

# Printing in the VISE Laboratory

October 6, 2010

## 1 Printing from VISE Computers

This section contains information for using the printing facilities in the VISE lab. **Remember that the printers in the VISE lab are to be used only for VISE related activities.** Unauthorized use of printers will result in loss of laboratory access.

The computers in the VISE lab run on a Unix platform. To obtain more detailed information on any of the commands discussed in this document, use the Unix command

```
man command
```

where `command` is the name of Unix command in question.

### 1.1 Setting the Default Destination

To set your default printer in the Unix environment, execute the following command from a Unix terminal window,

```
setenv LPDEST printer_name
```

where `printer_name` is the name of your default printer. There are two destinations in the VISE lab: *ms184h1* and *ms184h2*. *ms184h1* should be principally be used for printing, while *ms184h2* should be reserved for color printing. Now, applications (e.g. Netscape, Matlab) that are launched from this particular terminal window will recognize your specified default printer.

### 1.2 Sending Print Jobs

To send a postscript or text document to a printer, use the unix command

```
lp -d printer_name filename
```

where `filename` is the full name of the postscript or ASCII file you are printing. If the `-d` switch is left out of the command, the document will be sent to your default printer.

The `lp` command will only work for printing text or postscript documents. If you send a print job, and it doesn't reach the printer, **DO NOT** send any more jobs to the printer until you have checked the queue (as described in the next section). If there are jobs in the queue and none are reaching the printer, please cancel your job and contact a lab TA or an instructor.

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## 1.3 Monitoring and Canceling Your Print Jobs

To list all submitted print jobs for a particular printer, use the unix command

```
lpstat printer_name
```

This will return a list of each job with the job number on the far lefthand side.

To cancel a print job, use the command

```
cancel job_number
```

where `job_number` is the job number returned by `lpstat`.

As an alternative to using these Unix commands, if you are using the KDE windowing environment on the Linux computers, there is a *Printer* icon on the desktop which allows you to list and cancel print jobs.

## 2 Printing from Matlab

### 2.1 Printing Matlab Figures

To print a Matlab figure, select *Print...* from the figure's *File* menu. Set the *Printer* to `ms184h1` or `ms184h2`, and set the *Driver* to `Postscript Level 2`. If printing a color figure, set the printer to `ms184h2`, and the *Driver* to `Postscript Level 2 Color`. Then select *OK*.

Matlab also has a built-in print command to obtain a hard copy of the active (current) figure window. If you have more than one figure window, you can make one of them active by using following command from the Matlab prompt

```
figure(n)
```

where `n` is the desired figure number.

To print the active figure, type the following command from the Matlab prompt.

```
print
```

This will print to the default printer, which may be set as described in section 1.1 above. To send a figure to a specific printer, use the following command.

```
print -Pprinter_name
```

You need to add the `-dpsc` option if you want to obtain a color output. For more detailed information on the Matlab *print* command, type the Matlab command

```
help print
```

If you use the subplot command, it is helpful to use the tall mode to use the full page. You can do this by typing

```
orient('tall')
```

directly before you print. You can also obtain prints in landscape mode using

```
orient('landscape')
```

### 2.2 Printing Simulink System Windows

To print a Simulink system window, select *Print...* from the system window's *File* menu. Under the *Device Option*, type `-dps2 -Pms184h1`. Then select *Print*.

Matlab also has a built-in print command to obtain hard copies of Simulink system windows. To print a Simulink system window from the Matlab prompt, type the command

```
print -sSimulink_window -Pms184h1
```

where `Simulink_window` is the name displayed along the top of the Simulink system window. For more detailed information on the Matlab *print* command, type the Matlab command

```
help print
```