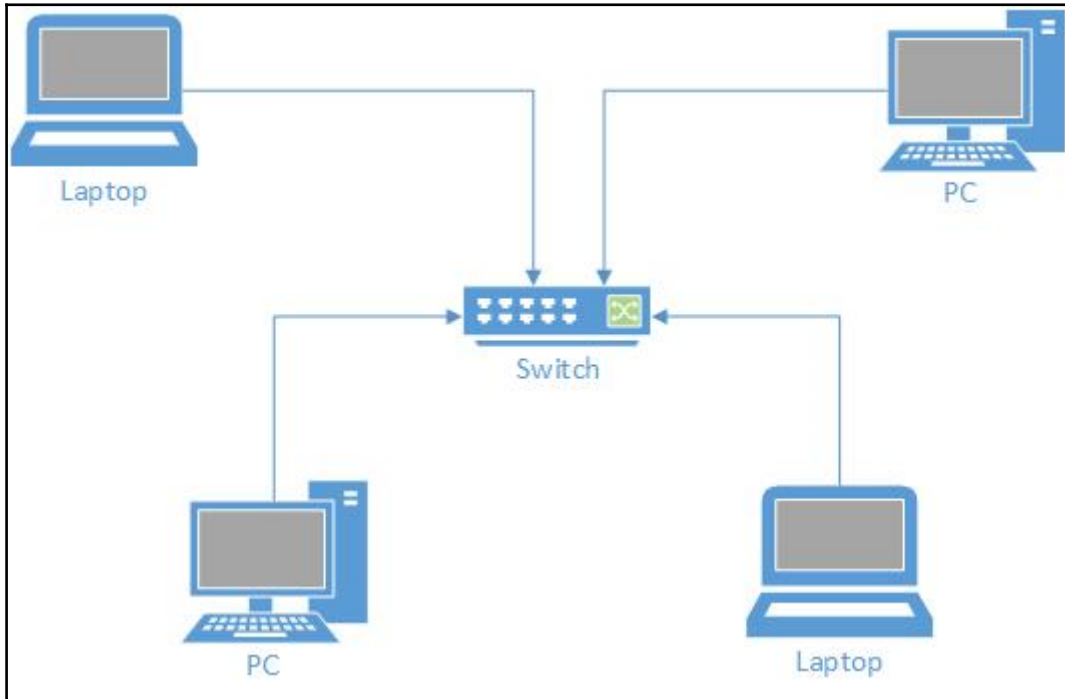
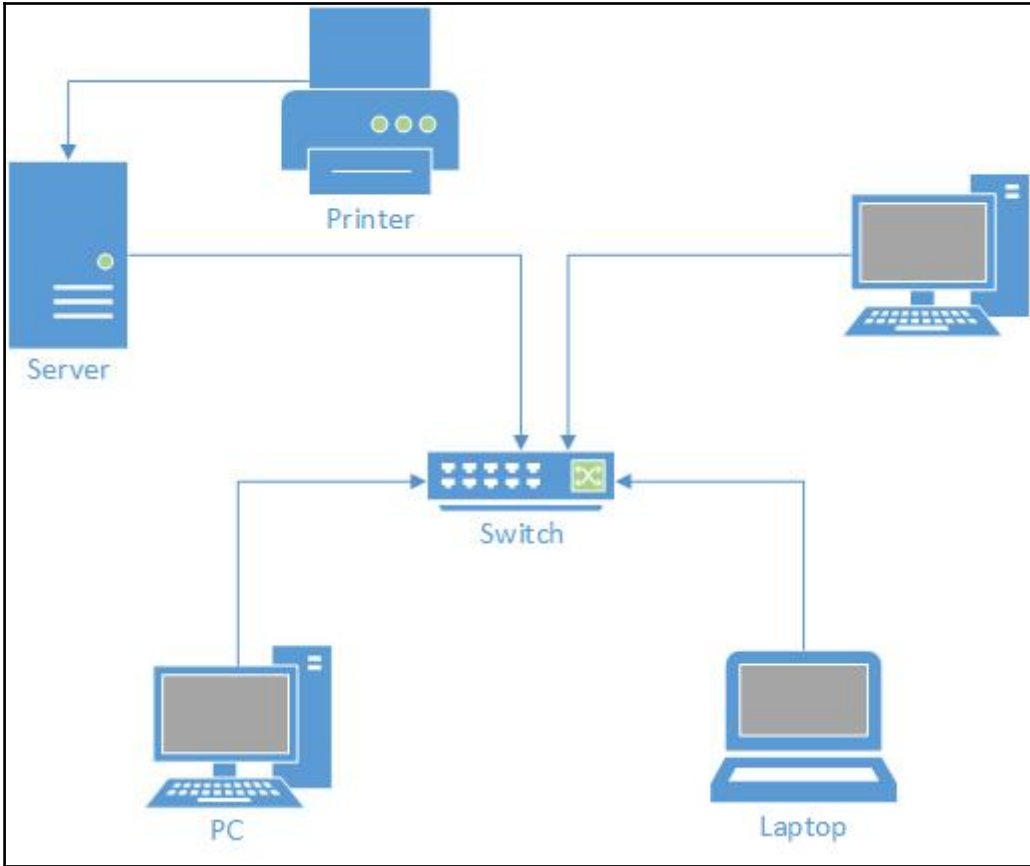


Chapter 1: Introducing Windows Server





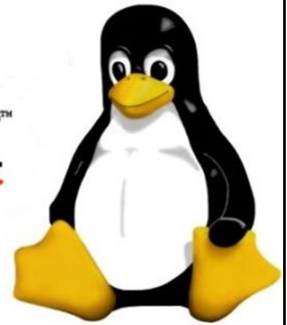


Windows Server 2016



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Windows Server 2016

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Download

Registration is required for this evaluation.

Register to continue



Description



Preinstall Information



Explore



Try



Learn

Chapter 2: Installing Windows Server

Press any key to boot from CD or DVD..._

Loading files...



Windows Setup

Windows Server 2016

Language to install: English (United States)

Time and currency format: English (United States)

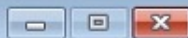
Keyboard or input method: US

Enter your language and other preferences and click "Next" to continue.

© 2016 Microsoft Corporation. All rights reserved.

Next

Windows Setup

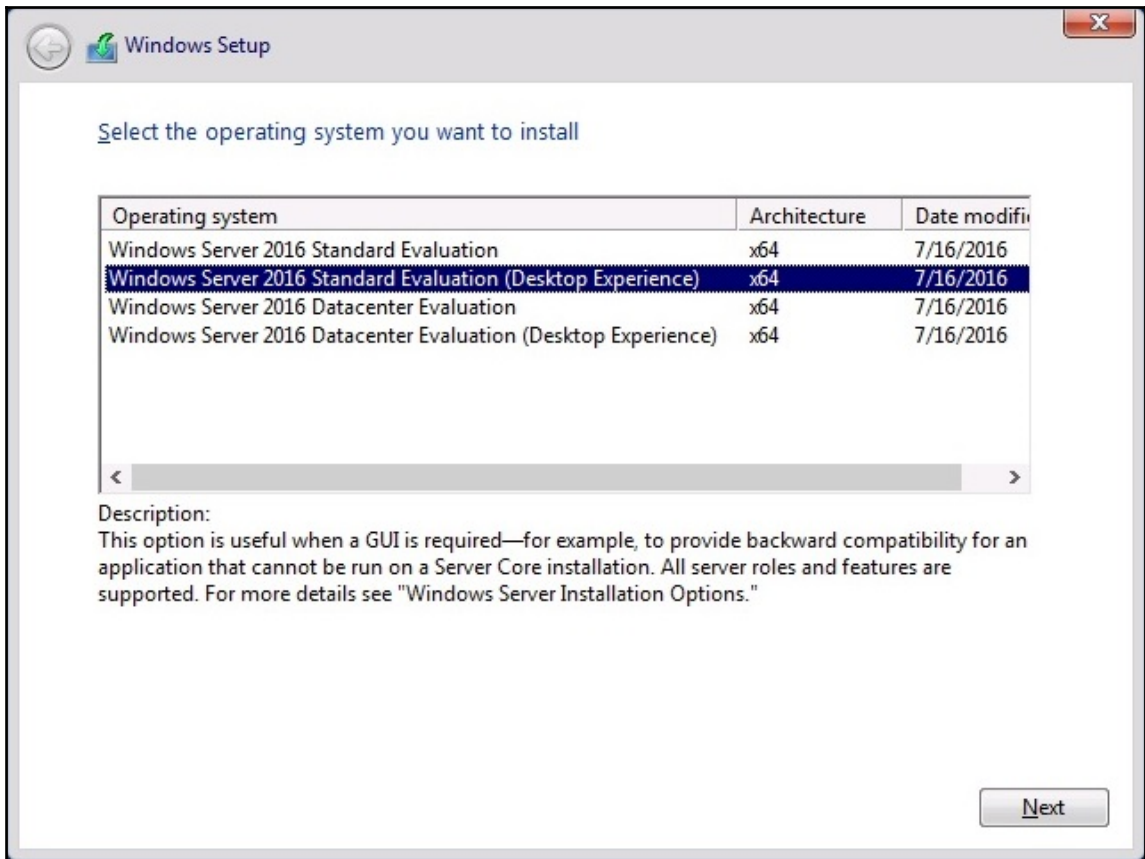


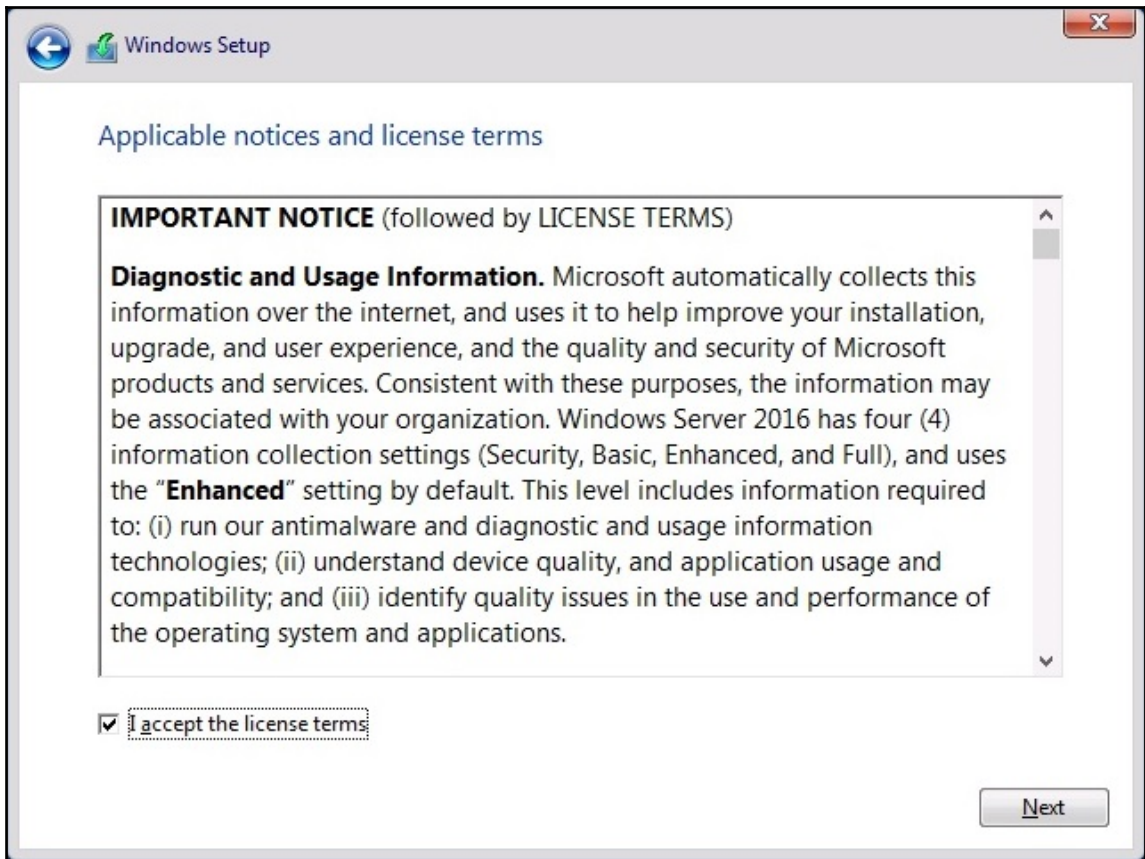
 Windows Server 2016

[Install now](#)

[Repair your computer](#)

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Windows Setup



Which type of installation do you want?

Upgrade: Install Windows and keep files, settings, and applications

The files, settings, and applications are moved to Windows with this option. This option is only available when a supported version of Windows is already running on the computer.

Custom: Install Windows only (advanced)

The files, settings, and applications aren't moved to Windows with this option. If you want to make changes to partitions and drives, start the computer using the installation disc. We recommend backing up your files before you continue.

[Help me decide](#)



Windows Setup



Where do you want to install Windows?

	Name	Total size	Free space	Type
	Drive 0 Partition 1: System Reserved	500.0 MB	483.0 MB	System
	Drive 0 Partition 2	38.6 GB	38.6 GB	Primary
	Drive 0 Unallocated Space	10.9 GB	10.9 GB	

Refresh

Delete


Format

New

Load driver

Extend

Next

 Windows Setup



Installing Windows

Status

Copying Windows files (0%)

Getting files ready for installation

Installing features

Installing updates

Finishing up

Customize settings

Type a password for the built-in administrator account that you can use to sign in to this computer.

User name

Password

Reenter password



Finish

Press Ctrl+Alt+Delete to unlock.

4:04

Hyper-V

PXE Network Boot 09.14.2011

(C) Copyright 2011 Microsoft Corporation, All Rights Reserved.

CLIENT MAC ADDR: 00 15 5D 02 87 08 GUID: B16774B3-B69E-4DF1-BCF8-80B04EE5CF1E

CLIENT IP: 192.168.0.114 MASK: 255.255.255.0 DHCP IP: 192.168.0.1

GATEWAY IP: 192.168.0.1

Downloaded WDSNBP from 192.168.0.105 WinSrv2012R2.Packtbiz.local

Architecture: x64

Contacting Server: 192.168.0.105.

TFTP Download: boot\x64\pxeboot.n12

Loading files...



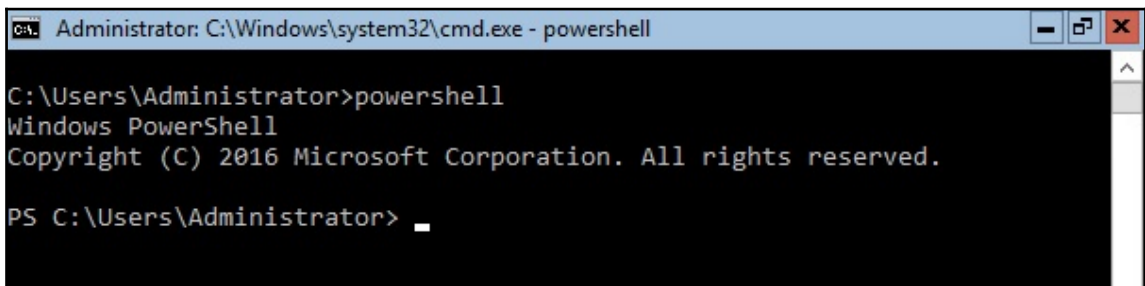
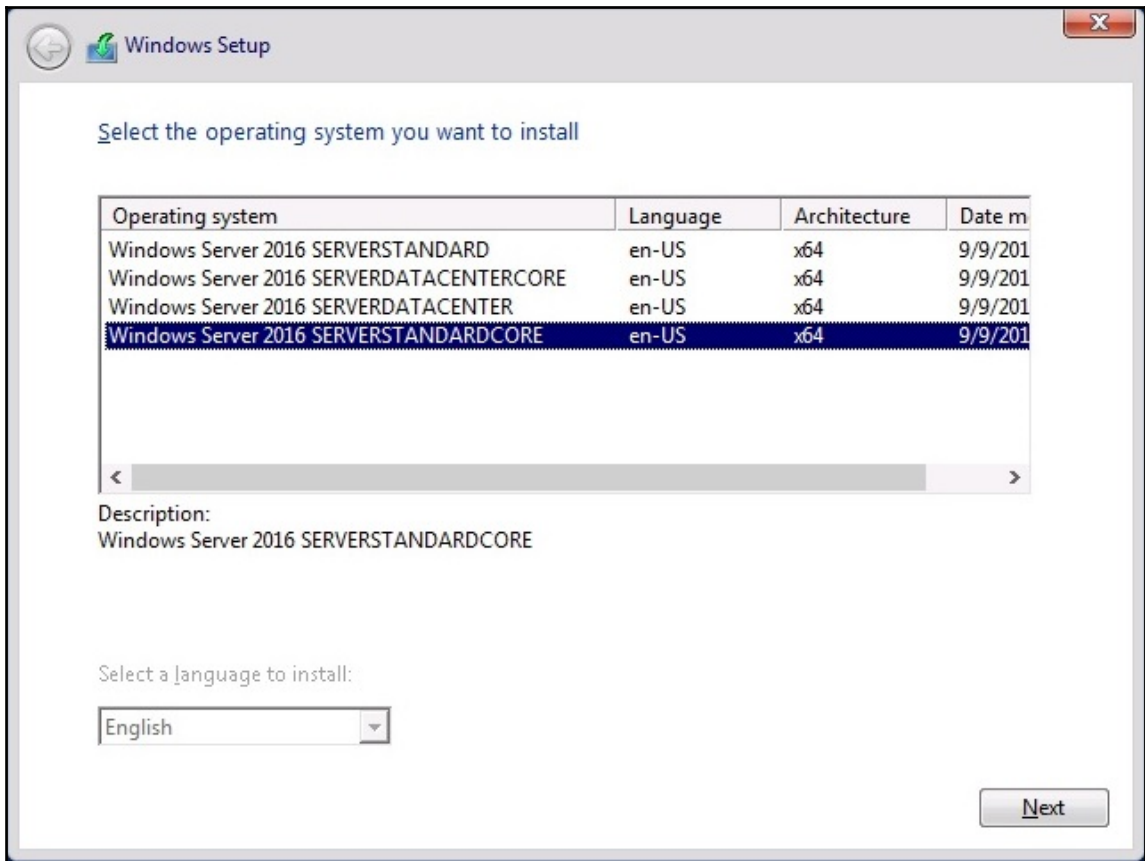
IP: 192.168.0.105, File: \Boot\x64\Images\boot.wim

Windows Deployment Services

Locale: English (United States)

Keyboard or input method: US

Next



Windows Assessment and Deployment Kit - Windows 10

Specify Location

Install the Windows Assessment and Deployment Kit - Windows 10 to this computer

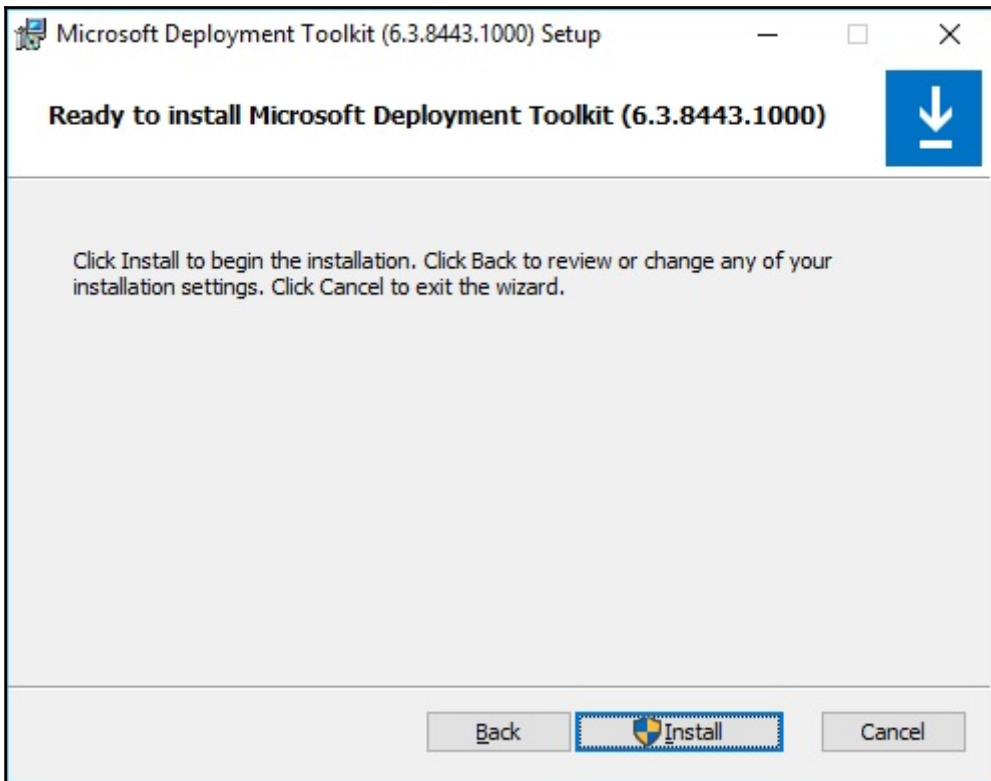
Install Path:

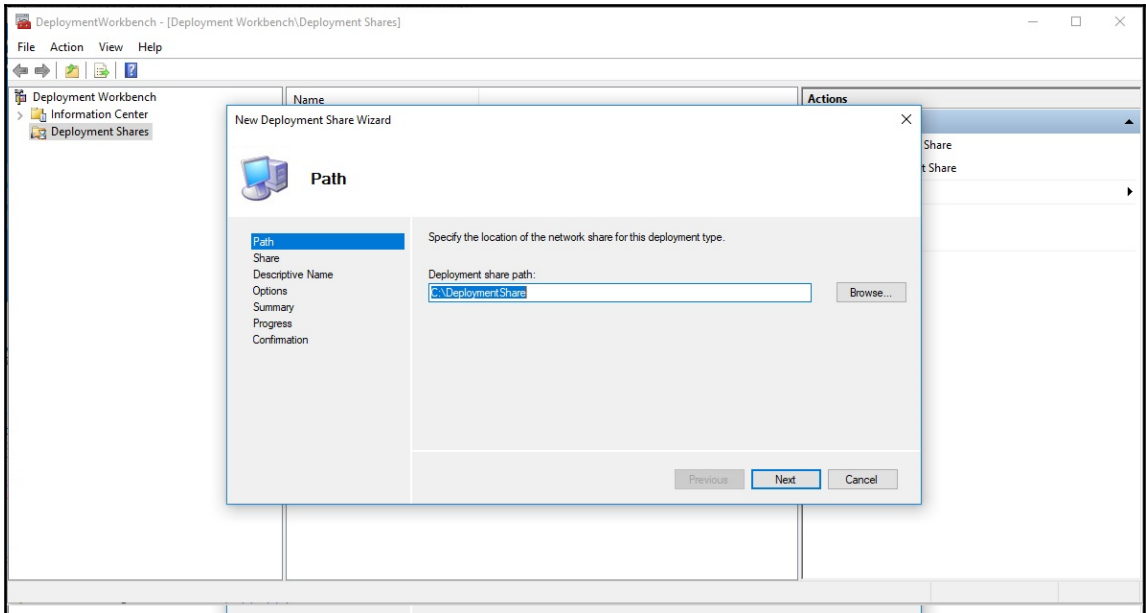
* Windows Kit common installation path used

Download the Windows Assessment and Deployment Kit - Windows 10 for installation on a separate computer

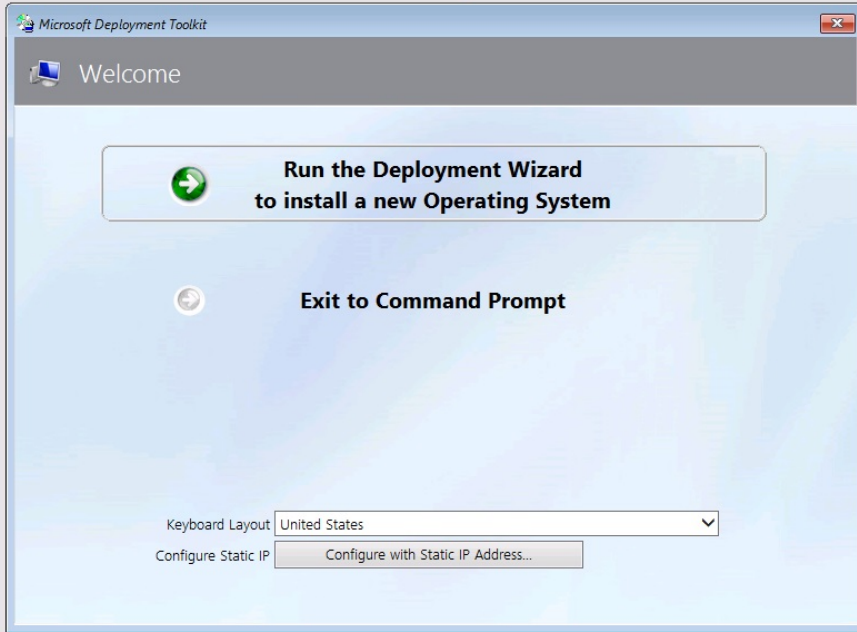
Download Path:

Estimated disk space required:	3.0 GB
Disk space available:	589.5 GB






Microsoft Deployment Toolkit




Deployment Summary

 **Success**

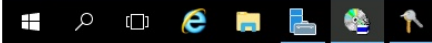
Operating system deployment completed successfully.
The computer is now ready to use.

During the deployment process, 0 errors and 0 warnings were reported.

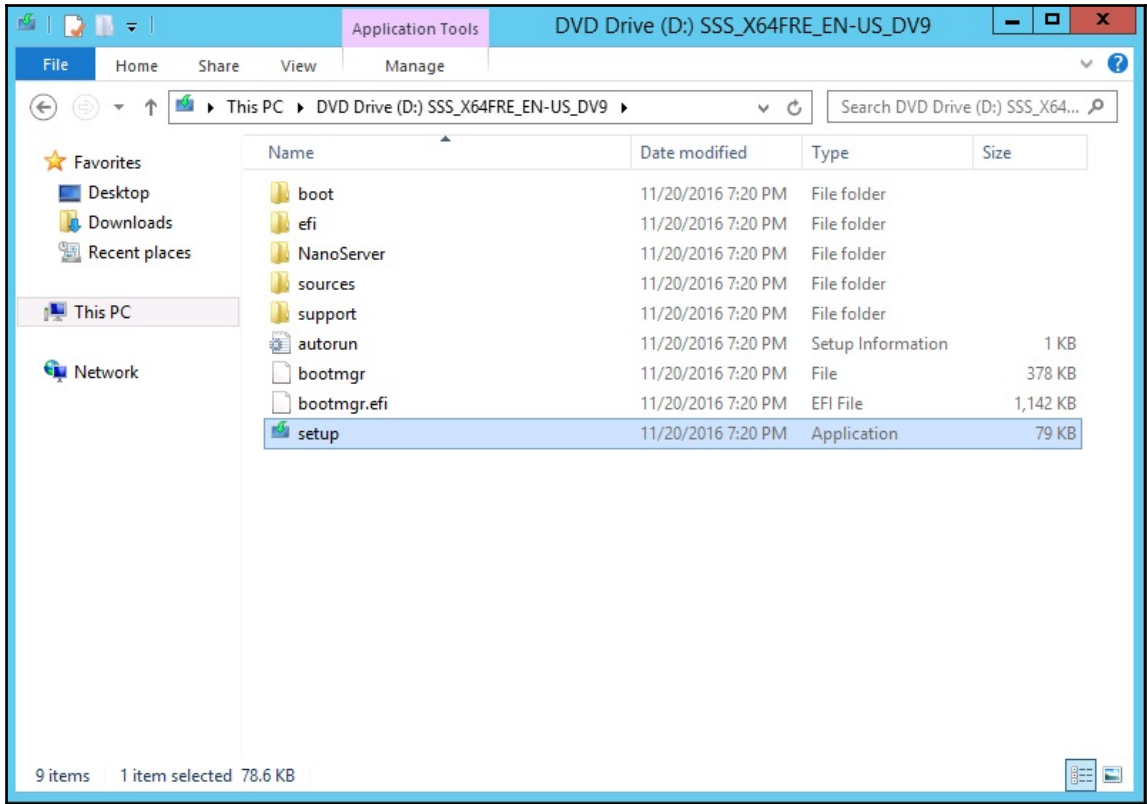
 Details ...

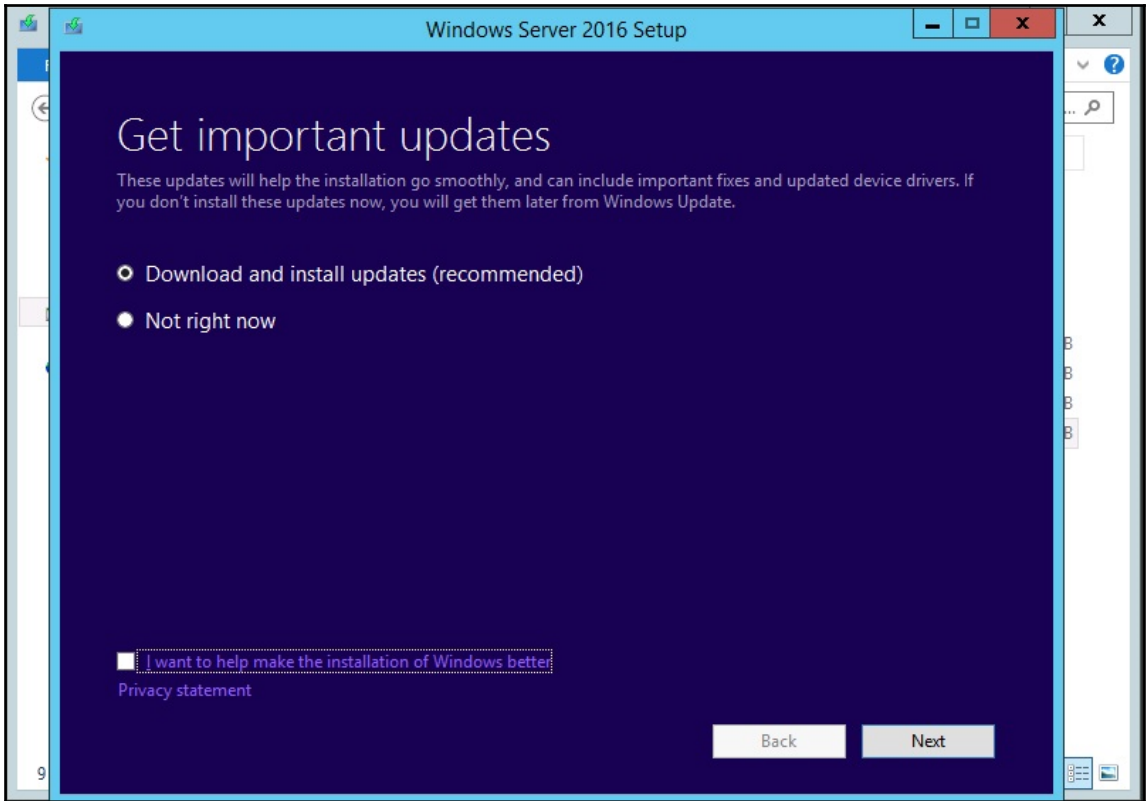


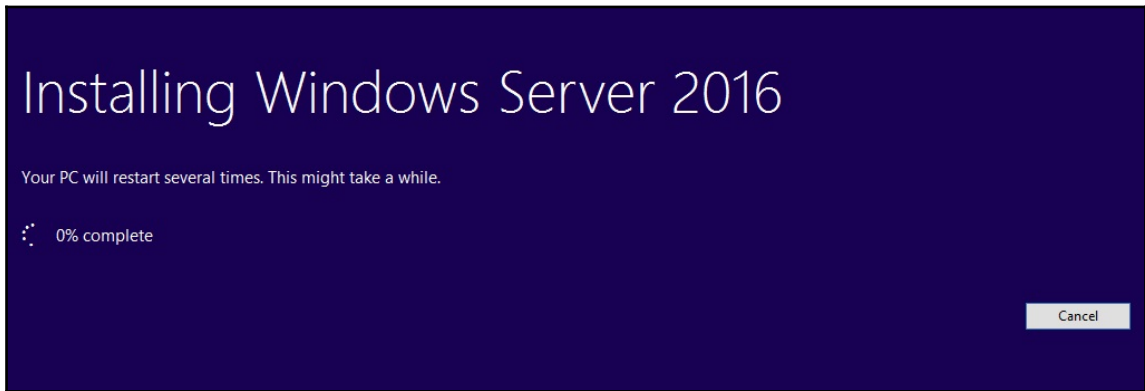
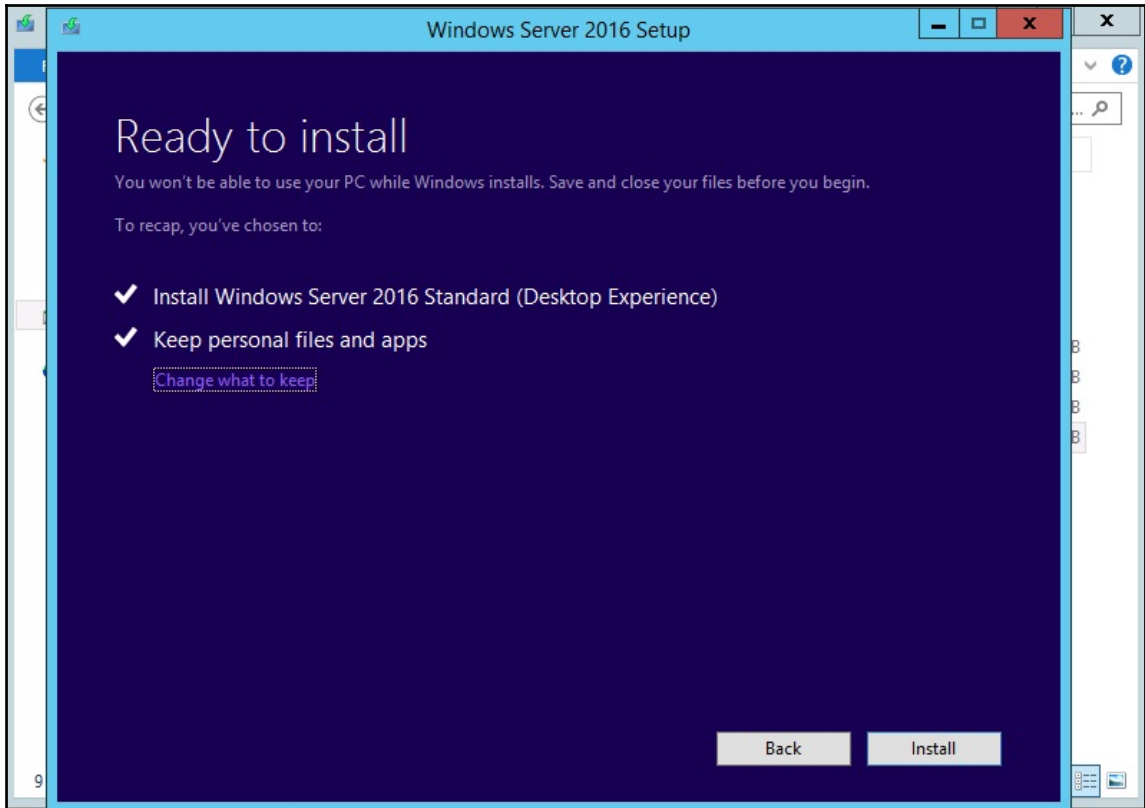
Recycle Bin



12:20 AM
9/12/2017









Installing Windows 0%
Don't turn off your PC. This will take a while.

Your PC will restart several times.

System

Control Panel > System and Security > System

View basic information about your computer

Windows edition

Windows Server 2016 Standard
© 2016 Microsoft Corporation. All rights reserved.

Windows Server 2016

System

Processor: Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz 2.90 GHz
Installed memory (RAM): 2.00 GB
System type: 64-bit Operating System, x64-based processor
Pen and Touch: No Pen or Touch Input is available for this Display

Computer name, domain, and workgroup settings

Computer name: WinSrv2012STD [Change settings](#)
Full computer name: WinSrv2012STD
Computer description:
Workgroup: WORKGROUP

Windows activation

Product ID: Not Available

See also
Security and Maintenance



Server Manager

Server Manager Dashboard

Dashboard Add Roles and Features Wizard

Select features

DESTINATION SERVER
WinSrv2016Upg

Select one or more features to install on the selected server.

Features	Description
<input type="checkbox"/> Windows Identity Foundation 3.5	
<input type="checkbox"/> Windows Internal Database	
<input checked="" type="checkbox"/> Windows PowerShell (2 of 5 installed)	
<input type="checkbox"/> Windows Process Activation Service	
<input type="checkbox"/> Windows Search Service	
<input type="checkbox"/> Windows Server Backup	
<input checked="" type="checkbox"/> Windows Server Migration Tools	Windows Server Migration Tools includes Windows PowerShell cmdlets that facilitate migration of server roles, operating system settings, files, and shares from computers that are running earlier versions of Windows Server or Windows Server 2012 to computers that are running Windows Server 2012.
<input type="checkbox"/> Windows Standards-Based Storage Management	
<input type="checkbox"/> Windows TIFF IFilter	
<input type="checkbox"/> WinRM IIS Extension	
<input type="checkbox"/> WINS Server	
<input type="checkbox"/> Wireless LAN Service	
<input checked="" type="checkbox"/> WoW64 Support (Installed)	
<input type="checkbox"/> XPS Viewer	

< Previous Next > Install Cancel

BPA results

9/9/2017 6:07 PM

6:09 PM
9/9/2017


```
Administrator: Windows Server Migration Tools
PS C:\WINDOWS\system32\ServerMigrationTools> dir

Directory: C:\WINDOWS\system32\ServerMigrationTools

Mode                LastWriteTime         Length Name
----                -
d-----          9/9/2017   6:13 PM           en
d-----          9/9/2017   6:13 PM        en-US
-a----          7/16/2016   3:19 PM         228 ServerMigration.psc1
-a----          9/9/2017   6:13 PM        81920 SmigDeploy.exe
-a----          7/16/2016   3:19 PM         187 SmigDeploy.exe.config
-a----          9/9/2017   6:13 PM       719360 svrmig.dll

PS C:\WINDOWS\system32\ServerMigrationTools> .\SmigDeploy.exe /package /architecture amd64 /OS WS12R2 /path C:\Migration
Tools
SmigDeploy.exe is checking for prerequisites.
-----
SmigDeploy.exe is copying Windows Server Migration Tools files to C:\MigrationTools\SMT_ws12R2_amd64.
-----
PS C:\WINDOWS\system32\ServerMigrationTools>
```

```
Administrator: Windows Server Migration Tools
PS C:\MigrationTools\SMT_ws12R2_amd64> net stop "DHCP server"
The DHCP Server service is stopping.
The DHCP Server service was stopped successfully.

PS C:\MigrationTools\SMT_ws12R2_amd64> Export-SmigServerSetting -FeatureID DHCP
-Path C:\DHCP\Store -Verbose

cmdlet Export-SmigServerSetting at command pipeline position 1
Supply values for the following parameters:
Password: *****

      ItemType ID                               Success DetailsList
-----
WindowsFeature DHCP                            True <>
```

```
Administrator: Windows Server Migration Tools
PS C:\> net stop "DHCP Server"
The DHCP Server service is stopping.
The DHCP Server service was stopped successfully.

PS C:\> Import-SmigServerSetting -FeatureID DHCP -Path C:\MigrationTools\DHCP\Store -Force

cmdlet Import-SmigServerSetting at command pipeline position 1
Supply values for the following parameters:
Password: *****

    ItemType ID      Success DetailsList
    -----
WindowsFeature DHCP    True {}

PS C:\> _
```

The screenshot shows the DHCP console interface. The left pane displays a tree view with the following structure:

- DHCP
 - winsrv2016upg
 - IPv4
 - Scope [192.168.2.0] IP Addresses
 - Address Pool
 - Address Leases
 - Reservations
 - Scope Options
 - Policies
 - Server Options
 - Policies
 - Filters
 - IPv6

The main pane displays a table with the following data:

Start IP Address	End IP Address	Description
192.168.2.10	192.168.2.90	Address range for distribution

The right pane shows the 'Actions' menu with 'Address Pool' and 'More Actions' options.

