

Dreamweaver: The Basics

Lesson 1: The Web and the Internet

What are the World Wide Web and the Internet?

The **World Wide Web** consists of millions of specially formatted documents (called web pages) residing on servers connected to the Internet.

The **Internet** is a vast worldwide computer network. It consists of the hardware that connects computers together and allows them to communicate with each other. Contrary to popular belief, the Internet is *not* the same thing as the Web! (Web pages are only one of several services available over the Internet, as we will discuss a little later.)

What is a server?

A **server** is a powerful networked computer that stores information (e.g., web pages, email, shared files) and that desktop computers communicate with to get a **service**. A service might be getting web pages, or getting email, or transferring files, and so on. A server that distributes web pages is called a web server, a server that distributes email is called an email server... you get the idea.

Server software is software that runs on a server computer and provides the desired service. There is web server software for distributing web pages, email server software for delivering email, file transfer software for transferring files, etc.

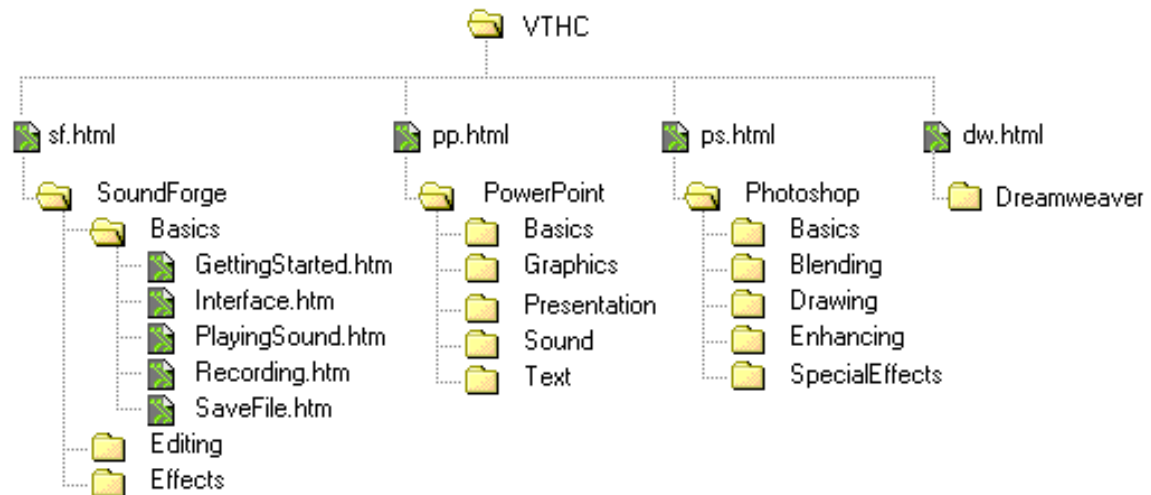
Server hardware can run more than one type of server software at the same time. So, for example, a server computer can be both a web server and an email server, because both types of server software are running on it. (Note: sometimes the word "server" refers to the hardware, and sometimes it refers to the software, so it can be confusing. If you see a reference to a "web server" you can assume that it means a hardware server that is running web server software on it.)

What is a browser?

Web pages are viewed by a special type of software on your computer called a **web browser**. (Netscape and Internet Explorer are the two most popular web browsers.) Web pages are written in HTML (HyperText Markup Language), and they contain only text. (If you open a web page with a text editor rather than a browser, all you will see is text-based HTML code.) However, HTML can include *references* to graphic, sound, animation, and video files. A browser has the ability to get a web page from a web server somewhere, interpret the HTML code, fetch the referenced files, and then construct the page on your computer monitor to look as the designer intended. Be aware, however, that each browser can interpret the HTML code a little differently, so the same page displayed by different browsers may not look exactly the same.

What is a web site?

The term **web site** refers to a collection of related web pages stored on a server and arranged hierarchically in folders. For example, the *Virtual Training Help Center* pages are collectively a web site. Below is a partial "site map" for the *Virtual Training Help Center*:



How does my browser find the web page I want?

Every web page has a unique address, called a **URL** (Uniform Resource Locator). A URL specifies the server on which the web page resides, as well as the path on that server to find the specific web page. An example of a URL is:

iit.bloomu.edu/vthc/welcome.htm

- The above URL says that the web page is stored on the server named *iit.bloomu.edu*. (Web server names do *not* have to begin with "www", although most do. The only thing a computer needs to be a web server is to be running web server software.)

Every server has a unique name, called a *domain name*. The Internet translates the domain name to a unique identifying number, called an *IP address*. With the IP address, your computer can talk to the remote server. (You can think of IP addresses as phone numbers that computers use to talk to each other!)

- The URL also says that the web page's name is *welcome.htm*, and that it can be found inside the *vthc* folder on the *iit.bloomu.edu* server. (Web pages usually have **.htm** or **.html** as an extension.)

Every browser has a place where you can type the URL of the web site you want to see. A web page can also contain links to other web pages, which take you to the specified web page when clicked upon (without typing anything). Either way, once the browser is given the URL, it knows which server the web page resides on and where it is stored on that server. With both of these pieces of information, the browser can:

- 1) talk to the appropriate server
- 2) ask the web server software on the server machine to locate and send the web page to the browser
- 3) receive the web page file from the server
- 4) interpret the HTML contents
- 5) request and receive any graphic, sound or video files referenced by the web page
- 6) construct the web page, incorporating any referenced files
- 7) display the web page

**What does
"client/server" mean?**

The web is an example of what is called **client/server** technology. The software on the **client** machine talks to the software on the **server** machine and they exchange information. In this case, the client software is your web browser, and the server software is the web server software running on the server machine.

What is a protocol?

Every client and server software pairing communicates using a specific protocol, or language. For example, web browsers communicate with web servers using the HTTP protocol.

The HTTP web protocol is just one of several protocols that computers use to communicate over the Internet. You can think of the Internet as a collection of telephones and the wires used to connect the phones together. When you use a telephone, you have to speak in a language that both sides understand. Languages are the equivalent of the various Internet protocols. Web browsers and servers talk to each other in Web language (HTTP); email clients and servers can talk to each other using the Post Office Protocol (POP); file transfers take place between servers and clients using the File Transfer Protocol (FTP); and other clients and servers use other languages or protocols as well.

Earlier we said that a URL looks something like this:

iit.bloomu.edu/vthc/welcome.htm

In actuality, complete URLs begin with "http://":

