to selected text (Chapter 4). You can also choose to attach an existing style sheet to the current document, or export the document's own style sheet for use in other sites.

- **Size.** Applies a new size to the selected text. Sizes range from 1 (the smallest) to 7 (the largest); as described in Chapter 3, HTML sizes are relative, and they change depending on your visitors' browser preferences. CSS offers a much better alternative that's not only more flexible, but also uses less code and is more in line with current Web standards and techniques (see Chapter 4).

- **Size Change.** Increases or decreases the selected text's size relative to the document's base font size (which is set to 3 by default). The note about CSS in the previous item applies here, too.

- **Color.** Opens the standard Mac or Windows color picker dialog box, so that you can choose a color to apply to the selected text. *Macintosh*: You can choose from a variety of color palettes, including CMYK, RGB, HTML (Web safe), HSV, and HLS. *Windows*: In general, the Property inspector's color box is a better way to assign Web colors to text.

- **Check Spelling.** Checks the current document for possible spelling errors (see page 79).

Commands Menu

You can use the Commands menu to apply advanced features to your Dreamweaver document. Some menu items, such as the Record commands, eliminate repetitive tasks; others, such as the Clean Up HTML command, fix common problems in a single sweep:

- **Start/Stop Recording.** Records a series of actions that can then be reapplied to other parts of the document (Chapter 20). When you select the Start Recording command, Dreamweaver records each of your actions until you choose Stop Recording. Note that Dreamweaver retains only one recorded command at a time.

- **Play Recorded Command.** Reapplies the most recently recorded command.
- **Edit Command List.** Opens a list of all saved commands. You can rename the commands, or delete them permanently.
- **Get More Commands.** Opens the Adobe Exchange for Dreamweaver Web site in a new browser window so that you can search for and download new extensions or commands. Extensions are downloaded to your Extension Manager (see Chapter 21).
- **Manage Extensions.** Opens the Extension Manager, a program that lets you manage extensions you download from the Adobe Exchange Web site (Chapter 21). The Extension Manager helps you install, delete, and selectively disable extensions.
- **Apply Source Formatting.** Changes you make to Dreamweaver's HTML source formatting (which is defined in the Preferences window and the SourceFormat.txt file) apply only to newly created documents. This command, on the other hand, offers a way to apply these formatting preferences to existing HTML documents.
- **Apply Source Formatting to Selection.** Same as the previous command, "Apply Source Formatting," but applies only to whatever you've selected. In this way, you can make sure the HTML for a <table> is nicely formatted (by selecting it and applying this command), while the rest of your finely crafted HTML is left alone.
- **Clean Up HTML/XHTML.** Opens a list of options for correcting common HTML problems, such as empty tags or redundant nested tags. Once you've selected what you'd like to fix, Dreamweaver applies those changes to the current document, and, if requested, provides a log of the number and type of changes made. (See Chapter 16.)
- **Clean Up Word HTML.** If you import HTML that was generated by Microsoft Word, you often end up with unnecessary or cluttered HTML tags that can affect your site's performance. This command opens a list of options that can correct common formatting problems in Microsoft Word's HTML. Dreamweaver applies your selected changes to the document and, if requested, displays a log of the number and type of changes it made.
- **Add/Remove Netscape Resize Fix.** This command lets you insert JavaScript code into your document that counteracts a bug in version 4 of Netscape Navigator (the bug causes pages that use layers to display incorrectly when the browser window is resized). The inserted code makes the page reload every time someone resizes a browser window. Does anyone still use Netscape 4?
- **Remove Flash Video Detection.** If you've added Flash Video to your page as described on page 546, Dreamweaver inserts some JavaScript code to help make sure your site's visitors can view the video. Unfortunately, if you just delete the movie from your page, the JavaScript code is left in the page. This command removes it.

- **Optimize Image.** Opens the selected image in the Image Preview window, where you can experiment with different compression settings to find the best balance between file size and image quality. See page 205.
- **Create Web Photo Album.** Lets you turn a folder of images into a Web-based photo album. The Create Web Photo Album window appears; specify a title for your album, the source folder, and so on.

Note: This command requires Adobe's Fireworks image-editing program, which creates thumbnail and full-size versions of each image. Dreamweaver then creates a Web site with one page displaying all the thumbnail images. The thumbnails are linked to individual HTML pages containing the full-size images.

