# FTP for Free

by Mary E. Tyler
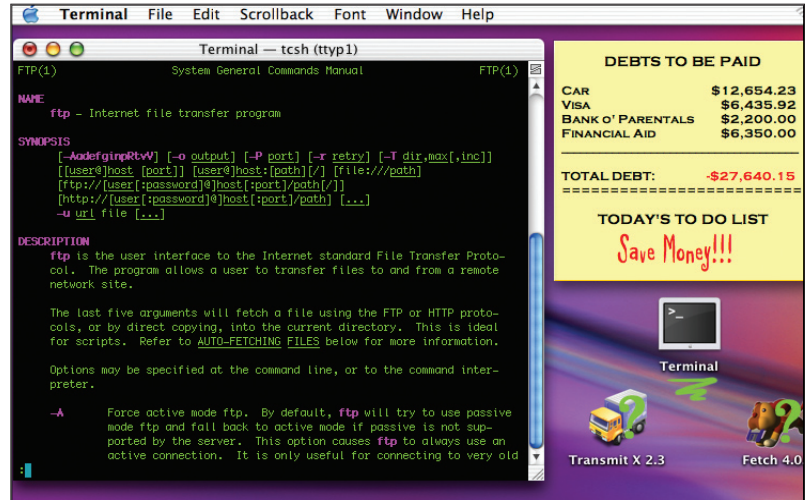
**TRICKY**

### WHAT YOU NEED
- Mac OS X ($129, www.apple.com)
- An Internet connection
- Access to a remote server

Y ou are the master of your own domain—your Web domain, that is. But trying to scrounge up some extra cash from banner-ad click-throughs on your Web site won't afford you anything more than a pizza every now and then (and a frozen Totino's one at that!). So you pimp yourself out as the Webmaster of other sites—like the "Can Carrot Top" protest site for the People for Ethical Treatment of AT&T Customers—maintaining various sites and their mirrors to earn extra scrap. Just one small thing, though—good ol' Dreamweaver won't let you FTP to more than one site per project. That means you'll have to go in and change the FTP settings every time you update each mirror on each Web site. And you really don't want to have to shell out extra for an FTP program.

**ON THE DISC**
Fetch 4.0.3 and Transmit X 2.3

Buck up, buckaroo—things aren't so grim. Mac OS X has a built-in FTP client, aptly named FTP (file transfer program), that lets you transfer files to and from any FTP-enabled server. (For the uninitiated, FTP stands for file transfer
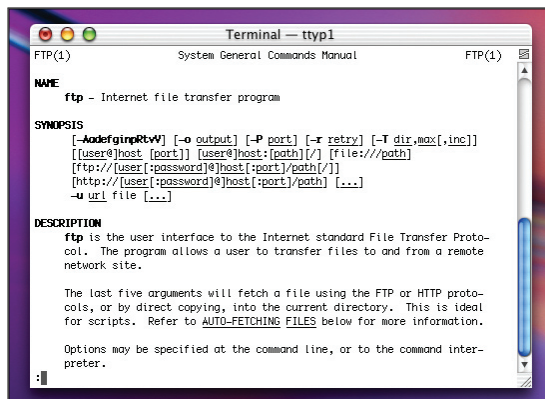
protocol, a standard Internet method of exchanging files between computers via TCP/IP.) Why haven't you noticed this app before? Probably because it resides in OS X's Darwin side, accessible only via the Terminal. While you might not want to employ it to manage huge Web sites, it's great for quick-and-dirty changes or if you're maintaining your own personal site. And unlike Stairways Software Interarchy (formerly Anarchie; $45, www.interarchy.com), Fetch Softworks Fetch ($25, www.fetchsoftworks.com), and Panic Transmit ($24.95, www.panic.com), it's free. Here's how to use FTP to upload files to and download them from a remote server.
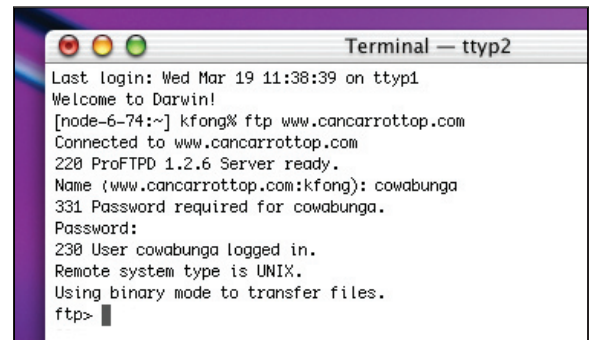

