

# Introducing Dreamweaver MX 2004

**D**reamweaver MX 2004, by Macromedia, is a professional Web site development program for creating static pages and dynamic Web applications. Among its many distinctions, Dreamweaver was the first Web authoring tool capable of addressing multiple server models. This feature makes it equally easy for developers of ASP, ColdFusion, or JavaServer Pages to use it. In its latest incarnation, Dreamweaver MX 2004 has refined the user interface and sharpened its focus. In addition to creating straight HTML pages with enhanced Cascading Style Sheet (CSS) rendering, Dreamweaver is also suitable for coding a wide range of Web formats including JavaScript, XML, and ActionScript — to name a few.

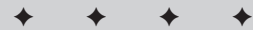
Dreamweaver is truly a tool designed by Web developers for Web developers. Designed from the ground up to work the way professional Web designers do, Dreamweaver speeds site construction and streamlines site maintenance. This chapter describes the philosophical underpinnings of the program and provides a sense of how Dreamweaver blends traditional HTML and other Web languages with cutting-edge server-side techniques and CSS design standards. You also learn some of the advanced features that Dreamweaver offers to help you manage a Web site.

## The Dynamic World of Dreamweaver

Dreamweaver is a program very much rooted in the real world. Web applications are developed for a variety of different server models, and Dreamweaver writes code for the most widely used ones. The real world is also a changing world, and Dreamweaver's extensible architecture opens the door for custom or third-party server models as well.

Moreover, Dreamweaver recognizes the real-world problem of incompatible browser commands and addresses that problem by producing code that is compatible across browsers. Dreamweaver includes browser-specific HTML validation so you can see how your existing or new code works in a particular browser. Dreamweaver even checks your pages automatically upon opening and gives you a full report that you can act on.

# CHAPTER



## In This Chapter

Understanding the Dreamweaver philosophy

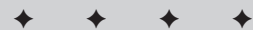
How Dreamweaver is designed

Connecting to data in Dreamweaver

Accessing next-generation features

Automating Web application production

Maintaining your Web site with Dreamweaver





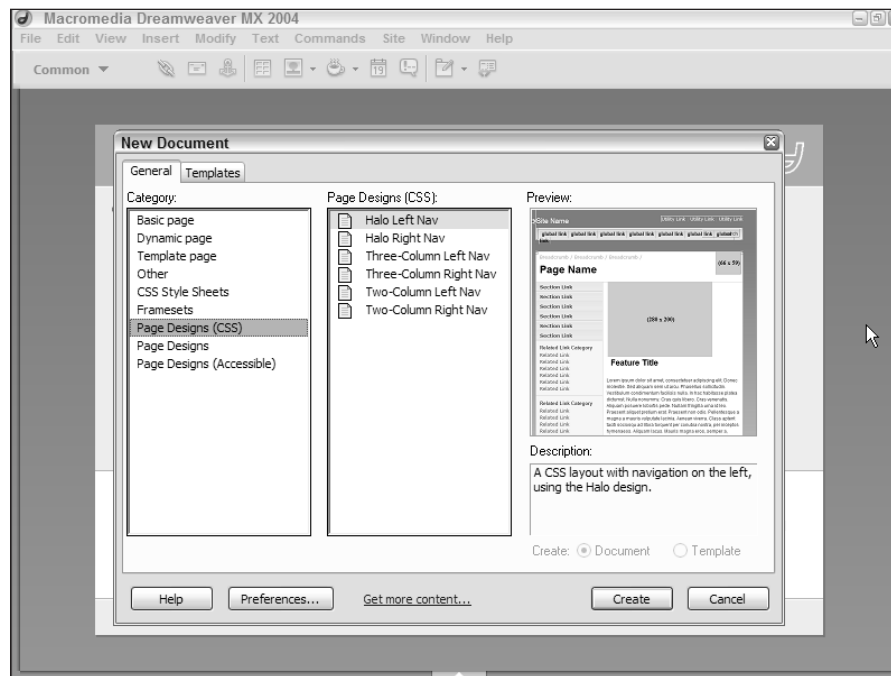
## 4 Part I ♦ Dreamweaver MX 2004 Basics

Dreamweaver MX 2004 extends the real-world concept to the workplace. Features such as the Assets panel streamline the production and maintenance process on large Web sites. The advanced Design view makes it possible to quickly structure whole pages during the production stage, while maintaining backward compatibility with browsers when the pages are published. Dreamweaver's CSS rendering is top-of-the-line and lets you design with Web standards like no other program. Dreamweaver's Commands capability enables Web designers to automate their most difficult Web creations, and its Server Behavior Builder enables them to easily insert frequently used custom code.

### Connecting to the world's data

Connectivity is more than a buzzword in Dreamweaver; it's an underlying concept. Dreamweaver makes it possible to connect to any data source supported by the most widely used application servers: ASP, ASP.NET, ColdFusion, PHP, and JSP. Moreover, the actual connection type is quite flexible; developers may opt for a connection that is easier to implement but less robust or one that requires slightly more server-side savvy and offers greater scalability. Dreamweaver offers a choice of languages for a number of applications servers and a collection of ready-to-use CSS standard templates, as shown in Figure 1-1.

Dreamweaver accesses standard recordsets — subsets of a database — as well as more sophisticated data sources, such as session or application variables and stored procedures. Through their implementation of cookies and server-side code, Web applications designed in Dreamweaver can track visitors or deny them entrance.



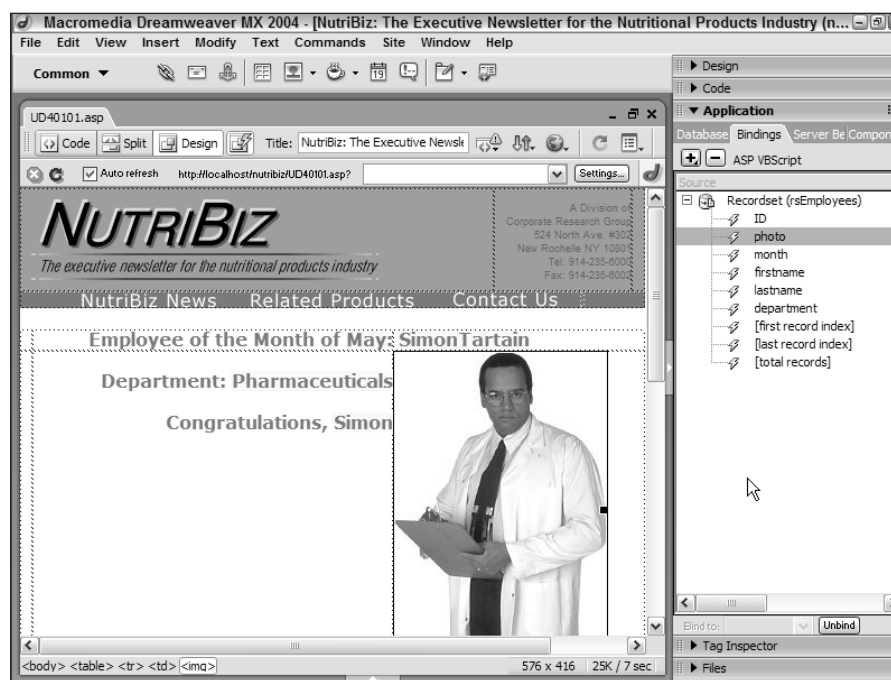
**Figure 1-1:** Get a jump-start on building your Web pages by choosing a page — and the corresponding tags — from Dreamweaver's extensive collection.



You also find support in Dreamweaver for high-end technologies such as Web services, JavaBeans, and ColdFusion components. Dreamweaver enables you to introspect elements of all technologies, enabling coders to quickly grasp the syntax, methods, and functions required.

## True data representation

One truly innovative feature of Dreamweaver integrates the actual data requested with the Web page — while still in the design phase. Dreamweaver's Live Data view sends the page-in-process to the application server to depict records from the data source within the page, as shown in Figure 1-2. All elements on the page remain editable in Live Data view; you can even alter the dynamic data's formatting and see those changes instantly applied. Live Data view shortens the work cycle by showing the designer exactly what the user will see. In addition, the page may be viewed under different conditions through the Live Data Settings feature.



**Figure 1-2:** When in Live Data view, you can edit the Web page to accommodate the actual data used, as highlighted here.

## Integrated visual and text editors

In the early days of the World Wide Web, most developers hand-coded their Web pages using simple text editors such as Notepad and SimpleText. The second generation of Web authoring tools brought visual design or WYSIWYG (what you see is what you get) editors to market. What these products furnished in ease of layout, they lacked in completeness of code. Professional Web developers were required to hand-code their Web pages, even with the most sophisticated WYSIWYG editor.

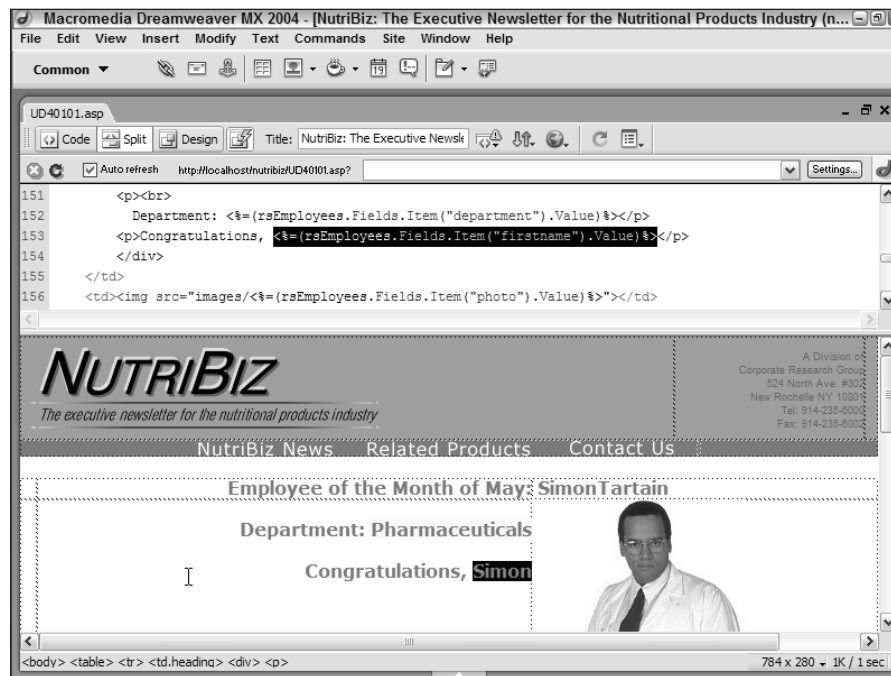


Dreamweaver acknowledges this reality and has integrated a superb visual editor with its browser-like Document view. You can work graphically in Design view, or programmatically in Code view. You even have the option of a split-screen view, which shows Design view and Code view simultaneously. Figure 1-3 shows Dreamweaver's visual editor and code editor working together. Any change made in the Design view is reflected in the Code view and vice versa. If you prefer to work with a code editor you're more familiar with, Dreamweaver enables you to work with any text editor. Moreover, the program includes two of the best: a full-version of HomeSite for Microsoft Windows developers and a trial version of BBEdit for Macintosh developers. Dreamweaver enables a natural, dynamic flow between the visual and code editors.

