

Chapter 2

Installing Windows Server 2008

Lab 2.1 Install the Windows Automated Installation Kit (WAIK)

Review Questions

1. True or **False**? The Windows Automated Installation Kit is installed in Windows Server 2008 by default.
2. What interface provides the best access to the utilities installed with the WAIK?
 - a. Windows PowerShell
 - b. Windows RE Tools Command Prompt
 - c. Windows PE Tools Command Prompt**
 - d. Windows Command Prompt
3. Which of the following is not installed as part of the Windows Automated Installation Kit?
 - a. ImageX
 - b. PEImg
 - c. Sysprep**
 - d. Copype
4. Which of the following is not a switch for ImageX?
 - a. /mount
 - b. /apply
 - c. /capture
 - d. /details**
5. ____ **Windows PE** ____ is a minimal Win32 operating system with limited services, built on the Windows Vista kernel.

Lab 2.2 Create a Custom WinPE Image

Review Questions

1. What is the command to access an image file so the contents of the image can be modified?
 - a. Imagex /mount -rw [imagefile] [imagenumber] [mountfolder]
 - b. Imagex /write [imagefile] [imagenumber] [mountfolder]
 - c. Imagex /mountrw [imagefile] [imagenumber] [mountfolder]
 - d. Imagex /mount [imagefile] [imagenumber] [mountfolder]
2. Which of the following is a new command-line tool that can be used to capture, modify, and apply file-based disk images for rapid deployment?
 - a. Oscdimg
 - b. Copytype
 - c. Peimg
 - d. ImageX
3. Which of the following is a new command –line tool for creating an .iso-based image file of a customized 32-bit or 64-bit version of Windows PE?
 - a. Oscdimg
 - b. Copytype
 - c. Peimg
 - d. Imagex
4. **True** or False? ImageX cannot be used to create a full system backup of Windows Server 2008 for disaster recovery purposes.
5. ____ **Oscdimg** ____ is a command-line tool for creating an image file (.iso) of a customized 32-bit or 64-bit version of Windows PE.

Lab 2.3 Create and Deploy a Windows Server 2008 Image Using WinPE

Review Questions

1. By default, images created using ImageX are stored in what format?
 - a. ISO
 - b. IMG
 - c. WIM

- d. WMI
2. Which of the following command switches can be used with ImageX?
- a. /capture
 - b. /apply
 - c. /shrink
 - d. /compress
3. Which of the following is not an option of the /compress switch?
- a. Fast
 - b. Maximum
 - c. Normal
 - d. Slow
4. In order to work with an ImageX file it must be ____mounted____.
5. True or False? A deployable operating system image can be created using ImageX from within the GUI of Windows Server 2008.

Lab 2.4 Use Windows System Image Manager to Create an Answer File for Unattended

Review Questions

1. How many component areas are available in a WSIM answer file?
- a. 2
 - b. 7
 - c. 14
 - d. 51
2. This file format is used to store Answer Files:
- a. .wim
 - b. .iso
 - c. .csv

d. .xml

3. Which of the following would be the most efficient method for getting help with a specific component setting?

a. Search for the component name in your favorite search engine.

b. Highlight the component setting and press F1.

c. Double-click on the component setting.

d. Highlight the component setting and click the Help icon on the taskbar.

4. Before you can load an image file into WSIM for creating an answer file, a _____ **Catalog** _____ file must be created for the image file.

5. True or **False**? WSIM only needs DNS name resolution on the Internet in order to function properly.

Review Questions

1. The Server Core version of the Windows Server 2008 Enterprise edition can be upgraded to the Full version without completely reinstalling the OS. True or False? **False?**
2. You can use OCsetup.exe to install Active Directory Domain Services on a Server Core version of Windows Server 2008 Standard edition. True or False? **False?**
3. To capture a drive partition containing an operating system, you need run ImageX by booting from Windows PE. **True** or False?
4. You can use the same image file for 32-bit and 64-bit versions of Windows Server 2008. True or False? **False?**
5. TFTP and multicast are based on reliable network protocols and transport services. True or False? **False?**
6. The Windows Automated Installation Kit is installed by default as part of the Windows Deployment Services role installation. True or False? **False?**
7. ImageX automatically saves all changes you make to a mounted image. True or False? **False?**
8. By default, Windows Server 2008 has a grace period of 30 days in which to activate. True or False? **False?**
9. Which component would you install on a Windows Server 2008 server to manage the deployment of OS images over the network?
 - a. ImageX
 - b. Sysprep
 - c. WindowsPE
 - d. **Windows Deployment Services**
 - e. Windows System Image Manager
10. Which utility do you use to mount image files for adding device drivers and data?
 - a. **ImageX**
 - b. Sysprep
 - c. WindowsPE
 - d. Windows Deployment Services
 - e. Windows System Image Manager
11. Which utility do you use to create answer files for unattended installations?
 - a. ImageX
 - b. Sysprep
 - c. WindowsPE
 - d. Windows Deployment Services
 - e. **Windows System Image Manager**
12. Which utility do you use to generalize computers before imaging by removing specific information such as user settings and the security identifier?
 - a. ImageX
 - b. **Sysprep**
 - c. WindowsPE
 - d. Windows Deployment Services

