Virtual Access to the Mathematics PC Laboratory Using Windows

1 Requirements

To access your Linux account, you need a computer with Internet access and two programs—PuTTY and VNC. For Windows users, these programs can be downloaded from

`http://www.chiark.greenend.org.uk/~sgtatham/putty/download.html`

and

`http://www.realvnc.com/download.html`

Installing each of these is as simple as downloading them to your desktop.

2 Using PuTTY and VNC

Here is a quick overview of the steps involved:

- Use PuTTY to establish a remote connection to the server, mathvnc.eiu.edu, logging on to your Linux account.
- Start the vncserver program on mathvnc.eiu.edu and log off your Linux account.
- Start VNC, allowing you to interact with your Linux desktop.
- Complete your Linux session, closing the desktop when finished.
- Return to your PuTTY session, close the vncserver program, and exit.

These steps are explained in more detail in the following sections.

2.1 Establish a Remote Connection

By starting the PuTTY program, you should see a window similar to Figure 1. Ensure that the protocol is set to SSH, enter `mathvnc.eiu.edu` for the *Host Name*, then click on the Open button.[1] A terminal window will appear, as shown in Figure 2, allowing you to login to your Linux account. Use your Linux login id and password.

2.2 Start vncserver

After you have logged in, enter the Linux command:

`vncserver`

In response, the system will indicate a new X desktop has been created. For example, Figure 3 shows:

`New 'X' desktop is mathvnc:3`

which indicates the new desktop is assigned the number 3. (This number can be any value between 1 and 20.) **Take note of this desktop number, as it will be needed in the following steps.**

Log out of your Linux account by entering:

`exit`

in the terminal window.

[1] You may receive a security alert from PuTTY the first time you make this connection. You can click on the Yes button in the dialog box to avoid subsequent warnings.

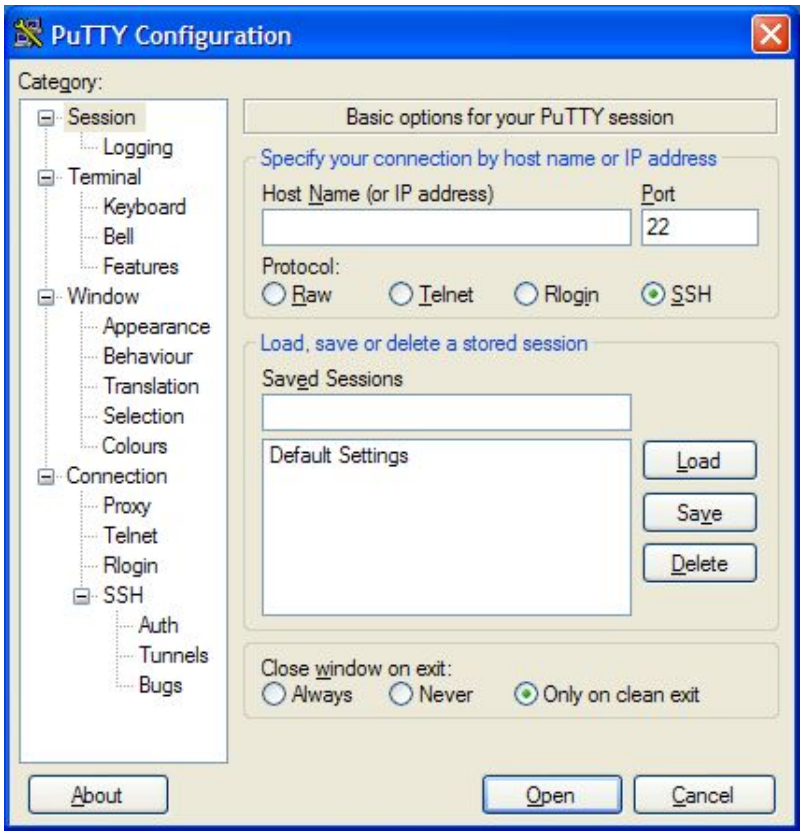

Figure 1: PuTTY configuration window.

