Implementing a Tabular Data Model by Using SQL Server Analysis Services

Course Description : This course provides participants with a comprehensive understanding of SSAS in tabular mode, from setup to integration with reporting tools. Throughout this hands-on course, participants will explore the design, implementation, optimization, and deployment of a tabular data model. Key skills include working with DAX, enhancing performance, securing models, and leveraging SSAS with tools like Power BI and Excel for analytics workflows. The course emphasizes practical learning and real-world use cases.

Duration : 2 Days

Content Coverage :

Module 1: Introduction to Tabular Models

- Overview of SSAS and the tabular data model.

- Differences between tabular and multidimensional models.

- Use cases and benefits of the tabular model.

Module 2: Preparing the Environment

- Installing and configuring SSAS in tabular mode.

- Setting up the workspace database.

- Introduction to the tools: SQL Server Data Tools (SSDT) and SSMS.

Module 3: Designing the Tabular Model

- Data source selection and integration.

- Creating and managing relationships between tables.

- Defining measures and calculated columns using DAX (Data Analysis Expressions).

Module 4: Enhancing the Tabular Model

- Optimizing performance using partitions.

- Working with hierarchies and perspectives.

- Role-based security and user access.

Module 5: Testing and Deploying the Model

- Validating the tabular model.

- Deploying the model to the SSAS instance.

- Processing data and troubleshooting common issues.

Module 6: Leveraging the Model

- Querying the tabular model using Power BI and Excel.

- Integrating the model into real-world reporting and analytics workflows.

- Best practices for maintenance and updates.