

# ORG DIGITL COMP LAB (EECS 112L)

## SSH Client Tutorial

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Winter 2016

This tutorial explains how to connect to one of the EECS servers using pc or mac computers.

## Connecting to Server

### From a PC

#### Prerequisites

PC users are required to download a SSH client software to connect to EECS servers. There are multiple SSH clients available, MobaXterm is a good SSH client. The free version is more than enough for our course.

MobaXterm can be downloaded at the following web address:

<http://mobaxterm.mobatek.net/>

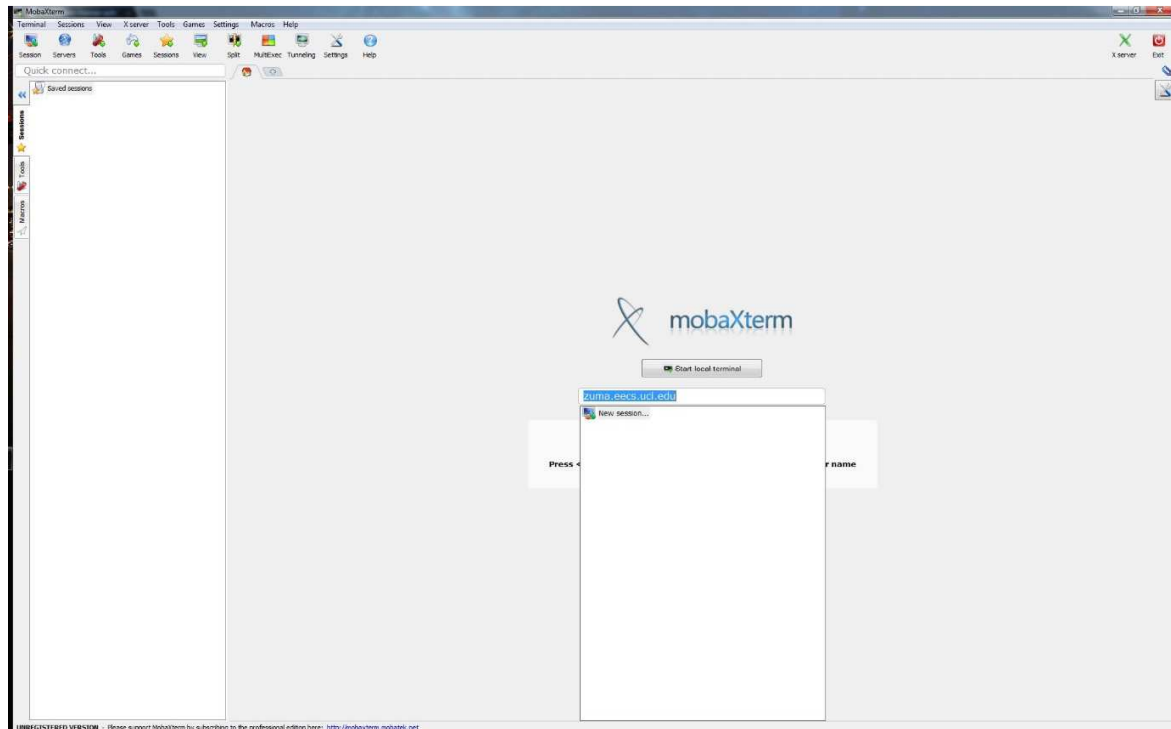
Once you arrive at the webpage on your browser, please go to Download tab and download the free version. Here you are given an option to download either a portable edition or an installer edition. Our recommendation is to download an installer edition. Students are more than welcome to download the portable version (Portable version appears to have bugs and might crash on you once in a while).

Portable version doesn't need installing, you just have to download a zip file, un-compress it and run the application. However if you choose to download the installer edition, please run the setup file and follow all the steps to install.

## Running the SSH client.

Run the client by double clicking the MobaXterm icon.

Your initial screen should look like this:



Please enter the host name or IP address of the server you wish to access. UCI EECS has two Sun SPARC servers and three Linux Intel servers. Linux servers are new and very fast however Sun servers are old and slow.

