

Module: 14-Identity with Windows Server

1. Explain the process of installing and configuring Hyper-V virtualization in Windows Server 2016.

ANS: - Steps to Install Hyper-V:

1. Open Server Manager - Click Add roles and features.
2. Select Role-based or feature-based installation.
3. Choose the target server and click Next.
4. Select Hyper-V and click Next.
5. Configure Virtual Switches, Migration Options, and Default Storage Location.
6. Click Install, then restart the server.

Post-Installation Configuration:

- Open Hyper-V Manager.
- Create Virtual Switches for network connectivity.
- Create and configure Virtual Machines (VMs).
- Enable Live Migration if needed.

2. How do you monitor server performance and manage event logs in Windows Server?

ANS: -Use Performance Monitor (perfmon) to track CPU, memory, disk, and network usage.

- Event Viewer (eventvwr) helps review system logs:
 - System Logs (hardware/software issues).
 - Application Logs (errors from applications).
 - Security Logs (login attempts, audit logs).
- Use Task Manager & Resource Monitor to track real-time usage.
- Set up Alerts and Performance Counters in Performance Monitor for proactive monitoring.

3. Describe the different types of storage options available in Windows Server.

1. Local Storage – Internal disks, partitions, NTFS/ReFS.
2. Storage Spaces – Software-defined storage with redundancy.
3. RAID (Redundant Array of Independent Disks) – Hardware/software-based redundancy.
4. Network-Attached Storage (NAS) – File-level storage over the network.
5. Storage Area Network (SAN) – High-speed block-level storage.
6. Cloud Storage – Azure, OneDrive, hybrid solutions.

4. What is the role of File Server in Windows Server, and how do you configure it?

ANS: - Role: Manages and shares files securely across a network.

Configuration:

1. Install File Server via Server Manager.
2. Set up Shared Folders and define permissions.
3. Configure Access Control (NTFS & Share Permissions).
4. Enable File Screening, Quotas, and Classification Policies using FSRM (File Server Resource Manager).

5. Explain the process of implementing and managing Distributed File System (DFS) in Windows Server 2016.

ANS: - Install DFS via Add Roles and Features.

1. Open DFS Management - Create Namespace.
2. Add DFS Folders and Replication to sync files across servers.
3. Configure Replication Groups for high availability.
4. Monitor DFS with Event Viewer and DFS Replication Logs.

6. Discuss the built-in backup and recovery options available in Windows Server 2016 or 2019.

ANS: - Windows Server Backup (WSB) – Basic full/incremental backups.

- **Volume Shadow Copy** – Restores previous file versions.
- **System State Backup** – Backups Active Directory and critical system files.
- **Bare Metal Recovery (BMR)** – Restores the entire server.
- **Azure Backup** – Cloud-based backup solution.

7. How do you configure Windows Server Backup to back up critical data?

ANS: -Install Windows Server Backup via Server Manager.

1. Open Windows Server Backup - Select Backup Schedule.
2. Choose Full Backup or Custom Backup (specific files).
3. Select backup destination (Local disk, Network share, Azure).
4. Configure Retention Policy and click Finish.

8. Explain the steps for restoring files and folders using Windows Server Backup.

ANS: - Open Windows Server Backup.

1. Click Recover - Select Backup Location.
2. Choose Files and Folders for restoration.
3. Specify the Restore Destination and confirm.
4. Verify restored data integrity.

9. . What are some common troubleshooting techniques for Windows Server startup issues?

ANS: - Check Boot Order in BIOS.

- Use Safe Mode (F8 or Shift + Restart).

- Run Startup Repair from Windows Recovery.
- Check Event Viewer Logs for errors.
- **Use Bootrec Commands:**
 - bootrec /fixmbr
 - bootrec /fixboot
 - bootrec /scanos
 - bootrec /rebuildbcd

10. How do you troubleshoot network connectivity problems in Windows Server?

ANS: - Check IP Configuration (ipconfig /all).

- Ping Default Gateway and external sites (ping 8.8.8.8).
- Verify DNS Settings (nslookup example.com).
- Restart Network Adapter and check Drivers.
- Use Netstat, Tracert, Pathping for diagnosis.

11. Discuss common Active Directory-related issues and their troubleshooting steps.

ANS: - Replication Issues – Use repadmin /replsummary.

1. User Login Failures – Reset passwords, check account status.
2. Group Policy Not Applying – Use gpupdate /force & gpresult /r.
3. DNS Issues – Ensure correct DNS settings (nslookup, dcdiag).
4. FSMO Role Failures – Use netdom query fsmo to verify roles.

12. Explain how to troubleshoot performance problems on Windows Server 2016 or 2019.

ANS: - Use Task Manager & Resource Monitor.

- Identify high CPU/memory processes (top or Get-Process).
- Analyze disk usage (chkdsk, Disk Performance Counters).
- Check for memory leaks (RAMMap, Poolmon).
- Optimize using Performance Monitor and Event Viewer logs.