

Using FTP to Update Your Site

To get started accessing your ServInt account, you will need a computer with Internet access to begin uploading your web files from. Any type of computer which can handle normal SLIP/PPP dial-up Internet access will suffice (if you need more information, or you are having problems getting connected to the Internet, you should contact your dial-up access provider). Beyond that, you will need clients (programs) for the service you wish to use.

What is FTP? Why Use it?

FTP (File Transfer Protocol) is used to upload or download files to or from a local computer (such as your home or work PC) to a remote computer (such as ServInt's web servers).

In a pinch, you can administer your website solely through FTP client use. You will need to make all modifications to your site's files on your local computer, then FTP upload the finished files to the ServInt server. Typical FTP sessions restrict you to placing, removing and renaming files only.

Follow the instructions below to get started, based on the type of home PC you use.

Windows FTP

For FTP from a Windows-based computer, we recommend the program **WS_FTP**. This is a shareware application. There is a freeware version, called **WS-FTP LE version 4.60**; screenshots in these examples are taken from this program. To download WS-FTP LE ver. 4.60 for Windows 3.1, Windows 95 or Windows 98, go to <http://www.tucows.com>.

Note: Virtually any Windows FTP client will work; however, the steps involved in setting up the program, etc., may be superficially different. However, all of this information should hold true for any graphical FTP client for Windows.

Configuring Your FTP Client

Upon starting your FTP client, the application will prompt you for information about the site you wish to connect to. This information lets the computer know where it needs to look on the internet for the server and how to log into it.

For example, figure 1 shows the 'Session Properties' screen for WS-FTP. In order to configure the FTP client to log into dcfree net, one would fill in the fields as shown. The Profile Name field in this example is simply a name that you wish to assign to this server as a sort of nickname. It is of no particular use to the application, it just gives you a way of easily organizing your list of commonly accessed servers.

The Host Name/Address field is the first critical field for configuring your client. This field tells the client where to look for the server you wish to connect to. It is equivalent to a street address in the real world. You may either supply the server's domain name, *dcfree.net*, or the server's IP address, *209.50.251.25*. The client understands either nomenclature, but the address must be correct, not just close, or the FTP client will not be able to find the server.

The host type field defaults to Automatic detect. Leave this alone, it works wonderfully. As a side note, this information lets your FTP client know whether you wish to override the client's built-in feature that detects what sort of computer it is talking to when it logs in.

The User ID field is where you enter your account name on the *dcfree.net* server. This allows your client to log in for you without prompting you for a username each time.

Enter your password to the dcfree net server in the next field, and check the box that says 'Save Pwd'. This will tell your client that you wish to save your password information on the machine you are working on, so that you can log in without providing it each time.

When all of this information has been entered, click the 'Apply' pushbutton. This will save the information as your login

preference for logging into dcfree net. From here on out, you may simply log into dcfree net by starting the WS-FTP application and selecting D.C. FreeNet from your list of configured hosts. The same configuration screen will appear for each new session you start. For future sessions though, you only need to select your dcfree net information from the Profile Name field and then click 'OK'. Your computer will automatically connect and log into dcfree net.

Transferring Files With Your FTP Client

Once you have configured your client and logged into the server, you are ready to begin navigating around the server and transferring files both to and from the server. Your FTP client has two list boxes in its main window. The left box shows the local system, your computer. The right box shows the server you are connected to, in this case, dcfree net.