### Sun SPARC Servers

vivian.eecs.uci.edu

malibu.eecs.uci.edu

### Linux Intel Servers

crystalcove.eecs.uci.edu

zuma.eecs.uci.edu

ladera.eecs.uci.edu

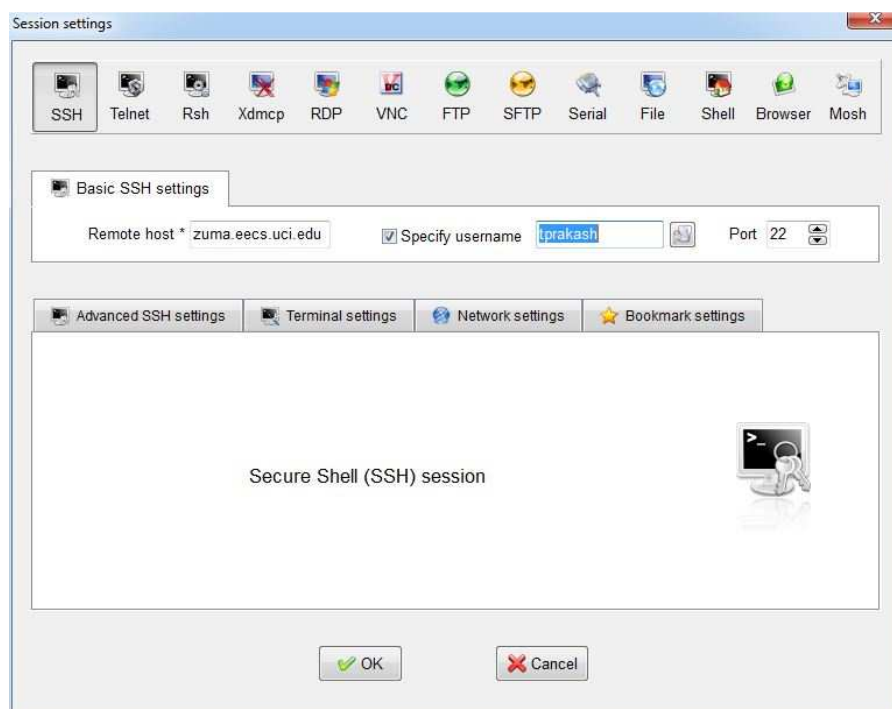
**EECS 112L requires you to learn two EDA tools, Mentor Graphics QuestaSim and Cadence Incisive. The tutorials for both the tools are available in the class website.**

*Please use Sun SPARC servers if you want to run simulations on Cadence Incisive and alternatively use Linux Intel servers if you want to run simulation on Mentor Graphics Questasim.*

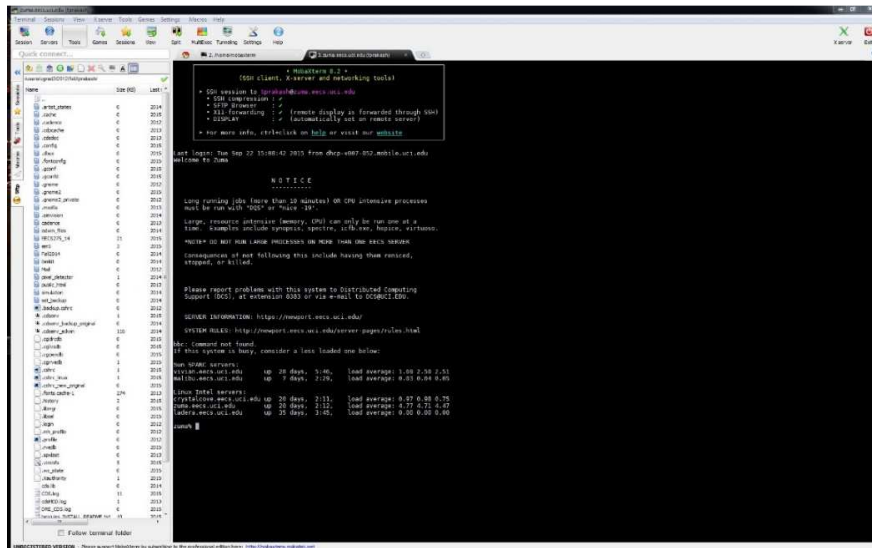
*We are trying to resolve an issue with Linux Intel servers and once the issue is resolved you will be able to run both cadence Incisive and Mentor Graphics Questasim simulations on Linux Intel servers.*

More information about EECS Servers can be found at < <http://newport.eecs.uci.edu/> >

Once you enter your host name, MobaXterm will ask you to choose the type of the session. Please select SSH and go ahead and type your user name in the respective field and hit OK.



You will be prompted to enter your password and once you enter your password, you should be successfully logged into the server.



## File Transfer between PC and Server.

You simply have to drag and drop your files in the sftp tab of MobaXterm, it is that simple.

## Connecting to EECS Servers from a Mac

You don't need to download anything for a mac computer. There is a built in program called Xquartz (X11 in older versions). Open this program and type the following:

```
ssh -X -Y UserName@ServerName
```

Username is your user name assigned to you by DCS. ServerName is the name of eeecs servers which can be any of the following:

zuma.eecs.uci.edu

or

crystalcove.eecs.uci.edu

or

malibu.eecs.uci.edu

You will be asked for your password. Enter your password and you are good to go.

## File Transfer between MAC and Server.

Use the following command to transfer files between MAC and Servers.

```
scp -r source destination
```

Example 1 (copying a file file.vhd from your account to local directory)

```
scp -r UserName@servername.edu:adder.vhd /some/local/directory
```

Example 2 (copying a file file.vhd from your local directory to server)

```
scp -r file.vhd UserName@servername.edu:/some/remote/directory
```

Alternatively MAC users can also download cyberduck <<https://cyberduck.io/?l=en>> tool and access the servers.