<http://iit.bloomu.edu/vthc/welcome.htm>

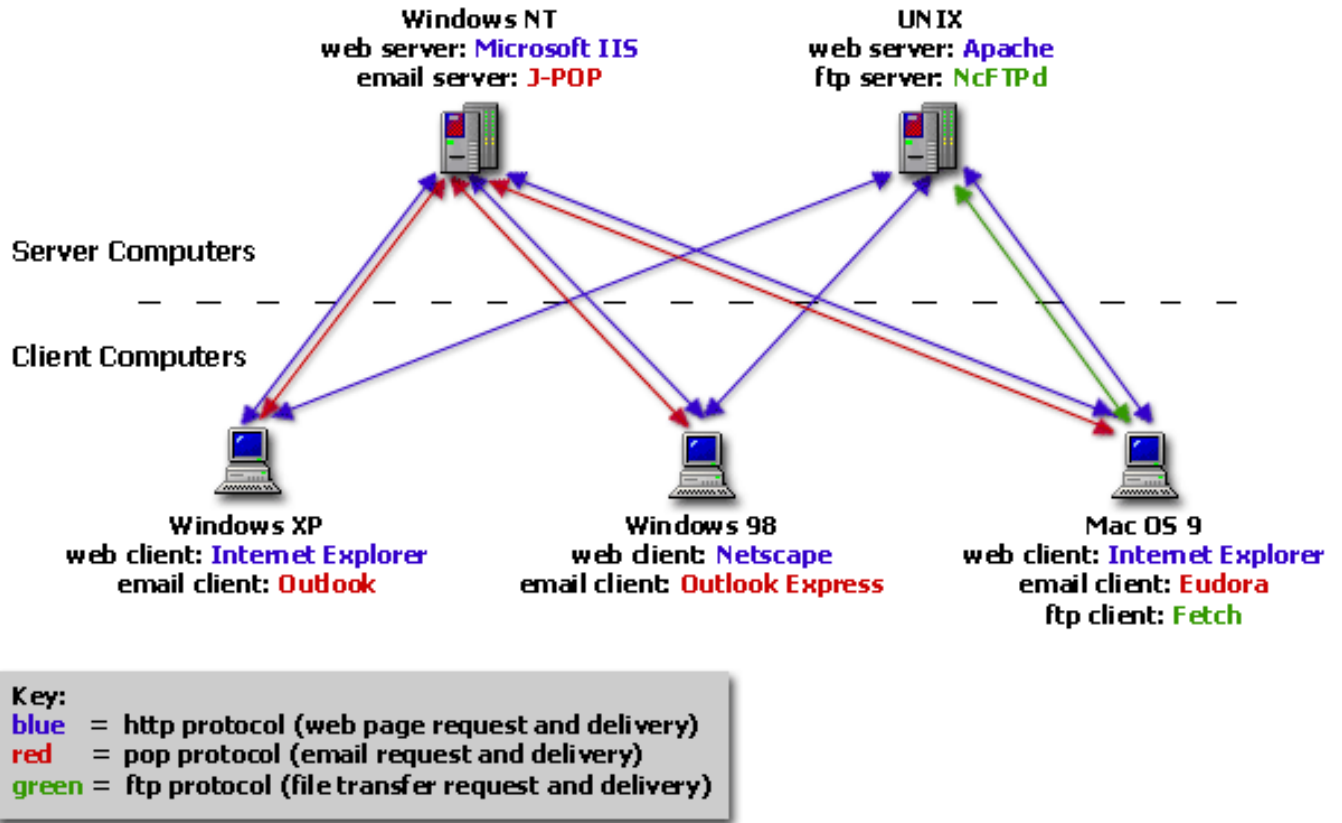
This tells the browser which protocol to use when communicating with the server. Of course, since HTTP is the standard protocol for the web, if you don't type the protocol the web browser simply assumes HTTP.

Note: There is a big advantage to having a standard "language" or protocol for each service on the Internet: client software written by one company can "talk" to server software written by another company, as long as they both "speak" the same protocol. For example, two very popular web servers are Microsoft IIS and Apache. Since both of these servers speak HTTP, your web browser doesn't care which server software it's talking to, or what operating system the server hardware is running. Conversely, the server doesn't care whether your client is Netscape, Internet Explorer, or some other browser, or whether you are using a Windows machine or Macintosh. The communication occurs and the web files are transferred because the same language is being spoken.

Below is a diagram showing different client and server computers talking to each other. Each service (the web, email, etc.) has its own protocol (http, pop, etc.) that the client and server software use to communicate.

As an example, look at the items in green: a file transfer

client (Fetch) and a file transfer server (NcFTPd) are talking in the FTP language to carry out a file transfer.



Lesson 2: Introduction

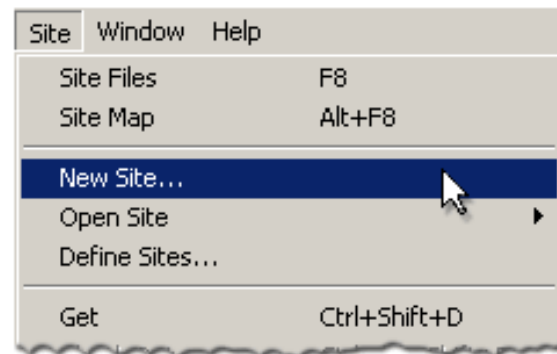
What is Dreamweaver, and why should I use it?

Dreamweaver is an application that lets you create web pages quickly and easily, without having to know more than the basics of the HTML language. While working in the document window, you design the way your page should look, and Dreamweaver automatically generates the correct HTML (Hyper Text Mark-up Language) and javascript codes for web browsers to understand. You can even switch between seeing what the page will look like and the HTML code that creates it. Dreamweaver has very useful web site management tools to help you organize your web pages or work collaboratively on a web site.

How do I get started?

To set up a new web site:

- 1) Make a new folder on your hard disk to hold all of your web files. This is called the *root folder*. Give the root folder a descriptive name (but don't use spaces!) This folder and the files you will put into it are called the *local site* because it's on your local hard disk, and not on a web server. (Yet!)
- 2) Launch Dreamweaver.
- 3) Pull down the **Site** menu and select **New Site**:

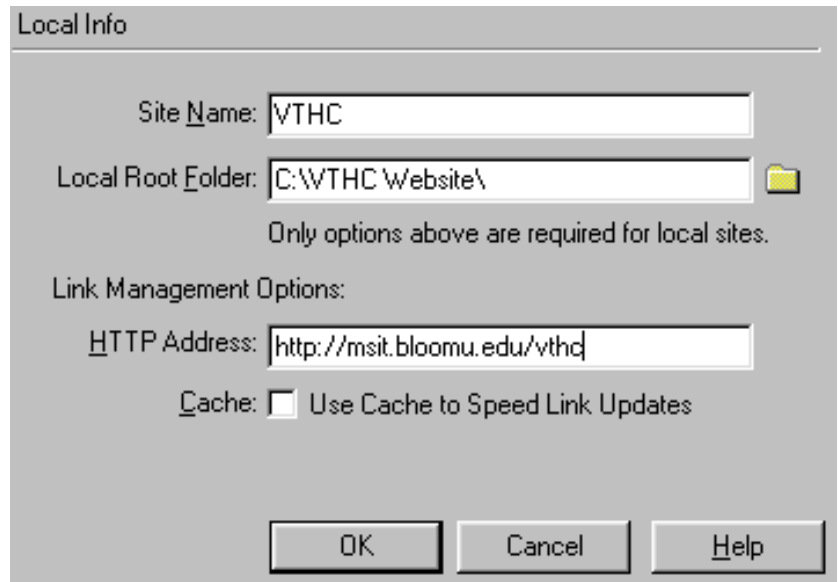


A **Site Definition** dialog box will appear.

- 4) In the **Category** list on the left, click **Local Info**:



The right-hand side of the **Site Definition** dialog box should now look like this:



5) Enter a name for your site in the **Site Name** text box. (It's probably easiest to use the same name as the one you gave your root folder.)

6) Enter the path to your root folder in the **Local Root Folder** text box.

OR

Click the small folder icon to the right of the **Local Root Folder** text box. A dialog box will appear; select your root folder then click **Select**. The path will be inserted into the text box automatically.