Dreamweaver further tightens the integration between the visual design and the underlying code with the Quick Tag Editor. Web designers frequently adjust the HTML code minutely—changing an attribute here or adding a single tag there. The Quick Tag Editor, which appears as a small pop-up window in the Design view, makes these code tweaks quick and easy.

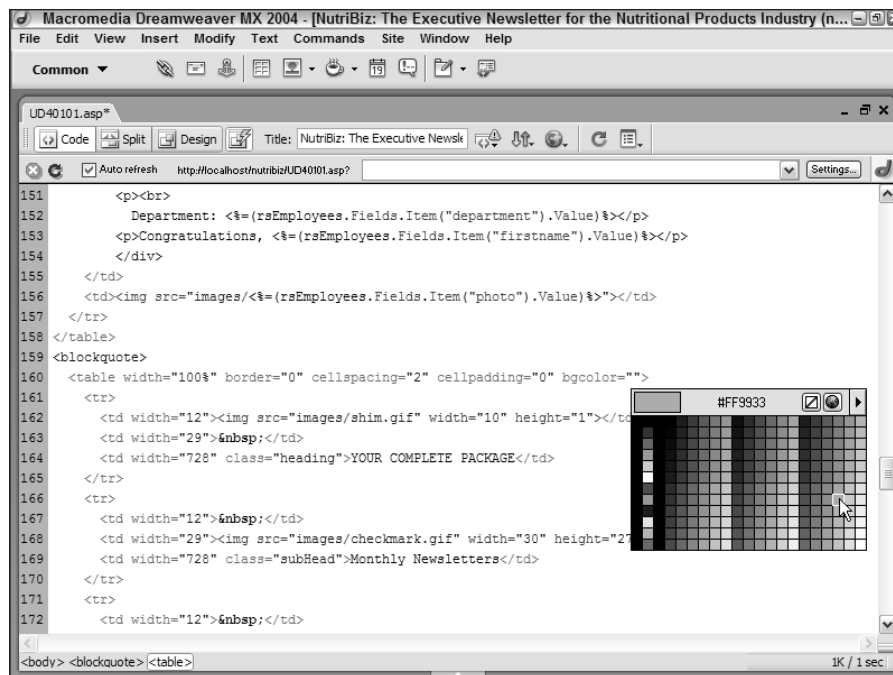
## World-class code editing

Coding is integrally tied to Web page development, and Dreamweaver's coding environment is second-to-none. If you're hand-coding, you'll appreciate the code completion and code-hint features, shown in Figure 1-4, that Dreamweaver offers. Not only do these features speed development of HTML pages, but Dreamweaver's underlying Tag Libraries extend their use to the full range of other code formats such as JavaScript, ActionScript, and XML.



**Figure 1-3:** Dreamweaver enables you to work with a visual WYSIWYG editor and a code editor simultaneously.





**Figure 1-4:** Code Hints speed hand-coding by displaying all the attributes available for a specific tag, including color.

Dreamweaver's Code view is easy on the eyes as well with syntax coloring that can be turned off and on at will. To get around the page quickly, use either the standard line-numbering facility or the advanced Code Navigation feature; Code Navigation lists all the functions found on a page and instantly jumps to that code when a function is selected.

Veterans and novices alike find Dreamweaver's Tag Chooser and Tag inspector indispensable. As the name implies, the Tag Chooser enables the coder to select a tag from a full list of tags in the various Web markup languages including HTML, CFML, PHP, ASP, ASP.NET, and more.



The Tag Inspector gives a complete overview of all the aspects of a selected tag. Not only do you get to see a full array of all the associated properties—far more than could ever fit in the Property inspector—but you can also modify their values in place. Any applied JavaScript behaviors are also displayed in the Tag Inspector. Perhaps the most innovative feature of this inspector is a CSS-related one, which displays any style impacting on a tag with completely modifiable properties and values. Select a CSS style and the Tag Inspector becomes the Rule inspector for quick and easy CSS editing.

Code is far more than just a series of individual tags, of course. Dreamweaver's Snippets panel stores the most commonly used sections of code just a drag and drop away. Dreamweaver comes with hundreds of snippets ready to use—and gives you a way to add your own at any time.



## Roundtrip HTML

Most Web authoring programs modify any code that passes through their system — inserting returns, removing indents, adding `<meta>` tags, uppercasing commands, and so forth. Dreamweaver's programmers understand and respect the fact that all Web developers have their own particular coding styles. An underlying concept, Roundtrip HTML, ensures that you can move back and forth between the visual editor and any HTML text editor without your code being rewritten.

## Web site maintenance tools

Dreamweaver's creators also understand that creating a site is only a part of the Webmaster's job. Maintaining the Web site can be an ongoing, time-consuming chore. Dreamweaver simplifies the job with a group of site management tools, including a library of repeating elements and a file-locking capability for easy team updates.



Speed is often essential in Web site maintenance. With Dreamweaver's siteless editing mode, you can make changes as quickly as you can connect to a server. You don't define an entire site if you only want to alter a couple of pages; just set up a server connection. Dreamweaver lets you access, edit, and publish the page in one smooth workflow.

Overall in Dreamweaver, Web site maintenance is easier than ever — and very visual. Take note of the Site Map feature that enables you to view your Web site structure at a glance and to access any file for modification (see Figure 1-5). Links are updated automatically or, if a file moves from one directory to another, are under user control. Moreover, not only can you access a library of repeating elements to be inserted in the page, you can also define templates to control the entire look and feel of a Web site — and modify a single template to update all the pages sitewide.

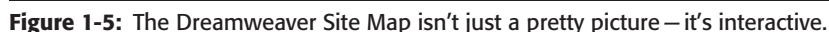
## Team-oriented site building

Until now, individual Web developers have been stymied when attempting to integrate Dreamweaver into a team-development environment. File-locking was all too easily subverted, enabling revisions to be inadvertently overwritten; site reports were limited in scope and only output to HTML; and, most notable of all, version control was nonexistent. Dreamweaver MX 2004 addresses all these concerns while laying a foundation for future connectivity.

Dreamweaver MX 2004 supports two industry-standard source control systems: Visual SourceSafe (VSS) and WebDAV. Connecting to a Visual SourceSafe server is well integrated into Dreamweaver; simply define the VSS server as your remote site and add the necessary connection information. WebDAV, although perhaps less well known than VSS, offers an equally powerful and more available content-management solution. More important, Macromedia has developed the source-control solution as a system architecture, enabling other third-party content-management or version-control developers to use Dreamweaver as their front end.

ColdFusion developers have long enjoyed the benefits of RDS, short for Remote Development Services — and now, RDS connectivity has been added to Dreamweaver. Through RDS, teams of developers can work on the same site stored on a remote server. Moreover, you can connect directly to an RDS server without creating a site.





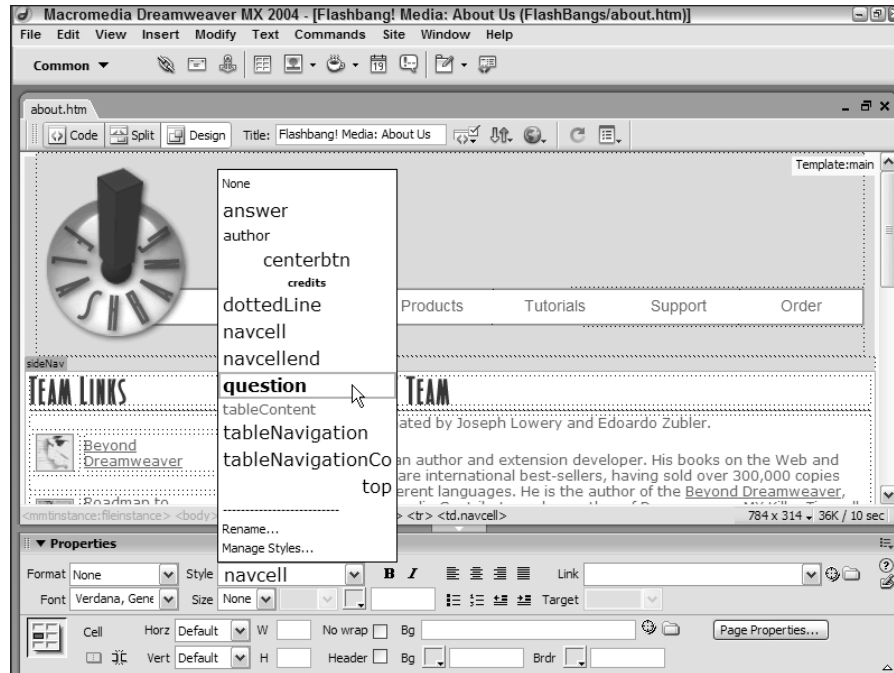
## The Dreamweaver Interface

## Easy text entry

Although much of the World Wide Web's glitz comes from multimedia elements such as images and sound, Web pages are primarily a text-based medium. Dreamweaver recognizes this and makes the text cursor the default tool. To add text, just click in Dreamweaver's main workspace—the Document window—and start typing. As shown in Figure 1-6, the Text Property inspector even enables you to change characteristics of the text, such as the size, font, position, or color by assigning a Cascading Style Sheet (CSS) style. Dreamweaver even helps you along by automatically creating a style if none has been previously assigned.



