

Setting up Design Compiler (1/13/04)

1. Steps 1 and 2 will set up both ModelSim and Design Compiler licenses/paths. In your `.cshrc` file (or `.bashrc`) add the following line (use your favorite editor):

```
setenv LM_LICENSE_FILE 1717@license:1781@license
```

1717 is for ModelSim, while 1781 is for Design Compiler, with the `:` being the way to concatenate licenses.

2. Also add the following lines:

```
set path = (/eci/mentor/modeltech/bin $path)
set path = (/eci/synopsys/2000.11/linux/syn/bin $path)
```

The first line is for ModelSim, and the second line is for the Linux version of Design Compiler.

3. Open a command window/terminal window. Sometimes the ECI lab has problems seeing changes in my `.cshrc` file, so if that happens, I do `source ~/.cshrc` to refresh it. It doesn't hurt to do this every time just to be sure everything is ok.

4. Type `design_analyzer &` and the Design Compiler window will pop up. You can also do `dc_shell` to access the command line version of it.

The above instructions will work if you are working on the actual Linux workstation. In order to work from home or from a UNIX machine, you will need to follow these instructions as well to have the Design Compiler window pop up on your terminal display.

Following will be a tutorial for using one of the UNIX machines as opposed to the Linux ones.

1. Log into a UNIX workstation and open two terminals.
2. On one terminal, do `ssh linux.engr.ucsb.edu`
3. After logging into `linux.engr.ucsb.edu`, you can follow the steps 1 and 2 above for linux workstations (editing the `.cshrc` file)
4. Before typing `design_analyzer`, you need to set the display redirection as follows:
 - a. In the Linux terminal, type `setenv DISPLAY ipaddress:0.0`, where `ipaddress` is the IP address of the UNIX machine you are using. You can find this on the sticker on the monitor of the workstation. An example would be `setenv DISPLAY 128.111.53.226:0.0`
 - b. In the Linux terminal, 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 UNIX terminal, 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 UNIX machine's display.

Note you can also do the display redirection described for UNIX ECI machines at home. <http://www.cygwin.com/> has software you can install to set up a “UNIX type display” on your local computer.

Finally, the new directory of the tutorial is in:

```
/eci/synopsys/2000.11/doc/syn/tutorial
```

and the new directory for the search path is:

```
/eci/synopsys/2000.11/libraries/syn
```

I will try to give a quick guide to installing / configuring Cygwin too, but wanted to get this out before the end of today so that you can start playing around with Design Compiler.