Chapter 3: Post-installation tasks in Windows Server



<p>▼ Monitors</p> <ul style="list-style-type: none">Generic PnP Monitor	<p>▼ Sound, video and game controllers</p> <ul style="list-style-type: none">Audio Device on High Definition Audio BusHD Webcam C615	<p>▼ Sound, video and game controllers</p> <ul style="list-style-type: none">HD Webcam C615High Definition Audio Device
--	--	---

How do you want to search for driver software?

→ Search automatically for updated driver software

Windows will search your computer and the Internet for the latest driver software for your device, unless you've disabled this feature in your device installation settings.

→ Browse my computer for driver software

Locate and install driver software manually.

The screenshot shows the Windows Settings application. On the left, the 'Settings' menu is visible with 'Home' selected. Below it, a search bar contains 'Find a setting'. Under the 'Devices' section, 'Printers & scanners', 'Connected devices', and 'Mouse & touchpad' are listed. The main content area is titled 'Add devices' and features a '+ Add a device' button. Below this, the 'Other devices' section shows a 'Generic Non-PnP Monitor' with a 'Remove device' button highlighted by a red box.

Settings

Home

Find a setting

Devices

Printers & scanners

Connected devices

Mouse & touchpad

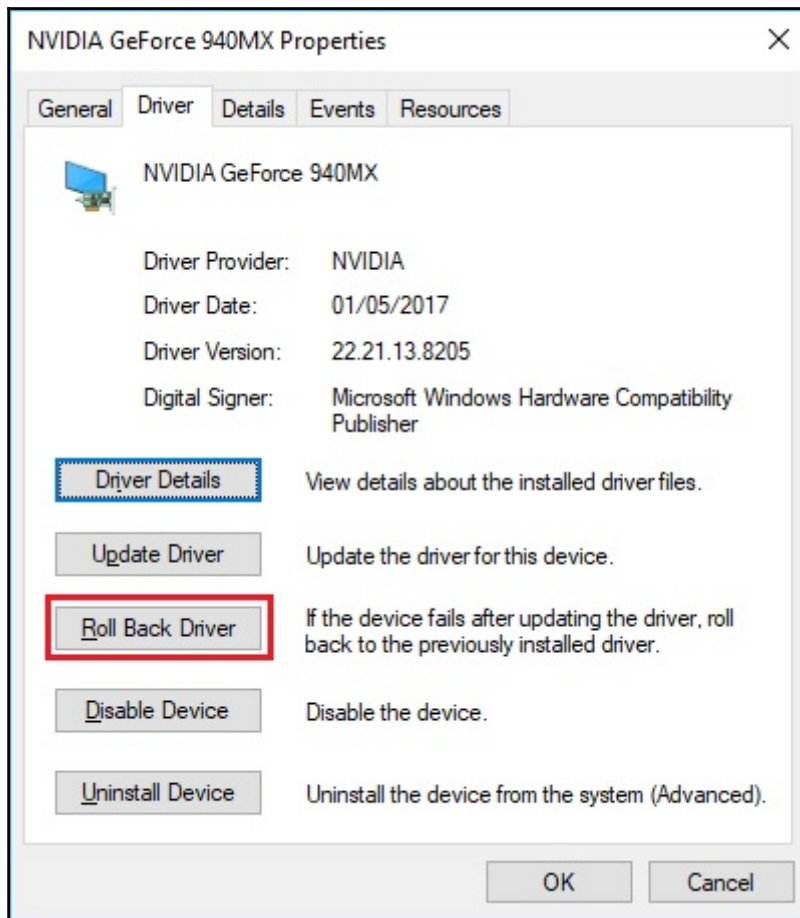
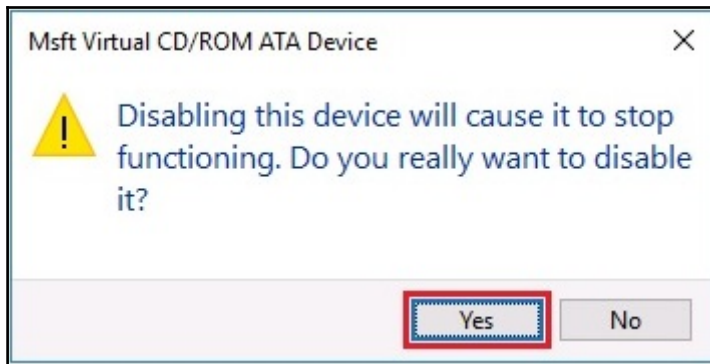
Add devices

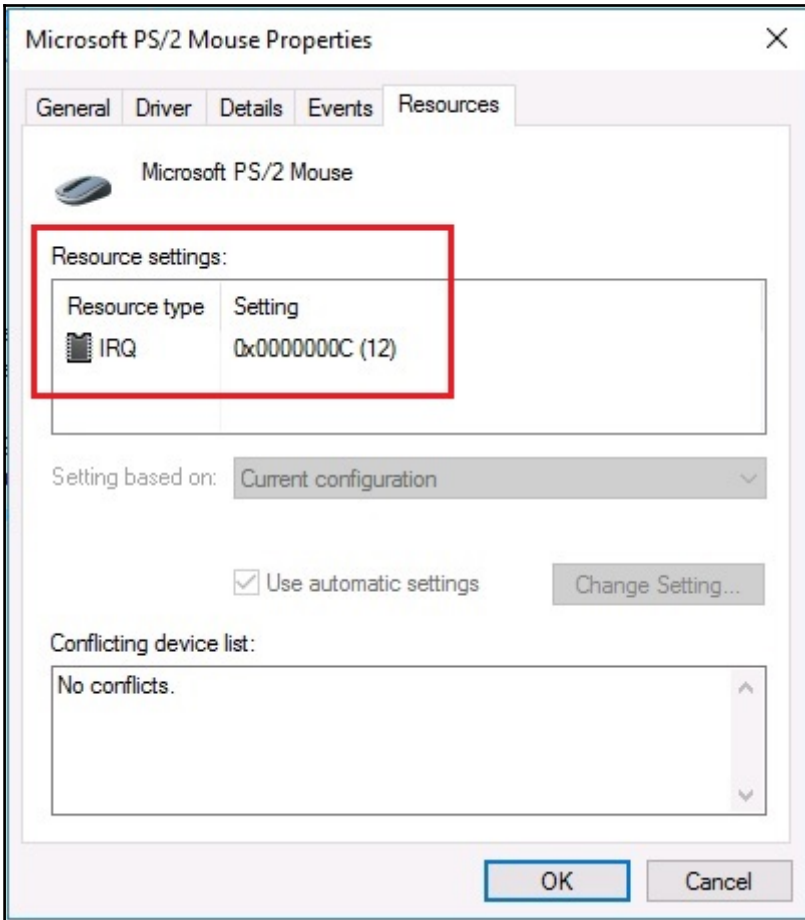
+ Add a device

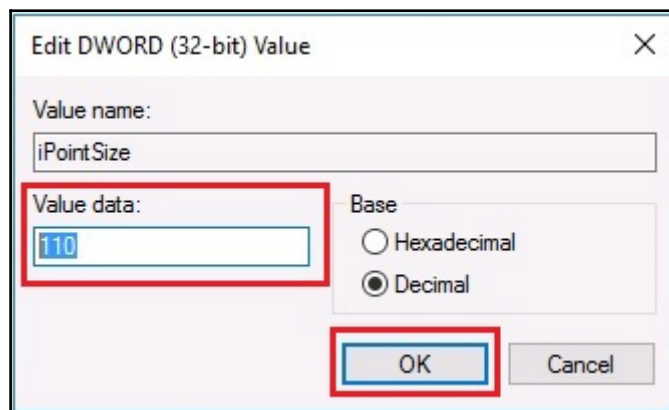
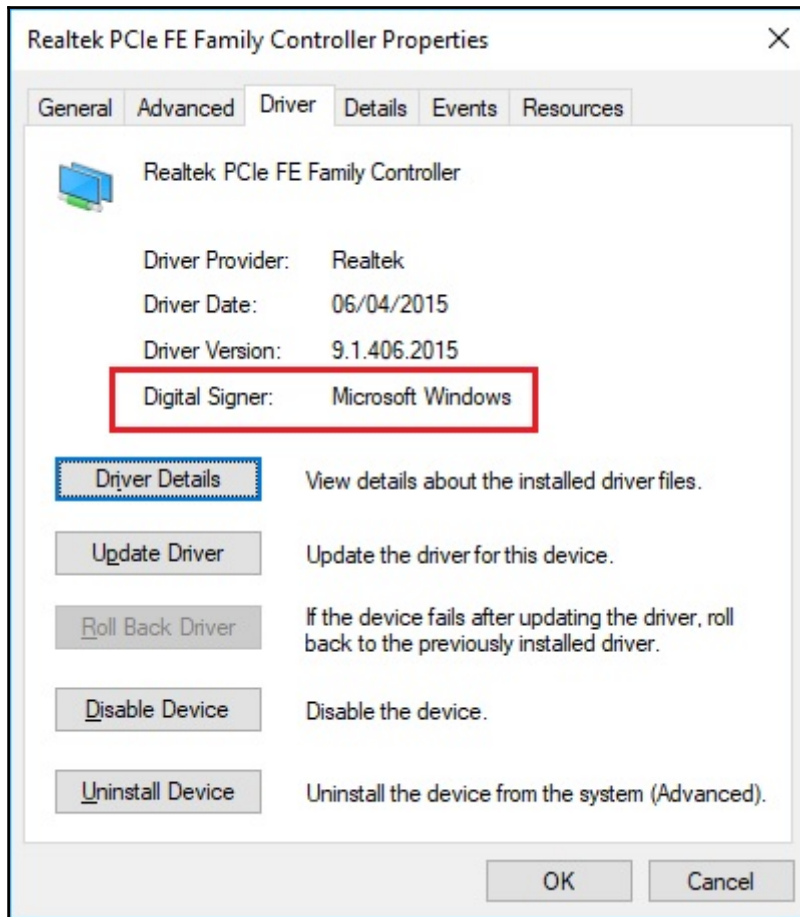
Other devices

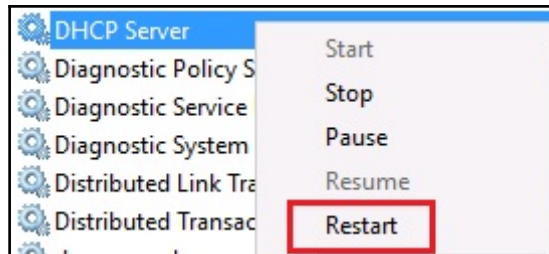
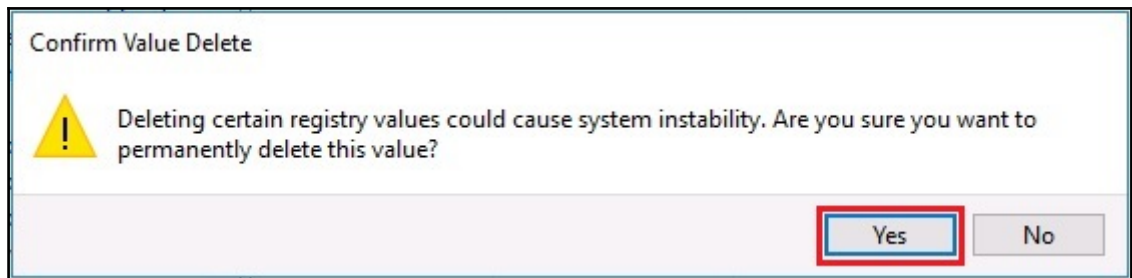
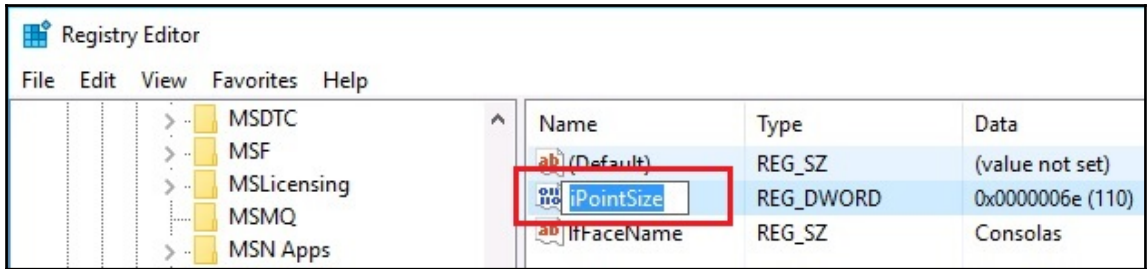
Generic Non-PnP Monitor

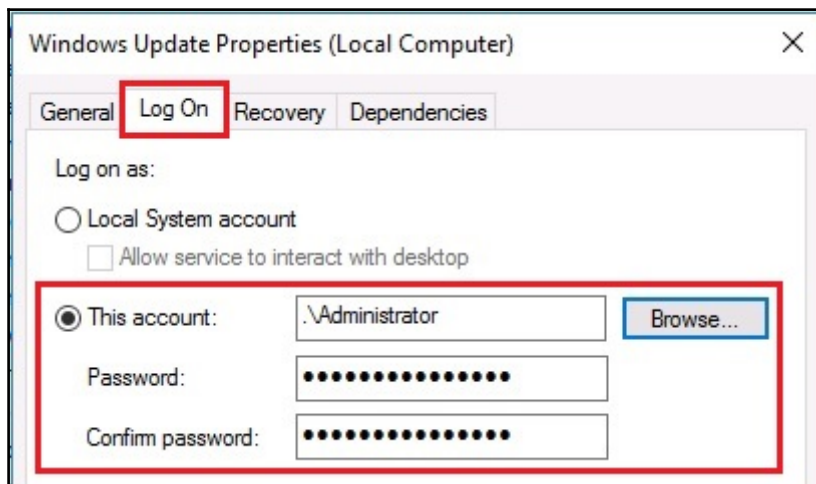
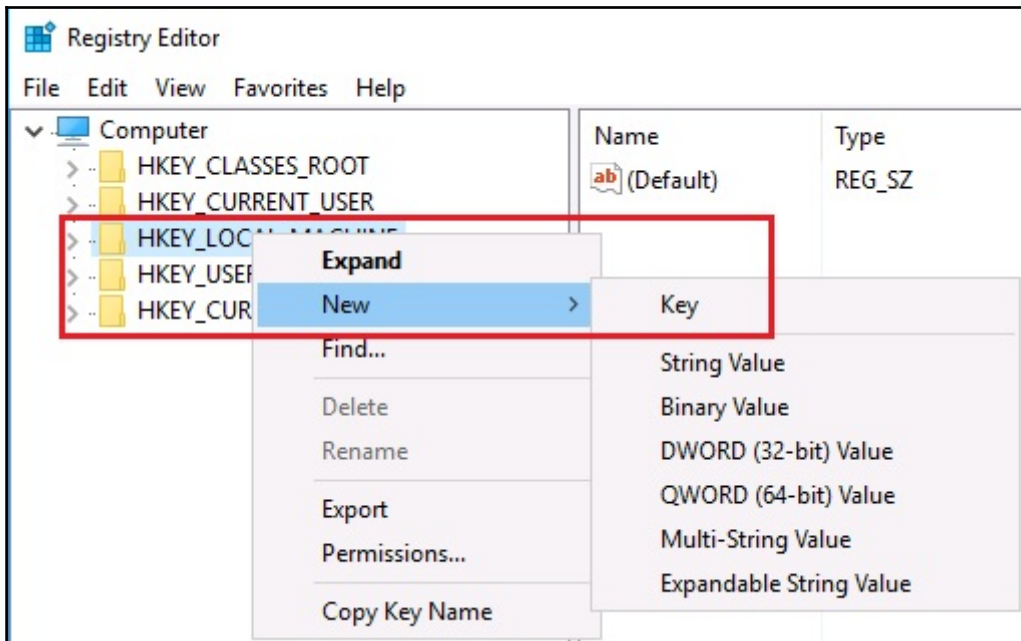
Remove device











Server Manager

Server Manager Dashboard

Manage Tools View Help

Dashboard

- Local Server
- All Servers
- DHCP
- File and Storage Services

WELCOME TO SERVER MANAGER

1 Configure this local server

2 Add roles and features

3 Add other servers to manage

4 Create a server group

5 Connect this server to cloud services

QUICK START

WHAT'S NEW

LEARN MORE

Hide

ROLES AND SERVER GROUPS

Roles: 2 | Server groups: 1 | Servers total: 1

Role	Count
DHCP	1
File and Storage Services	1

Category	Item
DHCP	Manageability
	Events
	Services
	Performance
	BPA results
File and Storage Services	Manageability
	Events
	Services
	Performance
	BPA results

9:14 PM 9/11/2017

Server Manager

Server Manager ▸ Local Server

Dashboard

Local Server

All Servers

DHCP

File and Storage Services ▸

PROPERTIES
For WIN-SRV2016STD

Computer name: WIN-SRV2016STD
Workgroup: WORKGROUP

Windows Firewall: Private: On
Remote management: Enabled
Remote Desktop: Disabled
NIC Teaming: Disabled
WinSrv2016Upg: IPv4 address assigned b

Operating system version: Microsoft Windows Ser
Hardware information: Microsoft Corporation V

EVENTS
All events | 32 total

Server Name	ID	Severity	Source	Log	Date and Time
WIN-SRV2016STD	134	Warning	Microsoft-Windows-Time-Service	System	9/11/2017 8:45:46 PM
WIN-SRV2016STD	134	Warning	Microsoft-Windows-Time-Service	System	9/11/2017 8:45:37 PM
WIN-SRV2016STD	4199	Error	Tcpip	System	9/11/2017 8:45:36 PM

System Properties

Computer Name/Domain Changes

You can change the name and the membership of this computer. Changes might affect access to network resources.

Computer name:
WinSrv2016STD

Full computer name:
WinSrv2016STD

More...

Member of

Domain:

Workgroup:
WORKGROUP

OK Cancel

OK Cancel Apply

9:25 PM
9/11/2017

Server Manager

Server Manager ▸ Local Server

Manage Tools View Help

Dashboard

Local Server

All Servers

DHCP

File and Storage Services ▸

PROPERTIES
For WinSrv2016STD

Computer name WinSrv2016STD

Workgroup WORKGROUP

Windows Firewall Private: On

Remote management Enabled

Remote Desktop Disabled

NIC Teaming Disabled

WinSrv2016Upg 192.168.1.20, IPv6 enable

Operating system version Microsoft Windows Serve

Hardware information Microsoft Corporation Vi

System Properties

Computer Name/Domain Changes

You can change the name and the membership of this computer. Changes might affect access to network resources.

Computer name:
WinSrv2016STD

Full computer name:
WinSrv2016STD

More...

Member of

Domain:
PacktBiz.local

Workgroup:
WORKGROUP

OK Cancel

OK Cancel Apply

EVENTS
All events | 48 total

Filter

Server Name	ID	Severity	Source	Log	Date and Time
WINSRV2016STD	8007	Warning	Microsoft-Windows-DNS Client Events	System	9/11/2017 9:57:27 PM
WINSRV2016STD	8007	Warning	Microsoft-Windows-DNS Client Events	System	9/11/2017 9:57:26 PM
WINSRV2016STD	134	Warning	Microsoft-Windows-Time-Service	System	9/11/2017 9:57:16 PM

10:04 PM
9/11/2017

Server Manager

Server Manager ▸ Local Server

Dashboard

Local Server

All Servers

DHCP

File and Storage Services ▸

PROPERTIES
For WinSrv2016STD

Computer name WinSrv2016STD
Domain Packbiz.local

Windows Firewall Private: On
Remote management Enabled
Remote Desktop Disabled
NIC Teaming Disabled
WinSrv2016Uppg 192.168.1.20, IPv6 enabled

Operating system version Microsoft Windows Server 2016
Hardware information Microsoft Corporation

EVENTS
All events | 69 total

Filter

Server Name	ID	Severity	Source	Log	Date and Time
WINSRV2016STD	10016	Error	Microsoft-Windows-DistributedCOM	System	9/11/2017 10:47:10 AM
WINSRV2016STD	1067	Warning	Microsoft-Windows-TerminalServices-RemoteConnectionManager	System	9/11/2017 10:47:10 AM
WINSRV2016STD	1059	Error	Microsoft-Windows-DHCP-Server	System	9/11/2017 10:47:10 AM

System Properties

Remote Desktop Connection

Remote Desktop Firewall exception will be enabled

You chose to enable Remote Desktop Connection for all network connections on this computer.

To enable it for selected network connections, open [Windows Firewall with Advanced Security](#).

OK

Don't allow remote connections to this computer

Allow remote connections to this computer

Allow connections only from computers running Remote Desktop with Network Level Authentication (recommended)

[Help me choose](#)

Select Users...

OK Cancel Apply

10:47 PM
9/11/2017

Server Manager

Server Manager ▶ Local Server

Manage Tools View Help

Dashboard

Local Server

All Servers

File and Storage Services ▶

PROPERTIES

For WIN-705CNM2D005

Computer name	WIN-705CNM2D005	Last installed updates	Never
Workgroup	WORKGROUP	Windows Update	Download u
		Last checked for updates	Never
Windows Firewall	Public: On	Windows Defender	Real-Time P
Remote management	Enabled	Feedback & Diagnostics	Settings
Remote Desktop	Enabled	IE Enhanced Security Configuration	On
NIC Teaming	Disabled	Time zone	(UTC+01:00)
Ethernet	IPv4 address assigned by DHCP, IPv6 enabled	Product ID	Not activate
Operating system version	Microsoft Windows Server 2016 Standard Evaluation	Processors	Intel(R) Core
Hardware information	Microsoft Corporation Virtual Machine	Installed memory (RAM)	1.98 GB
		Total disk space	38.57 GB

EVENTS

All events | 11 total

Filter

Server Name	ID	Severity	Source	Log	Date and Time
WIN-705CNM2D005	8198	Error	Microsoft-Windows-Security-SPP	Application	9/12/2017 11:12:56 AM
WIN-705CNM2D005	1014	Error	Microsoft-Windows-Security-SPP	Application	9/12/2017 11:12:56 AM
WIN-705CNM2D005	8200	Error	Microsoft-Windows-Security-SPP	Application	9/12/2017 11:12:56 AM

11:16 AM
9/12/2017

The image shows a Windows Server Manager window titled "Server Manager Local Server" and a Settings window titled "Update status".

Server Manager Properties:

Property	Value
WinSrv2016STD	Never
Windows Update	Download updates only, using Windows Update
Last checked for updates	Today at 10:30 PM

Settings - Update status:

Updates are available.

- 2017-08 Update for Windows Server 2016 for x64-based Systems (KB4035631).
- Windows Malicious Software Removal Tool for Windows 8, 8.1, 10 and Windows Server 2012, 2012 R2, 2016 x64 Edition - August 2017 (KB890830).
- 2017-08 Cumulative Update for Windows Server 2016 for x64-based Systems (KB4034658).

Updates are ready to install

Install now

[Update history](#)

[Update settings](#)

The taskbar at the bottom shows the system clock as 11:41 PM on 9/11/2017.

Server Manager

Server Manager ▶ Local Server

Dashboard

Local Server

All Servers

DHCP

File ar

PROPERTIES
For WinSrv2016STD

WinSrv2016STD
Packtbiz.local

Last installed updates: Never
Windows Update: Download updates only, using Windows Update
Last checked for updates: Today at 10:30 PM

Windows Defender: Real-Time Protection: On
Feedback & Diagnostics: Settings
IE Enhanced Security Configuration: On

Time zone: (UTC+01:00) Sarajevo, Skopje, Warsaw, Zagreb
Product ID: 00376-30818-89117-AA456 (activated)

Processors: Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
Installed memory (RAM): 2 GB
Total disk space: 39.22 GB

Internet Explorer Enhanced Security Configuration (IE ESC) reduces the exposure of your server to potential attacks from Web-based content. Internet Explorer Enhanced Security Configuration is enabled by default for Administrators and Users groups.

Administrators:
 On (Recommended)
 Off

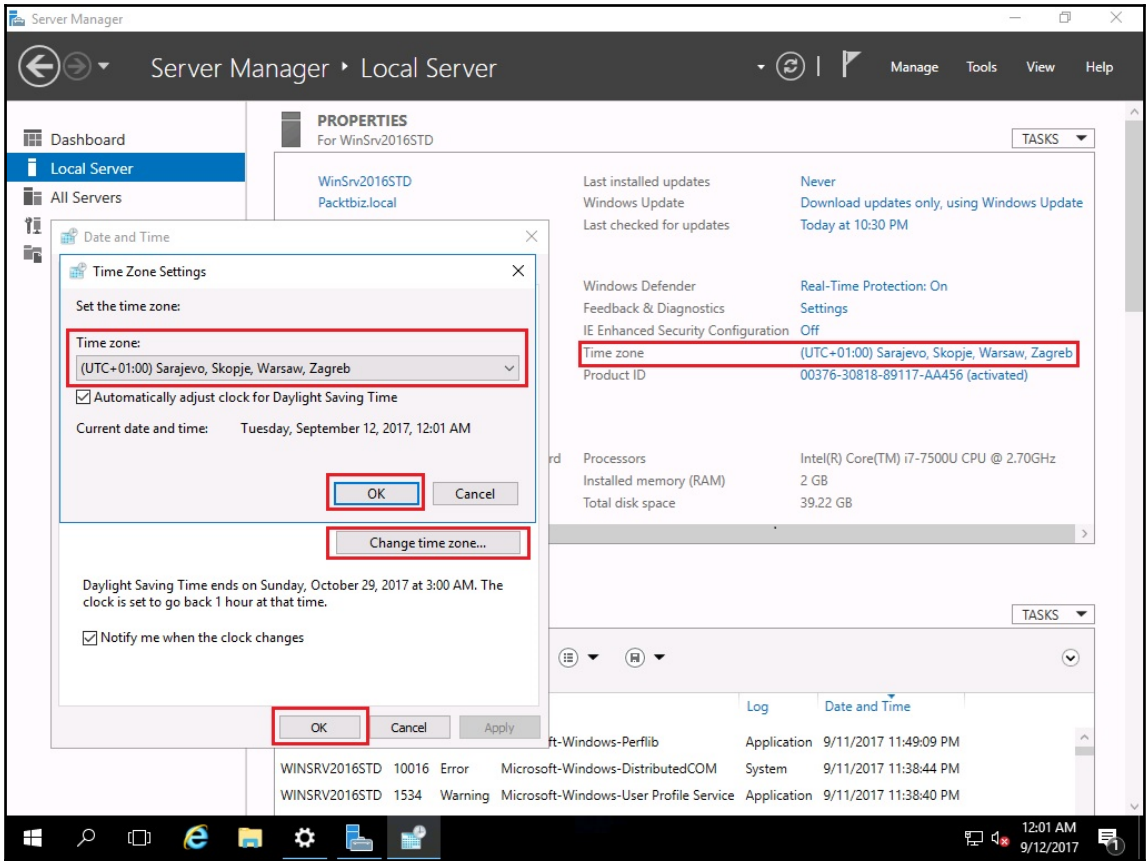
Users:
 On (Recommended)
 Off

[More about Internet Explorer Enhanced Security Configuration](#)

OK Cancel

Log	Date and Time
WINSRV2016STD 1008 Error Microsoft-Windows-Perflib Application	9/11/2017 11:49:09 PM
WINSRV2016STD 10016 Error Microsoft-Windows-DistributedCOM System	9/11/2017 11:38:44 PM
WINSRV2016STD 1534 Warning Microsoft-Windows-User Profile Service Application	9/11/2017 11:38:40 PM

11:50 PM
9/11/2017



Server Manager

Server Manager ▸ Local Server

Dashboard
Local Server
All Servers

PROPERTIES

For WinSrv2016STD

WinSrv2016STD	Last installed updates	Never
WORKGROUP	Windows Update	Install updates automatically using Windows Update
	Last checked for updates	Never
Public: On	Windows Defender	Real-Time Protection: On
nabled	Feedback & Diagnostics	Settings
Disabled	IE Enhanced Security Configuration	On
Disabled	Time zone	(UTC+01:00) Sarajevo, Skopje, Warsaw, Zagreb
Pv4 address assigned by DHCP, IPv6 enabled	Product ID	Not activated
Microsoft Windows Server 2016 Standard	Processors	Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz
Microsoft Corporation Virtual Machine	Installed memory (RAM)	2 GB
	Total disk space	39.11 GB

EVENTS

All events | 0 total

Filter

Server Name	ID	Severity	Source	Log	Date and Time
-------------	----	----------	--------	-----	---------------

12:13 AM
9/12/2017

Administrator: C:\Windows\system32\cmd.exe - sconfig.cmd

Microsoft (R) Windows Script Host Version 5.812
Copyright (C) Microsoft Corporation. All rights reserved.

Inspecting system...

=====

Server Configuration

=====

- | | |
|---------------------------------|----------------------|
| 1) Domain/Workgroup: | Workgroup: WORKGROUP |
| 2) Computer Name: | WIN-7QTUGHDQMSI |
| 3) Add Local Administrator | |
| 4) Configure Remote Management | Enabled |
| 5) Windows Update Settings: | DownloadOnly |
| 6) Download and Install Updates | |
| 7) Remote Desktop: | Disabled |
| 8) Network Settings | |
| 9) Date and Time | |
| 10) Telemetry settings | Enhanced |
| 11) Windows Activation | |
| 12) Log Off User | |
| 13) Restart Server | |
| 14) Shut Down Server | |
| 15) Exit to Command Line | |

Enter number to select an option:

Administrator: C:\Windows\system32\cmd.exe - sconfig.cmd
Microsoft (R) Windows Script Host Version 5.812
Copyright (C) Microsoft Corporation. All rights reserved.

Inspecting system...

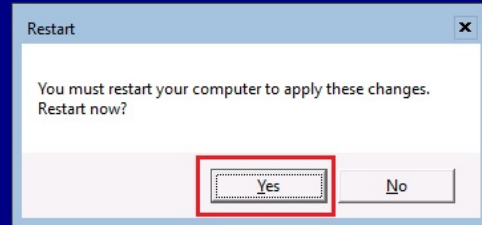
=====
Server Configuration
=====

- 1) Domain/Workgroup: Workgroup: WORKGROUP
- 2) Computer Name: WIN-7QTUGHDQMSI
- 3) Add Local Administrator
- 4) Configure Remote Management Enabled
- 5) Windows Update Settings: DownloadOnly
- 6) Download and Install Updates
- 7) Remote Desktop: Disabled
- 8) Network Settings
- 9) Date and Time
- 10) Telemetry settings Enhanced
- 11) Windows Activation
- 12) Log Off User
- 13) Restart Server
- 14) Shut Down Server
- 15) Exit to Command Line

Enter number to select an option: 2

Computer Name

Enter new computer name (Blank=Cancel): WinSrv2016SC
Changing Computer name...



Administrator: C:\Windows\system32\cmd.exe - powershell

Microsoft (R) Windows Script Host Version 5.812
Copyright (C) Microsoft Corporation. All rights reserved.

Inspecting system...

=====
Server Configuration
=====

- | | |
|---------------------------------|----------------------|
| 1) Domain/Workgroup: | Workgroup: WORKGROUP |
| 2) Computer Name: | WINSRV2016SC |
| 3) Add Local Administrator | |
| 4) Configure Remote Management | Enabled |
| 5) Windows Update Settings: | DownloadOnly |
| 6) Download and Install Updates | |
| 7) Remote Desktop: | Disabled |
| 8) Network Settings | |
| 9) Date and Time | |
| 10) Telemetry settings | Enhanced |
| 11) Windows Activation | |
| 12) Log Off User | |
| 13) Restart Server | |
| 14) Shut Down Server | |
| 15) Exit to Command Line | |

Enter number to select an option: 1

Change Domain/Workgroup Membership

Join (D)omain or (W)orkgroup? (Blank=Cancel) D

Join Domain

Name of domain to join: PacktBiz.local

Specify an authorized domain\user: PacktBiz\Administrator

Joining PacktBiz.local...

Change computer name

Do you want to change the computer name before restarting the computer?

Yes

No

```
Administrator: C:\Windows\system32\cmd.exe - powershell
Microsoft (R) Windows Script Host Version 5.812
Copyright (C) Microsoft Corporation. All rights reserved.

Inspecting system...

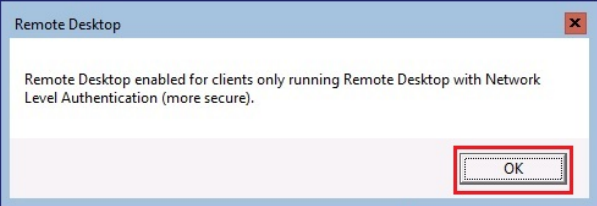
=====
Server Configuration
=====

1) Domain/Workgroup:           Domain: PacktBiz.local
2) Computer Name:             WINSRV2016SC
3) Add Local Administrator
4) Configure Remote Management Enabled
5) Windows Update Settings:   DownloadOnly
6) Download and Install Updates
7) Remote Desktop:           Disabled
8) Network Settings
9) Date and Time
10) Telemetry settings        Enhanced
11) Windows Activation

12) Log Off User
13) Restart Server
14) Shut Down Server
15) Exit to Command Line

Enter number to select an option: 7

(E)nable or (D)isable Remote Desktop? (Blank=Cancel) E
1) Allow only clients running Remote Desktop with Network Level Authentication (more secure)
2) Allow clients running any version of Remote Desktop (less secure)
Enter selection: 1
Enabling Remote Desktop...
```



```
(E)nable or (D)isable Remote Desktop? (Blank=Cancel) E
1) Allow only clients running Remote Desktop with Network Level Authentication (more secure)
2) Allow clients running any version of Remote Desktop (less secure)
Enter selection: 1
Enabling Remote Desktop...
```

Administrator: C:\Windows\system32\cmd.exe - powershell

Network Adapter Settings

```
-----  
NIC Index           1  
Description         Microsoft Hyper-V Network Adapter  
IP Address          192.168.1.50    fe80::290d:68ff:99ed:41b7  
Subnet Mask         255.255.255.0  
DHCP enabled        False  
Default Gateway     192.168.1.1  
Preferred DNS Server 192.168.1.10  
Alternate DNS Server
```

- 1) Set Network Adapter Address
- 2) Set DNS Servers
- 3) Clear DNS Server Settings
- 4) Return to Main Menu

Select option: 2
DNS Servers

Enter new preferred DNS server (Blank=Cancel): 192.168.1.10
Enter alternate DNS server (Blank = none):

Network Adapter Settings

```
-----  
NIC Index           1  
Description         Microsoft Hyper-V Network Adapter  
IP Address          192.168.1.50    fe80::290d:68ff:99ed:41b7  
Subnet Mask         255.255.255.0  
DHCP enabled        False  
Default Gateway     192.168.1.1  
Preferred DNS Server 192.168.1.10  
Alternate DNS Server
```

- 1) Set Network Adapter Address
- 2) Set DNS Servers
- 3) Clear DNS Server Settings
- 4) Return to Main Menu

Select option: 4


```
Administrator: C:\Windows\system32\cmd.exe - powershell
1) Domain/Workgroup:          Domain: PacktBiz.local
2) Computer Name:           WINSRV2016SC
3) Add Local Administrator

C:\Windows\System32\cscript.exe
Microsoft (R) Windows Script Host Version 5.812
Copyright (C) Microsoft Corporation. All rights reserved.

Search for for (A)ll updates or (R)ecommended updates only? r
Searching for recommended updates...
List of applicable items on the machine:
1> Update for Windows Server 2016 for x64-based Systems (KB3199986)
2> Cumulative Update for Windows Server 2016 for x64-based Systems (KB3206632)
3> Definition Update for Windows Defender - KB2267602 (Definition 1.233.2733.0)

Select an option:
(A)ll updates, (N)o updates or (S)elect a single update? _

9) Windows Settings
10) Date and Time
11) Telemetry settings          Enhanced
12) Windows Activation
13) Log Off User
14) Restart Server
15) Shut Down Server
16) Exit to Command Line

Enter number to select an option:
```

Administrator: C:\Windows\system32\cmd.exe - powershell

```
1) Domain/Workgroup: Domain: PacktBiz.local
2) Computer Name: WINSRV2016SC
3) Add Local Administrator
4) Configure Remote Management Enabled
5) Windows Update Settings: DownloadOnly
6) Download and Install Updates
7) Remote Desktop: Enabled (more secure clients only)
8) Network Settings
9) Date and Time
10) Telemetry settings Enhanced
11) Windows Activation

12) Log Off User
13) Restart Server
14) Shut Down Server
15) Exit to Command Line

Enter number to select an option: 9
```

=====

Server Configuration

=====

```
1) Domain/Workgroup: Domain: PacktBiz.l
2) Computer Name: WINSRV2016SC
3) Add Local Administrator
4) Configure Remote Management Enabled
5) Windows Update Settings: DownloadOnly
6) Download and Install Updates
7) Remote Desktop: Enabled (more secur
8) Network Settings
9) Date and Time
10) Telemetry settings Enhanced
11) Windows Activation

12) Log Off User
13) Restart Server
14) Shut Down Server
15) Exit to Command Line

Enter number to select an option:
```

Date and Time

Time Zone Settings

Set the time zone:

Time zone: (UTC+01:00) Sarajevo, Skopje, Warsaw, Zagreb

Automatically adjust clock for Daylight Saving Time

Current date and time: Tuesday, September 12, 2017, 11:31 AM
New date and time: Tuesday, September 12, 2017, 8:31 PM

OK Cancel

Change time zone...

Daylight Saving Time ends on Sunday, November 5, 2017 at 2:00 AM. The clock is set to go back 1 hour at that time.

