

Provisioning SQL Databases - MOC On Demand (MS-20765)

Modality: On Demand

Duration: 2 Days

SATV Value: 2

This course sets you up for the Exam of 70-765 prompting the Certification of 70-765. This course does exclude the Official Exam Voucher, in any case, you can demand to buy the Official Exam Voucher independently.

About this course:

This MS Official On-Demand course is open for 90 days from the date of the demand of course if you have a yearly membership, or course buys independently. Course access will terminate when 90 days completed from the enlistment of the course.

Prior to attempting this course, how about we get the thought regarding provisioning of databases, it implies when more than one engineer is taking a shot at a database development, it is savvy to assure that designers can undoubtedly set up, or provision, their own part of the present form of the database as a piece of having a segregated improvement condition.

With the study of this course, we will show our understudies how to provision the databases of SQL Server both in SQL Azure and on-premise. Also, this course readies the understudies for the MS 70-765: certification exam of Provisioning SQL Databases.

The normal pay for an Administrator of SQL Database is **\$77,428** every year.

Course Objective:

- Provision, manage and migrate databases in the cloud
- Manage Databases and Files (shared)
- Upgrade SQL Server
- Provision a Database Server
- Configure SQL Server
- Explain SQL Server versions and components.
- Define SQL Server resource and architecture usage.
- Describe the services of SQL Server and how you manage those services configuration.
- Explain the considerations when SQL Server install.
- Define the files of TempDB.
- Install SQL Server 2016.
- Automate the installation of SQL Server.
- Manage Storage for System Databases.
- Explain the Storage of data with SQL Server.
- Move and Copy Files of Database.
- Manage User Databases Storage.

- Define and utilize Buffer Pool Extensions.
- Explain the Side-by-Side Upgrade: SQL Server Applications and Data process Migration.
- Configure Azure storage.
- Manage Azure SQL Database Security.
- Implement Azure Automation.

Audience:

This course is proposed for:

- People who maintain and administer the databases of SQL Server. These people perform database maintenance and administration as their essential zone of duty or work in situations where databases assume a key job in their primary employment.
- The secondary crowds for this course are people who create applications that convey content from the databases of SQL Server.

Prerequisites:

This course needs you to meet the below essentials:

- Fundamental information on the MS Windows working framework and its main functionality.
- Operational information on Transact-SQL.
- Working information on relational databases.
- Some involvement in database structure

Suggested prerequisites courses:

SQL Database for Beginners

Developing SQL Databases - MOC On-Demand (MS-20762)

Course Outline:

Module 1: SQL Server 2016 Components

This module describes the various SQL Server 2016 components and versions.

Lessons

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

Lab : Discussion: SQL Server versions

- When we do use a separate installation of SQL Server and when would use a separate instance?

- Which version of SQL Server is most suitable in your organization?

After completing this module, you will be able to:

- Describe SQL Server components and versions.
- Describe SQL Server architecture and resource usage.
- Describe SQL Server services and how you manage the configuration of those services.

Module 2: Installing SQL Server 2016

This module describes the process to install SQL Server 2016.

Lessons

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

Lab : Installing SQL Server

- Assess the available resources
- Install an instance of SQL Server
- Perform post installation checks
- Automating Installation

After completing this module, you will be able to:

- Describe the considerations when installing SQL Server.
- Describe TempDB files.
- Install SQL Server 2016.
- Automate a SQL Server installation.

Module 3: Upgrading SQL Server to SQL Server 2016

This module describes the process for upgrading to SQL Server 2016.

Lessons

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

Lab : Upgrading SQL Server

- Create the Application Logins
- Restore Database Backups
- Orphaned Users and Database Compatibility Level

After completing this module, you will be able to:

- Describe the upgrade requirements for SQL Server.
- Upgrade SQL Server.
- Migrate SQL Server data and applications.

Module 4: 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

- 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

Lab : Managing Database Storage

- Configuring tempdb Storage
- Creating Databases
- Attaching a Database
- Enable Buffer Pool Extension

After completing this module, you will be able to:

- Describe Data Storage with SQL Server.
- Manage Storage for System Databases.
- Manage Storage for User Databases.
- Move and Copy Database Files.
- Describe the Side-by-Side Upgrade: Migrating SQL Server Data and Applications process.
- Describe and use Buffer Pool Extensions.

Module 5: Performing Database Maintenance

This module covers database maintenance plans.

Lessons

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

Lab : Performing Database Maintenance

- Use DBCC CHECKDB to Verify Database Integrity
- Rebuild Indexes
- Create a Database Maintenance Plan

After completing this module, you will be able to:

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

Module 6: Database Storage Options

Describe SQL Server storage options.

Lessons

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

Lab : Implementing Stretch Database

- Run Stretch Database Advisor
- Implement Stretch Database

After completing this module, you will be able to:

- Describe SQL Server Storage Performance.
- Describe SMB Fileshare.
- Explain SQL Server Storage in Microsoft Azure.
- Describe Stretch Database.

Module 7: Planning to Deploy SQL Server on Microsoft Azure

This module describes how to plan to deploy SQL Server on Azure.

Lessons

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

Lab : Plan and Deploy an Azure SQL Database

- Plan an Azure SQL Database, Networking, performance tiers, security
- Provision an Azure SQL Database

- Connect to an Azure SQL Database

After completing this module, you will be able to:

- Describe SQL Server Virtual Machines in Azure.
- Describe Azure Storage.
- Explain Azure SQL Authentication, auditing and compliance.
- Deploy an Azure SQL Database.

Module 8: Migrating Databases to Azure SQL Database

This module describes how to migrate databases to Azure SQL Database.

Lessons

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

Lab : Migrating SQL Server Databases to Azure

- Perform Migration Testing
- Migrate a SQL Server Database to Azure SQL Database
- Test a Migrated Database

After completing this module, students will be able to:

- Describe various database migration testing tools.
- Explain database migration compatibility issues.
- Migrate a SQL Server database to Azure SQL database.

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

This module describes how to deploy SQL Server on Microsoft Azure VMs.

Lessons

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

Lab : Deploying SQL Server on an Azure Virtual Machine

- Provision an Azure VM
- Use the Deploy Database to Azure VM Wizard

After completing this module, students will be able to:

- Deploy SQL Server on an Azure VM.

- Use The Deploy Database to a Microsoft Azure VM Wizard.

Module 10: Managing databases in the Cloud

This module describes how to manage SQL Server on Azure.

Lessons

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

Lab : Managing Databases in the Cloud

- Configure Azure Security
- Automate Azure Deployment

After completing this module, students will be able to:

- Manage Azure SQL Database Security.
- Configure Azure storage.
- Implement Azure Automation.