

Why Bother with a Network?

Frankly, computer networks are a bit of a pain to set up. So why bother? Because the benefits of having a network outweigh the difficulties of setting up one.

You don't have to be a PhD to understand the benefits of networking. In fact, you learned everything you need to know in kindergarten: Networks are all about sharing. Specifically, networks are about sharing four: files, resources, programs, and messages.

Sharing files

Networks enable you to share information with other computers on the network. Depending on how you set up your network, you can share files with your network friends in several different ways. You can send a file from your computer directly to a friend's computer by attaching the file to an email message and then mailing it. Or you can let your friend access your computer over the network so that your friend can retrieve the file directly from your hard drive. Yet another method is to copy the file to a disk on another computer and then tell your friend where you put the file so that your friend can retrieve it later. One way or the other, the data travels to your friend's computer over the network cable and not on a CD or DVD or flash drive, as it would in a sneakernet.

Sharing resources

You can set up certain computer resources — such as hard drives or printers — so that all computers on the network can access them. For example, the printer attached to Homer's computer in Figure 1-1 is a *shared resource*, which means that anyone on the network can use it. Without the network, Bart, Lisa, and Marge would have to buy their own printers.

Hard drives can be shared resources, too. In fact, you must set up a hard drive as a shared resource to share files with other users. Suppose that Bart wants to share a file with Lisa, and a shared hard drive has been set up on Homer's computer. All Bart has to do is copy his file to the shared hard drive in Homer's computer and tell Lisa where he put it. Then, when Lisa gets around to it, she can copy the file from Homer's computer to her own.



TIP

You can share other resources, too, such as an Internet connection. In fact, sharing an Internet connection is one of the main reasons why many networks are created.