# Microsoft

# SQL Server 2012 Analysis Services: Tabular Model

## Workshop*PLUS*

**Target Audience:**

*This is an advanced course for SQL Server 2012 Analysis Services and is only targeted at IT staff with good understanding of data warehousing, business intelligence and general OLAP techniques. An understanding of Unified Dimensional Model as well as an understanding of the MDX and DAX query language are encouraged for this course.*

## Overview

The SQL Server 2012 Analysis Services Tabular Model WorkshopPLUS provides attendees with the deep knowledge and understanding of architecture, design, administration, troubleshooting techniques and best practices needed to build, manage, secure and use SQL Server 2012 Analysis Services. Through presentations, white-board discussions, and goal-based labs, this 3-day workshop covers the individual approaches for creating and administering elements of an enterprise deployment of Analysis Services using the Tabular Model.

## Key Features and Benefits

This training is aimed at advanced Business Intelligence and Analysis Services developers and SQL DBAs who want to master the concept of the new Tabular Model in SQL Server 2012 Analysis Services. The course includes hands-on lab exercises for creating an in-memory model, solving business problems, administrating the server and writing DAX to query the model.

## Technical Highlights

After completing this course, you will be able to:

- Understand the architecture, functionality and configuration of Analysis Services Tabular data model
- Understand how to build a model to solve business problems
- Use SQL Server Data Tools to rapidly build and deploy Tabular Models
- Use popular client tools such as Excel, PowerView, Reporting Services and PerformancePoint to produce reports charts and graphs

# Syllabus

This workshop runs for **3** full days. Students should anticipate consistent start and end times for each day. Early departure on any day is not recommended.

**Module 1: Business Intelligence Stack  Overview and Comparison of Analysis Services 2012 Models:** This module provides an overview of the fundamental components of a Business Intelligence environment, its workflow, and how to consume the business data. It also compares the multidimensional and tabular models.

**Module 2: Tabular Overview and Data Refresh**: This module presents the enterprise level in-memory model in Analysis Services and how to use the technology. It also introduces working with data using the Tabular model.

**Module 3: Administration and Monitoring:** This module provides in-depth presentation of the day-to-day administration and monitoring of Analysis Services.

**Module 4: Optimization**: This module focuses on the optimization of tabular processing and querying.

**Module 5 Connectivity:** This module focuses on the connectivity between client applications and the server. It covers TCP and HTTP connection protocols in the product plus the Kerberos configuration for double-hop connections.

**Module 6: Data Analysis Expressions (DAX):** This module includes writing DAX expressions and queries, solving business problems, and locating performance bottlenecks in DAX.

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