

## Remote Access: How to log into the EECS Linux servers from anywhere

### Logging into the EECS Linux servers via SSH using a Microsoft Windows computer

1. Download and run the SSH client PuTTY, which can be found here: <http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html>
2. In the PuTTY configuration window, enter into [Host Name] field: `<server>.cs.wichita.edu`  
where <server> is a Linux server: kira, kirk, mccoys, riker, sisko, or spock  
(NOTE: on all the servers you will have access to your files and the same applications)
3. When you click "Open", PuTTY will open a new terminal (shell) window.
4. Enter your myWSU ID as username and your myWSU password when prompted to do so.  
(If you wish to have PuTTY automatically fill in your username during each SSH connection, then enter it in the [Connection] | [Data] category and save this custom session in the [session] category within the configuration window.)
5. You are now logged into the Linux server and can use commands just like on the lab terminals.

### Logging into the EECS Linux servers via SSH using a Linux or Mac OSX computer

1. Open a terminal (shell) window and type  
`ssh <myWSU ID>@<server>.cs.wichita.edu`  
where <myWSU ID> is your own myWSU ID and <server> is a Linux server:  
kira, kirk, mccoys, riker, sisko, or spock  
i.e. `ssh a123b456@kira.cs.wichita.edu`  
(NOTE: on all the servers you will have access to your files and the same applications)
2. Enter your myWSU password when prompted to do so.
3. You are now logged into the Linux server via a pure command-line interface.

### X11-Forwarding over SSH for graphical applications

Though there are pure command-line tools for editing text and program source files (i.e. nano, vi, and emacs), you can use X11-forwarding over SSH to run graphical software tools, including the text editors you use in our Linux lab. Once you have X11-forwarding configured, you can run any GUI application of your choice by typing its name, e.g. geany or as a "background process" just add an ampersand at the end of your command, e.g. `geany &`

1. If you wish to use X11-forwarding on Microsoft Windows, then you will need to install and configure Xming with PuTTY. A how-to on configuring Xming and PuTTY can be found here: [http://www.geo.mtu.edu/geoschem/docs/putty\\_install.html](http://www.geo.mtu.edu/geoschem/docs/putty_install.html)  
Once PuTTY and Xming are installed and configured, you can log into our servers as per the above directions, but make sure the Xming software is running before using PuTTY to login.
2. If you wish to use X11-forwarding on Linux then just add the option -X to the above ssh command, i.e. type `ssh -X <myWSU ID>@<server>.cs.wichita.edu`
3. If you wish to use X11-forwarding on Mac OSX then you will need to install the XQuartz software. XQuartz can be downloaded here: <https://www.xquartz.org/>  
Once XQuartz is installed, then you can add the option -X to the above ssh command, i.e. type `ssh -X <myWSU ID>@<server>.cs.wichita.edu`

**NOTE: Please never attempt to use su, or sudo to gain root access on the EECS Linux servers. If you attempt to gain root access, then your Linux user account will be disabled!**

## How to remotely copy files from/to the EECS Linux servers

### Copying files from/to EECS Linux servers using a graphical application on Microsoft Windows, Linux, or Mac OSX

You can use a GUI-based FTP/SFTP application to copy files, such as:

FileZilla, downloaded here: <https://filezilla-project.org/>

WinSCP (Windows only), downloaded here: <https://winscp.net/>

Once installed, enter [host] as: `<server>.cs.wichita.edu`

where `<server>` is a Linux server: `kira`, `kirk`, `mccoy`, `riker`, `sisko`, or `spock`

enter [User] as your myWSU ID, enter [password] as your myWSU password, and enter [port] as 22 (SFTP). You can also use the [Site Manager] for saving server connection details.

### Copying files from/to EECS Linux servers using Linux or Mac OSX from the terminal

If you are comfortable using a command-line terminal interface, then you can use the scp (Secure Copy) command:

1. To copy a file from a local machine to your home directory on a remote server, type `scp <file or filepath> <myWSU ID>@<server>.cs.wichita.edu:~` where `<file or filepath>` is the local filename (or complete pathname to that file) which you wish to copy, `<myWSU ID>` is your myWSU ID, and `<server>` is a Linux server: `kira`, `kirk`, `mccoy`, `riker`, `sisko`, or `spock`
2. To copy a file from a remote server to the present working directory on a local machine, type `scp <myWSU ID>@<server>.cs.wichita.edu:<file or filepath> .` where `<file or filepath>` is the filename (or complete pathname to that file) which you wish to copy, `<myWSU ID>` is your myWSU ID, and `<server>` is a Linux server: `kira`, `kirk`, `mccoy`, `riker`, `sisko`, or `spock`

## EXTRA LINUX HELP

If you need to know more about a specific command, you can type `man <command>` (and Google is your friend when it comes to working with Linux!)

WuLUG (WSU Linux User Group) meets regularly on campus and is happy to help or answer questions. Please see the WuLUG profile on Facebook for more info: <https://www.facebook.com/wulug>

For those of you new to the Linux Command Line Interface (CLI), here are a few helpful links:

Linux Foundation's free Introduction to Linux: <https://training.linuxfoundation.org/linux-courses/system-administration-training/introduction-to-linux>

The Linux Documentation Project: <http://www.tldp.org/>

The Linux Command Line (under a CC License with No Starch Press): <http://linuxcommand.org/>

FOSSwire.com Linux Cheat Sheet: <http://files.fosswire.com/2007/08/fwunixref.pdf>