

Getting started on HPUX, Design Architect, and SPICE via ESIM

There are two types of computers in the C211 lab: Sunray thin clients and HPUX workstations. The applications for EE575 all run on the HPUX machines. Design architect is the editor used for making schematic representations of circuits. It is invoked by `_da`. Esim, invoked by `_esim`, is package to access a GUI netlist editor, Eldo SPICE, and the graphing program Xelga. The layout editor IC Station is run with `_ic`.

The HPUX machines are named `cae1` through `cae14`. `cae7` is the license server for the lab, so please do not use it for your work. These machines are used by many people. Even though the lab may be empty, the machines could have many users on them. For this and many other reasons, **never restart any machine in this lab**. In case you missed that: **NEVER RESTART ANY MACHINE IN THIS LAB**.

After logging on to a machine, you will be presented with the Common Desktop Environment. The first thing you need to do is get a terminal window on an HPUX machine. If you sit at an HPUX machine, click on the arrow above the text editor icon (4th icon from the left), and then click on "Terminal". You can now skip the part about setting up your account.



If you sit at a one of the Sunrays you will need to open a terminal window by clicking on the arrow above the 3rd icon from the right, and then clicking on "This Host".



This will give you a terminal on the computer called `sunray`. You need to log on remotely to one of the HP-UX machines and export the display to your screen. First you need to know the address of your screen.

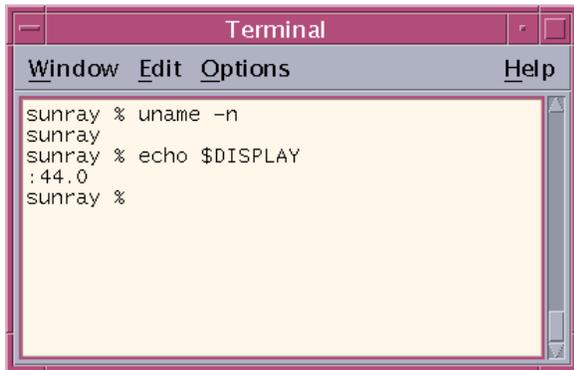
To get your computer's name, type

```
uname -n
```

To get your screen address type

```
echo $DISPLAY
```

Remember the output from these commands.



```
Terminal
Window Edit Options Help
sunray % uname -n
sunray
sunray % echo $DISPLAY
:44.0
sunray %
```

In order to balance the load of all the users in the lab, use the last digit before the “.” in your screen address to decide which `cae` machine to use. E.g. if your screen address is “:43.0” log in to `cae3`; “:40.0”→`cae10`. The one exception being `cae7`. If your screen address ends in 7, use `cae11` or higher. Now log on to one of the HP-UX machines by typing

```
ssh cae3
```

You will be prompted for your password. You now have a window to an HP-UX machine. Now we need to make that machine draw things on your screen. To do that type

```
setenv DISPLAY your_machine_name+your_screen_address
```

See the example below.

Everyone needs to setup their accounts to run the programs needed in this course. Type the following commands to backup your settings and copy new ones:

```
cp .cshrc .cshrc.old
```

```
cp /top/students/GRAD/ECE/jlgregg/shared/justin.cshrc .cshrc
```

```
source .cshrc
```



```
Terminal
Window Edit Options Help
cae14 % tcsh
cae14 % setenv DISPLAY sunray:44.0
cae14 % cp .cshrc .cshrc.old
overwrite .cshrc.old? (y/n) y
cae14 % cp ~/jlgregg/./shared/justin.cshrc .cshrc
overwrite .cshrc? (y/n) y
cae14 % source .cshrc
cae14 % █
```

Advanced users can use the last 5 lines from this file in their own shell `.rc` file. This `.rc` file only sets up the aliases `_da`, `_esim`, and `_ic` which source the right setup files and launch the respective applications.

You are all set to run the applications used in EE575. Your first lab involves DA, so you may want to play with it a bit. A couple of suggestions:

The “`esc`” key completes commands and file names. Use it often.

Run `tcsh` after logging into the HP-UX machines for a more intuitive shell. Arrow keys explore previous commands, and `tab` completes commands and file names.