

MSQ4-2 - MOC 20762 - DEVELOPING SQL DATABASES

Categoria: **SQL Server 2017 e 2016**

INFORMAZIONI SUL CORSO



Durata:
5 Giorni



Categoria:
SQL Server 2017 e
2016



Qualifica Istruttore:
Microsoft Certified
Trainer



Dedicato a:
Sviluppatore



Produttore:
Microsoft

OBIETTIVI

- Implementare un server di database
- Aggiornare SQL Server
- Configurare SQL Server
- Gestire database e file (condivisi)
- Implementare, migrare e gestire i database nel cloud

PREREQUISITI

- Conoscenza di base del sistema operativo Microsoft Windows e delle sue funzionalità principali.
- Conoscenza operativa di Transact-SQL.
- Conoscenza operativa dei database relazionali.
- Esperienza operativa nella progettazione del database

CONTENUTI

Module 1: SQL Server 2016 Components

- 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

- 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

- 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

- 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

- 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

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

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

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

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

Lab : Deploying SQL Server on an Azure Virtual Machine

Provision an Azure VM

Use the Deploy Database to Azure VM Wizard

Module 10: Managing databases in the Cloud

Managing Azure SQL Database Security

Configure Azure storage

Azure Automation

Lab : Managing Databases in the Cloud

Configure Azure Security

Automate Azure Deployment

INFO

Materiale didattico: Materiale didattico e relativo prezzo da concordare

Costo materiale didattico: NON incluso nel prezzo del corso

Natura del corso: Operativo (previsti lab su PC)