



CSCE 491/CSCE 611
Tech Note #10 – Printing from the ASM Design Software Packages

1. Printing from Nimbus and flowHDL

The flowHDL® and Nimbus™ software packages have a printer environment variable that is set up when the package is run from the command line. You have the ability to change this variable manually, in the same command window, before you start up either package.

Unix uses environment variables to set up different command switches, giving the application software some flexibility in setting options. It is not MS-Windows, however, and so you can't do it through the Print dialog in the application itself. I don't know if any Unix software where you can do this.

The variable is `FLOWHDL_PRINTER`, and is set by default to the printer in lab 1D43, namely as the following command line:

```
setenv FLOWHDL_PRINTER `l43@printer.cse.sc.edu`
```

When you execute the command for running flowHDL, as shown below, this variable is set to the value.

```
source /usr/local/etc/flowHDL.csh
```

This is also true when you run this command before starting Nimbus, as indicated in the “run_nimbus” file located in your `$HOME/nimbus` directory:

If you want to change this for flowHDL, you can do the following: (1) copy the `flowHDL.csh` file from the `/usr/local/etc` directory into your class directory, and (2) edit the file in `vi` or `emacs` so that the `setenv` command line (shown above) has a different printer specified. I assume you all know how to copy files and use a text editor in Unix. If you don't, then ask me or the T.A. for help.

If you want to change this for using Nimbus, then you have to edit your `run_nimbus` file in your `$HOME/nimbus` directory. You use the same procedure, by editing the file, changing the printer name associated with the `setenv` statement (you have to scroll down to the bottom in the file, as the Nimbus shell script is more complicated), and then you save the file. You might want to make a backup copy of the file before you edit it to make changes. This is just good practice when you are using Unix.

2. Printing using Ghostview

There are many times when you will want to print to a file and use the Ghostview previewer programs on the Solaris and PC machines. This will be true when you want to look at your models to make sure they are properly formatted before wasting your print quota of paper printing them out. Later in the course, when you have lots of simulation output waveforms to hand in, you will be doing this, because I will not accept a bunch of printout without your commentary about the results depicted in the waveforms.

1. Print the ASM model, using either flowHDL or Nimbus, by selecting to Print (in the File pulldown menu), and specifying that you want to Print to File (a dialog checkbox). You specify the filename. It will have the .prn extension on it, but you can change it to .ps (for Postscript).
2. You will then start Ghostview, and open this print file in this application and print it. To use Ghostview on the Unix machines, you type `gv&` on the shell command line.
3. The File -> Load and File -> Print options in Ghostview are easy enough to use. You specify the print command you want to use as `lpr -P139` for the printer in Lab 1D39, or `lpr -P143` for the one in 1D43. Note: the default print command in this Ghostview dialog box won't work, so you have to change it as I have indicated.