

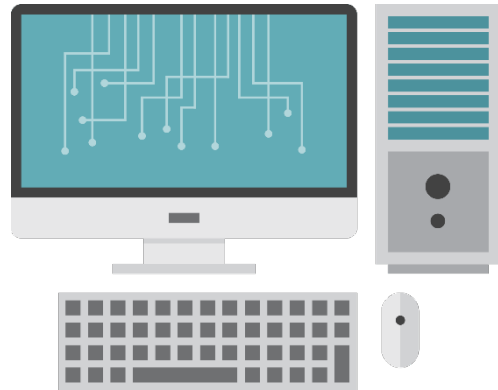
Install Servers



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What This Module Covers



Plan for a Server Installation

Plan for Server Roles

Plan for a Server Upgrade

Migrate Roles from Previous Versions of Windows Server

Install Server Core

Optimize Resource Utilization by using Features on Demand

Plan for a Server Installation

Edition

Windows Server 2012 R2 Foundation

Windows Server 2012 R2 Essentials

Windows Server 2012 R2 Standard

Windows Server 2012 R2 Datacenter

Characteristics

Plan for a Server Installation

Edition

Windows Server 2012 R2 Foundation

Windows Server 2012 R2 Essentials

Windows Server 2012 R2 Standard

Windows Server 2012 R2 Datacenter

Characteristics

Intended for small office networks.

Up to 15 users. No CALs.

Single CPU socket. No limit on cores.

Maximum of 32GB of RAM.

No virtualization rights.

Plan for a Server Installation

Edition

Windows Server 2012 R2 Foundation

Windows Server 2012 R2 Essentials

Windows Server 2012 R2 Standard

Windows Server 2012 R2 Datacenter

Characteristics

Also intended for small office networks.

Up to 25 users and 50 devices.

Preconfigured connectivity to cloud-based services.

Remote Web Access

My Server app for Windows/RT/Phone

Microsoft Azure Backup integration

Office 365 integration

No virtualization rights.

Plan for a Server Installation

Edition

Windows Server 2012 R2 Foundation

Windows Server 2012 R2 Essentials

Windows Server 2012 R2 Standard

Windows Server 2012 R2 Datacenter

Characteristics

The entirety of Windows Server.

Up to two CPU sockets. No limit on cores.

Two virtual instances included.

Plan for a Server Installation

Edition

Windows Server 2012 R2 Foundation

Windows Server 2012 R2 Essentials

Windows Server 2012 R2 Standard

Windows Server 2012 R2 Datacenter

Characteristics

The entirety of Windows Server.

Up to two CPU sockets. No limit on cores.

Unlimited virtual instances included.

Windows Server 2012 R2 User Interfaces



Windows Server 2012 R2 User Interfaces

Server with a GUI

Standard Windows GUI with traditional Start screen.
Server Manager tool and MMC console supported.
All server roles can be installed.

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Standard Windows GUI with traditional Start screen.
Server Manager tool and MMC console supported.
All server roles can be installed.

Minimal Server Interface

Also known as “Windows Server Core”.
Start screen, Explorer, IE, and the desktop not supported.

Windows Server 2012 R2 User Interfaces

Server with a GUI

Standard Windows GUI with traditional Start screen.
Server Manager tool and MMC console supported.
All server roles can be installed.

Minimal Server Interface

Also known as “Windows Server Core”.
Start screen, Explorer, IE, and the desktop not supported.

Full Desktop Experience

Intended for using Windows Server as a desktop OS.
Standard Windows GUI with traditional Start screen, plus
Windows Store and Windows Store apps supported.

Roles, Role Services, and Features

Role

“Something a Windows Server aspires to be.”

Role Service

“The functions that fulfill those aspirations.”

Feature

“Other tasks that don’t fit within an established Role.”

Supported Roles on Windows Server Core

AD Certificate Services

AD Domain Services

AD Lightweight Domain Services

AD Rights Management Services

DHCP Server

DNS Server

File and Storage Services

Hyper-V

Print and Document Services

Remote Access Services

Streaming Media Services

Web Server (IIS)

Windows Server Update Services

Plan for a Server Upgrade

Upgrade Method

Clean Install

Upgrade

License Conversion

Role Migration

Characteristics

Plan for a Server Upgrade

Upgrade Method

Clean Install

Upgrade

License Conversion

Role Migration

Characteristics

Used for new installations.

Used where old OS instance will be deleted.

Used when changing from x86 to x64 architecture.

Used when changing languages.

Used when converting from pre-release versions.

Plan for a Server Upgrade

Upgrade Method

Clean Install

Upgrade

License Conversion

Role Migration

Characteristics

Used when an existing OS instance requires an in-place upgrade.

Supported upgrades:

Windows Server 2008 SP2

Windows Server 2008 R2

Windows Server 2012 Standard and Datacenter

Plan for a Server Upgrade

Upgrade Method

Clean Install

Upgrade

License Conversion

Role Migration

Characteristics

DISM command can migrate a Windows Server instance to a higher OS edition.

Offline servicing to OS images

Online servicing to running OS instances

Plan for a Server Upgrade

Upgrade Method

Clean Install

Upgrade

License Conversion

Role Migration

Characteristics

Windows Server Migration Tools are available as an installable feature in Server Manager.

Install-WindowsFeature Migration

Tools must be installed onto source and destination computers. This can be done manually.

Migration steps are different based on the role being migrated.

Export-SmigServerSetting

Import-SmigServerSetting

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