

# SQL Server Tuning

Hands-on course of 4 days - 28h

Ref.: SQS - Price 2024: CHF2 660 (excl. taxes)

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## THE PROGRAMME

last updated: 01/2018

### 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

### 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

#### 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.

#### 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 to review your request and its feasibility.

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## DATES

REMOTE CLASS

2024 : 09 Jul, 22 Oct