



Masterclass: Advanced SQL Server Performance Tuning SQL Server 2012 / 2014

*Authored training by Maciej Pilecki
(3 days)*

Overview

This class is designed for experienced DBAs and Database Application Developers who want to update and organize their skills in the designing, developing and maintaining high-performance applications utilizing Microsoft SQL Server.

While this class will be presented using SQL Server 2012, most of the tools and techniques presented are not specific to particular version of SQL Server and can be applied on any version of the product.



Trainer: Maciej Pilecki

SQL Server Most Valuable Professional (MVP)
Microsoft Certified Trainer (MCT)
Microsoft Certified Master (MCM): Microsoft SQL Server

Target audience

Experienced Database Administrator
Experienced Database Developer

Module 1 - Introduction to Performance Tuning

Introduction to Performance Tuning
SQLOS Execution Model
Waits and Queues
From Query to Results

Module 2 - Hardware and OS Performance Tuning

Understanding your Hardware
Choosing the right Hardware for SQL Server
Tuning the Operating System

Module 3 - Instance-level Performance Tuning

Server Settings
Tempdb configuration
Blocked process report
Resource Governor

Module 4 - Understanding Waits and Queues

What are waits
Types of waits
Spinlocks



Module 5 - Compilation and Recompilation

- Query optimization and execution
- Plan caching and reuse
- What is the Procedure Cache and how it works
- Managing the Procedure Cache
- Controlling plan reuse
- Recompilation
- Optimizing compilation and plan reuse

Module 6 - Query Tuning

- Set-based thinking
- Cursors
- User Defined Functions
- SARGS
- Revising Queries
- Query Tuning in 12 steps

Module 7 - Index Tuning

- Indexes in SQL Server 2012/2014
- Index optimization scale
- Covering Indexes
- Filtered Indexes
- Indexed Views
- Columnstore indexes

Module 8 - Parallelism and Performance

- Parallelism in SQL Server
- Parallel operators
- Options to control parallelism

When, Where

Warsaw, 21-23.10.2015

Golden Floor, Millennium Plaza,
Al. Jerozolimskie 123A

Price

Standard price: 5250 PLN net/person
