

Course 20765A:

Provisioning SQL Databases

⊖ [Course details](#)

Course Outline

Module 1: SQL Server 2016 Components

Describe the SQL Server platform, SQL Server services, and SQL Server configuration options.

Lessons

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

Lab : SQL Server Versions (Discussion session)

After completing this module, you will be able to:

- Describe the SQL Server platform and architecture
- Describe the SQL Server services and configuration..

Module 2: Installing SQL Server 2016

This module describes the process to install SQL Server 2016.

Lessons

- Considerations for installing SQL Server

- TempDB Files
- Installing SQL Server 2016
- Automating Installation

Lab : Installing SQL Server

After completing this module, you will be able to:

- Describe the considerations when installing SQL Server 2016
- Be able to install SQL Server
- Be able to automate the installation

Module 3: Upgrading SQL Server to SQL Server 2016

This module describes how you go about upgrading your current SQL Server installation to SQL Server 2016.

Lessons

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

Lab : Upgrading SQL Server

After completing this module, you will be able to:

- Describe the requirements for upgrading to SQL Server 2016
- Describe how to upgrade SQL Server services
- Be able to migrate SQL Server Data and Applications

Module 4: Deploying SQL Server on Microsoft Azure

This module describes the options available to run SQL Server on Azure.

Lessons

- SQL Server Virtual Machines in Azure

- Deploying an Azure SQL Database
- Migrating an On-Premise Database to an Azure SQL Database

Lab : Migrating SQL Server with Azure

After completing this module, you will be able to:

- Describe how SQL Server Virtual Machines work in Azure
- Describe how to deploy and Azure SQL database
- Describe how to migrate and on-premise database to Azure

Module 5: Working with Databases

This module describes the preinstalled system databases, the physical structure of databases and the most common configuration options related to them.

Lessons

- Overview of SQL Server Databases
- Creating Databases
- Database Files and Filegroups
- Moving Database Files
- Buffer Pool Extension

Lab : Managing Database Storage

After completing this module, you will be able to:

- Be able to create SQL Server databases
- Describe database files and filegroups
- Be able to move database files
- Describe the buffer pool extension

Module 6: Database Storage Options

At the end of this module you will be able to describe the database storage options.

Lessons

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

Lab : Implementing Stretch Database

After completing this module, you will be able to:

- Explain the elements impacting storage performance
- Describe SMB fileshare
- Describe SQL Server storage in Azure
- Describe Stretch Databases

Module 7: Performing Database Maintenance

This module covers database maintenance.

Lessons

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

Lab : Performing Ongoing Database Maintenance

After completing this module, you will be able to:

- Describe how to ensure database integrity
- Be able to maintain indexes
- Be able to automate routine database maintenance

Additional Reading

After completing this course, students will be able to:

Provision a Database Server

- Provision a Database Server
 - Upgrade SQL Server
 - Configure SQL Server
 - Manage Databases and Files (shared)
-