## 10 Part I ♦ Dreamweaver MX 2004 Basics



**Figure 1-6:** Use the Text Property inspector to change the format of the selected text with CSS.

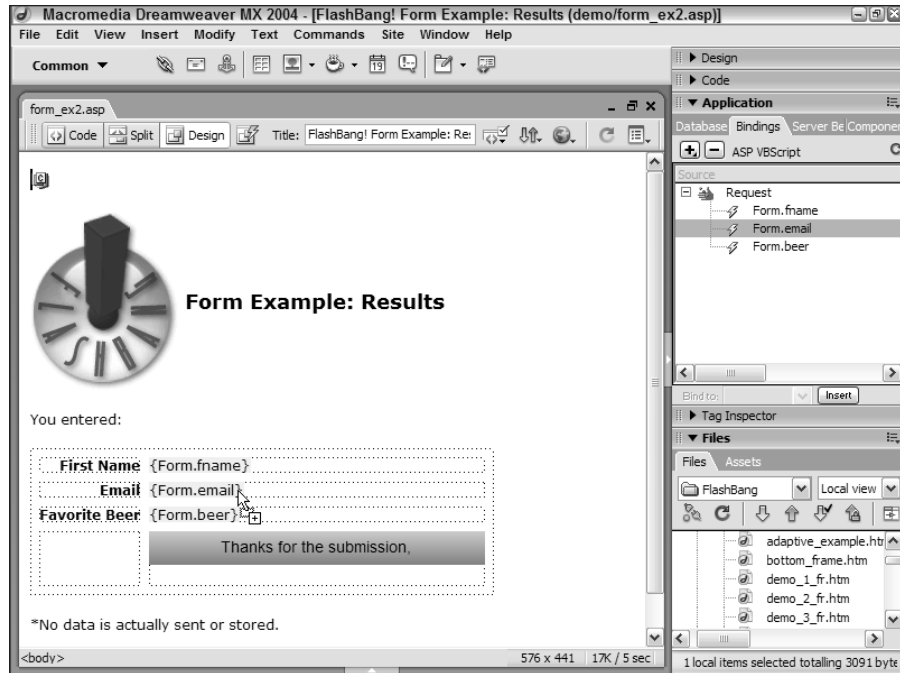
### Drag-and-drop data fields

It's one thing to make a connection to a data source; it's quite another to actually insert the dynamic data in the proper place on the Web page. Dreamweaver makes drag and drop easy with the Bindings panel. All the available data sources for a page are displayed in an expandable tree outline in the Bindings panel, as shown in Figure 1-7. You can insert an instance of any dynamic field displayed in the panel onto the page by either dropping it into place or by using the Insert button.

### One-stop object modification

You can select Web page elements other than text from the Insert bar. Adding a picture to a Web page is as easy as clicking the Image icon from the Insert bar. Dreamweaver asks you to select the file for the image, and your image appears in your current cursor position. After your graphic is onscreen, selecting it brings up the appropriate Property inspector to enable you to make modifications. The same technique holds true for any other inserted element—from horizontal rules to Shockwave movies.





**Figure 1-7:** Drag any field from the Bindings panel onto a selected placeholder phrase to quickly turn a static page into a dynamic one.

## Accessing and managing resources

One standout addition to Dreamweaver's interface is the Assets panel, shown in Figure 1-8. The Assets panel gathers all the various elements used in an individual site: images, background and text colors, external URLs, included scripts, Flash movies, Shockwave content, and QuickTime media, as well as Dreamweaver templates and library items. Sizeable thumbnails of graphics and media are displayed in the preview pane of the Assets panel—you can even play Flash, Shockwave, and QuickTime elements in preview before dragging them onto the page. Moreover, often-used resources can be listed in a Favorites category, distinguishing them from the rest of the assets found in the site.

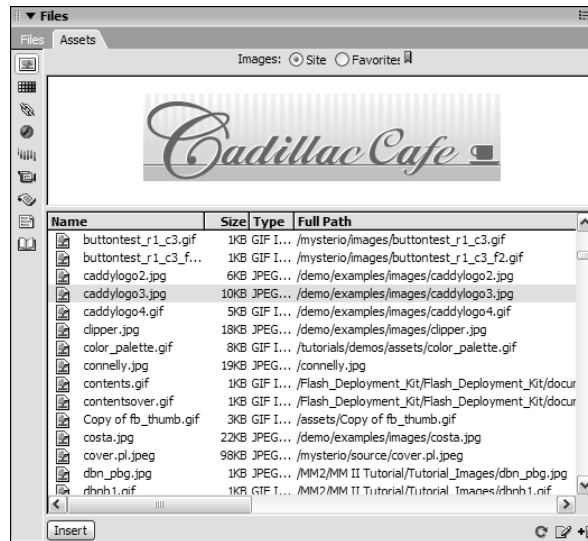
## Complete custom environment

Dreamweaver enables you to customize your workspace to suit yourself. Much of Dreamweaver's power derives from the various windows, panels, and inspectors, all of which are movable. Just drag them wherever you want them on-screen or keep them docked to the side. Want to see your page by itself? You can hide all windows at the touch of a function button; press it again, and your controls are revealed.



## 12 Part I ♦ Dreamweaver MX 2004 Basics

Dreamweaver's customization capabilities extend even further. If you find that you are repeatedly inserting something, such as a QuickTime video or WAV sound file, you can add that element to your Insert bar. Dreamweaver even enables you to add a specific element—a Home button, for example—to the Insert bar. In fact, you can add entire categories of objects if you like. Moreover, Dreamweaver MX 2004 exposes the entire menu structure for customization—you cannot only change keyboard shortcuts, you can also add custom menus.



**Figure 1-8:** You can preview a Flash movie with the Assets panel before placing it on the Dreamweaver page.



For more information about customizing your Insert bar, see Chapter 33.

## Managing keyboard shortcuts

Keyboard shortcuts are great in theory: Just press a key combination to activate an essential feature. Unfortunately, in reality, there are too many essential features, too few single-purpose keys on the keyboard and, most important, too few brain cells to retain all the widely varied keyboard combinations that the working designer must master.

Macromedia has taken steps to ease keyboard-shortcut overload across its entire product line, and Dreamweaver's no exception. Dreamweaver offers a Keyboard Shortcut Editor that enables you to both standardize and customize the key combinations used in the program. Choose from a Macromedia standard set—common to Dreamweaver, Fireworks, and Flash—or use a set taken from Dreamweaver 3.



If you're a ColdFusion Studio user switching to Dreamweaver, you'll really appreciate the capability to add keyboard shortcuts to snippets.

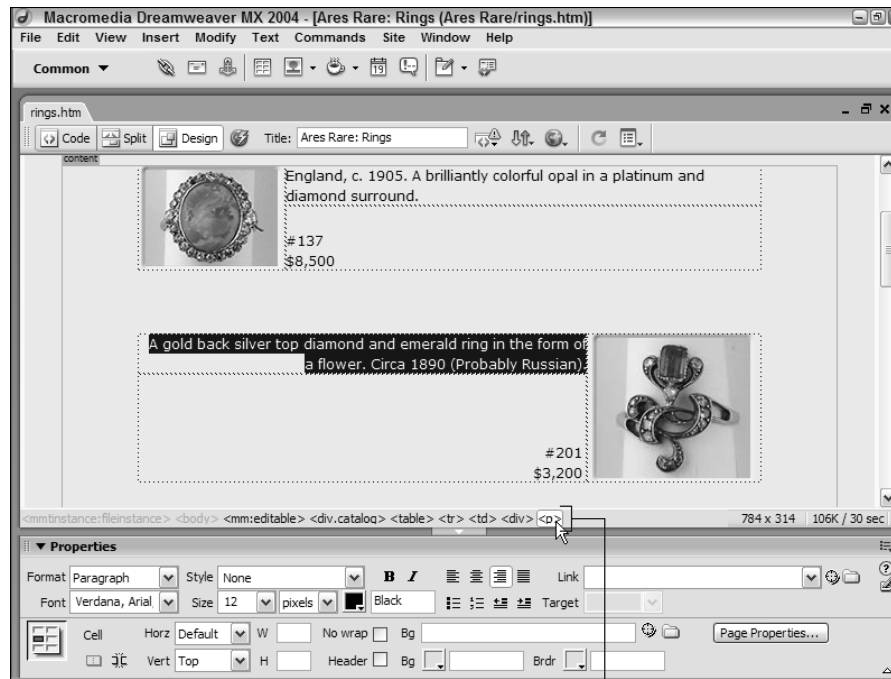


You can even select a set from an entirely different program such as HomeSite or BBEdit. Best of all, any keyboard shortcut can be personalized to represent a combination that's easy for you to remember.

## Simple selection process

As with most modern layout programs, in order to modify anything in Dreamweaver, you must select it first. The usual process to do this is to click an object to highlight it or to click and drag over a block of text to select it. Dreamweaver adds another selection option with the Tag Selector feature. Click anywhere on a Web page under construction and then look at Dreamweaver's status bar. The applicable tags appear on the left side of the status bar.

In the example shown in Figure 1-9, the Tag Selector shows `<mm:editable> <div.catalog> <table> <tr> <td> <div> <p>`



Tag Selector

**Figure 1-9:** Choosing the `<p>` tag in Dreamweaver's Tag Selector is a quick and easy way to highlight the current paragraph on your Web page.

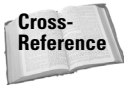
Click one of these tags, and the corresponding elements are selected on your page, ready for modification. The Tag Selector is a terrific timesaver; throughout this book, I point out how you can use it under various circumstances.



## Enhanced layout options

Dreamweaver works much more like a desktop publishing program than do many other visual HTML editors. Today's browser capabilities permit images and text to be placed in specific locations on the Web page—a concept known as *absolute positioning*. To enable you to take full advantage of this power, Dreamweaver includes both rulers and grids. You can specify the type of measurement to be used (inches, pixels, or centimeters), as well as the spacing and appearance of the grid lines. You can even have objects snap to the grid for easy alignment.

