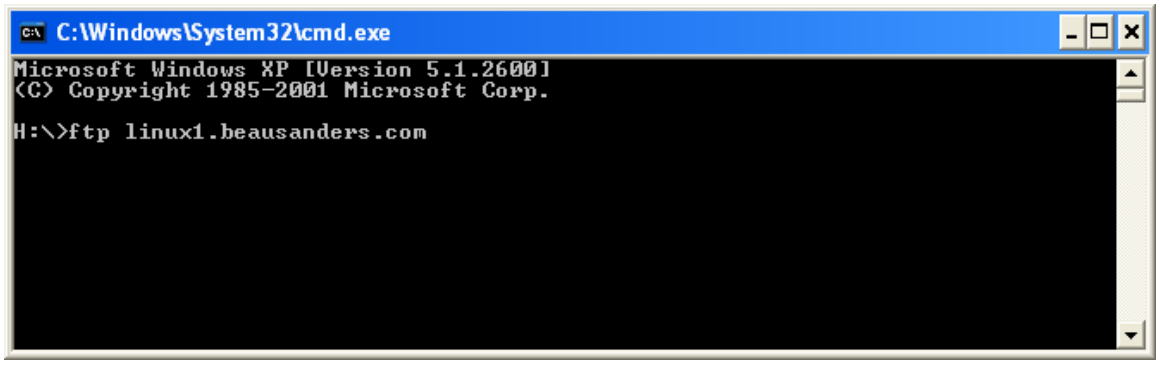
How To Use FTP Client

The following instructions are designed to help students log in to the Linux Student Server using Microsoft Windows FTP client. This process can also be used with other FTP clients other than Microsoft's.

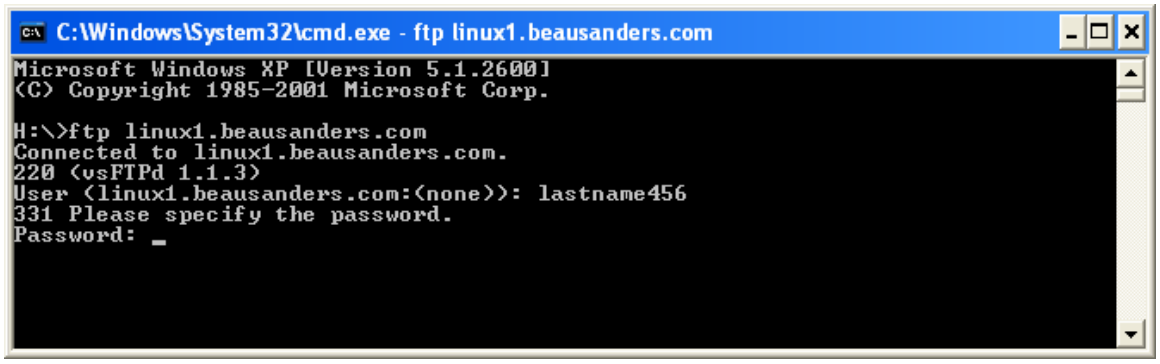
Running FTP Client

1. **Open a command prompt window** by clicking the Start button, click Run, and enter **`cmd.`**

2. **Start the FTP client program and access the Student Server** in one command by entering **`ftp linux1.beausanders.com`**

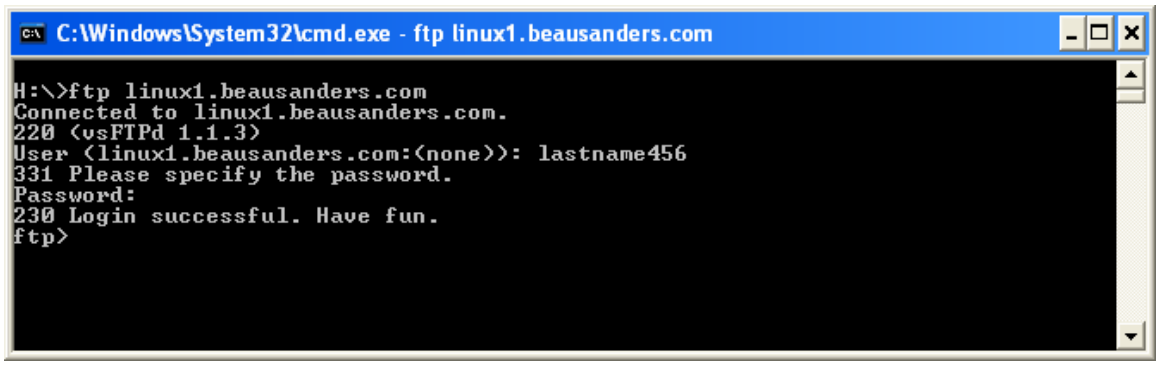


3. The FTP client program will try to connect to the remote host. If the connection is successfully made, the remote host will prompt you for your login name:



