

Introduction to SQL Server MDX

Duration: 3 Days

### OBJECTIVES

This course provides the fundamental skills required to query cubes using the MDX SELECT statement and customise cubes with the MDX scripting language and functions. At the end of the course delegates will be able to confidently query existing cubes as well as create their own measures and named sets derive information from stored cube data and aggregations. The course covers the most commonly used set of MDX functions and scripting statements and provides the first step in a career of writing MDX statements and scripts. The course covers versions of SQL Server Analysis Services up to an including SQL Server 2012.

### PRE-REQUISITES

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### COURSE OUTLINE

Introduction to Business Intelligence

- OLTP databases
- OLAP databases
- Data Warehouses
- SSIS ETL, SSRS and SSAS

Introduction to PowerPivot and Analysis Services Tabular Mode

- What Is PowerPivot?
- PowerPivot Deployment Options
- Self-Service Business Intelligence (SSBI)
- Differences between SSAS Tabular Mode and Multidimensional
- Power Pivot Data Models
- Pivot Tables and Charts

A First Look at Tabular BISM

- Using Visual Studio and working with Projects
- The Tabular Designer
- Importing Data
- Relationships
- Calculations
- Browsing Models
- Modelling and Deploying
- Administering Tabular Models with SSMS

Enhancing Your Tabular BISM

- Refining the Tabular Model
- Hierarchies
- Measures
- KPIs
- Perspectives
- Partitions
- Processing a Tabular Database
- Creating and Applying Security Roles

#### Introduction To DAX

- DAX Fundamentals
- DAX Operators
- DAX Functions
- DAX as a Query Language

#### Advanced Topics in DAX

- Parent-Child Hierarchies
- Cross Filtering with Many-to-Many Relationships
- Multiple Relationships Between Tables
- Time Based Analysis
- Non-Aggregatable Columns

#### Analysing Tabular BISMS in Excel

- Pivot Tables
- Sheet Data Reports
- Pivot Charts
- Local Cubes
- Excel Services

#### Reporting on Tabular Models with SSRS

- PowerPivot
- PowerPivot Add-In for Excel
- PowerPivot data model