

SSAS 2005 (SQL Server 2005 Analysis Services)

Course Title: END TO END ANALYSIS SERVICES (SQL Server 2005 SSAS)

Duration: 4 days

Cost: \$2,395

Overview: During this 4-day course, you will learn how to use SSAS in your enterprise. This class takes you from the ground-up, teaching you the fundamental skills you need to develop and deploy SSAS solutions and present this new data to your end users.

Objectives include:

- Develop a repeatable methodology for a successful SSAS project.
- How to create and configure a cube and dimensions
- How to define calculations, Key Performance Indicators (KPIs) and perspectives
- How to design a sophisticated UDM model.
- Implement dynamic security.
- How to administer and deploy SSAS.
- Define actions.
- Implement data mining.
- Build office-based BI applications and dashboards.
- Administering SSAS
- How to use Performance Point to present data to the end user.

Prerequisites: The target of this class is developers, architects or IT professionals who have basic SQL skills already. This class assumes that you have no previous knowledge of OLAP or Analysis Services. Technical knowledge of basic database design concepts is assumed. It is required that you already know how to navigate around SQL Server 2005 and how to query a SQL Server.

Course Materials: Students attending this class will receive a printed copy of all the labs plus a copy of Applied Microsoft Analysis Services 2005: And Microsoft Business Intelligence Platform (Paperback) by Teo Lachev.

Outline: **Day 1**

Module 1: Developing the Dimensional Model

- Basics of data warehouse design
- Metric Decomposition Data Profiling
- Analysis Services terminology
- The UDM
- SSAS development and deployment tools
- SSAS Projects
- Hands-on Lab: Creating a DSV

Module 2: SSAS Overview

- Dimensions and Measures
- Aggregates
- Storage and processing options
- Hands-on Lab: Creating your first cube.

Module 3: Cube, Dimension and Measure Properties

- Creating hierarchies
- Dimension and attribute properties
- Varying types of dimensions in SSAS
- Defining dimension, attribute and hierarchy properties
- Hands-on Lab: Creating a cube without the wizard

Module 4: Creating Relationships

- Creating relationships between facts and dimensions
- Using multiple fact tables of multiple grain
- Hands-on Lab: Creating relationship between attributes and adding multiple fact tables

Day 2

Group Lab: Creating an End-to-End Cube against Project Real. Module 5: MDX Overview

- The basics of querying your cube
- Hands-on Lab: Building a series of MDX statements to query your cube

Module 6: Calculations

- Creating a calculation to merge multiple fact tables
- Creating profit calculations through calculations
- Creating a named set
- Hands-on Lab: Creating a series of calculations

Module 7: Actions

- Drilling through to data with actions
- Opening a Reporting Services report
- Using action to execute custom scripts
- Hands-on Lab: Adding actions to your cube

Module 8: Data Mining with SSAS

- The methodology needed for a data mining project
- Creating a mining model
- Training the mining model
- Validating and testing the mining model
- Predicting sales using the model
- Hands-on Lab: Creating a mining model against Project Real

Day 3

Group Lab: Creating a data mining solution. Students will be given rough requirements and a database. They must then determine which customers are more likely to purchase a product. Module 9: Perspectives and Translations

Translating your data, dimensions and measures
Creating perspectives to simplify viewing of the data
Hands-on Lab: Creating perspectives for marketing and translating your cube

Module 10: KPIs

Creating rich KPIs with grouping
Hands-on Lab: Creating a set of KPIs for Project Real

Module 11: Reporting Services with SSAS

Creating reports that use MDX
Hands-on Lab: Viewing OLAP data through a Reporting Services reports

Module 12: User Interface (Office 2007, Web Based).

Using Office 2007 to view cube and data mining data
Basics of creating a thin client to show data. Students will be given a basic solution that can be used license-free to display cube data
Hands-on Lab: Using Excel 2007 to display cube data

Day 4

- Module 13: Administration and Scaling SSAS

Administrating your SSAS server
Clustering SSAS best practices
Scheduling the processing of your cube
Partitioning your cube
Hands-on Lab: Deploying and scheduling processing of your cube

Module 14: Dashboards through Performance Point

Configuring a Performance Point system
Creating a Performance Point dashboard
Scorecarding through Performance Point
Hands-on Lab: Creating a dashboard through Performance Point

Group Lab: Creating an End to End SSAS Solution