Notify me when the clock changes

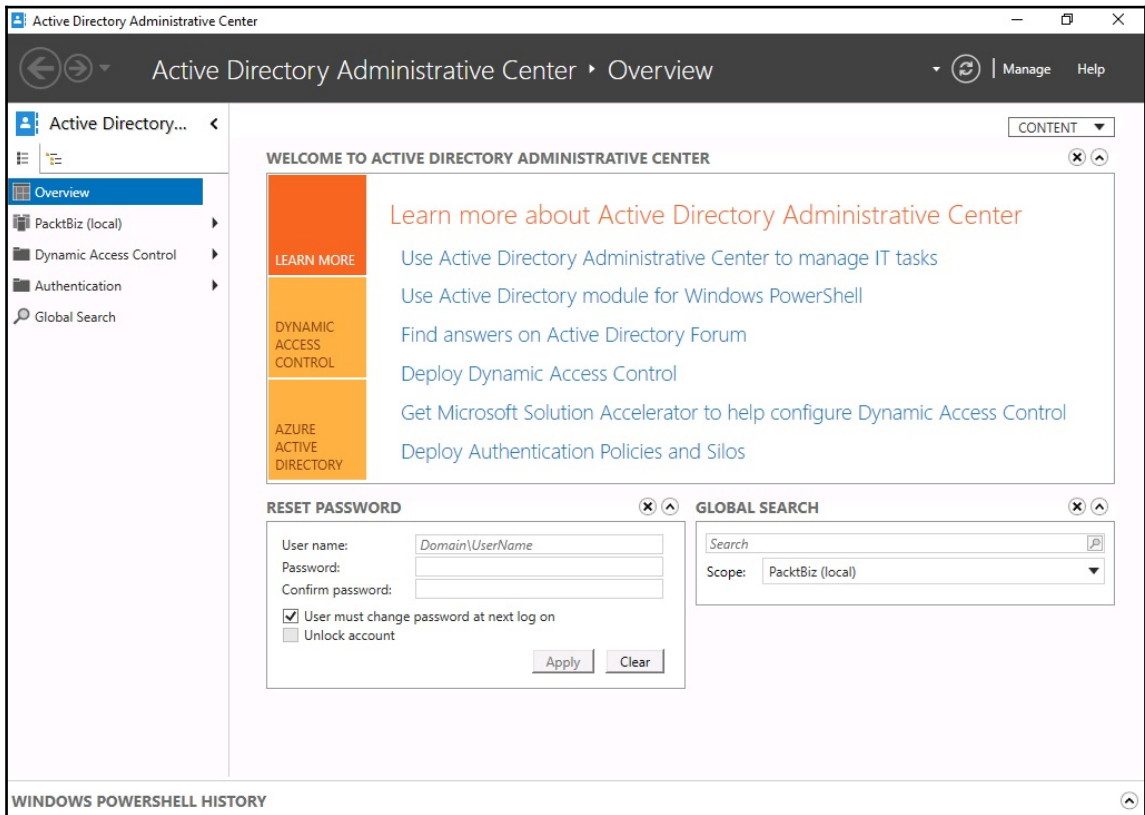
OK Cancel Apply

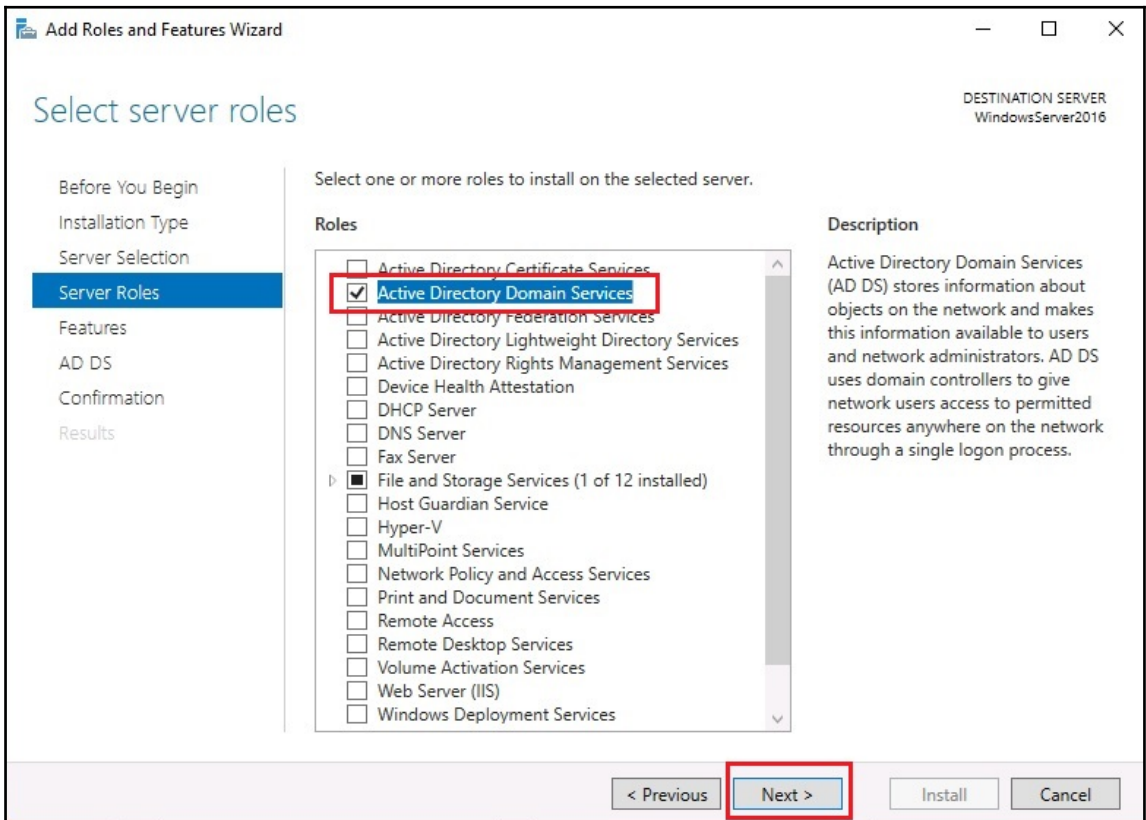
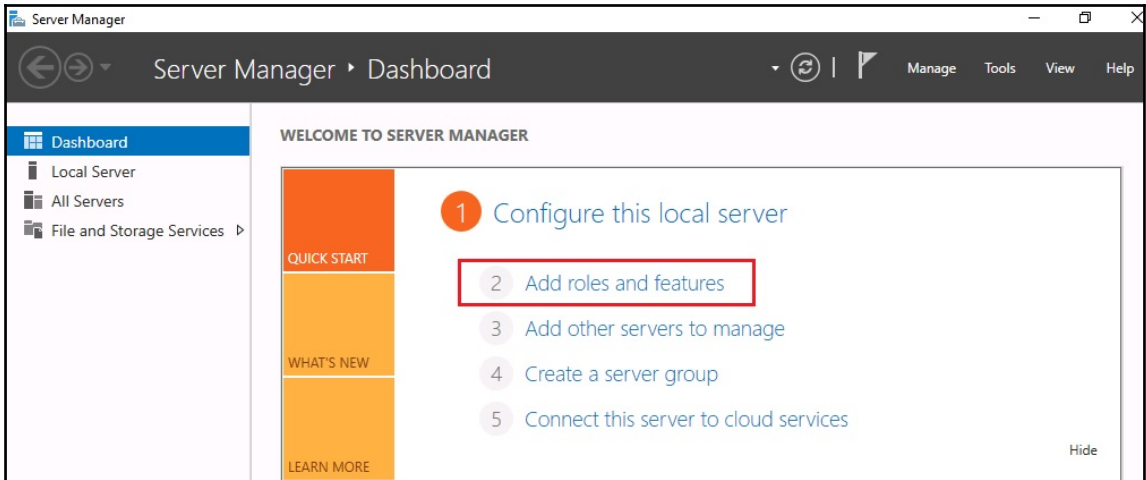
```
Administrator: C:\Windows\system32\cmd.exe - powershell
Administrator: C:\Windows\system32\cmd.exe
Microsoft (R) Windows Script Host Version 5.812
Copyright (C) Microsoft Corporation. All rights reserved.

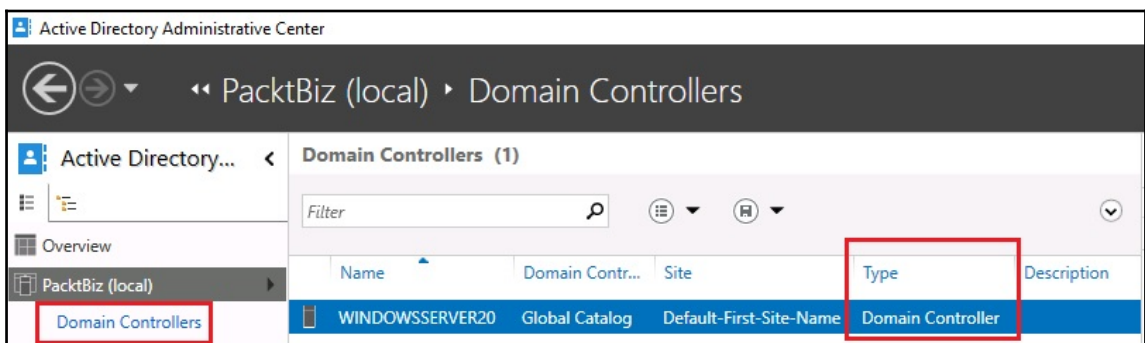
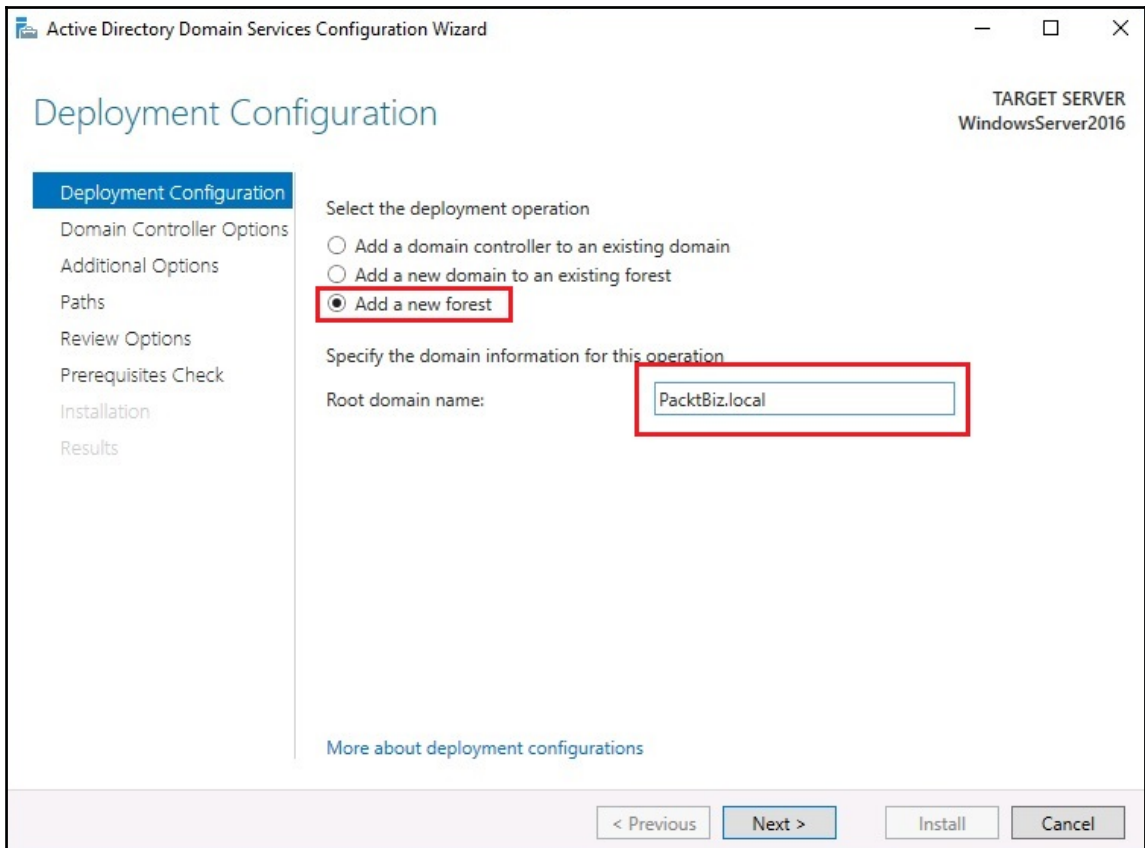
Activating Windows(R), ServerStandardEval edition (9dfa8ec0-7665-4b9d-b2cb-bfc2dc37c9f4) ...
Product activated successfully.

C:\Windows\System32\en-US>
3) Install Product key
4) Return to main menu
Enter selection: 2
-- Windows Activation --
1) Display License info
2) Activate Windows
3) Install Product key
4) Return to main menu
Enter selection: 4
```

Chapter 4: Directory Services in Windows Server







Deployment Configuration

TARGET SERVER
WindowsServer2016

Deployment Configuration

Domain Controller Options

Additional Options

Paths

Review Options

Prerequisites Check

Installation

Results

Select the deployment operation

- Add a domain controller to an existing domain
- Add a new domain to an existing forest
- Add a new forest

Specify the domain information for this operation

Root domain name:

PacktBiz.local

[More about deployment configurations](#)

< Previous

Next >

Install

Cancel

Deployment Configuration

TARGET SERVER
WinSrv2016STD

Deployment Configuration

Domain Controller Options

DNS Options

Additional Options

Paths

Review Options

Prerequisites Check

Installation

Results

Select the deployment operation

- Add a domain controller to an existing domain
- Add a new domain to an existing forest
- Add a new forest

Specify the domain information for this operation

Select domain type:

Forest name:

New domain name:

Supply the credentials to perform this operation

PacktBiz\Administrator

[More about deployment configurations](#)

< Previous

Next >

Install

Cancel

Deployment Configuration

Deployment Configuration

Domain Controller Options

DNS Options

Additional Options

Paths

Review Options

Prerequisites Check

Installation

Results

Select the deployment operation

- Add a domain controller to an existing domain
- Add a new domain to an existing forest
- Add a new forest

Specify the domain information for this operation

Root domain name:

PacktBiz.local

[More about deployment configurations](#)

< Previous

Next >

Install

Cancel

Deployment Configuration

Deployment Configuration

Domain Controller Options

DNS Options

Additional Options

Paths

Review Options

Prerequisites Check

Installation

Results

Select the deployment operation

- Add a domain controller to an existing domain
 Add a new domain to an existing forest
 Add a new forest

Specify the domain information for this operation

Select domain type:

Child Domain

Parent domain name:

ITBooks.local

Select...

New domain name:

SysAdmin.ITBooks.local

Supply the credentials to perform this operation

ITBooks\Administrator

Change...

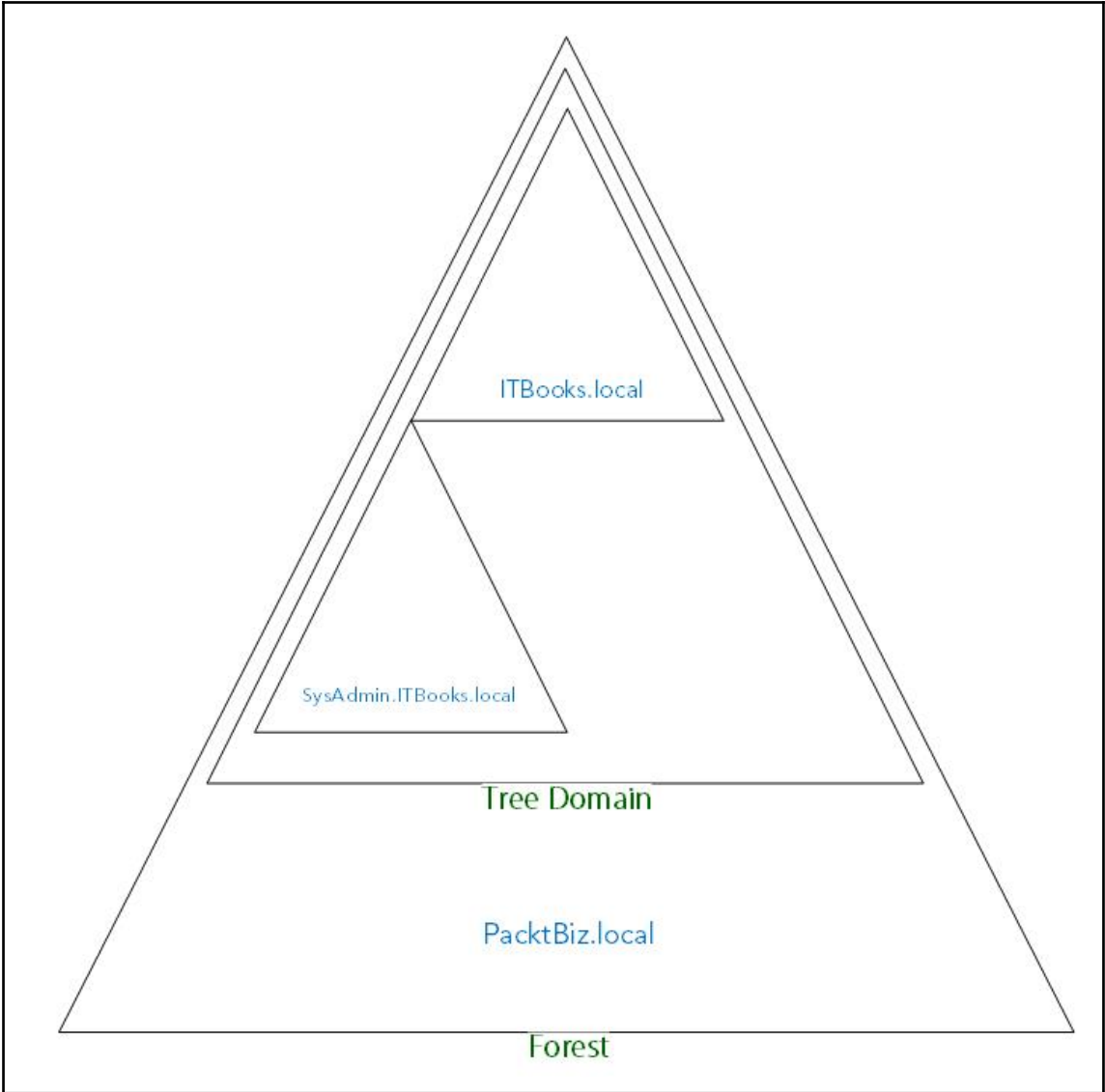
[More about deployment configurations](#)

< Previous

Next >

Install

Cancel



Domain Controller Options

Deployment Configuration

Domain Controller Options

DNS Options

Additional Options

Paths

Review Options

Prerequisites Check

Installation

Results

Select functional level of the new forest and root domain

Forest functional level: Windows Server 2016

Domain functional level: Windows Server 2016

Specify domain controller capabilities

- Domain Name System (DNS) server
- Global Catalog (GC)
- Read only domain controller (RODC)

Type the Directory Services Restore Mode (DSRM) password

Password: *

Confirm password: *

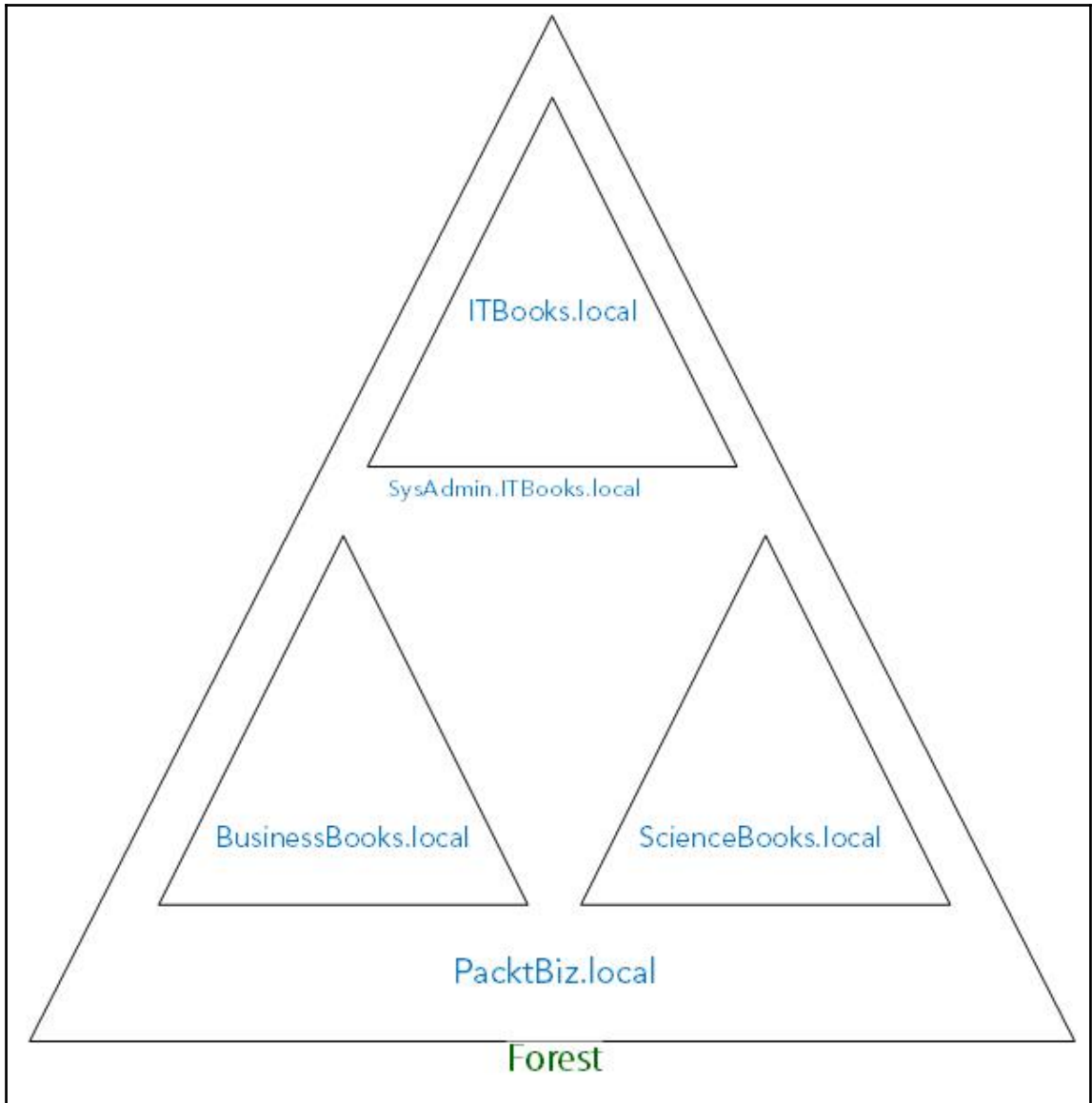
[More about domain controller options](#)

< Previous

Next >

Install

Cancel



Select server roles

DESTINATION SERVER
WinSrv2016STD

Before You Begin

Installation Type

Server Selection

Server Roles

Features

DNS Server

Confirmation

Results

Select one or more roles to install on the selected server.

Roles

- Active Directory Certificate Services
- Active Directory Domain Services (Installed)
- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services
- Device Health Attestation
- DHCP Server (Installed)
- DNS Server**
- Fax Server
- File and Storage Services (2 of 12 installed)
- Host Guardian Service
- Hyper-V
- MultiPoint Services
- Network Policy and Access Services
- Print and Document Services

Description

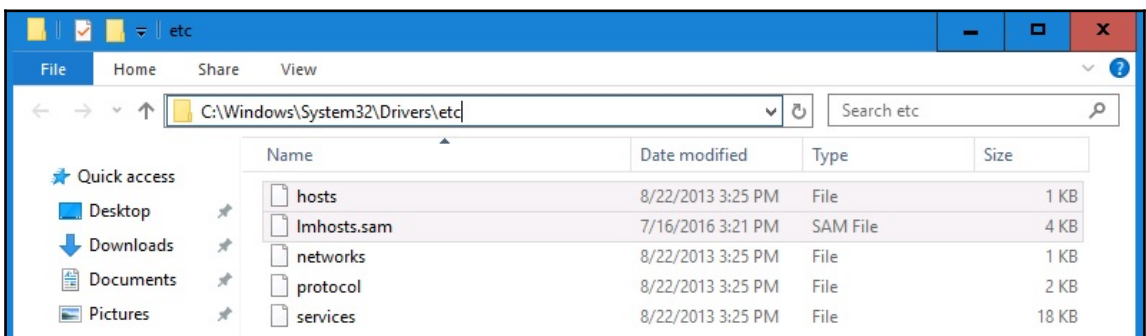
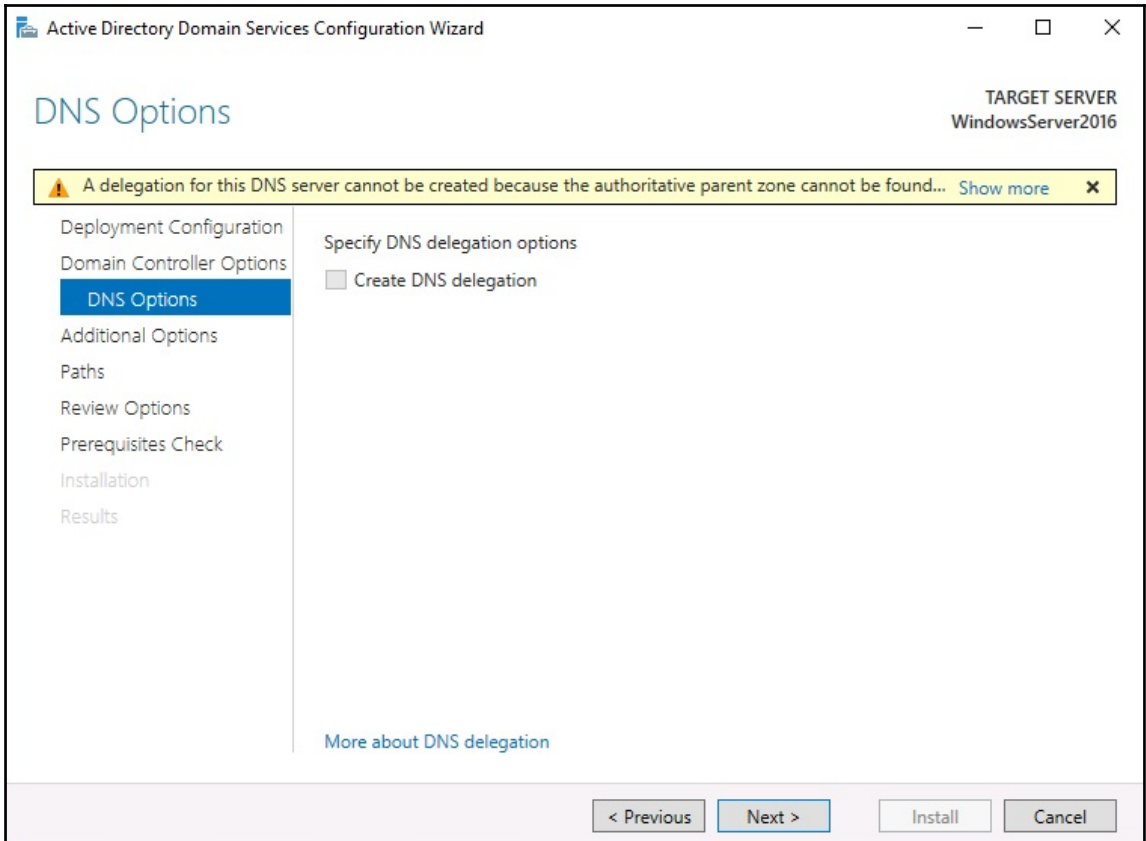
Domain Name System (DNS) Server provides name resolution for TCP/IP networks. DNS Server is easier to manage when it is installed on the same server as Active Directory Domain Services. If you select the Active Directory Domain Services role, you can install and configure DNS Server and Active Directory Domain Services to work together.

< Previous

Next >

Install

Cancel



Computer name:
WinSrv2016STD

Full computer name:
WinSrv2016STD

Add Roles and Features Wizard

Select features

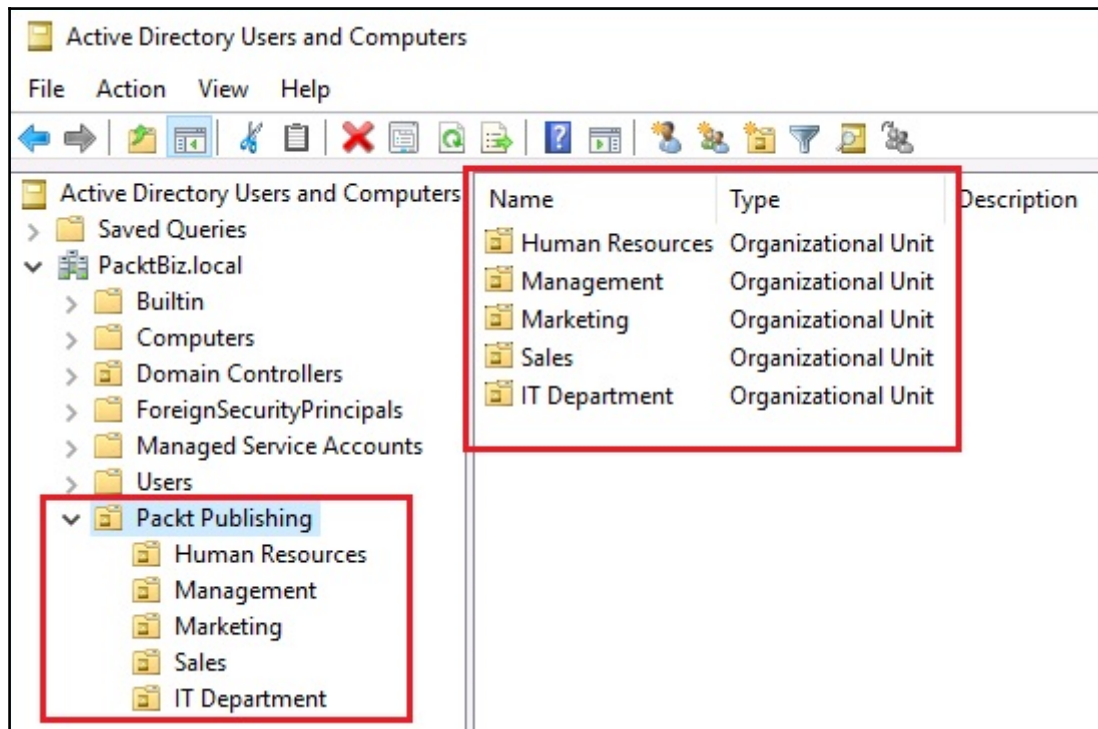
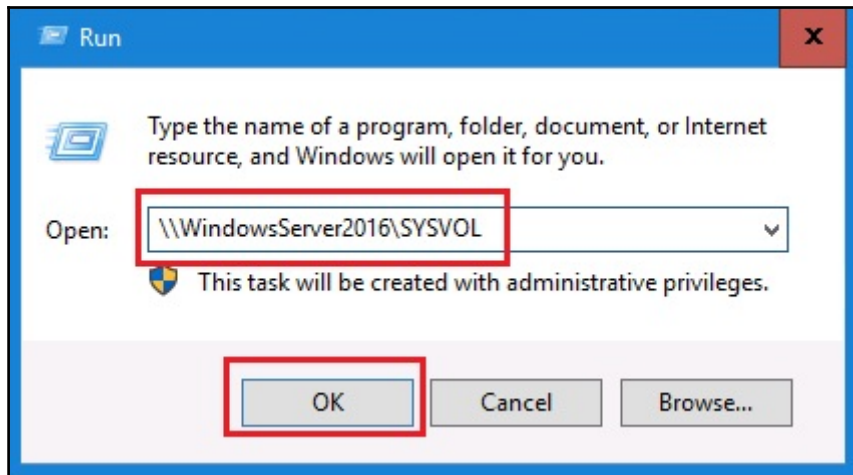
DESTINATION SERVER
WinSrv2016STD

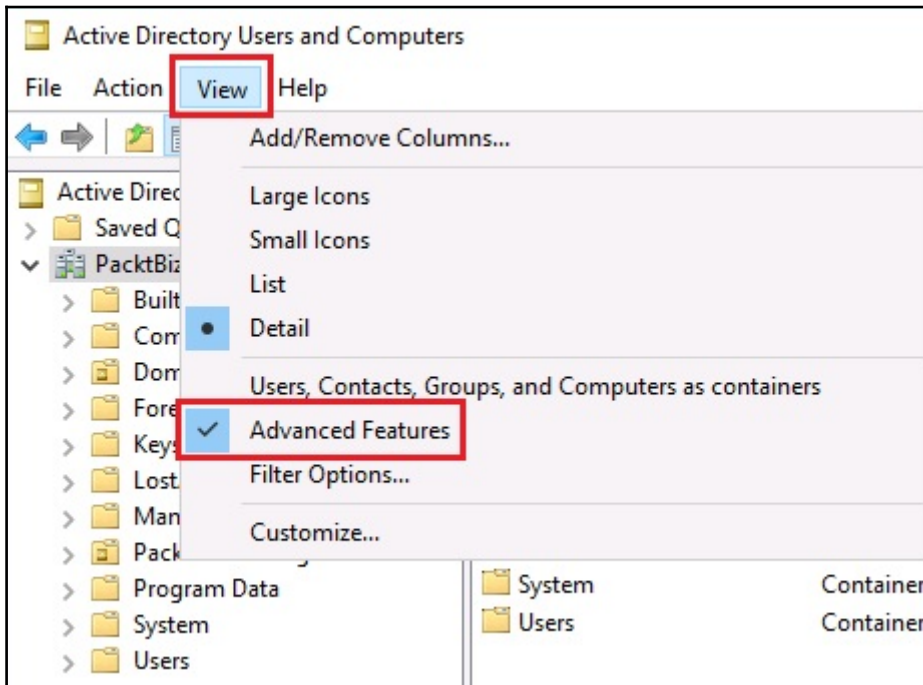
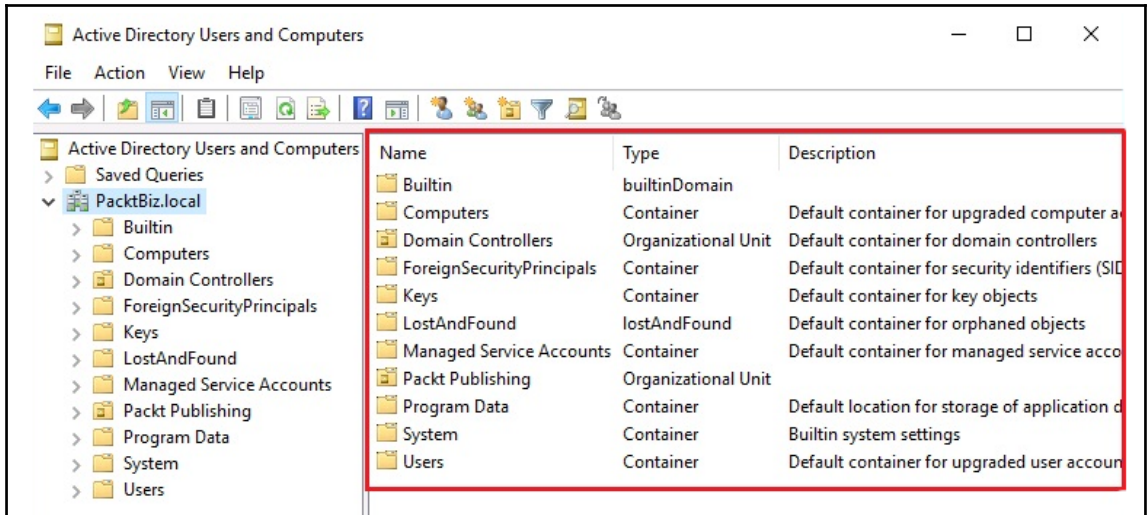
Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

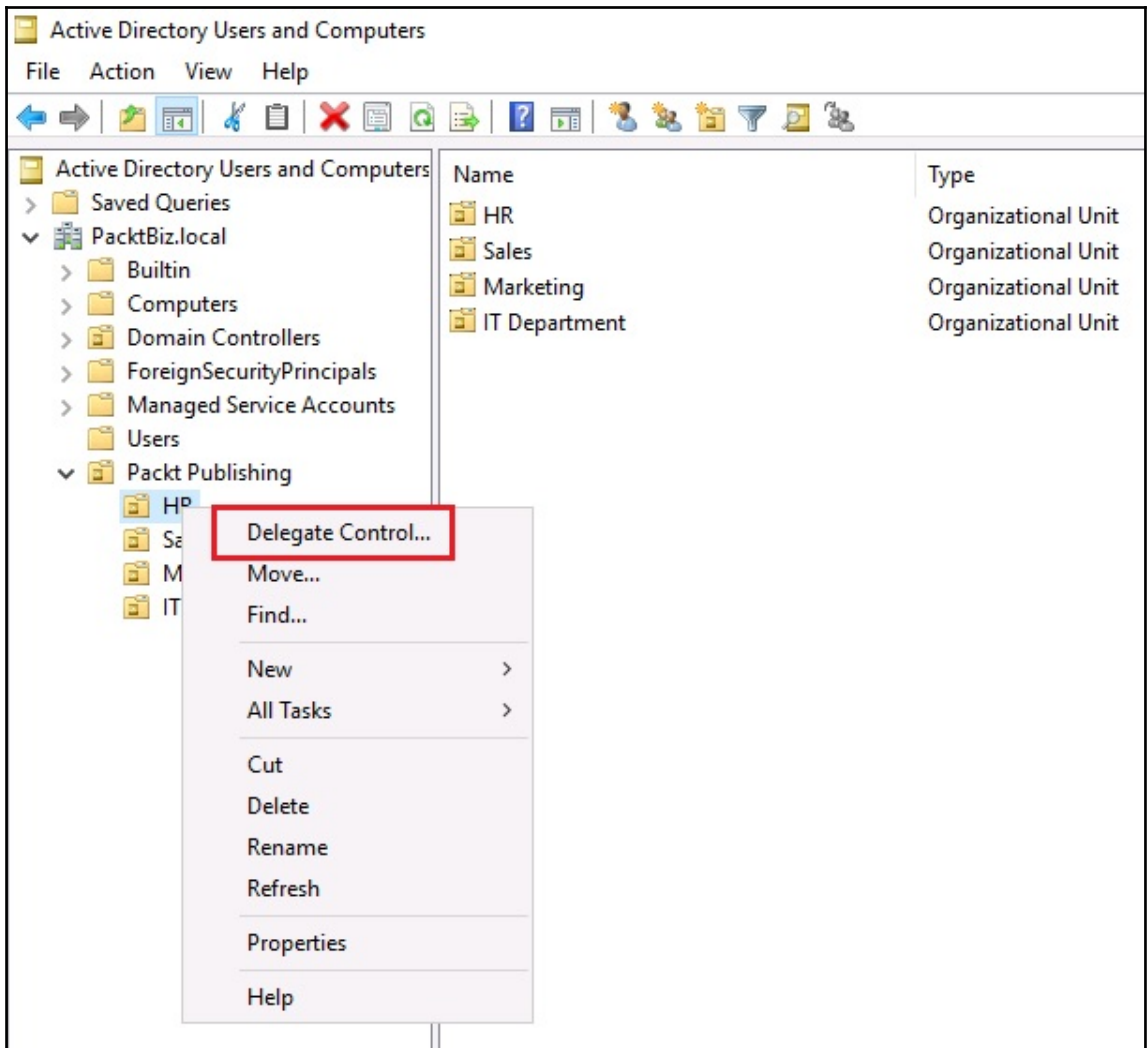
Select one or more features to install on the selected server.