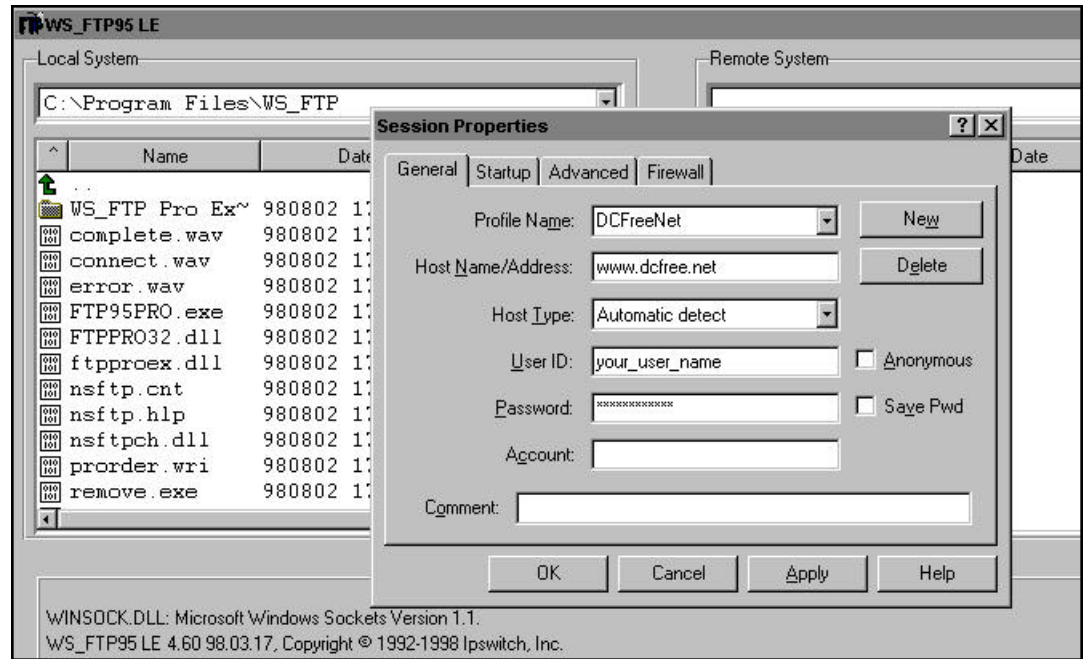


Fig. 1: Using the Session Properties dialog box to give the correct settings for FTP-ing files.

When transferring files, the directories selected in both windows act as your target directories. If you are sending a file to the server, the file will be copied from your current working directory on your computer, to the current working directory on the server.

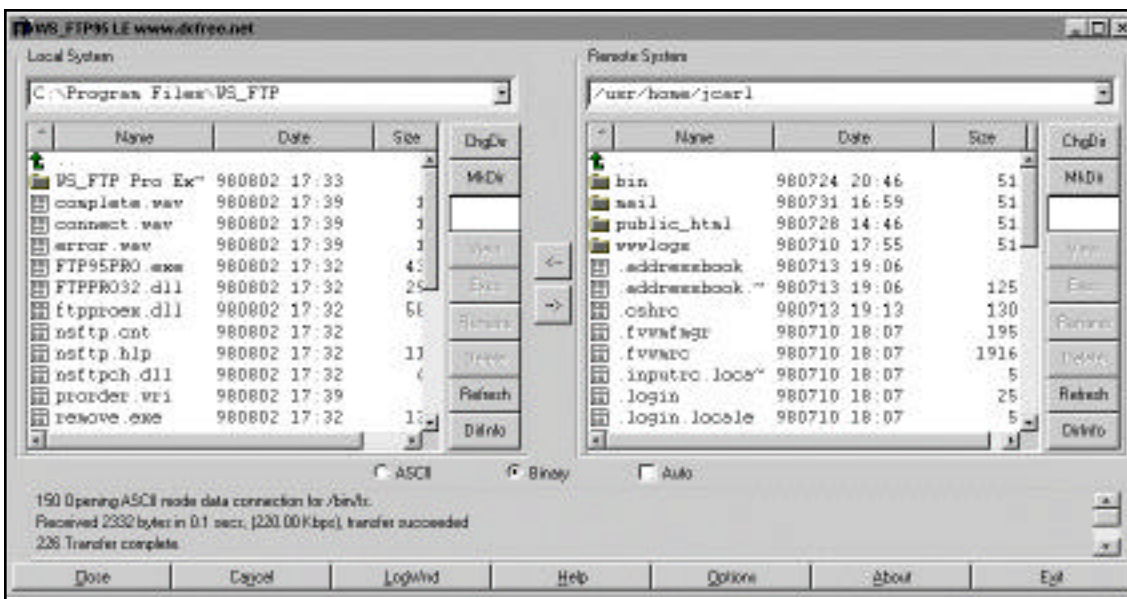


Fig. 2: Local and remote files viewed in WS_FTP LE.

