

Microsoft Technology Associate Certification Exam Review Kit:

98-349 Windows Operating System

Fundamentals Course 10753

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Microsoft Technology Associate Certification Exam Review Kit:
98-349 Windows Operating System Fundamentals

About This Exam Review Kit

Microsoft Technology Associate Certification Exam Review Kit: 98-349 Windows Operating System Fundamentals

Exam Review Kit Description

- This Microsoft® Technology Associate (MTA) Certification Exam Review Kit contains a series of 20 review lessons intended to reinforce concepts in preparation for the *MTA Certification Exam: 98-349 Windows® Operating System Fundamentals* and serve as a resource and guide for teachers and faculty to create their own additional student learning experiences.
- It is assumed that students taking an MTA certification exam have completed or are currently taking academic courses, have job experience that addresses the exam objective domain, or both.
- The Exam Review Kits:
 - Are intended to supplement (not supplant) existing academic courses.
 - Are not intended to serve as foundational content for academic courses.
 - Are tied directly and closely to the objective domain of each individual MTA certification exam.
 - Are platform-specific or -agnostic in accord with the objective domain of each MTA certification exam.
- Because each certification exam has approximately 20 objectives, this Exam Review Kit includes 20 review lessons of 50 minutes apiece.
- The materials for each review lesson include a lesson plan, lesson delivery materials, and Student Activity documents.
- MTA certification exams test breadth of technical knowledge and help students explore career options before choosing a specialized career path with minimal investment of time and money. MTA certifications measure and validate the fundamental technology skills that are in demand today and provide an essential foundation to build a career in technology. Earning MTA certification provides students with a credential that validates fundamental technology industry knowledge and motivates them to succeed in continued studies, compete on admissions, and prepare for a career in technology. The MTA certifications enable students to prove their commitment to technology and connect with a community of more than 5 million Microsoft Certified Professionals (MCPs).
- Teachers and faculty can integrate the new MTA certification exams easily into existing schedules and curricula and deliver exams right in the classroom, on their own schedules.

Audience

- This Exam Review Kit is intended for students attending high schools and two-year colleges and technology workers who are preparing for the *MTA Certification Exam: 98-349 Windows Operating System Fundamentals* and seek to prove introductory knowledge of and skills with Microsoft Windows.

- It is recommended that exam candidates be familiar with the concepts of and have hands-on experience with the technologies described here, either by taking relevant training courses or by working with tutorials and samples available on MSDN®. Although minimal hands-on experience with the technologies is recommended, job experience is not assumed for these exams.
- Candidates for this exam are in the process of expanding their knowledge and skills in the following areas:
 - Understanding operating system configurations
 - Installing and upgrading client systems
 - Managing applications
 - Managing files and folders
 - Managing devices
 - Understanding operating system maintenance

Student Prerequisites

This course requires that you meet the following prerequisites:

- It is assumed that students taking an MTA certification exam have completed or are currently taking academic courses, have job experience that addresses the exam objective domain, or both.
- It is expected that students have worked with desktop and application virtualization.

Exam Review Kit Objective Domain

This Exam Review Kit provides lessons that reinforce previous learning in the following objectives:

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 upgrade 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 startup 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.

Exam Review Kit Timing

Each of the 20 Review Lessons in this collection is intended to be used in a single 50-minute class period.

Exam Review Kit Materials

The following materials are included in this Exam Review Kit:

- Review Lessons: A plan for teacher and student activities in reviewing the learning objectives and providing the key points that are critical to the success of the in-class review experience.
- Microsoft PowerPoint® presentations: A structure for classroom lectures and discussions.
- Student Activities: A hands-on platform for applying the knowledge and skills reviewed in the lesson.

- Student Activity Answer Keys: Solutions to Student Activities.
- Additional resources: Various resources to expand reviewing and learning opportunities.

Software Requirements

The following software is suggested for this series of review lessons:

- Windows 7 Professional or a virtual machine with Windows 7 Professional
- PowerPoint 2007
- Additional software may be required for individual lessons, as listed in the lesson materials within each module.

Instructional Preparation Activities

It is highly recommended that you complete the following instructional preparation activities:

- Familiarize yourself with the objectives of each lesson.
- Walk through each Review Lesson presentation slideshow and read the corresponding Instructor Notes (located in the Notes view of the presentation slideshow) for the lesson.
- Familiarize yourself with the Student Activities.
- Practice presenting each module.
- Identify the key points and must-know information for each topic.
- Perform each demonstration and hands-on lab.
- Anticipate the questions that students might have.
- Identify examples, analogies, impromptu demonstrations, and additional delivery tips that will help to clarify module content and provide a more meaningful learning experience for your specific audience.
- Customize and enhance your instructor notes.
- Review the updated information about the Microsoft Certification Program on the Microsoft Learning Certifications website (<http://www.microsoft.com/learning/en/us/certification/cert-default.aspx>).

About the Authors

Michael Teske

Michael has been teaching in the Network Specialist Program for 10 years at Northeast Wisconsin Technical College in Green Bay, Wisconsin and has been working as a network engineer and business consultant for more than 15 years. He has a passion for both teaching and technology and loves helping people find happiness in a career. Michael has become known as “the Microsoft Guy” on campus. His goal is to continue to teach network technology with the same enthusiasm and passion for many years to come and to help his students find the same joy and passion that he has found in an amazing industry. Michael is also the author of the 98-365: *Windows Server Administration Fundamentals* Exam Review Kit in the MTA Certification Exam Review Kit series.



Patricia Philips

Patricia taught computer science for 20 years in Janesville, Wisconsin. She served on Microsoft’s National K-12 Faculty Advisory Board and edited the Microsoft® MainFunction website for technology teachers. For the past five years, she has worked with Microsoft in a variety of roles related to K-12 curriculum development and pilot programs, including Expression Studio web design, XNA® game development, and MTA Certification Exam Review Kits. She is currently the editor of the Computer Science Teachers Association newsletter, the *Voice*.



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Jeffrey teaches the Network Specialist degree program and the Advanced Technical Certificate in Information Security. Jeffrey is also certified to teach classes in international business. He is beginning his 10th year at Moraine Park Technical College (MPTC) in Fond du Lac, Wisconsin, and he enjoys teaching courses in networking, Microsoft servers, and information security. His goal is to help students succeed and enjoy their college experience in a future-focused learning environment. He was instrumental in developing MPTC's student exchange with technical colleges in Darmstadt, Germany, and he has led the college's student exchange programs for over six years. Prior to joining the faculty at MPTC, Jeffrey spent 14 years as an independent consultant, specializing in medical and dental office computer systems and software. Jeffrey is also the author of the *98-367: Security Fundamentals* Exam Review Kit in the MTA Certification Exam Review Kit series.

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