

Course 2791: Implementing and Maintaining Microsoft SQL Server 2005 Analysis Services

Introduction

Elements of this syllabus are subject to change. This three-day instructor-led course teaches students how to implement an Analysis Services solution in an organization. The course discusses how to use the Analysis Services development tools to create an Analysis Services database and an OLAP cube, and how to use the Analysis Services management and administrative tools to manage an Analysis Services solution.

Audience

This course is intended for information technology (IT) professionals and developers who need to implement analysis solutions by using Microsoft SQL Server 2005 Analysis Services.

At Course Completion students will be able to:

- Describe how SQL Server Analysis Services can be used to implement analytical solutions.
- Create multidimensional analysis solutions with SQL Server Analysis Services.
- Implement dimensions in an Analysis Services solution.
- Implement measures and measure groups in an Analysis Services solution.
- Query a multidimensional Analysis Services solution.
- Customize an Analysis Services cube.
- Deploy and Secure an Analysis Services database.
- Maintain a multidimensional Analysis Services solution.
- Implement a Data Mining solution.

Prerequisites

Before attending this course, students must have:

- Conceptual understanding of OLAP solutions.
- Experience navigating the Microsoft Windows Server environment.
- Experience with Windows services (starting and stopping).
- Experience creating service accounts and permissions.
- Experience with Microsoft SQL Server, including:
 - SQL Server Agent.
 - SQL Server query language (SELECT, UPDATE, INSERT, and DELETE).
 - SQL Server System tables.
 - SQL Server accounts (users and permissions).

Course Outline

Module 1: Introduction to Microsoft SQL Server 2005 Analysis Services

This module introduces common analysis scenarios and describes how Analysis Services provides a powerful platform for multidimensional OLAP solutions and data mining solutions. The module then describes the main considerations for installing Analysis Services.

Module 2: Creating Multidimensional Analysis Solutions

This module introduces the development tools you can use to create an Analysis Services multidimensional analysis solution, and describes how to create data sources, data source views, and cubes.

Module 3: Working with Dimensions

This module describes how to edit dimensions and to configure dimensions, attributes, and hierarchies.

Module 4: Working with Measures and Measure Groups

This module explains how to edit and configure measures and measure groups.

Module 5: Querying Multidimensional Analysis Solutions

This module introduces multidimensional expressions (MDX) and describes how to implement calculated members and named sets in an Analysis Services cube.

Module 6: Customizing Cube Functionality

This module explains how to customize a cube by implementing key performance indicators (KPIs), actions, perspectives, and translations.

Module 7: Deploying and Securing an Analysis Services Database

This module describes how to deploy an Analysis Services database to a production server, and how to implement security in an Analysis Services multidimensional solution.

Module 8: Maintaining a Multidimensional Solution

This module discusses the maintenance tasks associated with an Analysis Services solution, and describes how administrators can use the Analysis Services management tools to perform them.

Module 9: Introduction to Data Mining

This module introduces data mining, and describes how to implement data mining structures and models. It then explains how to validate data model accuracy.