

Administering Microsoft SQL Server Databases

Duration: 5 Days

Description

In this course, you will learn the skills required to maintain a Microsoft SQL Server database by focusing on data storage, backup and restoration, importing and exporting data, security, database maintenance and the SQL Server Agent.

Delegates will learn how to

- Core database administration tasks and tools
- Install and configure SQL Server
- Configure SQL Server databases and storage
- Plan and implement a backup strategy
- Restore databases from backups
- Import and export data
- Monitor SQL Server
- Trace SQL Server activity
- Manage SQL Server security
- Audit data access and encrypt data
- Perform ongoing database maintenance
- Automate SQL Server maintenance with SQL Server Agent jobs
- Configure database mail, alerts, and notifications

Outline

Introduction to SQL Server Database Administration

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

Installing and Configuring SQL Server

- Plan SQL Server Installation
- Install SQL Server and Post-Installation Configuration

Work with Databases and Storage

- Introduction to Data Storage with SQL Server
- Manage Storage for System Databases and User Databases
- Move Database Files
- Configure the Buffer Pool Extension

Plan and Implement a Backup Strategy

- SQL Server Recovery Models
- Plan a Backup Strategy
- Backup Databases and Transaction Logs
- Backup Options and Backup Reliability

Restore SQL Server Databases

- Restore Process and Databases Restoration
- Advanced Restore Scenarios
- Point-in-Time Recovery

Import and Export Data

- Transferring Data
- Import and Export Table Data
- Copy or Move a Database
- **Monitor SQL Server**
- Introduction to Monitoring SQL Server
- Dynamic Management Views and Functions
- Performance Monitor

Tracing SQL Server Activity

- Trace SQL Server Workload Activity and Use Traces

Manage SQL Server Security

- Introduction to SQL Server Security
- Manage Server-Level Security and Database-Level Principals
- Manage Database Permissions

Audit Data Access and Encrypt Data

- Audit Data Access in SQL Server
- Implement SQL Server Audit

- Encrypt Databases

Perform Ongoing Database Maintenance

- Ensure Database Integrity
- Maintain Indexes
- Automate Routine Database Maintenance

Automate SQL Server Management

- Implement and Manage SQL Server Agent Jobs
- Manage Job Step Security Contexts
- Manage Job on Multiple Servers

Monitor SQL Server Using Alerts and Notifications

- Monitor SQL Server Errors
- Configure Database Mail
- Configure Operators, Alerts, and Notifications

Prerequisites

There are no prerequisites for this course.