

# 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 in formato digitale

**Costo materiale didattico:** incluso nel prezzo del corso a Calendario

**Natura del corso:** Operativo (previsti lab su PC)