**On a mission to maintain your money? Use the Terminal for free FTP.**

**1** **Help Me, Man!** If you're not comfy cozy with commanding Unix apps, we recommend perusing the FTP manual first to gain insight on various options (aka flags) that you can apply to the program's use. So call up the man—Unix's manual command. Launch the Terminal (Applications › Utilities › Terminal). At the prompt, type `man ftp` and press Return to have the Terminal display the FTP manual. Press the Return key to scroll down line by line or the space bar to page down (the window's scroll bar and arrows won't work here). You can leave this window open for reference if needed. Then open a new window (aka a shell) by pressing Command-N. (If you're curious about other Unix commands, type `man`, press the space bar, type a Unix command, and press Return to call up its manual.)
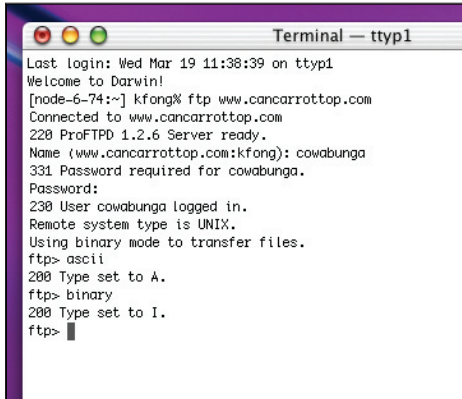

**Though the scroll bar indicates otherwise, this is not the end of the manual—press the Return key or space bar to scroll through it in its entirety.**

**2** **Open (Sesame)** To open an FTP connection, just type `ftp`, press the space bar, type in the server address or Web site's URL, and press Return. For example, we typed `ftp www.cancarrottop.com`, and then pressed Return to open our gateway to the Carrot Top protest site. FTP will connect to the site and ask you to log in. After the Name prompt, type your user name for the site and press Return. At the Password prompt, type your password and press Return. The Terminal will then display a confirmation that you're logged in, followed by the remote computer's system type in the line below it.


**Once you've logged in to a site via FTP, the Terminal displays the remote computer's system-platform type.**

## 3 Set the Transfer Mode

**Set the Transfer Mode** You may be on a Mac, but your hosting server may be running a different platform. Therefore, set the transfer mode—either ASCII or binary—to ensure that your file doesn't get garbled in transit. The Terminal displays the current mode below the line that states the remote system type. Use ASCII for text transfers, such as HTML files; use binary for everything else, like media files and graphics. To change modes, simply type the mode you want FTP to use. For example, to transfer text files, switch from binary to ASCII mode by simply typing `ascii` at the prompt and pressing Return. If you need to switch to binary mode, type `binary` at the prompt and press Return.
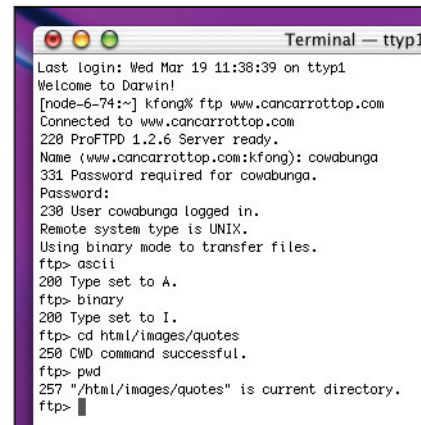
```
●●●              Terminal — ttyp1
Last login: Wed Mar 19 11:38:39 on ttyp1
Welcome to Darwin!
[node-6-74:~] kfong% ftp www.cancarrottop.com
Connected to www.cancarrottop.com
220 ProFTPD 1.2.6 Server ready.
Name (www.cancarrottop.com:kfong): cowabunga
331 Password required for cowabunga.
Password:
230 User cowabunga logged in.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ascii
200 Type set to A.
ftp> binary
200 Type set to I.
ftp> █
```

**Set the transfer mode to ASCII by typing `ascii` if you want to upload text files; use binary for everything else.**

## 4 Find the Files

**Find the Files** OK, time to get down to business. For demonstration purposes, follow our example, but you can apply the instruction to your own files. In our example, every one of our Can Carrot Top pages sports a GIF image of a quote. Our job today is to download the current quote files from the server, update them, and then upload the new ones. First, navigate to the server directory that houses your target files using the cd (change directory) command—we typed `cd html/images/quotes` to navigate to our *quotes* directory. Type `pwd` (print working directory) if you need to view the path name of your current directory so you can figure out where you're at. FTP uses the same navigational commands as the Terminal to help you troll through a remote server. To navigate through your local drive, you must add one extra letter, as you'll see in the next step.
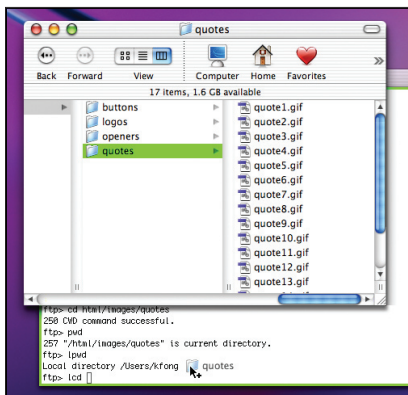
```
●●●              Terminal — ttyp1
Last login: Wed Mar 19 11:38:39 on ttyp1
Welcome to Darwin!
[node-6-74:~] kfong% ftp www.cancarrottop.com
Connected to www.cancarrottop.com
220 ProFTPD 1.2.6 Server ready.
Name (www.cancarrottop.com:kfong): cowabunga
331 Password required for cowabunga.
Password:
230 User cowabunga logged in.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ascii
200 Type set to A.
ftp> binary
200 Type set to I.
ftp> cd html/images/quotes
250 CWD command successful.
ftp> pwd
257 "/html/images/quotes" is current directory.
ftp> █
```