2.3 Start VNC

From your computer, start the VNC viewer application. For the server, enter:

```
mathvnc.eiu.edu:X
```

(using the appropriate desktop number number you used before). In our example we would use `mathvnc.eiu.edu:3` Figure 4 shows the VNC window.

Click on OK, then enter your VNC password as requested. If everything goes well, you should now see your Linux desktop.[2]

2.4 Complete Your Linux Session

For all practical purposes, interactions on this desktop act as if you were in the Old Main lab. You can open a terminal window, change directories, edit files, run netbeans, websync, and 2170submit.

If you try to print anything, however, note that the results will appear in the lab!

2.5 Close vncserver

When you are finished working, you can close your Linux desktop by just closing the VNC window it appears in.

The only thing left to do is to stop the vncserver session you started and log off your account. Returning to the PuTTY terminal window, the appropriate commands are:

[2]You may see several warnings from the KDE window manager, but these can be safely ignored.

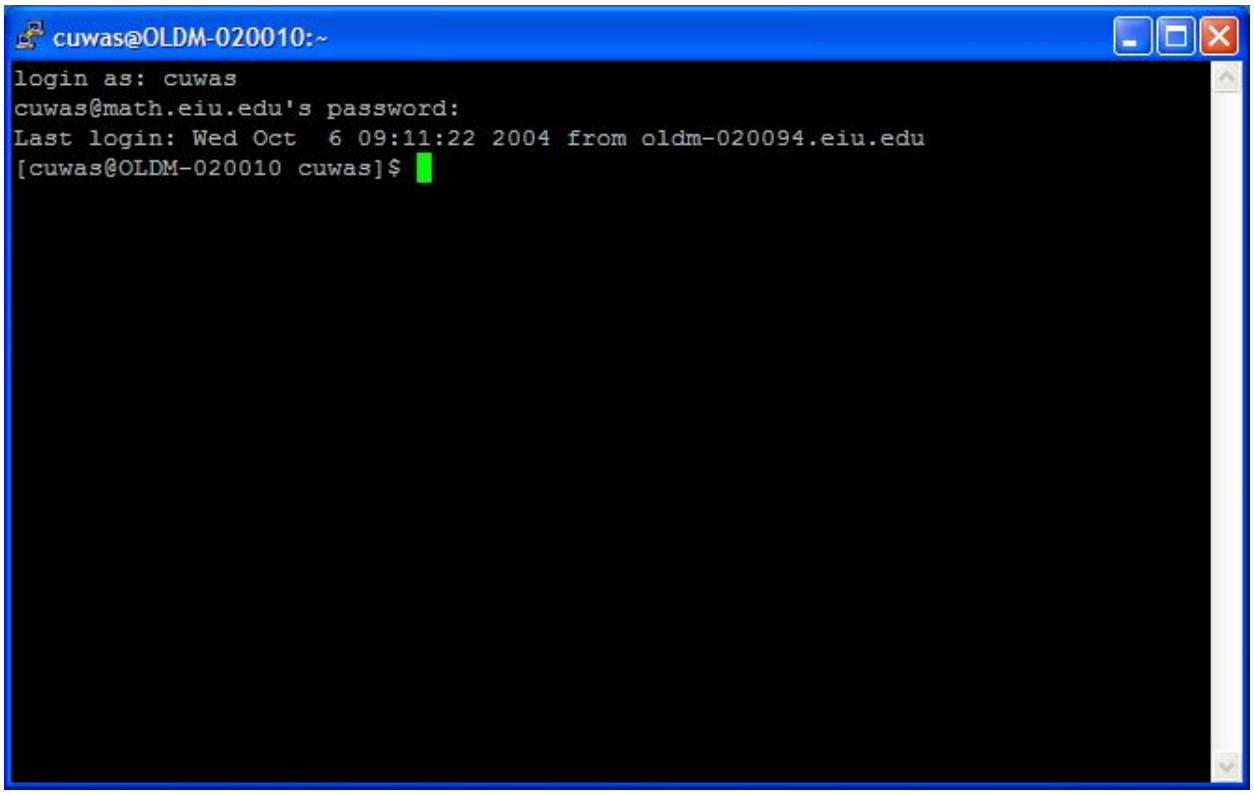

Figure 2: PuTTY window after successful login.

```
vncserver -kill :3
exit
```

In this example, we are stopping the vncserver session that produced desktop 3, as shown in the previous examples. For other sessions, use the appropriate desktop number.

