

# 20765: Provisioning SQL Databases

**Duration: 5 Days**

**Method: Instructor-Led Training (ILT) | Live Online Training**

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## 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 individuals 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.
- Develop applications that deliver content from SQL Server databases.

## Prerequisites

To attend this course, candidates 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, attendees 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

### 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