Dreamweaver has always made it easy for designers new to the Web to build nice-looking interactive Web pages without having to know HTML. Dreamweaver's Layout mode is a good example of that focus. Layout mode enables designers to draw tables and cells directly on the screen for positioning content. After they are drawn, you can modify cells by dragging borders or moving the entire cell. You can also include nested tables.



To find out more about absolute positioning, see Chapter 11; you can learn more about Layout mode in Chapter 13.

## Plugin media preview

In order for a browser to display anything beyond standard format graphics, a plugin is generally required. Plugins extend the capability of most browsers to show animations, play music, or even explore 3D worlds. Dreamweaver is one of the first Web authoring tools to enable you to design your Web page with an active plugin playing the extended file; with all other systems, you have to preview your page in a browser to see the active content.

The active content feature in Dreamweaver enables the playback of plugins such as Macromedia Flash, Shockwave, and others. However, this feature extends far beyond this use. Many Web pages are coded with server-side *includes*, which traditionally require the page to be viewed through a Web server. Dreamweaver translates much of the server-side information so that the entire page—server-side includes and all—can be viewed in its entirety at design time.

## Extended Find and Replace

The Web is a fluid medium. Pages are constantly in flux, and because changes are relatively easy to effect, corrections and additions are the norm. Quite often, a Web designer needs to update or alter an existing page—or series of pages. Dreamweaver's enhanced Find and Replace feature is a real power tool when it comes to making modifications.

Find and Replace works in the Document window, whether in Design view or Code view, as well as in the Code inspector to alter code and regular content. Moreover, changes are applicable to a selected section, the current page, the working site, selected Web pages, or an entire folder of pages, regardless of the number. Complex Find and Replace queries can be stored and retrieved later to further automate your work.

## Up-to-Date Code Standards

Most Web pages are created in HyperText Markup Language (HTML). This programming language—really a series of tags that modify a text file—is standardized by an organization known as the World Wide Web Consortium, or W3C ([www.w3.org](http://www.w3.org)). Each new release of HTML incorporates an enhanced set of commands and features. The majority of browsers in use



today recognize the current version, HTML 4. Dreamweaver writes clear, easy-to-follow, real-world, browser-compatible HTML version 4.01 code whenever you insert or modify an element in the visual editor.

If you're working in XHTML, Dreamweaver has you covered as well with a number of tools. With one operation, Dreamweaver converts an existing page from HTML to XHTML. When coding from the ground up, you can set any page type—static or dynamic—to be XHTML-compliant.

#### New Feature

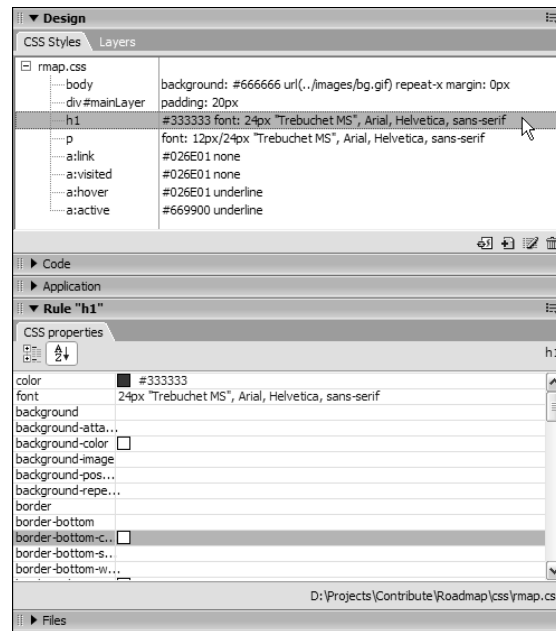
Additionally, Dreamweaver now includes complete Unicode support. Unicode is an encoding standard that enables Web browsers to display characters from almost any language worldwide. Dreamweaver displays Unicode properly at design time and runtime.

## Cutting-edge CSS support

Support for Cascading Style Sheets (CSS) has been steadily growing among browsers, and Dreamweaver has greatly enhanced its own support in response. In addition to enhanced rendering in the Design view for advanced CSS effects such as backgrounds and positioning, Dreamweaver has made it far simpler to apply CSS from the ground up.

#### New Feature

Editing CSS has undergone a complete makeover in Dreamweaver MX 2004, as shown in Figure 1-10. Now editing a CSS style is just as easy as applying one. The CSS Styles panel displays all the current styles—both internal and external—with detailed characteristics. Double-click on any style to modify it. Dreamweaver even includes a Relevant CSS tab detailing all the CSS styles applicable to a given tag.



**Figure 1-10:** The CSS Styles panel works with the Tag inspector for upfront editing of any style, whether from an internal or external style sheet.



CSS is well on its way to becoming the standard approach to Web design, and it pervades every aspect of Dreamweaver. CSS styles can now be applied — and created — right from the Property inspector. Dreamweaver properly renders the more advanced CSS properties, such as float and fixed background, so that designers can truly concentrate on the look of a site rather than hassling with code hacks.

## Addressing accessibility

Accessibility is an issue of great concern to many Web developers. Increasingly, many designers labor under a mandate to produce accessible sites, especially in consideration of Section 508 of the Federal Rehabilitation Act. To help designers create accessible pages, Dreamweaver optionally displays additional attributes for key Web page objects such as tables, forms, images, media, and frames. These attributes — like summary for the `<table>` tag — are always available through the Tag inspector when enabled through Dreamweaver's Preferences.

In addition, Dreamweaver is accessible as a tool itself. A number of screen readers, including JAWS for Windows and Window Eyes, are supported. Furthermore, the entire Dreamweaver interface may be navigated without using the mouse.

## Straightforward text and graphics support

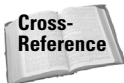
Text is a basic building block of any Web page, and Dreamweaver makes formatting your text a snap. After you've inserted your text, either by typing it directly or pasting it from another program, you can change its appearance. You can use the generic HTML formats, such as the H1 through H6 headings and their relative sizes, or you can use font families and exact point sizes.



Chapter 8 shows you how to work with text in Dreamweaver.

Additional text support in Dreamweaver enables you to add both numbered and bulleted lists to your Web page. The Text Property inspector provides buttons for both kinds of lists as well as easy alignment control. Some elements, including lists, offer extended options. In Dreamweaver, clicking the Property inspector's Expander arrow opens a section from which you can access additional controls.

Graphics are handled in much the same easy-to-use manner. Select the image or its placeholder to enable the Image Property inspector. From there, you can modify any available attributes, including the image's source, its width or height, and its alignment on the page. Need to touch up your image? Send it to your favorite graphics program with just a click of the Edit button.



You learn all about adding and modifying images in Chapter 9.

## Enhanced table capabilities

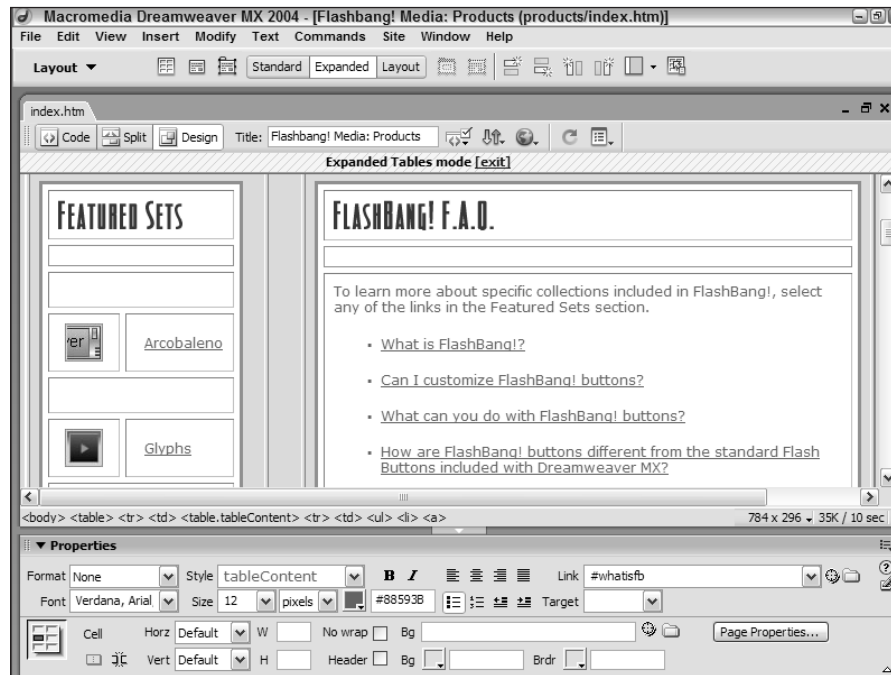
Other features — standard, yet more advanced — are similarly straightforward in Dreamweaver. Tables are a key component in today's Web pages, and Dreamweaver gives you full control over all their functionality. Dreamweaver changes the work of resizing the column or row of a table, previously a tedious hand-coding task, into an easy click-and-drag motion. Likewise,



you can delete all the width and height values from a table with the click of a button. The Table Property inspector centralizes many of these options in Dreamweaver.

#### New Feature

The nitty-gritty of table editing is often tedious and tricky: Grabbing just the right selection in a tightly formatted table row is precision work. Dreamweaver's new Expanded mode takes the guesswork out of precise table selection by visually exploding the table at design time to make all the elements far more accessible, as shown in Figure 1-11. You can switch between Standard, Layout, and Expanded modes at the click of the mouse.



**Figure 1-11:** By temporarily displaying borders with increased cell padding and cell spacing, Expanded mode makes table editing far easier.

Tables are flexible in Dreamweaver. Font changes can be applied to any number of selected cells, rows, or columns. Standard commands enable you to automatically format or sort a table as well.

#### Cross-Reference

You can find all you need to know about tables in Chapter 13.

