

## Using SSH and sFTP to Access the University's Unix Timesharing Service on a Macintosh

### Overview

Your University Computing Account gives you access to file storage space on the Unix Timesharing Service. In order to access this space, you must use one of two secure connection methods: SSH or sFTP.

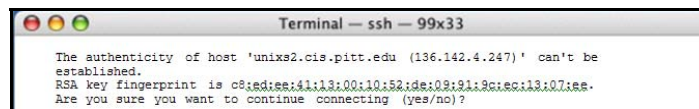
- SSH, which stands for Secure Shell, is a program that enables you to securely log in to a remote computer. SSH should be used in place of telnet, which is an insecure method of connecting to a remote computer.
- sFTP stands for secure file transfer protocol. It enables you to transfer files securely between two computers. sFTP should be used in place of FTP because files that are transferred using FTP are not encrypted.

Macs have a built-in SSH client that can be used to access the Unix Timesharing Service. Macs also have a built-in sFTP capability that can be used to access the Unix Timesharing Service, or you can use an sFTP program called Fetch. The built-in utilities for Mac are already configured to use the secure SSH and sFTP connections. This document explains how to connect to the Unix Timesharing Service with these programs.

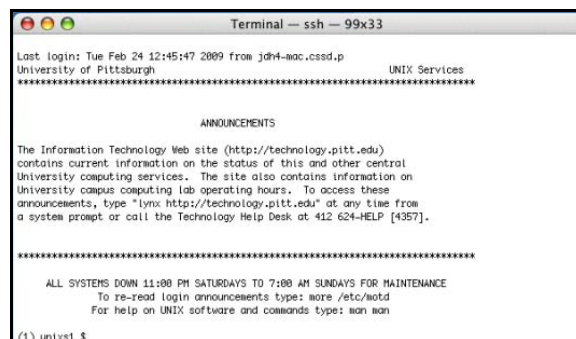
### Accessing Unix Timesharing on a Mac

#### Using the Built-in SSH Utility

1. Double click on your hard drive, select **Applications**, and then select the **Utilities** folder.
2. Double click the **Terminal** application to launch it.
3. Type `ssh username@unixs.cis.pitt.edu` (where *username* represents your University Computing Account username) and press **Enter**.
4. The first time that you use the Terminal application, you may see an unknown **Host Alert** window similar to the one below. Type **yes** to cache the server's host key in the registry. This warning should not display again.

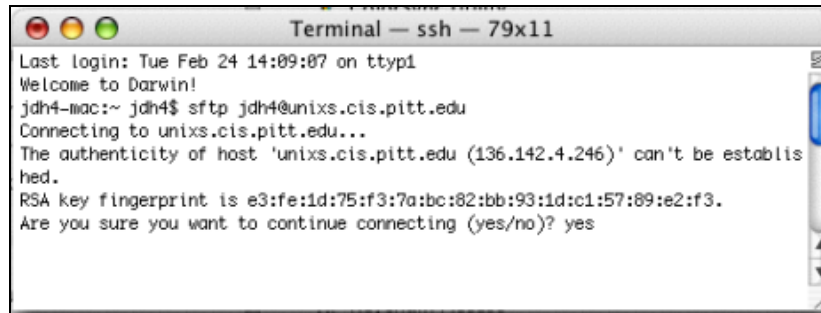


5. Type your University Computing Account password and press the **Enter** key.
6. The Unix Timesharing Service login screen will display. You are now securely connected.



