Provisioning Microsoft SQL Databases (MS-20765)

Modality: Virtual Classroom

Duration: 5 Days

SATV Value: 5

If you try out this course with no Master Subscription plan, you get a free Voucher of Official Exam (not including buys utilizing Training Vouchers/SATV) for the Exam of 70-765. This course does exclude Exam Voucher if enlisted inside the Master Subscription, however, you can demand to buy the Official Exam Voucher independently.

About this course:

The fundamental comprehension and need of this course emerge from the way that each designer requires a separate condition for development so as to set up and spare his advancement when at least 2 engineers are taking a shot at the development database.

Taking this course assures an understudy will have the option to provision the databases of SQL Server both in SQL Azure and on-premise. Understudies will also get hands-on direction for the readiness of MS 70-765: certification exam of Provisioning SQL Databases.

The normal pay for a SQL Database Administrator is **$77,428** annually.

Course Objective:

Successful students of this course will be enabled to:

- Develop the performance of SQL Server
- Explain the Storage of data with SQL Server.
- Provision a Database Server
- Manage Storage for System Databases.
- SQL Server setup as per the task performance requirement
- Move and Copy Files of Database.
- Move and Copy Files of Database.
- Explain the Storage of data with SQL Server.
- Manage User Databases Storage.
- Run Databases and Files (shared)
- Manage User Databases Storage.
- Provision, control and relocate databases in the cloud

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:

Administering Microsoft SQL Server Databases (MS-20462)

Querying Data with Microsoft Transact-SQL (MS-20761)

Course Outline:

Module 1: SQL Server Components

This module describes the various SQL Server components and versions.

Lessons

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

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

This modules describes the process to install SQL Server 2016.

Lessons

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

Lab : Installing SQL Server

- Preparing to install SQL Server
- 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.
- Automate a SQL Server installation.

Module 3: Upgrading SQL Server to SQL Server 2017

This module describes the process for upgrading to SQL Server 2017.

Lessons

- Upgrade Requirements
- Upgrade SQL Server Services
- Side by Side Upgrade: Migrating SQL Server Data and Applications

Lab : Upgrading SQL Server

- Create the Application Logins
- Restore the backups of the TSQL Database
- 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
- 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 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.
- Configure SQL Server Connections

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

- Add data masking
- Use Azure automation to stop Virtual Machines

After completing this module, students will be able to:

- Manage Azure SQL Database Security.

- Configure Azure storage.
- Implement Azure Automation.