## Easy form entry

Forms, the basic vehicle for Web page data exchange, are just as easy to implement as tables in Dreamweaver. Switch to the Forms category of the Insert bar and insert any of the available



# 18

## Part I ♦ Dreamweaver MX 2004 Basics

elements: text boxes, radio buttons, checkboxes, and even drop-down or scrolling lists. With the Validate Form behavior, you can easily specify any field as a required field and even check to ensure that the requested type of information has been entered.

### Click-and-drag frame setup

Frames, which enable separate Web pages to be viewed on a single screen, are often considered one of the most difficult HTML techniques to master. Dreamweaver employs a click-and-drag method for establishing your frame outlines. After you've set up your frame structure, open the Frames panel (see Figure 1-12) to select any frame and modify it with the Property inspector. Dreamweaver writes the necessary code for linking all the HTML files in a frameset, no matter how many Web pages are used. Dreamweaver keeps frame creation simple with the Frames menu on the Insert bar's Layout category.



**Figure 1-12:** In Dreamweaver, you use the Frames panel to choose which frame you want to modify through the Property inspector.



For more information about creating frame-based Web pages, see Chapter 17.



## Multimedia enhancements

Dreamweaver enables you to drop in any number of multimedia extensions, plug-ins, applets, or controls. Just click the appropriate button on the Insert bar and modify with the Property inspector. Two multimedia elements, Shockwave movies and Flash files — both from Macromedia — warrant special consideration in Macromedia's Dreamweaver. When you insert either of these objects, Dreamweaver automatically includes the necessary HTML code to ensure the widest browser acceptance, and you can edit all the respective properties.

Dreamweaver fully supports the wide range of multimedia output through custom objects that enable complex images, audio, and presentations to be easily inserted and displayed in Web pages.

## Next-Generation Features

Dreamweaver was among the first Web authoring tools to work with the capabilities brought in by the 4.0 generation of browsers. The latest browsers all support variations of Dynamic HTML (DHTML). Moreover, the current generation of browsers adhere to the Cascading Style Sheet (CSS) standards for the most part, with support for absolute and relative positioning. Dreamweaver gives Web developers an interface that translates these advanced possibilities into reality.

## Flash and Fireworks integration

Dreamweaver MX 2004 has upped the ante for integration with Macromedia's graphics engine, Fireworks. Now, images derived from Fireworks are identified as such, both in the Property inspector and in the Assets panel. Graphics may be optimized to alter the file size, cropping, transparency, or many other aspects right from within Fireworks.



Dreamweaver has picked up a couple of tricks from its close association with Fireworks and can now handle basic graphics editing on its own. Use Dreamweaver to crop, resample, brighten, darken, or sharpen any GIF or JPEG image. All the tools are immediately accessible from the Image Property inspector.

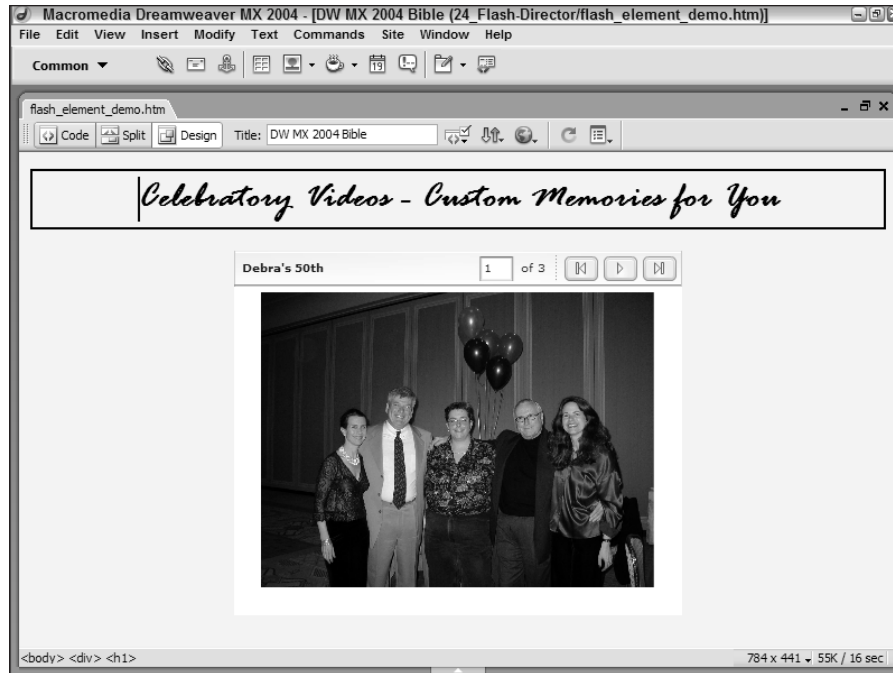
If more extensive modification is required, select the Edit button to send the graphic back to Fireworks. More impressively, you can edit sliced images — maintained as a borderless table in HTML — in their entirety. Fireworks even respects (to a degree) HTML alterations, such as changes to URLs or conversion of an image slice to a text block. This degree of integration lends an amazing fluidity to the workflow.



The latest version of Flash brought a new format: compiled Flash movies. Dreamweaver takes advantage of these new creations by incorporating the first of a series of Flash elements: Image Viewer. Like other Flash elements, the Image Viewer, shown in Figure 1-13, is a Flash movie that enables you to set attributes within Dreamweaver, providing you with a full range of design options and customization.

You can send Flash movies to be edited directly from within Dreamweaver, just as you can with Fireworks. After you have completed your editing operation in Flash, just select Done, and your revised movie is republished and inserted back into Dreamweaver.





**Figure 1-13:** Add JPEGs and set animated transitions to create your own slide show with the Flash element Image Viewer.

## Server-side behaviors

The driving forces behind Dreamweaver's Web application creation are its server behaviors. A server behavior is code written in a language understood by the particular server model that is executed on the server. Dreamweaver comes standard with a wide variety of useful server behaviors, ranging from one that replicates records on a page to another that restricts access to a page.

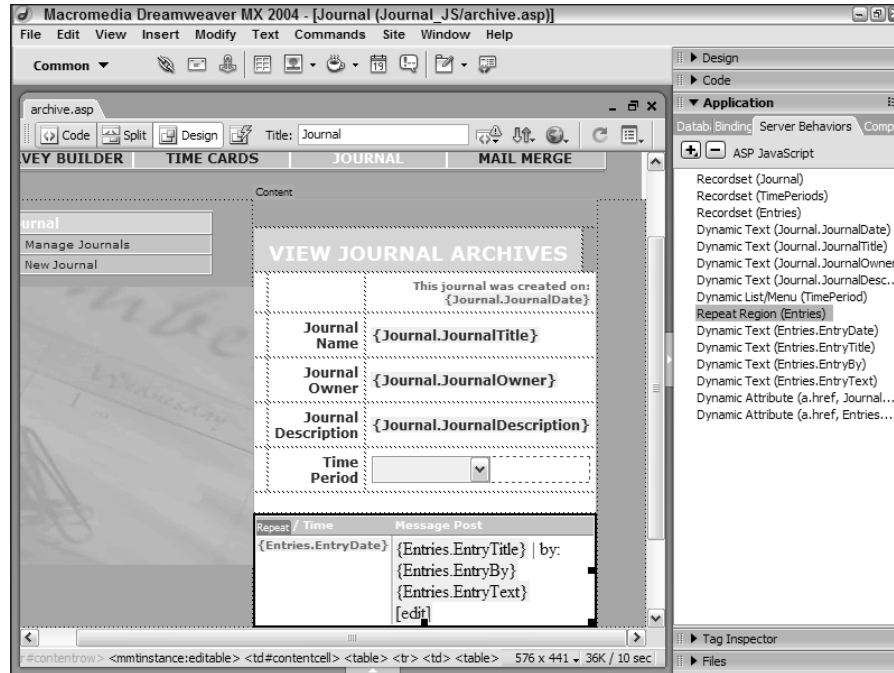
You apply and manage server behaviors from the Server Behaviors panel, shown in Figure 1-14. Unlike the Bindings panel, from which you drag fields onto the page, the main area of the Server Behaviors panel indicates which server behaviors have been inserted into the page. If the server behavior has user-defined parameters, they may be altered by double-clicking the entry in the Server Behaviors panel.

## Roundtrip XML

XML, which stands for Extensible Markup Language, has piqued the interest of many Web designers, intranet developers, and corporate users because of its underlying customizable nature. With XML, tags are created to describe the use of the information, rather than its appearance.



Dreamweaver is capable of exporting and importing XML tags, no matter what the tag definition. You can also create, modify, and validate XML files in Dreamweaver. As XML grows in popularity, Dreamweaver is ready to handle the work.



**Figure 1-14:** Quickly identify the page elements affected by a server behavior by selecting the entry in the Server Behaviors panel.

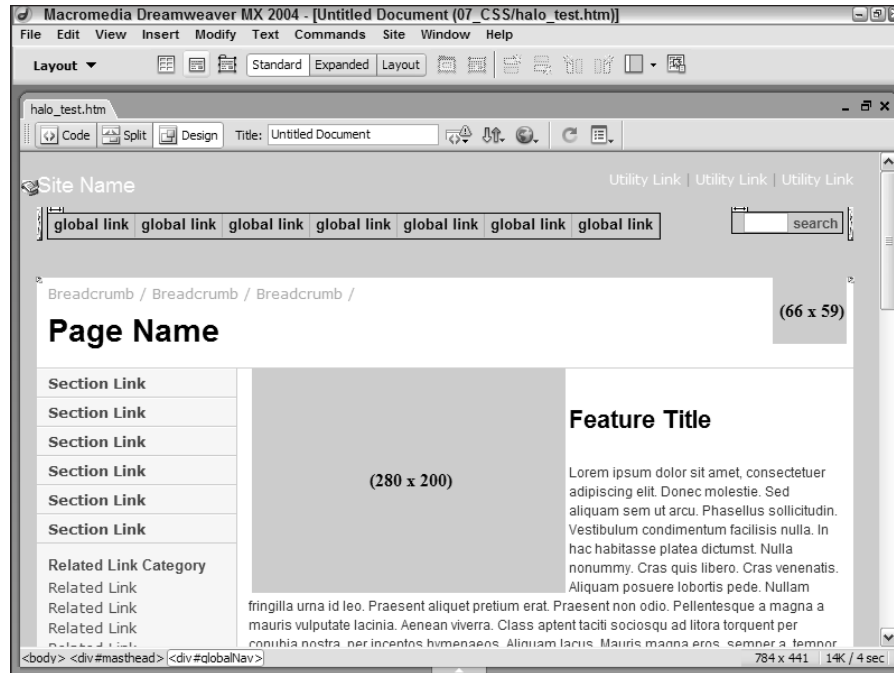
## 3D layers

One particular Dynamic HTML feature enables Dreamweaver to be called “the first 3D Web authoring tool.” Until Dynamic HTML, Web pages existed on a two-dimensional plane—images and text could only be placed side by side. Dreamweaver supports absolute positioning with CSS—known colloquially as layers—meaning that objects can be placed in front of or behind other objects. Layers can contain text, graphics, links, and controls—you can even nest one layer inside another.



