Use of Secure Shell and SFTP

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This document explains how to use secure shell (SSH) in Windows environment.

1. Secure Shell (SSH)

SSH (Secure SHell) is the secured remote network connection program or protocol that supports strong cryptography for transmitting commands and data. Since tradition telnet and FTP (File Transfer Protocol) are not safe, secured Telnet (SSH) and secured FTP (SFTP) replace old Internet services.

In Linux or Mac OS, you may run `ssh` followed by network id and host name at the UNIX prompt. Linux distributions have by default open secure shell program installed.

```
$ ssh solamoo@joosin.org
```

In Microsoft Windows, you need to get programs installed into your machine. You may download PuTTY from http://www.putty.org/ or WinSCP. SSH/SFTP Secure Shell 3.2.9 is old enough to cause problems (e.g., "Algorithm negotiation failed …") in latest SSH servers.

2. PuTTY

PuTTY is available from https://www.chiark.greenend.org.uk/~sgtatham/putty/latest.html Download the latest installer and run it to install PuTTY and PSFTP (secured FTP).

Launch PuTTY by clicking consecutively Start->Programs->PuTTY->PuTTY.

Type host computer name into the input box labeled "Host Name (or IP address)." You may use either domain name or IP address of the host computer. Type in "joosin.org."
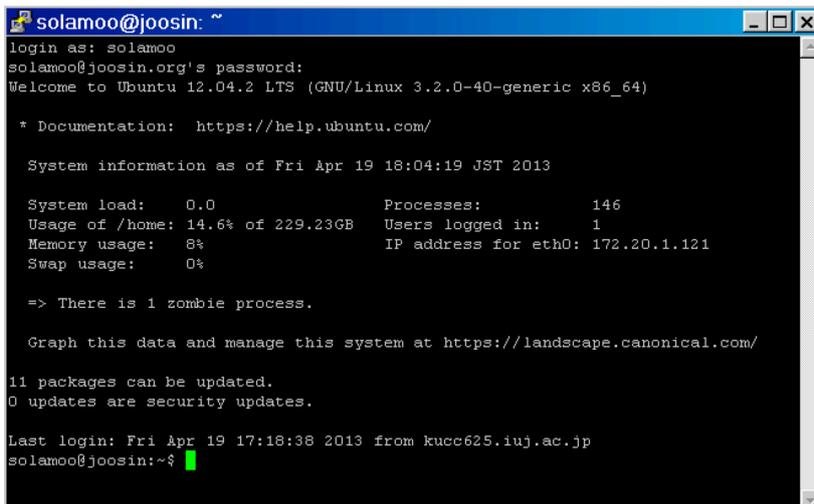
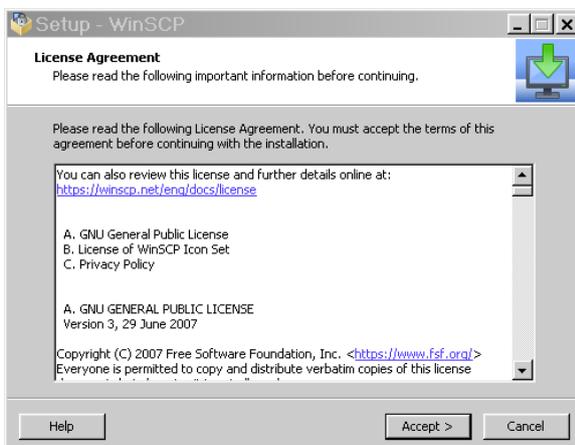Then click on the **Open** button at the bottom to get a pop-up window.
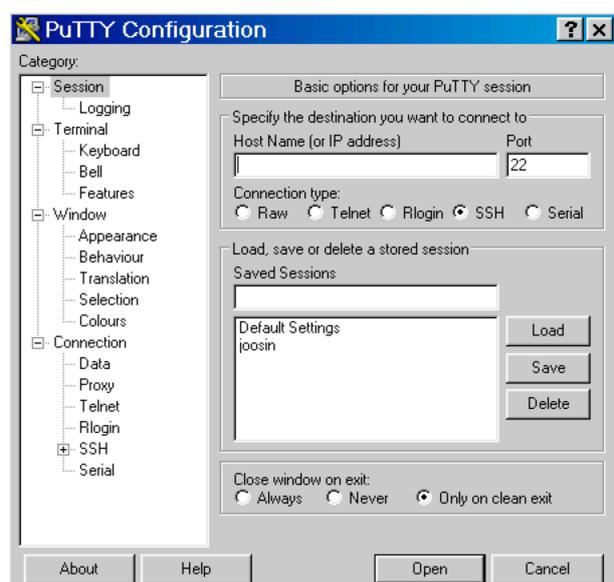
Type in your network ID after "`login as:`" and hit **Enter**. Then type in your password or passphrase after "…`'s password:`" and hit **Enter**.
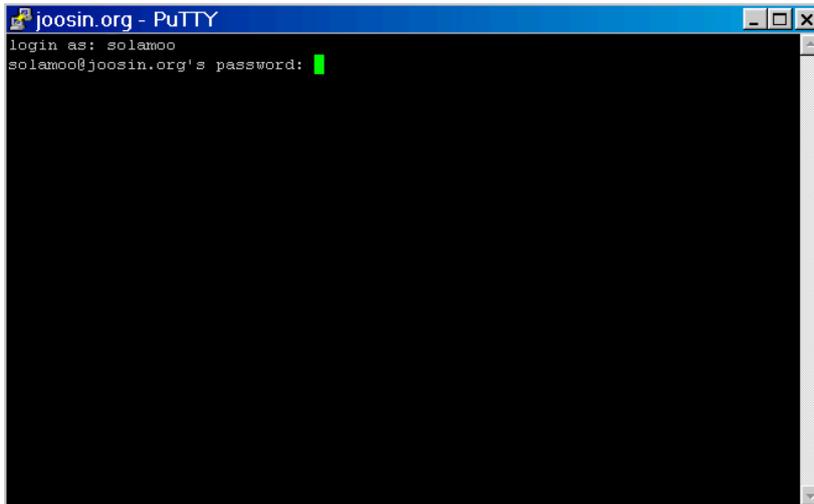
Then you will get the following UNIX prompt. You can run UNIX prompt from now.

