

About This Exam Review Kit

Microsoft Technology Associate Certification Exam Review Kit: 98-365 Windows Server Fundamentals

Exam Review Kit Description

- This Microsoft® Technology Associate (MTA) Certification Exam Review Kit is a series of 20 review lessons intended to reinforce concepts in preparation for the *MTA Certification Exam: 98-365 Windows Server Fundamentals* and/or 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 and/or are currently taking academic courses and/or job experiences that address the exam objective domain.
- The MTA Exam Review Kits:
 - Are intended to supplement (not supplant) existing academic courses
 - Are not intended to serve as foundational content for academic courses
 - Are directly and closely tied to the objective domain of each individual MTA exam
 - Are platform-specific or -agnostic in accord with the objective domain of each MTA exam.
- Because each certification exam has approximately 20 objectives, this MTA Exam Review Kit includes twenty 50-minute review lessons.
- The build of materials for each review lesson includes a lesson plan, lesson delivery materials, and student activity documents.
- MTA 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 an 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 five million Microsoft Certified Professionals (MCPs).
- Teachers and faculty can easily integrate the new MTA certification exams 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 ages 15–24 years who have an interest in technology and technology careers and are preparing for the MTA Certification Exam: 98-365 Windows Server Fundamentals, and seeking to prove introductory knowledge of and skills with Windows Server® concepts and technologies.

- 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:
 - Windows Server
 - Windows[®]-based networking
 - Active Directory[®]
 - Account management
 - System recovery tools and concepts
 - Server hardware
 - Storage systems

Student Prerequisites

This course requires that you meet the following prerequisites:

- It is assumed that students taking an MTA certification exam have completed and/or are currently taking academic courses and/or job experiences that address the exam objective domain.
- It is expected that students have had experience with Windows Server and associated technologies.

Exam Review Kit Objective Domain

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

1. Understanding Server Installation

1.1. Understand device drivers.

This objective may include but is not limited to: installation; removal; disabling; update/upgrade; rollback; troubleshooting; Plug and Play (PnP); IRQ; interrupts; driver signing.

1.2. Understand services.

This objective may include but is not limited to: what services are; 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.

1.3. Understand server installation options.

This objective may include but is not limited to: choosing correct OS version; partitioning; F8 options; server core vs. full; interactive install; unattended install; automated install using Windows Deployment Service (WDS); upgrade vs. clean install; firmware updates including BIOS.

2. Understanding Server Roles

2.1. Identify application servers.

This objective may include but is not limited to: mail servers; database servers; collaboration servers; monitoring servers; threat management.

2.2. Understand Web services.

This objective may include but is not limited to: IIS, WWW, and FTP; separate worker processes; adding components; sites; ports; SSL; certificates.

2.3. Understand remote access.

This objective may include but is not limited to: remote assistance; remote administration tools; Remote Desktop Services; licensing; RD Gateway; VPN; application virtualization; multiple ports.

2.4. Understand file and print services.

This objective may include but is not limited to: local printers; network printers; printer pools; Web printing; Web management; driver deployment; file, folder, and share permissions vs. rights; auditing; print job management.

2.5. Understand server virtualization.

This objective may include but is not limited to: virtualization modes; VHDs; virtual memory; virtual networks; snapshots and saved states; physical to virtual; virtual to physical.

3. Understanding Active Directory

3.1. Understand accounts and groups.

This objective may include but is not limited to: domain accounts; local accounts; user profiles; group types; group scopes; group nesting.

3.2. Understand organizational units (OUs) and containers.

This objective may include but is not limited to: purpose of OUs; purpose of containers; delegation; default.

3.3. Understand Active Directory infrastructure.

This objective may include but is not limited to: domain controllers; forests; operation masters roles; domain vs. workgroup; child domains; trusts; functional levels; namespace; sites; replication.

3.4. Understand group policy.

This objective may include but is not limited to: group policy processing; Group Policy Management Console; computer policies; user policies; local policies.

4. Understanding Storage

4.1. Identify storage technologies.

This objective may include but is not limited to: advantages and disadvantages of different storage types; local (SATA, SCSI, IDE); NAS; SAN; fibre channel; iSCSI; NFS; FC HBA and FC switches; iSCSI hardware.

4.2. Understand RAID.

This objective may include but is not limited to: RAID 0, RAID 1, RAID 5, RAID 10 and combinations; hardware and software RAID.

4.3. Understand disk types.

This objective may include but is not limited to: basic disk; dynamic disk; mount points; file systems; mounting a virtual hard disk; distributed file systems; optical disks.

5. Understanding Server Performance Management

5.1. Identify major server hardware components.

This objective may include but is not limited to: memory; disk; processor; network; 32 and 64 bits; removable drives; graphic cards; cooling; power usage; ports.

5.2. Understand performance monitoring.

This objective may include but is not limited to: methodology; procedures; creating a baseline; perfmon; Resource Monitor; Task Manager; performance counters.

5.3. Understand logs and alerts.

This objective may include but is not limited to: purpose of performance logs and alerts.

6. Understanding Server Maintenance

6.1. Identify steps in the startup process.

This objective may include but is not limited to: BIOS; bootsector; bootloader; MBR; boot.ini; bcdedit; POST; Safe Mode.

6.2. Understand business continuity.

This objective may include but is not limited to: backup and restore; disaster recovery; clustering; Active Directory restore; folder redirection; data redundancy; uninterruptible power supply (UPS).

6.3. Understand updates.

This objective may include but is not limited to: software; driver; operating systems; applications; Windows Update; Windows Server Update Services (WSUS)

6.4. Understand troubleshooting methodology.

This objective may include but is not limited to: processes; procedures; best practices; systematic vs. specific approach; perfmon; Event Viewer; Resource Monitor; Information Technology Infrastructure Library; central logging; event filtering; default logs.

Exam Review Kit Timing

Each of the 20 Exam 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 the reviewing and learning opportunities.

Software Requirements

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

- Windows 7®
- Windows Server 2008 R2

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 slide deck and read the corresponding Instructor Notes (located in the notes view of the presentation slide deck) for the lesson. *Note that additional hidden slides are used in each slide deck to accommodate the amount of Instructor Notes information for a given topic.*
- Familiarize yourself with the student activity.
- 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/certdefault.aspx>).