

MCTS: SQL Server 2008 Implementation and Maintenance

Course Description and Overview

Overview

SecureNinja's MCTS (Microsoft Certified Technology Specialist): SQL Server 2008, Implementation and Maintenance training and certification boot camp in Washington, DC will prepare candidates to demonstrate in-depth knowledge of SQL Server 2008 and understand how to use the SQL Server 2008 client tools to administer databases and create database applications; perform common administrative tasks; optimize SQL Server performance; manage, back up, and restore databases.

The Microsoft Certified Technology Specialist (MCTS) certifications provide the foundation for Microsoft Certification. These certifications are designed to validate your skills on the features and functionality of key technologies. You can show your depth of knowledge in one specific technology, earn multiple MCTS certifications to show breadth across different products, or build on the MCTS to earn a Microsoft Certified IT Professional (MCITP) certification.

Topics Covered

Installing and Configuring SQL Server 2008 (10 percent)

- Install SQL Server 2008 and related services.
- This objective may include but is not limited to: file locations; default paths; service accounts
- Configure SQL Server instances.
- This objective may include but is not limited to: sp_configure
- Configure SQL Server services.
- This objective may include but is not limited to: configuration manager; SQL browser
- Configure additional SQL Server components.
- This objective may include but is not limited to: SQL Server Integration Services (SSIS), SQL Server Analysis Services (SSAS), SQL Server Reporting Services (SSRS), replication
- Implement database mail.
- This objective may include but is not limited to: set up and configure
- Configure full-text indexing.
- This objective may include but is not limited to: enable/disable, index population

Maintaining SQL Server Instances (13 percent)

- Manage SQL Server Agent jobs.
- This objective may include but is not limited to: create and schedule jobs; notification of job execution; disable/enable jobs; change job step order; logging
- Manage SQL Server Agent alerts.

- This objective may include but is not limited to: performance condition alerts; SQL event alerts; Windows Management Instrumentation (WMI) alerts
- Manage SQL Server Agent operators.
- This objective may include but is not limited to: operator schedules; fail safe operator; add a new operator; notification methods
- Implement the declarative management framework (DMF).
- This objective may include but is not limited to: create a policy; verify a policy; schedule a policy compliance check; enforce a policy; create a condition
- Back up a SQL Server environment.
- This objective may include but is not limited to: operating system-level concepts

Managing SQL Server Security (15 percent)

- Manage logins and server roles.
- This objective may include but is not limited to: create logins; disable/enable logins; security model (authentication mode); password policy enforcement; fixed server roles; alter logins
- Manage users and database roles.
- This objective may include but is not limited to: user mapping; user-defined roles; fixed roles; guest, public, dbo; creating and deleting user roles
- Manage SQL Server instance permissions.
- This objective may include but is not limited to: logon triggers; permissions vs. fixed role membership; cross-database ownership chaining; impersonation
- Manage database permissions.
- This objective may include but is not limited to: impersonation; cross-database ownership chaining
- Manage schema permissions and object permissions.
- This objective may include but is not limited to: manage schema ownership
- Audit SQL Server instances.
- This objective may include but is not limited to: use DDL triggers and logon triggers; C2; common criteria; login failures; event notifications
- Manage transparent data encryption.
- This objective may include but is not limited to: impact of transparent data encryption on backups
- Configure surface area.
- This objective may include but is not limited to sp_configure

Maintaining a SQL Server Database (16 percent)

- Back up databases.
- This objective may include but is not limited to: full backups; differential backups; transaction log; compressed backups; file and filegroup backups; verifying backup
- Restore databases.
- This objective may include but is not limited to: online restores; full restores; differential restores; transaction log; file and filegroup restores; verifying restore; the tail of the transaction log
- Manage and configure databases.
- This objective may include but is not limited to: files, file groups, and related options; database options; recovery model; attach/detach data

- Manage database snapshots.
- This objective may include but is not limited to: create, drop, revert
- Maintain database integrity.
- This objective may include but is not limited to: DBCC CHECKDB; suspect pages
- Maintain a database by using maintenance plans.
- This objective may include but is not limited to Maintenance Plan Wizard; Maintenance Plan Designer

Optimizing SQL Server Performance (10 percent)

- Implement Resource Governor.
- Use the Database Engine Tuning Advisor.
- Collect trace data by using SQL Server Profiler.
- Collect performance data by using Dynamic Management Views (DMVs).
- Collect performance data by using System Monitor.
- Use Performance Studio.
- Implementing High Availability (9 percent)
- Implement database mirroring.
- This objective may include but is not limited to: monitoring, configuring, failover
- Implement a SQL Server clustered instance.
- This objective may include but is not limited to: monitoring, configuring, failover
- Implement log shipping.
- This objective may include but is not limited to: monitoring, configuring, failover
- Implement replication.
- This objective may include but is not limited to: monitoring, configuring, failover

Who Would Benefit

IT professionals who want to become skilled on SQL Server 2008 product features and technologies for implementing a database.

Prerequisites

Candidates should have one to two years of experience using SQL Server 2008 or two to three years of experience using a previous version of SQL Server. Candidates for this exam are IT professionals who have jobs in which database administration is their main area of responsibility, or they work in environments in which databases are central to their job roles. These job roles include the following:

- IT generalists who work in environments in which SQL Server 2008 is part of an overall solution
- IT professionals who manage systems that run SQL Server 2008
- IT professionals who work with third-party applications that are built on SQL Server 2008
- Developers who build applications that use SQL Server 2008

Required Exams

- Exam 70-432: TS: Microsoft SQL Server 2008, Implementation and Maintenance

This exam will give you the requirements for the following certification(s):

- Microsoft Certified Technology Specialist (MCTS): Microsoft SQL Server 2008, Implementation and Maintenance

In addition Exam 70-432: TS: Microsoft SQL Server 2008, Implementation and Maintenance: counts as credit toward the following certification(s):

- MCSA
- MCSE

Courseware

MCITP SQL Server 2008 Database Developer All-in-One Exam Guide

Course Length

5 days

Follow On Courses

MCITP: SQL Server 2008