3. WinSCP

WinSCP is a SFTP client for Microsoft Windows. But it also supports SSH (PuTTY). Get

http://www.sonsoo.org

latest one (5.xx) from https://winscp.net/eng/download.php. Run the setup program and hit **Accept, Install, Next,** or **OK** to proceed.

Launch WinSCP by clicking Start→Program→WinSCP to get the following dialog box.
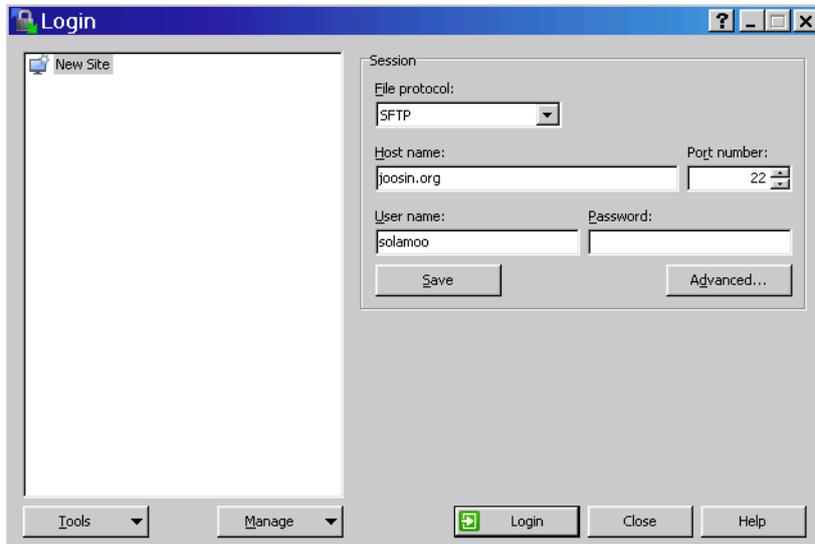
In the login dialog box, provide host name ("joosin.org"), user name (your nickname), and password. Then click **Login**. Click simply **Yes** and/or **Update** on security warning pop-ups.