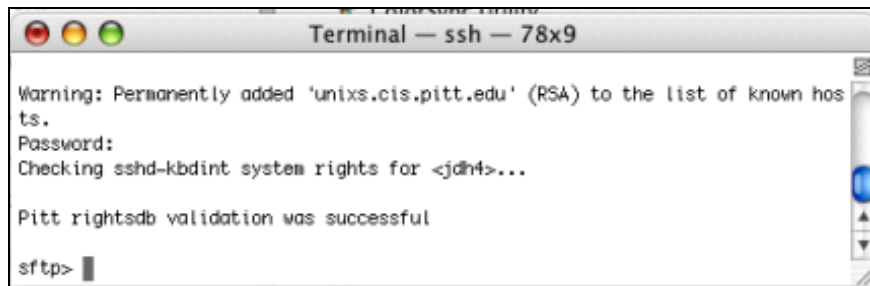
## Using the Built-in sFTP Utility

1. Double click on your hard drive, select **Applications**, and then select the **Utilities** folder.
2. Double click the **Terminal** application to launch it.
3. Type `sftp username@unixs.cis.pitt.edu` (where *username* represents your University Computing Account username) and press **Enter**.
4. The first time that you use the Terminal application, you may see an unknown **Host Alert** window similar to the one below. Type **yes** to cache the server's host key in the registry. This warning should not display again.



```
Terminal — ssh — 79x11
Last login: Tue Feb 24 14:09:07 on ttty1
Welcome to Darwin!
jdh4-mac:~ jdh4$ sftp jdh4@unixs.cis.pitt.edu
Connecting to unixs.cis.pitt.edu...
The authenticity of host 'unixs.cis.pitt.edu (136.142.4.246)' can't be established.
RSA key fingerprint is e3:fe:1d:75:f3:7a:bc:82:bb:93:1d:c1:57:89:e2:f3.
Are you sure you want to continue connecting (yes/no)? yes
```

5. Type your University Computing Account password and press the **Enter** key.
6. If you have successfully logged in, an `sftp>` prompt will display as shown in the screen below.



```
Terminal — ssh — 78x9
Warning: Permanently added 'unixs.cis.pitt.edu' (RSA) to the list of known hosts.
Password:
Checking sshd-kbdint system rights for <jdh4>...
Pitt rightsdb validation was successful
sftp> █
```

## Using Fetch for sFTP

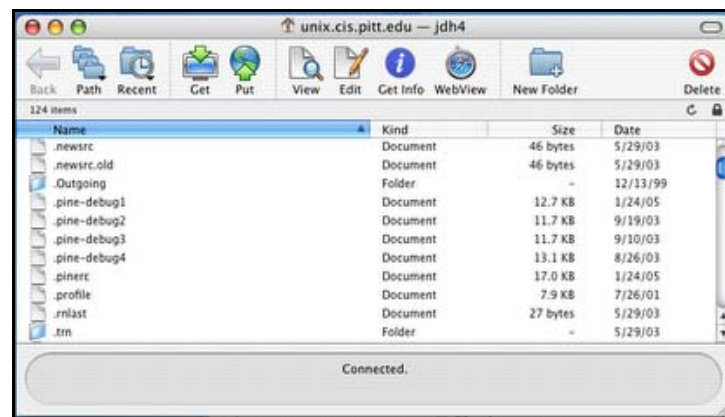
If you use Fetch as an FTP client, complete the following steps to configure it for a secure sFTP connection.

1. Go to the **Applications** folder and double click the **Fetch** icon to launch the program. A **New Connection** window will display.
2. In the **Hostname** field, type **unixs.cis.pitt.edu**.
3. In the **Username** field, type your University Computing Account username.
4. Set the **Connect using** drop-down menu to **SFTP**.
5. In the **Password** field, type your University Computing Account password.

6. Click the **Connect** button.



7. When you have successfully connected, files on the remote system will appear in the window as shown below.



At this point, you can use the **Path** button to navigate through directories on the remote system. To begin downloading files from the remote system to your local system, select the file you wish to download and click the **Get** button. To begin uploading files to the remote system from your local system, select the file you wish to upload and click the **Put** button.

When you have completed your file transfer and you are ready to disconnect from the remote system, close the connection window.

## Questions and Feedback

The Technology Help Desk at 412 624-**HELP** [4357] is available 24 hours a day, seven days a week to answer your technology-related questions. Questions can also be submitted via the Web at [technology.pitt.edu](http://technology.pitt.edu).