As the prevalence of CSS grows across the Web, more and more designers are applying their absolute positioning properties to `<div>` tags directly. This process keeps the layout properties (the CSS rules) separate from the content and makes for simpler maintenance. Dreamweaver offers an easy-to-apply `<div>` tag object, right from the Insert bar's Layout category (see Figure 1-15).





**Figure 1-15:** Position your content through <div> tags or drawn layers—with Dreamweaver, it's up to you.

Another way to create a layer in Dreamweaver is by clicking the Draw Layer button on the Insert bar. Dreamweaver places the necessary CSS inline with the layer (<div>) tag. After they are created, layers can be positioned anywhere on the page by clicking and dragging the selection handle. As with other Dreamweaver objects, you can modify a layer through the Property inspector.



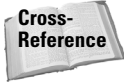
See Chapter 11 for detailed information about using <div> tags and layers in Dreamweaver.

## Dynamic style updates

Dreamweaver completely supports the Cascading Style Sheet (CSS) specification agreed upon by the World Wide Web Consortium. CSS gives Web designers more flexible control over almost every element on their Web pages. Dreamweaver applies CSS capabilities as if they were styles in a word processor. For example, you can make all the <h1> tags blue, italic, and put them in small caps. If your site's color scheme changes, you can make all the <h1> tags red—and you can do this throughout your Web site with one command. Dreamweaver gives you style control over type, background, blocks, boxes, borders, lists, and positioning.

Dreamweaver enables you to change styles online as well as offline. By linking a CSS change to a user-driven event such as moving the mouse, text can be highlighted or de-emphasized, screen areas can light up, and figures can even be animated. Moreover, it can all be done without repeated trips to the server or huge file downloads.



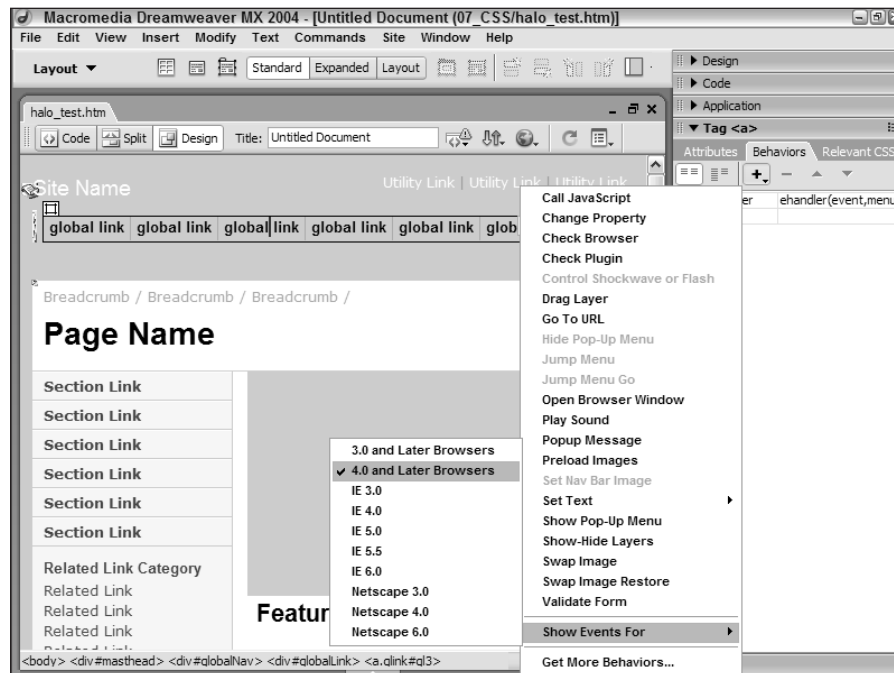


Details about using Cascading Style Sheets begin in Chapter 7.

## JavaScript behaviors

Through the development of JavaScript behaviors, Dreamweaver combines the power of JavaScript with the ease of a point-and-click interface. A behavior is defined as a combination of an event and an action—whenever your Web page user does something that causes something else to happen, that's a behavior. What makes behaviors extremely useful is that they require no programming whatsoever.

Behaviors are JavaScript-based, and this is significant because JavaScript is supported to varying degrees by existing browsers. Dreamweaver has simplified the task of identifying which JavaScript command works with a particular browser. You simply select the Web page element that you want to use to control the action and open the Behaviors panel. As shown in Figure 1-16, Dreamweaver enables you to pick a JavaScript command that works with all browsers, a subset of browsers, or one browser in particular. Next, you choose from a full list of available actions, such as go to a URL, play a sound, pop up a message, or start an animation. You can also assign multiple actions and even determine when they occur.



**Figure 1-16:** Dreamweaver offers only the JavaScript commands that work with the browser you specify.





For complete details about working with JavaScript behaviors, see Chapter 12.

## Program Extensibility

One of Dreamweaver's primary strengths is its extensibility. Virtually no two Web sites are alike, either in their design or execution. With such a tremendous variety of results, the more flexible a Web authoring tool, the more useful it is to a wider group of designers. When it was introduced, Dreamweaver broke new ground with objects and behaviors that were easily customizable. Now, Dreamweaver lengthens its lead with custom floaters, commands, translators, and Property inspectors. The basic underpinnings of Dreamweaver can even be extended with the C-Level Extensibility options.

## Objects and behaviors

In Dreamweaver parlance, an *object* is a bit of HTML code that represents a specific image or HTML tag, such as a `<table>` or a `<form>`. Dreamweaver's objects are completely open to user customization, or even out-and-out creation. For example, if you'd rather import structured data into a table without a border instead of with the standard 1-pixel border, you can easily make that modification to the Insert Tabular Data object file—right from within Dreamweaver—and every subsequent table is similarly inserted. Objects are accessed from the Insert bar as well as through the menus.

Objects are a terrific timesaving device, essentially enabling you to drop in significant blocks of HTML code at the click of a mouse. Likewise, Dreamweaver behaviors enable even novice Web designers to insert complex JavaScript functions designed to propel the pages to the cutting edge. Dreamweaver ships with a full array of standard behaviors—but that's only the tip of the behavior iceberg. Because behaviors are also customizable and can be built by anyone with a working knowledge of JavaScript, many Dreamweaver designers have created custom behaviors and made them publicly available.



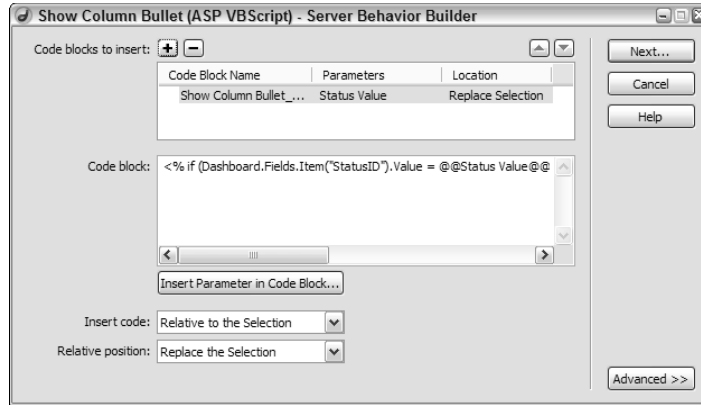
You can find a large assortment of custom objects, behaviors, and commands on the CD-ROM that accompanies this book.

## Server Behavior Builder

Server behaviors are key to Dreamweaver's success as a Web application authoring tool. Although Dreamweaver provides a full palette of server behaviors for handling many of the required tasks, the needs of Web developers are too diverse and numerous. Dreamweaver cannot supply a server behavior for every occasion. Enter Dreamweaver's Server Behavior Builder, shown in Figure 1-17, a terrific tool for creating custom server behaviors.

The Server Behavior Builder is engineered to handle a wide range of circumstances. Some server behaviors may be encapsulated in a single line of code repeated verbatim, whereas others require multiple blocks of programming involving several user-supplied parameters—you can construct almost any kind of code with the Server Behavior Builder. After you create the custom server behavior, you can apply and modify it just like any of the standard Dreamweaver server behaviors.





**Figure 1-17:** With the Server Behavior Builder, you can create a new behavior from the ground up or modify an existing behavior.

## Commands and floating panels

Objects and behaviors are great ways to help build the final result of a Web page, but what about automating the work of producing that page? Dreamweaver employs commands to modify the existing page and streamline production. A great example is the Sort Table command, standard with Dreamweaver. If you've ever had to sort a large table by hand — meticulously moving data, one row at a time — you can appreciate the power of this option the first time you use a command to alphabetize or otherwise re-sort a table.

Commands hold a great promise — they are, in effect, more powerful than either objects or behaviors combined. In fact, some of the more complex objects, such as the Rollover Image object, are actually commands. Commands can also extract information sitewide and offer a powerful programmable language within Dreamweaver.

Creating a Dreamweaver command is easy for anyone, thanks to the History panel. Aside from displaying every action you undertake as you build your Web page, the History panel enables you to select any number of those actions and save them as a command. Your new command is instantly available to be called from the menu whenever you need it.

After only a few moments with Dreamweaver, you become accustomed to its use of floating panels. In Dreamweaver, you can create custom floating panels. These custom panels can show existing resources or provide a whole new interface for modifying an HTML element.

