Better printing with Linux

Better Printing

Since the first personal computer and maybe even before, vendors, users, programmers, and admins have struggled to make their printers and computers communicate. If you're only looking at the hardware – similarly beige units joined with a cord – it seems like it should be easy. BY JOE CASAD

However, the details of sending data to a printing device have never been simple. Richard Stallman reportedly *started* the free software movement when he couldn't obtain the necessary source code to troubleshoot a printer driver. And since that day, printers have only gotten more sophisticated and complex.

As we all know, the computer world fractured into several mini-worlds, with a rough polarity oscillating between the Mac and Windows extreme, where you're not expected to know anything about what goes on beneath the little printer icon, and the Unix and Linux extreme, where you really are better off if you have an understanding of what your computer is doing.

The real complication for Unix and Linux users is that the need for the seamless installation of printers, and the problem of matching multiple image formats with a multitude of printing devices, has caused the evolution of an elaborate software infrastructure that is well beyond the original ideal of simply installing the driver and hooking up the device.

So where do you learn about all of this? Here, of course. This month's issue of Linux Magazine leads you through a series of articles that unravel the complexity of Linux printing, and on the way, you'll find some ideas for how to improve and extend your printing systems.

The first article, "Serving Up CUPS," describes the Common Unix Printing System (CUPS). You'll learn how the CUPS printing system works and find out how to configure your Windows computers to print to CUPS servers. The article also describes the Adobe PostScript driver and shows how you can use it to bring your Windows to CUPS.

The next article, "Faxless Office," describes how to send and receive faxes over the Internet. You'll find out about fax gateway providers, and you'll find discover how to create your own pseudo-printer for Internet/Fax communications.

If you're happy with your text-based ASCII email client, but you would love to find a way to automatically strip headers and format your messages for print, you'll enjoy the next article on the muttprint utility. As you might guess, muttprint was originally written for the mutt mail client, but it now works with several other clients, such as Pine, Sylpheed, XFMail, and Gnus.

Rounding off this set on better printing is an in-depth study of the Postscript system, describing how Linux can even use Postscript to print to non-Postscript printers. You'll tour the background components that center around the Ghostscript interpreter, including Gimp-Print, PPDs, the CUPS raster driver, and the *foomatic-rip*. And you'll pick up some useful tips on getting more information using the tool called *foomatic-rip*. ■

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