When the FTP client connects to dcfree net, it places you in the default root directory for your account. In figure 2, you see the user jcarl logged in. The client has logged itself into the machine and placed you in jcarl's default directory /usr/home/jcarl. You probably do not want to place any files in that directory. Most likely you wish to place files in your public_html directory. In order to do this, click the public_html folder icon in the right-hand window. This will place you in your web site home directory.

Let's start with the scenario that you have created a web page or graphic and wish to place it in your public_html directory on dcfree net. You would log in and move to the public_html directory as described above. Next you would set the

directory from which you wish to copy the new files. Let's assume that you have the desired files on your Windows 95 or 98 desktop and wish to transfer them from there to the server. Your next step would be to change your local directory from the current, C:\Program Files\WS_FTP, to your desktop, C:\Windows\desktop. To do this, click the 'ChgDir' push-button located just to the right of the left-hand listbox. This will pop up a directory selection dialog box. Enter the directory into the box and click OK, as shown in figure 3.

Now your origination and destination directories are set. You may now transfer files. Let's transfer web_page.html from our local computer to dcfree net. We have done all of the above steps. Now we click on the file in the list of files in the left-hand list box in order to highlight it and then click the right-pointing arrow button. This places the file on the server, in the directory shown in the right-hand listbox. You have now successfully copied the file.

Note: Sending a file from one machine to another does NOT erase the copy on the originating computer. It only copies it. Therefore, uploading a file from your desktop will not delete it from your desktop, nor will a file be deleted from the server if you download it.

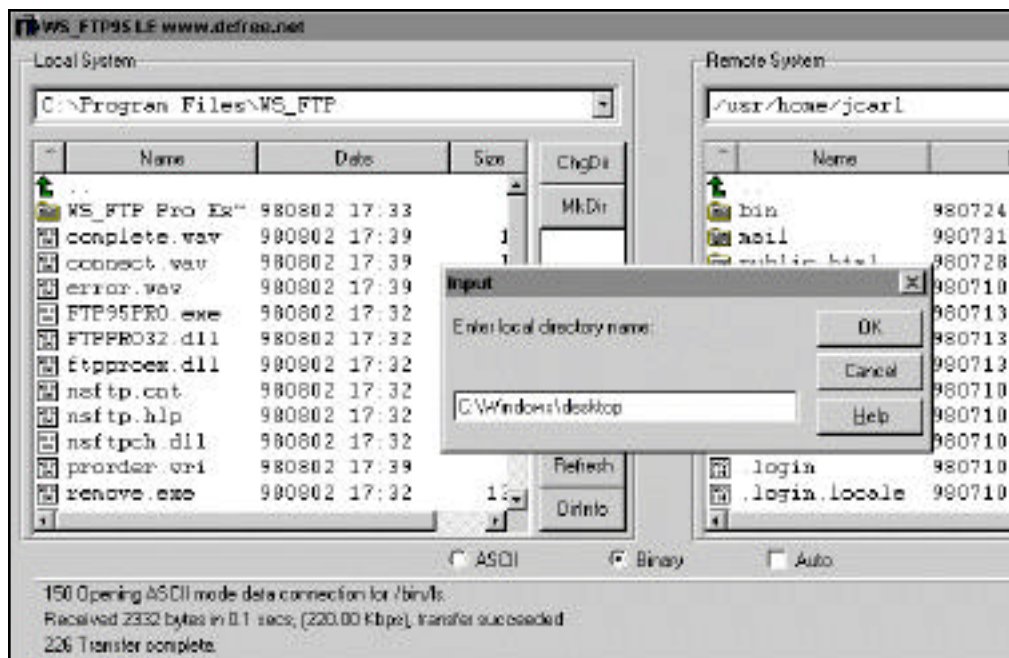


Fig. 3: Changing directories with WS_FTP.

