20463: Implementing a Data Warehouse with Microsoft SQL Server 2014

Course Details

Course Outline

1. Introduction to Data Warehousing

- Overview of Data Warehousing
- Considerations for a Data Warehouse Solution
- Lab: Exploring a Data Warehousing Solution

2. Data Warehouse Hardware Considerations

- Considerations for building a Data Warehouse
- Data Warehouse Reference Architectures and Appliances
- Lab : Planning Data Warehouse Infrastructure

3. Designing and Implementing a Data Warehouse

- Logical Design for a Data Warehouse
- Physical design for a data warehouse
- Lab : Implementing a Data Warehouse Schema

4. Creating an ETL Solution with SSIS

- Introduction to ETL with SSIS
- Exploring Data Sources
- Implementing Data Flow
- Lab: Implementing Data Flow in an SSIS Package

5. Implementing Control Flow in an SSIS Package

- Introduction to Control Flow
- Creating Dynamic Packages
- Using Containers
- Managing Consistency
- Lab: Implementing Control Flow in an SSIS Package
- Lab: Using Transactions and Checkpoints

6. Debugging and Troubleshooting SSIS Packages

- Debugging an SSIS Package
- Logging SSIS Package Events
- Handling Errors in an SSIS Package
- Lab: Debugging and Troubleshooting an SSIS Package

7. Implementing an Incremental ETL Process

- Introduction to Incremental ETL
- Extracting Modified Data
- Loading Modified data
- Lab: Extracting Modified Data
- Lab: Loading Incremental Changes

8. Enforcing Data Quality

- Introduction to Data Quality
- Using Data Quality Services to Cleanse Data
- Using Data Quality Services to Match data
- Lab : Cleansing Data
- Lab : De-duplicating data

9. Using Master Data Services

- Master Data Services Concepts
- Implementing a Master Data Services Model
- Managing Master Data
- Creating a Master Data Hub
- Lab : Implementing Master Data Services

10. Extending SQL Server Integration Services

- Using Scripts in SSIS
- Using Custom Components in SSIS
- Lab: Using Custom Components and Scripts

11. Deploying and Configuring SSIS Packages

- Overview of SSIS Deployment
- Deploying SSIS Projects
- Planning SSIS Package Execution
- Lab: Deploying and Configuring SSIS Packages

12. Consuming Data in a Data Warehouse

- Introduction to Business Intelligence
- Introduction to Reporting
- An Introduction to Data Analysis
- Lab : Using Business Intelligence Tools