

Cygwin Setup 1/14/04

1. Go to www.cygwin.com and download setup.exe.
2. Run setup.exe and get to the Select Packages screen.
3. **At the Select Packages screen, be sure to do the following:**
 - a. Scroll to XFree86.
 - b. Expand it by clicking on +.
 - c. Choose to install XFree86-base.
 - d. **(added 1/15/04) – Scroll to Net, expand it, and choose to install openssh**
4. Complete the installation.

Cygwin Starting 1/14/04

1. Explore to your installation directory. I will use c:\cygwin for my example.
2. Browse to c:\cygwin\usr\X11R6\bin.
3. Make a shortcut to startxwin.bat
4. Launch your shortcut, it will pop up a bash window.
5. It should say bash-2.05b\$ or something similar. Cygwin is now set up to use your regular desktop as a Unix desktop.

Cygwin Usage 1/14/04

1. Do xterm & to open a new terminal window.
2. Do ssh -username linux.engr.ucsb.edu on the black/yellow window (not the xterm window that popped up)
3. After logging into linux.engr.ucsb.edu, you can follow the steps 1 and 2 from the DC setup for linux workstations (editing the .cshrc file)
4. Before typing design_analyzer, you need to set the display redirection as follows:
 - a. Type "setenv DISPLAY ipaddress:0.0", where ipaddress is the IP address of your home computer. You can find this by going to start->run, cmd, and type ipconfig in the command window that pops up. An example would be "setenv DISPLAY 128.111.53.226:0.0". On Win98, instead of cmd, you type in winipcfg.
 - b. Determine which host you are in. You can do this by typing "hostname". This will return something like "linux32.engr.ucsb.edu".
 - c. On the xterm terminal (white background), do "xhost + linux32.engr.ucsb.edu", where linux32 is what you found in step b. I've seen linux31 through linux39 so far.
5. Type design_analyzer in the Linux terminal and Design Compiler will pop-up on your home machine's display.

Note 1/15/04: If you are having trouble using ssh with Cygwin X, you can use any other ssh client (<http://www.openssh.com/> has a command line client, and PuTTY has a free windowed client at <http://www.chiark.greenend.org.uk/~sgtatham/putty/>). Do step 2, 3, 4a, 4b on your new ssh client like openssh or PuTTY, and then do 4c on the Cygwin terminal window (black/yellow). After that you can do step 5 on your new ssh client as well.

Other notes 1/15/04:

If you are using a direct connection to the internet (modem, direct connection to cable modem/dsl box), then the above will work (IP address stuff).

If you are using a router to connect to the internet (usually when roommates want to pay for only one cable connection, they use a router to split the internet connection), then you need to do several things.

1. Your IP address will most likely be something like 192.168.0.100, or 192.168.x.y (from step a above).
2. X11 Display works through port 6000, as can be found here:
<http://www.netsys.com/focus-sun/2001/08/msg00033.html>
3. You will need to go to your router and log in as admin (or your roommate has to log in as admin) and forward port 6000 towards your computer.

For example, if I live with person A and B, and person B has admin rights on the router, then I would ask person B to add my computer, which is 192.168.2.45, to accept port 6000 as a server.

If you are the admin of the router, there is a page that says: Port Forwarding. What you do is add your IP address and port 6000 on that page, and from that point forward, whenever something tries to access port 6000 on the router, the router will forward the request to your computer. (If you have trouble, look on Google for help, such as searching for “**netgear router setup port forwarding**” returned: http://www.netgear-support.com/ts/doc/port_applications.htm)

Finally, your IP address can also be found on the router, usually on the status page. This is the IP address you want to use (not the internal 192.168.x.y one) in the setenv command.

Also, if you are using a firewall, you need to either disable it or tell it to accept port 6000. In Windows XP default built in one, you go to start->control panel->network connections. Right click on your connection (usually labeled “Local Area Connection” and has no red X on it), properties, advanced tab. You can disable the firewall from here, or add port 6000 in the settings button. I’ll assume that if you have a different firewall software, that you know how to configure that yourself.

More than one person who wants X11 in one router (roommate situation):

If 2 or more people in a household are using an X11 Server, then you can assign different ports, such as 6000 for person A, 6001 for person B, then just do `setenv DISPLAY ipaddress:0.0` for 6000 and `setenv DISPLAY ipaddress:0.1` for 6001