

# Course : SQL Server Tuning

Practical course - 4d - 28h00 - Ref. SQS

Price : 2830 CHF E.T.

 4,5 / 5

BEST

This course provides an introduction to rational and efficient optimization of SQL Server databases for complex or high volume applications. It covers SQL Server 2000 to 2008 versions

## Intended audience

SQL Server DBAs, project managers having to drive developments with high volumes (data, access ...) and developers facing response time problems

## Prerequisites

Good knowledge of RDBMS data modeling concepts, SQL Server, Transact SQL and SQL languages. Basic knowledge of Windows operating systems

## Course schedule

### 1 Model and data

- Importance of data type, schema design, keys content.
- Modeling methods depending on data volume
- Using constraints and triggers
- Data quality and redundancy management.

#### Exercise

Comparison between two models with identical data

### 2 Hardware optimization

- Processors and parallelism management
- RAM configuration
- Windows 32 Bits vs Windows 64 Bits comparison
- Choosing Hard Disk: RAID, SAN, etc...
- Network infrastructure : best practices

#### Exercise

Measuring physical I/O using « Perfmon » tool

## PARTICIPANTS

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## PREREQUISITES

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## TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

## ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

### 3 SQL Server settings

- Installation considerations : OS, SQL Server, sessions, etc... Auditing server with « Perfmon » tool
- Managing quotas on Resources

#### Exercise

Retrieving server information using SQL queries and « Perfmon » tool

### 4 Writing and reading data

- Storage engine and buffer cache
- Checkpoint and LazyWriter
- Organization of tables and indexes taking into account data volume
- Transactions, logs and isolation level
- Files organization

#### Exercise

Creating a multi files database and migrating data

#### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

#### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

#### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at [psh-accueil@orsys.fr](mailto:psh-accueil@orsys.fr) to review your request and its feasibility.

## Dates and locations

### REMOTE CLASS

2026: 26 May, 26 May, 30 June, 8 Sep., 8 Sep., 3 Nov., 3 Nov.