Deciding which Windows Server 2012R2 version to use

- Windows Server 2012R2 Datacenter

- Windows Server 2012R2 Standard

- Windows Server 2012R2 Foundation

Deciding Which Windows Server 2012 R2 Versions to Use

You may be wondering which version of Windows Server 2012 R2 is best for your organization. After all, Microsoft offers the following four versions of Windows Server 2012 R2.

Windows Server 2012 R2 Datacenter This version is designed for organizations that are looking to migrate to a highly virtualized, private cloud environment. Windows Server 2012 R2 Datacenter has full Windows Server functionality with unlimited virtual instances.

Windows Server 2012 R2 Standard This version is designed for organizations with physical or minimally virtualized environments. Windows Server 2012 R2 Standard has full Windows Server functionality with two virtual instances.

Windows Server 2012 R2 Essentials This version is ideal for small businesses that have as many as 25 users and 50 devices. Windows Server 2012 R2 Essentials has a simpler interface and preconfigured connectivity to cloud-based services but no virtualization rights.

Windows Server 2012 R2 Foundation This version is designed for smaller companies that need a Windows Server experience for as few as 15 users. Windows

Server 2012 R2 Foundation is a general-purpose server with basic functionality but no virtualization rights.

Once you choose what roles are going on your server, you must then decide how you're going to install Windows Server 2012 R2. There are two ways to install Windows Server 2012 R2. You can upgrade a Windows Server 2008 R2 with SP1 or Windows Server 2012 machine to Windows Server 2012 R2, or you can do a clean install of Windows Server 2012 R2. If you decide that you are going to upgrade, there are specific upgrade paths you must follow.

Current System	Upgraded System
Windows Server 2008 R2 Datacenter with SP1	Windows Server 2012 R2 Datacenter
Windows Server 2008 R2 Enterprise with SP1	Windows Server 2012 R2 Standard or Windows Server 2012 R2 Datacenter
Windows Server 2008 R2 Standard with SP1	Windows Server 2012 R2 Standard or Windows Server 2012 R2 Datacenter
Windows Web Server 2008 R2 with SP1	Windows Server 2012 R2 Standard
Windows Server 2012 Datacenter	Windows Server 2012 R2 Datacenter
Windows Server 2012 Standard	Windows Server 2012 R2 Standard or Windows Server 2012 R2 Datacenter
Hyper-V Server 2012	Hyper-V Server 2012 R2
Windows Storage Server 2012 Standard	Windows Storage Server 2012 R2 Standard
Windows Storage Server 2012 Workgroup	Windows Storage Server 2012 R2 Workgroup

Deciding on the Type of Installation

One of the final choices you must make before installing Windows Server 2012 R2 is what type of installation you want. There are three ways to install Windows Server 2012 R2.

Windows Server 2012 R2 with the Graphical User Interface (GUI) This is the version with which most administrators are familiar. This is the version that uses *Microsoft Management Console (MMC)* windows, and it is the version that allows the use of a mouse to navigate through the installation.

Windows Server 2012 R2 Server Core This is a bare-bones installation of Windows Server 2012 R2. You can think of it this way: If Windows Server 2012 R2 is a top-of-the-line luxury car, then Windows Server 2012 R2 Server Core is the stripped-down model with no air-conditioning, manual windows, and cloth seats. It might not

Windows Server 2012 R2 MinShell This is the best of both installation types mentioned previously. Minimum Shell (MinShell) gives you the advantage of using the GUI management tools, but MinShell does not actually install the GUI. It gives administrators the ability to use tools with which they are familiar but still provides a small attack surface and the advantages of Server Core.

In Windows Server 2012 R2, an administrator has the ability to remove the GUI shell after a GUI shell install has been completed. This removes Internet Explorer 10, Windows Explorer, the desktop, and the Start screen. Microsoft Management Console (MMC), Server Manager, and a subset of Control Panel are still present, giving you a MinShell installation plus PowerShell.