## Adjustable Insert bars

The Insert bar is more than just part of a new look for Dreamweaver. Now, designers can quickly see all the available object categories and switch to them with a single click. More important — from an extensibility standpoint — new categories may be developed and integrated into the Dreamweaver workspace on a contextual basis. In other words, if you create a category for SMIL, you can set the preferences so that it displays only when you are working on an SMIL file.





The Insert bar has been completely restyled for this release to make it more accessible to new users. You can even switch between the different categories being available as drop-down list or as a series of tabs. The ultimate in accessibility, however, has to be the Insert bar's Favorites category. Now you can personalize an entire category and display just those objects you use most frequently.

## Custom tags, translators, and Property inspectors

In Dreamweaver, almost every part of the user interface can be customized—including the tags themselves. You can easily add new tags and specify how they should be formatted via the Tag Library Editor; you can even import entire tag sets represented by DTDs. After you've developed your custom third-party tags, you can display and modify their current properties with a custom Property inspector. Moreover, if your custom tags include content not typically shown in Dreamweaver's Document window, you can build a custom translator, enabling the content to be displayed.

Programs such as Dreamweaver are generally built in the programming language called C or C++, which must be compiled before it is used. Generally, the basic functions of a C program are frozen solid; there's no way that you can extend them. This is not the case with Dreamweaver, however. Dreamweaver offers a C-Level Extensibility that permits programmers to create libraries to install new functionality into the program. Translators, for example, generally rely on new C libraries to display content in Dreamweaver that could not be shown otherwise. Companies can use the C-Level Extensibility feature to integrate Dreamweaver into their existing workflow and maximize productivity.

## Automation Enhancements

Web site design is the dream job; Web site production is the reality. After a design has been finalized, its execution can become repetitive and burdensome. Dreamweaver offers a number of ways to automate the production work, keeping the look of the Web pages consistent—with minimum work required.

## Rapid application development with Application objects

Although it's true that almost every active Web site has one or more unique situations that require some custom coding, it's equally true that the same type of Web application is used repeatedly. It's hard to find an e-commerce-enabled site that doesn't use some variation of the master-detail Web application in which a search returns a list of matches (the master page), each of which links to a page with more information (the detail page). Likewise, every intranet administration application requires the capability to add, edit, and remove records. To speed the development of these types of applications, Dreamweaver includes a series of Application objects, some of which reduce a 20-step operation to a single dialog box, like the one shown in Figure 1-18.

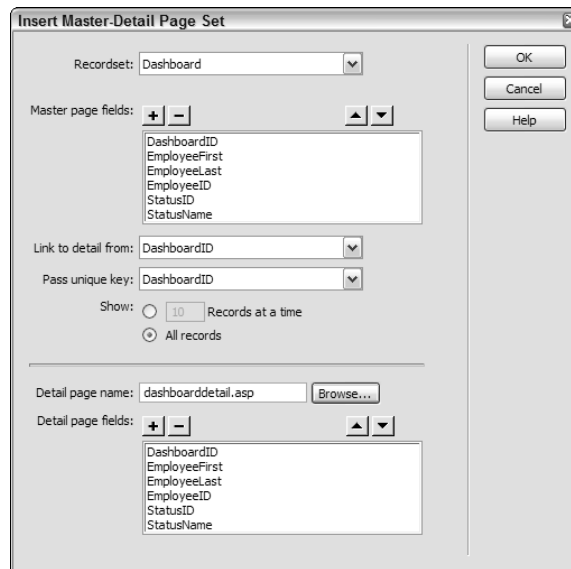
Here are some of the Application objects that come standard with Dreamweaver:

- ♦ Dynamic Table
- ♦ Master Detail Page Set
- ♦ Recordset Navigation Bar



- ♦ Recordset Navigation Status
- ♦ Record Insertion Form
- ♦ Record Update Form

Although they vary in complexity, all are guaranteed timesavers. In addition to creating pages as needed, Application objects can also insert dynamic data and apply server behaviors.



**Figure 1-18:** The Master-Detail Page Set Application object provides rapid development for a common Web application.

## Importing office documents

Much of the Web's content originates from other sources — in-house documents produced by a word processor or spreadsheet program. Dreamweaver bridges the gap between the offline and online world with a variety of useful import features.

Microsoft Word, perhaps the premier word processor, is great at creating and storing word processing documents but not so accomplished at outputting standard HTML. An HTML file derived from Word is, to put it mildly, bloated with extraneous and repetitive code.



Content from Word can now be simply copied and pasted into Dreamweaver. Dreamweaver handles the conversion from Word to HTML, automatically retaining most formatting in clean HTML. The same copy/paste functionality applies to Excel.

For full documents, you can use Dreamweaver's Import Word HTML command. This feature strips out the unnecessary code and even permits you to format the code as you format your other Dreamweaver files. The Import Word HTML command offers a wide range of options for cleaning up the code.



Of course, not all Web content derives from word processing documents — databases and spreadsheets are the other two legs of the modern office software triangle. With the Import Tabular Data command, Dreamweaver offers the capability to incorporate data from any source that can export structured text files. Just save your spreadsheet or database as a comma, tab, or otherwise delimited file and bring it directly into Dreamweaver in the table style of your choice.

## Reference panel

Even the most advanced coder needs a reference when including seldom-used HTML tags or arcane JavaScript functions. Dreamweaver includes built-in references with HTML, JavaScript, and Cascading Style Sheet. Dreamweaver's guide is context-sensitive; highlight a tag or function in Code view and press Shift+F1 to get a breakdown on syntax and browser compatibility.

In addition to the resources already noted, you can use a ColdFusion Markup Language reference from Macromedia. UsableNet has contributed a valuable guide to accessibility issues, and two new guides from Wrox are onboard — one for ASP 3.0 and one for JSP.

## History panel

The repetitiveness of building a Web site is often a matter of entering the same series of commands over and over. You might, for example, need to add a vertical margin of 10 pixels and a horizontal margin of 5 around most, but not all, of the images on a page. Rather than selecting each image and then repeatedly entering these values in the Property inspector, you can now enter the values once and then save that action as a command.

You can find the feature that brings this degree of automation to Dreamweaver in the History panel. The History panel shows each step taken by a designer as the page is developed. Although this visual display is great for complex, multilevel undo actions, the capability to save any number of your steps as an instantly available command is truly timesaving.

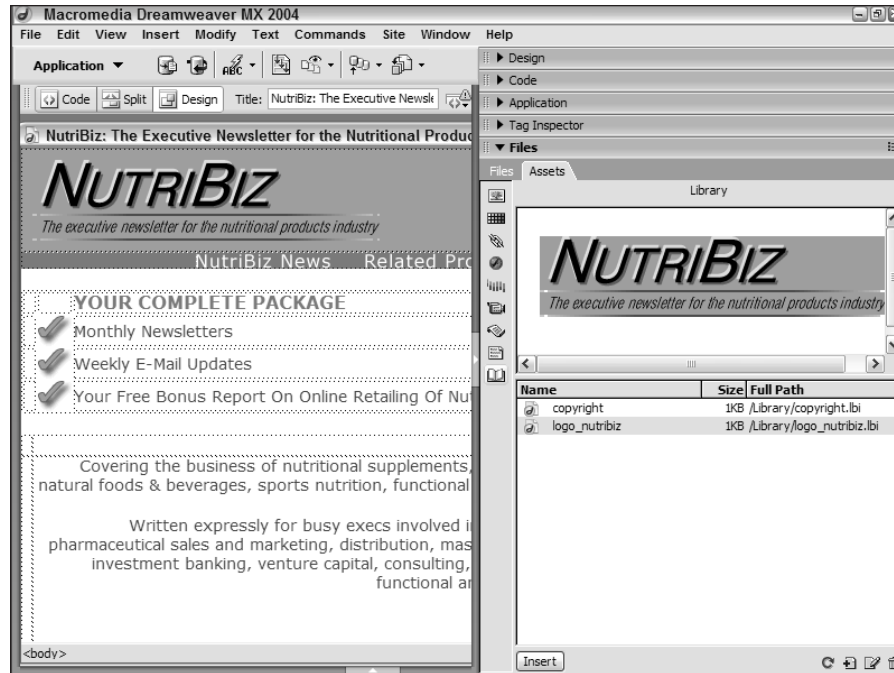
## Site Management Tools

Long after your killer Web site is launched, you'll find yourself continually updating and revising it. For this reason, site management tools are as important to a Web authoring program as site creation tools. Dreamweaver delivers on both counts.

## Object libraries

In addition to site management functions that have become traditional, such as FTP publishing, Dreamweaver adds a whole new class of functionality called *libraries*. One of the truisms of Web page development is that if you repeat an element across your site, you're sure to have to change it — on every page. Dreamweaver libraries eliminate that drudgery. You can define almost anything as a Library element: a paragraph of text, an image, a link, a table, a form, a Java applet, an ActiveX control, and so on. Just choose the item and open the Library category of Assets (see Figure 1-19). After you've created the Library entry, you can reuse it throughout your Web site. Each Web site can have its own library, and you can copy entries from one library to another.





**Figure 1-19:** Use Dreamweaver's Library feature to simplify the task of updating elements repeated across many Web pages.

Being able to include boilerplate Web elements is one issue; being able to update them across the site simultaneously is quite another! You can easily change a library entry through the Library category of the Assets panel. After the change is complete, Dreamweaver detects the modification and asks if you want to update your site. Imagine updating copyright information across a 400+ page Web site in the wink of an eye, and you start to understand the power of Dreamweaver libraries.



To find out more about making sitewide changes with library items, see Chapter 28.

