## Copy backups

A *copy backup* is similar to a full backup except that the archive bit isn't reset when each file is copied. As a result, copy backups don't disrupt the cycle of normal and incremental or differential backups.

Copy backups are usually used for occasional one-shot backups that fall between your normal backup cycle. If you're about to perform an operating system upgrade, for example, you should back up the server before proceeding. If you do a full backup, the archive bits are reset, and your regular backups are disrupted. If you do a copy backup, however, the archive bits of any modified files remain unchanged. As a result, your regular normal and incremental or differential backups are unaffected.

If you don't incorporate incremental or differential backups into your backup routine, the difference between a copy backup and a full backup is moot.

## Incremental backups

An *incremental backup* backs up only those files that were modified since the last time you did a backup. Incremental backups are a lot faster than full backups because your users probably modify only a small portion of the files on the server on any given day. As a result, fewer files are backed up in an incremental backup than in a full backup.

When an incremental backup copies each file, it resets the file's archive bit. That way, the file won't be backed up again in a subsequent incremental backup unless a user modifies the file.

Here are some thoughts about using incremental backups:

## >> One common scheme for using incremental backups is the following:

- A full backup once a week, typically Friday so the full backup can complete
  over the weekend.
- An incremental backup on each remaining normal business day (typically Monday, Tuesday, Wednesday, and Thursday).
- When you use incremental backups, the complete backup consists of the full backup tapes and all the incremental backup tapes that you've made since you did the full backup.

If the hard drive crashes, and you have to restore the data onto a new drive, you first restore the full backup, and then restore all the subsequent incremental backups.