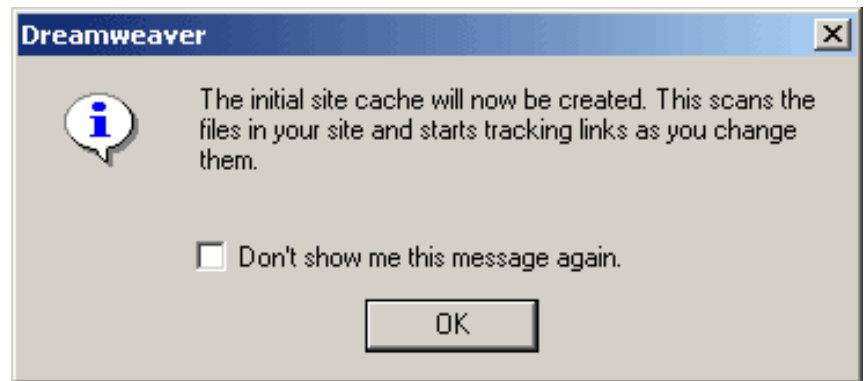
7) The HTTP Address is the URL where your site will eventually live on web server. In the **HTTP Address** text box, enter that URL (including the "http://" part). If you don't know what the URL will be, leave the **HTTP Address** text box empty for now.

Note: You will learn how to transfer your site to the web server in the lesson *Transferring Files*.

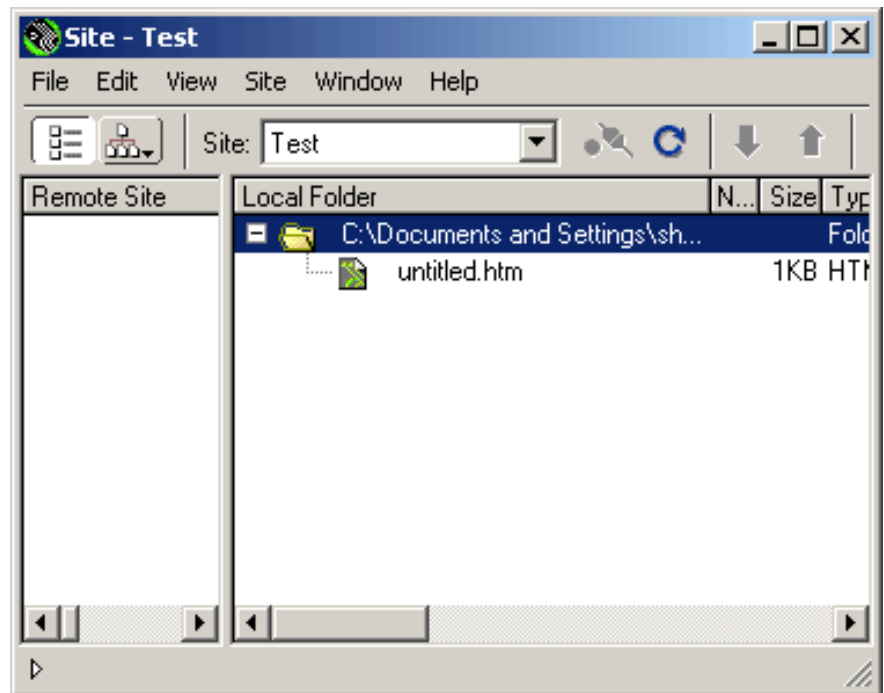
8) Select the **Use Cache** check box to improve the

speed of link- and site-management tasks.

9) Click **OK**. You will see the following dialog box:



10) Click **OK**. Dreamweaver will create your site, create the site cache, and open the site window:



Practice

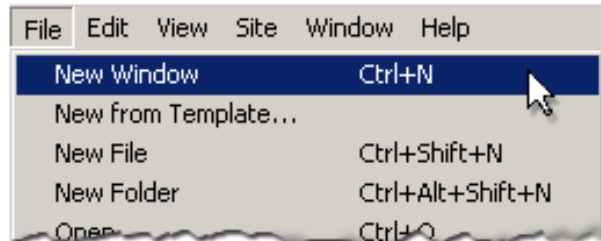
So now that you know how it's done, let's try it:

- 1) Create a folder for your site and name it.
- 2) Open Dreamweaver and open the **Site Definition** dialog box.
- 3) Enter the name for your site.
- 4) Enter the path of your local root folder.
- 5) If you know it, enter the site's future URL.
- 6) Check the **Cache** box to speed things up.
- 7) Click **OK**. Create the site cache, and you're done! You should be looking at the site window of your new web site.

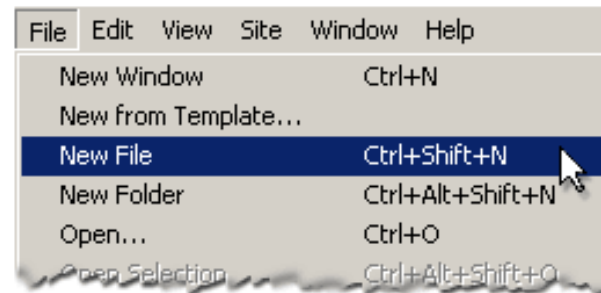
Lesson 3: Working with Files

How do I create a file?

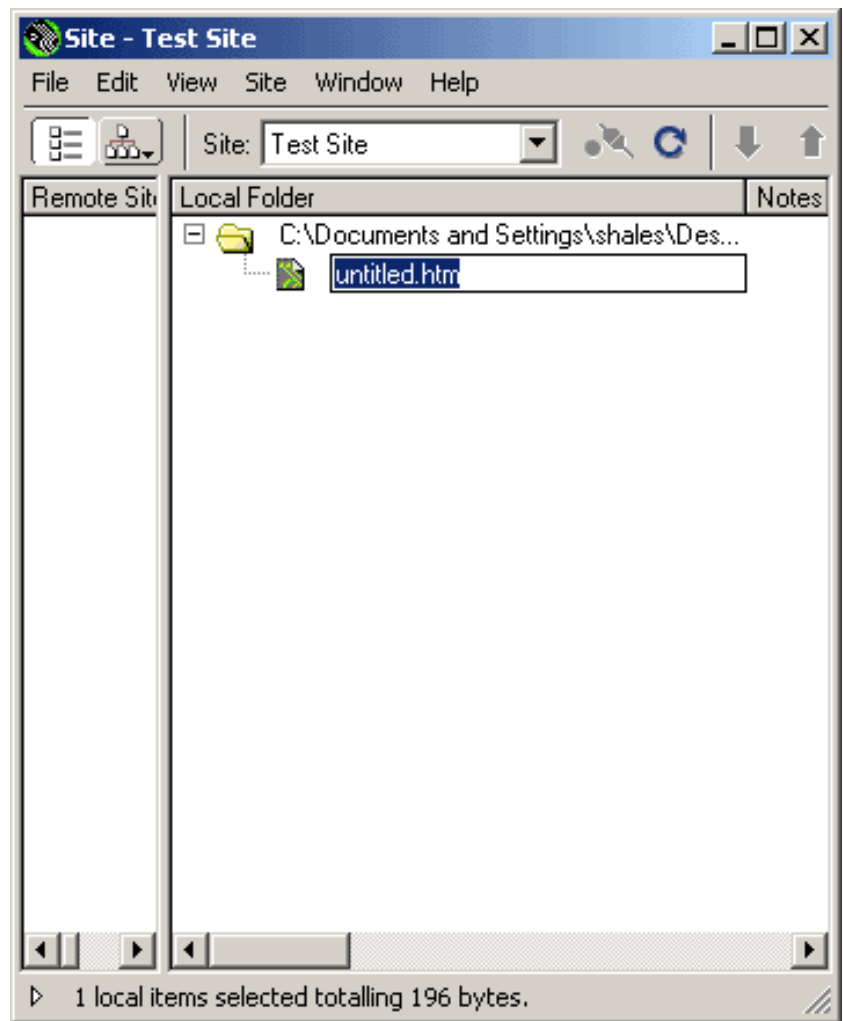
By default, when you first launch Dreamweaver, a new blank file is opened. You can create and open additional new files by pulling down the **File** menu and selecting **New**:



If you want to create a new blank file but not open it, pull down the **File** menu and select **New File**:



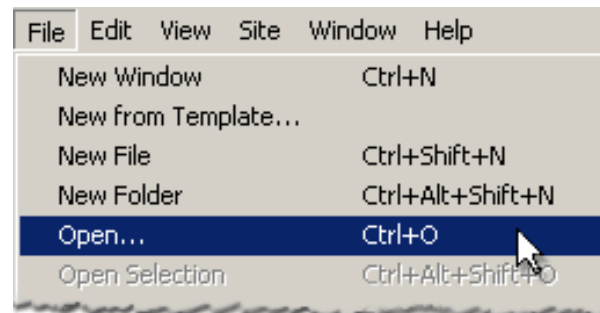
The file will appear in the site window, where you can name it:



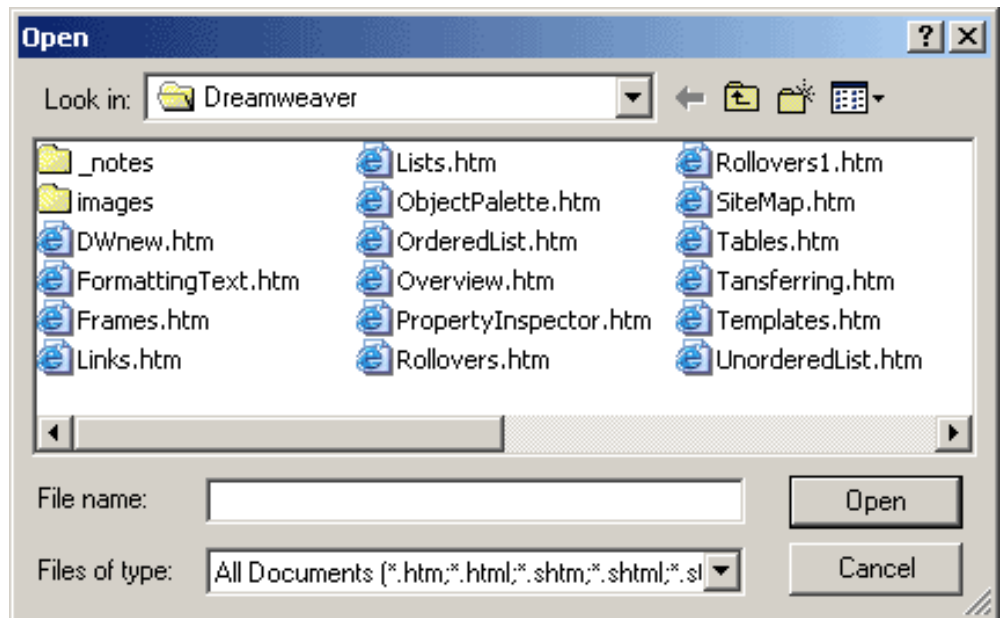
**How do I
open a file that
already exists?**

To open an existing file in Dreamweaver:

- 1) Pull down the the **File** menu and select **Open**:



The Open File dialog box will appear:



2) Be sure that **Files of Type** pull-down menu includes the file type you want, then make your selection.

OR

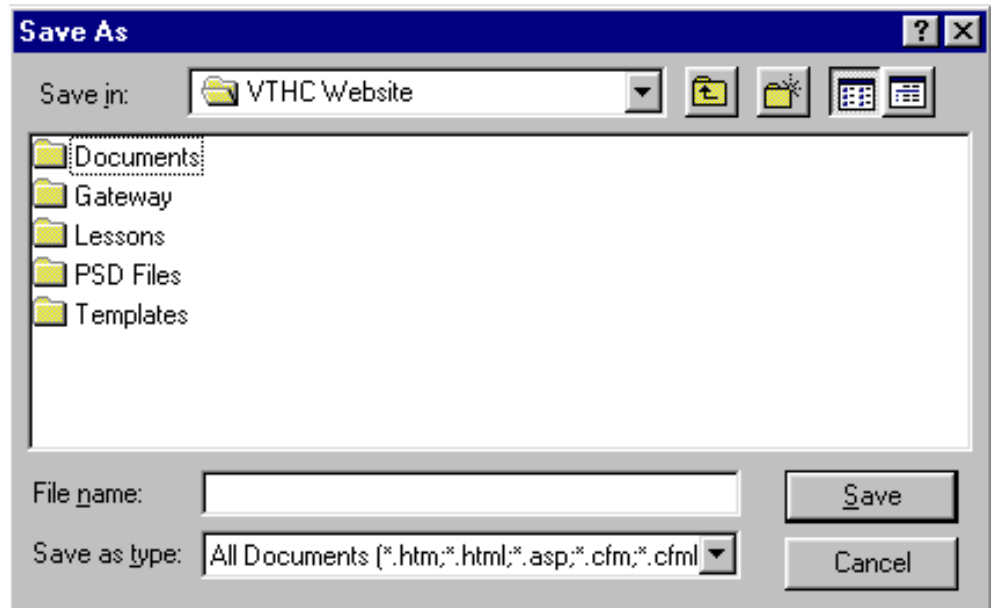
Simply double-click the file's icon in the site window.

Note: You can open any file with an .htm, .html, .cfm, or any other web file extension. It does not matter whether the file has been "hard coded" (the HTML typed in by hand) or created in Dreamweaver or any other HTML editor. It makes no difference, because the files are text-only and have no special format.

How do I save a file?

To save a file in Dreamweaver:

1) Pull down the **File** menu and select **Save**. The **Save As** dialog box will appear:



2) Give the file a name by entering it in the **File Name** box. Dreamweaver will save your file as an HTML document.

How do I view my page within a browser?

To view how your page looks within your default web browser, press the <F12> key. Your default browser will automatically launch and load your page. To return to Dreamweaver, close the browser window.

Practice

Now let's make your very first web page:

- 1) Launch Dreamweaver.
- 2) Open the site you defined in the last lesson by pulling down the **Site** menu, selecting **Open Site**, and selecting your site from the nested menu.
- 3) Open a new file.
- 4) In the file window, type "Welcome to Dreamweaver."
- 5) Save the file, and name it "Welcome".
- 6) View your page in your default web browser.

Congratulations! When you're done looking at your page, you can close your browser's window.

In the next lesson we'll learn more about putting text into your web page.

Lesson 4: Adding Text

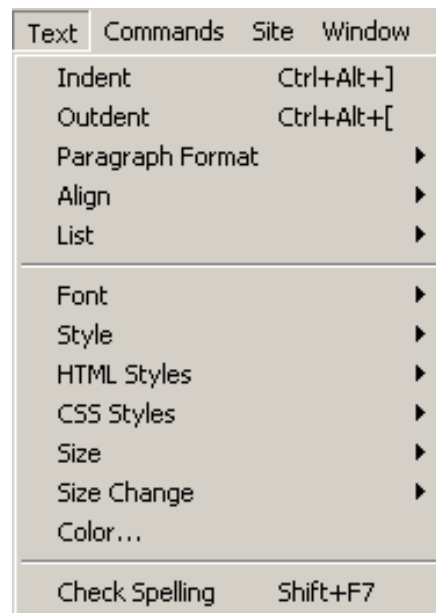
How do I add text?

As you learned in the exercise in the previous lesson, all you have to do to add text to your web page is click in the document and type. In this way, Dreamweaver is just like a simple word processor.

How do I format text?

However, formatting text in HTML is a little different from formatting in your word processor. When you create a document in your word processor, you decide exactly how you want it to look. You have control over the exact font and font size that is used, how many spaces you want a paragraph to be indented, etc. The idea with web pages, however, is that the *browser* makes the final determination on exactly how a web page looks. As the designer of the page, you set certain parameters and the browser interprets them, based upon the user's specification. You'll learn more about this idea as we go.

