



20765: Provisioning SQL Databases

Duration: 5 Days

Method: Instructor-Led

Certification: Microsoft® Certified Solutions Associate (MCSA): SQL 2016 Database Administration — **Exam 2 of 2: 70-765 Provisioning SQL Databases**

Course Description

This course is designed to teach participants how to provision SQL Server® databases both on-premise and in SQL Azure®.

Target Audience

This course is intended for:

- Persons who administer and maintain SQL Server databases. These persons perform database administration and maintenance as their primary area of responsibility or work in environments where databases play a key role in their primary job.
- Persons who develop applications that deliver content from SQL Server databases.

Prerequisites

To attend this course, participants should have:

- Basic knowledge of the Microsoft Windows® operating system and its core functionality.
- Working knowledge of Transact-SQL.
- Working knowledge of relational databases.
- Some experience with database design.

Course Objectives

Upon successful completion of this course, participants will be able to:

- Provision a Database Server.
- Upgrade SQL Server.
- Configure SQL Server.
- Manage Databases and Files (shared).
- Provision, migrate and manage databases in the cloud.



Course Content

Module 1: SQL Server 2016 Components

- Introduction to the SQL Server Platform
- Overview of SQL Server Architecture
- SQL Server Services and Configuration Options

Module 2: Installing SQL Server 2016

- Considerations for SQL Installing Server
- TempDB Files
- Installing SQL Server 2016
- Automating Installation

Module 3: Upgrading SQL Server to SQL Server 2016

- Upgrade Requirements
- Upgrade SQL Server Services
- Migrating SQL Server Data and Applications

Module 4: Working with Databases

- Introduction to Data Storage with SQL Server
- Managing Storage for System Databases
- Managing Storage for User Databases
- Moving and Copying Database Files
- Side-by-Side Upgrade: Migrating SQL Server Data and Applications
- Buffer Pool Extension

Module 5: Performing Database Maintenance

- Ensuring Database Integrity
- Maintaining Indexes
- Automating Routine Database Maintenance

Module 6: Database Storage Options

- SQL Server storage Performance
- SMB Fileshare
- SQL Server Storage in Microsoft Azure
- Stretch Databases

Module 7: Planning to Deploy SQL Server on Microsoft Azure

- SQL Server Virtual Machines in Azure
- Azure Storage
- Azure SQL Authentication
- Deploying an Azure SQL Database



Course Content, *Continued*

Module 8: Migrating Databases to Azure SQL Database

- Database Migration Testing Tools
- Database Migration Compatibility Issues
- Migrating a SQL Server Database to Azure SQL Database

Module 9: Deploying SQL Server on a Microsoft Azure Virtual Machine

- Deploying SQL Server on an Azure VM
- The Deploy Database to a Microsoft Azure VM Wizard

Module 10: Managing databases in the Cloud

- Managing Azure SQL Database Security
- Configure Azure storage
- Azure Automation

LABS INCLUDED