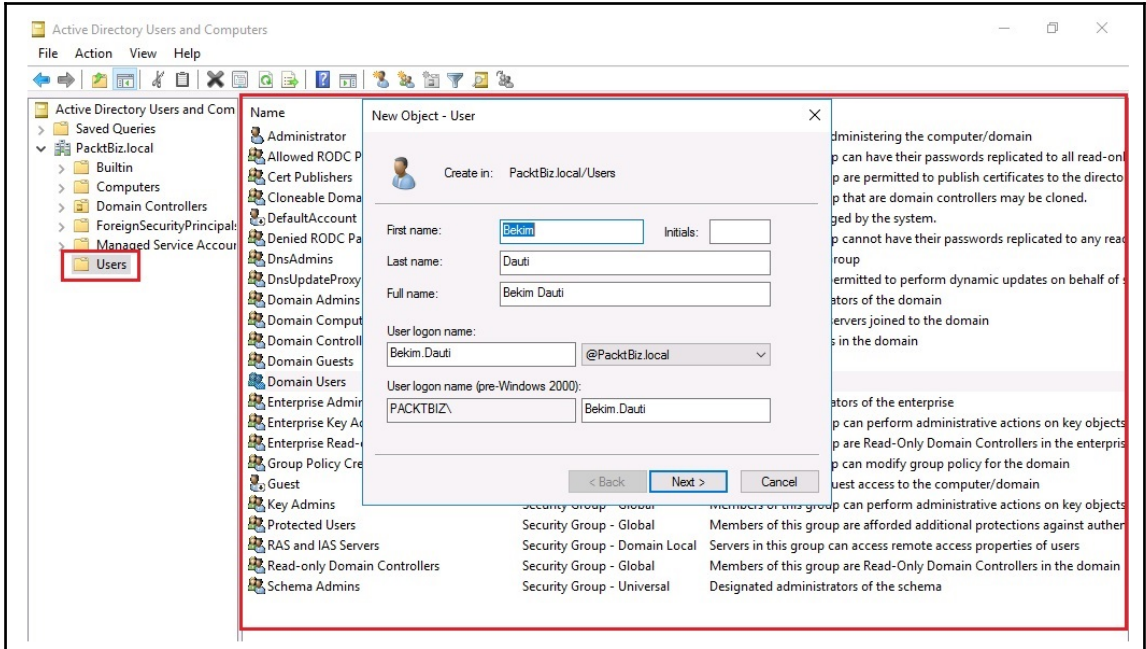
Features	Description
<input type="checkbox"/> Windows Identity Foundation 3.5	
<input type="checkbox"/> Windows Internal Database	
<input checked="" type="checkbox"/> Windows PowerShell (2 of 5 installed)	
<input type="checkbox"/> Windows Process Activation Service	
<input type="checkbox"/> Windows Search Service	
<input type="checkbox"/> Windows Server Backup	
<input checked="" type="checkbox"/> Windows Server Migration Tools (Installed)	
<input type="checkbox"/> Windows Standards-Based Storage Management	
<input type="checkbox"/> Windows TIFF IFilter	
<input type="checkbox"/> WinRM HS Extension	
<input checked="" type="checkbox"/> WINS Server	Windows Internet Naming Service (WINS) Server provides a distributed database for registering and querying dynamic mappings of NetBIOS names for computers and groups used on your network. WINS maps NetBIOS names to IP addresses and solves the problems arising from NetBIOS name resolution in routed environments.
<input type="checkbox"/> Wireless LAN Service	
<input checked="" type="checkbox"/> WoW64 Support (Installed)	
<input type="checkbox"/> XPS Viewer	

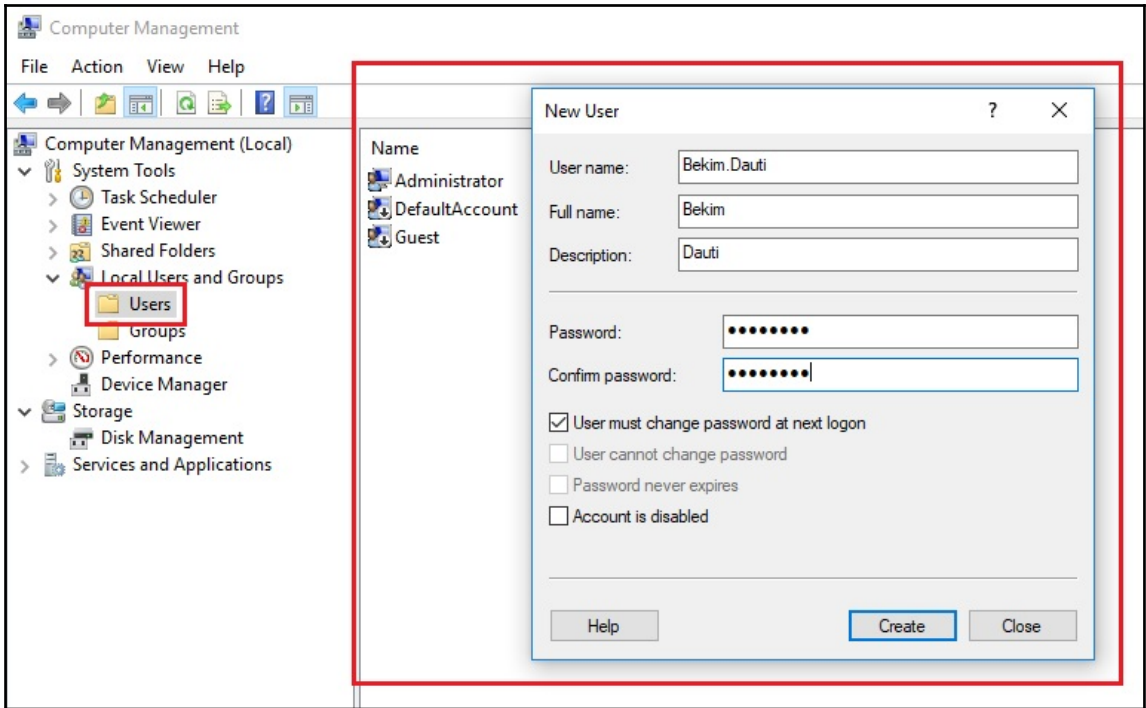
< Previous Next > Install Cancel

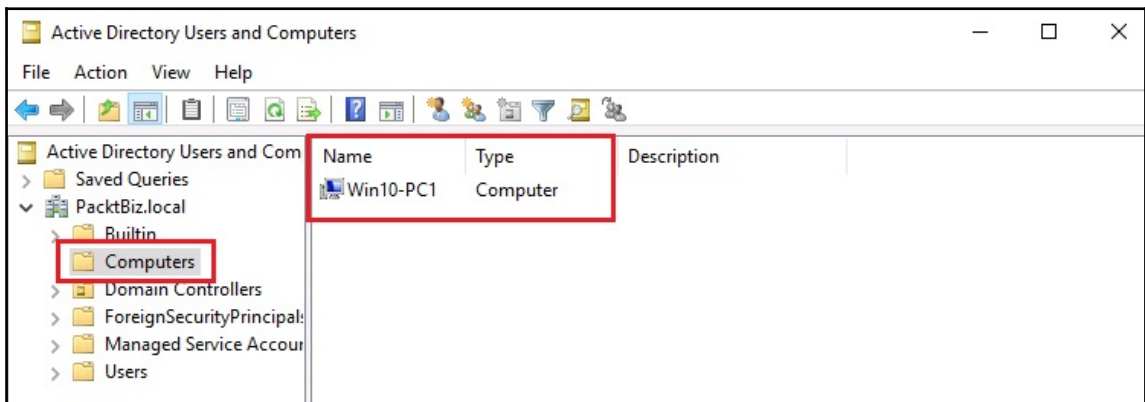
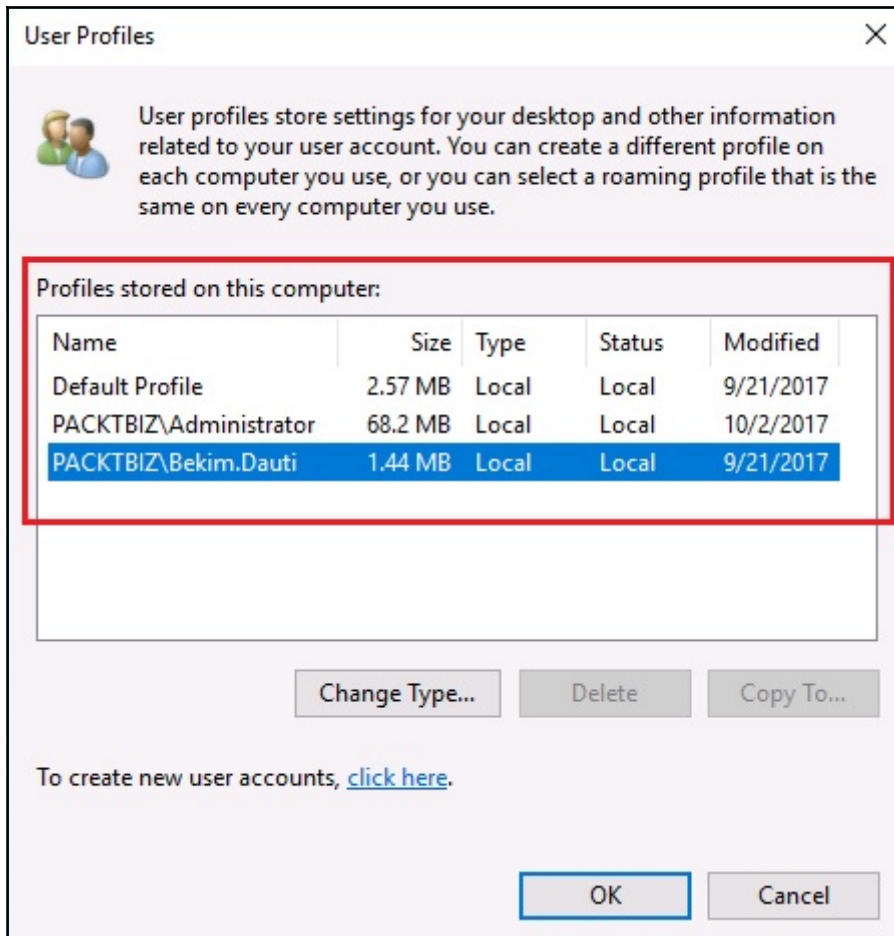


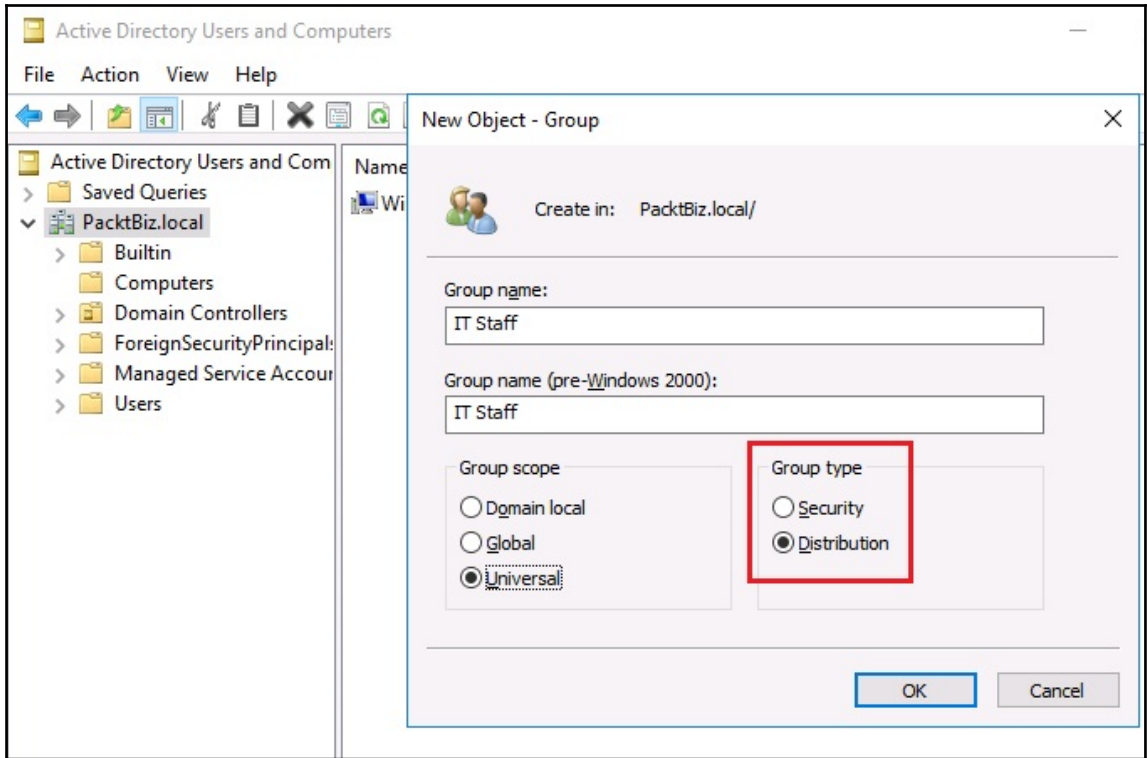












Active Directory Users and Computers


File Action View Help

Active Directory Users and Computers

- Saved Queries
- PaektBiz.local
 - Builtin
 - Computers
 - Domain Controllers
 - ForeignSecurityPrincipals
 - Managed Service Accounts
 - Users

Name	Type	Description
Bekim Dauti	User	
IT Staff	Distribution Group - Universal	
DefaultAccount	User	A user account managed by the system.
Domain Controllers	Security Group - Global	All domain controllers in the domain
Domain Guests	Security Group - Global	All domain guests
Domain Users	Security Group - Global	All domain users
Domain Computers	Security Group - Global	All workstations and servers joined to the domain
Administrator	User	Built-in account for administering the computer/domain
Guest	User	Built-in account for guest access to the computer/domain
Domain Admins	Security Group - Global	Designated administrators of the domain
Enterprise Admins	Security Group - Universal	Designated administrators of the enterprise
Schema Admins	Security Group - Universal	Designated administrators of the schema
DnsAdmins	Security Group - Domain Local	DNS Administrators Group
DnsUpdateProxy	Security Group - Global	DNS clients who are permitted to perform dynamic updates on behalf of the domain
Allowed RODC Password Replication Group	Security Group - Domain Local	Members in this group can have their passwords replicated to all Read-Only Domain Controllers in the domain
Group Policy Creator Owners	Security Group - Global	Members in this group can modify group policy for the domain
Denied RODC Password Replication Group	Security Group - Domain Local	Members in this group cannot have their passwords replicated to any Read-Only Domain Controllers in the domain
Protected Users	Security Group - Global	Members of this group are afforded additional protections against password replication to Read-Only Domain Controllers
Cert Publishers	Security Group - Domain Local	Members of this group are permitted to publish certificates to the domain
Read-only Domain Controllers	Security Group - Global	Members of this group are Read-Only Domain Controllers in the domain
Enterprise Read-only Domain Controllers	Security Group - Universal	Members of this group are Read-Only Domain Controllers in the enterprise
Key Admins	Security Group - Global	Members of this group can perform administrative actions on key objects in the domain
Enterprise Key Admins	Security Group - Universal	Members of this group can perform administrative actions on key objects in the enterprise
Cloneable Domain Controllers	Security Group - Global	Members of this group that are domain controllers may be cloned.
RAS and IAS Servers	Security Group - Domain Local	Servers in this group can access remote access properties of users

New Object - Group ✕

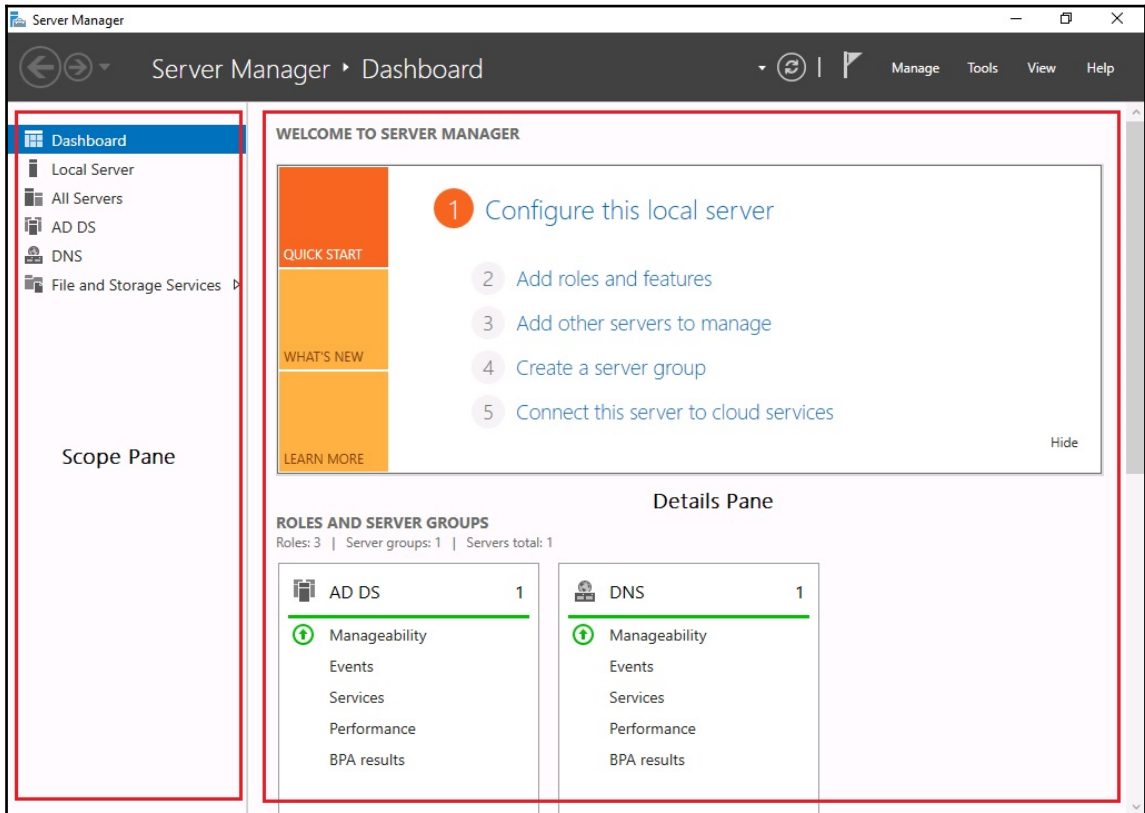
 Create in: PacktBiz.local/Users

Group name:

Group name (pre-Windows 2000):

<p>Group scope</p> <p><input type="radio"/> Domain local</p> <p><input type="radio"/> Global</p> <p><input checked="" type="radio"/> Universal</p>	<p>Group type</p> <p><input checked="" type="radio"/> Security</p> <p><input type="radio"/> Distribution</p>
--	--

Chapter 5: Adding Roles to Windows Server



Select features

- Before You Begin
- Installation Type
- Server Selection
- Server Roles
- Features**
- Web Server Role (IIS)
 - Role Services
- Confirmation
- Results

Select one or more features to install on the selected server.

Features

- Remote Server Administration Tools (4 of 41 instal ^
- RPC over HTTP Proxy
- Setup and Boot Event Collection
- Simple TCP/IP Services
- SMB 1.0/CIFS File Sharing Support (Installed)
- SMB Bandwidth Limit
- SMTP Server**
- SNMP Service
- Telnet Client
- TFTP Client
- VM Shielding Tools for Fabric Management
- WebDAV Redirector
- Windows Biometric Framework
- Windows Defender Features (Installed)
- Windows Identity Foundation 3.5
- Windows Internal Database
- Windows PowerShell (2 of 5 installed)
- Windows Process Activation Service
- Windows Search Service

Description

SMTP Server supports the transfer of e-mail messages between e-mail systems.

< Previous

Next >

Install

Cancel

Select server roles

DESTINATION SERVER
WindowsServer2016.PacktBiz.local

Before You Begin

Installation Type

Server Selection

Server Roles

Features

Web Server Role (IIS)

Role Services

Confirmation

Results

Select one or more roles to install on the selected server.

Roles

- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services
- Device Health Attestation
- DHCP Server
- DNS Server (Installed)
- Fax Server
- File and Storage Services (2 of 12 installed)
- Host Guardian Service
- Hyper-V
- MultiPoint Services
- Network Policy and Access Services
- Print and Document Services
- Remote Access
- Remote Desktop Services
- Volume Activation Services
- Web Server (IIS)**
- Windows Deployment Services
- Windows Server Essentials Experience
- Windows Server Update Services

Description

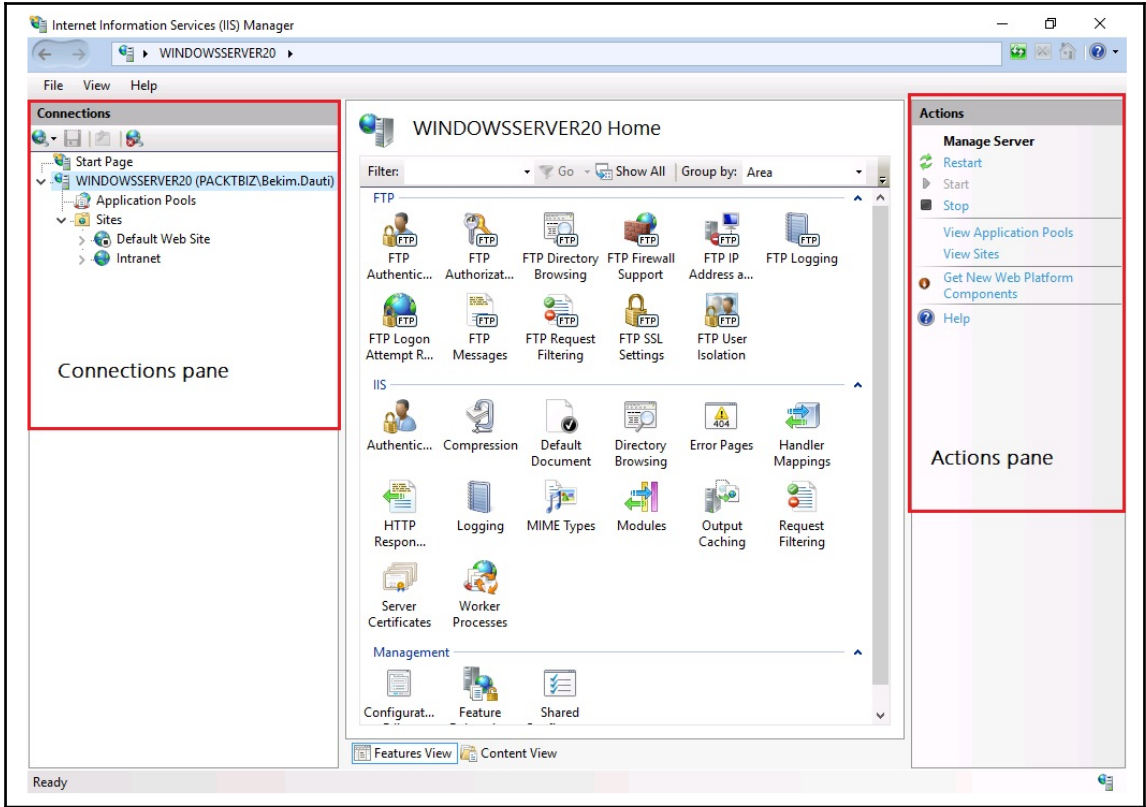
Web Server (IIS) provides a reliable, manageable, and scalable Web application infrastructure.

< Previous

Next >

Install

Cancel



The image shows a web browser window displaying the Packt Publishing website. The main content area features a large orange banner with the text "5 for \$50 Bundles" and "Get all the content you need for an incredible price." Below the banner, there are five book covers: "Python Machine Learning By Example", "JavaScript 2 book", "Spring in", "Creative book", and "CUI Programming book".

The browser's address bar shows the URL "https://www.packtpub.com/". The browser's developer tools are open, showing the "Debugger" tab. The "Network" pane is active, displaying the HTML source code of the page. The code includes a DOCTYPE declaration, an HTML root element with an XML namespace, a head section with a title "Packt Publishing | Technology Books, eBooks & Videos | <tit", and several script tags. One script tag is highlighted, showing a JavaScript function that initializes a site ID and sets up a cookie expiration date.

```
1 <!DOCTYPE html>
2 <html xmlns="http://www.w3.org/1999/xhtml" lang="en" xml:lang="en">
3   <head>
4     <title>Packt Publishing | Technology Books, eBooks & Videos | <tit
5     <script>
6       dataLayer = [];
7     </script>
8     <script type="text/javascript">
9       var GRANIFY_SITE_ID = 1318;(function(e,t,n){var r,i,s,o,u;u=fal
expires="+i.toGMTString()+";path=/"})catch(a){}if(u)e.replace("javascript.j
01-Jan-1970 00:00:01 GMT;path=/"");if(!window.location.origin){if(window.loc
referrer=document.referrer;i=new Date(+new Date)+1e3*60*30);document.cooki
v="+a;window.Granify=n;n_stack=[];n.init=function(e,t,r){function i(e,t){e
p=document.createElement("iframe");p.src="javascript:false";p.title="";p.rc
!important;";c=document.getElementsByTagName("script");c=c[c.length-1];c.pa
t<this.createElement("script");if(f)this.domain=f;t.id="is-iframe-async">t.
```

Select role services

DESTINATION SERVER
WindowsServer2016.Pack81z.local

Before You Begin

Installation Type

Server Selection

Server Roles

Features

Web Server Role (IIS)

Role Services

Confirmation

Results

Select the role services to install for Web Server (IIS)

Role services

- Security
 - Request Filtering
 - Basic Authentication
 - Centralized SSL Certificate Support
 - Client Certificate Mapping Authentication
 - Digest Authentication
 - IIS Client Certificate Mapping Authenticatic
 - IP and Domain Restrictions
 - URL Authorization
 - Windows Authentication
- Application Development
- FTP Server
 - FTP Service
 - FTP Extensibility
- Management Tools
 - IIS Management Console
 - IIS 6 Management Compatibility
 - IIS Management Scripts and Tools
 - Management Service

Description

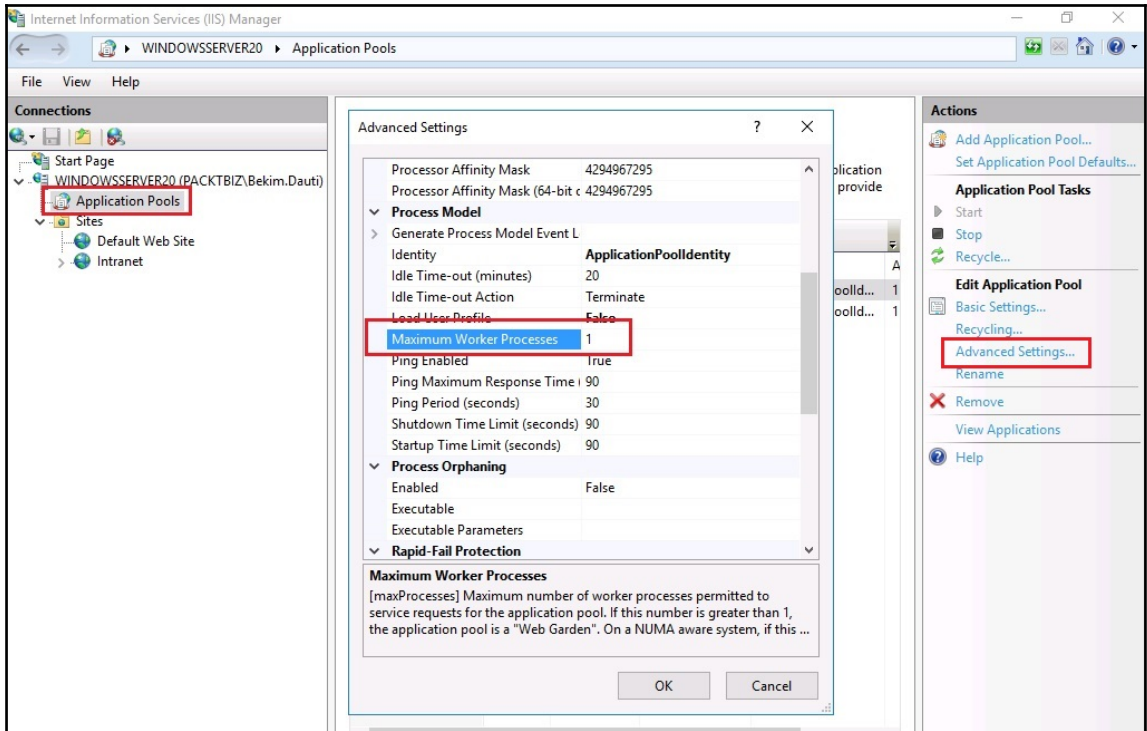
FTP Server enables the transfer of files between a client and server by using the FTP protocol. Users can establish an FTP connection and transfer files by using an FTP client or FTP-enabled Web browser.

< Previous

Next >

Install

Cancel




Windows Server


Internet Information Services

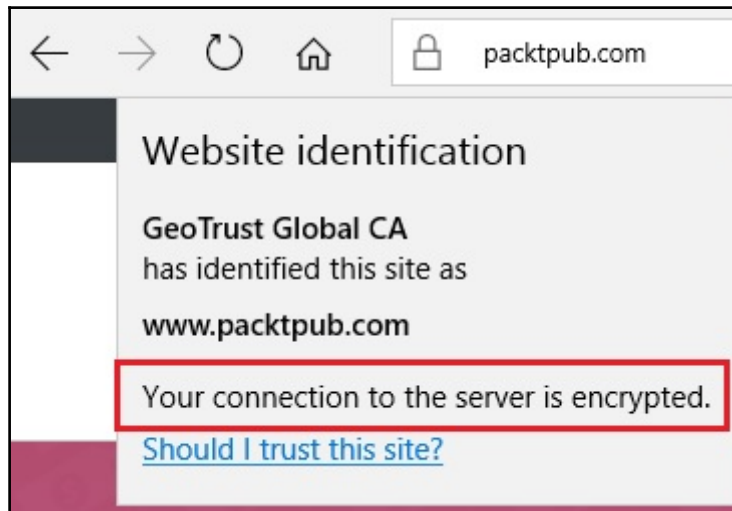
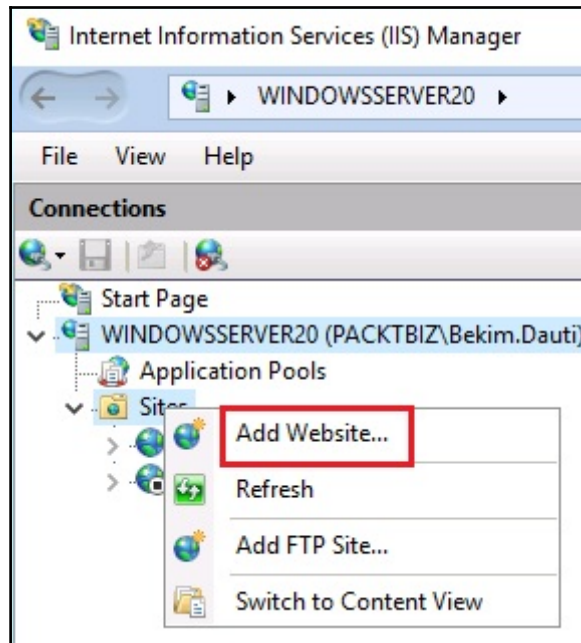
Welcome Bienvenue Tervetuloa

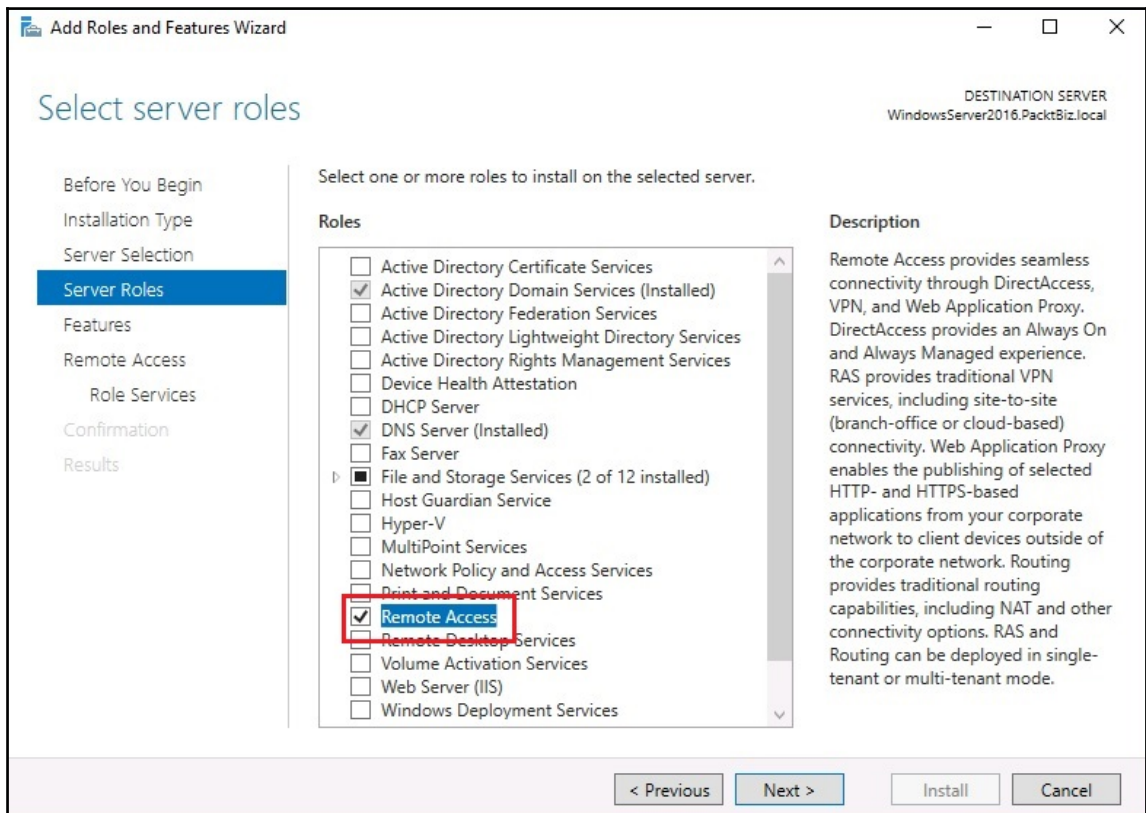
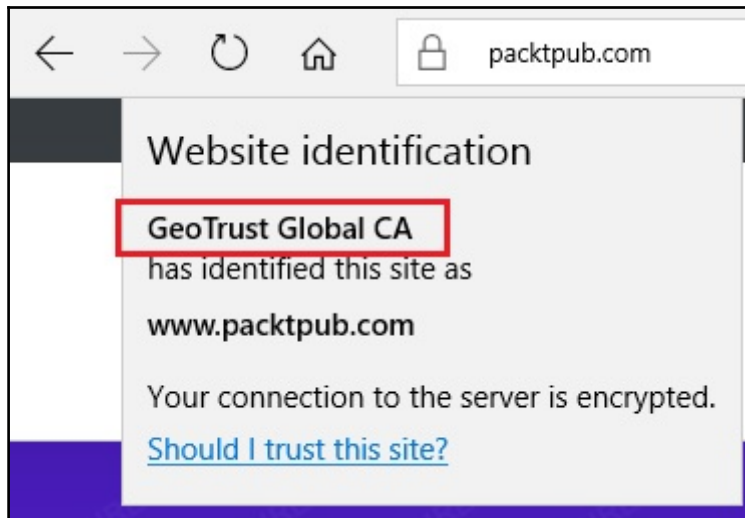
ようこそ Benvenuto 歡迎

Bem-vindo  Bienvenido Hoş geldiniz ברוכים הבאים Welkom

Vítejte Καλώς ορίσαστε Välkommen 환영합니다 Добро пожаловать Üdvözöljük

Microsoft Willkommen Willkommen Witamy  مرحبا 歡迎





Add Roles and Features Wizard

DESTINATION SERVER
WindowsServer2016.PacktBiz.local

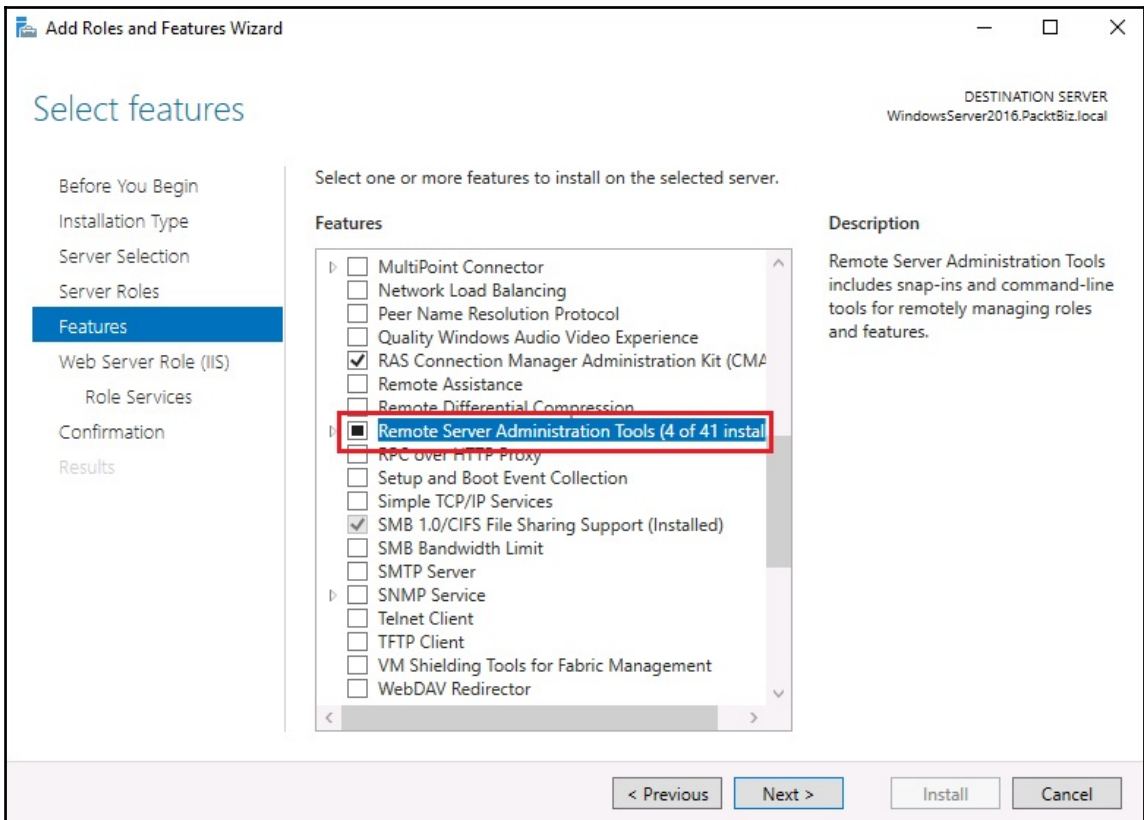
Select features

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Confirmation
Results

Select one or more features to install on the selected server.

Features	Description
<input type="checkbox"/> Multipath I/O	
<input type="checkbox"/> MultiPoint Connector	
<input type="checkbox"/> Network Load Balancing	
<input type="checkbox"/> Peer Name Resolution Protocol	
<input type="checkbox"/> Quality Windows Audio Video Experience	
<input type="checkbox"/> RAS Connection Manager Administration Kit (CMA)	
<input checked="" type="checkbox"/> Remote Assistance	Remote Assistance enables you (or a support person) to help users with PC issues or questions. You can view and get control of the user's desktop to troubleshoot and fix problems. Users can also ask for help from friends or co-workers.
<input type="checkbox"/> Remote Differential Compression	
<input checked="" type="checkbox"/> Remote Server Administration Tools (4 of 41 installed)	
<input type="checkbox"/> RPC over HTTP Proxy	
<input type="checkbox"/> Setup and Boot Event Collection	
<input type="checkbox"/> Simple TCP/IP Services	
<input checked="" type="checkbox"/> SMB 1.0/CIFS File Sharing Support (Installed)	
<input type="checkbox"/> SMB Bandwidth Limit	
<input type="checkbox"/> SMTP Server	
<input type="checkbox"/> SNMP Service	
<input type="checkbox"/> Telnet Client	
<input type="checkbox"/> TFTP Client	
<input type="checkbox"/> VM Shielding Tools for Fabric Management	

< Previous Next > Install Cancel



Select server roles

DESTINATION SERVER
WindowsServer2016.PacktBiz.local

- Before You Begin
- Installation Type
- Server Selection
- Server Roles**
- Features
 - Web Server Role (IIS)
 - Role Services
 - Remote Desktop Services
 - Role Services
- Confirmation
- Results

Select one or more roles to install on the selected server.

Roles

- Active Directory Certificate Services
- Active Directory Domain Services (Installed)
- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services
- Device Health Attestation
- DHCP Server
- DNS Server (Installed)
- Fax Server
- File and Storage Services (2 of 12 installed)
 - Host Guardian Service
 - Hyper-V
 - MultiPoint Services
 - Network Policy and Access Services
 - Print and Document Services
 - Remote Access
 - Remote Desktop Services
 - Volume Activation Services
- Web Server (IIS)
- Windows Deployment Services

Description

Remote Desktop Services enables users to access virtual desktops, session-based desktops, and RemoteApp programs. Use the Remote Desktop Services installation to configure a Virtual machine-based or a Session-based desktop deployment.

< Previous

Next >

Install

Cancel

Select role services

DESTINATION SERVER
WindowsServer2016.PacktBiz.local

- Before You Begin
- Installation Type
- Server Selection
- Server Roles
- Features
- Remote Desktop Services
 - Role Services**
- Confirmation
- Results

Select the role services to install for Remote Desktop Services

Role services

- Remote Desktop Connection Broker
- Remote Desktop Gateway
- Remote Desktop Licensing**
- Remote Desktop Session Host
- Remote Desktop Virtualization Host
- Remote Desktop Web Access

Description

Remote Desktop Licensing (RD Licensing) manages the licenses required to connect to a Remote Desktop Session Host server or a virtual desktop. You can use RD Licensing to install, issue, and track the availability of licenses.