Several options are available under the **Text** menu to format the appearance of your text within a web page. Click on the **Text** menu to see the available options:



In this lesson we will cover the most commonly used formatting options. In later lessons some more advanced formatting will be discussed.

What are "serif" and "sans serif" fonts?

Before we learn about specifying fonts on web pages, first we need to add a couple of terms to our typesetting vocabulary: **serif** and **sans serif**. Although there are some exceptions, for the most part fonts fall into one of these two categories. A serif font is one that has serifs on the letters (more about that in a minute), whereas a sans serif font is one that does not have serifs ("sans" is French for "without").

OK, so what's a serif? A serif is a little ornamentation or bar across the ends of the strokes of a letter. It's easier to see than explain, so take a look at the pictures below. The one on the left is showing a serif font, and the red arrows point to the little serifs on the ends of the letters. The picture on the right shows a sans serif font, and the red arrows point to where the serifs *would* be, but aren't.



Studies have shown that serif fonts are much more legible, and so they are usually used for extended lengths of text, like in paragraphs.

Sans serif fonts, on the other hand, tend to have a bolder, more attention-getting look, and so they are usually used for titles, headings, sub-heads, etc.

Professional typesetters will tend to use only two fonts on a page: one serif, and one sans serif. Otherwise, the page begins to look too busy and it can be disruptive. (You should usually follow this rule as well.)

Note: "Monospaced" fonts are fonts where each letter has the same width; in other words, an "i" takes up as much space as a "w". Monospaced fonts (or "mono" for short) were all that were available on typewriters, and on early computer monitors. Because of that, monospaced fonts are often used on web pages and documentation to indicate text that a person should type, or computer prompts. For example:

To go to the Virtual Training Help Site, enter

```
iit.bloomu.edu/vthc.
```

If you make a mistake, you will see the following error message:

```
The page cannot be displayed.
```

How do I specify the font?

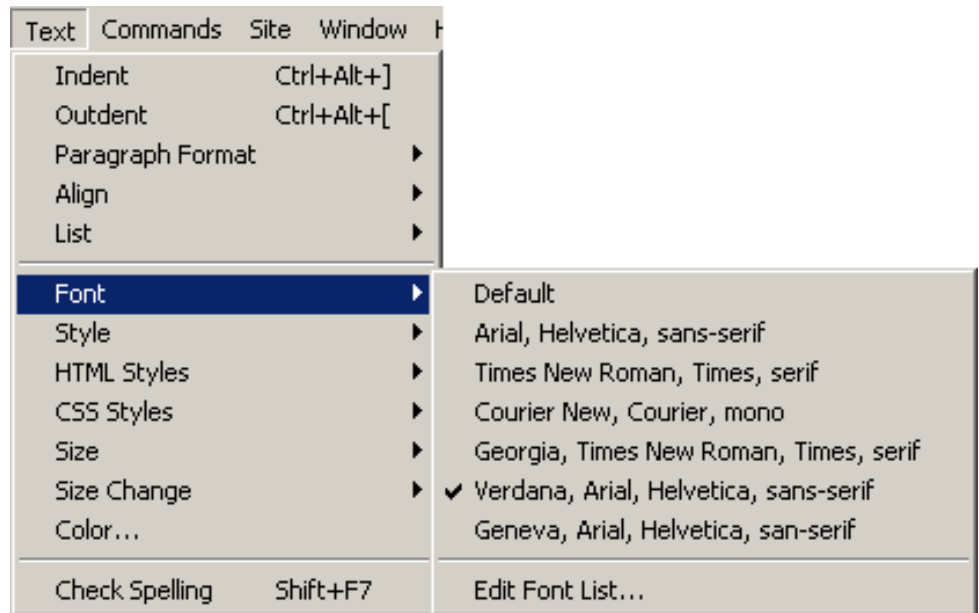
Because your web page will be transferred over the Internet and viewed on another computer, you don't know what fonts will be available to the viewer. For this reason, you can't pick just any old font that happens to be on your computer. You can do either of the following:

- tell Dreamweaver to use whatever font is the default font specified by the user's browser
- specify a group of similar fonts, and the user's browser will use the first one available from the list.

Here's how:

1) Select the text you want to format.

2) Pull down the **Text** menu, click **Fonts**, and select the desired item from the fly-out menu:



- Select **Default** to use the browser's default font setting;

OR

- Pick one of the available font groups;

OR

- Choose **Edit Font List** to create your own font group.

One of the benefits of using the pre-defined font groups is that the fonts listed are extremely common on both Windows and Macintosh computers, and so your page is more likely to look the way you expect it to.

Notice that at the end of each font group, it says either "serif", "sans serif", or "mono". What that means is that if none of the listed fonts are available on the viewer's computer, the default serif, san serif, or mono font will be used instead. This lets you at least specify the type of font, even if you can't be sure of getting the exact one you want.

How do I change the font size?

In HTML, fonts are not set by point size. Instead, you get to choose size on a scale of one to seven.

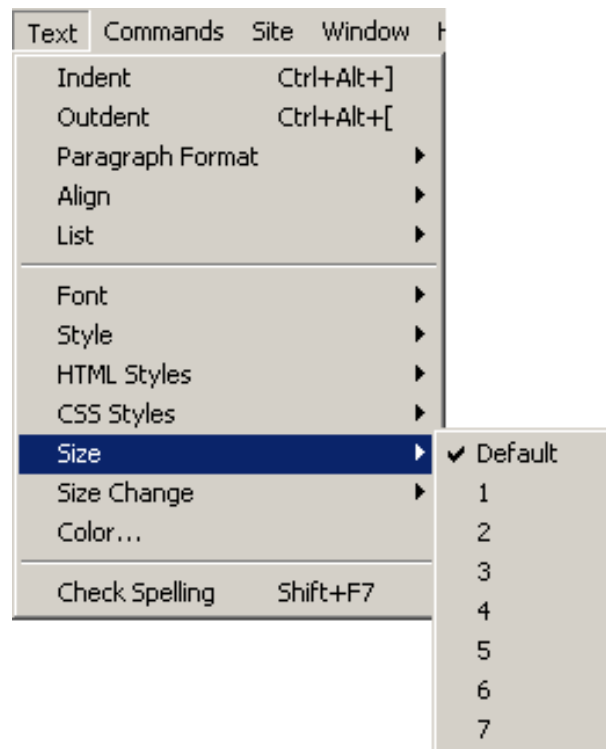
Here's how the different sizes look:

One
Two
Three
Four
Five
Six
Seven

If you don't specify a size, the browser will use its default setting.

