# MTA: Windows Server Administration Fundamentals – Skills Measured

NOTE: The bullets that appear below each of the skills measured are intended to illustrate how we are assessing that skill. This list is not definitive or exhaustive.

NOTE: In most cases, exams do NOT cover preview features, and some features will only be added to an exam when they are GA (General Availability).

# **Exam 98-365: Windows Server Administration Fundamentals**

# **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, uniterruptible 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