

# Accessing your home directory

## Overview

Accessing your home directory on the HUB is easy with the three methods described in this section. While sFTP is the most common, you will find which method works best for you.

# sFTP

## Accessing your home directory 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
	chmod	Change the permissions of a file or directory
	chown	Change the owner of a file or directory
	dir (or ls)	List the contents of the current directory
	exit (or quit)	Close the sFTP session and return to the local shell
	get	Copy a file from the remote system to the local system
	help (or ?)	Get help on the sFTP commands
	lcd	Change the local directory
	lls	See the contents of the local directory
	lnmkdir	Create a new local directory
	ln (or symlink)	Create a symbolic link to a file or directory
	lpwd	Show the local path of the current directory
	lumask	Change the local permissions of a file or directory
	mkdir	Create a new remote directory
	put	Copy a file from the local system to the remote system
	pwd	Show the remote path of the current directory
	rename	Rename a file or directory on the remote system
	rm	Delete a file or directory on the remote system
	rmdir	Remove a remote directory
	version	Display the sFTP version number
	!	In Unix, !pwd means enter the command pwd at the sFTP prompt

Change the current directory  
Change the permissions of a file or directory  
Change the owner of a file or directory  
List the contents of the current directory  
Close the sFTP session and return to the local shell  
Copy a file from the remote system to the local system  
Get help on the sFTP commands  
Change the local directory  
See the contents of the local directory  
Create a new local directory  
Create a symbolic link to a file or directory  
Show the local path of the current directory  
Change the local permissions of a file or directory  
Create a new remote directory  
Copy a file from the local system to the remote system  
Show the remote path of the current directory  
Rename a file or directory on the remote system  
Delete a file or directory on the remote system  
Remove a remote directory  
Display the sFTP version number  
In Unix, !pwd means enter the command pwd at the sFTP prompt

# WebDAV

## Accessing your home directory via WebDAV

WebDAV is the Distributed Authoring and Versioning extension to the standard HTTP/HTTPS web protocol. It allows a client to browse a remote filesystem, usually with a graphical browser that makes it appear that your files are on your desktop. You may access your hub storage using only the secure version of this service (HTTPS). We do not support HTTP. Most modern computer platforms support HTTPS transport for WebDAV with either small adjustments or freely available software.

## Linux/Unix

If you use the KDE graphical desktop environment, you can access your hub storage with the Konqueror browser by typing the special URL `webdavs://hubzero.org/webdav` into the Location field of the browser. It will prompt you for your hub login and password. Thereafter, you traverse your home directory by clicking on folders and you can drag and drop files to your desktop.

[Cadaver](#) is a text-mode WebDAV browser. It can be used if it is compiled with SSL support. Invoke it with the command `cadaver https://hubzero.org/webdav/` and it will prompt you for your hub login and password. You can then use it in a manner similar to FTP. If you are using Linux, you can use the [davfs](#) kernel module to mount your hub storage area as a local filesystem.

## Macintosh

MacOS versions 10.4 and higher support HTTPS transport for WebDAV using the Finder. To access your hub directory, select the Go menu in the Finder and choose "Connect to Network Server". Enter the URL `https://hubzero.org/webdav/` into the address field. You will be prompted for your hub login and password.

MacOS versions lower than 10.4 do not have support for HTTPS, but a free client exists.

Download [Goliath](#) and install it on your system. Invoke it and use `https://hubzero.org/webdav/` as the address to connect to. Note that you may also use Goliath on newer MacOS platforms as well.

## Windows

Windows XP systems have native support for accessing WebDAV storage via HTTPS, but it may be disabled by default depending on how your OS was configured. Try these instructions first, and then check the next set of instructions to enable WebDAV. To access your hub storage,

- Double-click on the desktop icon called "My Network Places".
- This will invoke a dialog box where you can select "Add Network Place". This will invoke a wizard that you can step through.

- Select the "Choose another network location" function.
- The wizard will then ask you for the "Internet or Network Address." In the box, type `https://hubzero.org/webdav/`
- Specify the name that you would like to have associated with this storage space. An icon will be created for the hub storage folder. When you double-click on it to open it, you will be prompted for your hub login and password.

### Enabling WebDAV in Windows XP

If the steps above do not work, for Windows XP, or you cannot find the named options, your OS may have WebDAV turned off by default. Do the following additional steps and then try to add network storage again.

- Open Windows Explorer
- Go to the "Tools" menu and select "Folder Options"
- Select the radio button "Use Windows classic folders" under "Tasks".

### Windows 2003 users cannot access secure WebDAV

There is no support for secure WebDAV transport in Windows 2003. Various workarounds have been suggested, but it appears the easiest action to take is to simply upgrade the OS.

### Windows Vista users cannot access secure WebDAV

A default and up to date installation of Windows Vista has no support for secure WebDAV. You'll need to install the following [patch](#).

### Windows XP users cannot change credentials for WebDAV authentication.

To clear previously entered authentication data from the credential cache, use the following menu selection:

Start -> Settings -> Control Panel -> User Accounts -> Change an Account

Then select the User account for which you wish to clear the stored password. Click on 'Manage My Network Passwords', highlight the mapped drive or WebDAV account and click 'Remove'.

### Windows users trick

Many users have mentioned that changing a certain setting in their internet options has allowed them to access a site via WebDAV (this includes several instances on Windows 7). Open up the "Internet Options" from the control panel, go the "Connections" tab, click on the "LAN Settings" button, and insure that "Automatically detect settings" is unchecked.

This does not guarantee that WebDAV will work in every instance, but has simply proven to be a helpful trick for many users.

### **filexfer (in Workspace tool)**

#### **Accessing your home directory files via filexfer (in Workspace tool)**

Filexfer, short for 'file transfer', is a utility that you can call from within the workspace tool to transfer a file into your home directory from your local machine or download a file from your home directory. Type 'filexfer' in the xterm provided to you when you start the workspace tool. You should now see the filexfer GUI as it appears in the image below.

Click on "Upload" or "Download" for the desired action. Please note, that you must enable pop-ups in your browser to proceed. The following windows that appear allow you to browse or download per your selected action. Note: filexfer is currently limited to uploading one file at a time..