Chapter 2: Installing Windows Server 2008

TRUE/FALSE

1. TFTP traffic is connectionless in nature, meaning that the sequencing of data packets, or datagrams, is not guaranteed.

   ANS: T PTS: 1 REF: 40

2. UDP does not lend itself to applications that need efficiency and speed over guaranteed delivery.

   ANS: F PTS: 1 REF: 40

3. Clean installations do not transfer settings from previous operating systems that might be installed on a server.

   ANS: T PTS: 1 REF: 48

4. You cannot upgrade from Windows Server 2003 (any edition) to Windows Server 2008 with Server Core.

   ANS: T PTS: 1 REF: 49

5. A virtual client is a computer running a virtualization application for VM guests.

   ANS: F PTS: 1 REF: 59

MULTIPLE CHOICE

1. A(n) ____ is a text file that provides configuration settings during the installation of an operating system.
   a. installation script
   b. answer file
   c. feature
   d. packet

   ANS: B PTS: 1 REF: 39

2. ____ automate the installation of services and features that you would normally enter manually during installation.
   a. Installation scripts
   b. Answer files
   c. Features
   d. Packets

   ANS: A PTS: 1 REF: 39

3. ____ is a tool you use to manage the imaging process on a network. Imaging allows you to capture a customized Windows image that you can reuse throughout an organization.
   a. Multicast
   b. Trivial File Transfer Protocol
   c. Windows Deployment Services
   d. User Datagram Protocol

   ANS: C PTS: 1 REF: 39

4. ____ allows multiple computers to receive communication simultaneously.
   a. XML
   b. Multicast
   c. Key Management Services
   d. New Technology File System

ANS: B PTS: 1 REF: 40

5. The ____ is the protocol used for transferring images across the network.
   a. User Datagram Protocol
   b. Trivial File Transfer Protocol
   c. Transmission Control Protocol
   d. New Technology File System

   ANS: B PTS: 1 REF: 40

6. The ____ for Windows Server 2008 is a suite of tools that helps original equipment manufacturers (OEMs), system builders, and corporate IT professionals deploy Windows onto new hardware by automating the installation process.
   a. User Datagram Protocol
   b. Trivial File Transfer Protocol
   c. Windows Automated Installation Kit
   d. New Technology File System

   ANS: C PTS: 1 REF: 41

7. ____ is a new command-line tool that organizations can use to capture, modify, and apply file-based disk images for rapid deployment.
   a. ImageX
   b. Windows RE
   c. Key Management Services
   d. CMID

   ANS: A PTS: 1 REF: 43

8. Windows PE is a limited 32-bit operating system based on the Windows Server 2008 and Windows Vista SP1 ____, which is the programmatic logic in the central components of Windows operating systems.
   a. SID
   b. Sysprep
   c. UDP
   d. kernel code

   ANS: D PTS: 1 REF: 43

9. ____ prepares an installation of Windows for imaging and deployment by modifying a system to create a new SID and other unique information the next time it starts.
   a. Sysprep
   b. TCP/IP
   c. SID
   d. UDP

   ANS: A PTS: 1 REF: 45

10. ____ removes user and computer-specific information that should not be transferred to new images.
    a. Sysprep
    b. TCP/IP
    c. OOBE
    d. UDP

    ANS: A PTS: 1 REF: 45

11. ____ removes all the SIDs, unique characteristics, and applications from an operating system..
    a. Sysprep
    b. TCP/IP
    c. OOBE
    d. UDP

    ANS: C PTS: 1 REF: 46

12. ____ is an advanced generalization mode that allows you to apply additional application and driver modifications to a specific image.
    a. Sysprep
    b. Audit Mode
    c. Read-only domain controller
    d. SID

    ANS: B PTS: 1 REF: 46

13. ____ require you to create a customized image that is applied to each computer you are deploying.
    a. Network distribution share installations
    b. CD boot installations
    c. Image-based installations
    d. Unattended installations