Here's how to set the font size:

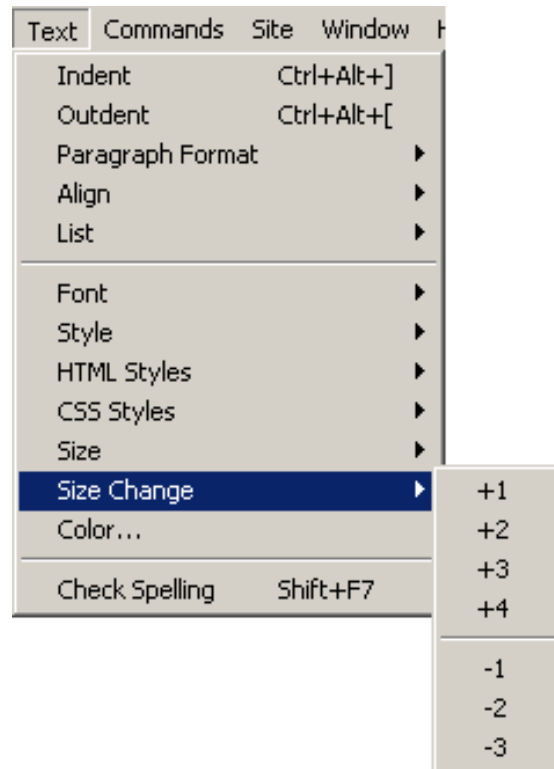
- 1) Select the text you want to resize.
- 2) Pull down the **Text** menu, click **Size**, and select the desired size from the fly-out menu:



There are times when you don't want to set a font to a specific size; instead, you want to make its size *relative* to the size of the default font. For example, if the body of your web page is set to the browser default, and you want a header to be a bit bigger, what do you set the size to? Since you don't know the default size, you can't set the header size to any specific number. In that case, you can use the **Size Change** command to set a font size. You can increase the size up to four steps over the default size by selecting either +1, +2, +3, or +4; you can decrease the size up to three steps below the default size by selecting either -1, -2, or -3. Here's how:

1) Select the text you want to resize.

2) Pull down the **Text** menu, click **Size Change**, and select the desired size from the fly-out menu:

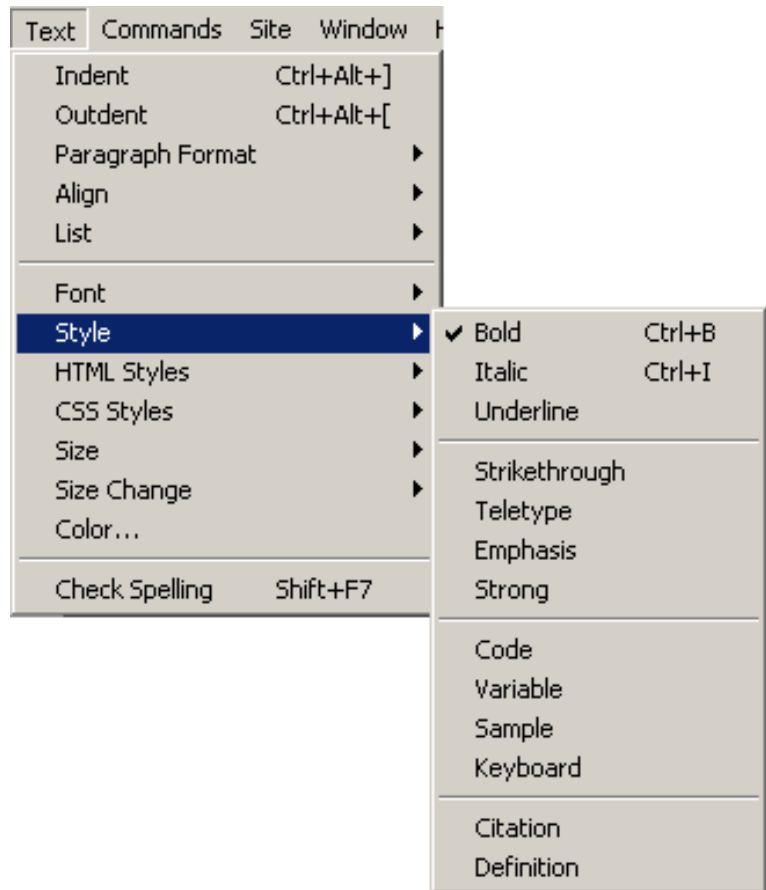


Food for thought: What is the point of having the default font size set by the browser, rather than the web page designer? One good reason would be if the designer wanted the page to be easily readable by people who have difficulty seeing, but not ridiculously large for those who don't. The user could set their default font size to something very big, and then the web page would be displayed in large type for them. Can you think of any other reasons?

How do I set text style?

To make your text bold, italic, and/or underlined:

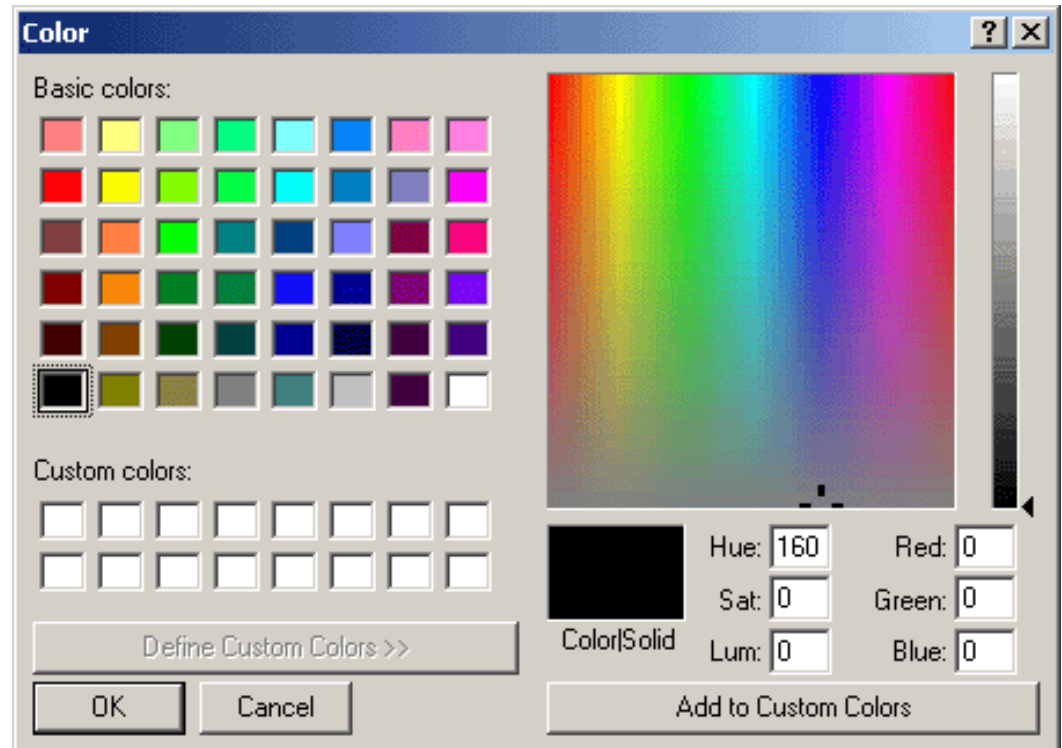
- 1) Select the text you want to format.
- 2) Pull down the **Text** menu, click **Style**, and select the desired style from the fly-out menu:



How do I change the text color?

To change the color of your text:

- 1) Select the text you want to color.
- 2) Pull down the **Text** menu and select **Color**. The following dialog box appears:



- 3) Select the color, then click **OK**.

How do I indent and "outdent" text?

A paragraph is indented when extra spaces are added to its left and outdented when the extra spaces to its left are removed. (Outdenting is the same as un-doing an indent.)

In the example below, the phrase "Some of the people who worked on this project are:" is outdented, and the names are indented:

Some of the people who worked on this project are:

**Frank
Aimee
Bill**

To indent a paragraph:

- 1) Click anywhere in the paragraph you want to indent.
- 2) Pull down the **Text** menu and select **Indent**.

To outdent text that has been indented:

- 1) Click anywhere in the paragraph you want to outdent.
- 2) Pull down the **Text** menu and select **Outdent**.

**How do I
add headings?**

Unlike a desktop word processing software, which lets you add various sizes and styles of headings to your document, you can only use six types of headings within a web page. **Heading 1** is the largest and **Heading 6** is the smallest.

