# 98-349

# MTA: Windows Operating System Fundamentals

## **Target Audience**

#### **Microsoft Technology Associate**

The Microsoft Technology Associate (MTA) is Microsoft's newest suite of technology certification exams that validate fundamental knowledge needed to begin building a career using Microsoft technologies.

Successful candidates earn MTA certificates as well as access to benefits on the Microsoft Certification member site.

#### This program:

- is targeted primarily at students who attend high schools and two-year colleges.
- provides an appropriate entry point to a future career in technology.
- assumes some hands-on experience or training but does not assume on-the-job experience.

#### **Minimally Qualified Candidate**

The minimally qualified candidate typically:

- is a student who attends high school or a two-year college.
- has worked with desktop and application virtualization.

### **Objective Domain**

#### 1. Understanding Operating System Configurations

1.1. Configure Control Panel options.

This objective may include but is not limited to: configuring administrative tools, configuring accessibility options

1.2. Configure desktop settings.

This objective may include but is not limited to: configuring gadgets, profiles, display settings, shortcuts, and Aero configurations and capabilities

1.3. Understand native applications and tools.

This objective may include but is not limited to: understanding Windows Internet Explorer, the snipping tool, Windows Media Player, Windows Media Center, and MSCONFIG

1.4. Understand mobility.

This objective may include but is not limited to: understanding Sync Center, Windows Mobility Center, and Remote Desktop

1.5. Understand remote management and assistance.

This objective may include but is not limited to: understanding MMC, and Windows PowerShell

#### 2. Installing and Upgrading Client Systems

2.1. Identify Windows operating system editions.

This objective may include but is not limited to: identifying system requirements, using PC Upgrade Advisor

2.2. Identify upgrade paths.

This objective may include but is not limited to: identifying ugrade paths from Windows XP, Windows Vista, and other operating systems; identifying application compatibility

2.3. Understand installation types.

This objective may include but is not limited to: understanding removable media installations (DVD, ZTI, LTI, and USB), cloud and network installations, and product identification keys

2.4. Understand virtualized clients.

This objective may include but is not limited to: understanding Windows XP Mode, Remote Desktop, and Remote Desktop Services

#### 3. Managing Applications

3.1. Understand application installations.

This objective may include but is not limited to: understanding local vs. network applications, Group Policy, and application removal

3.2. Understand user account control (UAC).

This objective may include but is not limited to: understanding standard user vs. administrative user, understanding types of UAC prompts and levels

3.3. Remove malicious software.

This objective may include but is not limited to: understanding Windows Defender, Action Center, the Malicious Software Removal tool, Windows Registry, and Microsoft Forefront Endpoint Protection

3.4. Understand services.

This objective may include but is not limited to: understanding service start-up types, service accounts, and service dependencies

3.5. Understand application virtualization.

This objective may include but is not limited to: understanding Med-V and VDI

#### 4. Managing Files and Folders

4.1. Understand file systems.

This objective may include but is not limited to: understanding FAT, FAT32, NTFS, and 32 bit vs. 64 bit

4.2. Understand file and print sharing.

This objective may include but is not limited to: understanding NTFS and share permissions, HomeGroup, print drivers, and effective permissions; creating public, basic, and advanced shares; mapping drives

4.3. Understand encryption.

This objective may include but is not limited to: understanding BitLocker, encrypting file systems (EFS), and compression

4.4. Understand libraries.

This objective may include but is not limited to: understanding offline files, adding multiple local locations to a library, adding networked locations

#### 5. Managing Devices

5.1. Connect devices.

This objective may include but is not limited to: connecting plug-and-play devices, connecting and disconnecting printers, installing third-party software for devices

5.2. Understand storage.

This objective may include but is not limited to: understanding disk types (NTFS, FAT, etc.), security (encryption), storage device types (eSATA, USB, USB 2.0, IEEE 1394, iSCSI), storage drive types (basic, primary, extended, logical, dynamic disk, VHDs), and cloud storage (Windows Live SkyDrive, OneNote to SkyDrive, Live mesh)

5.3. Understand printing devices.

This objective may include but is not limited to: understanding local printers, network printers, print queues, print-to-file, and Internet printing

5.4. Understand system devices.

This objective may include but is not limited to: understanding video, audio, and infrared input devices, understanding Device Manager

#### **6.** Understanding Operating System Maintenance

6.1. Understand backup and recovery methods.

This objective may include but is not limited to: understanding local, online, and automated backup methods; understanding backup options; understanding System Restore, recovery boot options such as Last Known Good, and various Safe Mode options

6.2. Understand maintenance tools.

This objective may include but is not limited to: understanding Disk Defragmenter, Disk Cleanup, Task Scheduler, Action Center, and System Information

6.3. Understand updates.

This objective may include but is not limited to: understanding Windows updates, Microsoft updates, and hotfixes