Upon logging in your account, you will have two file systems as shown in the next screen shot. The left one is the default directory of your (local) machine, while the right one shows the directory of your account in the remote machine (joosin.org).
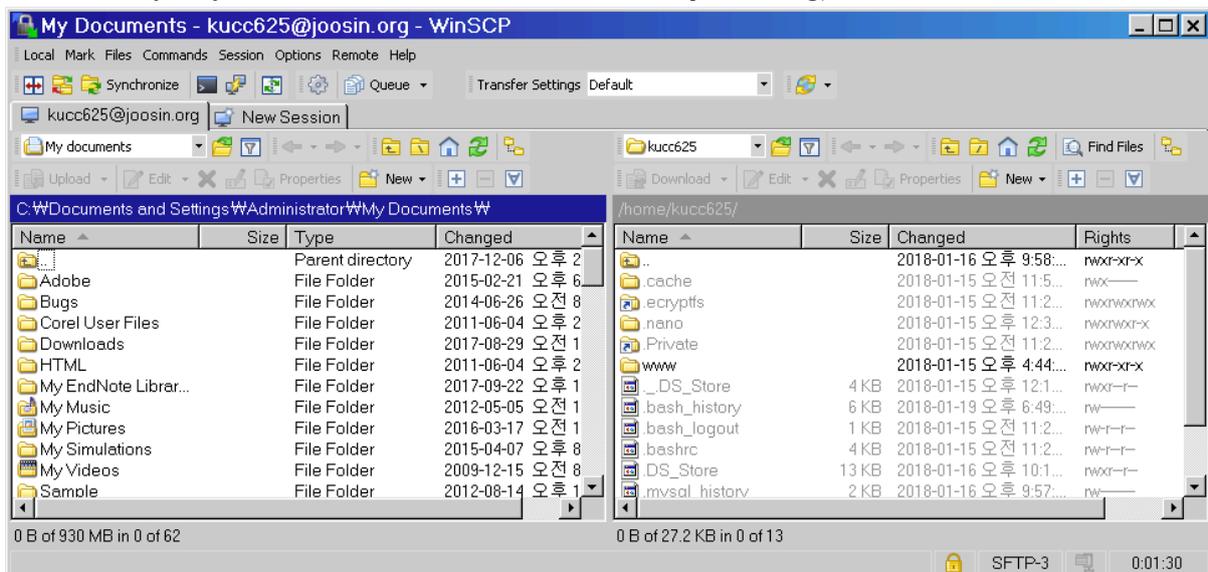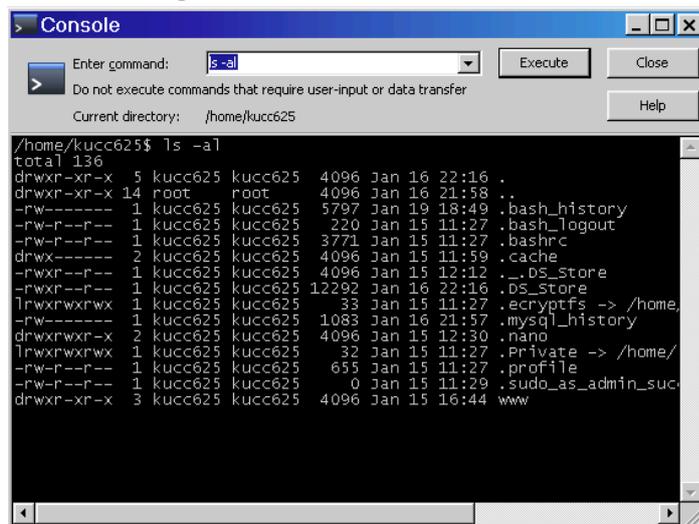

Uploading is to transfer files in the local machine to a directory in the remote machine. You may click a file on the left file system, drag it to the right file system, and then drop it. WinSCP copy the local file to the current directory of the remote machine. Of course, you change directory as if it is Windows Explore (file manager).

Downloading is the opposite to Upload; it transfers files in the remote machine to a directory of the local machine. Usage is the same as in upload.

If you want to use SSH and execute UNIX commands, you may call PuTTY (if you have) or open terminal. Click Commands➔Open in PuTTY or press Ctrl+P to initiate PuTTY. Click Commands➔Open Terminal or press Ctrl+T to start terminal.

The following screen shot illustrate how to run a UNIX command in the terminal.

4. Terminating Remote Connection

Once you finish your task, run the `exit` command to terminate the remote connection.

End of this document.