Another operation you may wish to do is download a copy of a file from the server to your computer. This operation is almost identical to the previously described operation with the following changes. First, you would log into the server from which you wish to download as described above. You would set the directory on the server to the one where your file is located. You would also set the directory on your local machine (your computer) to the directory where you wish to place the file. Once you have done this, highlight the desired file on the server, by clicking it's name in the right-hand listbox, and then click the left-pointing arrow. This copies the file to your computer's hard drive.

When you are through with your session, click the 'Close' pushbutton at the bottom left of your FTP client's window. This disconnects you from the server. Finally, click the 'Exit' pushbutton to exit out of the program.

Note: The dcfree net server is set up such that it only allows an FTP client to perform a limited range of operations. It is therefore extremely unlikely that you will damage anything on the server or your computer by using the FTP client.

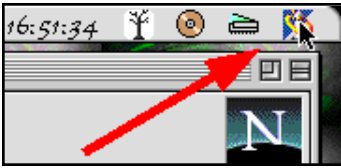
MacOS FTP

Finding the Software

Most MacOS users don't have FTP software pre-installed on their computers (unless you chose to install **Cyberdog**, Apple's now-discontinued all-purpose browser/client that came with System 7.6 and some versions of MacOS 8). For a superior FTP client, go <http://www.tucows.com> and download the shareware **Fetch 3.0.3** (best Mac FTP client; PowerPC and 680x0 versions also available).

Once these clients are installed, you can use them anytime that you're connected to your ISP.

Using Fetch for FTP

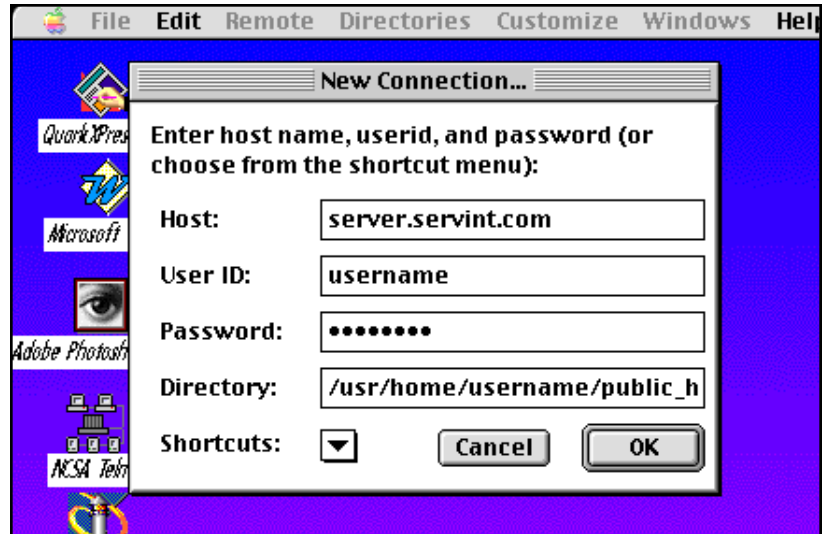


Many users have their Internet connection to their ISP set to open when they double-click on their web browser (Netscape Navigator or MS Internet Explorer). Many people don't know that their Internet connection is still active, even if they switch applications out of their web browser. With your web browser hidden, you can then launch your Telnet program.

The MacOS Application Menu, used to hide programs (not the same as quitting them).

Using Fetch is similar to using BetterTelnet. Once you are connected to the Internet, hide your browser, return to the Macintosh desktop, and double-click Fetch's icon to launch it.