4. **Enter your login name.** If you do not have an account on the Student Server, request a student account from your instructor. Be sure to use the login name for the remote account, not the login for your local computer account, if they are different. Next the remote host will prompt for your password.

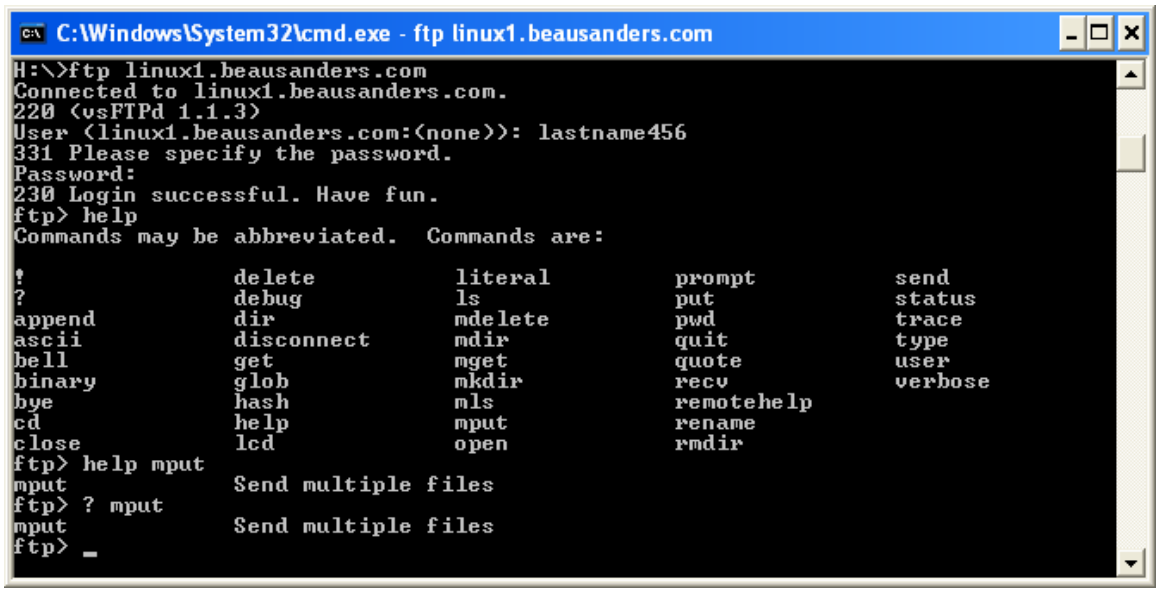
5. **Enter your password.** The password does not show on the screen as you type it. You will be notified when you have successfully logged in:



FTP Help

The FTP client program takes dozens of commands. Fortunately, one of those commands is **`help`**, which lists and describes the set of ftp commands.

1. **Enter the help command at the ftp prompt.** There are two ways to do this. Either type the word **`help`**, or a single question mark (**`?`**). The computer will respond with a list of commands:



   Some of these are similar to UNIX commands that are already familiar to you (such as **`cd`**, **`ls`**, **`mkdir`**, and **`pwd`**). Others are particular to the **`ftp`** program.

2. **Obtain a description of a command.** Enter the **`help`** or **`?`** command, followed by the command you are interested in. In the screen shot above, **`help mput`** and **`? mput`** are examples of the use of this feature. FTP responded with a short

description of the command that will give you an idea of how the command is used.

Getting a File

One of the reasons to use FTP is to get a copy of a file from a remote host. This is done with the **`get`** command.

