

70-463: Implementing a Data Warehouse with Microsoft SQL Server 2012**Data Warehouse Logical Design**

- Introducing Star and Snowflake Schemas
- Designing Dimensions
- Designing Fact Tables

Implementing a Data Warehouse

- Implementing Dimensions and Fact Tables
- Managing the Performance of a Data Warehouse
- Columnstore Indexes and Batch Processing
- Loading and Auditing Loads

Creating SSIS Packages

- Using the SQL Server Import and Export Wizard
- Developing SSIS Packages in SQL Server Data Tool (SSDT)
- Introducing Control Flow, Data Flow and Connection Managers

Designing and Implementing Control Flow

- Connection Managers
- Control Flow Tasks and Containers
- Planning a Complex Data movement
- Precedence Constraints

Designing and Implementing Data Flow

- Defining Data Sources and Destinations
- Working with Data Flow Transformations
- Determining Appropriate ETL Strategy and Tools
- Set-Based Updates

Enhancing Control Flow

- SSIS Variables
- Connection Managers, Tasks and Precedence Constraint Expressions
- Using a Master Package for Advanced Control Flow

Enhancing Data Flow

- Defining Attribute Types
- Preparing a Package for Incremental Load
- ETL Strategy for incrementally loading Fact Tables
- Error Flow

Creating a Robust and Restartable Package

- Package Transactions
- Manually Handling Transactions
- Implementing Restartability Checkpoints
- Using Event Handlers

Implementing Dynamic Packages

- Using Project-level Connection Managers Parameters
- Implementing Package Configurations
- Logging Packages
- Implementing Auditing and Lineage
- Preparing Package Templates

Installing SSIS and Deploying Packages

- Preparing an SSIs Installation
- Installing SSIS
- Deploying SSIS Packages
- SSISDB Catalog, Objects
- Project Deployment

Executing and Securing Packages

- On-Demand, Automated SSIS Execution
- Monitoring SSIS Execution
- Securing SSIS Packages

Troubleshooting and Performance Tuning

- Design-Time and Production-Time Troubleshooting
- SSIS Data Flow Engine Performance Tuning
- Data Flow Tuning Options
- Troubleshooting and Benchmarking Performance

Installing and Maintaining Data Quality Services

- Data Quality Problems and Roles
- Data Quality Activities and Roles
- Installing Data Quality Services
- DQS Architecture
- DQS Installation
- Performing Administrative Activities with Data Quality Client
- Performing Administrative Activities and Other Tools

Implementing Master Data Services

- What is Master Data, MDM Challenges
- Installing Master Data Services
- MDS Architecture
- Creating a Master Data Services Model
- MDS Models and Objects in Models

Managing Master Data

- Creating and Deploying MDS Packages
- Importing Batches of Data
- Exporting Data
- Defining Master Data Security
- Using Master Data Services add-in for Excel

Creating a Data Quality Project to Clean Data

- Creating and Maintaining a Knowledge Base
- Creating a Data Quality Project
- Data Cleansing
- Profiling Data and Improving Data Quality
- SSIS Data Profiling task

SSIS and Data Mining

- What is Data Mining
- SSAS Data Mining Algorithms
- Text Mining
- Preparing the Data
- SSIS Sampling

Implementing Custom Code in SSIS Packages

- Configuring the Script Task
- Configuring the Script Component
- Implementing Custom Components
- Planning a Custom Component
- Design Time and Run Time Methods

Identity Mapping and De-Duplicating

- Understanding the Problem
- Solving the Problems
- Using DQS and the DQS Cleansing Transformation
- Implementing SSIS Fuzzy Transformations
- Versions of Fuzzy Transformations