## **Simplifying LAN Management**

# **Networks that Work**

The stand-alone computer is a dying breed. Computers without a connection to the outside world are quickly becoming a thing of the past. Local networks with or without an Internet connection make for light work and offer boundless opportunities for leisure use. BY PATRICIA JUNG

ogging around with floppy disks was quite a common thing just a few years ago. Maybe you can remember using floppies to spread spreadsheets, transport the latest chapter of your thesis between the computer center at college and the stand-alone machine in your department, or exchange the latest gossip with friends and colleagues.

Looking back, this kind of sneaker network seems just one step removed from

**COVER STORY** 

### Networking tools.....20

From the moment you connect your machine to the network, you are not only expected to know all about your machine, but also about the way it communicates with the outside world. Standard tools can help you cope.

#### DHCP server .....24

Adding machines to a network means more configuration work. A centralized solution that uses a DHCP server to assign IP addresses and other values to the clients removes the administrative headaches.

#### SCPM ......30

Changing the operating environment on a single machine, involves a lot of configuration work. SCPM makes life easier for Suse users by maintaining profiles with different settings.

#### CUPS network printing......32

Sharing a printer among multiple users can help save money and resources. Connect your printers to a CUPS server to give access to Apple or even Microsoft clients.

#### INFO

- [1] Gnome Human Interface Guidelines: http://developer.gnome.org/projects/ gup/hig/
- [2] Freedesktop.org: http://www.freedesktop.org/

the dinosaur. Nowadays, cookery books are being ousted from the kitchen by laptops, the stereo is a simple client that retrieves MP3s from a central server in the broom cupboard, and it goes without saying that communication in enterprises is entirely electronic.

While offices are typically wired, wireless LANs continue to make inroads into home offices and family networks. After organizing the physical side of the network, it's time to get serious with software. Every machine on the network needs a unique address; it needs to know in which network it resides, and which computer it should ask if it needs to send data outside the borders of the local network and into the big, wide world.

A Question of Attitude

Your options are to painstakingly configure every single machine, or set up a special server to take care of the job. The extra effort tends to pay off, especially if your network continues to grow and configuration changes are needed. Add a few laptops that attach here and there, and you may come to appreciate a modern distro that provides tools for facilitating configuration changes, such as Suse's SCPM.

New configurations tend to be prone to teething trouble. In this case, standard Linux

tools can be a big help. Although you may feel uncomfortable with standard tools at first, they have the advantage of being available with almost any distro—although you may need to install them from your distribution disks in some cases.

And when your network is up and running, you can start assigning tasks to individual machines to benefit the whole network, for example, by designating a machine as a DHCP or print server.