Then select New from the File menu (or hit ⌘-N), and a New Connection dialog box will appear. Enter the name or IP address of the server you wish to connect to. Then enter your username and password (your password will not show up on the screen, but don't worry). Finally, enter the directory that you want to connect to – usually `/usr/home/username/public_html`.



Opening a connection with Fetch 3.0.3 (MacOS)

Once you're there, you can point and click to enter a subdirectory of the current directory (such as the `html` or `public_html` directory where you'll keep your web files). Click on the bar above the file listings to move "back" a directory or two.

To transfer individual files to or from your PC and the web server, use the Put File and Get File buttons on the main Fetch screen. Put Files will transfer from your PC to the web server, and Get Files will download from the web server to your PC. If you need to move entire directories at once, just select Put Folders and Files (or Get Directories and Files) from the Remote menu.

When you're done with the FTP session, just click the Close button in the upper-left corner of the session window.

Troubleshooting FTP Problems

Q: Sometimes, when I try to Telnet or FTP to my domain, it gives me a "host/domain not found" error. What can I do?

A: This is caused by a DNS problem – either on (more likely) your ISP's end, or ServInt's end. There are a few different possible causes:

- **If you are trying to connect to a new domain that has just been registered**, then there is a possibility that the name servers of your ISP have not received the updated information from the InterNIC yet to "recognize" the new domain. New domains may take up to 48 hours to "zone out" across the Internet after the InterNIC processes the new domain.

To verify that this is the problem, try Telnetting or FTP-ing to the **IP address** of the server, rather than its domain name. The IP address is a number (in the form of 209.50.225.13) that identifies your server to the rest of the Internet, without having to look up its domain name. If you don't know the IP address of your server, our Network Operations Center can tell you.

If you can connect to the IP address of the server, then it is a DNS problem rather than a problem with the server.

- **Your ISP's name servers are down.** When you set up the configuration for your dial-up access, you are asked to enter two IP addresses for name servers (usually, these belong to your ISP). If those name servers are down, your home connection will be unable to connect to any domain names. If you try connecting to another site (not on ServInt's network) and you get a similar error message, then this is most likely the cause. It doesn't mean that users everywhere can-

not connect; it only affects your ISP.

To get around this, try Telnetting or FTP-ing to the IP address of the server, as mentioned above.

- **There is congestion on the Internet**, or some form of network difficulty, which prevents your local ISP from reaching us.

Unfortunately, the only solution for this is to try to connect again later.

- **The domain has not been properly set up** on our servers, and our network does not know where to direct traffic to your domain name. The domain name cannot be “resolved,” and the connection fails.

If this is the case, contact our Network Operations Center to make sure that the domain has been properly configured on our end. The ServInt NOC should be able to resolve the problem within a few hours in most cases.

Q: I'm having problems using FTP in conjunction with Microsoft FrontPage. Why is it inaccurate sometimes in reporting what files I have in my account?

A: The key word there is “sometimes.” FrontPage is a complex program and attempts to make its own job easier by writing various informational index files in the account its maintaining. These files contain listings of the files on the site being maintained by the program, as well as other info on how the files are linked, owned, etc. The idea behind the system is to speed up the process of updating the site when the user logs in and then the user logs off after making changes.

In order for this system to work correctly, FP 98 has to be the only program you use to maintain the site. If you use **WS_FTP** and other transfer programs to make changes in your site's structure, the FP maps of your site won't know about the changes. The next time you load up your site, it will be shown as it was the last time you used FrontPage. If you used telnet or FTP to modify your site since then, those changes won't have been recorded.

Sometimes FP will notice the conflicts (like missing files causing suddenly broken links) and report trouble, but even in these situations FP wasn't programmed to scrap the old data maps will create new ones. The only method to fix the mismatches is a total uninstall of the extensions for the affected account, a clean-up of the files the uninstall leaves behind (as with any Microsoft uninstall, it leaves stuff behind), and then a reinstallation.

