

## 10998: Updating Your Skills to SQL Server 2017

- **Formato do curso:** Presencial e Live Training
- **Localidade:** Live Training
- **Data:** 20 Dez. 2021 a 21 Dez. 2021
- **Preço:** 910€
- **Horário:** Laboral - das 9h00 às 17h00
- **Duração:** 14 horas

This instructor led training course is aimed at database professionals looking to update their skills to cover SQL Server 2017.

### Destinatários

- Existing database professionals with experience of SQL Server 2016 who want to update their skills to SQL Server 2017.
- Existing SQL Server 2016 MCSAs who want to prepare for the Upgrade exam for SQL Server 2017 certification.

### Pré-requisitos

In addition to their professional experience, students who attend this training should already have the following technical knowledge:

- Experience of building and managing database, data warehouse, and business intelligence (BI) solutions with SQL Server 2016.
- Familiarity with the Windows Server 2016 operating system and networking.
- Familiarity with Microsoft Office 2016.

### Objectivos

After completing this course, students will be able to:

- Describe key capabilities and components of SQL Server 2017
- Describe new and enhanced features in SQL Server Performance, Availability, and Scalability
- Describe new and enhanced features in SQL Server data access

- Describe new and enhanced features in SQL Server reporting and BI
  - Describe new and enhanced features in SQL Server OLAP
  - Describe new and enhanced data analytics features
  - Describe new and enhanced features in SQL Server Cloud deployments
  - Describe SQL Server on Linux functionality
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## Programa

### **Module 1: Introduction to SQL Server 2017**

Module Goal: Describe key capabilities and components of SQL Server 2017

#### **Lessons**

- Overview of SQL Server 2017
- Functionality across versions

After completing this module, students will be able to:

- Describe the edition scale limits
- Explain the consistent functionality across versions

### **Module 2: What's new in SQL Server Performance, Scalability, and Availability.**

This module introduces the performance enhancements provided by Adaptive Query Processing and Automatic Tuning, as well as the scalability and availability enhancements provided by new Availability Group architectures, including Read-Scale Availability Groups and Availability Groups with SQL Server on Linux.

#### **Lessons**

- Adaptive query processing
- Automatic tuning
- Availability Scalability

#### **Lab : Performance and availability - adaptive query processing**

- Interleaved execution
- Batch mode memory grant feedback
- Batch mode adaptive joins

After completing this module, students will be able to:

- Describe adaptive query processing
- Describe automatic plan correction
- Describe availability group architectures
- Describe always on availability groups for Linux

- Describe load balancing of readable secondary replicas
- Describe petabyte-scale data warehousing

### **Module 3: What's New in SQL Server data Access**

SQL Server 2017 introduces SQL Graph which enables you to define the relationships between your data items in a table rather than calculating them during a query, reducing the query cost and simplifying your data structure.

#### **Lessons**

- SQL Graph

#### **Lab : SQL Graph**

- Create a Graph database
- Query a Graph database

After completing this module, students will be able to:

- Describe SQL Graph

### **Module 4: What's new in SQL Server Reporting and BI**

This module describes what's new in SQL Server reporting and BI.

#### **Lessons**

- Power BI report Server
- Reporting Services update

#### **Lab : Reporting and BI**

- Deploy Power BI report server
- Add commenting to a report

After completing this module, students will be able to:

- Explain what Power BI report server is
- Use Power BI report server
- Create a Power BI report for Power BI report server

### **Module 5: New and Enhanced Features in SQL Server Analysis Services**

This module introduces new and enhanced features in SQL Server Analysis Services, with particular emphasis on the tabular data model.

## Lessons

- Tabular model updates

## Lab : Ragged hierarchies

- View existing reports
- Hide blank members

After completing this module, students will be able to:

- Describe the new features of tabular data models

## Module 6: New and Enhanced data Analytics Features

This module introduces new and enhanced data analytics features.

## Lessons

- New and enhanced data analytics features

## Lab : Data analytics with Python

- Enable external script execution
- Run Python scripts

After completing this module, students will be able to:

- Describe the new and enhanced data analytics features.

## Module 7: What's new in SQL Server in the Cloud

Organizations want the best value from a mixture of cloud services and their existing investment in on-premises hardware and software. This module covers a comparison between the features of Microsoft Azure SQL Database and Microsoft SQL Server 2017, as well as new features that make it easier for you to migrate databases from on-premises SQL Server instances to Azure SQL Database.

## Lessons

- Azure SQL database features
- Managed Instances

## Lab : Managed instances

After completing this module, students will be able to:

- Explain the different features available in Azure SQL database and SQL Server 2017
- Describe Azure managed instances

## **Module 8: SQL Server on Linux**

This module covers the features of SQL Server on Linux, as well as the process for deploying SQL Server on Linux and using Docker.

### **Lessons**

- SQL Server on Linux
- Deploying SQL Server on Linux

### **Lab : SQL Server in Docker containers**

- Deploy a SQL Server Docker image
- Run a SQL Server instance inside a Docker container
- Connect to a SQL Server Instance running in a Docker container

After completing this module, students will be able to:

- Describe the features of SQL Server on Linux
- Describe SQL Server on Linux deployment
- Deploy SQL server in a Docker container.