

Working with SQL Server Analysis Services and Data Mining

IN BRIEF

Delivery: Instructor-led course

Duration: One day

Inclusions: Microsoft expert instructor, comprehensive course manual, individual computer access, and fully catered lunch, morning and afternoon tea breaks.

Prerequisites:

While this course is targeted at database professionals with some experience with data warehouse solutions, this workshop requires no prior experience with any version of SQL Server Analysis Services.

This course assumes knowledge of dimensional design and loading of data warehouses. Attendees without this knowledge should consider attending our Working with SQL Server Integration Services course prior to attending this course. We typically schedule the Analysis Services course to run immediately after the Integration Services course. Alternately, consider attending our full Microsoft SQL Server Business Intelligence Bootcamp course.

Products Covered: Microsoft SQL Server 2008 & 2005

Course Description

During this one day instructor led course, you will learn to design, develop, and deploy an analytical solution using SQL Server Analysis Services (SSAS). This course demonstrates design and development best practices as you build a fully working analytical solution. An introduction to the use of data mining is also provided.

SQL Server Analysis Services (SSAS) enables IT Professionals to rapidly build and deploy powerful analytical solutions that enable business users to analyze business data and achieve competitive advantage. SSAS enables rapid application development, increases performance and functionality, and reduces the costs and complexity of operation. This course focuses on teaching IT professionals the skills and best practices required to design and develop a well performing and successful analytical solution using SQL Server 2008 Analysis Services.

Audience

This course is intended for IT Professionals that are responsible for designing, developing, and deploying business intelligence solutions. The target audience for this course is database warehouse, decision support, and business intelligence solution architects, IT professionals, and business intelligence developers who want to learn the details of how to use the new capabilities provided by SSAS to build analytical applications.

While based on SQL Server 2008, the course is equally applicable to those working with SQL Server 2005. Differences in the versions will be highlighted.

Objectives

Upon completion of this course, the student will be able to:

- Describe the process of building a business intelligence solution and identify where and how SSAS fits into the process.
- Create effective SSAS cubes complete with calculations, actions, aggregations, and more.
- Design solutions in SSAS that are both scalable and secure.
- Successfully manage and deploy SSAS cubes in a development/test/production environment.

Topics Covered

Introduction to SQL Server Analysis Services

- Introduction to OLAP
- Building Analysis Services cubes
- LAB: Creating a cube
- Enhancing cube dimensions
- Implementing dimension hierarchies

Calculations, KPIs and Actions

- Basic MDX Concepts
- Calculations
- Key Performance Indicators
- Actions

Deploying and Processing Cubes

- Cube processing concepts
- Incremental fact and dimension processing
- Deploying Cubes

Introduction to Analysis Services Data Mining

- Introduction to Data Mining
- Business applications of data mining
- Data mining algorithm comparison