

Course 20462D: Administering Microsoft® SQL Server® 2014 Databases Exam Code: 70-462

Course Outline

Module 1: Introduction to SQL Server 2014 Database Administration

This module introduces the Microsoft SQL Server 2014 platform. It describes the components, editions, and versions of SQL Server 2014, and the tasks that a database administrator commonly performs for a SQL Server instance.

Lessons

Database Administration Overview
Introduction to the SQL Server Platform
Database Management Tools and Techniques

Lab : Using SQL Server Administrative Tools

Module 2: Installing and Configuring SQL Server 2014

This module explains how to assess resource requirements for SQL Server 2014 and how to install it..

Lessons

Planning SQL Server Installation
Installing SQL Server 2014
Post-Installation Configuration

Lab : Installing SQL Server 2014

Module 3: Working with Databases and Storage

This module describes how data is stored in databases, how to create databases, how to manage database files, and how to move them. Other tasks related to storage, include managing the tempdb database and using fast storage devices to extend the SQL Server buffer pool cache, are also discussed.

Lessons

Introduction to Data Storage with SQL Server
Managing Storage for System Databases
Managing Storage for User Databases
Moving Database Files
Configuring the Buffer Pool Extension

Lab : Managing Database Storage

Module 4: Planning and Implementing a Backup Strategy

In this module, you will consider how to create a backup strategy that is aligned with organizational needs, and learn how to perform the backup operations required by that strategy.

Lessons

Understanding SQL Server Recovery Models
Planning a Backup Strategy
Backing up Databases and Transaction Logs
Using Backup Options
Ensuring Backup Reliability

Lab: Backing Up SQL Server Databases

Module 5: Restoring SQL Server 2014 Databases

In this module, you will see how to restore user and system databases and how to implement point-in-time recovery.

Lessons

Understanding the Restore Process
Restoring Databases
Advanced Restore Scenarios
Working with Point-in-Time Recovery

Lab : Restoring SQL Server Databases

Module 6: Importing and Exporting Data

In this module, you will briefly explore tools and techniques so that you can import and export data to and from SQL Server.

Lessons

Introduction to Transferring Data
Importing and Exporting Table Data
Copying or Moving a Database

Lab : Importing and Exporting Data

Module 7: Monitoring SQL Server 2014

This module explains how to use three of the most commonly used tools: Activity Monitor, dynamic management views and functions (DMVs and DMFs), and Performance Monitor.

Lessons

Introduction to Monitoring SQL Server
Dynamic Management Views and Functions
Performance Monitor

Lab : Monitoring SQL Server 2014

Module 8: Tracing SQL Server Activity

This module describes how to use SQL Server Profiler and SQL Trace stored procedures to capture information about SQL Server, and how to use that information to troubleshoot and optimize SQL Server workloads.

Lessons

Tracing SQL Server Workload Activity
Using Traces

Lab : Tracing SQL Server Workload Activity

Module 9: Managing SQL Server Security

In this module, you will be learn about the core concepts on which the SQL Server security architecture is based, and how to manage security at the server and database levels.

Lessons

Introduction to SQL Server Security
Managing Server-Level Security
Managing Database-Level Principals
Managing Database Permissions

Lab : Managing SQL Server Security

Module 10: Auditing Data Access and Encrypting Data

This module describes the available options for auditing in SQL Server, how to use and manage the SQL Server audit feature, and how to implement encryption.

Lessons

Auditing Data Access in SQL Server
Implementing SQL Server Audit
Implementing SQL Server Audit

Lab : Auditing Data Access and Encrypting Data

Module 11: Performing Ongoing Database Maintenance

This module describes common database maintenance tasks that a DBA must perform, and demonstrates how to automate these tasks using maintenance plans.

Lessons

Ensuring Database Integrity
Maintaining Indexes
Automating Routine Database Maintenance

Lab : Performing Ongoing Database Maintenance

Module 12: Automating SQL Server 2014 Management

This module describes how to use SQL Server Agent to automate jobs, how to configure security contexts for jobs, and how to implement multi-server jobs.

Lessons

Automating SQL Server Management
Implementing SQL Server Agent Jobs
Managing SQL Server Agent Jobs
Managing Job Step Security Contexts
Managing Jobs on Multiple Servers

Lab : Automating SQL Server Management

Module 13: Monitoring SQL Server 2014 by Using Alerts and Notifications

This module covers the configuration of database mail, alerts, and notifications.

Lessons

Monitoring SQL Server Errors
Configuring Database Mail
Configuring Operators, Alerts, and Notifications

Lab : Monitoring SQL Server by Using Alerts and Notifications