UNIX / LINUX BASIC UTILITIES - PRINTING, EMAIL

Advertisements

In this chapter, we will discuss in detail about Printing and Email as the basic utilities of Unix. So far, we have tried to understand the Unix OS and the nature of its basic commands. In this chapter, we will learn some important Unix utilities that can be used in our day-to-day life.

Printing Files

Before you print a file on a Unix system, you may want to reformat it to adjust the margins, highlight some words, and so on. Most files can also be printed without reformatting, but the raw printout may not be that appealing.

Many versions of Unix include two powerful text formatters, **nroff** and **troff**.

The pr Command

The **pr** command does minor formatting of files on the terminal screen or for a printer. For example, if you have a long list of names in a file, you can format it onscreen into two or more columns.

Following is the syntax for the **pr** command −

```
pr option(s) filename(s)
```

The **pr** changes the format of the file only on the screen or on the printed copy; it doesn't modify the original file. Following table lists some **pr** options −

Sr.No.	Option & Description
1	**-k** Produces **k** columns of output
2	**-d** Double-spaces the output (not on all **pr** versions)
3	**-h "header"** Takes the next item as a report header
4	**-t** Eliminates the printing of header and the top/bottom margins
5	**-l PAGE_LENGTH** Sets the page length to PAGE_LENGTH (66) lines. The default number of lines of text is 56

6	**-o MARGIN** Offsets each line with MARGIN (zero) spaces
7	**-w PAGE_WIDTH** Sets the page width to PAGE_WIDTH (72) characters for multiple text-column output only

Before using **pr**, here are the contents of a sample file named food.

```
$cat food
Sweet Tooth
Bangkok Wok
Mandalay
Afghani Cuisine
Isle of Java
Big Apple Deli
Sushi and Sashimi
Tio Pepe's Peppers
........
$
```

Let's use the **pr** command to make a two-column report with the header *Restaurants* −

```
$pr -2 -h "Restaurants" food
Nov  7  9:58 1997  Restaurants   Page 1

Sweet Tooth              Isle of Java
Bangkok Wok              Big Apple Deli
Mandalay                 Sushi and Sashimi
Afghani Cuisine          Tio Pepe's Peppers
........
$
```

The lp and lpr Commands

The command **lp** or **lpr** prints a file onto paper as opposed to the screen display. Once you are ready with formatting using the **pr** command, you can use any of these commands to print your file on the printer connected to your computer.

Your system administrator has probably set up a default printer at your site. To print a file named **food** on the default printer, use the **lp** or **lpr** command, as in the following example −

```
$lp food
request id is laserp-525  (1 file)
$
```

The **lp** command shows an ID that you can use to cancel the print job or check its status.

- If you are using the **lp** command, you can use the -n**Num** option to print Num number of copies. Along with the command **lpr**, you can use -**Num** for the same.

- If there are multiple printers connected with the shared network, then you can choose a printer using -d**printer** option along with lp command and for the same purpose you can use -P**printer** option along with lpr command. Here printer is the printer name.

The lpstat and lpq Commands

The **lpstat** command shows what's in the printer queue: request IDs, owners, file sizes, when the jobs were sent for printing, and the status of the requests.

Use **lpstat -o** if you want to see all output requests other than just your own. Requests are shown in the order they'll be printed −

```
$lpstat -o
laserp-573  john  128865  Nov 7  11:27  on laserp
laserp-574  grace  82744  Nov 7  11:28
laserp-575  john   23347  Nov 7  11:35
$
```

The **lpq** gives slightly different information than **lpstat -o** −

```
$lpq
laserp is ready and printing
Rank   Owner     Job  Files                 Total Size
active john       573  report.ps             128865 bytes
1st    grace      574  ch03.ps ch04.ps       82744 bytes
2nd    john       575  standard input        23347 bytes
$
```

Here the first line displays the printer status. If the printer is disabled or running out of paper, you may see different messages on this first line.

The cancel and lprm Commands

The **cancel** command terminates a printing request from the **lp command**. The **lprm** command terminates all **lpr requests**. You can specify either the ID of the request (displayed by lp or lpq) or the name of the printer.

```
$cancel laserp-575
request "laserp-575" cancelled
$
```

To cancel whatever request is currently printing, regardless of its ID, simply enter cancel and the printer name −

```
$cancel laserp
request "laserp-573" cancelled
$
```

The **lprm** command will cancel the active job if it belongs to you. Otherwise, you can give job numbers as arguments, or use a **dash (-)** to remove all of your jobs −

```
$lprm 575
dfA575diamond dequeued
cfA575diamond dequeued
$
```

The **lprm** command tells you the actual filenames removed from the printer queue.

Sending Email

You use the Unix mail command to send and receive mail. Here is the syntax to send an email −

```
$mail [-s subject] [-c cc-addr] [-b bcc-addr] to-addr
```

Here are important options related to mail command −s

Sr.No.	Option & Description

1	**-s**	Specifies subject on the command line.
2	**-c**	Sends carbon copies to the list of users. List should be a commaseparated list of names.
3	**-b**	Sends blind carbon copies to list. List should be a commaseparated list of names.

Following is an example to send a test message to admin@yahoo.com.

```
$mail -s "Test Message" admin@yahoo.com
```

You are then expected to type in your message, followed by **"control-D"** at the beginning of a line. To stop, simply type dot (**.**) as follows −

```
Hi,

This is a test
.
Cc:
```

You can send a complete file using a **redirect < operator** as follows −

```
$mail -s "Report 05/06/07" admin@yahoo.com < demo.txt
```

To check incoming email at your Unix system, you simply type email as follows −

```
$mail
no email
```