PROVISIONING SQL SERVER AND SQL AZURE

Course ID : MS-SQL-19-Prov

Scan for Details on Our Website

Duration: 4 Days

(24 Hours) 09:00 AM – 04:00 PM

Price: Call (Inhouse training only)

* (excluding VAT 7%)
* Eligible for 200% tax deduction

Training Schedule

www.9experttraining.com

Category: Data

This course provides comprehensive training on the installation and migration of Microsoft SQL Server, Azure SQL Database, and SQL Server on Azure Virtual Machines. It focuses on performing installations and migrations correctly by following industry best practices. The course content is distinct from standard system administration training and offers sufficient depth on the use of Azure SQL Database.

Objectives

1. Ability to plan, install, and upgrade Microsoft SQL Server.
2. Ability to install Microsoft SQL Server in accordance with best practices.
3. Ability to migrate data from legacy systems to modern environments.
4. Ability to manage and optimize storage for Microsoft SQL Server.
5. Ability to deploy databases on Azure SQL Database.
6. Ability to deploy and manage databases on SQL Server running on Azure Virtual Machines

Target Audience

1. Individuals responsible for installing or upgrading SQL Server within client or organizational environments.
2. Individuals seeking to migrate databases from legacy systems to modern environments or to Microsoft Azure.

Prerequisites

1. A basic understanding of database management systems..
2. Fundamental knowledge of SQL..

System Requirements

1. Operating System: Windows 10 or Windows 11
2. CPU : 1.6 GHz or faster processor (minimum)
3. RAM : 8 GB or higher
4. Remote Desktop Connection enabled
5. Stable Internet connection

TRAINING TOPICS

DAY 1 Morning Session 9:00 AM – 12:00 PM

1. Installable Components of Microsoft SQL Server

- Fundamental concepts of Microsoft SQL Server
- Installable components of Microsoft SQL Server
  - Versions and editions
  - Understanding instance-aware features
- Overview of Microsoft SQL Server architecture
- Configuring service accounts and network settings

DAY 1 Afternoon Session 1:00 PM – 4:00 PM

2. Installing Microsoft SQL Server

- Pre-installation assessment
  - Hardware and software requirements
  - Using virtual machines or containers
  - Using Linux as a SQL Server host
- Placement of tempdb database files
  - Importance of tempdb
  - Determining the number of files and configuring appropriate autogrowth settings
- Installing Microsoft SQL Server
  - Installation options
  - Key steps during installation
  - Post-installation configuration
- Automated installation methods

DAY 2 Morning Session 9:00 AM – 12:00 PM

3. Upgrading Microsoft SQL Server

- Pre-upgrade prerequisites
- Upgrading Microsoft SQL Server components and services
- Database migration
  - Types of database migration
  - Migrating server logins
  - Resolving orphaned users
  - Adjusting and validating configuration settings

DAY 2 Afternoon Session 1:00 PM – 4:00 PM

4. Storage Management

- Understanding storage architecture for Microsoft SQL Server
- Managing storage for system databases
- Managing storage for user databases
- Moving database files to designated storage locations
- Configuring the Buffer Pool Extension

DAY 3 Morning Session 9:00 AM – 12:00 PM

5. Additional Storage Options

- Understanding the performance impact of storage
- Using SMB file shares
- Using Azure Storage
- Using Stretch Database

6. Database Maintenance

- Ensuring database integrity with DBCC CHECKDB
- Managing indexes and statistics
- Implementing SQL Server Maintenance Plans

DAY 3 Afternoon Session 1:00 PM – 4:00 PM

7. Deployment Planning for SQL Server on Microsoft Azure

- Comparing SQL Server on Azure Virtual Machines with Azure SQL Database
- Using Azure Storage
- Configuring authentication for Azure SQL Database
- Deploying databases to Azure SQL Database

DAY 4 Morning Session 9:00 AM – 12:00 PM

8. Migrating Databases to Azure SQL Database

- Planning database migration
- Performing compatibility checks
  - Comparing Microsoft SQL Server (on-premises) with Azure SQL Database
  - Identifying limitations in Azure SQL Database
  - Identifying unsupported T-SQL commands in Azure SQL Database
- Migrating on-premises databases to Azure SQL Database

DAY 4 Afternoon Session 1:00 PM – 4:00 PM

9. Deployment of SQL Server on Azure Virtual Machines

- Deploying SQL Server on Azure Virtual Machines
  - Migrating on-premises databases to Azure Virtual Machines

10. Managing Databases on Azure SQL Database

- Managing security
- Configuring Azure Storage
- Configuring Azure Automation

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