- **Sort Table.** Sorts the information in a selected table. You can choose to sort alphabetically or numerically, in ascending or descending order. You can't apply this command to tables that include *rowspans* or *colspans*.
- **Insert Mark of the Web.** This is applicable only to Windows XP with Service Pack 2 and Vista. The Service Pack 2 update for XP inserted code into Internet Explorer to "protect" it from malicious Web page code. Unfortunately, this also has the effect of preventing you from previewing JavaScript effects—like the image rollovers discussed in Chapter 6—or Flash movies. Strangely, this happens only when you preview a local page (on your own computer), not when you view a page on the Internet. This menu option lets you overcome that peculiar problem.
- **Attach an XSLT Stylesheet.** This menu option, available only when working on a XML file, lets you attach an XSL file, which miraculously transforms cryptic XML into a beautiful, browser-viewable page. This feature is discussed in Chapter 26.

Site Menu

As its name suggests, the commands in this menu apply to your entire Web site, rather than one document at a time. These commands can help keep your Web site organized, and promote collaboration between large workgroups:

- **New Site.** Opens the New Site window, where you can set up a site for working in Dreamweaver.
- **Manage Sites.** Opens the Manage Sites Panel where you can create, delete, or edit site definitions. See Chapter 15.

Note: The next five menu commands let you transfer files between your computer (the *local* site) and a Web server (the *remote* site). These commands, in other words, don't work unless you've first defined a remote site in the Site Definition window. In addition, these operations work only on files that you've *selected* in the Site window.

- **Get.** Copies files (those you've selected in the Site window) from the remote server to the local site folder for editing. Note that if the File Check In and Check Out feature is active, the downloaded files aren't editable.
- **Check Out.** Copies files (those you've selected in the Site window) from the remote server to your local site, and marks them on the remote server as *checked out*. No one else can make changes to the document until you upload it back onto the remote server.
- **Put.** Uploads files (those you've selected in the Site window) from the local site to the remote site. The uploaded file replaces the previous version of the document.
- **Check In.** Uploads checked-out files from the local site to the remote site, and makes them available for others to edit. Once a file is checked in, the version on your local site becomes read-only (you can open it, but you can't edit it).
- **Undo Check Out.** Removes the checked-out status of selected files. The file isn't uploaded back to the remote server, so any changes you made to the file aren't transmitted to the Web server. Your local copy of the file becomes read-only.
- **Show Checked Out By.** Lets you see who's checked out a particular file.
- **Locate in Site.** When working on a document, selecting this option opens the Site window and highlights that document's file in the site's local folder.

Note: See Chapter 17 for the full scoop on remote sites, local sites, and checking files in and out.

- **Reports.** Opens the Reports window, and lists options for generating new reports (Chapter 16). Reports can monitor workflow (such as design notes and checkout status) and common HTML problems (such as missing Alt text, empty tags, untitled documents, and redundant nested tags). You can generate a report on just the open document, multiple documents, or the entire site.
- **Synchronize Sitewide.** Opens the Synchronization window, which lets you compare all your local files with all the files on your Web server. Use this to make sure all the most recent files you've updated locally are transferred to the Web server, or vice versa.
- **Check Links Sitewide.** Analyzes the current site for broken links, external links, and orphaned pages. Dreamweaver then generates a report listing all the found problems. You can fix problematic links directly in the Report window—or click the file name to open the errant file in a new document window, with the link highlighted and ready to repair.
- **Change Link Sitewide.** In one step, replaces a broken link that appears multiple times throughout your site. In the Change Link dialog box, you first specify the incorrect link; below it, enter the link with which you'd like to replace it. Dreamweaver searches your site, replacing every instance of the old link.

- **Advanced.** Provides access to advanced site options, such as the FTP Log, which opens the *FTP log*—a record of all FTP file transfer activity; "Recreate Site Cache," which forces Dreamweaver to rescan the site's files and update its cache file to reflect any changes to the files or links in the site; "Remove Connection Scripts" for removing the script files Dreamweaver creates to work with dynamic, database-driven Web sites; and "Deploy Supporting Files" to move necessary programming files to the Web server when using Dreamweaver's ASP.NET server model to build dynamic pages.

Window Menu

This menu controls which panels and windows are visible or hidden at the moment. (A checkmark in the menu denotes open panels.)

