

Provisioning SQL Databases 2017



Purpose of the training

The primary audience for this course is individuals who administer and maintain SQL Server databases. These individuals perform database administration and maintenance as their primary area of responsibility, or work in environments where databases play a key role in their primary job. The secondary audiences for this course are individuals who develop applications that deliver content from SQL Server databases.



Benefits of completing the training

After completing this course, students will be able to:

- Provision a Database Server
- Upgrade SQL Server
- Configure SQL Server
- Manage Databases and Files (shared)
- Provision, migrate and manage databases in the cloud



Expected Listener Preparation

This course requires that you meet the following prerequisites:

- Basic knowledge of the Microsoft Windows operating system and its core functionality.
- Working knowledge of Transact-SQL.
- Working knowledge of relational databases.
- Some experience with database design

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Training Language

- **Training:** English
- **Materials:** English



Training Includes

- manual in electronic form available on the platform: <https://www.altkomakademia.pl/>
- access to Altkom Akademia's student portal
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Duration

5 days / 35 hours

Training agenda

1. SQL Server Components
 - Introduction to the SQL Server Platform
 - Overview of SQL Server Architecture
 - SQL Server Services and Configuration Options
2. Installing SQL Server
 - Considerations for SQL Installing Server
 - TempDB Files
 - Installing SQL Server
 - Automating Installation
3. Upgrading SQL Server to SQL Server 2017
 - Upgrade Requirements
 - Upgrade SQL Server Services
 - Side by Side Upgrade: Migrating SQL Server Data and Applications
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
 - Buffer Pool Extension
5. Performing Database Maintenance
- Ensuring Database Integrity
 - Maintaining Indexes
 - Automating Routine Database Maintenance
6. Database Storage Options
- SQL Server storage Performance
 - SMB Fileshare
 - SQL Server Storage in Microsoft Azure
 - Stretch Databases
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
8. Migrating Databases to Azure SQL Database
- Database Migration Testing Tools
 - Database Migration Compatibility Issues
 - Migrating a SQL Server Database to Azure SQL Database
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
10. Managing databases in the Cloud
- Managing Azure SQL Database Security
 - Configure Azure storage
 - Azure Automation