VNC Setup

When you are at home not using USC Ethernet, using X-Win32 to run Cadence will be slow sometimes. This document shows you how to use VNC to connect to your computing account on the USC server. Note that in order to connect VNC, no VPN connection is required.

1) Login to your account using X-Win32 and type the following command:

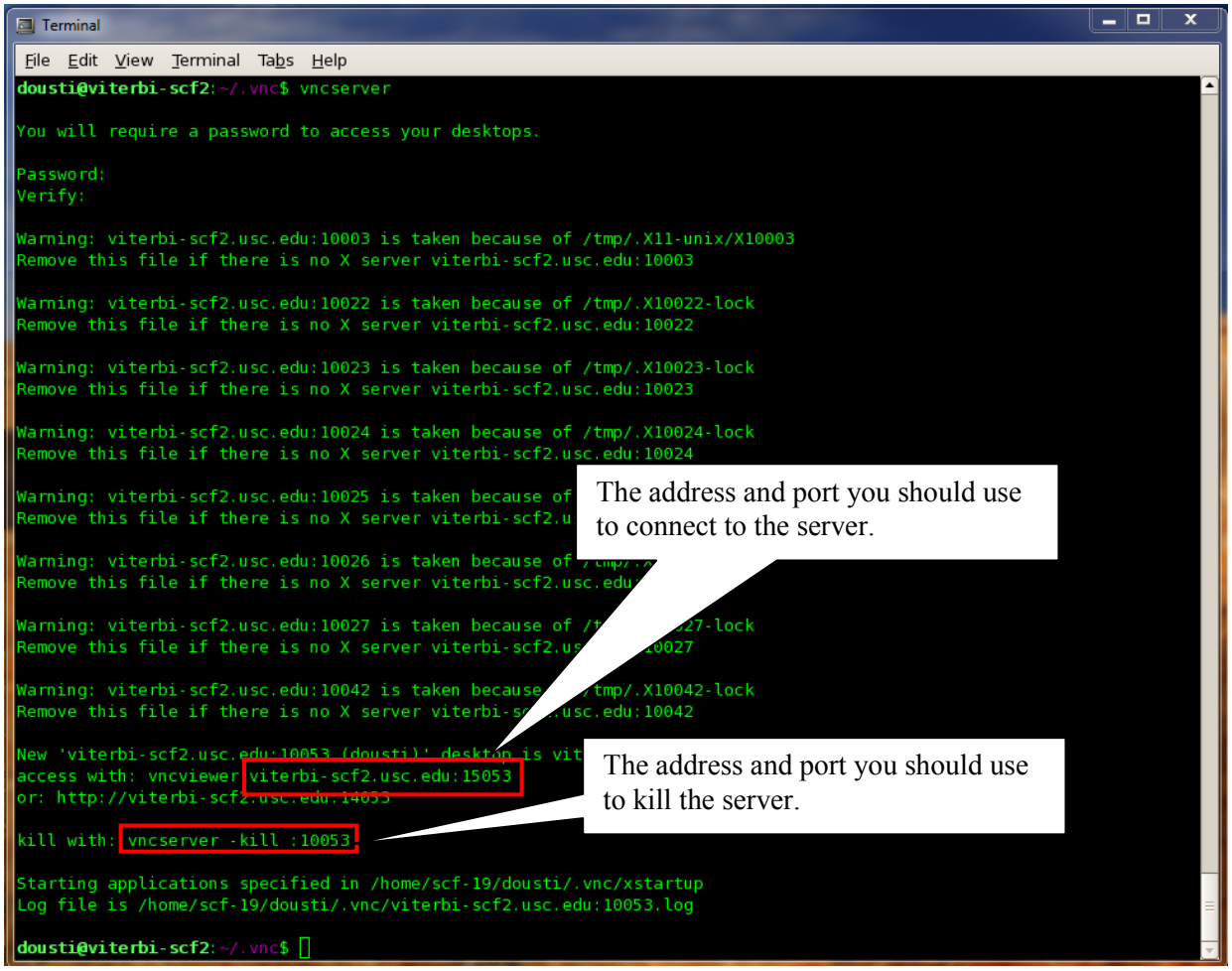
vncserver -geometry <width>x<height>

where <width> and <height> are the resolution width and height of VNC server. For instance, if the resolution of your screen is 1024x768, you should enter

vncserver -geometry 1024x768

Note that when you set a resolution for your VNC server, it cannot be changed unless you kill it and start a new one (you will learn how to do it in the rest of this manual).

