# **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 sFT	PCommand cd chmod	Description
	chown	
	dir (or ls)	
	exit (or quit)	
	get	
	help (or ?) lcd	

Char Char comp Char comp

List t remo Close and e Copy local

Get h

Command

Description
Ils

Imkdir
In (or symlink)

Ipwd

Iumask
mkdir
put

pwd

rename
rm
rmdir

version
!

See the lo

Crea

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Show

Char

Crea

Copy remo

direc Rena

Dele<sup>-</sup>

Rem direc

Displ In Ur enter SFTF !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 <u>Installation</u> unless otherwise noted.

See the <u>Installation</u> overview for details on a typical HUBzero install's directory structure.