

## Module 12: Installation, Storage, and Compute with Windows Server

### **1. What two options are provided in the type of installation window during Windows Server 2016 installation?**

- Windows Server 2016 Standard/Datacenter (Desktop Experience): Includes GUI.
- Windows Server 2016 Standard/Datacenter (Server Core): Minimal installation without GUI.

### **2. How to configure server step by step?**

1. Install Windows Server OS.
2. Set computer name and IP address.
3. Install updates and required drivers.
4. Open Server Manager.
5. Add roles and features (e.g., AD, DNS, DHCP).
6. Promote server to a domain controller.
7. Create user accounts and groups.
8. Set Group Policies.
9. Configure security settings.
10. Enable backup and monitoring tools.

### **3. What are the Pre-installation tasks?**

- Verify hardware compatibility.
- Plan IP address scheme.
- Choose edition of Windows Server.
- Backup existing data.
- Check software compatibility.
- Plan storage and partitions.
- Have product key/license ready.
- Identify server roles/features.

### **4. What are the Post-installation tasks?**

- Install Windows updates.
- Rename server and configure IP.
- Activate Windows.

- Harden security.
- Configure Firewall.
- Join to domain.
- Configure server roles.
- Take system backup.
- Document configuration.

## **5. What is the standard upgrade path for Windows Server?**

- Windows Server 2012 → 2016
  - Windows Server 2012 R2 → 2016
  - Windows Server 2016 → 2019
  - Windows Server 2019 → 2022
- Note: Always back up before upgrading.

## **6. What is the Physical structure of Active Directory?**

- Domain Controller (DC)
- Sites
- Subnets
- Domains
- Replication links

## **7. What are the Logical components of Active Directory?**

- Forest
- Domain
- Organizational Units (OUs)
- Trees
- Trusts
- Global Catalog
- Group Policy Objects (GPOs)

## **8. What is the full form of LDAP?**

- LDAP = Lightweight Directory Access Protocol

## **9. What is the location of the AD database?**

- Default path: C:\Windows\NTDS\ntds.dit

**10. What is a child DC?**

- A Domain Controller in a child domain (e.g., sales.corp.com under corp.com).

**11. Explain the term forest in AD**

- A Forest is the highest-level container in AD, consisting of one or more domains sharing a common schema and configuration.

**12. What is Active Directory? Check all that apply.**

- An open-source directory server
- A Windows-only implementation of a directory server
- Microsoft's implementation of a directory server
- An LDAP-compatible directory server

**13. When you create an Active Directory domain, what's the name of the default user account?**

- Administrator

**14. AD domain provides which of the following advantages? Check all that apply.**

- Centralized authentication
- More detailed logging
- Centralized management with GPOs
- Better performance

**15. What are the minimum hardware requirements for installing Windows Server 2016?**

- Processor: 1.4 GHz 64-bit processor
- RAM: 2 GB (2 GB for Server with Desktop Experience installation)
- Disk Space: 32 GB or more
- Network: Ethernet adapter capable of at least gigabit throughput

**16. Explain the different editions of Windows Server 2016 and their features.**

- Datacenter: Ideal for highly virtualized environments.
- Standard: Suitable for physical or minimally virtualized environments.
- Essentials: Designed for small businesses with up to 25 users and 50 devices.

**17. Walk through the steps of installing Windows Server 2016 using GUI mode.**

ANS :

1. Boot from the installation media.
2. Choose language, time, and keyboard layout.
3. Click "Install Now".
4. Select the Windows Server edition (with Desktop Experience).
5. Accept license terms.
6. Choose Custom installation.
7. Select the drive to install.
8. Wait for installation to complete and restart.
9. Set Administrator password.
10. Login and configure settings.

**18. Describe the steps for installing Windows Server 2016 in Server Core mode.**

ANS :

1. Boot from installation media.
2. Select appropriate language and click Next.
3. Click Install Now.
4. Choose the Windows Server Core edition.
5. Accept license terms.
6. Choose Custom installation.
7. Select installation disk.
8. Complete installation and reboot.
9. Login using Administrator account.

**19. How do you configure network settings during Windows Server 2016 installation?**

1. After installation, go to 'Network and Sharing Center' in GUI or use PowerShell/CMD in Core.
2. Use 'sconfig' in Core to set IP address, DNS, etc.

3. Use Control Panel > Network settings in GUI mode.

## **20. Explain the process of promoting a Windows Server to a domain controller.**

1. Install AD DS role using Server Manager.
2. Click 'Promote this server to a domain controller'.
3. Choose to add a new forest or domain.
4. Set DSRM password.
5. Configure DNS, NetBIOS, and paths.
6. Review and install.
7. Restart the server.

## **21. Discuss the steps involved in upgrading from a previous version of Windows Server to Windows Server 2016.**

1. Backup all data.
2. Run compatibility check.
3. Insert Server 2016 installation media.
4. Choose upgrade option.
5. Follow wizard instructions.
6. Complete upgrade and validate settings.

## **22. What is Active Directory Domain Services (AD DS), and what are its key components?**

AD DS is a server role in Active Directory for authenticating and authorizing users and computers. Key components:

- Domain
- Trees and Forests
- Organizational Units (OUs)
- Schema
- Global Catalog

## **23. How do you create a new Active Directory user account in Windows Server?**

1. Open Active Directory Users and Computers.
2. Navigate to desired OU.

3. Right-click > New > User.
4. Enter user details.
5. Set password and configure settings.

## **24. Explain the process of creating and managing Group Policy Objects (GPOs) in Windows Server 2016 or 2019.**

1. Open Group Policy Management Console.
2. Right-click domain or OU > Create a GPO.
3. Edit GPO to define settings.
4. Link GPO to desired OUs.
5. Use 'gpupdate' to apply.

## **25. What are Organizational Units (OUs) in Active Directory, and how do you use them?**

OUs are containers for organizing users, groups, and computers in Active Directory. They allow delegation and GPO application.

## **26. Describe the process of delegating administrative privileges in Active Directory.**

1. Open Active Directory Users and Computers.
2. Right-click OU > Delegate Control.
3. Use the wizard to add users and assign permissions.