10.4.6 Managing Print Jobs

Click one of the buttons to take you to that part of the video.

Managing Print Jobs 0:00-0:10

In this demonstration, we manage print jobs.

There are two different ways that you can manage CUPS print jobs.

The CUPS Interface 0:07-0:58

One way is to use the CUPS web-based administration interface. We select ‘Printers', and our printer. There are no active print jobs for this printer. If there were, they would be listed at the bottom. Let's create a job and see what that looks like. Before we do, let's pause the printer so the job stays in the queue. Here's our job. Notice that we can hold the job, cancel it, or move it to another printer.

We can also manage print jobs from the ‘Jobs' tab. If there were multiple printers connected to this system, all the jobs for all the printers would be shown. Here's our job again. And we can hold, cancel, or move the job, just like in the single printer queue.

Manage the Print Queue 0:59-1:43

Let's cancel this one. And let's resume the printer. Pausing a printer is good for when you need to perform routine maintenance, like changing a toner cartridge. Users can continue sending jobs to the printer. They just won't print until you resume the printer.

You can also pause and resume the print queue itself, but the terminology for this is rejecting and accepting. To pause the print queue, you set the queue to ‘Reject Jobs'. Notice that the print queue is now rejecting jobs. Let's see what happens when we attempt to send a print job. We're told that HPLJ is not accepting jobs. Let's undo the reject jobs by selecting ‘Accept Jobs'.

The lpc, lpoptions and lpstat Commands 1:44-2:58

The second way to manage print jobs is from the command line.

The first command we want to look at is the 'lpc' command. The ‘lpc status' command shows the status of your printers. We have the HPLJ printer defined on this system. The printer is on the network and we communicate with it using ‘ipp'. The print queue is enabled and accepting jobs. The printer is also enabled and accepting jobs, but there are no current print jobs being processed.

We can also view the printer's current configuration using the 'lpoptions -l' command. We see the page size, the paper source or tray, the duplex mode, and quality settings. For each of these parameters, all of the available settings are listed. The one that the printer is currently set to use is marked with an asterisk. For example, our page size is set to ‘Letter' and our duplex printing is ‘None'.

You can also see printer status using the 'lpstat -t' command. It displays the name of the queue, how it's connected, whether it's accepting requests and if the printer is busy. No print jobs are being printed right now. It's idle.

The lpq and lpr Commands 2:59-4:01

From the command line, we can also send a print job directly to the printer. Before we do that, lets look at the ‘lpq -a' command. This command shows the jobs in our print queues. Since there are none, we see the message, ‘no entries'. Let's send a print job and run this ‘lpq' command as it processes.

In this directory we have a file named ‘lorumipsum.txt', and it just contains some text. Let's run our ‘lpq -a' command so that we can up-arrow to run it after we send this file to the printer. We send a file to a printer using the 'lpr' command. The syntax is 'lpr -P', the name of the printer, ‘HPLJ', and the file, ‘lorumipsum.txt'. We'll hit enter, then up-arrow a couple of times to run the ‘lpq' command. We'll repeat until the job has processed. It's complete, there are now no entries in the queue.

Pause and Resume the Printer 4:02-4:42

Before we look at how to manage jobs in a print queue, let's see how you can pause and resume the printer, and set the queue to accept or reject jobs from the command line. This will make it easier to show how to manage the queue.

To pause and resume the printer, we use the commands ‘cupsdisable' and ‘cupsenable'. We'll need privileges to do this. Let's open a new terminal window to do that. Let's try ‘cupsdisable HPLJ'. When we run ‘lpc status' it shows ‘printing is disabled'. The ‘cupsenable HPLJ' enables the printer.

Accept or Reject Jobs 4:43-5:22

To set the queue to reject jobs, we use the ‘cupsjreject' command, and we see that ‘queuing is disabled'. The ‘lpr' command confirms this. The ‘cupsaccept' command enables the queue.

Holding and Removing a Job 5:23-6:22

Let's disable printing, go back to our normal user, and reprint our document. It's now in the queue. We can put a hold on it using the ‘lp -i' command, the print job number, and ‘-H hold'.

To test that it's on hold, lets go to our root window and enable the printer. We go back to our normal user and the job does not complete. We could use the ‘lp -i' command with ‘-H resume' option. Instead let's remove the job using the ‘lprm' command, followed by the print job number we got from the ‘lpq -a' command. When we rerun the ‘lplq -a' command we see that the job has been removed.

Summary 6:23-6:32

That's it for this demo. We showed how to manage printers, print queues and print jobs from the CUPS interface. We also showed how to do the same tasks from the command line using the lp commands and the cups commands.
