Local and Remote Login into a Linux Machine
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CHAPTER 1: LOGGING IN TO A LINUX MACHINE

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Acknowledgements:
Chapter 1: Logging in to a Linux Machine

EDA (electronic design automation) tools tend to be written for the Linux operating system. In general you will use these tools remotely rather than logging on to a specific machine. Currently we have 50 Linux machines that you can log into.

Finding the status of a Linux machine:
To make sure that the computer you are going to use has a minimum of users, click on this link, using a computer or internet connected phone. You should see a status report as shown in Figure 1. In this example, only machines 42 and 46 have active users. You should do this every time, rather than just sue a favorite machine.

FTLC (face to local computer) login to EE Linux machines:
1. The Linux machines are located in rooms 289 and 291 of the engineering building. To be able to get into these rooms go to the EE office and get a door code.

2. Sit down in front of a Linux machine and use your SJSUone log in credentials to log in.
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Figure 1: Usage status of Linux machines.

**VPN login to SJSU (Off campus or wireless login):**
You need to this before starting a client that allows you to remotely log into the Linux machines if you are off campus or using the wireless network. If you use the VPN and do not need it, it is ok. If you do need the VPN you must use it or you will get an error message.

1. It is best of you follow the instructions the university created [here](http://fineg02.engr.sjsu.edu/labcond.html) on how to access the linux machines with a VPN. If you follow their instructions, then you should see a similar figure as in Figure 5.
2. Download the Cisco connect anywhere app. The download locations for all operating systems are located [here](#).

3. Install the software.

4. For windows:
   a. Click on the cisco connect anywhere app. A pop-up like Figure 2 should appear.

   ![Figure 2: Cisco Connect Anywhere App.](#)

   b. Enter the server name into the pop-up: vpn.sjsu.edu as shown in Figure 3. Left click connect.

   ![Figure 3: Enter in SJSUOne credentials into pop-up.](#)

   c. In the pop-up (Figure 4):
      i. Enter in your SJSUone ID number into user name.
      ii. Enter your SJSUOne password into password.
      iii. Set the group to SJSU-VPN
      iv. Left click the ok button.

   ![Figure 4: Enter in your SJSU credentials in to the pop-up.](#)
d. If you are successful, there should be no error messages and you should see the status icon in your tool bar as shown in Figure 5.

Figure 5: Cisco Connect Anywhere client successfully started. Yellow highlight added.
FTRC (face to remote computer) login to the EE Linux machines using the Remote Desktop Protocol:

If you are off campus or using the wireless network you need to use the VPN shown above.

1. On your Windows machine, open up a Remote Desk Top Connection. A pop-up like Figure 6 should appear.

2. Enter in the machine name you wish to connect to: coe-ee-cadXX.sjsuad.sjsu.edu, where XX is an integer from 1 to 50. In this example we are connecting to coe-ee-cad1.sjsuad.sjsu.edu.

3. A warning pop up like Figure 7 may appear. To clear the error message, left click on the yes button.

4. Enter in your SJSUone log information and left click on ok.

5. If you successfully entered in your SJSUone login credentials, you should see a window similar to Figure 9. You need to left click the cancel button of Figure 9 up to 10 times to begin working.

6. If you did not successfully entered in your SJSUone login credentials you should see a window like Figure 10. Left click Ok to reenter your log in credentials.

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1 RDP can work well, but it can be a pain to get to work. If it gives you too much trouble, use the second method of connecting (Putty and Xming).
Figure 7: Warning from Remote Desktop.

Figure 8: Enter in SJSUOne log in information.
Figure 9: Log in successful. Need to click cancel many times.

Figure 10: Log in error (Usually wrong log in credentials.)
**FTRC (face to remote computer) login to the EE Linux machines using the putty and Xming.**

If you are off campus or using the wireless network you need to use the VPN shown above.

This method requires you to download two open source software packages. Download and install **Putty** and **Xming**. Every time you want to login the Linux machines follow this procedure:

1. Open up Putty. You should see a window like Figure 11.

2. Run Xming in the background (Look at the status bar top see if it ran correctly as in Figure 12).

![Figure 11: Starting a Putty session.](image)

![Figure 12: Xming running in the background. (Yellow highlight added.)](image)

3. Fill out the putty log in application. For host name use name of the machines you selected (coe-ee-cadXX, where XX is an integer form 1 to 50.)

4. Click on SSH, then X11 in the category box of the Putty window as shown in Figure 13 and then click on X11 forwarding, Enable X11 Forwarding as in Figure 13.

5. Click on the open button of the putty window. If a pop-up like Figure 14 appears select yes.

6. Enter in your SJSUOne credentials into the putty window (Figure 15). If you have successfully logged and you should see a command prompt as in Figure 15.

7. To test if the remote graphics are working type in: gedit & , and press enter into the command line as shown in Figure 16. The text editor should appear as in Figure 17.

8. To exit gracefully, type in the Linux command exit and press enter.
Figure 13: Setting up Putty for X11 forwarding.

Figure 14: Selecting how you wish to trust a host.

Figure 15: Logging into a Linux machine with Putty.

Figure 16: Testing the remote graphics.
Figure 17: Gedit text editor successfully started.