

SQL Server Administration Fundamentals

Summary: Duration – 5 full days, Level - 200 (MS Scale), Delivery method - Virtual Instructor-led class or In-class

The SQL DBA fundamentals class will teach you the basic but very critical concepts of SQL Server. The training is very useful both for beginners and more experienced students. It teaches them how to secure and maintain the databases in their organizations, how to respond to issues and critical database related events, and how to plan for backup and recovery. Students will learn configuration best practices and understand the reasoning behind them. They will feel more confident working with and managing and maintaining their SQL Server Instances.

AUDIENCE:

- New specialists in role of DB Administrators/DB Developers
- Professionals working with other technology platforms, DB Specialists coming from versions earlier than SQL Server 2008
- DB Administrators who are willing to fill the gaps in their knowledge and build a good understanding of SQL Server product

AFTER THE TRAINING ATTENDEES WILL BE ABLE TO:

- Install and configure SQL Server instances and databases
- Understand important SQL Server processes like logging, recovery, checkpoint, etc.
- Understand and optimize the I/O subsystem for a SQL Server workload
- Understand the structure of the database and the transaction log file
- Understand the role of system databases and especially the TempDB, how it is used and how to isolate its issues and configure properly
- Understand and configure the SQL Server security subsystem, configure levels of access to object properly and according to the requirements
- Understand indexes, their structure, types and use cases as well as how to check their health status and maintain them
- Understand backup and restore process and how it works to plan a proper backup strategy

TOPICS:

Module 1. SQL Server Overview and Components, Management Tools

Module 2. Database Fundamentals

Module 3. Logging and the Transaction Log

Module 4. SQL Server Installation and Configurations

Module 5. Foundation of SQL Server Security Subsystem

Module 6. SQL Server Backup and Restore

Module 7. Index Fundamentals and DBCC CHECKDB

Module 8. Maintenance and Automation of administrative tasks

Module 9. Monitoring and troubleshooting basics and case scenarios