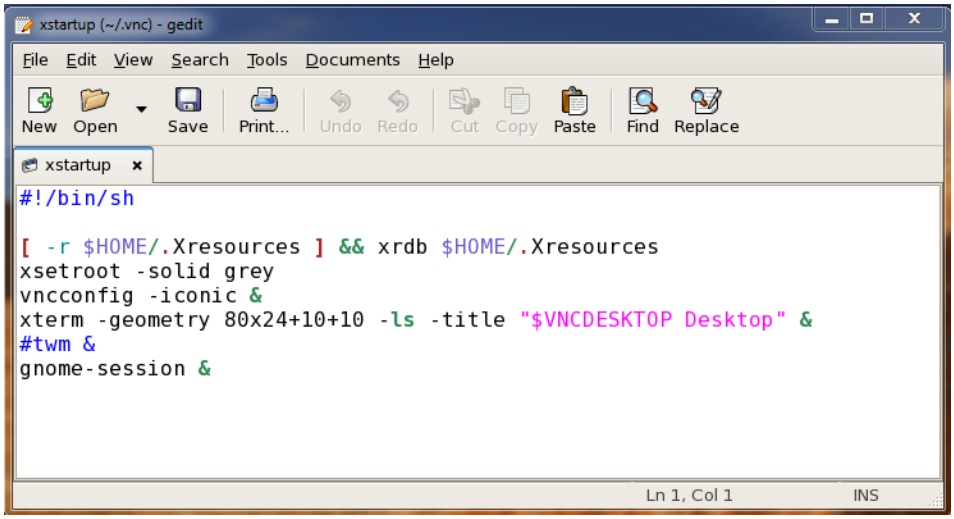
If this is the first time you use VNC server, it asks you to set a password. Then it assigns you a specific port on the server so that you can connect to it.



2) Open ~/.vnc/xstartup using the following command:

gedit ~/.vnc/xstartup

Comment out the last line by adding # and enter **`gnome-session &`** to the very end of the file. The final content should look like below. Save the changes and close it.



By this modification, you can use GNOME as the desktop environment which is user friendlier compared to TWM. This change probably would work on `viterbi-scf1` and `viterbi-scf2` servers.

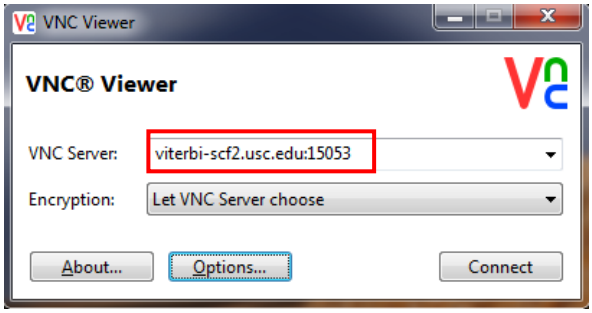
3) Restart your VNC server by first killing it and running it again:

vncserver -kill :10053
vncserver

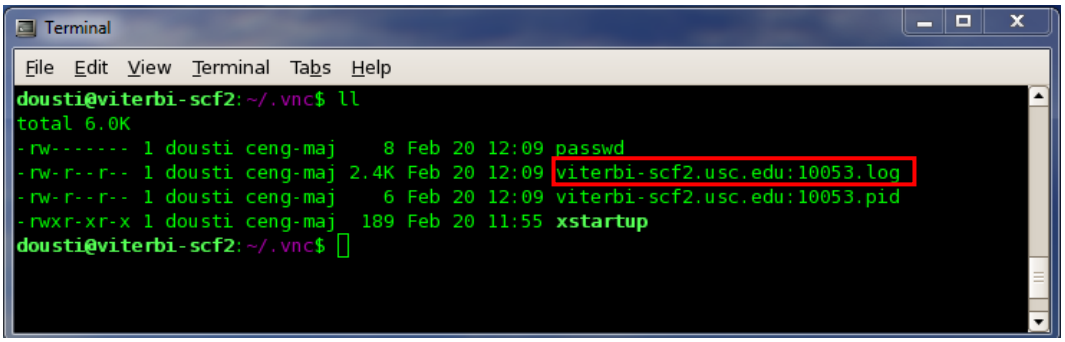
Use the port number which is assigned to you in step 2.

4) In order to connect to the VNC server, you need a VNC viewer. RealVNC is a good option which has a viewer for Windows, Mac OS X, and Linux operating systems. You can get it from here:
https://www.realvnc.com/download/viewer/

5) Open the RealVNC Viewer that you downloaded in step 1 and enter the given address and port that were assigned to you in step 2.



6) If you forgot your VNC server port number, you can find the list of active servers by looking at ~/.vnc directory (check the file with **.pid** extension):



In this figure, one active server exists with the port # of 10053. To kill this server, the following command should be used:

vncserver -kill :10053

In order to connect to this server, the following address should be used. Note that the second digit of the port number is changed from 0 to 5. In other words, 10053 is changed to 15053.

viterbi-scf2.usc.edu:15053

IMPORTANT NOTE: When you are done with VNC, remember to kill the vncserver process by executing the kill command. If you don't kill the process properly, you may receive a warning from ITS regarding and your VNC server might be killed by them. Also try not to spawn several VNC servers. It slows down the server which not only affects you, but also negatively affects all the students who rely on USC machines to do their HWs (including EE477, EE457, EE577a, and EE577b students). So be mindful about the fair use of computing resources USC provides you.