Here's how the different headings look:

One

Two

Three

Four

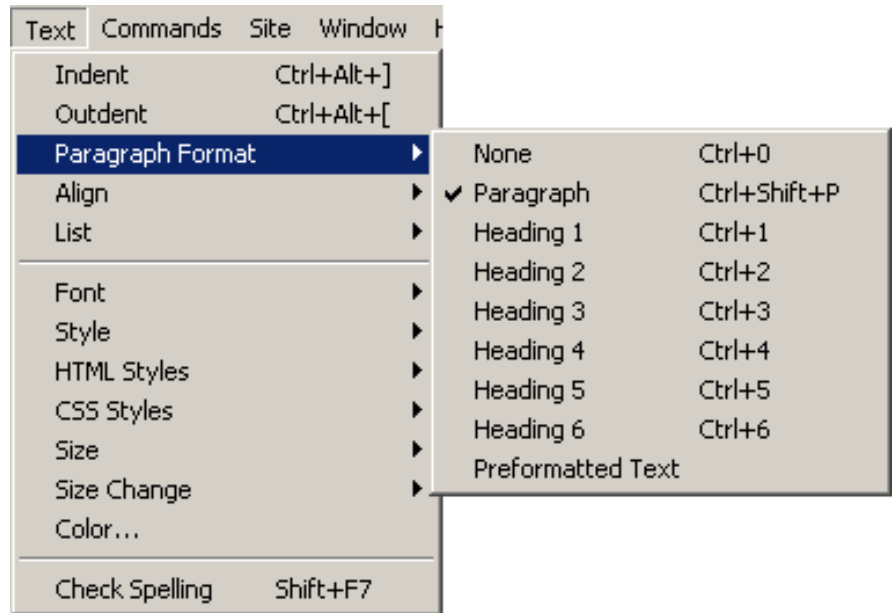
Five

Six

To add a heading to your page:

- 1) Click anywhere in the paragraph that you want to turn into a heading.
- 2) Pull down the **Text** menu, click

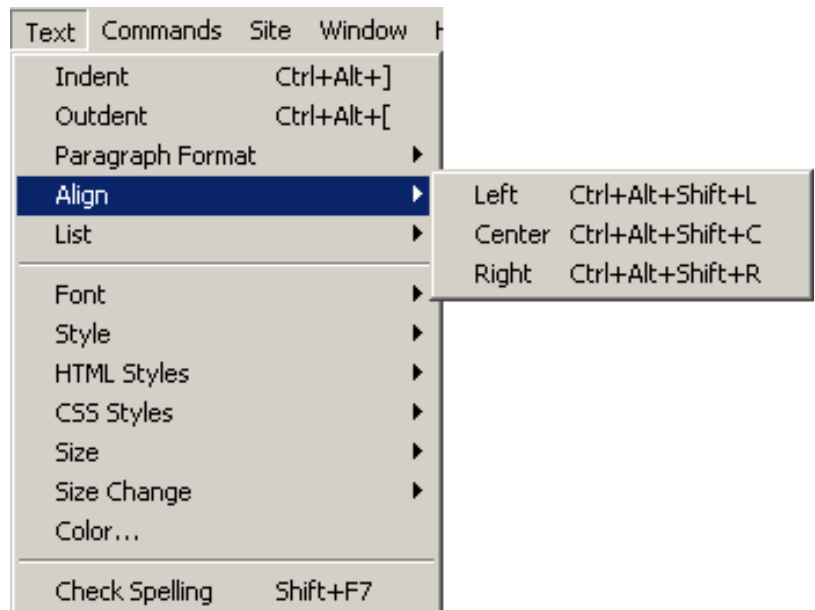
Paragraph Format and select the desired heading type from the fly-out menu:



How do I align text?

Paragraphs can be left aligned, centered or right aligned. To change the alignment of a paragraph:

- 1) Click anywhere in the paragraph.
- 2) Pull down the **Text** menu, click **Align**, and select the desired alignment from the fly-out menu:



Practice

Let's try adding some text to a web page and doing some basic formatting:

- 1) Open a new file in Dreamweaver.
- 2) Type a main heading using Heading 1.
- 3) Type a secondary heading using Heading 2.
- 4) Center the main heading on the page.
- 5) Color the main heading blue.
- 6) Type two paragraphs of text.
- 7) Set the font and font size of the text.
- 8) Italicize a sentence of your text.
- 9) Indent the second paragraph.

Press F12 to launch your default web browser and see what your page looks like. When you're done, close your browser.

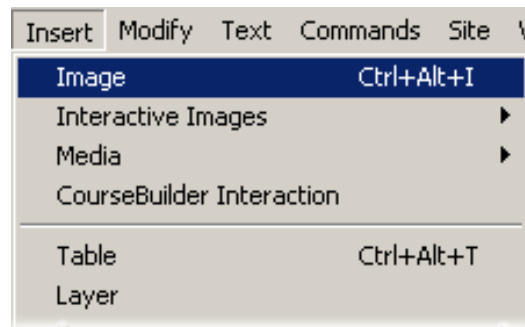
Lesson 5: Adding Graphics

How can I add graphics to my pages?

To put a graphic on a web page, it must be in either GIF, JPEG, or PNG format. (See the course on Digital Images for detailed information about graphic formats for the web.)

Once you have your image in an acceptable format, it is easy to insert it into a web page. Just follow these steps:

- 1) Make sure that your blinking insertion point is located you want the graphic to appear.
- 2) Pull down the **Insert** menu and select **Image**:



- 3) From the **File** dialog box that appears, select the image file you want to insert, then click **Select**. The image will be placed on your page.

Note: Right now, you can't put a graphic side-by-side with text. You'll learn how to do that in the *Tables* lesson.

Practice

If you have a GIF, JPEG, or PNG image available, place it on the web page you have been creating. Then save the web page.

Lesson 6: Transferring Files

Introduction

So now you have created a basic web page. That's great, but for anyone else to be able to see it, the page needs to be on a web server connected to the Internet. In general, web site designers do not create their web pages directly on a web server; instead, they use their local computer to design and create their website and then put their files on the web server so that it is available to be seen by web browsers.

How can I put files on a web server?

Sneaker Net

One way to transfer files from your computer to the web server is to save all your files on a floppy disk, a zip disk, or a CD-ROM, and then copy them to web server's hard drive. If you don't have physical access to the web server, it may be possible to send the disk to the server administrator and he or she will copy them to the correct location. Of course, this is a slower approach, and you may have to wait for the files to be made available.

File Services

A second way to put the files onto the web server is to "mount" the server's hard drive as another lettered drive in your **My Computer** folder, using a username and password given to you by the server administrator. You can then drag your web files to the desired location on the server the same way you copy files onto any other disk. This is a good solution if the server is located on the same local network as your computer, but it's a poor solution for a distant server, because file services protocols (that is, protocols for mounting remote disks) can be very slow over the Internet. This approach also only works if the client and server computers use the same file services protocol, because file services protocols are proprietary, rather than universal.

FTP

A third, and often most efficient, way to put the files on the web server's hard drive is to transfer them electronically over the network using the file transfer protocol (FTP). (For a reminder about protocols, see *Lesson 1*.) FTP is very fast, and since it is a standard rather than proprietary protocol, it doesn't matter what operating system the client and server are running.

As you may recall, in order to use the FTP protocol, you need an FTP client installed on your computer, and there must be an FTP server running on the server. This will let the two computers talk to each other and transfer files between them. Luckily, most servers that are running web server software also are running FTP server software. Client FTP software is easy to get, and it may already be installed on your machine.

