An important factor to consider when determining how often you should back up your data is determining how long each backup takes to complete. This period of time is called the *backup window*. For example, if it takes two hours to back up your data, you obviously can't back up every hour.

Fortunately, you can often work around a short backup window by choosing a backup method that doesn't back up all your data every time, but just backs up the data that has changed since the last time you backed up. For more information, refer to the section "Examining File-Based Backups" later in this chapter.)


TIP

You don't have to use the same backup interval for all three layers of your backup plan. For example, your primary backup might run every hour, your off-site just once a day (typically overnight), and your off-site backup once a week (typically over the weekend).

Choosing Where to Back Up Your Data

If you plan on backing up the data on your network server's hard drives, you obviously need some type of media on which to back up the data. This media is called the *backup target* because it's the location to which your backup data is sent. (The data being backed up is called the *backup source*.)

The most common backup target options are

- **Storage Area Network (SAN):** Disk storage that is directly attached to your servers. Your network's primary data most likely exists on a SAN. (For more information about SANs, refer to Chapter 13.)

  You should *not,* under any circumstances, back up your data to the same SAN that the live data is on. The reason is simple: If the SAN fails, you'll lose not only your live data, but also your backup.

  However, you can set up a second SAN to receive your backups. Then your backup data will be on a separate device from your live data.

- **NAS:** A device that connects directly to your network. A NAS device is often used as a backup device because it's less expensive than a SAN. Depending on your needs, you can acquire an enterprise-grade NAS device that is rack-mounted, or you can purchase an inexpensive consumer-grade NAS device that is portable. (For more information about NAS, refer to Chapter 13.)

- **Backup appliance:** A disk device that is specifically designed to serve as a backup target. Backup appliances are popular because they require very little engineering work to get them set up: You just plug it in, turn it on, and then configure your backup software to send backup data to it.