



- CYU – Check Your Understanding
- LOTW – Learning On The Walls
- PPR – Participant Progress Report
- PTS – Post Training Support (Web)

SQL SERVER ANALYSIS SERVICES (SSAS)-2014

Duration: 4 Days

INTRODUCTION TO MICROSOFT SQL SERVER ANALYSIS SERVICES

- ❖ Overview of SQL Server Analysis Services
- ❖ Installing Analysis Services
- ❖ What is Data Warehouse?
- ❖ What is MSBI?
- ❖ Difference between OLTP and OLAP

OLAP MODELING

- ❖ Understand Basic OLAP Modeling (star schema)
- ❖ Understand Dimensional Modeling (stars and snowflakes)
- ❖ Understand Measure (fact) and Cube Modeling

CREATING AN ANALYSIS SERVICES PROJECT

- ❖ Introduction
- ❖ The Business Intelligence Development Studio
- ❖ The Visual Studio Integrated Development Environment
- ❖ Creating a Data Source
- ❖ Creating a Data Source View
- ❖ Modifying the Properties of a Data Source View

BUILDING A CUBE

- ❖ Introduction
- ❖ Starting the Cube Wizard
- ❖ Selecting the Build Method
- ❖ Identifying Fact and Dimension Tables
- ❖ Selecting Time Periods
- ❖ Selecting Measures and Reviewing Dimension Hierarchies
- ❖ Deploying a Cube

EXTENDING THE CUBE WITH HIERARCHIES

CREATING HIERARCHIES

- ❖ Building natural hierarchies and creating attribute relationships
- ❖ Discrediting attribute values with the Clusters and Equal Areas algorithms

PARENT-CHILD RELATIONSHIPS

- ❖ Defining parent and key attributes
- ❖ Generating level captions with Naming Template



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EXPLOITING ADVANCED DIMENSION RELATIONSHIPS

STORING DIMENSION DATA IN FACT TABLES

- ❖ Building a degenerate dimension
- ❖ Configuring fact relationships

SAVING SPACE WITH REFERENCED DIMENSION RELATIONSHIPS

- ❖ Identifying candidates for referenced relationships
- ❖ Utilizing the Dimension Usage tab to configure referenced relationships

INCLUDING DIMENSIONS WITH MANY-TO-MANY RELATIONSHIPS

- ❖ Implementing intermediate measure groups and dimensions
- ❖ Reporting on many-to-many dimensions without double counting

IMPLEMENTING A TABULAR MODEL DATABASE

- ❖ Providing users with analytics via xVelocity and Power Pivot
- ❖ Comparing DAX with MDX
- ❖ Mapping out the role of SharePoint

MANAGING CUBES

DESIGNING STORAGE AND AGGREGATIONS

- ❖ Choosing between ROLAP, MOLAP and HOLAP
- ❖ Partitioning cubes for improved performance
- ❖ Designing aggregations with Aggregation Design Wizard
- ❖ Leveraging the Usage-Based Optimization Wizard

AUTOMATING PROCESSING AND DEPLOYMENT

- ❖ Exploiting XMLA scripts and SSIS
- ❖ Refreshing cubes with Proactive Caching

PERFORMING ADVANCED ANALYSIS WITH MDX

RETRIEVING DATA WITH MDX

- ❖ Defining tuples, sets and calculated members
- ❖ Querying cubes with MDX

MONITORING BUSINESS PERFORMANCE WITH KPIS

- ❖ Building goal, status and trend expressions
- ❖ Using PARALLELPERIOD to compare past time periods
- ❖ Simplifying KPI definitions using KPIValue and KPIGoal

ENHANCING CUBES WITH MDX

- ❖ Adding runtime calculations to the cube
- ❖ Adding drill-through and URL actions



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GAINING BUSINESS ADVANTAGE WITH DATA MINING

DETERMINING THE CORRECT MODEL

- ❖ Identifying business tasks for data mining
- ❖ Training and testing data-mining algorithms
- ❖ Comparing algorithms with the accuracy chart

PERFORMING REAL-WORLD PREDICTIONS

- ❖ Classifying with Decision Trees, Neural Network and Naive Bayes algorithms
- ❖ Predicting with the Time Series algorithm

INTRODUCTION TO REPORTING CLIENTS

- ❖ Design Reports using Reporting Services
- ❖ Design Reports by using Report Builder
- ❖ SQL Server 2014 Integration Services with SSAS
- ❖ Execute SQL Server Processing Task
- ❖ Tech Data from Cube Using Dataflow Task

ANALYSIS SERVICES ADMINISTRATION

- ❖ Deployment of Analysis Service
- ❖ Analysis Services and Security
- ❖ Implementing Security on Cubes