Server Core vs Server with Desktop Experience install options

Article • 11/26/2021

When you install Windows Server using the setup wizard, you can choose between Server Core or Server with Desktop Experience install options. With Server Core, the standard graphical user interface (the Desktop Experience) is not installed; you manage the server from the command line using PowerShell, the Server Configuration tool (SConfig), or by remote methods. Server with Desktop Experience installs the standard graphical user interface and all tools, including client experience features.

We recommend that you choose the Server Core install option unless you have a particular need for the extra user interface elements and graphical management tools that are included in the Server with Desktop Experience install option.

The setup wizard lists the install options below. In this list, editions without **Desktop Experience** are the Server Core install options:

- Windows Server Standard
- Windows Server Standard with Desktop Experience
- Windows Server Datacenter
- Windows Server Datacenter with Desktop Experience

(!) Note

Unlike some previous releases of Windows Server, you cannot convert between Server Core and Server with Desktop Experience after installation. You will need to do a clean installation if you install later decide to use a different option.

Differences

There are some key differences between Server Core and Server with Desktop Experience:

Expand table

Component	Server Core	Server with Desktop Experience
User interface	Minimal, command line driven (PowerShell, SConfig, cmd)	Standard Windows graphical user interface

Component	Server Core	Server with Desktop Experience
Disk space	Smaller requirement	Larger requirement
Install, configure, uninstall server roles locally	PowerShell	Server Manager or PowerShell
Roles and Features	Some roles and features are not available. For more information, see Roles, Role Services, and Features not in Windows Server - Server Core.	All roles and features are available, including those for application compatibility.
	Some of the features from Server with Desktop Experience for application compatibility can be installed with the App Compatibility Feature on Demand (FOD).	
Remote management	Yes, can be managed remotely using GUI tools, such as Windows Admin Center, Remote Server Administration Tools (RSAT), or Server Manager, or by PowerShell.	Yes, can be managed remotely using GUI tools, such as Windows Admin Center, Remote Server Administration Tools (RSAT), or Server Manager, or by PowerShell.
Potential attack surface	Greatly reduced attack surface	No reduction
Microsoft Management Console	Not installed - can be installed with the App Compatibility Feature on Demand (FOD).	Installed

① Note

For RSAT, you must use the version included with Windows 10 or later.