

# Accessing Files

## Accessing via SSH

The following tutorial should help you in using SSH to connect to and from your HUBzero server(s). You should be relatively comfortable with using a terminal (also referred to as a "command-line tool") to navigate directories and manipulate files.

**Warning:** Most accounts do **not** have SSH/sFTP access initially. Your system administrator must grant your account access before you will be able to connect.

From a terminal type `ssh <user>@<host>`. You will then be prompted for a password. Both the username and password will typically be the same as the account you registered on <host>.

```
yourmachine:~ you$ ssh username@host
yourmachine:~ you$ username@host password:
```

```
host ~
```

## Windows Clients

- [PuTTY](#) (a Telnet and SSH client)

## Mac OSX

All versions of Mac OSX come with Terminal.app which may be found in the /Utilities directory of your /Applications directory.

## Accessing via sFTP

sFTP, or secure FTP, is a program that uses SSH to transfer files. Unlike standard FTP, it encrypts both commands and data, preventing passwords and sensitive information from being transmitted in the clear over the network. It is functionally similar to FTP, but because it uses a different protocol, you can't use a standard FTP client to talk to an sFTP server, nor can you connect to an FTP server with a client that supports only sFTP.

The following tutorial should help you in using sFTP to connect to and from your HUBzero server(s).

**Warning:** Most accounts do **not** have SSH/sFTP access initially. Your system administrator must grant your account access before you will be able to connect.

### Graphical Clients

Using graphical SFTP clients simplifies file transfers by allowing you to transmit files simply by dragging and dropping icons between windows. When you open the program, you will have to enter the name of the host (e.g., yourhub.org) and your HUB username and password.

#### Windows Clients

- [WinSCP](#)
- [BitKinex](#)
- [FileZilla](#)
- [PuTTY](#)

#### Mac OSX Clients

- [Transmit](#)
- [Fetch](#)
- [Cyberduck](#)
- [Flow](#)
- [Fugu](#)

### Command-line

You can use command line SFTP from your Unix account, or from your Mac OS X or Unix workstation. To start an SFTP session, at the command prompt, enter:

```
yourmachine:~ you$ sftp username@host
yourmachine:~ you$ username@host password:
```

```
host ~
```

Some standard commands for command-line sFTP

Command	Description
---------	-------------

cd	Change the current directory on the remote host.
----	--

chmod	Change the permissions of a file or directory on the remote host.
-------	---

chown	Change the ownership of a file or directory on the remote host.
-------	---

dir (or ls)	List the contents of the current directory on the remote host.
-------------	--

exit (or quit)	Close the SFTP session and return to the local shell.
----------------	---

get	Copy a file from the remote host to the local host.
-----	---

help (or ?)	Get help for the SFTP commands.
-------------	---------------------------------

lcd	Change the local directory.
-----	-----------------------------

Char	Change the current directory on the remote host.
Chan	Change the permissions of a file or directory on the remote host.
comp	Change the ownership of a file or directory on the remote host.
Chan	Change the ownership of a file or directory on the remote host.
comp	List the contents of the current directory on the remote host.
List t	List the contents of the current directory on the remote host.
remo	Remove a file or directory from the remote host.
Clos	Close the SFTP session and return to the local shell.
and e	Copy a file from the remote host to the local host.
Cop	Copy a file from the remote host to the local host.
local	Copy a file from the remote host to the local host.
Get h	Get help for the SFTP commands.
Char	Change the local directory.

## ACCESSING FILES

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Command

Description

ls

mkdir

ln (or symlink)

lpwd

lumask

mkdir

put

pwd

rename

rm

rmdir

version

!

See a  
the lo  
Creat  
Creat  
comp  
Show  
direc  
Char  
Creat  
Copy  
remo  
Show  
direc  
Rena  
Delet  
Remo  
direc  
Displ  
In Ur  
enter  
SFTP  
!pwd  
dropp

## Finding Files

Once connected to a server, by either sFTP or directly with SSH, you will need to find the web root which contains the HUB install. The web root for the production version of a HUB can be found at /www/yourhub. Typically, HUBs will also have a development version of a HUB, which can be found at /www/dev.

Once in the desired directory, file layout and directory structure follows the conventions detailed in [Installation](#) unless otherwise noted.

See the [Installation](#) overview for details on a typical HUBzero install's directory structure.