

SQL Server 2016, what's new



MR-56 2 Days (14 Hours)

Description

administration, security, development, performance, high availability: there are many new features in the SQL Server 2016 database engine. This course will provide you with knowledge of the most useful new features for an informed and efficient implementation of SQL Server 2016.

Who is this training for ?

For whom

Project managers, DBAs and developers of database solutions.

Prerequisites

Aucune

Training objectives

- Review the additions of the 2016 version of SQL Server Know the new features for administration, security and performance monitoring Know what's new for database development and design Understand major enhancements to In-Memory and Index Column Store technologies

Training program

Présentation de SQL Server 2016

- Review of the contributions of the 2012 and 2014 versions.
- Overview of the contributions of the 2016 version.
- Migrate from previous versions.
- Practical work Migrate a database from a previous version.

Nouveautés pour l'administration et la sécurité

- New features and improvements for installation and configuration.
- Best practices.
- Scenarios with the Cloud: Stretch Databases, to archive historical data in Azure .
- Backup to Azure.
- Encryption from the client to the database: Always Encrypted (or "full encryption").
- Multi-tenant architectures and Row Level Security.
- Masking sensitive data from unauthorized users, with Dynamic Data Masking.
- High-end improvements AlwaysOn availability.
- Basic availability groups with the Standard version.
- Practical work Use Always Encrypted, use row-level security, mask data with Dynamic Data Masking.

Nouveautés pour le développement et la conception

- Automatic preservation of a history of table data, with temporal tables ("Temporal tables").
- JSON support.
- Functions to use data in JSON format.
- New features of the TSQL language, new commands and functions.
- Practical work Implement temporal tables.

Nouveautés du In-Memory et Index Column Store

- Reminder about In-Memory OLTP and Column Store Indexes with SQL Server 2014.
- The new capabilities of In-Memory OLTP with SQL Server 2016.
- Real-Time Operational Analytics: the new possibilities of Index Column Store reading/writing.
- Practical work Experimenting with In-Memory tables and Index Column Store.

Nouveautés pour les performances

- Optimizer behavior with SQL 2016/2014.
- New commands and directives with ALTER DATABASE SCOPED CONFIGURATION.
- Track and improve performance with the Query Store.
- Practical work Configure the Query Store.