    ANS: C PTS: 1 REF: 50

14. ____ validates licensed software products by creating a unique installation ID based on a hashed hardware serial numbers and a product key.
    a. SID
    b. Generalization
    c. Volume licensing
    d. Product activation

    ANS: D PTS: 1 REF: 56

15. With ____, administrators can activate a group of computers with a single connection to Microsoft.
    a. proxy activation
    b. image-based installation
    c. modularization
    d. generalization

    ANS: A PTS: 1 REF: 56

16. ____ activates your MAK with Microsoft while it manages the activations of your network clients internally in its database.
    a. Proxy activation
    b. Volume Activation Tool Management
    c. New Technology File System
    d. Key Management Services

    ANS: B PTS: 1 REF: 57

17. ____ provides an internal service for activating all computers in an enterprise network without requiring the computers to contact Microsoft.
    a. Proxy activation
    b. Volume Activation Tool Management
    c. New Technology File System
    d. Key Management Services

    ANS: D PTS: 1 REF: 57

18. A ____ is a collection of products used to identify the type of MAK or KMS key required to install specific operating system editions.
    a. feature
    b. license
    c. product key group
    d. module

    ANS: C PTS: 1 REF: 58

19. A ____ provides the right to install an instance of an operating system.
    a. feature
    b. license
    c. product key group
    d. module

    ANS: B PTS: 1 REF: 58

20. The term ____ is used to describe instances of an operating system running in a software-based workspace provided by a virtualization application such as Hyper-V.
    a. VM host
    b. client access license
    c. VM guests
    d. multicast

    ANS: C PTS: 1 REF: 59

21. A(n) ____ is a license that grants to a user or computer device the right to access the server.
    a. read-only domain controller
    c. CAL

b. installation script
d. packet

ANS: C PTS: 1 REF: 59

COMPLETION

1. A(n) _____ contains all the information you need to make an exact copy of a storage device, including its structure and contents.

   ANS:
   image file
   disk image

   PTS: 1 REF: 38

2. _____ allows you to capture a customized Windows image that you can reuse throughout an organization.

   ANS: Imaging

   PTS: 1 REF: 39

3. _____ is designed for installing, troubleshooting, and recovering Windows Server 2008 and Windows Vista.

   ANS: Windows PE

   PTS: 1 REF: 43

4. _____ installations allow you to install Windows Server 2008 over an existing installation of Windows Server 2003.

   ANS: Upgrade

   PTS: 1 REF: 48

5. KMS works by counting the number of physical client computers requesting activation and then storing information on these computers in a table based on _____ numbers, which are unique client IDs stored in the KMS database.

   ANS:
   client machine identification (CMID)
   client machine identification
   CMID

   PTS: 1 REF: 57

MATCHING

Match each item with the correct statement below.

a. Sysprep
b. Unattended installations
f. User-based CALs
g. RODCs

c. ImageX
d. Product activation
e. Device-based CALs
h. rmtshare.exe
i. Windows Remote Management

1. Provides a set of system cleanup actions
2. Validates licensed software products by creating a unique installation ID based on a hashed hardware serial numbers and a product key.
3. The license of choice in situations where many users access resources from a few client computers.
4. Uses answer files and scripts for automation and does not require you to be present.
5. Allow one user to access server resources from unknown or multiple devices.
6. Can place multiple images within a single file.
7. Allows you to create and manage remote shared resources from the command line.
8. Used to configure and manage Server Core installations.
9. Allow you to deploy a DC that allows only specific account data to be read from the server.

