» **Dynamically expanding disk:** A virtual disk that has a maximum disk space, but that actually consumes only the amount of disk space that is required to hold the data on the disk. For example, if you create a dynamically expanding disk with a maximum of 100GB but only put 10GB of data on it, the .vhdx file for the disk will occupy just 10GB of the host system's disk drive.

Don't be confused by the names *fixed size* and *dynamically expanding.* Both types of disk can be expanded later if you run out of space. The main difference is whether the maximum amount of disk space allowed for the drive is allocated when the drive is first created or as needed when data is added to the drive. Allocating the space when the drive is created results in better performance for the drive, because Hyper-V doesn't have to grab more disk space every time data is added to the drive. Both types of drives can be expanded later if necessary.

Enabling Hyper-V

Hyper-V is not automatically enabled when you install Windows; you must first enable this feature before you can use Hyper-V.

To enable Hyper-V on a server version of Windows, call up the Server Manager and open the Add Roles and Features Wizard. Then enable the Hyper-V role. When you complete the wizard, Hyper-V will install the Type-1 hypervisor and move the existing Windows Server operating system into the parent partition. You can then start building virtual machines.

To enable Hyper-V on a desktop version of Windows, follow these steps:

1. **Open the Control Panel.**

2. **Choose Programs and Features.**

   The Programs and Features window appears.

3. **Click Turn Windows Features On or Off.**

   The Windows Features dialog box appears, as shown in Figure 10-1.

4. **Select the Hyper-V feature and click OK.**

   The Client Hyper-V hypervisor is installed as an application on the existing desktop Windows operating system, and you can begin using Hyper-V.

5. **When prompted, restart the computer.**

   The reboot is required to start the Hyper-V hypervisor. When your computer restarts, it's actually the Hyper-V hypervisor that starts, not Windows. The hypervisor then loads your desktop Windows into the parent partition.