ELE 448 Lab Remote Access Tutorial

Step 0: Download Xpra and MobaXterm and install them

Xpra: <u>https://xpra.org/trac/wiki/Download</u> MobaXterm: <u>https://mobaxterm.mobatek.net/</u>

Step 1: Use MobaXterm to establish the SSH session with the remote computer

Open MobaXterm, and click "Session":

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Select Session type: SSH



Session se	ettings													:	×
SSH	Telnet	e Rsh	Xdmcp	INDP	VNC	🔇 FTP	SFTP	serial	9 File	∑ Shell	(Browser	🔊 Mosh	🍄 Aws S3	INSL	
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In the Session Settings, input Remote Host name, and there is no need to change anything else:

The Format of the remote host should be:

[username]@[computername].ele.uri.edu

Replace username with yours, delete all brackets, the computername can be chosen from the list:

	А	В
1	Name	Computer Name
2		jib
3		fin
4		keel
5		bow
6		oar
7		rudder
8		anchor
9		sail
10		mast
11		shark
12		sans
13		papyrus
14		toriel
15		eddie
16		undyne

Then click "OK":



For example, if we choose "rudder" from the list, now in MobaXterm we should see the server asking for Password:

🔄 jz2807@rudder.ele.uri.edu	- 0	×
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Ver sessions 22807@rudder.ele.uri.edu		Ŷ
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After you type in the Password, save it for further use if you want:



Now you should have successfully logged in to the server with your SSH settings:



Step 2: Start the Xpra service on server's end:

Now that you can use Shell (Command Line in MobaXterm) to manipulate the server computer, start Xpra Service by the command:

xpra start --start=xterm

Remember the "Actual display used" parameter for further use:



Step 3: Use Xpra on your local computer to connect to remote Xpra server:

Open Xpra, Click "Connect":

* 6	Xpra - • ×					
PBrowse	Connect					
Shadow	Start					

Choose "SSH" Mode, and Input the Server name, this should be the same as previous one, following the port number(22), type in the "Actual display used" parameter(green circle, 1 in this example):

Session Launcher	_ = ×
Connect to xpra serve	er
@ rudder.ele.uri.edu	22 : 1
□ Advanced Options	
Load	Connect
	Session Launcher

Click "Connect", you will be asked to input the Password again:

👓 Password Input		×
Password:		
	Confirm	Cancel

Now you are connected to the remote computer's Xpra server, you may use "ls" to check files and folders.

Step 4: Basic Lab setup

Create the "digital_IC" folder if you have not done so:

mkdir digital_IC

Navigate to "digital_IC" folder:

cd digital_IC

Go to https://www.ele.uri.edu/courses/ele448/Labs/Lab1/setup.txt, copy the 4 lines into the cmd window:

- ln -s /net/common/cad/NCSU/DesignKits/ncsu-cdk-1.6.0.beta/cdssetup cdssetup
- In -s /net/common/cad/NCSU/DesignKits/ncsu-cdk-1.6.0.beta/cdssetup/display.drf display.drf
 In -s /net/common/cad/NCSU/DesignKits/ncsu-cdk-1.6.0.beta/cdssetup/cdsinit .cdsinit
 In -s /net/common/cad/NCSU/DesignKits/ncsu-cdk-1.6.0.beta/cdssetup/cdsenv .cdsenv

You can now run Cadence by typing command

IC615

into the linux terminal while in your working directory:

🔍 rudder:~/digital_IC on rudder.ele.uri.edu					
<pre>(rudder:") jz2807% (rudder:") jz2807% ls (rudder:") jz2807% cd digital_IC (rudder:"/digital_IC) jz2807% IC615</pre>		n ini si	• •	•	•

The Cadence Window should come up:

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Messages			
Log file is "/w/grads/jz2807/digital_IC/libManager.log" Loading NCSU Library Manager customizationsdon WARNING (CLM-105): Library Manager custom oper Set ENV value [cdsLibManager.customize showDFIIV Save your defaults file for message setting to take effe	e. ations are inactive without a DFII session present. /arning] to off [nil]. ect permanently.		

Step 5: Stop Xpra server

After you finish you lab, an important thing to note is that the server must be manually closed after it is done being used by using the command "xpra stop". Otherwise, there may be many servers running at a time limiting the performance.

In the MobaXterm Window, Use

Ctrl + C to exit the "Xpra start" command, but make sure to input xpra stop