1. **Move to the remote directory containing the file you want.** Like the UNIX shell, FTP uses the **`cd`** command to change the working directory. So if you want to get a file from the subdirectory named documents, you would type

   ```
   ftp> cd documents
   ```

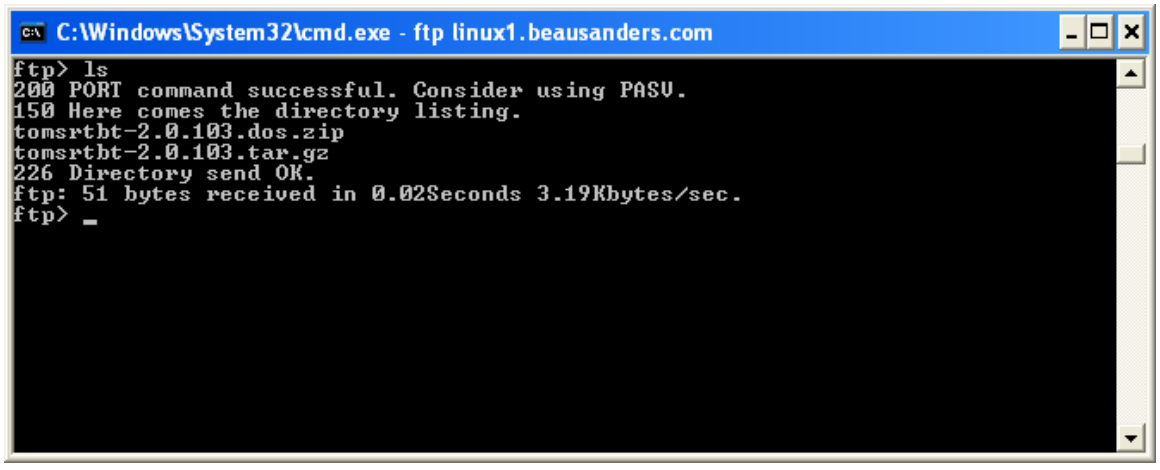
   Depending on how FTP has been set up on your system, you may see a message that looks something like this:

   ```
   250 CWD command successful.
   ```

2. **List the files to find the one you want.** With FTP, as with the UNIX shell, you can do this with the **`ls`** command:

   ```
   ftp> ls
   ```

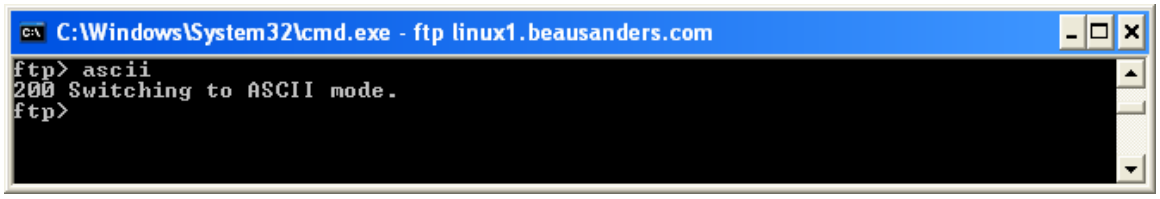
   This command will list the files in the current directory on the remote host. It usually tells you how many bytes of information were transferred across the network:



3. **Select the file transfer mode.** As far as FTP is concerned, there are two types of files. An ASCII file contains text; a binary file contains other kinds of information (such as graphics, audio recordings, or compressed text). Depending on the type of information that is in the file, enter either **`ascii`** or **`binary`** at the ftp prompt:

   `ftp> ascii`

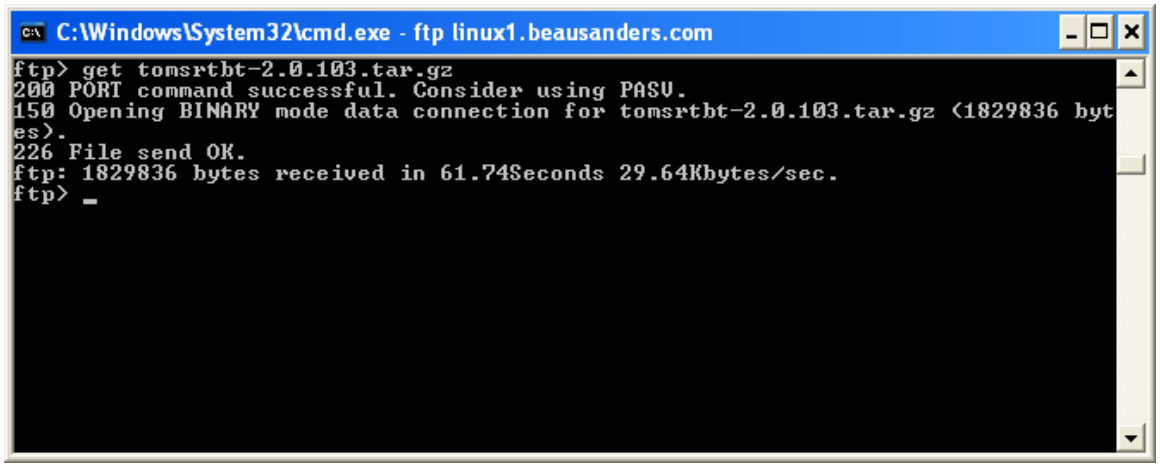
   The FTP program will confirm your selection:



4. **Get the file.** Enter the **`get`** command, followed by the name of the original file then the name you want to give the local copy of the file. You can keep the original name of the file by just entering the source file's name as shown here. For example, suppose you want to get a copy of the file **`tomsrtbt-2.0.103.tar.gz`** from the remote host, you would enter this line:

   `ftp> get tomsrtbt-2.0.103.tar.gz`

   In most cases, FTP will inform you that the transfer was successful:



5. For getting multiple files in one command, use the **`mget`** command.

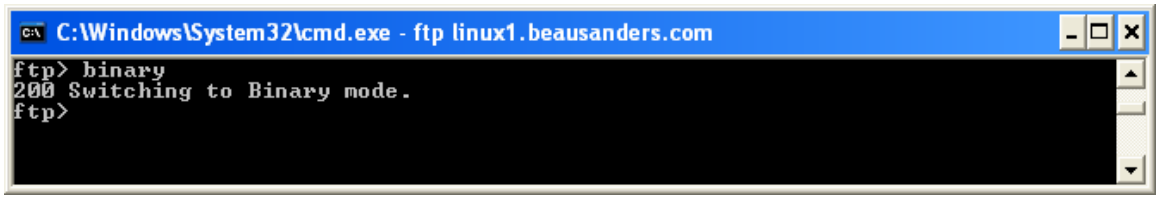
Sending a File

Using FTP, you can also send a file from your local host to the remote host, the reverse of the operation described in the previous section. This is done with the **`put`** command.

1. **Specify the file type.** Remember, FTP distinguishes between ASCII files containing text and binary files containing other kinds of information (graphical, audio, etc.). Select the proper file transfer mode by entering either **`ascii`** or **`binary`** at the ftp prompt:

   ```
   ftp> binary
   ```

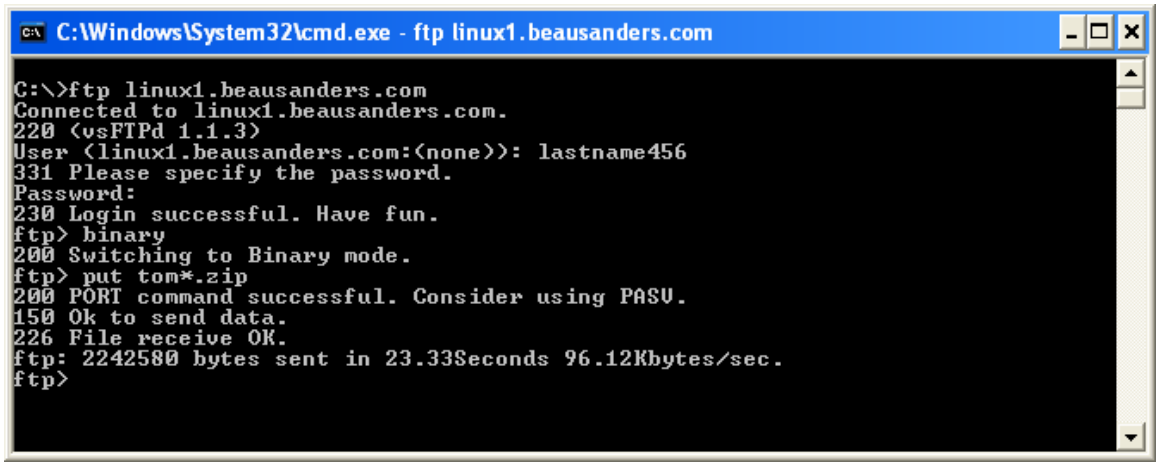
   The FTP program will confirm your selection:

2. **Send the file.** Enter the **`put`** command, followed by the name of the original file, then the name you want to give the remote copy of the file if different from the source file name. You can also use wildcards (* or ?) in the command. For example, suppose you wanted to send a copy of the file that starts with tom and ends with .zip from the local host to the remote host. You would enter this line:

   ```
   ftp> put tom*.zip
   ```

   FTP will inform you if the transfer was successful:

3. For sending multiple file transfers use the **`mput`** command.

Ending the FTP Session

Once you have finished working on the remote host, you should end the FTP session.

1. Quit the FTP program. Enter **`quit`** or **`bye`** at the ftp prompt:

   ```
   ftp> bye
   ```

   You will exit to the OS command prompt.

Getting Files with Anonymous FTP

Originally, FTP was intended to allow you to transfer files between two computers on which you have accounts. However, anonymous ftp allows you to get files from hosts on which you do not have an account. Those hosts are called public ftp servers. (Both our Student Server and the BeauSanders.com Web Server are also public ftp servers.)

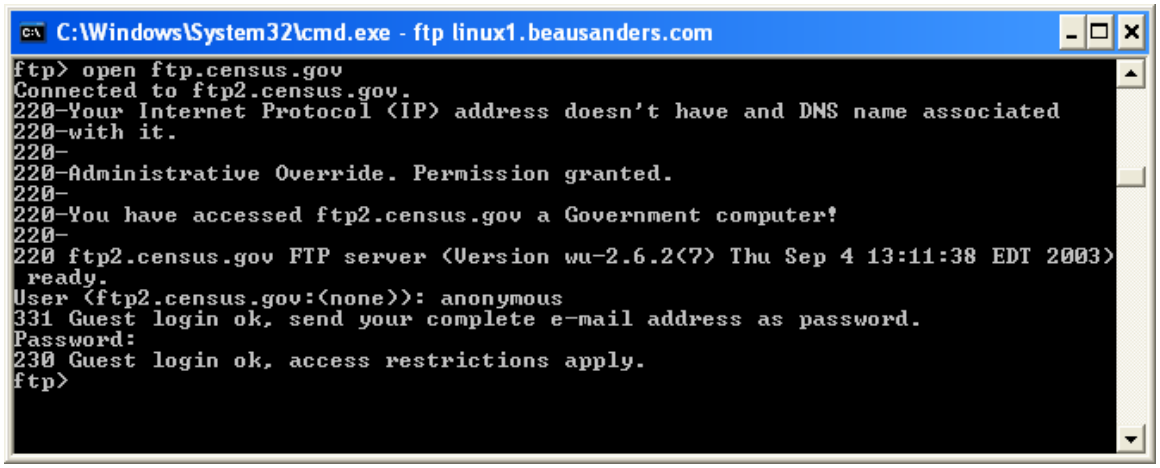
For example, the United States Census Bureau maintains a server that you can reach by anonymous ftp.

1. Start the FTP program and specify the server you want. For example, to connect to the Census Bureau's public ftp server, you would enter the command:

   ```
   OS Prompt> ftp ftp.census.gov
   ```

   If you are already in the FTP program, enter the following command:

   ```
   ftp> open ftp.census.gov
   ```



2. Enter the guest login name at the prompt. Some servers expect you to enter "guest" as your login; others require "anonymous". For the Census Bureau server (and linux1.beausanders.com) use "anonymous" as shown in the screen shot above.

3. If necessary, enter the guest password. Some systems require no password; others use "Guest" or "anonymous". The Census Bureau server asks for your e-mail address. Try all three of these if you have trouble logging in. (Your e-mail address works on our servers.)

4. Use FTP commands to transfer files.

5. When you are finished, quit FTP as described previous by entering **`quit`** or **`bye`**.

Source: Just Enough UNIX, Fourth Edition, Paul K. Andersen, published by McGraw Hill, 2003