

98-365: Windows Server Administration Fundamentals

Audience Description

Candidates for this exam are familiar with the concepts and the technologies of Windows Server administration. Candidates should have some hands-on experience with Windows Server, Windows-based networking, Active Directory, account management, and system recovery tools and concepts.

Skills Measured

Note: This document shows tracked changes that are effective as of January 31, 2018.

Understanding server installation (10–15%)

Understand device drivers

Installation, removal, disabling, update/upgrade, rollback, troubleshooting, Plug & Play, IRQ, interrupts, driver signing, [managing through Group Policy](#)

Understand services

Which statuses a service can be in, startup types, recovery options, delayed startup, Run As settings for a service, stopping or pausing a service, service accounts, dependencies

Understand server installation options

Choose the correct operating system version options; [Server core vs. Desktop Experience](#), [Nano Server installation](#), interactive installs; automated install using WDS; [VHD/VHDX installation source](#), perform unattended installs; perform upgrades, clean installs, and migrations

Understanding server roles (25–30%)

Identify application servers

Mail servers, database servers, collaboration servers, monitoring servers, threat management

Understand Web services

IIS, WWW, and FTP, [installing from Server Manager](#), separate worker processes, adding components, sites, ports, SSL, certificates

Understand remote access

Remote assistance, remote administration tools, Remote Desktop Services, [multipoint services](#), licensing, RD Gateway, VPN, application virtualization, multiple ports

Understand the file and print services

Local printers, network printers, printer pools, web printing, web management, driver deployment, file, folder, and share permissions vs. rights, auditing, print job management

Understand server virtualization

Virtual memory, virtual networks, snapshots and saved states, physical to virtual conversions, virtual to physical conversions, [VHD and VHDX formats, nested virtualization](#)

Understanding Active Directory (20–25%)

Understand accounts and groups

Domain accounts, local accounts, user profiles, computer accounts, group types, default groups, group scopes, group nesting, understand AGDLP and AGUDLP processes to help implement nesting

Understand organizational units and containers

Purpose of OUs, purpose of containers, delegation, default containers, uses for different container objects, default hidden and visible containers

Understand Active Directory infrastructure

Domain controllers, forests, child domains, operation master roles, domain vs. workgroup, trust relationships, functional levels, [deprecated functional levels](#), namespace, sites, replication, schema, [Passport](#)

Understand group policy

Group policy processing, Group Policy Management Console, computer policies, user policies, local policies

Understanding storage (10–15%)

Identify storage technologies and their typical usage scenarios

Advantages and disadvantages of different storage topologies, [local storage, network storage](#), Fibre Channel, iSCSI hardware

Understand RAID redundancy

RAID 0, RAID 1, RAID 5, RAID 10 and combinations, hardware and software RAID

Understand disk types

Solid State Drive (SSD) and Hard Disk Drive (HDD) types and comparisons, ATA basic disk, dynamic disk, mount points, file systems, mounting a virtual hard disk, distributed file systems

Understanding server performance management (10–15%)

Identify major server hardware components

Memory, disk, processor, network, 32-bit and 64-bit architecture, removable drives, graphic cards, cooling, power usage, ports

Understand performance monitoring

Methodology, procedures, effect of network, CPU, memory and disk, creating a baseline, Performance Monitor, Resource Monitor, Task Manager, performance counters, [Data Collector Sets](#)

Understand logs and alerts, Event Viewer

Purpose of performance logs and alerts

Understanding server maintenance (15–20%)

Identify steps in the startup process

BIOS, UEFI, TPM, bootsector, bootloader, MBR, boot.ini, POST, Safe Mode

Understand business continuity

Backup and restore, disaster recovery planning, clustering, AD restore, folder redirection, data redundancy, uninterruptible power supply (UPS)

Understand updates

Software, driver, operating systems, applications, Windows Update, Windows Server Update Service (WSUS)

Understand troubleshooting methodology

Processes, procedures, best practices; systematic vs. specific approach, Performance Monitor, Event Viewer, Resource Monitor, Information Technology Infrastructure Library, central logging, event filtering, default logs