2791 - Implementing and Maintaining Microsoft SQL Server 2005 Analysis Services

Overview:
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.

Target 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.

Pre-requisites:
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).

At Course Completion:
After completing this course, students will be able to:
- Describe how SQL Server Analysis Services can be used to implement analytical solutions.
- Create multidimensional analysis solutions with

Module 1: Introduction to Microsoft SQL Server 2005 Analysis Services

Lessons
- Overview of Data Analysis Solutions
- Overview of SQL Server 2005 Analysis Services
- Installing SQL Server 2005 Analysis Services

Module 2: Creating Multidimensional Analysis Solutions

Lessons
- Developing Analysis Services Solutions
- Data Sources and Data Source Views
- Creating a Cube
Lab : Creating a Multidimensional Analysis Solution
- Creating a Data Source
- Creating and Modifying a Data Source View
- Creating and Modifying a Cube

Module 3: Working with Dimensions

Lessons
- Configuring Dimensions
- Defining Hierarchies
- Sorting and Grouping Attributes
Lab : Defining Dimensions
- Configuring Dimensions
- Defining Relationships and Hierarchies
- Sorting and Grouping Dimension Attributes

Module 4: Working with Measures and Measure Groups

Lessons
- Working with Measures
- Working with Measure Groups
Lab : Configuring Measures and Measure Groups
- Configuring Measures
- Defining Dimension Usage and Relationships
- Configuring Measure Group Storage

Module 5: Querying Multidimensional Analysis Solutions

Lessons
- MDX Fundamentals
- Adding Calculations to a Cube
Lab : Querying a Cube
- Querying a Cube by Using MDX
- Creating a Calculated Member
- Defining a Named Set

Module 6: Customizing Cube Functionality

Lessons
- Implementing Key Performance Indicators
- Implementing Actions
- Implementing Perspectives
- Implementing Translations
Lab : Customizing a Cube
- Implementing a KPI
- Implementing an Action
- Implementing a Perspective
- Implementing a Translation

Module 7: Deploying and Securing an Analysis Services Database

Lessons
- Deploying an Analysis Services Database
- Securing an Analysis Services Database
Lab : Deploying and Securing an Analysis Services Database
- Deploying an Analysis Services Database
- Securing an Analysis Services Database

Module 8: Maintaining a Multidimensional Solution

Lessons
- Configuring Processing Settings
- Logging, Monitoring, and Optimizing an Analysis Services Solution
- Backing Up and Restoring an Analysis Services Database
Lab : Maintaining an Analysis Services Database
- Configuring Processing
- Implementing Logging and Monitoring
- Backing Up and Restoring an Analysis Services Database
Module 9: Introduction to Data Mining

Lessons
- Overview of Data Mining
- Creating a Data Mining Solution
- Validating Data Mining Models

Lab: Implementing Data Mining
- Creating a Data Mining Structure
- Adding a Data Mining Model
- Exploring Data Mining Models
- Validating Data Mining Models