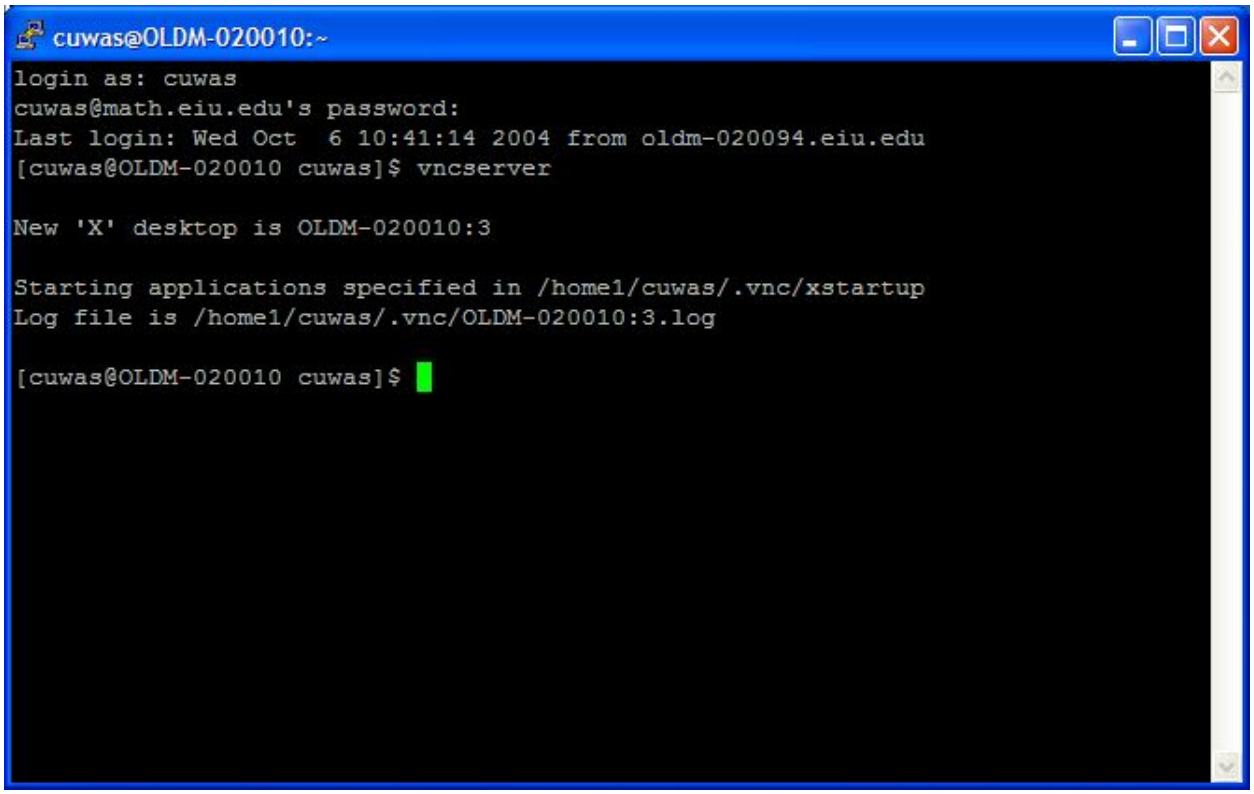

Figure 3: PuTTY window after starting VNCserver. Note the X desktop number 3.

Figure 4: VNC window.