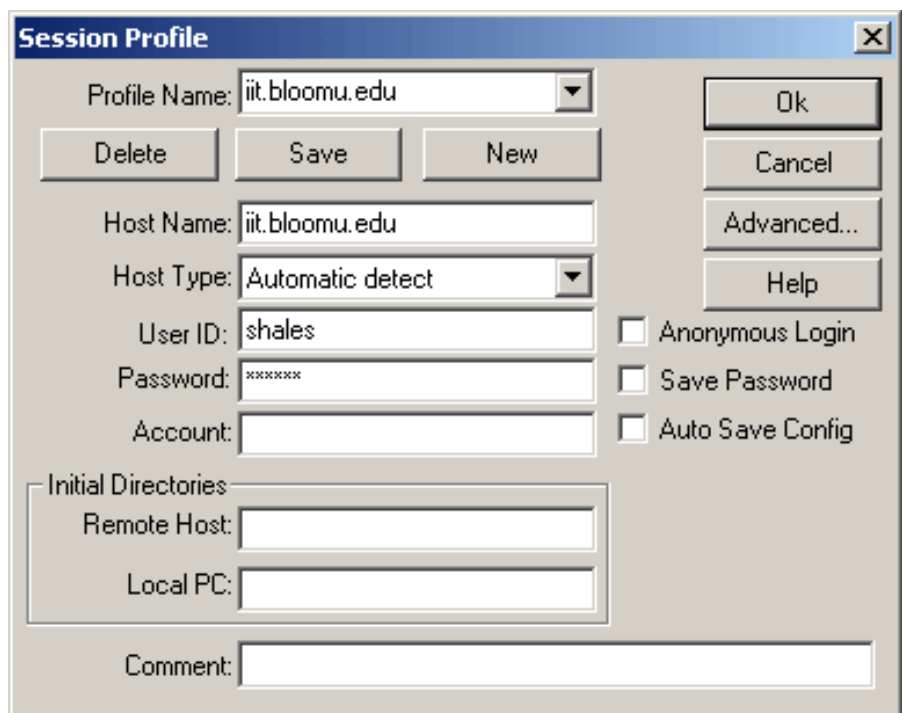
Because FTP software allows you to read and write to the server's hard drive, you must have a username and password for authorized access. When you run the FTP client software and tell it what machine you want to connect to, it will prompt you for the username and password before it will allow you to connect. To obtain a username and password in order to transfer files to a server, see the server administrator.

Transferring files with FTP

Every FTP client will look a little bit different, but the principle is always the same. We'll use WS_FTP, a common Windows FTP client, as our example client software. (You can download a trial copy of WS_FTP from www.ipswitch.com.)

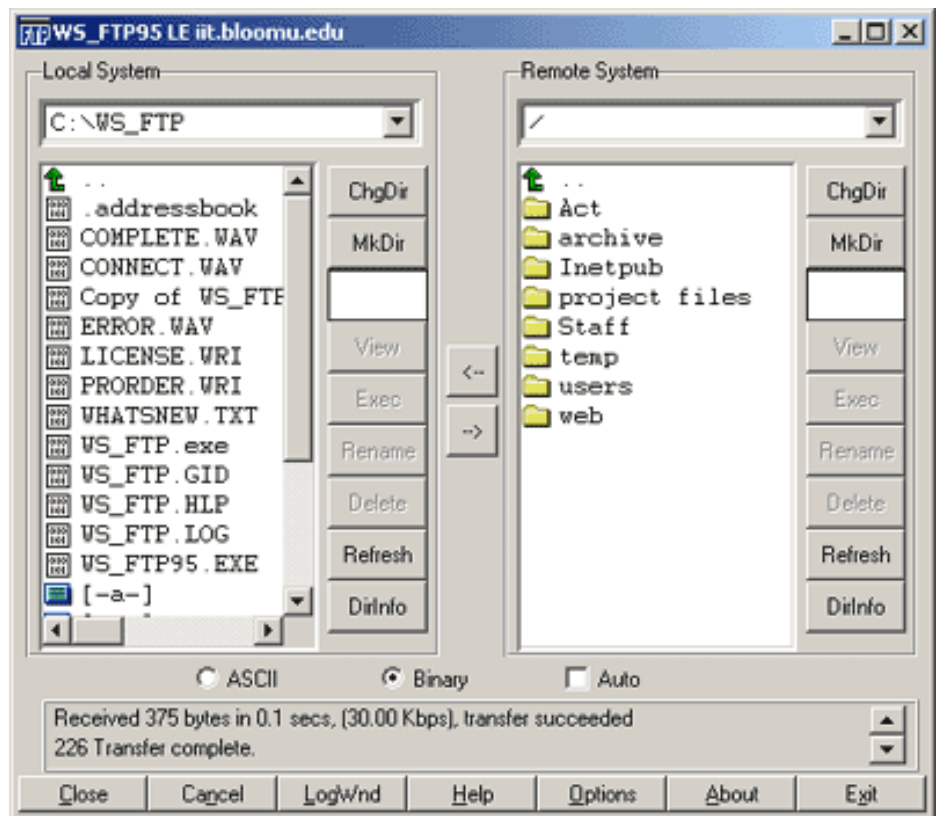
To transfer files from your computer to a web server using WS_FTP, follow these steps:

1) Open the **WS_FTP** program. The screen below will appear:



The screenshot shows the 'Session Profile' dialog box in WS_FTP. The dialog has a title bar with a close button (X). It contains several input fields and buttons. The 'Profile Name' field is set to 'iit.bloomu.edu'. Below it are 'Delete', 'Save', and 'New' buttons. The 'Host Name' field is also 'iit.bloomu.edu'. The 'Host Type' dropdown is set to 'Automatic detect'. The 'User ID' field contains 'shales'. The 'Password' field is masked with asterisks. The 'Account' field is empty. To the right of these fields are three checkboxes: 'Anonymous Login', 'Save Password', and 'Auto Save Config', all of which are unchecked. Below the 'User ID' and 'Password' fields is a section for 'Initial Directories' with 'Remote Host' and 'Local PC' fields. At the bottom is a 'Comment' field. On the right side of the dialog are buttons for 'Ok', 'Cancel', 'Advanced...', and 'Help'.

- 2) Within the **Host Name** box, type the domain name or IP address of the web server you want to connect to. (See *Lesson 1* to review what domain names and IP addresses are.)
- 3) In the **User ID** box, type your username.
- 4) In the **Password** box, enter your password.
- 5) Click the **OK** button. This screen will then be displayed:



On the left side is the directory for your local hard drive. On the right is the directory for the remote server.

- 6) On the left side, navigate to the folder where your source html files are located.
- 7) On the right side, navigate to the folder into which you want to copy your website.
- 8) On the left, select the file(s) you want to transfer to the web server.

- If you want to move the entire web site to the

server, select the folder;

- If you want to move just some individual files, select them individually. (To select multiple files located next to each other, click on the first file name in the list, then hold down the Shift button and click on the last file name in the list. To select multiple discontinuous files, hold down the Ctrl button and click on each file you want to select.)

9) Click on the right arrow in between the two columns to transfer your selected files from your computer (the left side) to the web server (the right side).

Practice

Let's get your web site established on a web server:

1) Contact your web administrator and ask her/him to:

- Tell you the web server host name (also called the DNS name).

example: *iit.bloomu.edu*

- Create a folder for your web site on the web server and give you the path to the folder.

example: */users/smith/*

- Give you a username and password so you can access the web server.

2) Transfer your html file from your computer to the web server. (In an earlier lesson, you named it *welcome.htm*).

3) Using your web browser, view your web page. The URL for the above example would be:

http://iit.bloomu.edu/users/smith/welcome.htm