

COURSE: SQL Server Performance Tuning And Optimization

The courses of SQL Server Mastering series consist intensive and modules which are comparatively complicated regarding the technical level and which are designed and intended for professionals in the field of SQL Server. Trainings include solid theoretical material, part of which comes directly from the programme team, who develops SQL Server in Microsoft, numerous demonstrations from the "workshop" of SQL Server, unpublished tuning techniques for increase of SQL Server performance.

Summary

<i>Duration:</i>	<i>5 days/ 40 hours</i>
<i>Level:</i>	<i>400*</i>
<i>Delivery method:</i>	<i>In class</i>
<i>Language:</i>	<i>Bulgarian</i>
<i>Price:</i>	<i>950 Euro excl VAT</i>

* The difficulty level is consistent with the widely accepted scale of technical difficulty of training on Microsoft Corp

AUDIENCE:

- Database administrators who are responsible for the proper and reliable operation of one or more SQL Servers
- Developers who want to create a good and scalable code by understanding how the internal processes works, the QP and code execution
- SQL Server architects and professionals who want to be successful in performance tuning of SQL Server environments, to empower themselves with knowledge, skills and methodology for finding, isolating and troubleshooting performance problems

AFTER THE TRAINING ATTENDEES WILL BE ABLE TO:

- Find performance problems in SQL Server workload and tune them properly
- Know out of the box monitoring and profiling tools that SQL Server provides in different product versions
- Choose the right tool in order to get the right monitoring data for fast problem reaction
- Have a deep understanding of the architecture and the way SQL Server works in order to explore the problem root cause and to act properly on their production environments
- Configure SQL Server at all levels properly in order to avoid and reduce problems
- Get to the problem quickly in order to reduce the downtime in production environment
- Develop SQL code that is aligned to good coding practices and provides scalability and performance of the database access layer

For more information visit: www.sqlmasteracademy.com

TOPICS:

- Module 1. SQL Server Resource Management and important configurations, SQLOS
- Module 2. TempDB and Database level Performance Tuning and Optimizations
- Module 3. Waits and Queues Methodology for Performance Tuning and Optimization
- Module 4. Specific Event based Monitoring and common PTO Scenarios
- Module 5. Query Execution and optimization, exploring query plans
- Module 6. The importance of statistics and indexes
- Module 7. Query Tuning Methodology
- Module 8. Optimizing Data Loading

FUNDAMENTALS

SQL Server Fundamentals courses give you an excellent base for successful career as administrator or data base developer. Their practical purpose, use of scenarios of working practice will help both the beginners, as well as the more experienced students. The courses will assist the students to develop skills to protect in a better way the data of their organizations, to react quicker and adequate to all issues, which are data base related, and to avoid following some harmful myths and wrong concepts in administration and data base development.

- ❖ **MS Windows & AD Administration for DBA's**
- ❖ **Querying SQL Server Fundamentals**
- ❖ **SQL Server Administration Fundamentals**
- ❖ **SQL Server Development Fundamentals**

MASTERING

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- ❖ **Mastering SQL Server for Database Admins**
- ❖ **Mastering SQL Server for Database Developers**
- ❖ **SQL Server Performance Tuning and Optimization**

DEEP DIVE

Deep Dive Series consists two and three day trainings with technical level 300+ (level 100 – beginners, level 400 – masters). Those courses are focused on specific components of SQL Server. They consist of a significant number of practical advices, a lot of demonstrations, huge theoretical part and also examples of real infrastructural solutions, discussions of real situations which students have in their infrastructures and want to discuss.

- ❖ **SQL Server Enterprise Infrastructure Optimization and Deployment**
- ❖ **SQL Server Upgrade**
- ❖ **SQL Server Replication Deep Dive**
- ❖ **SQL Server High Availability and Disaster Recovery Solutions**

BI

SQL Master Academy works in close partnership with SolidQ in the field of Business Intelligence trainings, due to which fact we have in our portfolio a unique programme of professional trainings in the field of Data Quality, Multidimensional Design, SSAS, ETL and SSIS. The courses train BI developers and designers of BI solutions, including back end EIM, as well as front end and reporting.

- ❖ **Personal Business Intelligence with MS Power BI**
- ❖ **Introduction to MS Business Intelligence**
- ❖ **BI Fundamentals**
- ❖ **Accelerated SQL Server 2012-2016 Integration Services**
- ❖ **Multidimensional Database Design with SSAS 2012-2016**
- ❖ **Data Quality and Master Data Management with SQL Server 2012-2016**
- ❖ **Data Mining Algorithms in SSAS, Excel, R, and Azure ML**

DATABASE DESIGN

The design of relational data base is one important and inseparable part of the solution development. Those are knowledge and skills which every DB Dev or DB Designer should have. A huge part of the problems in production sphere are due to a not good base model or to such, which does not scale well. The courses for design of relational data base we offer in SQL Master Academy, are oriented not only to mastering of the relational model and the good design of the subject filed, but also to the mastering of good practices in modelling of scalable data base.

- ❖ **Relational Database Design Fundamentals**
- ❖ **Relational Database Design for Performance and Scalability**

SQL SERVER 2016

Explore the new version of the fastest performing database system in the market today – SQL Server 2016! Be prepared for InMemory OLTP, the new columnstore extensions and the brand new operational analytics possibilities, which can give your workload 30x-100x performance improvement. See how the Query Store, temporals, the new built-in security features and AlwaysOn groups works. Get all that you need to put your skills and your databases on track.

- ❖ **SQL Server 2016 Get Ready for DBA and DB Devs**
- ❖ **SQL Server 2016 for Business Intelligence Experts**
- ❖ **SQL Server Cloud based Solutions**