- **Insert.** Opens the Insert bar, from which you can insert various types of objects (such as images, layers, or forms) into your document. The Insert bar also contains options for switching between Layout and Standard table views, and accessing options for dynamic Web pages.
- **Properties.** Opens the Property inspector, where you can edit the relevant properties for a selected object. The options in the Property inspector depend on which page element's selected.
- **CSS Styles.** Opens the CSS (Cascading Style Sheet) Styles panel, from which you can define and edit CSS styles, or apply existing ones to selected text.
- **AP Elements.** Opens the AP Elements panel, which lists all elements that have been positioned on the page using CSS positioning. See Chapter 9 for more details.
- **Databases.** Opens the Databases panel for working with dynamic Web sites. This panel lets you connect your site to a database, view the structure of a database, and even preview data currently stored in the database.
- **Bindings.** Opens the Bindings panel, which lets you create database queries for working with dynamic sites. In addition, the panel displays and lets you add dynamic data to a Web page.
- **Server Behaviors.** Opens the Server Behaviors panel, the control panel for viewing, editing, and adding advanced functionality to dynamic Web pages.
- **Components.** Opens the Components panel, for use with ColdFusion MX and JSP sites, as well as Web Services. This advanced feature lets ColdFusion and JSP developers take advantage of prewritten, self-contained programs, which makes building complex dynamic sites easier.
- **Files.** Opens the Files panel. From this window, you can open any file, and transfer files between your computer and the remote server.

- **Assets.** Opens the Assets panel, which conveniently groups and lists all the assets (such as colors, links, scripts, or graphics) you've used in your site.

- **Snippets.** Opens the Snippets panel, which contains snippets of HTML, JavaScript, and other types of programming code. You can create your own snippets to save your fingers from having to retype frequently repeated code.

- **Tag Inspector.** Opens the Tag Inspector panel, which provides a listing of *all* properties available for the currently selected HTML tag. This uber-geek option is like the Property inspector on steroids.

- **Behaviors.** Opens the Behaviors panel, which lets you associate *behaviors* (such as swapping images in a rollover, or checking for necessary plug-ins) to selected page elements (see Chapter 13).

- **Results.** Lets you open Dreamweaver's many site tools, such as the Find and Replace command, Link Checker, and Reports command. Pick the type of site-wide action you'd like to perform using the submenu.

- **Reference.** Opens the Reference panel, a searchable guide to HTML tags, Cascading Style Sheets, and JavaScript commands. The guides are culled from the popular O'Reilly reference books and include an explanation of what specific tags do, when you can use them, and what additional components are required, as well as tips for getting the most out of them.

- **History.** Displays the History panel for viewing a record of actions performed in the current document.

- **Frames.** Displays the Frames panel for selecting frames and framesets for editing.

- **Code Inspector.** A window displaying the HTML code for the current document. You can edit the code directly in the window, while still looking at the Design view. It's often easier to just use Dreamweaver's "Code and Design" view (View → Code and Design).

- **Timelines.** Opens the Timelines panel, in which you can set up and refine animations within Dreamweaver. This feature was added in Dreamweaver MX, and then removed in Dreamweaver MX 2004…and *then* put *back in* with the Dreamweaver 7.01 updater. This feature is a bit archaic, and adds lots of JavaScript code to your page, so this edition doesn't include details on how to use it. You can, however, download the chapter from an earlier edition of this book that describes how timelines work: *www.sawmac.com/missing/dwmx2004/DWmx_Ch12.pdf*.

- **Workspace Layout.** Lets you save the position and size of Dreamweaver's panels and windows in any arrangement you like.

- **Hide Panels.** Closes all currently open panels. Choosing Show Panels reopens only those panels that were displayed before you selected Hide Panels.

- **Cascade.** By default, when there are multiple documents open, you switch from page to page by clicking on tabs that appear at the top of the document area. If you prefer to have all open documents floating and resizable within this space, this and the next two options let you "undock" the current documents. The cascade option resizes each open document and places them one on top of the other. Windows folks can redock pages by clicking the Maximize button on any currently opened document. Mac people can select the Combine As Tabs option.

- **Tile Horizontally (Windows Only).** Places all open documents one on top of the other. The documents don't float on top of each other; rather, they fill the available document area as row upon row of thin, horizontal windows. With more than a few documents open, this option displays so little of each page that it's difficult to work on any one page.

- **Tile Vertically (Windows Only).** Just like the previous command, except that documents are placed vertically like stripes going across the screen.

- **Tile (Mac Only).** This has the same effect as Tile Vertically above.

- **Combine As Tabs (Mac Only).** Returns documents that either tile or cascade (see those options above) on the screen into the single, unified tab interface.

- **Next document, Previous document (Mac Only).** This pair of commands let you step through all your open documents, bringing each document in turn to the front of the screen for editing.

- **List of Currently Open Documents.** All the documents that are currently open are listed at the bottom of this menu. Selecting a document brings it to the front for editing. But with the easy document tabs, why bother?

Help Menu

The Help menu offers useful links and references for more information about using, troubleshooting, and extending Dreamweaver:

- **Dreamweaver Help.** The electronic help system that includes a handful of tutorials, background information on Web publishing, and documentation on Dreamweaver's many features.