Select role services

DESTINATION SERVER
WindowsServer2016.PacktBiz.local

- Before You Begin
- Installation Type
- Server Selection
- Server Roles
- Features
- Remote Desktop Services
 - Role Services**
- Network Policy and Acces...
- Web Server Role (IIS)
 - Role Services
- Confirmation
- Results

Select the role services to install for Remote Desktop Services

Role services

- Remote Desktop Connection Broker
- Remote Desktop Gateway
- Remote Desktop Licensing
- Remote Desktop Session Host
- Remote Desktop Virtualization Host
- Remote Desktop Web Access

Description

Remote Desktop Gateway (RD Gateway) enables authorized users to connect to virtual desktops, RemoteApp programs, and session-based desktops on the corporate network or over the Internet.

Select role services

DESTINATION SERVER
WindowsServer2016.PacktBiz.local

- Before You Begin
- Installation Type
- Server Selection
- Server Roles
- Features
- Remote Access
 - Role Services**
- Web Server Role (IIS)
 - Role Services
- Confirmation
- Results

Select the role services to install for Remote Access

Role services

- DirectAccess and VPN (RAS)**
- Routing
- Web Application Proxy

Description

DirectAccess gives users the experience of being seamlessly connected to their corporate network any time they have Internet access. With DirectAccess, mobile computers can be managed any time the computer has Internet connectivity, ensuring mobile users stay up-to-date with security and system health policies. VPN uses the connectivity of the Internet plus a combination of tunnelling and data encryption technologies to connect remote clients and remote offices.

< Previous

Next >

Install

Cancel

Select server roles

- Before You Begin
- Installation Type
- Server Selection
- Server Roles**
- Features
- Confirmation
- Results

Select one or more roles to install on the selected server.

Roles

- Active Directory Certificate Services
- Active Directory Domain Services
- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services
- Device Health Attestation
- DHCP Server
- DNS Server
- Fax Server
- File and Storage Services (2 of 12 installed)
- File and iSCSI Services (1 of 11 installed)
 - File Server (Installed)
 - BranchCache for Network Files
 - Data Deduplication
 - ...

Description

File Server manages shared folders and enables users to access files on this computer from the network.

Add Roles and Features Wizard

DESTINATION SERVER
WindowsServer2016.Pack8iz.local

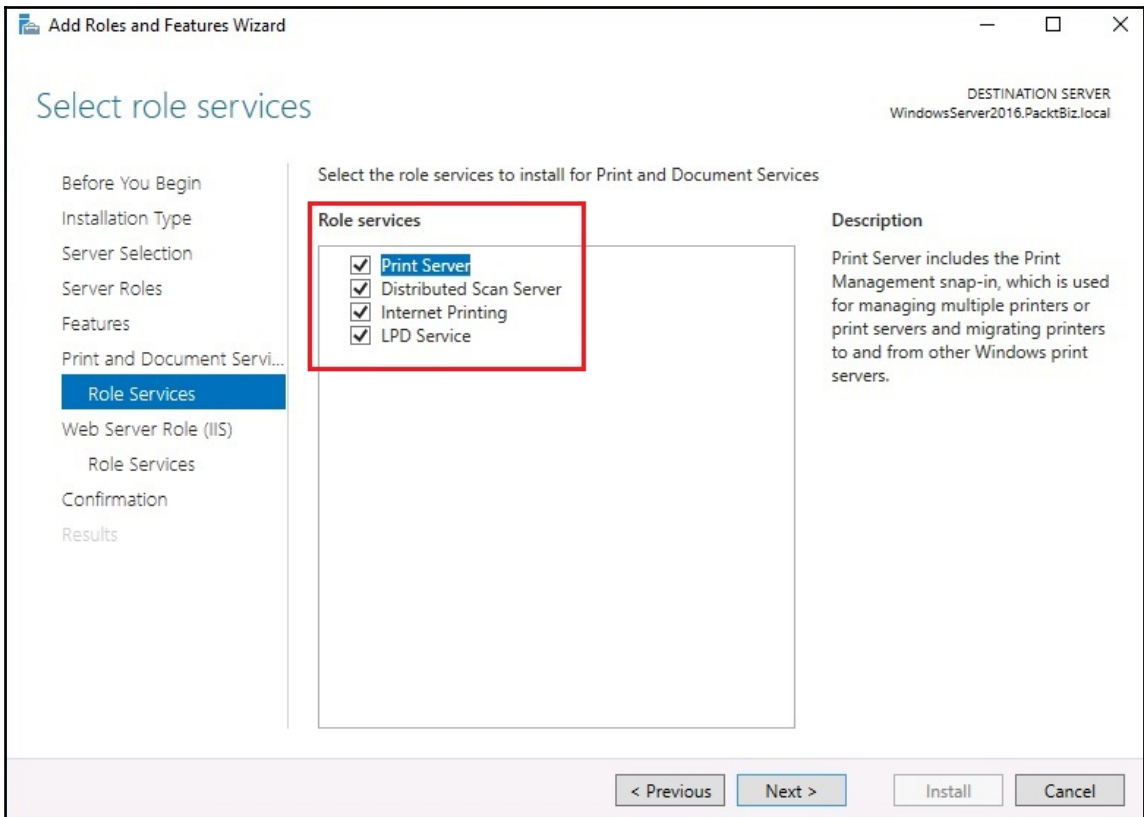
Select server roles

Before You Begin
Installation Type
Server Selection
Server Roles
Features
Print and Document Servi...
 Role Services
Confirmation
Results

Select one or more roles to install on the selected server.

Roles	Description
<input type="checkbox"/> Active Directory Certificate Services	
<input checked="" type="checkbox"/> Active Directory Domain Services (Installed)	
<input type="checkbox"/> Active Directory Federation Services	
<input type="checkbox"/> Active Directory Lightweight Directory Services	
<input type="checkbox"/> Active Directory Rights Management Services	
<input type="checkbox"/> Device Health Attestation	
<input type="checkbox"/> DHCP Server	
<input checked="" type="checkbox"/> DNS Server (Installed)	
<input type="checkbox"/> Fax Server	
<input checked="" type="checkbox"/> File and Storage Services (2 of 12 installed)	
<input type="checkbox"/> Host Guardian Service	
<input type="checkbox"/> Hyper-V	
<input type="checkbox"/> MultiPoint Services	
<input type="checkbox"/> Network Policy and Access Services	
<input checked="" type="checkbox"/> Print and Document Services	Print and Document Services enables you to centralize print server and network printer management tasks. With this role, you can also receive scanned documents from network scanners and route the documents to a shared network resource, Windows SharePoint Services site, or e-mail addresses.
<input type="checkbox"/> Remote Access	
<input type="checkbox"/> Remote Desktop Services	
<input type="checkbox"/> Volume Activation Services	
<input type="checkbox"/> Web Server (IIS)	
<input type="checkbox"/> Windows Deployment Services	

< Previous Next > Install Cancel



Select role services

DESTINATION SERVER
WindowsServer2016.PacktBiz.local

Before You Begin

Installation Type

Server Selection

Server Roles

Features

Print and Document Servi...

Role Services

Confirmation

Results

Select the role services to install for Print and Document Services

Role services

- Print Server**
- Distributed Scan Server
- Internet Printing
- LPD Service

Description

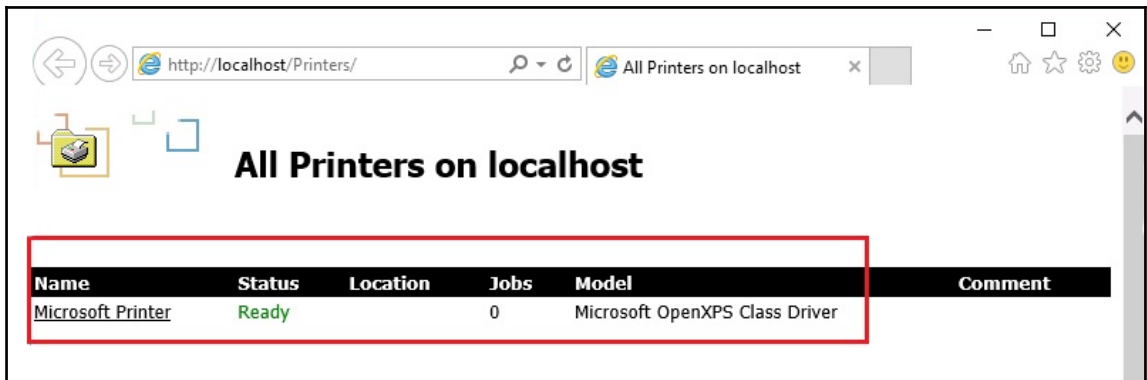
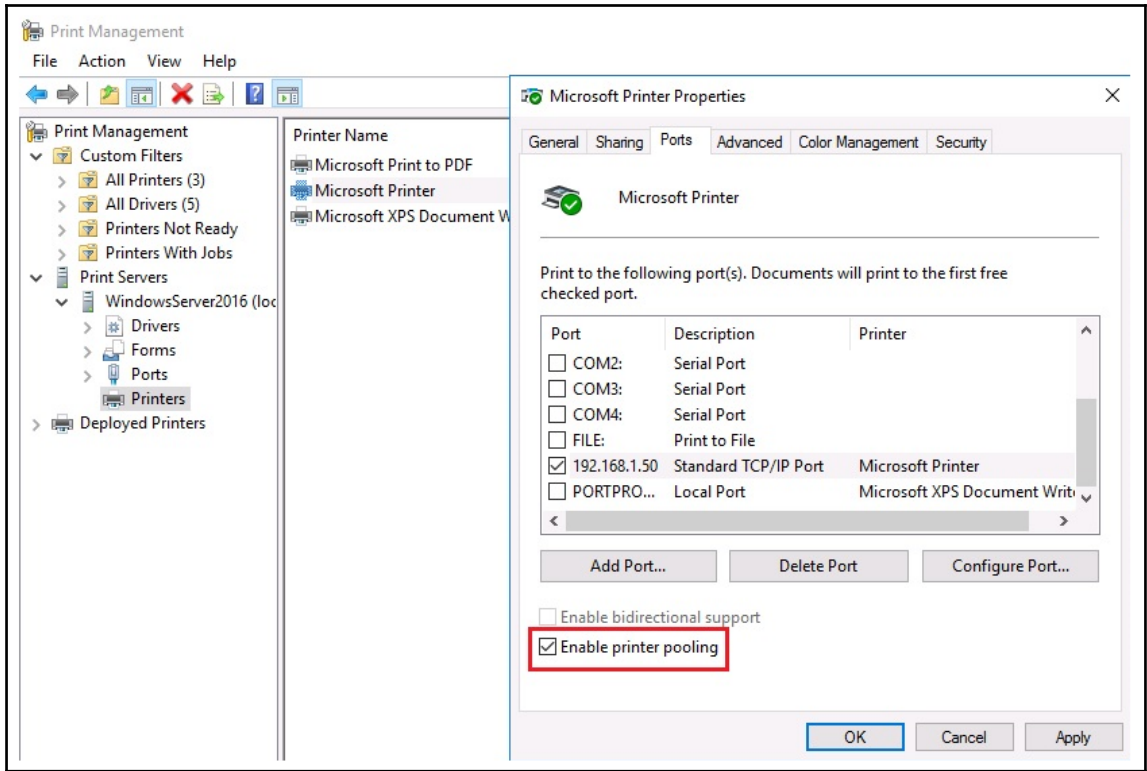
Print Server includes the Print Management snap-in, which is used for managing multiple printers or print servers and migrating printers to and from other Windows print servers.

< Previous

Next >

Install

Cancel



Microsoft Printer on localhost

Printer Queue: **Ready** Waiting Time: Unknown
Pending Documents: 1 Average size: 1 page(s)

VIEW

- [Document List](#)
- [Properties](#)
- [All Printers](#)

PRINTER ACTIONS

- [Pause](#)
- [Resume](#)
- [Cancel All Documents](#)

DOCUMENT ACTIONS

- [Pause](#)
- [Resume](#)
- [Cancel](#)

Document	Status	Owner	Pages	Size	Submitted
Test Page	Printing	Administrator 1		227.7 Kb	10:53:50 PM 10/8/2017

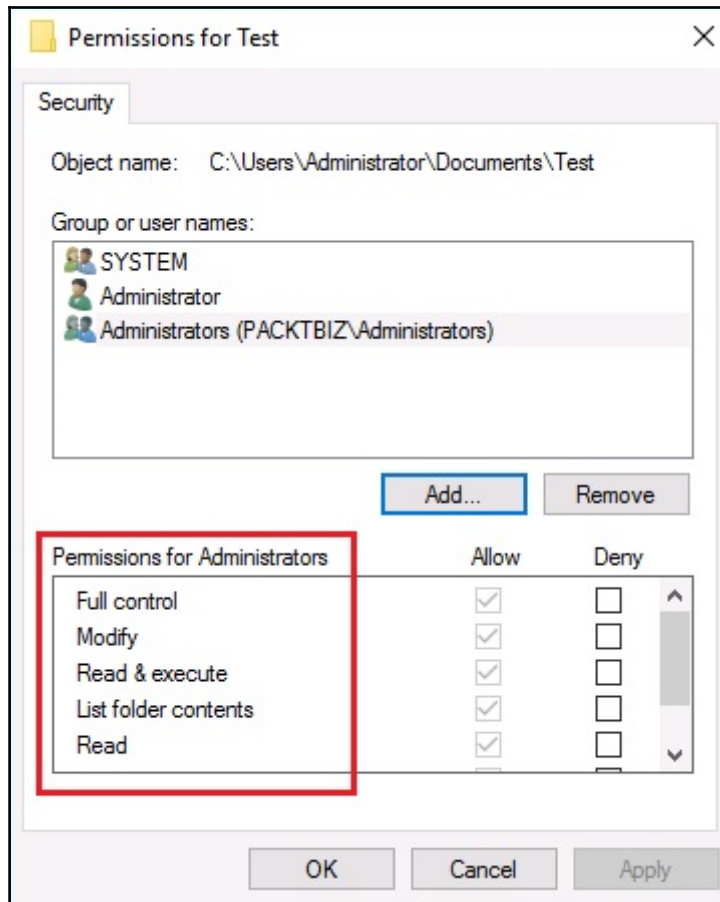
Print Management

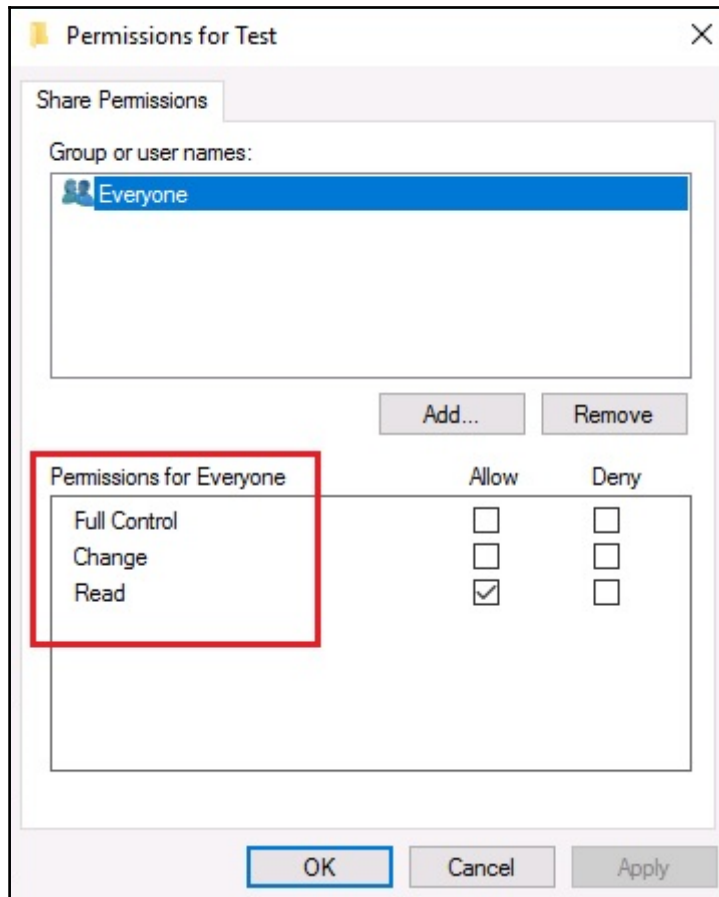
File Action View Help

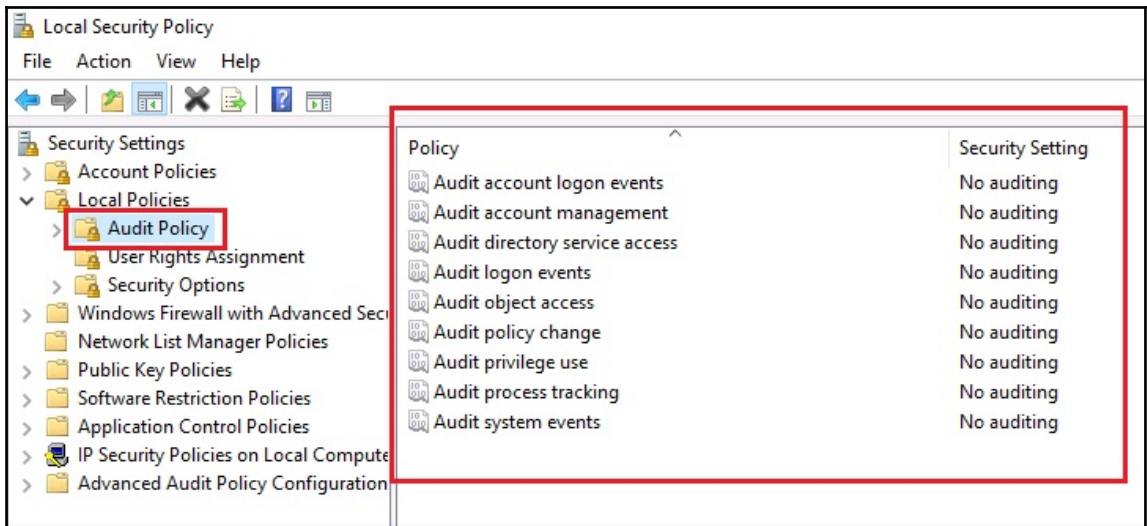
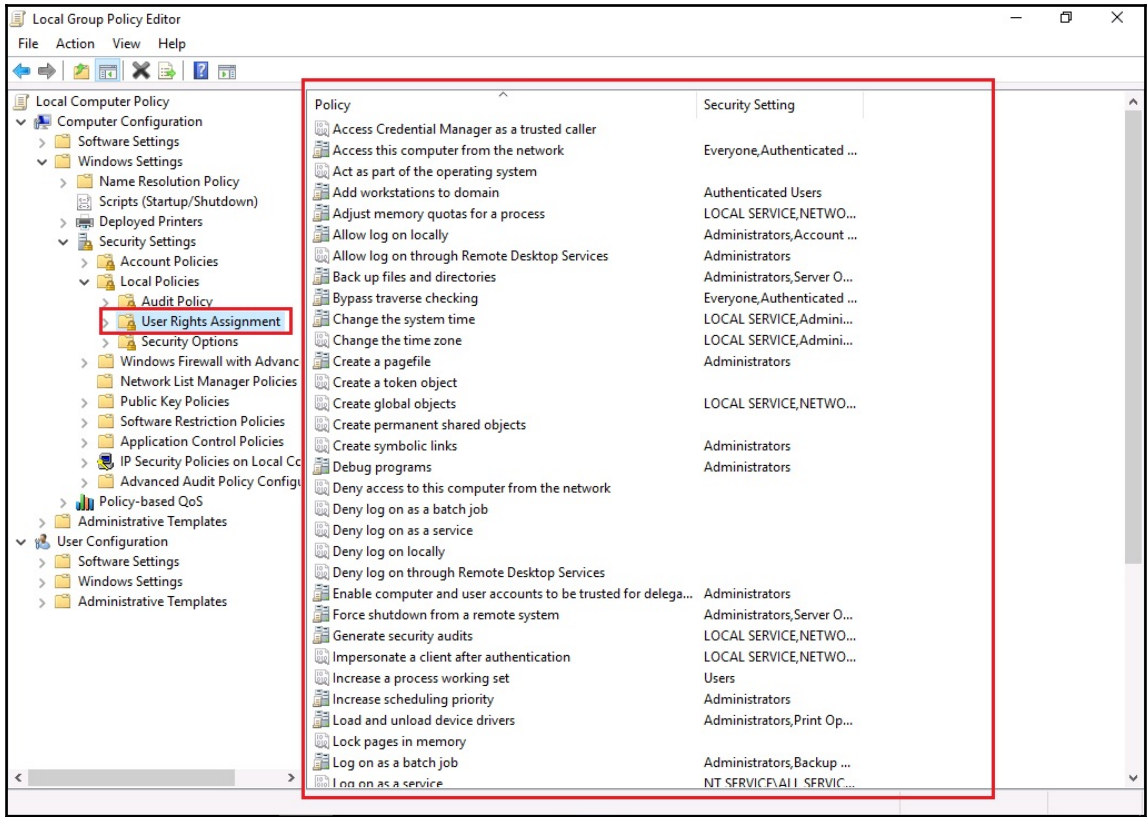
Print Management

- Custom Filters
 - All Printers (3)
 - All Drivers (5)
 - Printers Not Ready
 - Printers With Jobs
- Print Servers
 - WindowsServer2016 (local)
 - Drivers
 - Add Driver...**
 - Manage Drivers...
 - View >
 - Refresh
 - Export List...
 - Help
 - Form
 - Port
 - Print
 - Deployed P

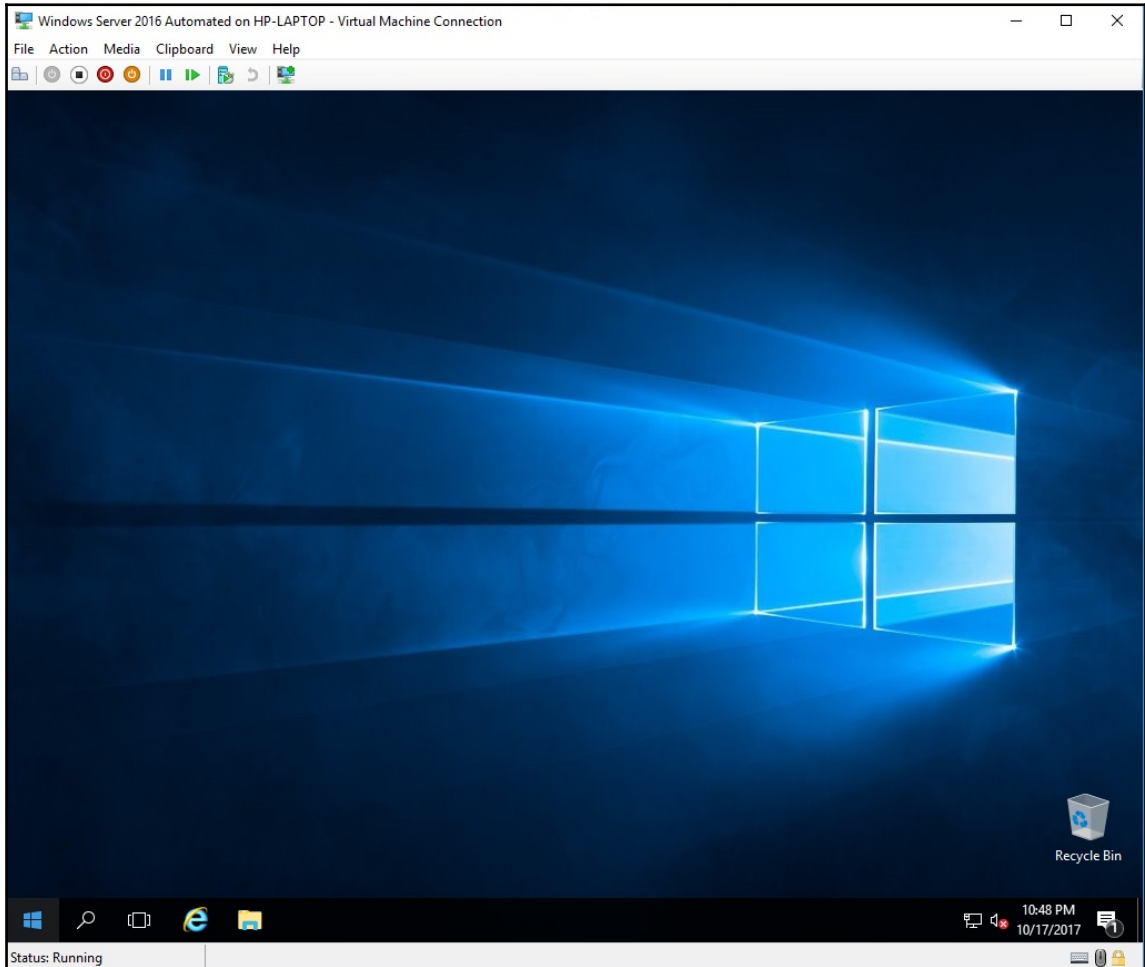
Driver Name	Environment	Driver Version	Driver Isolation	Actions
Microsoft enhanced Point and Print compatibility driver	Windows x64	10.0.14393.0	None	Drivers More Actions
Microsoft enhanced Point and Print compatibility driver	Windows NT x86	10.0.14393.0	None	
Microsoft OpenXPS Class Driver	Windows x64	10.0.14393.0	None	
Microsoft Print To PDF	Windows x64	10.0.14393.0	None	
Microsoft XPS Document Writer v4	Windows x64	10.0.14393.0	None	

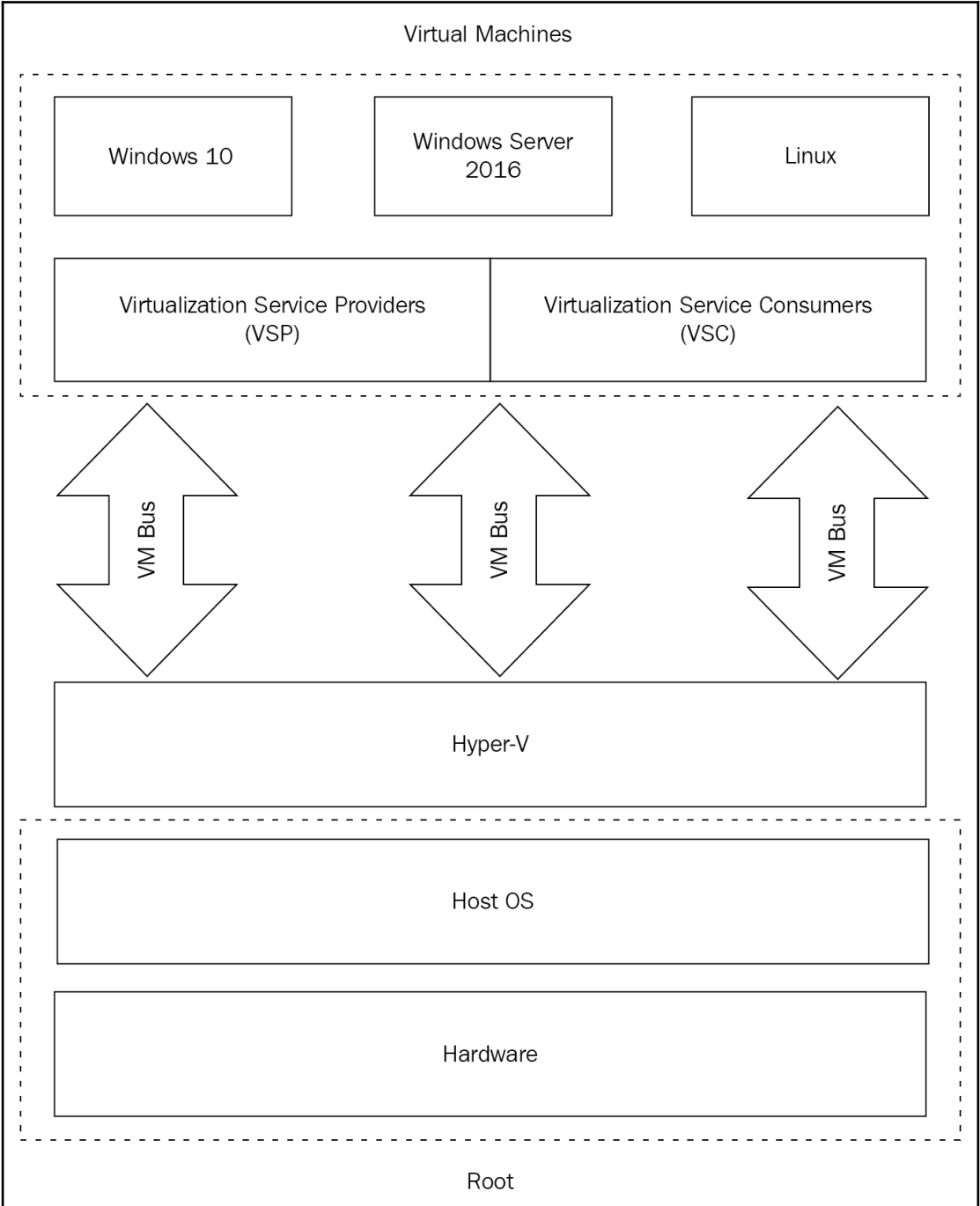






Chapter 6: Virtualization in Windows Server





Select server roles

- Before You Begin
- Installation Type
- Server Selection
- Server Roles**
- Features
- Confirmation
- Results

Select one or more roles to install on the selected server.

Roles

- Active Directory Certificate Services
- Active Directory Domain Services (Installed)
- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services
- Device Health Attestation
- DHCP Server
- DNS Server (Installed)
- Fax Server
- File and Storage Services (2 of 12 installed)
- Host Guardian Service
- Hyper-V
- MultiPoint Services
- Network Policy and Access Services
- Print and Document Services (2 of 4 installed)
- Remote Access
- Remote Desktop Services
- Volume Activation Services
- Web Server (IIS) (19 of 43 installed)
- Windows Deployment Services

Description

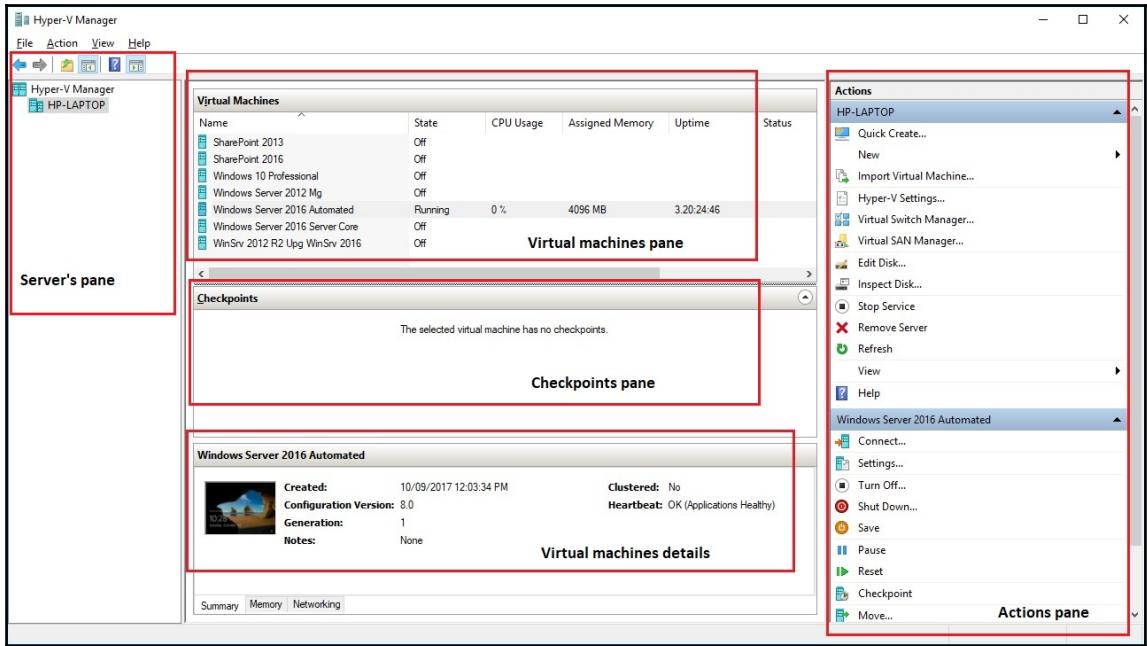
Hyper-V provides the services that you can use to create and manage virtual machines and their resources. Each virtual machine is a virtualized computer system that operates in an isolated execution environment. This allows you to run multiple operating systems simultaneously.

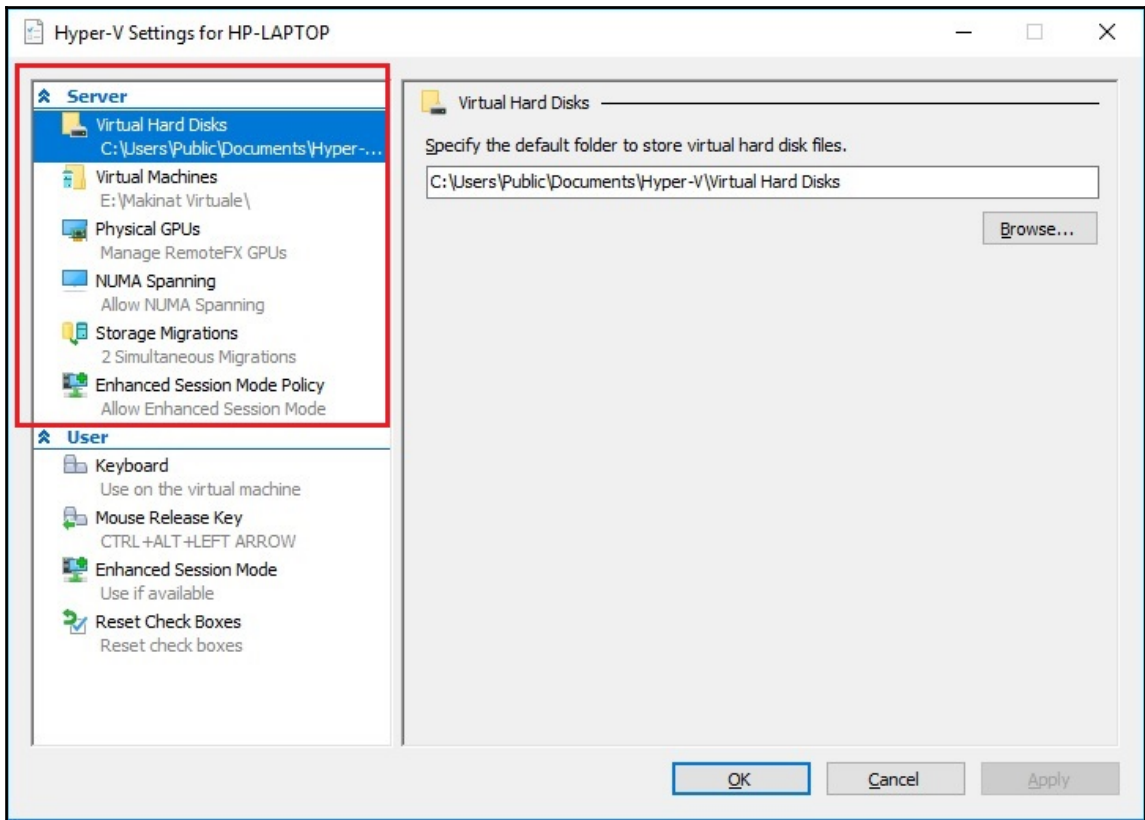
< Previous

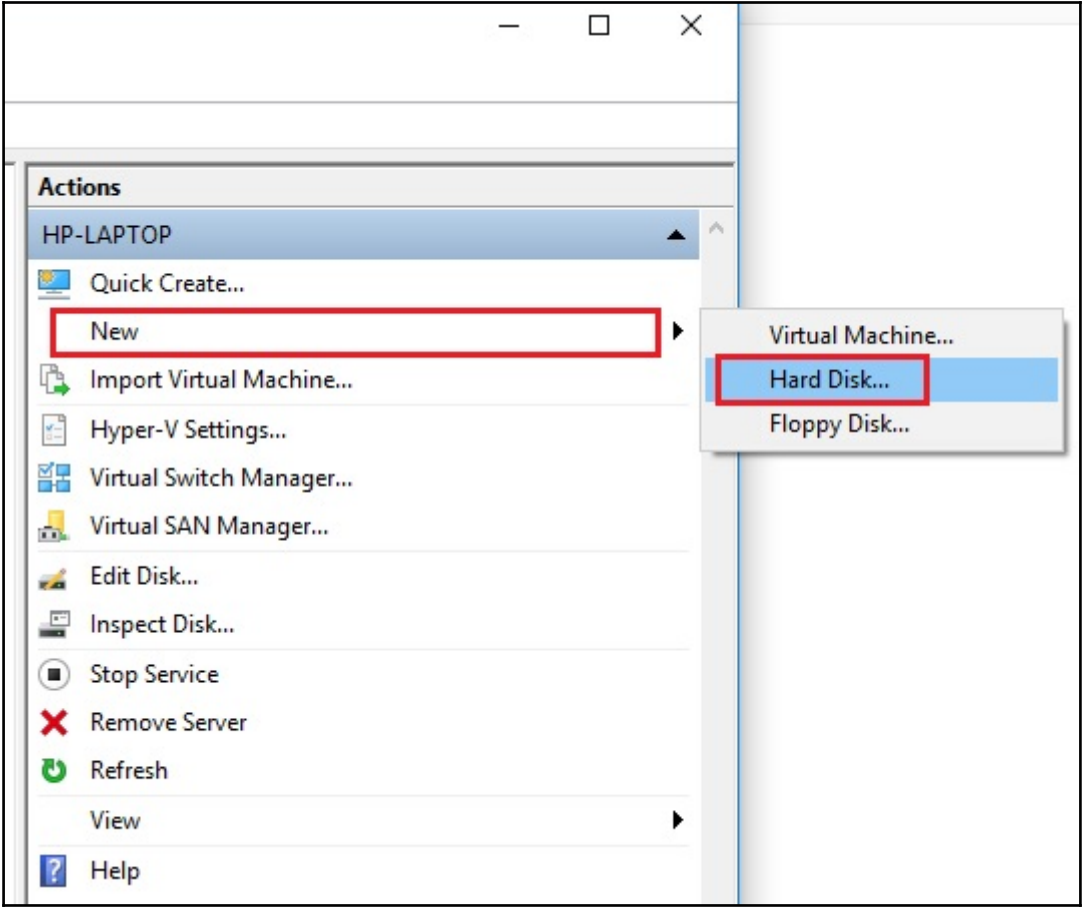
Next >

Install

Cancel







Virtual Machines

Name	State	CPU Usage	Assigned Memory
SharePoint 2013	Off		
SharePoint 2016	Off		
Windows 10 Professional	Off		
Windows Server 2012 Mg	Off		
Windows Server 2016 Automated	Off		
Windows Server 2016 Server Core	Off		
WinSrv 2012 R2 Upg WinSrv 2016	Off		

<

Checkpoints

The sele

- Connect...
- Settings...**
- Upgrade Configuration Version...
- Start
- Checkpoint
- Move...
- Export...
- Rename...
- Delete...
- Help

Memory

Specify the amount of memory that this virtual machine can use.

RAM: MB

Dynamic Memory

You can allow the amount of memory available to this virtual machine to change dynamically within the range you set.

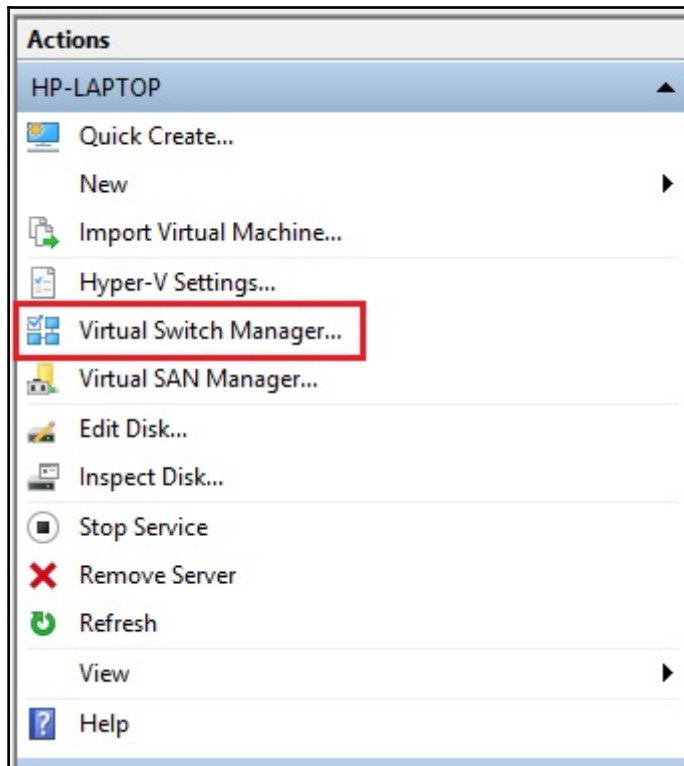
Enable Dynamic Memory

Minimum RAM: MB

Maximum RAM: MB

Specify the percentage of memory that Hyper-V should try to reserve as a buffer. Hyper-V uses the percentage and the current demand for memory to determine an amount of memory for the buffer.