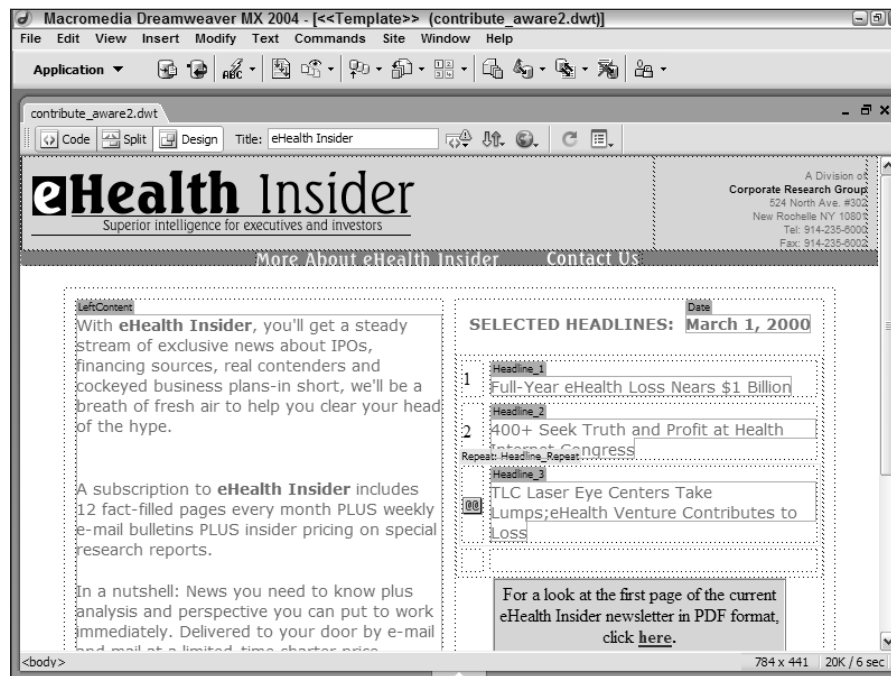
## Super-charged templates

The more your Web site grows, the more you find yourself using the same basic format for different pages. Dreamweaver enables the use of Web page templates to standardize the look and feel of a Web site and to cut down on the repetitive work of creating new pages. A Dreamweaver template can hold the basic structure for the page—an image embedded in the background, a navigation bar along the left side, or a set-width table in the center for holding the main text, for example—with as many elements predefined as possible.



Dreamweaver templates are far more than just molds for creating pages, however. Basically, templates work with a series of locked and editable regions. To update an entire site based on a template, all you have to do is alter one or more of the template's locked regions. Naturally, Dreamweaver enables you to save any template that you create in the same folder, so that your own templates, too, are accessible through the Templates category of the Assets panel. (You can find more about using and creating templates in Chapter 27.)

Dreamweaver templates are much more than just editable and uneditable regions, however. Dreamweaver gives the designer a high degree of control with such features as repeating regions—which, for example, enable a table row to be repeated as many times as needed but constrain the other areas of a table. You're also able to hide and show areas of a page conditionally with optional regions, as shown in Figure 1-20. Dreamweaver's template power extends to nested templates, so that changes can ripple down through a series of locked and editable regions.

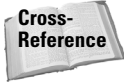


**Figure 1-20:** This template contains editable, repeating, and optional regions.

## Browser targeting

Browser targeting is another site management innovation from Dreamweaver. One of the major steps in any site development project is to test the Web pages in various browsers to look for inconsistencies and invalid code. Dreamweaver's Browser Targeting function enables you to check your HTML against any existing browser's profile. Dreamweaver includes predefined profiles for several browsers, and you can create a profile for any browser you'd like to check.





To learn how you can set up your own profile for Browser Targeting, see Chapter 29.

You can also preview your Web page in any number of browsers. Dreamweaver enables you to specify primary and secondary browsers that can display your page at the press of a function key. You can install up to 18 other browsers for previewing your Web page. The entire list of browsers is available through the Preview In Browser command under the File menu.

## Converting Web pages

Although Web site designers may have access to the latest HTML tools and browsers, much of the public uses older, more limited versions of browsers. Dreamweaver gives you the power to build Web pages with the high-end capabilities of fourth-generation browsers — and then convert those pages so that older browsers can also read what you've created. Moreover, you can take previously designed Web pages that use tables and upgrade them to take advantage of the latest HTML features with the Tables To Layers command. Dreamweaver goes a long way toward helping you bridge the gap between browser versions.

## Verifying links

Web sites are ever-evolving entities. Maintaining valid connections and links amid all that diversity is a constant challenge. Dreamweaver includes a built-in link checker so you can verify the links on a page, in a directory, or across your entire site. The Link Checker quickly shows you which files have broken links, which files have links to external sites, and which files may have been *orphaned* (so that no other file connects with them).

## FTP publishing

The final step in Web page creation is publishing your page on the Internet. As any Webmaster knows, this final step is one that happens repeatedly as the site is continually updated and maintained. Dreamweaver includes an FTP (File Transfer Protocol) publisher that simplifies the work of posting your site. More importantly, Dreamweaver enables you to synchronize your local and remote sites with one command.



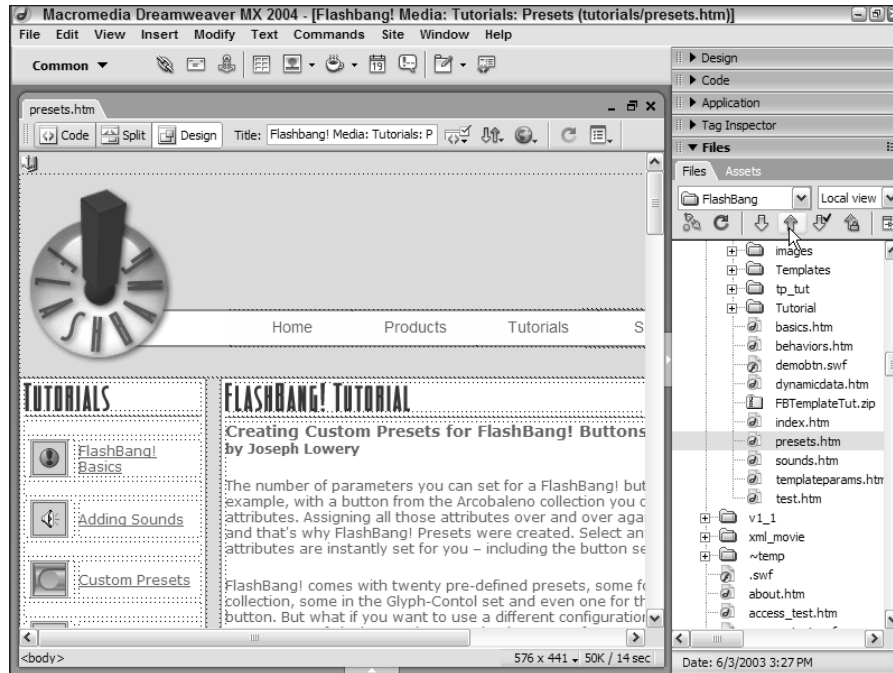
Security is a prime concern among many Webmasters, and many developers have switched to using Secure FTP (SFTP). Dreamweaver now lists SFTP among its supported file-transfer flavors.

Not all the files found in your local site need to be uploaded to the remote site. Dreamweaver includes a feature called *cloaking*, which permits the designer to designate folders that should be excluded during synchronization operations.

You can work with sites originating from a local folder, such as one on your own hard drive. Or, in a collaborative team environment, you can work with sites being developed on a remote server. Dreamweaver enables you to set up an unlimited number of sites to include the source and destination directories, FTP usernames, passwords, and more.

The Dreamweaver Files panel, shown in Figure 1-21, is a visual interface in which you can click and drag files or select a number of files and transfer them with the Get and Put buttons. You can even set the preferences so the system automatically disconnects after remaining idle for a user-definable period of time.





**Figure 1-21:** The Files panel enables you to publish your Web site directly from within Dreamweaver to your application server.

## Site map

Web sites can quickly outgrow the stage in which the designer can keep all the linked pages in mind. Dreamweaver includes a visual aid in the Web site management toolbox: the Site Map. With the Site Map, the Web designer can see how the entire Web site is structured. However, you can use the Site Map to do far more than just visualize the Web.

The Site Map can be used to establish the structure of the Web site in addition to viewing it. New pages can be created, and links can be added, modified, or deleted. In fact, the Site Map is so powerful, it becomes a site manager as well.

## File check in/check out

On larger Web projects, more than one person is usually responsible for creation and daily upkeep of the site. An editor may need to include the latest company press release, or a graphic artist may have to upload a photo of the newest product — all on the same page. To avoid conflicts with overlapping updates, Dreamweaver has devised a system by which Web pages can be marked as checked out and locked to prevent any other corrections until the file is once again checked in.



Dreamweaver places a green checkmark over a file's icon in the Site Files window when you have checked it out and a red checkmark if another member of your team has checked it out. In addition, so you won't have to guess who that team member is, Dreamweaver displays the name of the person next to the filename. You can also keep track of who last checked out a particular Web page (or image) — Dreamweaver keeps an ongoing log listing the file, person, date, and time of the check-out.

## Summary

Building any Web site — whether static or dynamic — is half craft and half art, and Dreamweaver is the perfect tool for blending these often dueling disciplines. Dreamweaver's visual editor enables quick and artful page creation, and at the same time, its integrated text editors offer the detail-oriented focus required by programmers. Dreamweaver's key features include the following:

- ♦ Dreamweaver works the way professional Web developers do, with integrated visual and text editors. Dreamweaver won't convert your code when it's used with preexisting Web pages.
- ♦ It supports HTML standard commands with easy entry and editing of text, graphics, tables, and multimedia elements.
- ♦ Dreamweaver provides straightforward yet robust connectivity to data sources and access to the most popular server models.
- ♦ It makes cutting-edge features, such as Dynamic HTML and Cascading Style Sheets, easy to use.
- ♦ A super-charged editor features advanced options like code completion and Code Hints.
- ♦ With Dreamweaver's Live Data view, you can construct your page while viewing the actual data to be displayed in the online application.
- ♦ Dreamweaver offers you a variety of reusable server behaviors, JavaScript behaviors, object libraries, commands, Application objects, and templates to streamline your Web page creation.
- ♦ Enhanced templates are possible with optional and conditional regions.
- ♦ Dreamweaver's wide range of site management tools includes FTP publishing, with a file-locking capability that encourages team creation and maintenance, as well as a built-in Link Checker, cloaking capabilities, and visual Site Map.

In the next chapter, you learn about ways to structure your Dreamweaver workflow so that you can hit the ground running.