**Here, we navigated to our server's *quotes* directory using the cd command, and then typed `pwd` to make sure we were really there.**

## 5 Set the Destination

**Set the Destination** To choose the download destination for files on your Mac (your local drive), preface navigational commands with a lowercase *l*, as in *lollygagger*. For example, typing `lpwd` displays the path of your Mac's current directory (as opposed to typing `pwd`, which displays the path of the server's current directory). Type `lcd`, press the space bar, and then type the path to the target local directory, separating each directory with a slash (/) and enclosing multiple word names in quotes (""). If the file path is long, try this shortcut: Type `lcd`, press the space bar, drag and drop the target folder from a Finder window onto the Terminal window, and press Return to change to that directory. Unfortunately, if this path includes directory names with special characters, this shortcut may not work—in that case, you'll have to type the path the long way.
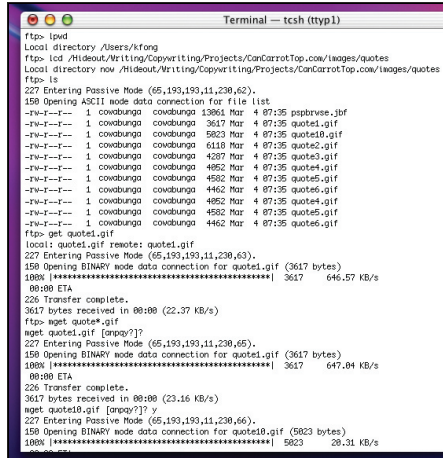
```
●●●                    quotes
◀  ▶    ≣≣ ≣ ▥        💻      🏠    ♥       »
Back Forward  View           Computer Home Favorites
             17 items, 1.6 GB available
    ▶  📁 buttons       ▶   🖼 quote1.gif
    ▶  📁 logos         ▶   🖼 quote2.gif
    ▶  📁 openers       ▶   🖼 quote3.gif
    ▼  📁 quotes        ▶   🖼 quote4.gif
                            🖼 quote5.gif
                            🖼 quote6.gif
                            🖼 quote7.gif
                            🖼 quote8.gif
                            🖼 quote9.gif
                            🖼 quote10.gif
                            🖼 quote11.gif
                            🖼 quote12.gif
                            🖼 quote13.gif
ftp> cd html/images/quotes
250 CWD command successful.
ftp> pwd
257 "/html/images/quotes" is current directory.
ftp> lpwd
Local directory /Users/kfong   📁 quotes
ftp> lcd █
```

**If you want to avoid typing a lengthy path name to change directories, drag and drop the desired folder onto the Terminal window.**

