Chapter 19

Setting Up Printing Services

Smaller networks typically have a printer connected to each computer. Over time, as more computers are purchased, users will often start sharing larger printers that have more features than the simplistic printers that most organizations start with. A print server is a computer that shares printers for other computers and systems on the network to use. These printers each have queues that are usually centrally visible and controllable from a single location, the print server. Mac OS X and Mac OS X Server can both act as a print server.

You can also use printer spoolers built into most network printers, rather than sharing printers through a dedicated server. The distributed management of printers in this fashion, although initially convenient, can begin to cause headaches as the user base grows. For example, in larger environments, it helps to be able to allow users to manage print jobs. You also will encounter scenarios where you want to create a single queue for multiple physical printers and even assign a maximum number of print jobs to a given printer. Finally, the distribution of printer queues, or automated installation of printers on clients, can help you manage computers and the printers that they use en masse.

There are a number of reasons to use Mac OS X Server as opposed to the Mac OS X client for managing printers. Perhaps the biggest reason is the granularity that you can apply to configure printing services. Although it is possible to use the command-line options included with Mac OS X client to configure things such as printer pools and quotas (which we will explain in further detail later in this chapter), it is not exactly easy and is likely not worth the time to do so when compared to leveraging the built-in tools of Mac OS X Server. But in addition to features specific to managing print queues, Mac OS X Server is also tuned to serving data rather than being used, which is an aspect that should not be overlooked.

In this chapter, we will cover setting up and managing the Print service in Mac OS X Server. This includes setting up shared print queues, quotas, and printer pools; managing print jobs; and even getting started with leveraging CUPS, the back-end printing subsystem. But before you can leverage the Print service, you need to first have
installed at least a printer to share to users. Therefore, we’ll start the chapter by covering how to install a number of different types of printers.

**Installing a Printer**

Before you can share a printer, you must first install one. In this regard, Mac OS X Server is almost identical to the Mac OS X client. In this section, we’ll cover how to configure your server to print to a printer.

Mac OS X 10.6 comes with a number of print drivers installed as part of the operating system installation. For a list of printer (and scanner) drivers that are available, see the Apple Knowledge Base article located at http://support.apple.com/kb/HT3669. Unlike previous versions of the operating system, Snow Leopard has the ability to install printer drivers automatically using the software update service. As you will see later in this section, if the operating system does not have the driver installed at the time that you install a printer, the installation wizard will check for the driver automatically and prompt you to download and install it.

However, Apple cannot support all printers. A number of printers will come with special software that should be used for installing the printer. Multifunction printers from a variety of vendors will commonly use custom installers rather than leverage supported standards because these printers often carry model-specific features that the OS cannot account for.

**Basic Printer Management**

As previously mentioned, installing printers in Mac OS X Server is identical to installing printers in the Mac OS X client. Unless your printer requires a special installation, for most environments you can install the printer using the Print & Fax System pane of System Preferences. To get started, click the Apple menu in the upper-left corner of the screen, and select System Preferences; the screen shown in Figure 19–1 will open.

From the System Preferences screen, you will click the Print & Fax icon. In the event that you have not yet configured any printers, this System Preferences pane will invoke an empty Print & Fax pane, as shown in Figure 19–2.

At any point in the management of Mac OS X or Mac OS X Server’s printing services, you will use the Print & Fax System pane of System Preferences to add and remove printers. Simply click the plus (±) sign to get started.

**NOTE:** You can also configure a new default printer in the Print & Fax pane of System Preferences, a common task when installing your shared printers on clients.