

File: README.vnc.setup

Part 1: Logging on to an UNIX machine from a PC using VNC

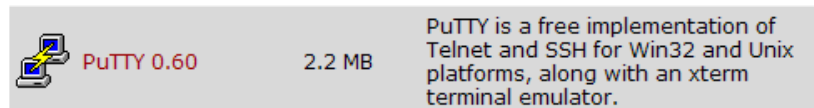
During EE101, EE357, EE457, EE560 courses (and perhaps in a few other courses) we will be using modelsim. It is best to install and run modelsim on the student laptops running windows 7. Modelsim is also available on our UNIX machines (aludra and nunki). If you want to run unix modelsim then you need a graphical interface:

1. From any Windows (XP/vista/7/8) PC (either on campus or at home) with a high-speed internet connection (like DSL or cable-modem) using a program called Virtual Network Computing or VNC for short.
2. From a Mac . Mac does not require VNC.
 - Open up terminal from Application -> Utilities -> Terminal.
 - Sign in to aludra server using command: (ssh -X uscid@aludra.usc.edu).
 - Enter your password (usc password).
 - You need to a FTP program like FileZilla to transfer the files to your unix account from your Mac to simulate them on unix and perhaps finally transfer the results back to your Mac.

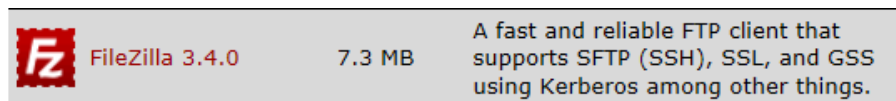
This section describes option 1:

VNC is freely available on the web from www.realvnc.com. VNC provides a remote login to one of the three USC UNIX servers, aludra, or nunki, but unlike PuTTY, it provides a graphical user interface. In order to establish a connection to aludra or nunki using VNC the user has to go through the following steps:

It is assumed that you have downloaded PuTTY (SSH) on to your PC from ITS. Go to <http://itserver-vices.usc.edu/> Click on Software which takes you to <http://software.usc.edu/> You need to login using your Choose your platform (XP or Vista or windows 7 or windows 8).



While you are there, you may want to download filezilla FTP program also if you do not have a file transfer program to transfer files between your unix account and your PC.



1. Bring up a PuTTY (SSH) connection from the WINDOWS PC to aludra or nunki by clicking SSH to host (PuTTY) icon ("C:\Program Files\PuTTY\putty.exe").
2. Logon on to aludra using your UNIX user name and password (same as your USC email account name and password). If you are logging into UNIX just to submit your files (like in the EE457), you can submit from this PuTTY itself. You do not need to invoke vncserver.

3. Set up your unix account to run the vncserver (this step needs to be done once for the first time only).

```
~eeview/vnc_initial.setup
```

Since the above setup adds lines to your .login file, source (execute) your .login files by the following command for the first time. Next time it is automatic when you login.

```
source ~/.login
```

4. Run vncserver on unix as follows.

Following is an example screen capture when the command **vncserver** was entered at the unix prompt:

Note that it asks you to set a password the very first time you invoke vncserver. This password need not be the same as your UNIX password. Most users select another password for vnc so that they can easily collaborate with their lab partners. You use this password to authenticate the vncviewer running on your PC to pair with the vncserver running on unix.

```
nunki.usc.edu(1) : vncserver
```

```
You will require a password to access your desktops.
```

```
Password:
```

```
Verify:
```

```
(ignore the bunch of warnings dumped on your screen!)
```

```
Look for the last few lines looking like the following:)
```

```
New 'nunki.usc.edu:10005 (eeview)' desktop is nunki.usc.edu:10005
```

```
access with: vncviewer nunki.usc.edu:15005
```

```
or: http://nunki.usc.edu:14005
```

```
kill with: vncserver -kill :10005
```

```
Starting applications specified in /home/scf-06/eeview/.vnc/xstartup
```

```
Log file is /home/scf-06/eeview/.vnc/nunki.usc.edu:10005.log
```

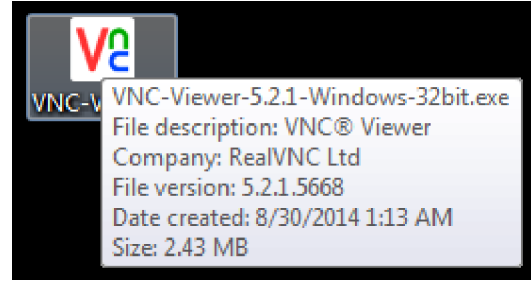
On the Windows PC download the free VNC viewer 5.2.1 or later from <http://www.realvnc.com/>
<http://www.realvnc.com/download/viewer/> .



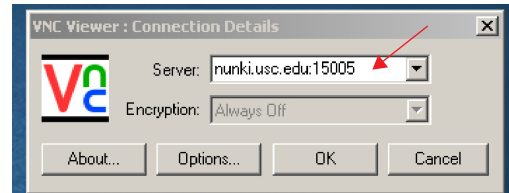
Download and place the executable on the desktop. No installation is needed! *Note that this is particularly convenient when you are working on a friend's/office PCs where you do not have installation rights. You can just carry the vnc viewer executable on an USB memory stick and use it with no installation.*

1. You will see the following icon on your desktop.

Click on the icon and run the VNC Viewer executable. This brings up a small window titled "VNC Viewer: Connection Details".



2. The line, "access with: `vncviewer nunki.usc.edu:15005`" (appeared in the above example) states that you should type `nunki.usc.edu:15005` in the Server box in the "VNC Viewer Connection Details" window. The "15005" in this example is to be replaced by whatever port number you were assigned when you invoke `vncserver`. And if you ran `vncserver` from `aludra`, then it should be `aludra.usc.edu` instead of `nunki.usc.edu`.



3. An alternative to the above (downloading VNC Viewer on your PC and invoking it) is to use a web-browser (example: Microsoft Internet Explorer) and access your unix desktop with "`http://nunki.usc.edu:14005`". This did not work on 8/30/2014 on my system.

In order to close the VNC connection properly the user has to follow these steps:

1. Close the VNC desktop window.
2. Go back to the PuTTY (SSH) window and kill `vncserver` process, you can use the following command:

```
vncserver -kill :10005
```

Note that one of *the last few lines in the response to vncserver invocation* was:

```
kill with: vncserver -kill :10005
```

So in your case the number will be something else (not necessarily 10005 as shown in this example).

3. NOTE: IT IS IMPORTANT TO TERMINATE THE VNC PROCESS PROPERLY SINCE THE PORTS HAVE TO BE FREED UP SO THAT OTHER STUDENTS CAN USE THEM!!!

Part 2: Logging on to an UNIX machine from a PC on ResNet using XWin32

Note: This part is not written here but you may be able to find online help.