- **Help Resources Online.** Takes you to a Web page at Adobe.com, where you can download PDF versions of help manuals for Dreamweaver, the Spry Framework, and extending Dreamweaver. There are also links to the online version of the help system, called LiveDocs, which has the added benefit of hosting reader comments—if the help system doesn't have the answer you're looking for, perhaps someone has provided it on this Web site. (Hey, but look in this book first!)

- **Extending Dreamweaver.** An electronic help system for those interested in writing their own "extensions" to Dreamweaver. Extensions are discussed in Chapter 21.

- **Dreamweaver API Reference.** Even more in-depth information for the Extension developer. uber-geeky information on how to communicate directly with Dreamweaver. Programmers only; all others continue, move along, there's nothing to see here.
- **What's New In Dreamweaver.** An overview of the new features introduced in Dreamweaver CS3.
- **Spry Framework.** An online reference to working with and programming Spry widgets like those discussed in Chapter 12. It doesn't have any information on how to use the Spry tools built into Dreamweaver. Instead, it provides more in-depth information for programming-oriented Web designers who wish to jump into Code view, and expand on Dreamweaver's Spry features.
- **ColdFusion Help.** Takes you to an online reference to Adobe's server-side programming language, ColdFusion, on Adobe.com.
- **Reference.** Opens the Reference panel, a searchable guide to HTML tags, Cascading Style Sheets, and JavaScript, as described on page 394.
- **Dreamweaver Exchange.** Launches a Web browser and loads the home page for the Dreamweaver Exchange at Adobe.com. Here you can download extensions for adding new features to Dreamweaver (see Chapter 21 for details).
- **Manage Extensions.** Same as the Manage Extensions menu option listed under the Commands menu (see page 968).
- **Dreamweaver Support Center.** Opens Adobe's online Dreamweaver Support Center Web page in your browser. This Web site offers technical support for known bugs or common questions, downloadable updates to the program, and a link to online forums.
- **Dreamweaver Developer Center.** Opens Adobe's Dev Center—a Web site with tips, tricks, and in-depth articles aimed at Dreamweaver users of all levels.
- **Adobe Online Forums.** Opens an index of available online forums from Adobe's Web site (in your Web browser). You can use the forums to interact with other Adobe customers, post questions, share techniques, or answer questions posted by others. Requires Internet access and a newsgroup reader.
- **Adobe Training.** Opens Adobe's Training Web page, where you can spend even more money learning how to use the program. Cool! Advertising, built right into Dreamweaver.
- **Registration.** Opens a registration form window, so you can register your copy of the program with Adobe. Adobe provides a few free gifts if you register.
- **Activate.** As part of Adobe's attempt to stop piracy of their software, Software Activation contacts Adobe and makes sure that the copy you're using isn't activated on any other computers. You're limited to installing the software on one desktop and one laptop of the same operating system. If you don't activate your software, it won't run on your computer after 30 days.

- **Deactivate.** If you're moving a new computer, *do not forget* to deactivate the software on your old computer. Use this menu option to do it. Deactivating the software lets you install it on another computer.

- **About Dreamweaver (Windows Only).** Opens an About Dreamweaver window, showing your software's version number. (On the Macintosh, this command is in the Dreamweaver menu.)

Index

Colophon

Sanders Kleinfeld and Adam Witwer provided quality control for *Dreamweaver CS3: The Missing Manual*. Ron Strauss wrote the index.

The cover of this book is based on a series design originally created by David Freedman and modified by Mike Kohnke, Karen Montgomery, and Fitch (*www.fitch.com*). Back cover design, dog illustration, and color selection by Fitch.

David Futato designed the interior layout, based on a series design by Phil Simpson. This book was converted by Abby Fox to FrameMaker 5.5.6. The text font is Adobe Minion; the heading font is Adobe Formata Condensed; and the code font is LucasFont's TheSans Mono Condensed. The illustrations that appear in the book were produced by Robert Romano and Jessamyn Read using Macromedia FreeHand MX and Adobe Photoshop CS.

Web Design/Dreamweaver

Answers found here!

Dreamweaver CS3: The Missing Manual. Adobe's powerful Web design program lets you do more than ever. Whether you're sprucing up an old site or building a new one, Dreamweaver has all the tools you need—except a printed guide. Why rely on help menus or books that raise more questions than they answer? This Missing Manual is packed with easy to follow and entertaining guidance.

The important stuff you need to know

- **Getting started**—from building your first site to putting it on the Web.
- **Gain pinpoint control** over design and layout with powerful CSS tools.
- **Add interactivity with forms**, new "Spry" tools, JavaScript, and animations.
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David Pogue is a *New York Times* technology columnist, bestselling author, and creator of the Missing Manual series.

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