1. ANS: A PTS: 1 REF: 46
2. ANS: D PTS: 1 REF: 56
3. ANS: E PTS: 1 REF: 60
4. ANS: B PTS: 1 REF: 47
5. ANS: F PTS: 1 REF: 60
6. ANS: C PTS: 1 REF: 52
7. ANS: H PTS: 1 REF: 66
8. ANS: I PTS: 1 REF: 67
9. ANS: G PTS: 1 REF: 62

SHORT ANSWER

1. What are the advantages of Windows Deployment Services?

   ANS:
   WDS provides the following benefits:
   • Allows network-based installation of Windows operating systems, including Windows Vista and Windows Server 2008, reducing the complexity and cost when compared to manual installations
   • Deploys Windows images to computers without operating systems. Supports mixed environments that include Windows Vista, Windows Server 2008, Windows XP, and Windows Server 2003
   • Uses standard Windows Server 2008 setup technologies, including Windows PE, .wim files, and image-based setup

   PTS: 1 REF: 39-40

2. Discuss the requirements that should be met by your environment prior to the installation and use of EDS.

   ANS:
   Your environment must meet the following requirements before you can install and use WDS:
   • The computer must be a member of an Active Directory domain.
   • Dynamic Host Configuration Protocol (DHCP) must be active and available on your network.
   • Domain Name System (DNS) must be active and available on your network.
   • A New Technology File System (NTFS) partition must be available for storing images.

   PTS: 1 REF: 40

3. What benefits are derived from the implementation of multicast?

   ANS:
   • Multicast works well on production networks without interfering with existing network communication because it controls congestion and data flow.
   • Multicast is independent of WDS and Active Directory. This means you do not need to have Active Directory or an active WDS implementation to take advantage of it.

   PTS: 1 REF: 40

4. Briefly discuss the meaning of the term *generalization*.

   ANS:
   Because even a basic installation of Windows Server 2008 contains unique information such as security identifiers (SIDs), you might need to remove unique characteristics of an installation before creating an image. This task is called generalization.

   PTS: 1 REF: 45

5. Under what circumstances would you opt for a clean installation of Windows Server 2008?

   ANS:
   The following are good examples of when to use a clean installation:
   • Your current server operating system is not Windows Server 2003 SP1 or greater.
   • You cannot upgrade your current server operating system to Windows Server 2003 SP1.
   • You have a third-party application installed that is not supported on Windows Server 2008.
   • You do not have a driving business need that requires you to perform an upgrade.
   • You have good backups and documentation.

   PTS: 1 REF: 48

6. Discuss the limitations of ImageX.

   ANS:
   Limitations include:
   • ImageX can be used only for capturing and applying full images of an OS. It cannot be used to apply updates to the OS or software applications.
   • ImageX supports only the .wim file type, unlike other third-party applications for imaging. Mounting a .wim file as a read/write volume requires NTFS.
   • ImageX images can be mounted only in Windows XP with SP2, Windows Vista, and Windows Server 2003 with SP1.

   PTS: 1 REF: 50-51

7. List four imaging tasks that can be performed with ImageX.

   ANS:
   With ImageX, you can perform the following imaging tasks:
   • Capture an image
   • Append an image
   • Modify an image
   • Apply an image

   PTS: 1 REF: 51

8. What is the difference between proxy and individual activation?

   ANS:
   With individual activations, each client is responsible for performing its own activation. This requires all of your machines to have access to the Internet during activation. Another type of activation is proxy. With proxy activation, administrators can activate a group of computers with a single connection to Microsoft.

   PTS: 1 REF: 56

9. What is the difference between Per Device mode and Per Server mode?

   ANS:
   With Per User or Per Device mode, a separate Windows CAL is required for each device or user that accesses the resources on any of your network servers. The number of CALs required is determined by the total number of users or devices accessing your server resources.

   With Per Server mode, a separate Windows CAL is required for each device or user that accesses the resources on a specific server, not all your network servers. The number of CALs required is determined by the total number of users or devices that can simultaneously access a single server.

   PTS: 1 REF: 60

10. List five deployment options for Server Core.

    ANS:
    The following are some common deployment options for Server Core:
    • Branch office server
    • RODC or standard DC
    • DNS
    • DHCP
    • File server
    • Print server
    • Hyper-V Host or Guest

    PTS: 1 REF: 62