

Wireless networks are especially useful for notebook computers. After all, the main benefit of a notebook computer is that you can carry it around with you wherever you go. At work, you can use your notebook computer at your desk, in the conference room, in the break room, or even out in the parking lot. At home, you can use it in the bedroom, kitchen, den, or game room, or out by the pool. With wireless networking, your notebook computer can be connected to the network no matter where you take it.

Wireless networks have also become extremely useful for other types of mobile devices, such as smartphones and tablet computers. Sure, these devices can connect via a cell network, but that can get real pricey real quick. With a wireless network, though, you can connect your smartphone or tablet without having to pay your cellphone company for the connection time.

This chapter introduces you to the ins and outs of setting up a wireless network. I tell you what you need to know about wireless networking standards, how to plan your wireless network, and how to install and configure wireless network components. And if you end up with a hybrid network of wired and wireless, I show you how to create that, too.

Diving into Wireless Networking

As I mention earlier, a wireless network is just a network that uses radio signals rather than direct cable connections to exchange information. Simple as that. A computer with a wireless network connection is like a cellphone. Just as you don't have to be connected (tethered) to a phone line to use a cellphone, you don't have to be connected to a network cable to use a wireless networked computer.

Here are the key concepts and terms you need to understand to set up and use a basic wireless network:

- » **WLAN:** A wireless network is often referred to as a wireless local area network (WLAN). Some people prefer to switch the acronym around to local area wireless network, or LAWN.
- » **Wi-Fi:** The term *Wi-Fi* is often used to describe wireless networks although it technically refers to just one form of wireless network: the 802.11 standard. (See the section "Eight-Oh-Two-Dot-Eleventy Something: Understanding Wireless Standards," later in this chapter for more information.)
- » **SSID:** A wireless network has a name, known as a SSID. *SSID* stands for *service set identifier*. (Wouldn't that make a great *Jeopardy!* question? I'll take obscure four-letter acronyms for \$400, please!) All the computers that belong to a single wireless network must have the same SSID.