55321AC - SQL Server Integration Services

Module 1: SSIS Overview
Lessons

1. Import/Export Wizard
2. Exporting Data with the Wizard
3. Common Import Concerns
4. Quality Checking Imported/Exported Data

Lab 1: SSIS Overview

- Use the Import/Export Wizard from SSMS

Module 2: Working with Solutions and Projects
Lessons

1. Working with SQL Server Data Tools
2. Understanding Solutions and Projects
3. Working with the Visual Studio Interface

Lab 1: Working with Solutions and Projects

- Import and run a package in SSDT-BI

Module 3: Basic Control Flow
Lessons

1. Working with Tasks
2. Understanding Precedence Constraints
3. Annotating Packages
4. Grouping Tasks
5. Package and Task Properties
6. Connection Managers
7. Favourite Tasks

Lab 1: Basic Control Flow

- Precedence Constraints and Execute SQL Task

Module 4: Common Tasks
Lessons

1. Analysis Services Processing
2. Data Profiling Task
3. Execute Package Task
4. Execute Process Task
5. Expression Task
6. File System Task
7. FTP Task
8. Hadoop Task
9. Script Task Introduction
10. Send Mail Task
11. Web Service Task
12. XML Task

Lab 1: Common Tasks

- Create a package to copy a file and send an email message on completion
- Create a package to perform data profiling and then review the results
- Create a master package and test the execution flow of the child packages

Module 5: Data Flow Sources and Destinations
Lessons

1. The Data Flow Task
2. The Data Flow SSIS Toolbox
3. Working with Data Sources
4. SSIS Data Sources
5. Working with Data Destinations
6. SSIS Data Destinations

Lab 1: Data Flow Sources and Destinations

- Working with Data Sources and Destinations

Module 6: Data Flow Transformations
Lessons

1. Transformations
2. Configuring Transformations

Lab 1: Data Flow Transformations

- Working with Derived Column Transformations
- Working with Lookup Transformations

Module 7: Making Packages Dynamic
Lessons

1. Features for Making Packages Dynamic
2. Package Parameters
3. Project Parameters
4. Variables
5. SQL Parameters
6. Expressions in Tasks
7. Expressions in Connection Managers
8. After Deployment
9. How It All Fits Together

Lab 1: Making Packages Dynamic

- Making a Package Dynamic

Module 8: Containers
Lessons

1. Sequence Containers
2. For Loop Containers
3. Foreach Loop Containers

Lab 1: Containers

- Use a Foreach Loop container to send a custom email to the names found in a database view

Module 9: Troubleshooting and Package Reliability
Lessons

1. Understanding MaximumErrorCount
2. Breakpoints
3. Redirecting Error Rows
4. Logging
5. Event Handlers
6. Using Checkpoints
7. Transactions

Lab 1: Troubleshooting and Package Reliability

- Creating a Script Task to Merge Error Messages
- Configure a package to use transactions

Module 10: Deploying to the SSIS Catalog
Lessons

1. The SSIS Catalog
2. Deploying Projects
3. Working with Environments
4. Executing Packages in SSMS
5. Executing Packages from the Command Line
6. Deployment Model Differences

Lab 1: Deploying to the SSIS Catalog

- Deploying a Project to the SSIS Catalog
- Manually executing a Package

Module 11: Installing and Administering SSIS
Lessons

1. Installing SSIS
2. Upgrading SSIS
3. Managing the SSIS Catalog
4. Viewing Built-in SSIS Reports
5. Managing SSIS Logging and Operation Histories
6. Automating Package Execution

Lab 1: Installing and Administering SSIS

- Automating Package Execution

Module 12: Securing the SSIS Catalog
Lessons

1. Principals
2. Securables
3. Grantable Permissions
4. Granting Permissions
5. Configuring Proxy Accounts

Lab 1: Securing the SSIS Catalog

- Securing the SSIS Catalog