Memory buffer: %



Virtual Switch Properties

Name:

New Virtual Switch

Notes:

Connection type

What do you want to connect this virtual switch to?

External network:

Intel(R) Dual Band Wireless-AC 7265

Allow management operating system to share this network adapter

Internal network

Private network

VLAN ID

Enable virtual LAN identification for management operating system

The VLAN identifier specifies the virtual LAN that the management operating system will use for all network communications through this network adapter. This setting does not affect virtual machine networking.

2

Remove

The screenshot shows the Hyper-V Virtual Machines console. A table lists several virtual machines, with 'Windows Server 2016 Automated' selected. A context menu is open over this VM, and the 'Checkpoint' option is highlighted. Below the table, a 'Checkpoints' section shows a single checkpoint for the selected VM, labeled 'Now'.

Name	State	CPU Usage	Assigned Memory	Uptime
SharePoint 2013	Off			
SharePoint 2016	Off			
Windows 10 Professional	Off			
Windows Server 2012 Mg	Off			
Windows Server 2016 Automated	Off			
Windows Server 2016 Server Core	Off			
WinSrv 2012 R2 Upg WinSrv 2016	Off			

Checkpoints

- Windows Server 2016 Automated - (19/10/2017 - 11:47:01 AM)
Now

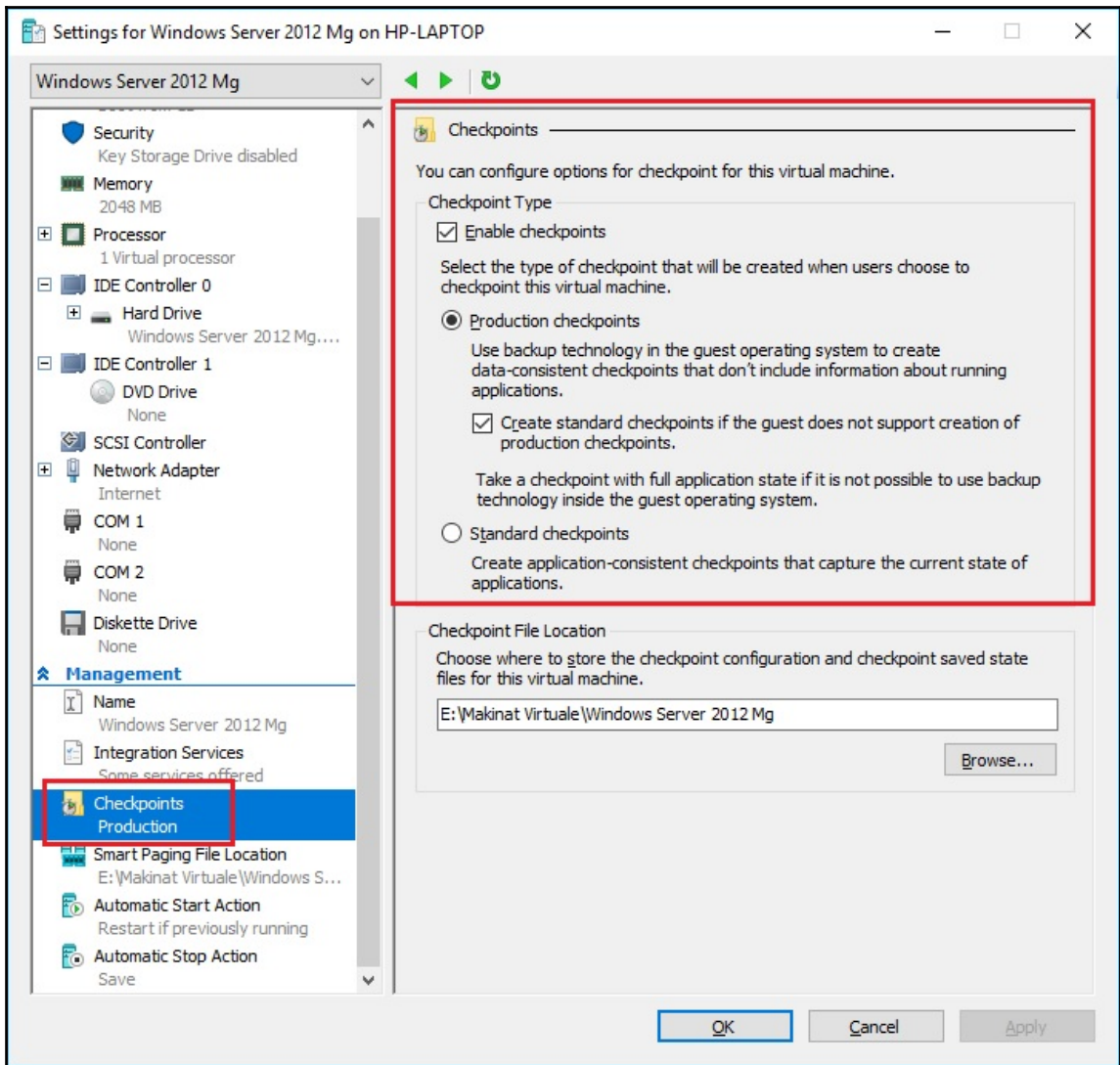
Context menu options: Connect..., Settings..., Upgrade Configuration Version..., Start, **Checkpoint**, Revert..., Move..., Export..., Rename..., Delete...




The dialog box is titled 'Virtual Machine Checkpoint' and contains an information icon and the following text:

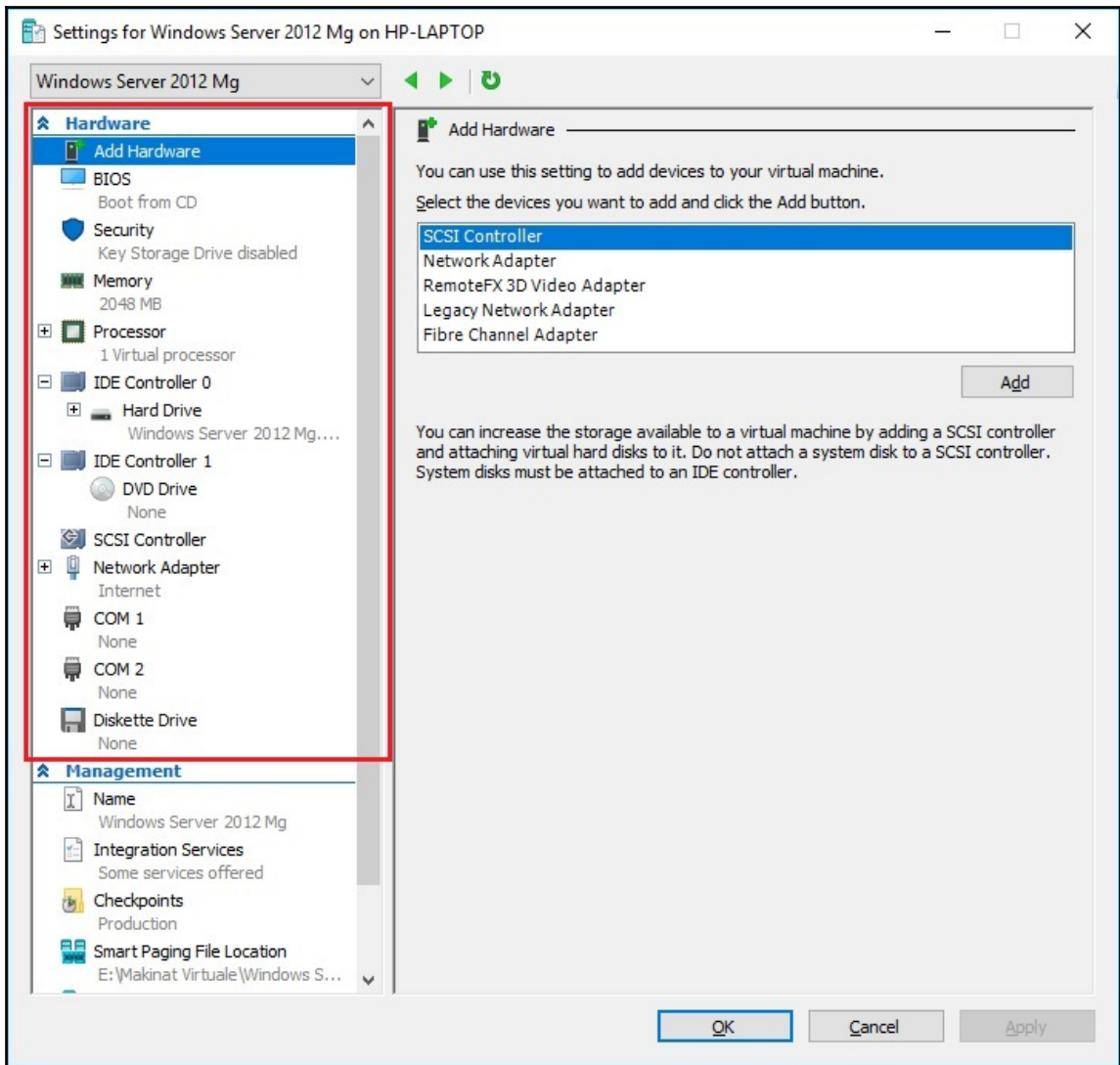
Production checkpoint created.

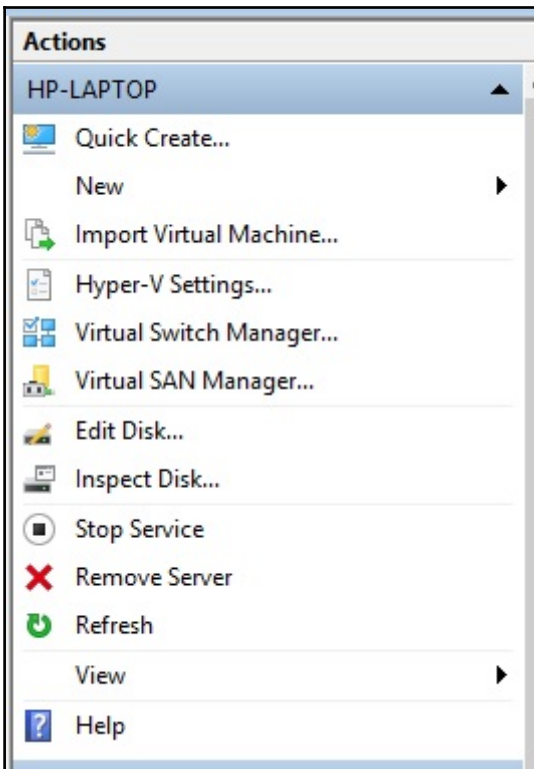
Backup technology in the guest operating system was used to create a production checkpoint. The running application state wasn't included in the checkpoint operation. You can configure checkpoint options under the virtual machine settings.

At the bottom, there is a checkbox labeled 'Please don't show me this again' and an 'OK' button.



<input type="checkbox"/> Name	Date modified	Type	Size
 Disk2vhd	17/12/2013 11:46 ...	Compiled HTML ...	40 KB
<input checked="" type="checkbox"/>  disk2vhd	20/01/2014 2:16 PM	Application	6,968 KB
 Eula	28/07/2006 8:32 AM	Text Document	7 KB






Windows Server 2016 Automated	Running
Windows Server 2016 Server Core	Off
WinSrv 2012 R2 Upg WinSrv 2016	Off

<

Checkpoints

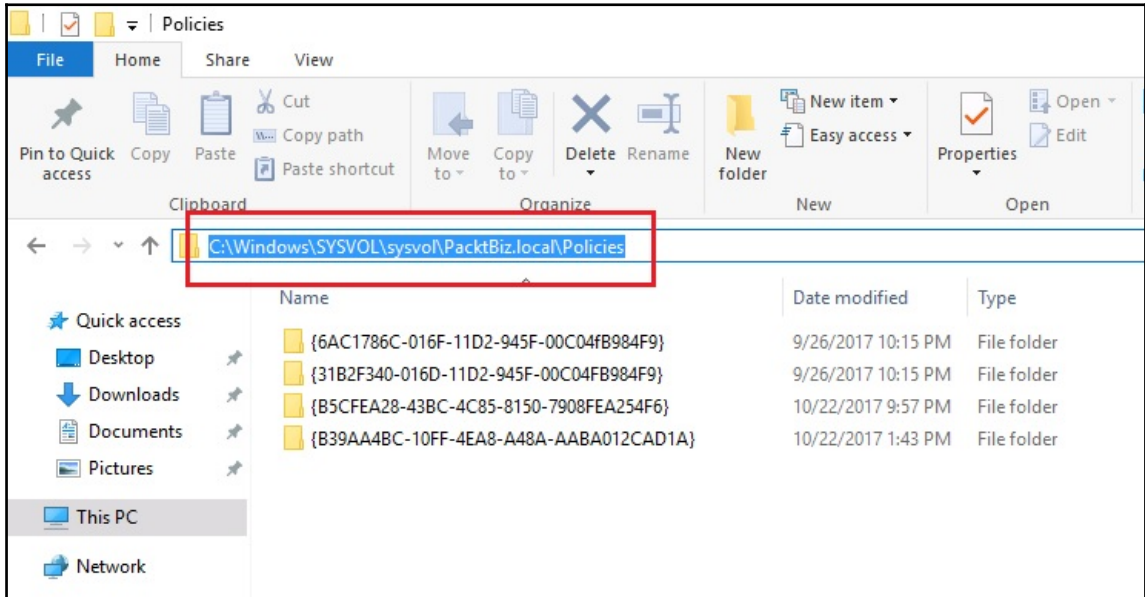
- Windows Server 2016 Automated - (19/10/2017 - 11:47:00)
 - Windows Server 2016 Automated - (19/10/2017 - 11:47:00)
 - Now

Windows Server 2016 Automated

 **Created:** 10/09/2017 12:03
Configuration Version: 8.0

- Connect...
- Settings...
- Turn Off...
- Shut Down...
- Save
- Pause
- Reset
- Checkpoint
- Revert...
- Move...
- Export...
- Rename...
- Help

Chapter 7: Group Policy in Windows Server



Lock the Taskbar

Lock the Taskbar

Previous Setting Next Setting

Not Configured

Enabled

Disabled

Comment:

Supported on: At least Windows Server 2003 operating systems or Windows XP Professional

Options:

Help:

This setting affects the taskbar, which is used to switch between running applications.

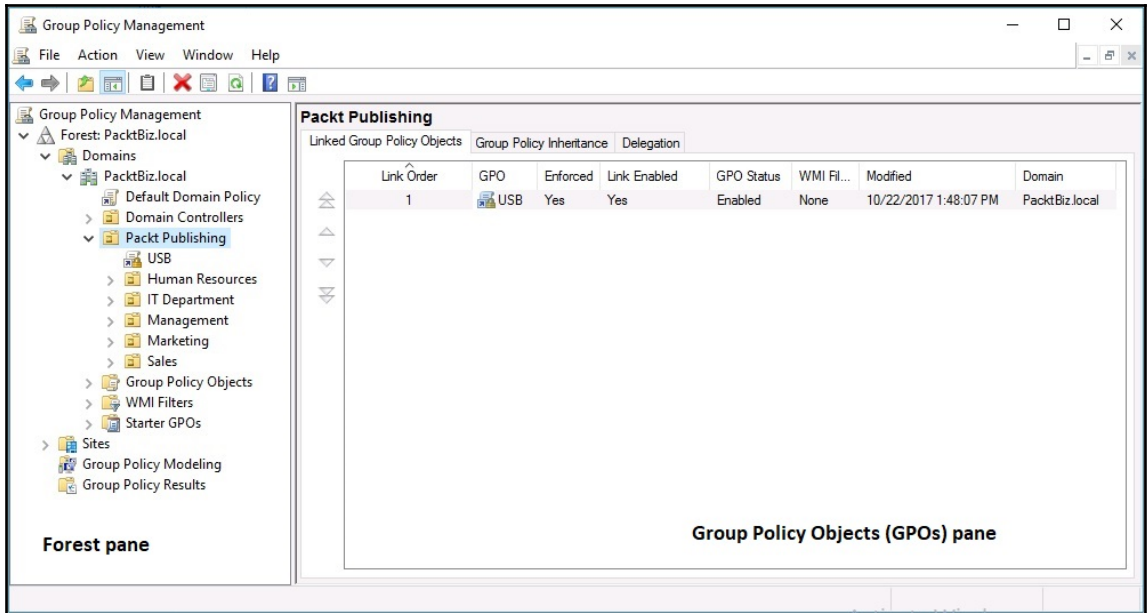
The taskbar includes the Start button, list of currently running tasks, and the notification area. By default, the taskbar is located at the bottom of the screen, but it can be dragged to any side of the screen. When it is locked, it cannot be moved or resized.

If you enable this setting, it prevents the user from moving or resizing the taskbar. While the taskbar is locked, auto-hide and other taskbar options are still available in Taskbar properties.

If you disable this setting or do not configure it, the user can configure the taskbar position.

Note: Enabling this setting also locks the QuickLaunch bar and any other toolbars that the user has on their taskbar. The toolbar's position is locked, and the user cannot show and hide various toolbars using the taskbar context menu.

OK Cancel Apply



Group Policy Management Editor

File Action View Help

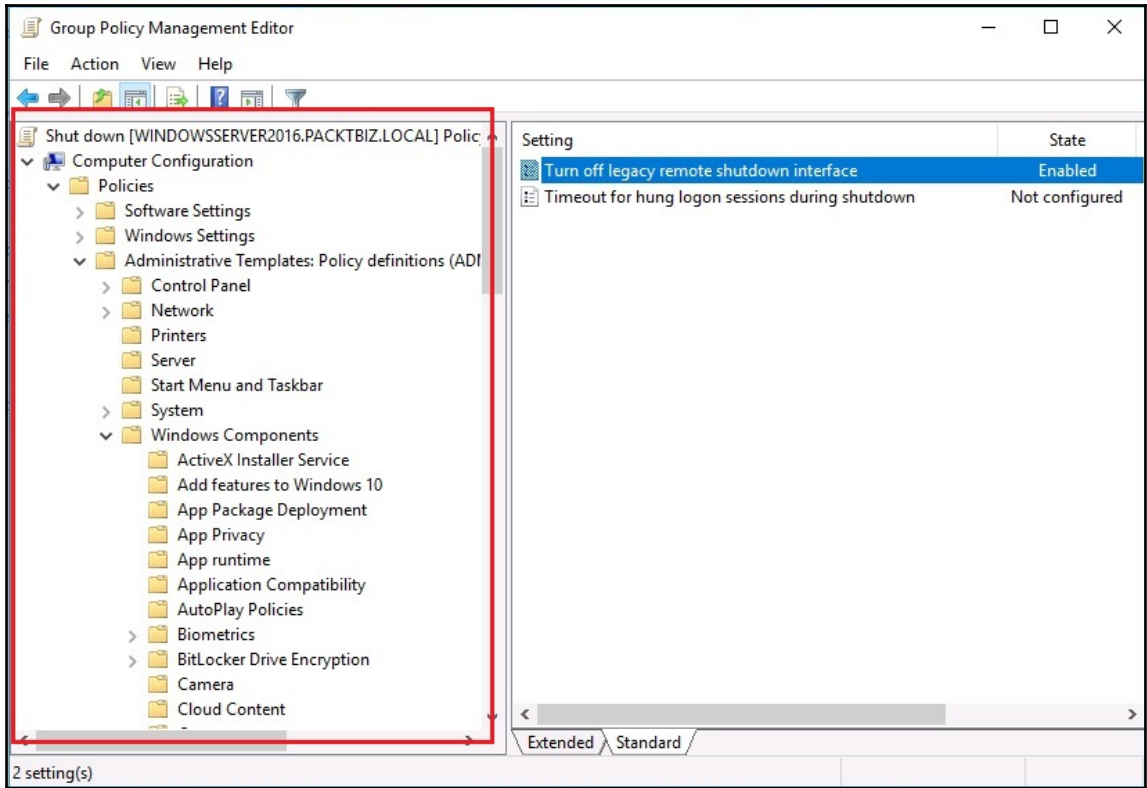
Shut down [WINDOWSSERVER2016.PACKETBIZ.LOCAL] Policies

- Computer Configuration
 - Policies
 - Software Settings
 - Windows Settings
 - Administrative Templates: Policy definitions (ADSI)
 - Control Panel
 - Network
 - Printers
 - Server
 - Start Menu and Taskbar
 - System
 - Windows Components
 - ActiveX Installer Service
 - Add features to Windows 10
 - App Package Deployment
 - App Privacy
 - App runtime
 - Application Compatibility
 - AutoPlay Policies
 - Biometrics
 - BitLocker Drive Encryption
 - Camera
 - Cloud Content

Setting	State
Turn off legacy remote shutdown interface	Enabled
Timeout for hung logon sessions during shutdown	Not configured

2 setting(s)

Extended Standard



Group Policy Management Editor

File Action View Help

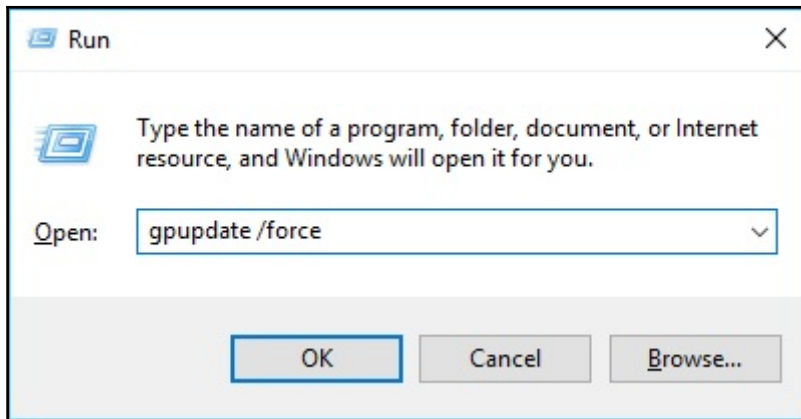
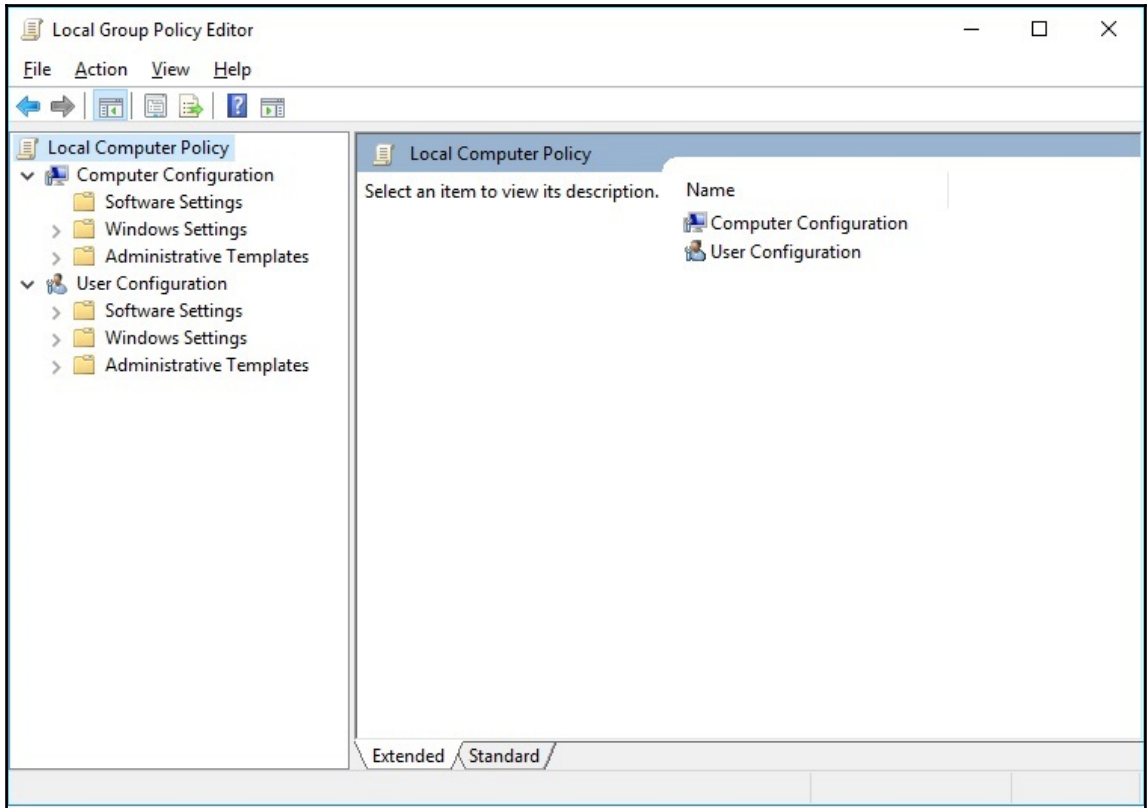
Wallpaper [WINDOWSSERVER2016.PACKTBIZ.L...

- Computer Configuration
 - Policies
 - Preferences
- User Configuration
 - Policies
 - Software Settings
 - Windows Settings
 - Administrative Templates: Policy def...
 - Control Panel
 - Desktop
 - Active Directory
 - Desktop
 - Network
 - Shared Folders
 - Start Menu and Taskbar
 - System
 - Windows Components
 - All Settings
 - Preferences

Setting	State
Enable Active Desktop	Not configured
Disable Active Desktop	Not configured
Prohibit changes	Not configured
Desktop Wallpaper	Enabled
Prohibit adding items	Not configured
Prohibit closing items	Not configured
Prohibit deleting items	Not configured
Prohibit editing items	Not configured
Disable all items	Not configured
Add/Delete items	Not configured
Allow only bitmapped wallpaper	Not configured

11 setting(s)

Extended Standard

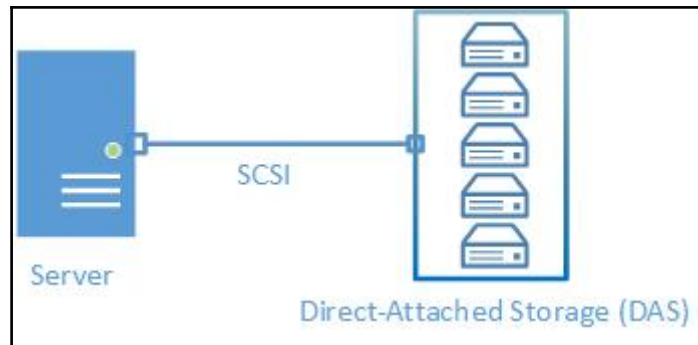
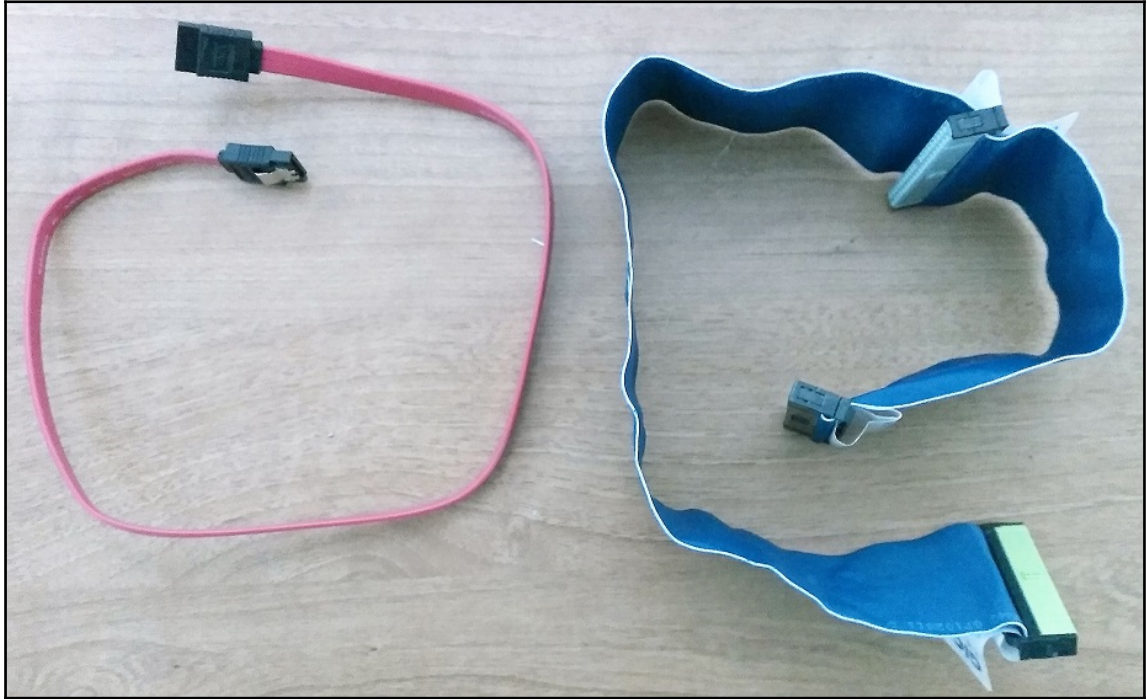


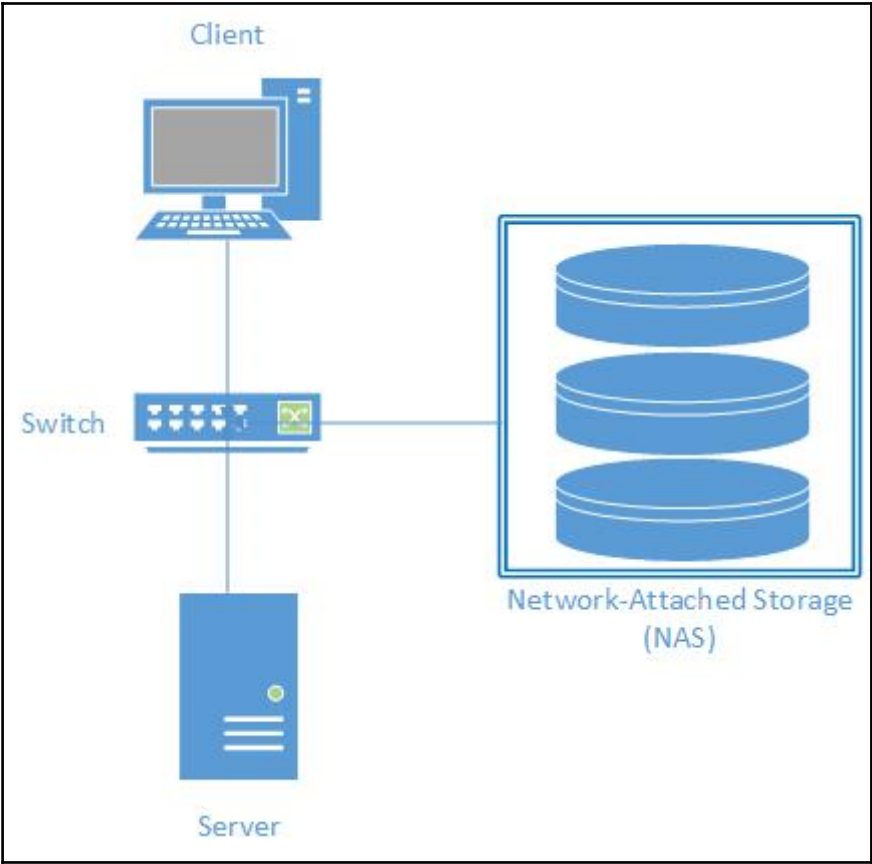
C:\windows\system32\gpupdate.exe

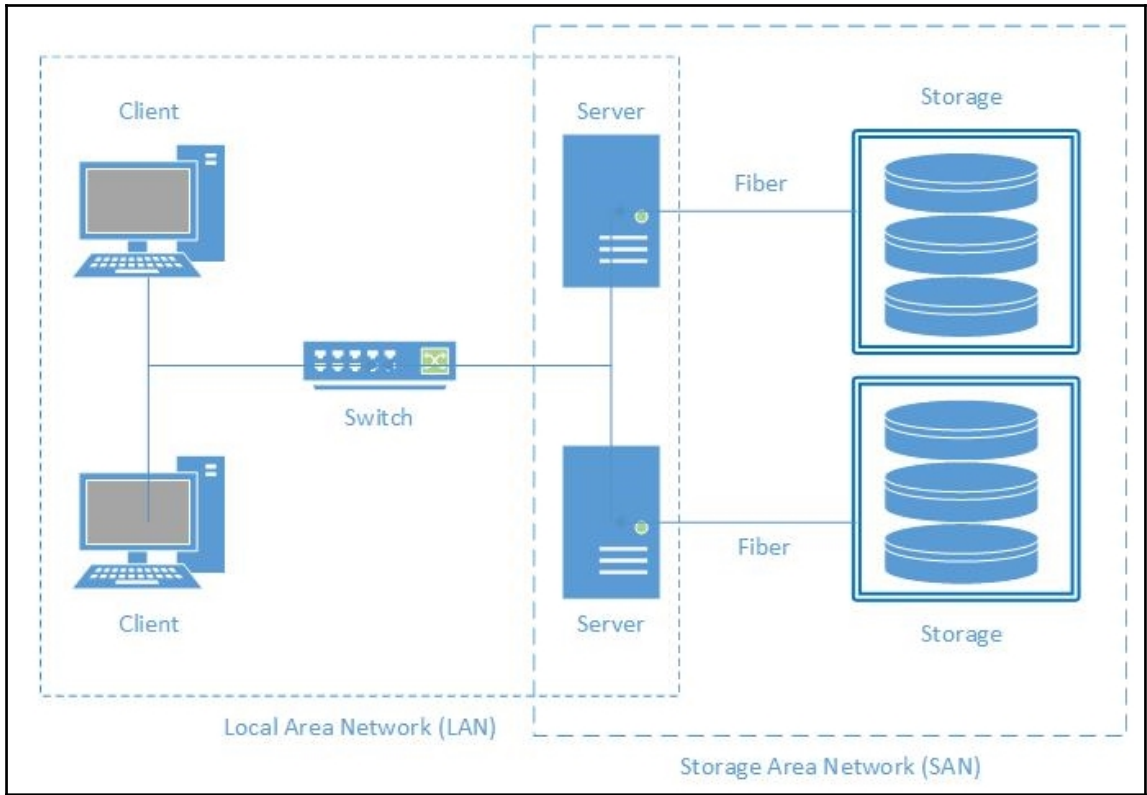
Updating policy...

Computer Policy update has completed successfully.

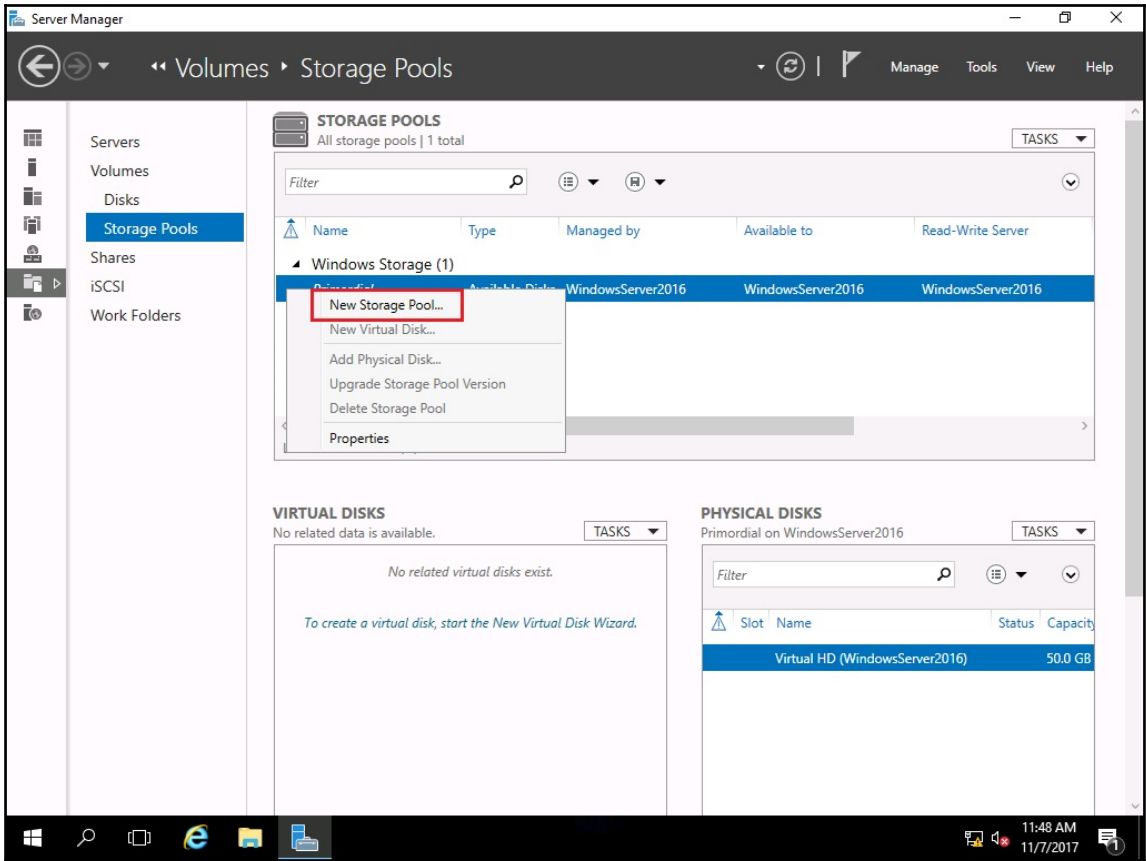
Chapter 8: Storing Data in Windows Server

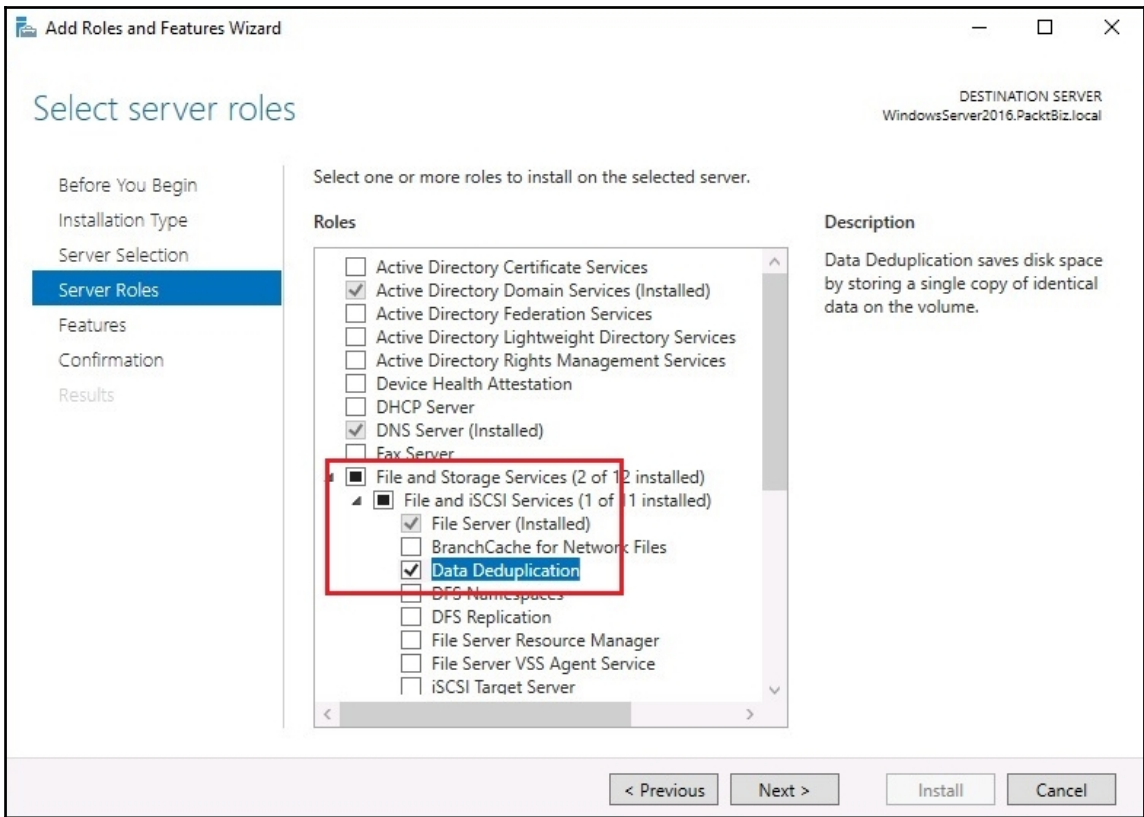












Server Manager

File and Storage Services > Volumes

Manage Tools View Help

VOLUMES
All volumes | 4 total

Filter

Volume	Status	File System Label	Provisioning	Capacity	Free Space	Deduplication Rate	Deduplication Savings
WindowsServer2016 (4)							
D:	Data		Fixed	10.9 GB	10.9 GB		
\\?.Volume{1c4...	System Reserved		Fixed	500 MB	169 MB		
C:	Windows Server 2...		Fixed	38.6 GB	28.4 GB		
F:	Data		Fixed	49.9 GB	49.8 GB		

Last refreshed on 11/7/2017 1:48:21 PM

SHARES
No related shares are available.

