Course Outline

Creating Databases in SQL Server

Duration: 2 Days

OBJECTIVES

Delegates attending this course will cover start to finish creation of SQL Server relational databases. They will be introduced to all SQL Data Definition Language (DDL) statements, and will create database storage, tables, data integrity constraints, and indexes. The course is aimed at Database Administrators and Database Developers/Database Designers who will need to create a new database from scratch or will be responsible for maintaining database storage, structures, schemas and design for existing databases on a SQL Server platform. This course, along with the SQL Server Database Querying and Advanced SQL Server Database Querying Courses, helps to prepare delegates for the Microsoft 70-461 exam: Querying Microsoft SQL Server 2012/2014/2016 and exam 70-762: Developing SQL Databases (M20762), which credit towards MCSA and MCSE certifications. It should be noted, however, that all course attendances should be complemented by reference to the skills measured by the exam, a period of self-study and test exams before sitting the actual exam. Covers SQL Server 2005, SQL Server 2008, SQL Server 2012, SQL Server 2014,and SQL Server 2016.

PRE-REQUISITES

Delegates should have knowledge to the level of that provided by our Relational Database Design course.

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