## Converting a server with a GUI to or from Server Core

As in Windows Server 2008 and Windows Server 2008 R2, Windows Setup in Windows Server 2012 allows you to choose one of two installation types: Server Core Installation or Server With A GUI (also called a full installation), as shown in Figure 1-8. One of the more interesting new features in Windows Server 2012 is the ability to convert a full installation to a Server Core Installation and vice versa.

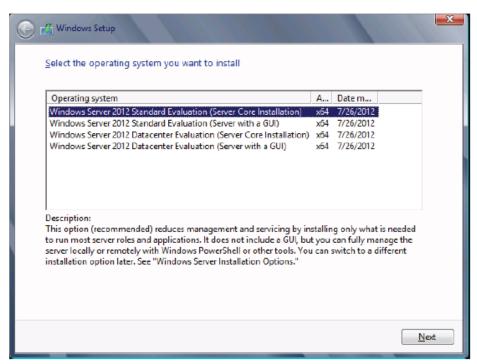
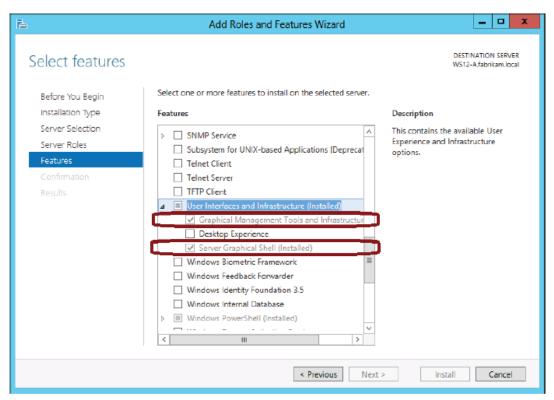


FIGURE 1-8 Windows Server 2012 includes a Server Core option and a Server with a GUI option.

You can switch between a Server Core installation and full installation in Windows Server 2012 because the difference between these installation options is contained in two specific Windows features that can be added or removed. The first feature, Graphical Management Tools and Infrastructure (Server-Gui-Mgmt-Infra), provides a minimal server interface and server management tools such as Server Manager and the Microsoft Management Console (MMC). The second feature, Server Graphical Shell (Server-Gui-Shell), is dependent on the first feature and provides the rest of the GUI experience, including Windows Explorer. In Figure 1-9, you can see these two features in the Add Roles And Features Wizard, on the Select Features page, beneath User Interfaces And Infrastructure.

To convert a full installation to a Server Core installation, just remove these two features in Server Manager. Note that removing the first feature will automatically remove the second, dependent feature.



**FIGURE 1-9** Two features are responsible for the difference between the full installation and Server Core installation.

**NOTE** As shown in Figure 1-9, Desktop Experience is a third available GUI feature. It builds on the Server Graphical Shell feature and is not installed by default in the Server with a GUI installation of Windows Server 2012. Desktop Experience makes available Windows 8 client features such as Windows Media Player, desktop themes, and photo management.

You can also remove these graphical interface features in Windows PowerShell. If you have deployed a full installation of Windows Server 2012 and want to convert it to a Server Core installation, run the following Windows PowerShell command:

Uninstall-WindowsFeature Server-Gui-Mgmt-Infra -restart

Remember that you only need to specify Server-Gui-Mgmt-Infra for removal to remove both this feature and Server-Gui-Shell. Once the graphical management tools and graphical shell have been removed, the server restarts. When you log back on, you are presented with the Server Core user interface.

The process can be reversed by replacing both features. You can do this from a remote server by using the Add Roles And Features Wizard in Server Manager. You can also do it locally by running the following Windows PowerShell command:

Install-WindowsFeature Server-Gui-Mgmt-Infra, Server-Gui-Shell -Restart

Note that when you install these two features from Windows PowerShell, you must specify them both.

**NOTE** If you just want to configure basic settings in a Server Core installation of Windows Server 2012 as opposed to adding or removing entire features, you can use the Sconfig utility. This utility, which appeared in Windows Server 2008 R2, enables you to set the domain/workgroup, computer name, Remote Desktop, network settings, date and time, Windows activation, Windows Update, and other similar settings.