

## SQL Server 2005 Data Mining Workshop

### Introduction

Take the next step in BI with SQL Server Data Mining capabilities to explore your data, find patterns, make predictions and develop intelligent applications.

This course teaches you how to use the highly sophisticated data mining technology of SQL Server to gain insight into your data to empower decision making and perform predictive analytics.

### Course Objectives

The student will learn:

- What data mining is and what business problems it's used for
- What the SQL Server Data Mining algorithms are and when to use them
- How to evaluate mining models
- How to use the DMX (Data Mining eXtensions) query language
- How to incorporate Data Mining into applications and reports

### Duration

1 day

### Format

Lecture and hands-on

### Audience

Business Intelligence architects and developers

### Prerequisites

Knowledge of the following concepts: Business Intelligence, relational database, dimensional modeling

### Course Materials

Course materials are yours to keep. You will be provided with the following software for use in the classroom:

- Microsoft SQL Server 2005

### Course Content

- Introduction
  - Definition
  - Business uses of Data Mining
  - Process
- SQL Server Data Mining Overview
  - Capabilities
  - Functionality
  - Algorithms
- OLE DB for Data Mining / DMX
  - Introduction
  - Concepts incl. Case tables & Nested tables, Data Mining Structures & Models
  - Model creation / training / prediction
  - DMX
- Data Mining with SQL Server
  - Data mining wizard
  - Data mining designer
  - Integrating Data Mining into SSIS, SSAS (for data analysis) and SSRS
  - LAB: Customer segmentation
  - LAB: Anomaly detection
  - LAB: Customer acquisition
  - LAB: Product recommendation
  - Mining OLAP cubes
    - Introduction
    - Data mining dimensions
    - LAB: Mining OLAP cubes
  - Metadata

- Management