- e. Windows System Image Manager
13. Which Windows Server 2008 process improvement simplifies the development of service packs and updates?
- a. Modularization
 - b. Windows Imaging Format
 - c. XML-based answer files
 - d. Installation scripts
 - e. File and Registry redirection
14. Which extension is used for ImageX-based image files?
- a. .wmi
 - b. .wim
 - c. .iso
 - d. .img
15. Which of the following are not requirements for running WDS?
- a. DHCP must be active and available on your network.
 - b. DNS must be active and available on your network.
 - c. An NTFS partition must be available for storing images.
 - d. WDS must be running on a domain controller.
16. You have a Windows Server 2008 server named MSN-SRV001 that has been configured for company XYZ.com. Before imaging the machine for deployment, you need to generalize the image so that Windows Welcome runs on the next reboot of the server. Which of the following steps generalize your installation? (Choose three answers that together provide the complete solution.)
- a. Run ImageX /generalize:OOBE "c:*.*)"
 - b. Run Windows Deployment Services
 - c. Choose Out-Of-Box Experience in Sysprep
 - d. Choose Out-Of-Box Experience in Windows Deployment Services
 - e. Run Sysprep.exe.
 - f. Choose the generalize check box in Windows Deployment Services
 - g. Choose the generalize check box in Sysprep
17. Which command-line utility do you use to manage product activation and licensing in Windows Server 2008?
- a. ImageX
 - b. Slmgr.vbs
 - c. Servermanagercmd.exe
 - d. WMIC
18. What type of media cannot be used to run Windows PE?
- a. CD
 - b. DVD
 - c. USB flash drive
 - d. distribution share
19. Which command can you use to mount an image using ImageX?

- a. ImageX /mount c:\imagefolder\ "Standard" "c:\Images\Server2008.img"
 - b. ImageX /mnt c:\imagefolder\ "Standard" "c:\Images\Server2008.wim"
 - c. ImageX /mount c:\imagefolder\ "Standard" "c:\Images\Server2008.wim"
 - d. ImageX /mnt c:\imagefolder\ "Standard" "c:\Images\Server2008.img"
20. Retaining settings and applications is one reason for performing a(n) Clean installation instead of a(n) upgrade installation.
21. WindowsPE is a customizable 32-bit operating system that can be used for installation and recovery of Windows Server 2008.
22. ImageX is the command-line tool for capturing a Windows image file.
23. Multicast is an unreliable transport service used by Windows Deployment Service to install multiple images to clients across a network.
24. To use Windows System Image Manager and ImageX, you need to install the Windows Deployment Services.
25. You have been asked to review the licensing for a future Windows Server 2008 deployment at Ditka's Coffee Traders (DCT). Based on the following information, recommend the options that require the fewest CALs to be purchased by the client. Select two answers that together provide the complete solution.
- 5 Windows Server 2008 Standard edition servers will be deployed.
 - 20 Windows Vista clients will be deployed.
 - DCT has 20 employees who will need to access server resources.
 - Each employee is provided a Windows Mobile 6.0 Smartphone for access to their server-based ordering application running in IIS 7.0.
- a. Use Per Server licensing mode
 - b. User Per User or Per Server licensing mode
 - c. Use Per User or Per Device licensing mode
 - d. Install 20 User-Based CALs
 - e. Install 40 Device-Based CALs

Case Projects

Case Project 2-1: Capturing an Image of Windows Server 2008 with ImageX

You are an administrator for Badger Novelties. The company is planning to introduce Windows Server 2008 Standard edition on 10 new servers to be installed in your data center. To ease the deployment burden, you want to create a custom image to deploy to all of the new servers. You've heard about ImageX and want to use it to create the image. Using ImageX, capture an image of a Windows Server 2008 installation and store it on an available network share. For this project, you can use your lab server for imaging or another server provided by your instructor.

Case Project 2-1: Creating a Batch File for Configuring Server Core Installations of Windows Server 2008

After researching Server Core and becoming familiar with it, you decided to create a batch script that will complete a default configuration of Server Core for you. The following is a list of settings you want to configure with your script:

- Rename the workgroup to SERVERCORE.
- Rename the workgroup to SERVERCORE.
- Add a local account named SAServerCoreAdmin with a password of P@ssw0rd.
- Add SAServerCoreAdmin to the local Administrators group.
- Install the Hyper-V role and the Telnet Client feature.
- Activate Windows.

With this information, create a batch script to configure the required settings.

Solution:

In Notepad or another text editor, enter the following commands:

```
Net User SAServerCoreAdmin P@ssw0rd /add
```

```
Net LocalGroup "administrators" SAServerCoreAdmin /Add
```

```
WMIC ComputerSystem Where name="%computername%" call Rename  
Name="SERVERCORE"
```

```
start /w Ocsetup Hyper-V
```

```
start /w ocsetup TelnetClient
```

```
Slmgr.vbs -ato
```

```
Shutdown /r /f /t 30
```

Save the text file as setup.bat.

Case Project 2-2: Building a Windows Server 2008 Standard Server for the Ongoing Case Study

In this project, you build an installation of Windows Server 2008 Standard (Full installation) for use in the ongoing case project. Install the default configuration with the following requirements:

- 20 GB system partition
- CS-SRV-001 as the server name
- Member of the CaseStudy workgroup
- Administrator account password set to P@ssw0rd

Solution: Using the information above, students should follow Activity 1-1 to build the server.

Case Project 2-3: Building a Server Core Server for the Ongoing Case Study

In this project, you build an installation of Windows Server 2008 Standard (Server Core installation) for use in the ongoing case project. You install the default configuration with the following requirements:

- 16 GB system partition
- CS-SCSRV-001 as the server name
- Member of the CaseStudy workgroup
- Administrator account password set to P@ssw0rd

Solution: Using the information above, students should follow Activity 2-8 to build the server.