The key to avoid trouble is to stick with FP as much as possible to make any kind of changes to your site, if you want to use it at all.

Q: I uploaded all of my files from a DOS/MS-Windows PC, and now none of the links work. Plus I've noticed that some of the file names are different, now that I've FTP-ed them. What's wrong?

A: This is a fairly common problem caused by the filename limitations of MS-DOS, the operating system which operates “underneath” Windows 3.1. DOS tends to convert filenames to all-capital letters, and to cut filenames down to eight characters. Let's look at each problem:

- DOS is not **case-sensitive**; this means that, to DOS, the files `picture.jpg` , `PICTURE.JPG` and `PiCtUrE.jPg` are all the same. Unix, however, sees these as three different files.

A common feature of most DOS-based FTP programs is to transfer all files in all-uppercase mode. If, however, your HTML code is written to access `picture.jpg` , and the file has been FTP-ed as `PICTURE.JPG` , then the file is “missing.” Inspect the links within your HTML pages, by reading them in pico or another text editor; if the `` or `` tags are referencing a lower-case filename, then that's your problem.

You can manually go through and change the filenames from uppercase to lowercase using the **mv** command, or you can create and run a simple shell script which will convert the filenames automatically.

- DOS and Windows 3.1 can store filenames of only eight characters in length, plus a three-character file extension (`.htm` , `.gif` , `.wpd` , `.exe` , etc.). While Windows 95 can understand long filenames, DOS cannot. So, for example, if you create a website with long filenames in Windows 95, but save it to a DOS floppy disk to transfer elsewhere, your filenames will be “cut” to meet DOS's limitations.

If the links on your site are not working after FTP-ing the files up, use the **ls** command to list the files that you have

transferred. If they have names like `INTRODU~.HIM` , that's your problem. Or, if you look into your HTML files (as above) and see that the page is referencing documents ending with `.html` (rather than `.htm`), you've also found your problem.

In this case, you'll pretty much be forced to use the **mv** command to manually change the filenames to their original "long" name or to restore their `.html` file extension.

Q: When I upload GIF or JPEG files, my web browser can't display them. Why?

A; A common problem is that the files have been uploaded using an incorrect **file type**. If you've used a command-line FTP client to transfer the files, and graphics were transferred while the ftp client was in **asc** (ASCII text) mode, the graphics can't be displayed. Make sure that you use either **Binary** or **Raw Data** format for transferring graphics. Remember that some FTP clients don't automatically sense what type of file you're trying to send, so using these two formats as a default may be a good option.

Q: I can download files but when I try to upload a file over my modem connection the computer freezes, or the upload fails. What's the matter?

A: There is probably a problem with the flow-control settings of your dial-up software or your modem. Make sure that your modem init string enables **hardware handshaking**, and that your dial-up software is configured to do hardware handshaking. Consult your modem manual or local ISP for more information.

Q: I have a 14,400 bps modem, but I only get 1000 bytes/second. Is it something wrong?

A: Modems use 10 bits to send a byte, so 1000 bytes/second over a modem translates to 10,000 bps. In addition to data, your modem must also transmit packet headers, acknowledgements, and other information. So you should not expect to always get the modem's rated speed in actual data throughput. If you think that your throughput should be better (e.g. it is less than 80% of the modem's rated speed) you should check your **modem init string** and the configuration of your dialup software, or check with your local ISP.

Q: In my FTP client, the file list does not include a file that I know was just put there. What gives?

A: Try refreshing the file list by choosing the current directory from the directory pop-up menu; that will usually fix this problem. Many graphical FTP programs re-use file lists when they have not changed in a long while, but this makes it possible to miss new changes.

Another possibility is that the hard drive of the server is full. To check this, open a Telnet session to your server and type `df` at the prompt. This should report back with the amount of free space on the drive.