

Tutorial – Linux

Dae Hyun Kim

EECS Washington State University

Goal

• Learn how to use Linux



- Download an SSH client program such as
 - PuTTY
 - NetSarang Xshell
 - This is what I am using. It is free.
 - SecureCRT
 - ...
- Download an X server software such as
 - Xming
 - This is what I am using. It is free.
 - This is used only for GUI environments.



Xshell

- Create a session.
- In the "Sessions" window, click "New".
 - Enter a name for the session and a host (server) address.

lew Session Properties				? ×
Category:				
Connection Authentication Login Prompts SSH Security Tunneling SFTP TELNET RLOGIN SERIAL Proxy Keep Alive Terminal Keyboard VT Modes Advanced Appearance Margins Advanced Classified Transfer X/MODEM	Connection General <u>N</u> ame: <u>P</u> rotocol: <u>H</u> ost: Port Number: <u>D</u> escription:	SSH SSH 22		
	Reconnect Reconnect automatically if connection is terminated unexpectedly Interval: 0 sec Limit: 0 TCP Options Use Nagle's algorithm			
			ОК	Cancel



Xshell

• Hosts

- You can try the following servers.
- ssh1.eecs.wsu.edu
- ssh2.eecs.wsu.edu
- ssh3.eecs.wsu.edu
- ssh4.eecs.wsu.edu

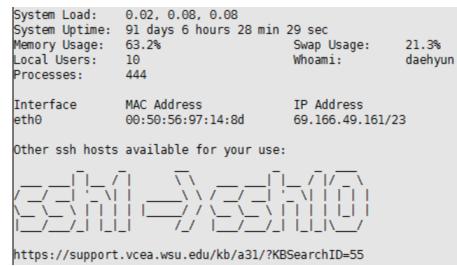


• Click "Tunneling" and turn on the "X11 Forwarding" option.

New Session Properties				? ×		
<u>Category:</u>						
	Connection > SSH > T	unneling				
Authentication Login Prompts Login Scripts SH	TCP/IP Forwarding Add/Edit/Remove TCP/IP forwarding rules. These rules are applied automatically when connection is established.					
Security Tunneling SFTP TELNET RLOGIN SERIAL Proxy Keep Alive	Type Listening	Destination	Description			
■ Terminal ■ Keyboard ■ VT Modes ■ Advanced	-X11 Forwarding	<u>A</u> dd <u>E</u> d	lit <u>R</u> emove	;		
Appearance Margins Advanced Trace Logging File Transfer X/YMODEM ZMODEM	▼ Forward X ○ Xmanay ● X DISPI	-				
			OK Can	cel		



- Click ok to save the session. From the next time, you can just double-click this session to connect to the server.
- Double-click the session.
 - If you are asked some questions, click "Accept and Save."
 - Then, enter your EECS ID and password.





- Run Xming if you also want to use GUI.
 - If you plan to work in text mode only, you don't need to run Xming.
 - Later on, you will need to run some GUI-based software, so it's better to just run Xming.
- Now, you are ready to work in Linux.



For Linux Users

- Open a terminal.
- Run
 - ssh -X your_EECS_id@ssh1.eecs.wsu.edu
- If you are asked a question, just enter "yes".
- Enter your EECS account password.
- Now, you are ready to work in the server.



For Mac Users

- For text-mode operations
 - Open a terminal.
 - Click "Launchpad" and type "terminal".
 - Click the terminal icon.
 - Run
 - ssh –X your_EECS_id@ssh1.eecs.wsu.edu
 - Follow the instructions for Linux users in the previous page.
- For GUI operations
 - You will need to install an X-client software such as
 - XQuartz
 - I use this.
 - Then, click XQuartz, "Applications", and "Terminal."
 - It will open a terminal supporting X window.
 - Run
 - ssh –X your_EECS_id@ssh1.eecs.wsu.edu
 - Follow the instructions for Linux users in the previous page.



Linux Commands

- Create a directory (folder).
 - mkdir directory_name
 - ex: mkdir ee434
- Go to the directory (cd: change directory).
 - cd directory_name
 - ex: cd ee434
- List all the files in the current directory.
 - Is –al
- Zip files
 - tar cvzf target_file_name.tar.gz file1 file2 …
 - ex: tar cvzf hw1.tar.gz src*.v wv1.out wv3.out



Linux Commands

- Unzip
 - tar xvfz filename.tar.gz (if it is .tar.gz)
 - unzip filename.zip (if it is .zip)
- Delete files (rm: remove)
 - rm filename
 - ex: rm s1.v s2.v t*
- Delete a directory
 - rmdir directory_name

