

Training: Microsoft
MS-55321 SQL Server Integration Services



TRAINING TERMS

2025-05-26 | 5 days | Virtual Classroom

TRAINING GOALS:

This five-day instructor-led course is intended for IT professionals who need to learn how to use SSIS to build, deploy, maintain, and secure Integration Services projects and packages, and to use SSIS to extract, transform, and load data to and from SQL Server.

This course is similar to the retired Course 20767-C: Implementing a SQL Data Warehouse but focuses more on building packages, rather than the entire data warehouse design and implementation.

Audience Profile

The primary audience for this course is database professionals who need to fulfil a Business Intelligence Developer role. They will need to focus on hands-on work creating BI solutions including Data Warehouse implementation, ETL, and data cleansing.

At Course Completion

- Create sophisticated SSIS packages for extracting, transforming, and loading data
- Use containers to efficiently control repetitive tasks and transactions
- Configure packages to dynamically adapt to environment changes
- Use Data Quality Services to cleanse data
- Successfully troubleshoot packages
- Create and Manage the SSIS Catalog
- Deploy, configure, and schedule packages
- Secure the SSIS Catalog

CONSPECT:

- SSIS Overview
 - Import/Export Wizard
 - Exporting Data with the Wizard

- Common Import Concerns
- Quality Checking Imported/Exported Data
- Lab: SSIS Overview
- Working with Solutions and Projects
 - Working with SQL Server Data Tools
 - Understanding Solutions and Projects
 - Working with the Visual Studio Interface
 - Lab: Working with Solutions and Projects
- Basic Control Flow
 - Working with Tasks
 - Understanding Precedence Constraints
 - Annotating Packages
 - Grouping Tasks
 - Package and Task Properties
 - Connection Managers
 - Favorite Tasks
 - Lab: Basic Control Flow
- Common Tasks
 - Analysis Services Processing
 - Data Profiling Task
 - Execute Package Task
 - Execute Process Task
 - Expression Task
 - File System Task
 - FTP Task
 - Hadoop Task
 - Script Task Introduction
 - Send Mail Task
 - Web Service Task
 - XML Task
 - Lab: Common Tasks
- Data Flow Sources and Destinations
 - The Data Flow Task
 - The Data Flow SSIS Toolbox
 - Working with Data Sources
 - SSIS Data Sources

- Working with Data Destinations
- SSIS Data Destinations
- Lab: Data Flow Sources and Destinations
- Data Flow Transformations
 - Transformations
 - Configuring Transformations
 - Lab: Data Flow Transformations
- Making Packages Dynamic
 - Features for Making Packages Dynamic
 - Package Parameters
 - Project Parameters
 - Variables
 - SQL Parameters
 - Expressions in Tasks
 - Expressions in Connection Managers
 - After Deployment
 - How It All Fits Together
 - Lab: Making Packages Dynamic
- Containers
 - Sequence Containers
 - For Loop Containers
 - Foreach Loop Containers
 - Lab : Containers
- Troubleshooting and Package Reliability
 - Understanding MaximumErrorCount
 - Breakpoints
 - Redirecting Error Rows
 - Logging
 - Event Handlers
 - Using Checkpoints
 - Transactions
 - Lab: Troubleshooting and Package Reliability
- Deploying to the SSIS Catalog
 - The SSIS Catalog
 - Deploying Projects
 - Working with Environments

- Executing Packages in SSMS
- Executing Packages from the Command Line
- Deployment Model Differences
- Lab: Deploying to the SSIS Catalog
- Installing and Administering SSIS
 - Installing SSIS
 - Upgrading SSIS
 - Managing the SSIS Catalog
 - Viewing Built-in SSIS Reports
 - Managing SSIS Logging and Operation Histories
 - Automating Package Execution
 - Lab: Installing and Administering SSIS
- Securing the SSIS Catalog
 - Principals
 - Securables
 - Grantable Permissions
 - Granting Permissions
 - Configuring Proxy Accounts
 - Lab: Securing the SSIS Catalog

REQUIREMENTS:

- Working knowledge of T-SQL and SQL Server Agent jobs is helpful, but not required.
- Basic knowledge of the Microsoft Windows operating system and its core functionality.
- Working knowledge of relational databases.
- Some experience with database design.

Difficulty level



CERTIFICATE:

Certificate of completing an authorized Microsoft training

TRAINER:

Microsoft Certified Trainer