## 6 Come and Get It

**Come and Get It** To download a single file, simply type `get`, press the space bar, type the file name, and press Return. For example, we typed `get quote1.gif` to download our quote1.gif file (make sure the transfer mode is set correctly for your file—we used binary for our GIFs). If you need to grab stuff in bulk and your files are similarly named, do what we did instead of grabbing files one by one; we typed `mget quote*.gif` and pressed Return to download all files whose names begin with *quote* and end with .*gif* (apply your own semantics). The asterisk (*) is a wild card that stands for any unspecified characters. For each file that matches the pattern, mget will ask if you want to download it—just press Return if you do, or type `n` (no) and press Return if you don't.

```
●●●              Terminal — tcsh (ttyp1)
ftp> lpwd
Local directory /Users/kfong
ftp> lcd /Hideout/Writing/Copywriting/Projects/CanCarrotTop.com/images/quotes
Local directory now /Hideout/Writing/Copywriting/Projects/CanCarrotTop.com/images/quotes
ftp> ls
227 Entering Passive Mode (65,193,193,11,230,62).
150 Opening ASCII mode data connection for file list
-rw-r--r--  1 cowabunga   cowabunga 13061 Mar  4 07:35 pspbrvse.jbf
-rw-r--r--  1 cowabunga   cowabunga  3617 Mar  4 07:35 quote1.gif
-rw-r--r--  1 cowabunga   cowabunga  5023 Mar  4 07:35 quote10.gif
-rw-r--r--  1 cowabunga   cowabunga  6118 Mar  4 07:35 quote2.gif
-rw-r--r--  1 cowabunga   cowabunga  4287 Mar  4 07:35 quote3.gif
-rw-r--r--  1 cowabunga   cowabunga  4052 Mar  4 07:35 quote4.gif
-rw-r--r--  1 cowabunga   cowabunga  4582 Mar  4 07:35 quote5.gif
-rw-r--r--  1 cowabunga   cowabunga  4462 Mar  4 07:35 quote6.gif
-rw-r--r--  1 cowabunga   cowabunga  4052 Mar  4 07:35 quote7.gif
-rw-r--r--  1 cowabunga   cowabunga  4582 Mar  4 07:35 quote8.gif
-rw-r--r--  1 cowabunga   cowabunga  4462 Mar  4 07:35 quote9.gif
ftp> get quote1.gif
local: quote1.gif remote: quote1.gif
227 Entering Passive Mode (65,193,193,11,230,63).
150 Opening BINARY mode data connection for quote1.gif (3617 bytes)
100% |*************************************|  3617    646.57 KB/s
00:00 ETA
226 Transfer complete.
3617 bytes received in 00:00 (22.37 KB/s)
ftp> mget quote*.gif
mget quote1.gif [anpqy?]?
227 Entering Passive Mode (65,193,193,11,230,65).
150 Opening BINARY mode data connection for quote1.gif (3617 bytes)
100% |*************************************|  3617    647.04 KB/s
00:00 ETA
226 Transfer complete.
3617 bytes received in 00:00 (23.16 KB/s)
mget quote10.gif [anpqy?]? y
227 Entering Passive Mode (65,193,193,11,230,66).
150 Opening BINARY mode data connection for quote10.gif (5023 bytes)
100% |*************************************|  5023    20.31 KB/s
```

**Because we have several similarly named GIF files, we typed `mget quote*.gif` to download every one in the numbered series.**

# 7 Put That Back

After you're done updating your files, upload them back onto your Web hosting server. You can choose to do this a file at a time by typing `put`, pressing the space bar, typing the file name, and pressing Return (that is, `put quote1.gif`), or use the command mput as you used mget in step 6. Remember, FTP operates within the remote and local directories you specify—if you download a file, update it, and then move it to another folder, you'll need to change your current local directory via the Terminal to upload that file back to the server.



**To upload your files, use the put command for single files or mput for multiple uploads.**

# 8 Fix Boo-Boos

We accidentally uploaded two nonquote files—one of which we shouldn't have uploaded at all, and another that should've gone into our parent *images* directory instead of our quotes directory. No problem. To get rid of a file, type `delete` followed by the unwanted file's name—we typed `delete zdonate_Can_Carrot_Top.gif` to remove that GIF. To move a file from one directory to another, you can't just drag and drop as in the Mac OS; you have to rename the file with a new path. To move our sign_our_petition.gif file, we typed `rename sign_our_petition.gif` (space) `../sign_our_petition.gif`. The command ../ before the second argument means "the parent of the present working directory," which is our images directory. Likewise, we could also do the same move by typing this out the long way: `rename sign_our_petition.gif` (space) `/html/images/sign_our_petition.gif`.



**In the Unix world, if you want to move a file between directories, you must rename the file with a new path name.**

# 9 Move Stuff into New Places

We got a call from our client, telling us that quotes 1 and 5 are now obsolete. We don't want to delete the files just in case the client changes his mind. Instead, we can put them into a new directory. To create a new directory, navigate to the parent directory in which you want the new directory to appear, and type `mkdir` *new directory name* (for example, we typed `mkdir old_quotes` to create a new directory called *old_quotes* within our quotes directory). If you're dyslexic like us and mistype the directory name, remove the directory by typing `rmdir` *directory name typo*. Then move files by using the rename command as you did in step 8.



**Removes directory**

**Creates new one**

**To create new directories on a remote computer, use the mkdir (make directory) command.**

# 10 Say Good-Night

Finally, your work is done. Now what? Time to terminate. There are a few different ways to terminate an FTP connection. To terminate the connection without quitting FTP, just type `close` and press Return. If you want to quit FTP and close your connection, type `bye`, `exit`, or `quit` and you'll return to the original shell. For future reference, if you forget which commands the Terminal understands, type `help` and press Return from within FTP and it'll list them. Typing `help` *command name* gives you a one-line explanation of what that command does. OK, go geek out!



**If you forget which command does what, type `help` before the command name to get a quick explanation.**

Mary E. Tyler remembers when Macs were expensive and FTP clients weren't just cheap—they were free.