

Alex Mulvaney
class: 471

FTP connection to Server demo



```
ftp/home/alex/python_playground/ftp_clientServer_python/Client
python/home/alex/python_playground/ftp_clientServer_python/238x26
~/p/ftp_clientServer_python on master * python ftp_server.py
/home/alex/.local/lib/python3.8/site-packages/pyftplib/authorizers.py:242: RuntimeWarning: write permissions assigned to anonymous user.
warnings.warn("write permissions assigned to anonymous user.",
1 2020-11-30 19:12:01) concurrency model: async
1 2020-11-30 19:12:01) masquerade (NAT) address: None
1 2020-11-30 19:12:01) passive ports: None
1 2020-11-30 19:12:01) >>> starting FTP server on ::1:5000, pid=6912 <<<
1 2020-11-30 19:12:32) ::1:55488-[] FTP session opened (connect)
1 2020-11-30 19:12:41) ::1:55488-[anonymous] USER 'anonymous' logged in.

~/p/ftp_client on master * ls
ls: cannot access 'ftp_client.py': No such file or directory
~/p/ftp_client on master * ftp
ftp> open localhost 5000
Connected to localhost.
220 Welcome to my ftp server.
Name (localhost:alex): anonymous
331 Username ok, send password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp>
```

SERVER: top terminal

FTP command: bottom terminal

ls → shows what is local

ftp → to open a connection to our server which is running in top terminal

login → username: anonymous password: anything you want

...see next page

```
fish/home/alex/python_playground/ftp_clientServer_python/Client
python/home/alex/python_playground/ftp_clientServer_python/238x26

~/p/ftp_clientServer_python on master * python ftp_server.py
/home/alex/.local/lib/python3.8/site-packages/pyftplib/authorizers.py:243: RuntimeWarning: write permissions assigned to anonymous user.
warnings.warn("write permissions assigned to anonymous user.",
2020-11-30 19:14:17] concurrency model: async
2020-11-30 19:14:17] masquerade (NAT) address: None
2020-11-30 19:14:17] passive ports: None
2020-11-30 19:14:17] >>> starting FTP server on ::1:5000, pid:7094 <<<
2020-11-30 19:14:35] ::1:55492-[] FTP session opened (connect)
2020-11-30 19:14:39] ::1:55492-[anonymous] USER 'anonymous' logged in.
2020-11-30 19:15:02] ::1:55492-[anonymous] RETR /home/alex/python_playground/ftp_clientServer_python/Stories/a_pirates_tale.txt completed=1 bytes=748 seconds=0.001
2020-11-30 19:15:05] ::1:55492-[anonymous] FTP session closed (disconnect).

fish/home/alex/python_playground/ftp_clientServer_python/Client/238x27

1 tin_drum.txt ftp_client.py
~/p/ftp/Client on master * ftp
ftpp open localhost 5000
Connected to localhost.
220 Welcome to my ftp server.
Name (localhost:alex): anonymous
331 Username ok, send password.
Password:
230 Login successful.
Remote system type is UNIX.
Using binary mode to transfer files.
ftpp ls Stories
200 Active data connection established.
125 Data connection already open. Transfer starting.
-rw-r--r-- 1 alex alex 748 Dec 01 02:16 a_pirates_tale.txt
-rw-r--r-- 1 alex alex 191 Dec 01 02:18 the_garlic_ballads.txt
226 Transfer complete.
ftpp get Stories/a_pirates_tale.txt a_pirates_tale.txt
200 Active data connection established.
125 Data connection already open. Transfer starting.
226 Transfer complete.
748 bytes received in 0.000115 seconds (6.2 Mbytes/s)
ftpp quit
221 Goodbye.
~/p/ftp/Client on master * ls
a_pirates_tale.txt a_tin_drum.txt ftp_client.py
~/p/ftp/Client on master *
```

Here we can ls our server to retrieve the contents
get command → to retrieve a text file manually
the file is now in the local folder of the client

