

# MS SQL Server 2008 and SQL Server 2005 Performance Monitoring & Tuning Workshop

## 3 Days Level 400 Microsoft SQL Server 2008 and SQL Server 2005 Performance Monitoring & Tuning Workshop

The goal of this workshop is to provide the participants with knowledge on how to monitor and tune performance of Microsoft SQL Server 2008 and SQL Server 2005. The course addresses CPU, Memory, Disk, Query and Lock monitoring and tuning techniques. Best practice guidelines for configuration and maintenance are covered. After the workshop, the attendees should be able to identify and tune performance issues.

### Prerequisite

This is a level 400 technical workshop, prior basic SQL Server experience (knowledge about Cluster, Heap and Non-cluster index, Database Engine Tuning Wizard, SQL Profiler) is necessary. This workshop is held in English language.

### Instructor

Ramesh Meyyappan has more than 10 years of SQL Server expertise including working as a Program Manager in the SQL Server Development Team at Microsoft Corporation. He is specialized in SQL Server Performance Monitoring, Tuning & Troubleshooting.

### Location

Microsoft Austria  
Am Euro Platz 3  
A 1120 Vienna / Austria  
[www.microsoft.com/austria](http://www.microsoft.com/austria)

### Registration

To register for a workshop please send an email to [atsop@microsoft.com](mailto:atsop@microsoft.com) with the desired workshop date or contact your Technical Account Manager (TAM).

### Charges

€ 2.100.-- (excl. VAT) for 3 days workshop per person. The workshop fee can also be charged on your Premier contract.

### Upcoming Workshop dates

A minimum of 6 participants is required.

- 16.-18.9.2008
- 17.-19.11.2008
- 12.-14.1.2009
- 16.-18.3.2009
- 11.-13.5.2009
- 15.-17.6.2009

### Agenda

#### Analyzing current performance bottlenecks

This module introduces a comprehensive approach for analyzing current performance bottlenecks of SQL Server in a Production environment.

#### CPU Utilization

SQL Server architecture relating to CPU usage is explained. Optimal methods to monitor and tune CPU bottlenecks are described. Best practice guidelines on using Resource Governor are covered.

#### Disk I/O and Database Files

SQL Server architecture relating to Disk I/O and Database File usage is explained. Various methods including Extended Events to monitor Disk I/O and Database File usage is described. Best practice guidelines on Disk subsystem and Database Files, Data Compression, Database Snapshots and Bulk Inserts for optimal performance are covered.

#### Memory Utilization

SQL Server architecture relating to Memory allocation and usage is explained. Efficient methods to monitor and tune Memory usage are described. Best practice guidelines on using Resource Governor are covered.

#### Query Optimization and Query Execution

SQL Server architecture relating to Query Optimization is explained. Various methods to monitor and tune Plan Caching and Recompilation are described. Analyzing Execution Plans and isolating performance issues are described. Monitoring and tuning Query Execution with optimal Indexes, Filtered Indexes, Indexed Views and Partitioned Tables are covered.

#### Locks, Deadlocks and other Concurrency issues

SQL Server architecture relating to resource Locking is explained. Various methods including Extended Events to monitor and tune Locking, Blocking and Deadlocks are described. Best practice guidelines on using Snapshot Isolation level, disabling Table Lock Escalation and Locking Hints are covered.

#### Database Mirroring, Backup Compression and Database Encryption

Monitoring and tuning the performance impact of Database Mirroring is explained. Best practice guidelines on using Backup Compression and Database Encryption are covered.