No related shares exist.

DISK
D:\ on WindowsServer2016

Virtual HD
Capacity: 50.0 GB

100% Allocated ■ 50.0 GB Allocated
 0.00 B Unallocated

Status: Online
Bus Type: ATA

1:56 PM
11/7/2017


```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) 2016 Microsoft Corporation. All rights reserved.

PS C:\Users\Bekim.Dauti> Get-Disk

Number Friendly Name Serial Number HealthStatus OperationalStatus Total Size Partition Style
-----
0 Virtual HD Healthy Online 50 GB MBR
1 Virtual HD Healthy Online 50 GB GPT

PS C:\Users\Bekim.Dauti> Get-Partition

DiskPath:
\\?\ide#diskvirtual_hd 1.1.0_#5&35dc7040&0&0.0.0#{53f56307-b6bf-11d0-94f2-00a0c91efb8b}

PartitionNumber DriveLetter Offset Size Type
-----
1 1048576 500 MB IFS
2 525336576 38.57 GB IFS
3 4194304000 10.94 GB IFS

DiskPath:
\\?\ide#diskvirtual_hd 1.1.0_#5&35dc7040&0&0.1.0#{53f56307-b6bf-11d0-94f2-00a0c91efb8b}

PartitionNumber DriveLetter Offset Size Type
-----
1 17408 128 MB Reserved
2 F 135266304 49.87 GB Basic

PS C:\Users\Bekim.Dauti> Get-Volume

DriveLetter FileSystemLabel FileSystem DriveType HealthStatus OperationalStatus SizeRemaining Size
-----
D Data NTFS Fixed Healthy OK 10.89 GB 10.94 GB
System Reserved NTFS Fixed Healthy OK 169.26 MB 500 MB
C Windows Server 2016 NTFS Fixed Healthy OK 28.36 GB 38.57 GB
E Data NTFS Fixed Healthy OK 49.78 GB 49.87 GB
A CD-ROM Healthy Unknown 0 B 0 B
Removable Healthy Unknown 0 B 0 B

PS C:\Users\Bekim.Dauti>
```

Disk Management

File Action View Help

Volume	Layout	Type	File System	Status	Capacity	Free Spa...	% Free
Data (D:)	Simple	Basic	NTFS	Healthy (P...	10.94 GB	10.89 GB	100 %
Data (F:)	Simple	Basic	NTFS	Healthy (P...	49.87 GB	49.78 GB	100 %
System Reserved	Simple	Basic	NTFS	Healthy (S...	500 MB	169 MB	34 %
Windows Server 2...	Simple	Basic	NTFS	Healthy (B...	38.57 GB	28.34 GB	73 %

— Disk 0
Basic
50.00 GB
Online

System Reserved 500 MB NTFS Healthy (System, Active, Primary Partit	Windows Server 2016 (C:) 38.57 GB NTFS Healthy (Boot, Page File, Crash Dump, Primary Partition)	Data (D:) 10.94 GB NTFS Healthy (Primary Partition)
--	--	--

— Disk 1
Basic
49.88 GB
Online

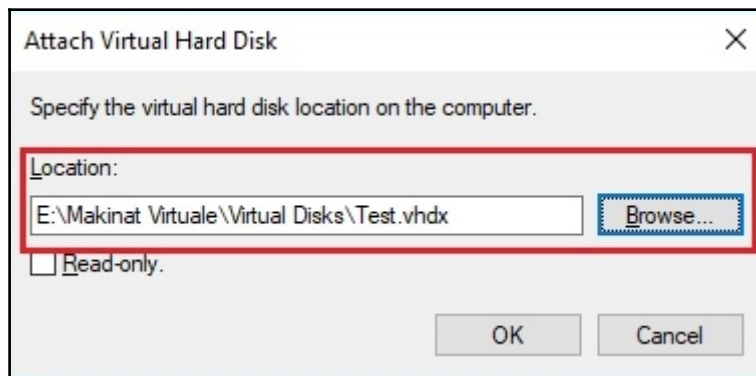
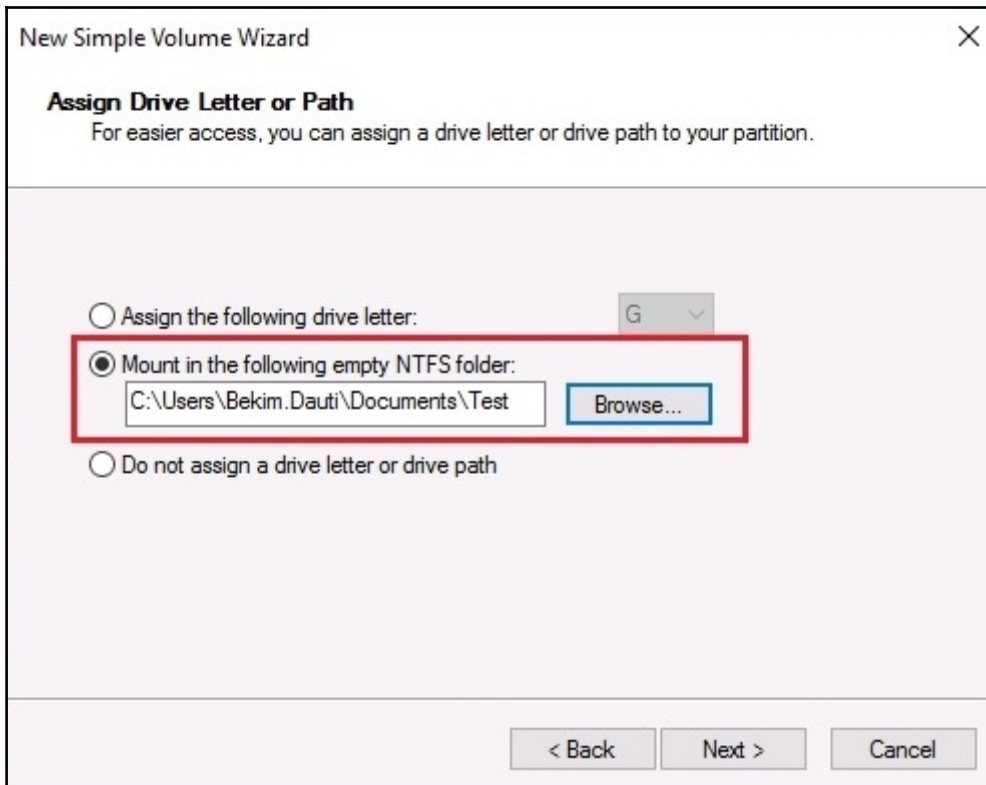
CD-ROM
DVD (E:)

No Media

Unallocat

- New Spanned Volume...
- New Striped Volume...
- New Mirrored Volume...
- New RAID-5 Volume...
- Convert to Dynamic Disk...**
- Convert to MBR Disk
- Offline
- Properties
- Help

1:47 PM
11/8/2017



Select server roles

DESTINATION SERVER
WindowsServer2016.PacktBiz.local

- Before You Begin
- Installation Type
- Server Selection
- Server Roles**
- Features
- Confirmation
- Results

Select one or more roles to install on the selected server.

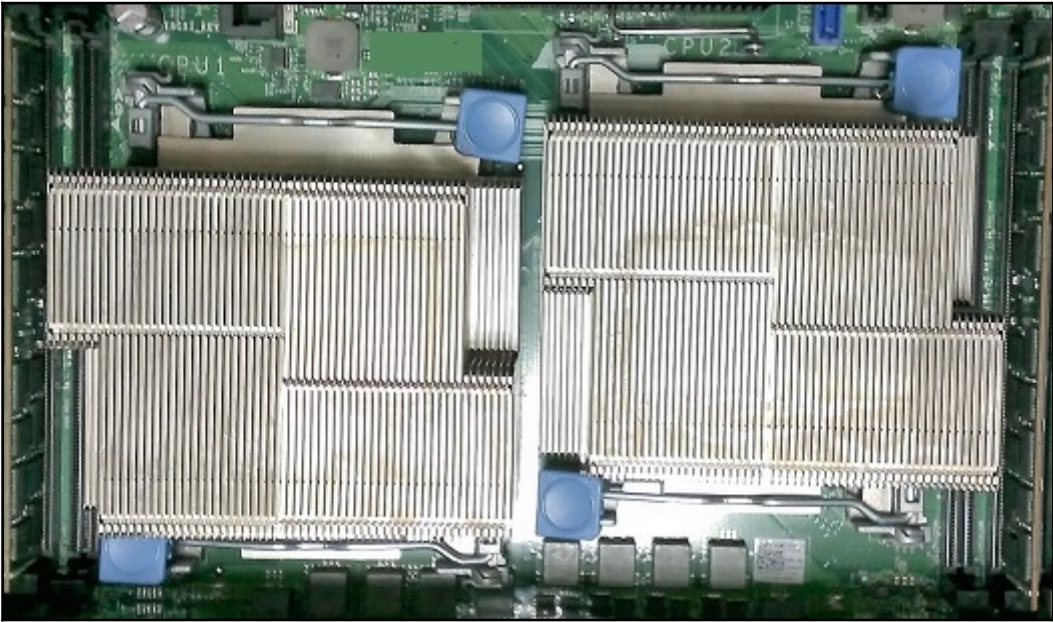
Roles

- Active Directory Certificate Services
- Active Directory Domain Services (Installed)
- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services
- Device Health Attestation
- DHCP Server
- DNS Server (Installed)
- Fax Server
- File and Storage Services (2 of 12 installed)
 - File and iSCSI Services (1 of 11 installed)
 - File Server (Installed)
 - BranchCache for Network Files
 - Data Deduplication
 - DFS Namespaces
 - DFS Replication
 - File Server Resource Manager
 - File Server VSS Agent Service
 - iSCSI Target Server

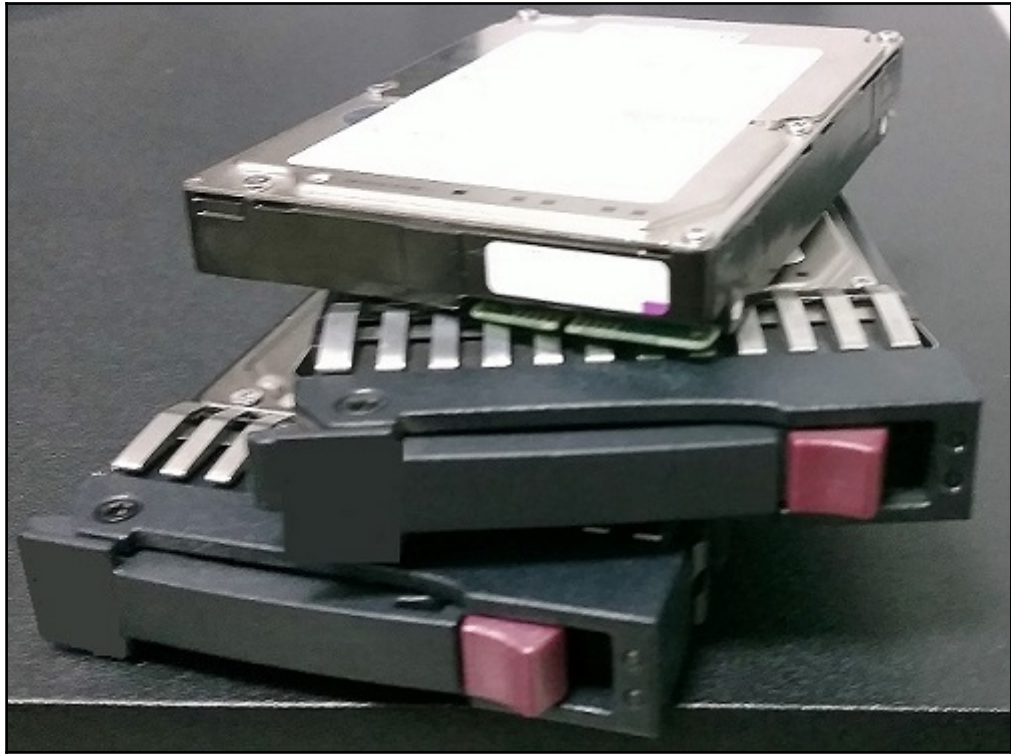
Description

DFS Namespaces enables you to group shared folders located on different servers into one or more logically structured namespaces. Each namespace appears to users as a single shared folder with a series of subfolders. However, the underlying structure of the namespace can consist of numerous shared folders located on different servers and in multiple sites.

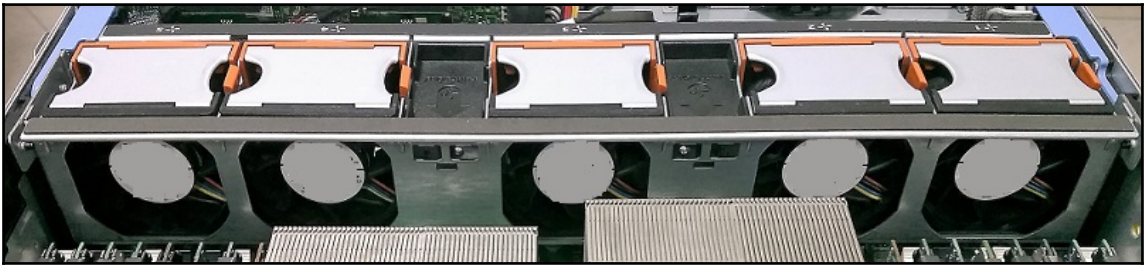
Chapter 9: Tuning and Maintaining Windows Server

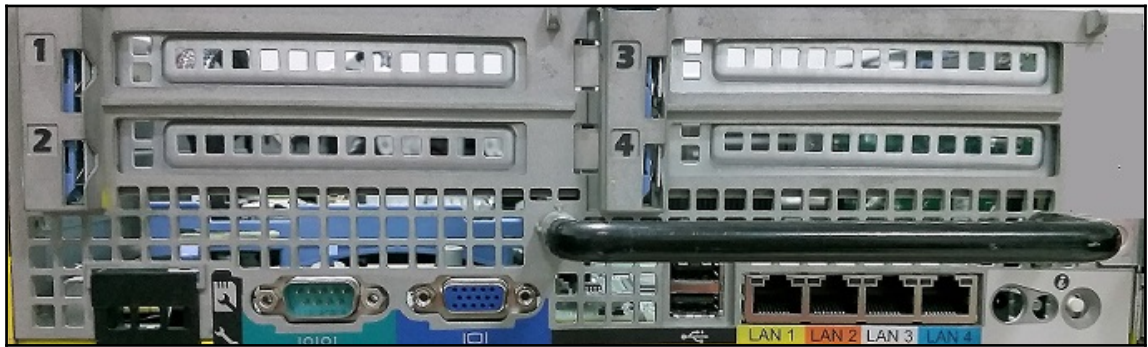
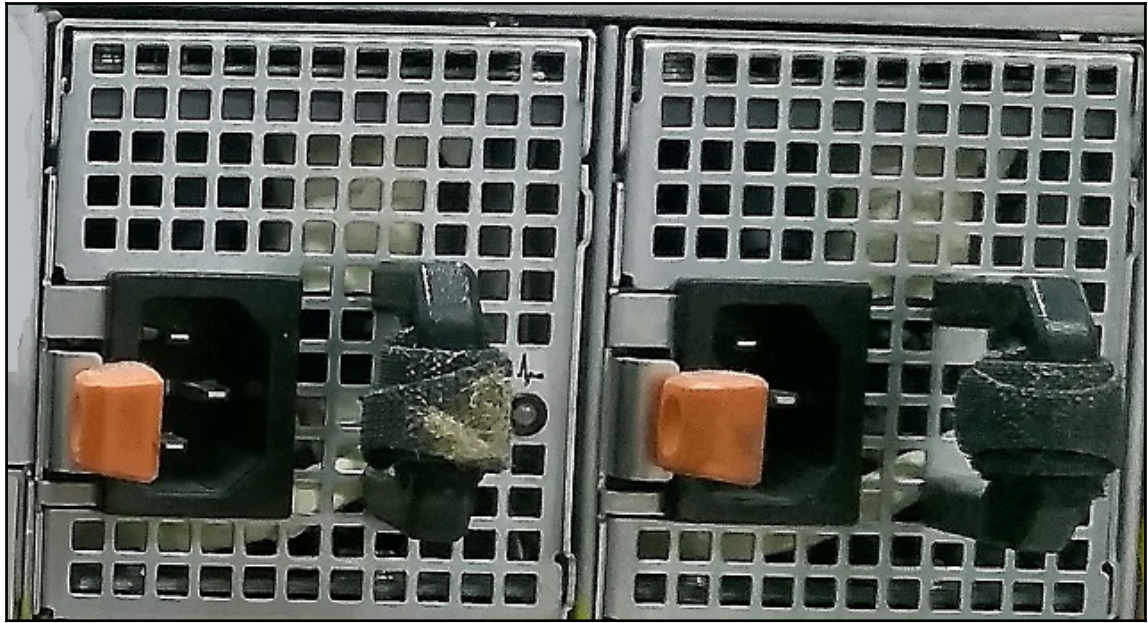












Performance Monitor

File Action View Window Help

Performance

- Monitoring Tools
- Performance Monitor
- Data Collector Sets
- Reports

Overview of Performance Monitor

You can use Performance Monitor to view performance data either in real time or from a log file. Create Data Collector Sets to configure and schedule performance counter, event trace, and configuration data collection so that you can analyze the results and view reports.

To begin, expand Monitoring Tools and click Performance Monitor, or expand Data Collector Sets or Reports.

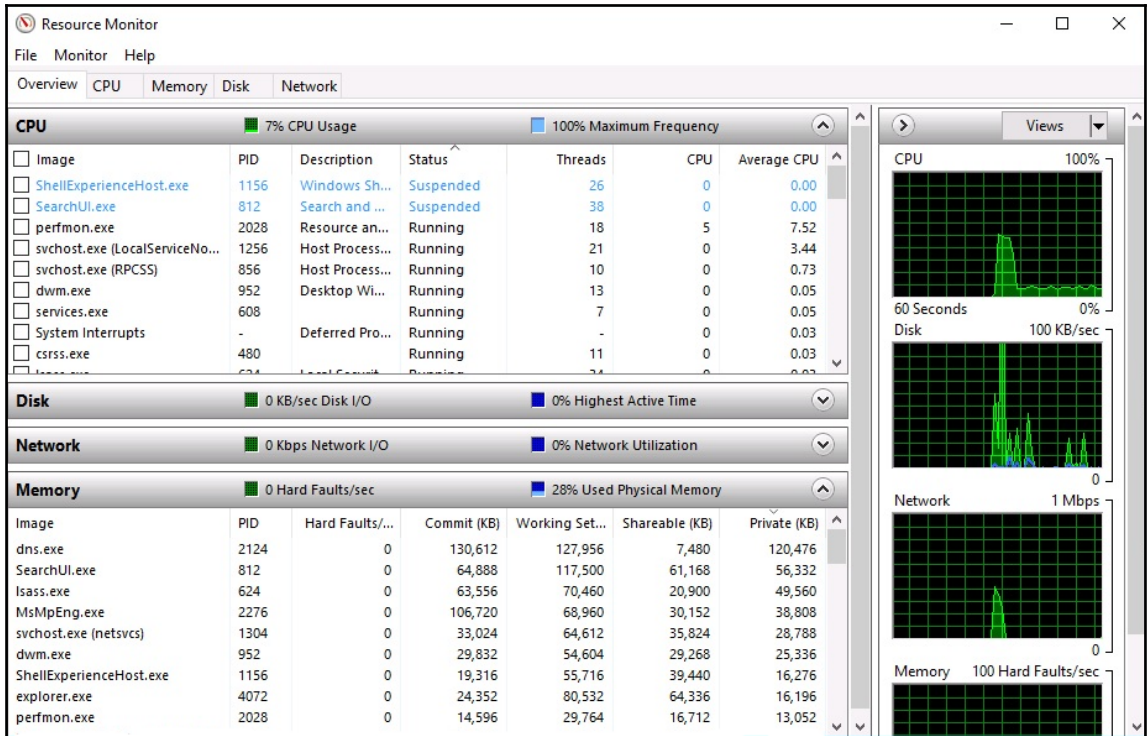
The new Resource Monitor lets you view detailed real-time information about hardware resources (CPU, disk, network, and memory) and system resources (including handles and modules) in use by the operating system, services, and running applications. In addition, you can use Resource Monitor to stop processes, start and stop services, analyze process deadlocks, view thread wait chains, and identify processes locking files.

[Open Resource Monitor](#)

System Summary

\\WINDOSSERVER20			
Memory			
% Committed Bytes In Use	22.766		
Available MBytes	2,891.000		
Cache Faults/sec	0.000		
Network Interface			
Bytes Total/sec	Intel 21140-Based PCI Fast Ethernet Adapter [Emulated]	isatap.{D41889C1-5E75-4CD1-86DE-7951A11}	
		0.000	
PhysicalDisk			
% Idle Time	_Total	0 C:	
	100.029	100.029	
Avg. Disk Queue Length	0.000	0.000	
Processor Information			
% Interrupt Time	_Total	0, _Total	0.0
	0.000	0.000	0.000
% Processor Time	0.000	0.000	0.000
Parking Status	0.000	0.000	0.000

Done



Task Manager

File Options View

Processes Performance Users Details Services

CPU
1% 2.90 GHz

Memory
1.2/4.0 GB (30%)

Ethernet
S: 0 Kbps R: 0 Kbps

Ethernet
S: 0 Kbps R: 0 Kbps

CPU

Intel(R) Core(TM) i7-7500U CPU @ 2.70GHz

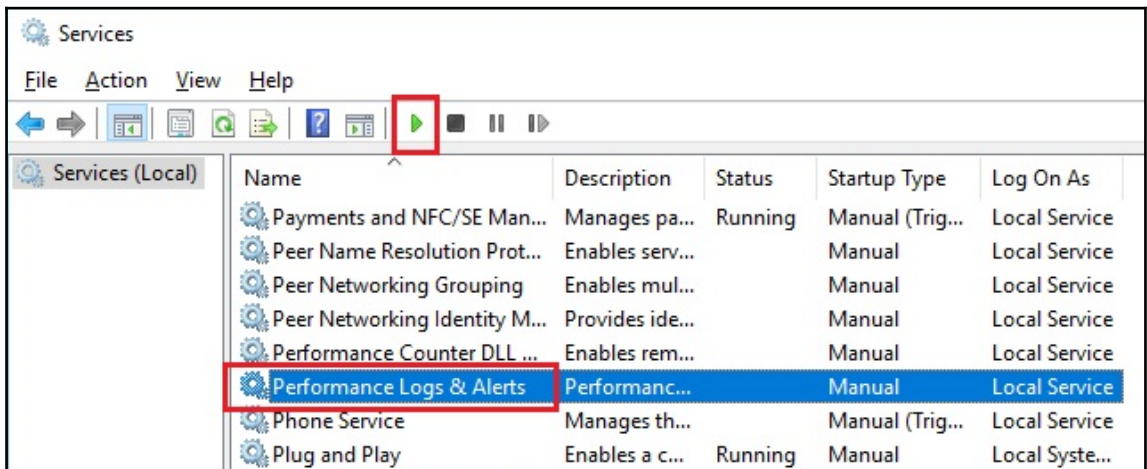
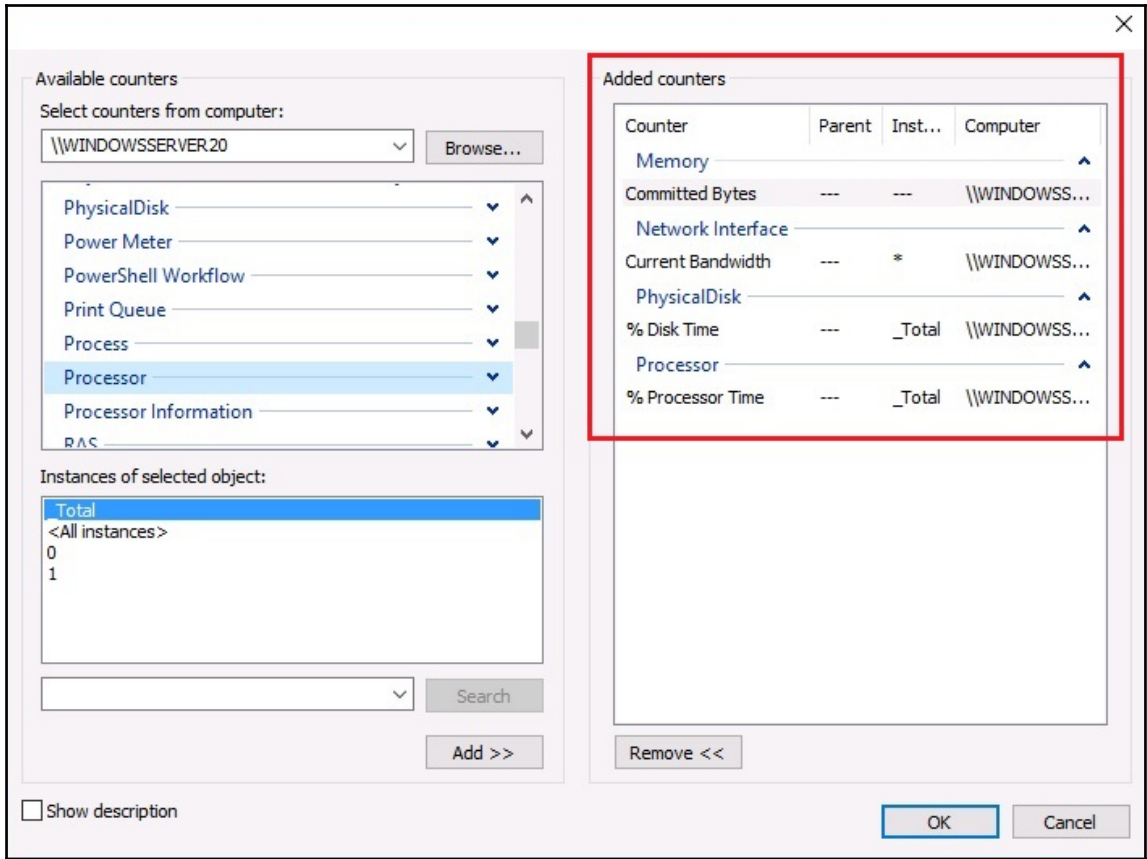
% Utilization 100%

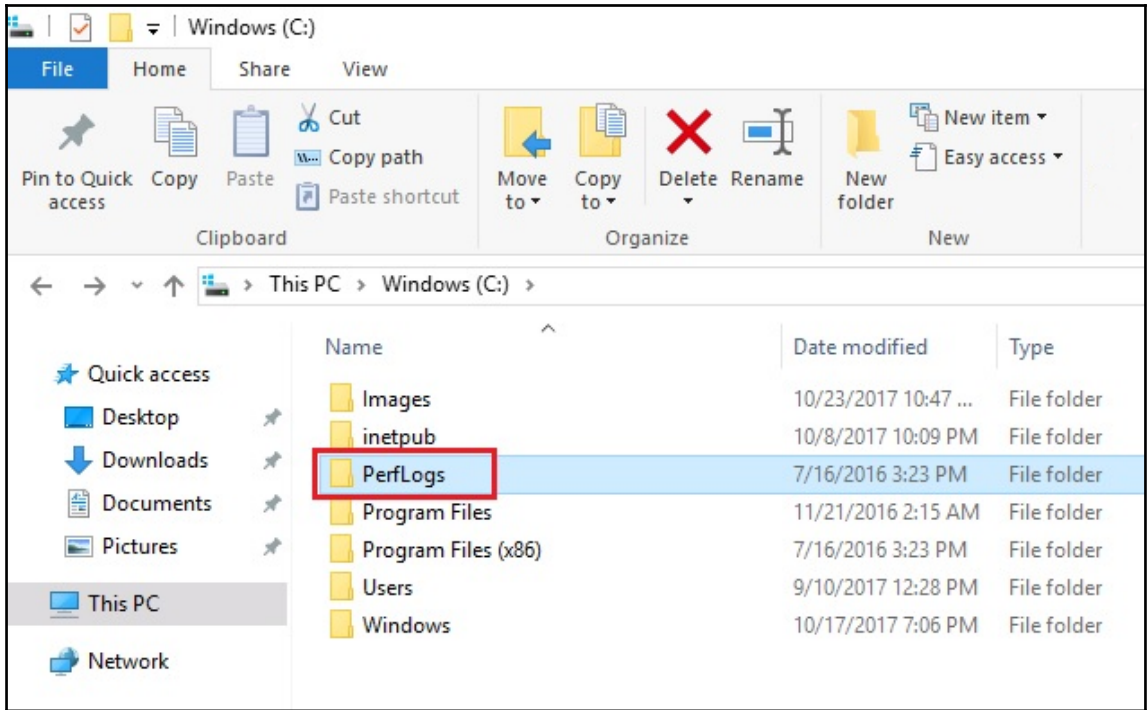
60 seconds 0


Utilization	Speed	Maximum speed:	2.90 GHz	
1%	2.90 GHz	Sockets:	1	
Processes	Threads	Handles	Virtual processors:	2
48	802	38351	Virtual machine:	Yes
		L1 cache:	N/A	

Up time
0:16:08:41

[Fewer details](#) | [Open Resource Monitor](#)





←  Create new Data Collector Set.

Which performance counters would you like to log?

Performance counters:

- \Processor Information(_Total)\% Processor Per...
- \Memory\Available Bytes

Sample interval:

Units: ▾

←  Create new Data Collector Set.

Which performance counters would you like to monitor?

Performance counters:

\Memory\Commit Limit
\Processor(_Total)\% Processor Time

Add...

Remove

Alert when:

Limit:

Above

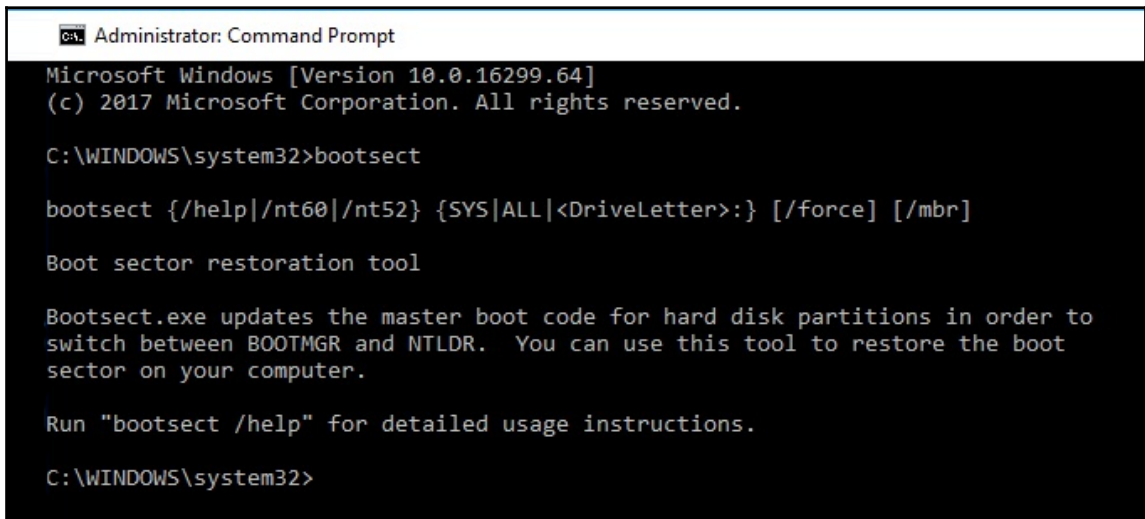
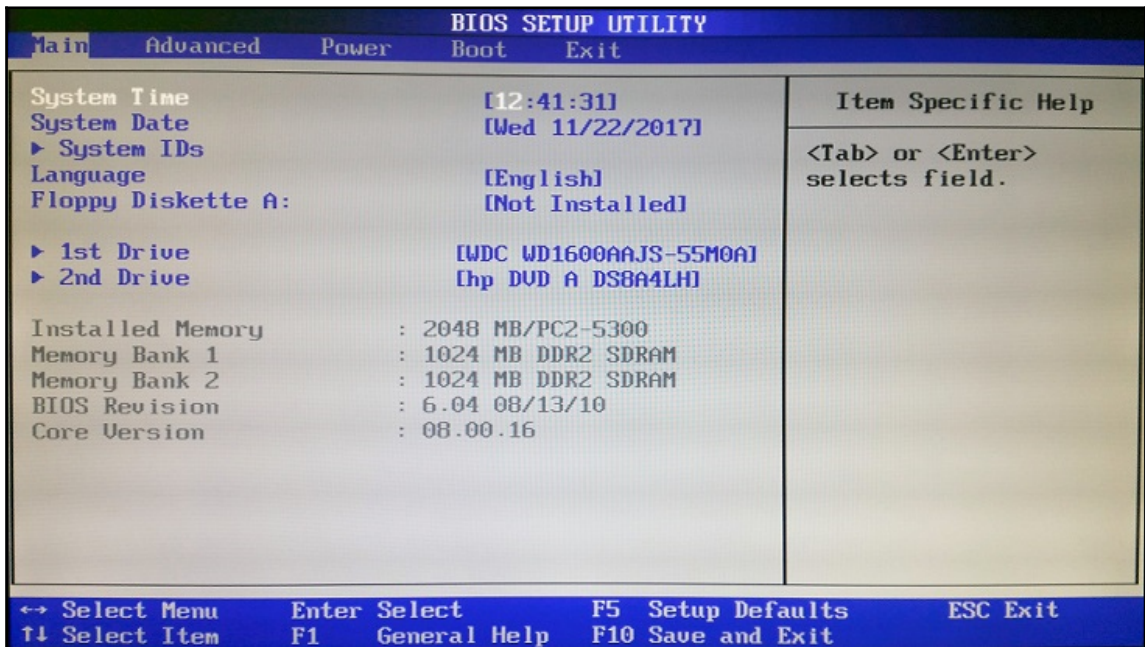
72

Next

Finish

Cancel

Chapter 10: Updating and Troubleshooting Windows Server



Please select the operating system to start:

Microsoft Windows XP Professional

Use the up and down arrow keys to move the highlight to your choice.
Press ENTER to choose.

For troubleshooting and advanced startup options for Windows, press F8.

Windows Advanced Options Menu

Please select an option:

Safe Mode

Safe Mode with Networking

Safe Mode with Command Prompt

Enable Boot Logging

Enable VGA Mode

Last Known Good Configuration (your most recent settings that worked)

Directory Services Restore Mode (Windows domain controllers only)

Debugging Mode

Disable automatic restart on system failure

Start Windows Normally

Reboot

Return to OS Choices Menu

Use the up and down arrow keys to move the highlight to your choice.

Advanced Boot Options

Choose Advanced Options for: Windows Server 2016
(Use the arrow keys to highlight your choice.)

Repair Your Computer

Safe Mode
Safe Mode with Networking
Safe Mode with Command Prompt

Enable Boot Logging
Enable low-resolution video
Last Known Good Configuration (advanced)
Directory Services Repair Mode
Debugging Mode
Disable automatic restart on system failure
Disable Driver Signature Enforcement
Disable Early Launch Anti-Malware Driver

Start Windows Normally

Description: View a list of system recovery tools you can use to repair startup problems, run diagnostics, or restore your system.

ENTER=Choose

ESC=Cancel

Select features

DESTINATION SERVER
WindowsServer2016.PacktBiz.local

- Before You Begin
- Installation Type
- Server Selection
- Server Roles
- Features**
- Confirmation
- Results

Select one or more features to install on the selected server.

Features

- TFTP Client
- VM Shielding Tools for Fabric Management
- WebDAV Redirector
- Windows Biometric Framework
- Windows Defender Features (Installed)
- Windows Identity Foundation 3.5
- Windows Internal Database
- Windows PowerShell (2 of 5 installed)
- Windows Process Activation Service
- Windows Search Service
- Windows Server Backup**
- Windows Server Migration Tools (Installed)
- Windows Standards-Based Storage Management
- Windows TIFF IFilter
- WinRM IIS Extension
- WINS Server
- Wireless LAN Service
- WoW64 Support (Installed)
- XPS Viewer

Description

Windows Server Backup allows you to back up and recover your operating system, applications and data. You can schedule backups, and protect the entire server or specific volumes.

Domain Controller Options

TARGET SERVER
WinServer2016

- Deployment Configuration
- Domain Controller Options**
- DNS Options
- Additional Options
- Paths
- Review Options
- Prerequisites Check
- Installation
- Results

Select functional level of the new forest and root domain

Forest functional level: Windows Server Technical Previe ▾

Domain functional level: Windows Server Technical Previe ▾

Specify domain controller capabilities

Domain Name System (DNS) server

Global Catalog (GC)

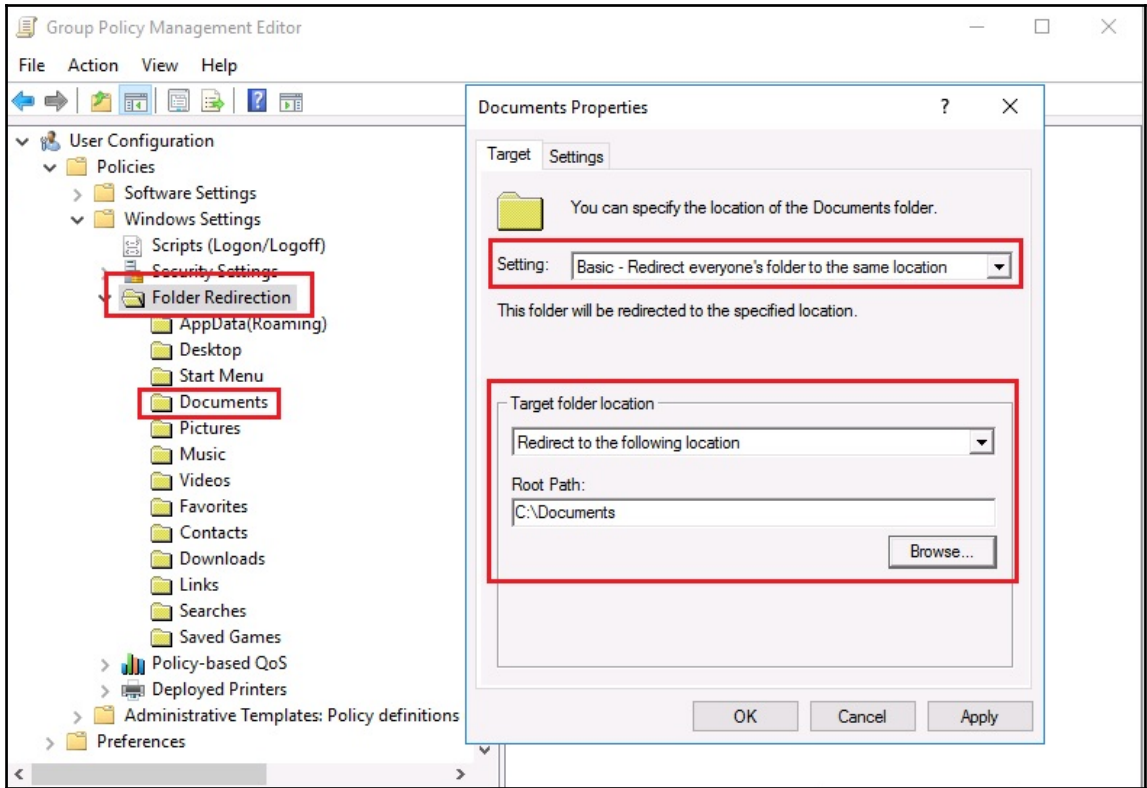
Read only domain controller (RODC)

Type the Directory Services Restore Mode (DSRM) password

Password: ●●●●●●●●

Confirm password: ●●●●●●●●

[More about domain controller options](#)



Settings

Advanced options

Choose how updates are installed

Give me updates for other Microsoft products when I update Windows.