DEMO of ftp_client.py access of server

...see next page

```
fish/home/alex/python_playground/ftp_clientServer_python/Client
python/home/alex/python_playground/ftp_clientServer_python/238x26

~/python_clientServer_python on master * python ftp_server.py
/home/alex/.local/lib/python3.8/site-packages/pyftplib/authors.py:243: RuntimeWarning: write permissions assigned to anonymous user.
warnings.warn("write permissions assigned to anonymous user.",
2020-11-30 19:26:58 concurrency model: async
2020-11-30 19:26:58 masquerade (NAT) address: None
2020-11-30 19:26:58 passive ports: None
2020-11-30 19:26:58 >>> starting FTP server on ::1:5000, pid=8038 <<<
2020-11-30 19:27:02 ::155516-[] FTP session opened (connect)
2020-11-30 19:27:02 ::155516-[anonymous] USER 'anonymous' logged in.
2020-11-30 19:27:02 ::155516-[anonymous] CWD /home/alex/python_playground/ftp_clientServer_python/250
2020-11-30 19:27:12 ::155516-[anonymous] CWD /home/alex/python_playground/ftp_clientServer_python/Stories 250
2020-11-30 19:27:12 ::155516-[anonymous] STOR /home/alex/python_playground/ftp_clientServer_python/Stories/a_tin_drum.txt completed=1 bytes=1168 seconds=0.001
2020-11-30 19:27:12 ::155516-[anonymous] CWD /home/alex/python_playground/ftp_clientServer_python/250
2020-11-30 19:27:12 ::155516-[anonymous] CWD /home/alex/python_playground/ftp_clientServer_python/Stories 250
2020-11-30 19:27:22 ::155516-[anonymous] RETR /home/alex/python_playground/ftp_clientServer_python/Stories/a_pirates_tale.txt completed=1 bytes=748 seconds=0.001
2020-11-30 19:27:22 ::155516-[anonymous] CWD /home/alex/python_playground/ftp_clientServer_python/250
2020-11-30 19:27:22 ::155516-[anonymous] CWD /home/alex/python_playground/ftp_clientServer_python/250
2020-11-30 19:27:22 ::155516-[anonymous] FTP session closed (disconnect).

fish/home/alex/python_playground/ftp_clientServer_python/Client/238x27
~/ftp_client on master * python ftp_client.py
drwxr-xr-x 8 alex alex 4096 Dec 01 03:00 .git
drwxr-xr-x 2 alex alex 4096 Dec 01 03:19 Client
-rw-r--r-- 1 alex alex 437 Dec 01 03:23 README.md
drwxr-xr-x 2 alex alex 4096 Dec 01 03:25 Stories
-rw-r--r-- 1 alex alex 226468 Dec 01 03:22 demo_ftp_into_server.pdf
-rw-r--r-- 1 alex alex 1300 Dec 01 02:10 ftp_server.py
Upload a story to our folder? (Y/n): Y
0
total 8
-rw-r--r-- 1 alex alex 1168 Nov 30 18:22 a_tin_drum.txt
-rw-r--r-- 1 alex alex 1236 Nov 30 19:26 ftp_client.py
Please enter a filename to upload: a_tin_drum.txt
Download our stories folder? (Y/n): Y
-rw-r--r-- 1 alex alex 748 Dec 01 02:16 a_pirates_tale.txt
-rw-r--r-- 1 alex alex 1168 Dec 01 03:27 a_tin_drum.txt
-rw-r--r-- 1 alex alex 191 Dec 01 02:18 the_garlic_ballads.txt
which story would you like to download: a_pirates_tale.txt
Thank you for visiting!
~/ftp_client on master * ls
_pirates_tale.txt a_tin_drum.txt ftp_client.py
~/ftp_client on master *
```

above is a demo of running ftp_client.py which shows uploading to the server as well as downloading from the server within an application