Defer feature updates
[Learn more](#)

Note: Windows Update might update itself automatically first when checking for other updates.

[Privacy settings](#)

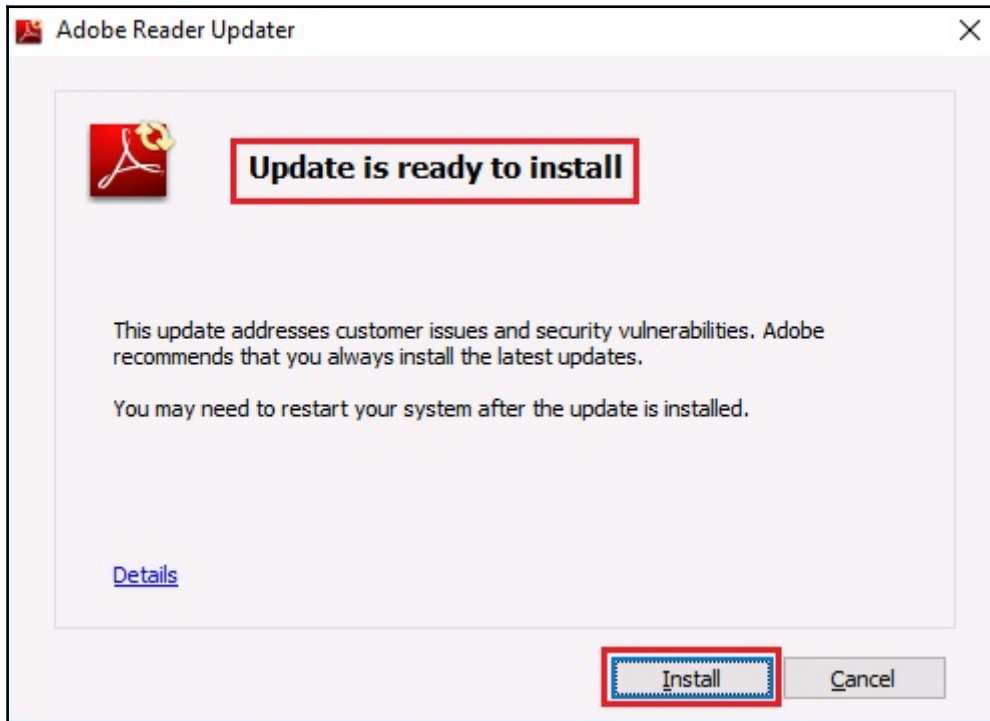
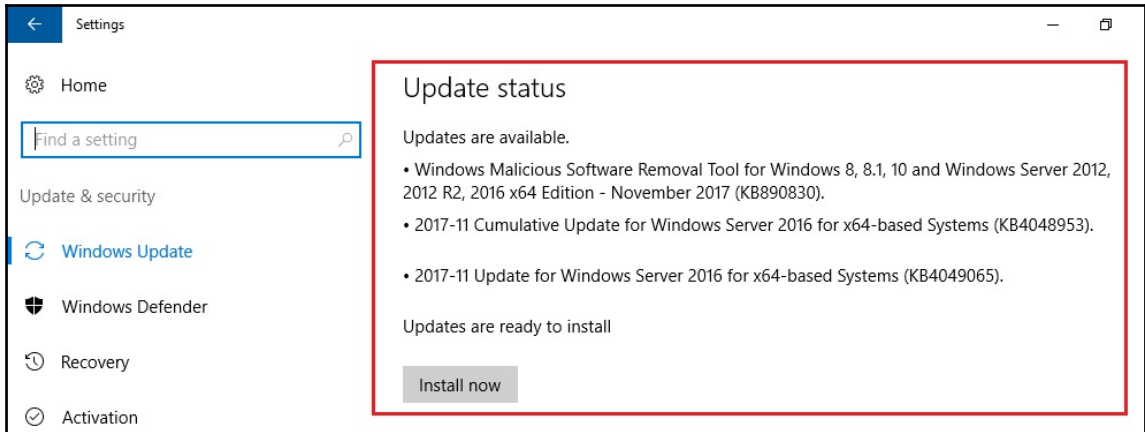
Device installation settings

Do you want to automatically download manufacturers' apps and custom icons available for your devices?

Yes (recommended)

No (your device might not work as expected)

[Save Changes](#) [Cancel](#)



⚙️ You need some updates.
Select this message to install.

Update status

Updates are available.

Preparing to install updates 0%

[Update history](#)

Update settings

Available updates will be downloaded automatically, except over metered connections (where charges may apply). You'll be asked to install updates when they've been downloaded.

[Change active hours](#)

[Restart options](#)

[Advanced options](#)

Select server roles

DESTINATION SERVER
WindowsServer2016.PacktBiz.Local

Before You Begin

Installation Type

Server Selection

Server Roles

Features

WSUS

Role Services

Content

Confirmation

Results

Select one or more roles to install on the selected server.

Roles

- Active Directory Federation Services
- Active Directory Lightweight Directory Services
- Active Directory Rights Management Services
- Device Health Attestation
- DHCP Server
- DNS Server (Installed)
- Fax Server
- File and Storage Services (2 of 12 installed)
- Host Guardian Service
- Hyper-V
- MultiPoint Services
- Network Policy and Access Services
- Print and Document Services
- Remote Access
- Remote Desktop Services
- Volume Activation Services
- Web Server (IIS) (10 of 43 installed)
- Windows Deployment Services
- ~~Windows Server Essentials Experience~~
- Windows Server Update Services

Description

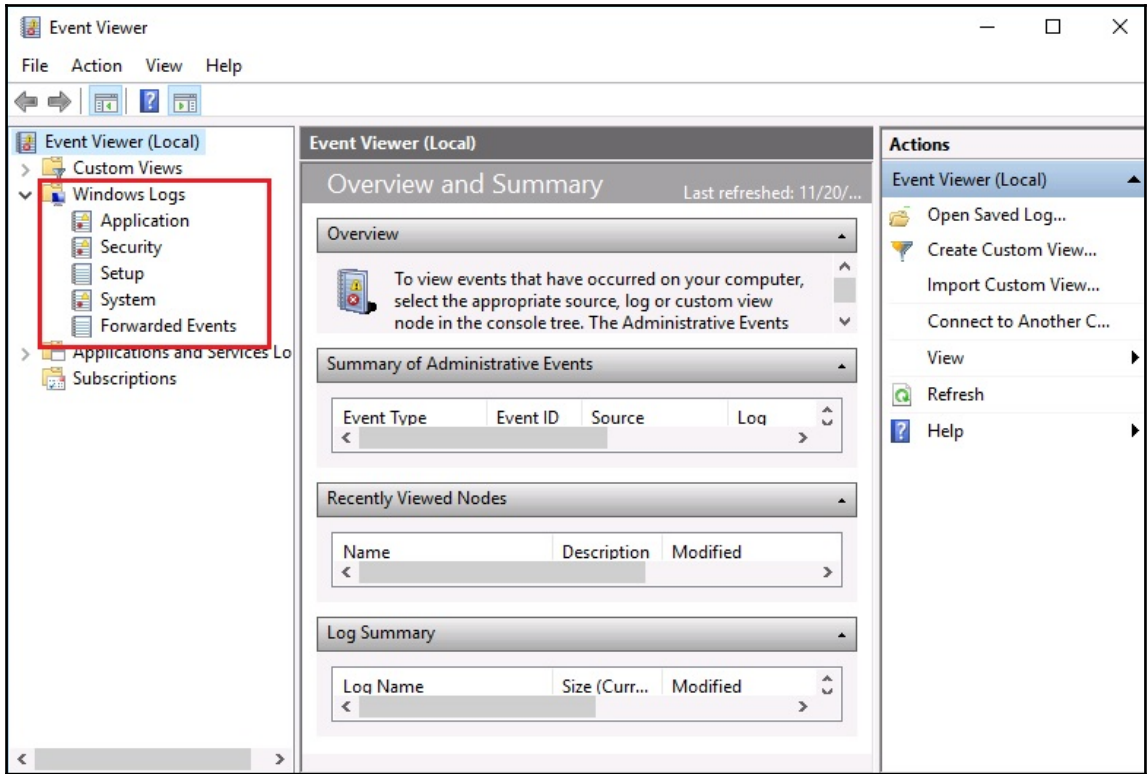
Windows Server Update Services allows network administrators to specify the Microsoft updates that should be installed, create separate groups of computers for different sets of updates, and get reports on the compliance levels of the computers and the updates that must be installed.

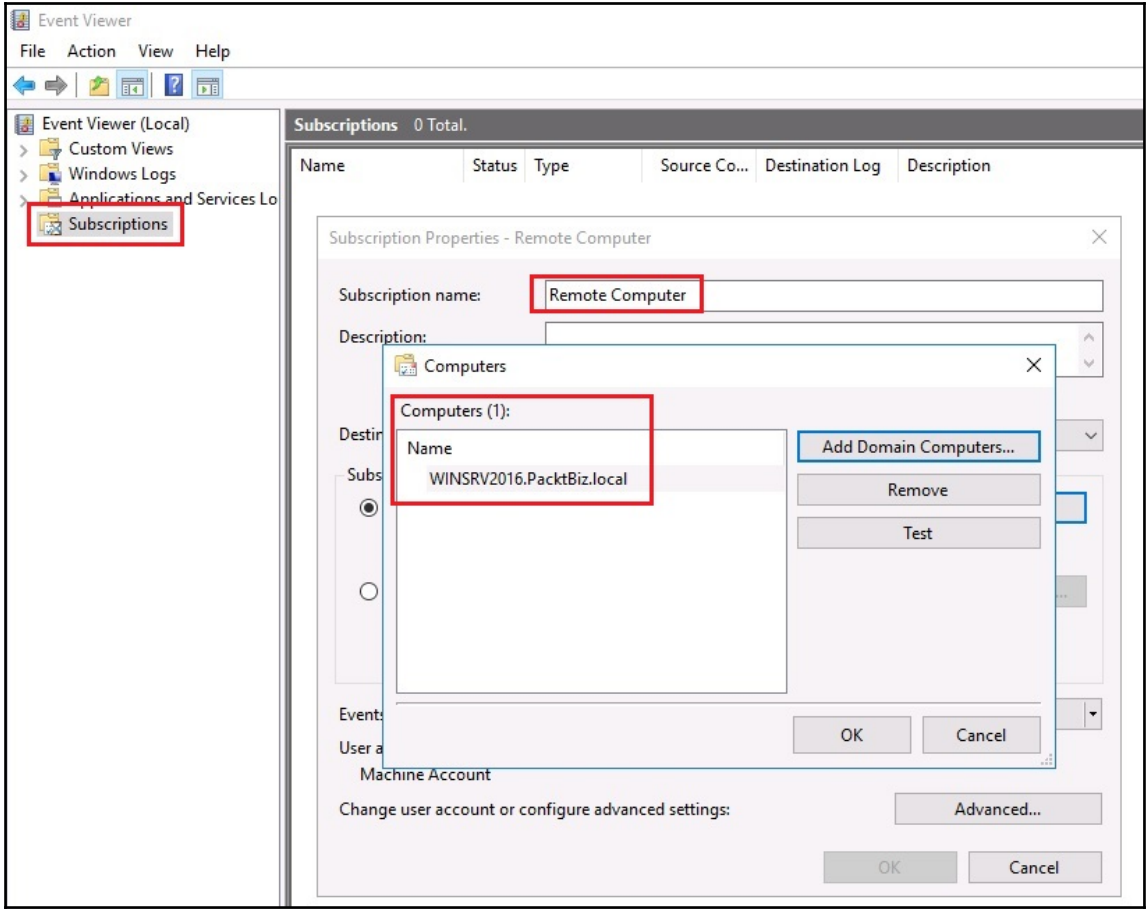
< Previous

Next >

Install

Cancel





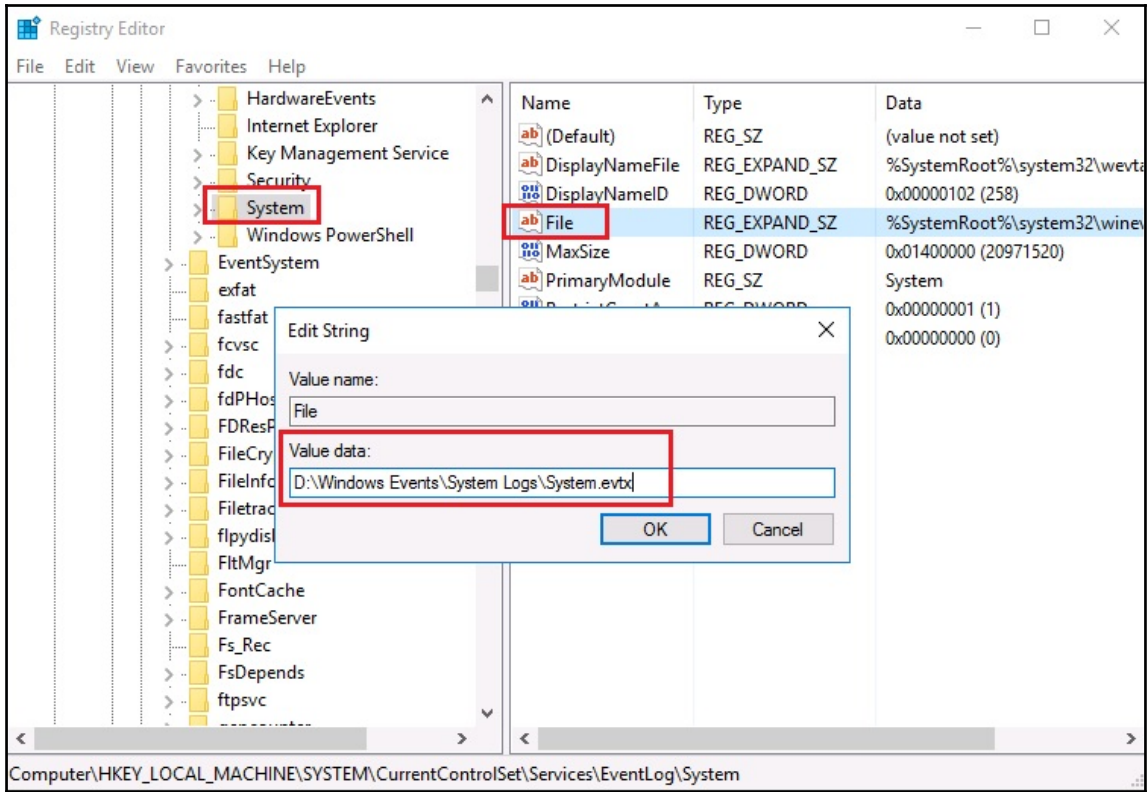
The screenshot shows the Windows Event Viewer application. The left-hand pane displays the tree view with 'Application' under 'Windows Logs' selected. The main pane shows a list of events filtered by 'Log: Application; Level: Error; Source: ; Keywords: win:AuditFailure'. The table below contains the event data:

Level	Date and Time	Source	Event ID	Task Category
Error	11/20/2017 12:13:00 PM	Defrag	257	None
Error	11/20/2017 12:12:58 PM	Defrag	257	None
Error	11/20/2017 12:12:57 PM	Defrag	257	None
Error	11/17/2017 10:20:01 PM	Application Error	1000	(100)
Error	11/16/2017 2:53:24 PM	Apps	2484	(2400)
Error	11/16/2017 1:29:21 PM	Apps	2484	(2400)
Error	11/16/2017 9:30:49 AM	Application Error	1000	(100)
Error	11/16/2017 9:28:02 AM	Application Error	1000	(100)
Error	11/16/2017 9:24:29 AM	Application Error	1000	(100)

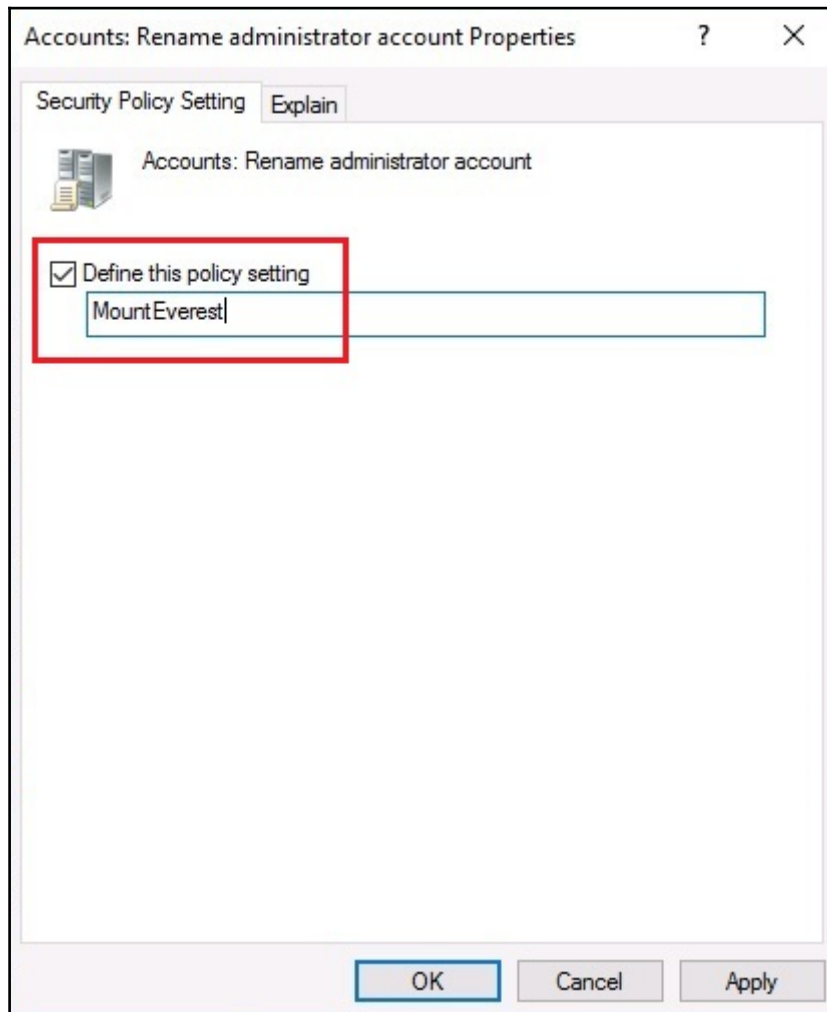
The 'Event 257, Defrag' details pane is open, showing the following message:

The volume Data (D:) was not optimized because an error was encountered: Consolidation nor Slab Analysis will run if slabs are less than 8 MB. (0x89000)

The 'Actions' pane on the right has 'Filter Current Log...' highlighted with a red box.



Appendix B: Examples of GPO for Sys Admins



Accounts: Guest account status Properties



Security Policy Setting Explain



Accounts: Guest account status

Define this policy setting:

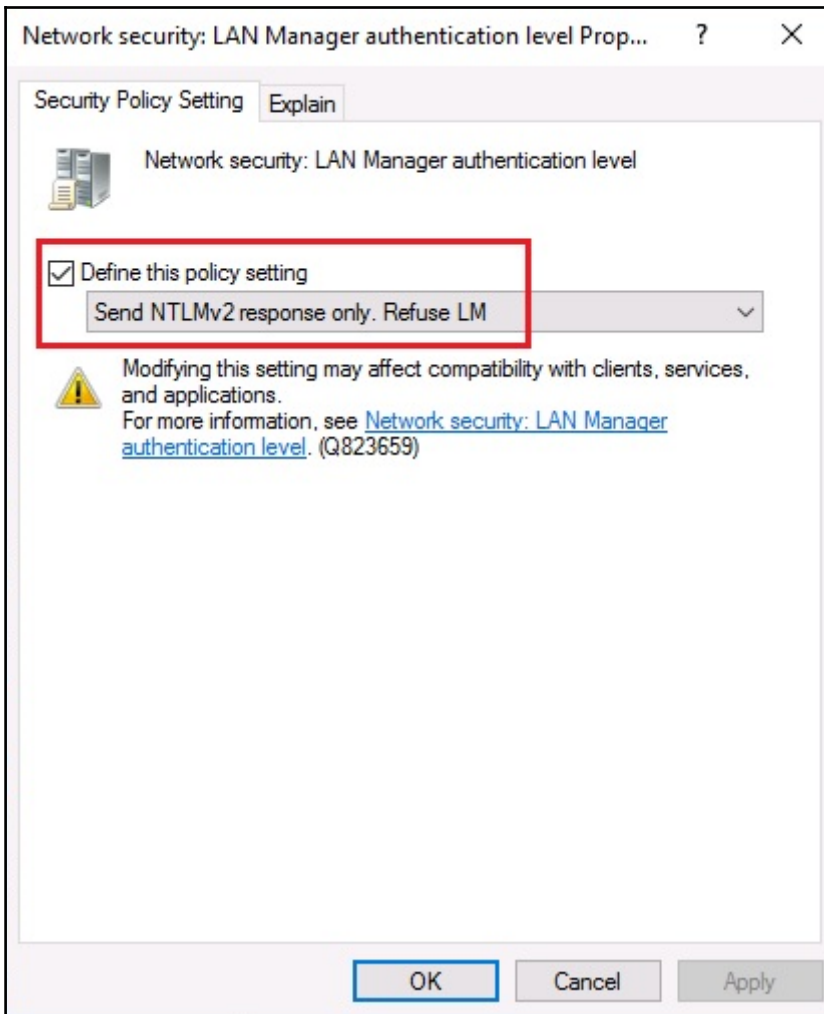
Enabled

Disabled

OK

Cancel

Apply



Network security: Do not store LAN Manager hash value o... ? X

Security Policy Setting Explain



Network security: Do not store LAN Manager hash value on next password change

Define this policy setting:

Enabled

Disabled

OK

Cancel

Apply

Minimum password length Properties



Security Policy Setting Explain



Minimum password length

Define this policy setting

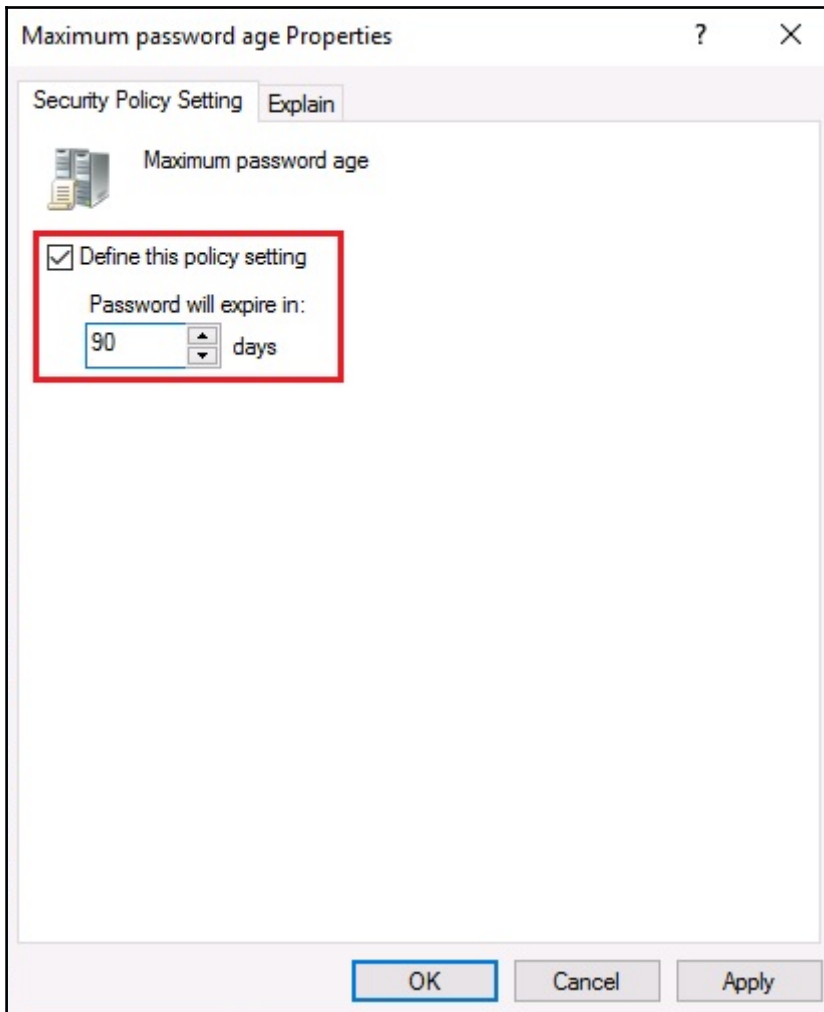
Password must be at least:

12 characters

OK

Cancel

Apply



Accounts: Block Microsoft accounts Properties



Security Policy Setting Explain



Accounts: Block Microsoft accounts

Define this policy setting

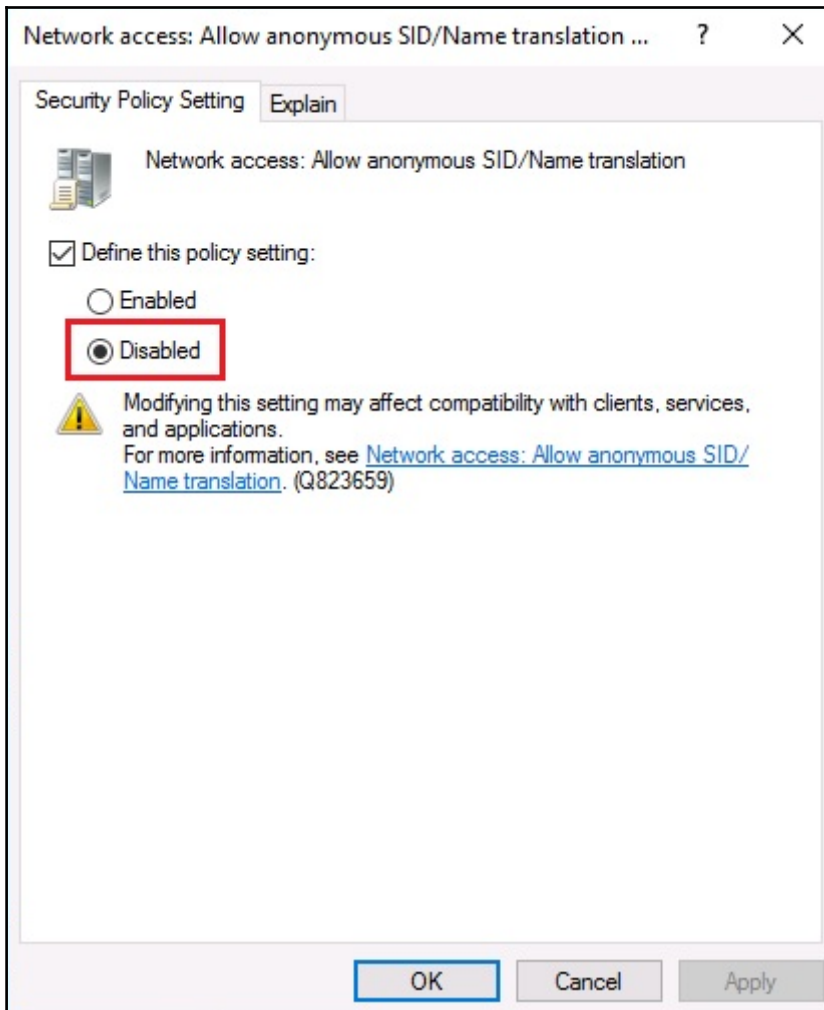
Users can't add or log on with Microsoft accounts

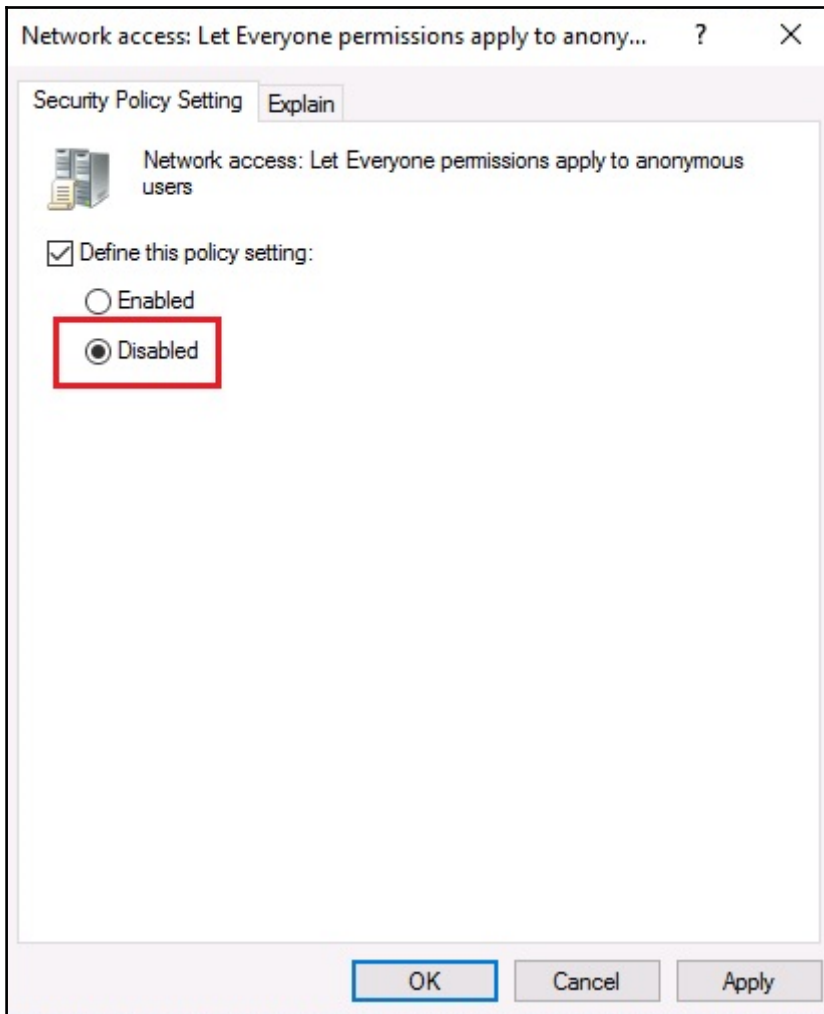


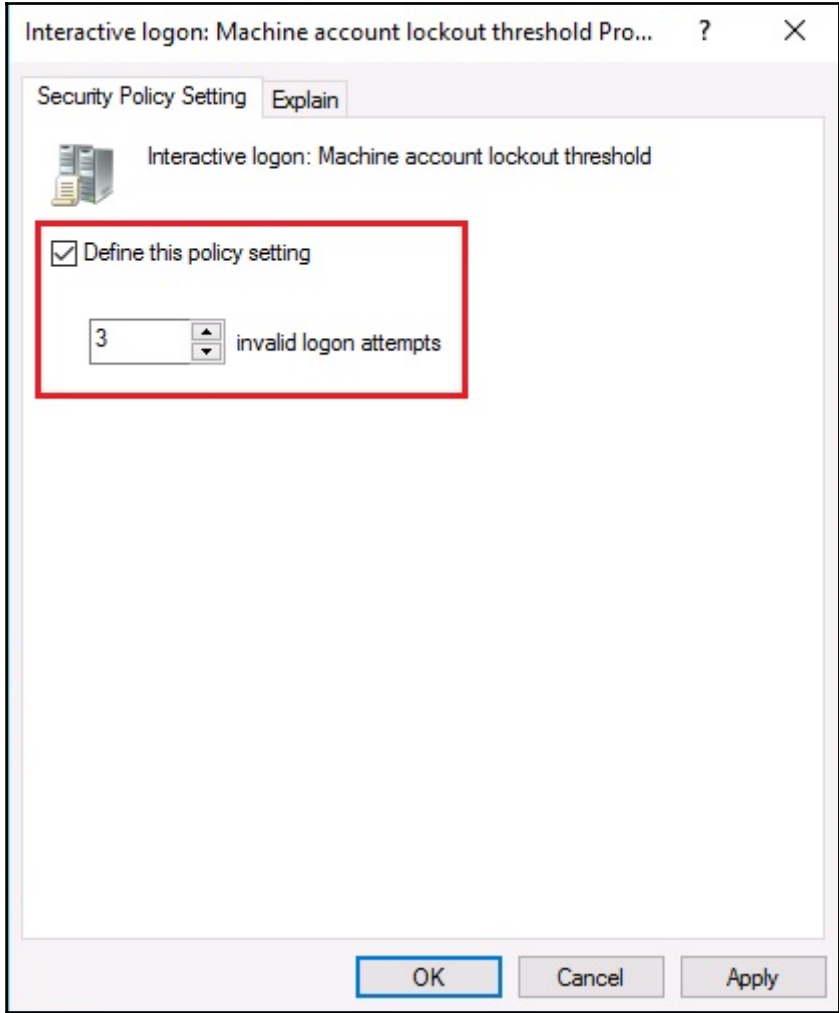
OK

Cancel

Apply







Prohibit access to Control Panel and PC settings

Prohibit access to Control Panel and PC settings

Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled

Supported on: At least Windows 2000

Options:

Help:

Disables all Control Panel programs and the PC settings app.

This setting prevents Control.exe and SystemSettings.exe, the program files for Control Panel and PC settings, from starting. As a result, users cannot start Control Panel or PC settings, or run any of their items.

This setting removes Control Panel from:

- The Start screen
- File Explorer

This setting removes PC settings from:

- The Start screen
- Settings charm
- Account picture
- Search results

If users try to select a Control Panel item from the Properties item on a context menu, a message appears explaining that a setting prevents the action.

OK Cancel Apply

Prevent access to the command prompt

Prevent access to the command prompt

Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled

Supported on: At least Windows 2000

Options:

Disable the command prompt script processing also?

No

Help:

This policy setting prevents users from running the interactive command prompt, Cmd.exe. This policy setting also determines whether batch files (.cmd and .bat) can run on the computer.

If you enable this policy setting and the user tries to open a command window, the system displays a message explaining that a setting prevents the action.

If you disable this policy setting or do not configure it, users can run Cmd.exe and batch files normally.

Note: Do not prevent the computer from running batch files if the computer uses logon, logoff, startup, or shutdown batch file scripts, or for users that use Remote Desktop Services.

OK Cancel Apply

Prevent access to registry editing tools

Prevent access to registry editing tools

Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled Supported on: At least Windows 2000

Options: Help:

Disable regedit from running silently?

Yes

Disables the Windows registry editor Regedit.exe.

If you enable this policy setting and the user tries to start Regedit.exe, a message appears explaining that a policy setting prevents the action.

If you disable this policy setting or do not configure it, users can run Regedit.exe normally.

To prevent users from using other administrative tools, use the "Run only specified Windows applications" policy setting.

OK Cancel Apply

Prevent the wizard from running.

Prevent the wizard from running. Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled Supported on:

Options:

Help:

OK Cancel Apply

All Removable Storage classes: Deny all access

All Removable Storage classes: Deny all access

Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled Supported on: At least Windows Vista

Options:

Help:

Configure access to all removable storage classes.

This policy setting takes precedence over any individual removable storage policy settings. To manage individual classes, use the policy settings available for each class.

If you enable this policy setting, no access is allowed to any removable storage class.

If you disable or do not configure this policy setting, write and read accesses are allowed to all removable storage classes.

OK Cancel Apply

Turn off Windows Installer

Turn off Windows Installer

Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled

Supported on: At least Windows 2000

Options:

Disable Windows Installer

Always

Help:

This policy setting restricts the use of Windows Installer.

If you enable this policy setting, you can prevent users from installing software on their systems or permit users to install only those programs offered by a system administrator. You can use the options in the Disable Windows Installer box to establish an installation setting.

-- The "Never" option indicates Windows Installer is fully enabled. Users can install and upgrade software. This is the default behavior for Windows Installer on Windows 2000 Professional, Windows XP Professional and Windows Vista when the policy is not configured.

-- The "For non-managed applications only" option permits users to install only those programs that a system administrator assigns (offers on the desktop) or publishes (adds them to Add or Remove Programs). This is the default behavior of Windows Installer on Windows Server 2003 family when the policy is not configured.

OK Cancel Apply

Prevent the usage of OneDrive for file storage

Prevent the usage of OneDrive for file storage

Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled

Supported on: At least Windows Server 2008 R2 or Windows 7

Options:

Help:

This policy setting lets you prevent apps and features from working with files on OneDrive.
If you enable this policy setting:

- * Users can't access OneDrive from the OneDrive app and file picker.
- * Windows Store apps can't access OneDrive using the WinRT API.
- * OneDrive doesn't appear in the navigation pane in File Explorer.
- * OneDrive files aren't kept in sync with the cloud.
- * Users can't automatically upload photos and videos from the camera roll folder.

If you disable or do not configure this policy setting, apps and features can work with OneDrive file storage.

OK Cancel Apply

Remove access to use all Windows Update features

Remove access to use all Windows Update features

Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled

Supported on: At least Windows XP Professional Service Pack 1 or At least Windows 2000 Service Pack 3 through Windows 8.1 or Windows Server 2012 R2 with most current

Options: Help:

Configure notifications:
0 - Do not show any notifications

This setting allows you to remove access to Windows Update.

If you enable this setting, all Windows Update features are removed. This includes blocking access to the Windows Update Web site at <http://windowsupdate.microsoft.com>, from the Windows Update hyperlink on the Start menu, and also on the Tools menu in Internet Explorer. Windows automatic updating is also disabled; you will neither be notified about nor will you receive critical updates from Windows Update. This setting also prevents Device Manager from automatically installing driver updates from the Windows Update Web site.

If enabled you can configure one of the following notification options:

0 = Do not show any notifications

This setting will remove all access to Windows Update features and no notifications will be shown.

1 = Show restart required notifications

OK Cancel Apply

Turn off Windows Defender

Turn off Windows Defender

Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled Supported on: At least Windows Vista

Options:

Help:

This policy setting turns off Windows Defender.

If you enable this policy setting, Windows Defender does not run, and computers are not scanned for malware or other potentially unwanted software.

If you disable or do not configure this policy setting, by default Windows Defender runs and computers are scanned for malware and other potentially unwanted software.

OK Cancel Apply

Prevent installation of devices not described by other policy settings

Prevent installation of devices not described by other policy settings Previous Setting Next Setting

Not Configured Comment:

Enabled

Disabled

Supported on:

Options: Help:

This policy setting allows you to prevent the installation of devices that are not specifically described by any other policy setting.

If you enable this policy setting, Windows is prevented from installing or updating the device driver for any device that is not described by either the "Allow installation of devices that match any of these device IDs" or the "Allow installation of devices for these device classes" policy setting.

If you disable or do not configure this policy setting, Windows is allowed to install or update the device driver for any device that is not described by the "Prevent installation of devices that match any of these device IDs," "Prevent installation of devices for these device classes," or "Prevent installation of removable devices" policy setting.

OK Cancel Apply

Table of Contents

Index

2

Index