



Implementing and Maintaining Microsoft SQL Server 2008 Integration Services

Days: 3
Format: Instructor-Led
Class Code: 6235
Certification Exams: None
Certification Track: None

Recommended Course Sequence

Knowledge of prerequisites noted below.

Course content is subject to change without notice.

Course Description:

This three-day instructor-led course teaches students how to implement an Integration Services solution in an organization. The course discusses how to develop, deploy, and manage Integration Services packages.

Target Student:

This course is intended for information technology (IT) professionals and developers who need to implement data transfer or extract, transform, and load (ETL) solutions by using Microsoft SQL Server 2008 Integration Services.

Delivery Method:

Instructor led, group-paced, classroom-delivery learning model with structured hands-on activities.

Prerequisites:

Before attending this course, students must have:

- Exposure to enterprise data import and export scenarios.
- Experience navigating the Microsoft Windows Server environment.
- Experience with Microsoft SQL Server, including:
 - SQL Server Agent.
 - SQL Server query language (SELECT, UPDATE, INSERT, and DELETE).
 - SQL Server System tables.
 - SQL Server accounts (users and permissions).

At Course Completion:

Upon successful completion of this course, students will be able to:

- Describe SQL Server Integration Services and its tools.
- Create an Integration Services package.
- Implement control flow in an Integration Services package.
- Implement data flow in an Integration Services package.
- Implement logging in an Integration Services package.
- Debug and implement error handling in an Integration Services package.
- Implement checkpoints and transactions in an Integration Services package.
- Deploy an Integration Services package.
- Manage and secure an Integration Services package.

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Course Outline

Module 1: Introduction to SQL Server 2008 Integration Services

The students will be introduced to the role that Integration Services plays in extracting, transforming, and loading data. The students will also be introduced to the tools that are used to build and manage Integration Services solutions.

Lessons
<ul style="list-style-type: none">■ Overview of SQL Server Integration Services■ Using Integration Services Tool
Lab : Introduction to SQL Server Integration Services
<ul style="list-style-type: none">■ Using the Import and Export Wizard■ Running an Integration Services Package

Module 2: Developing Integration Services Solutions

The students will be introduced to the development tasks that are involved in creating an Integration Services package.

Lessons
<ul style="list-style-type: none">■ Creating an Integration Services Solution■ Using Variables■ Building and Running a Solution
Lab : Developing Integration Services Solutions
<ul style="list-style-type: none">■ Creating an Integration Services Project■ Implementing a Package■ Building and Running an Integration Services package

Module 3: Implementing Control Flow

The students will be introduced to the tasks and precedence constraints that can be used to implement control flow in an Integration Services package.

Lessons
<ul style="list-style-type: none">■ Control Flow Tasks■ Control Flow Precedent Constraints■ Control Flow Containers
Lab : Implementing Control Flow
<ul style="list-style-type: none">■ Creating a Simple Control Flow■ Configuring Precedence Constraints■ Using Containers

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Module 4: Implementing Data Flow

The students will be introduced to the data flow sources, transformations, and destinations that can be used to implement a data flow task in an Integration Services control flow. It also explains how to use data flow paths to direct valid and invalid rows through the data flow.

Lessons
<ul style="list-style-type: none">■ Data Flow Sources and Destinations■ Basic Data Flow Transformations■ Advanced Data Flow Transformations■ Data Flow Paths
Lab : Implementing Data Flow
<ul style="list-style-type: none">■ Transferring Data■ Implementing Transformations■ Using Data Viewers■ Configuring Error Output

Module 5: Implementing Logging

The students will be introduced to how to use logging in an Integration Services package, and explained how to configure and use logging providers to generate information about a package's execution.

Lessons
<ul style="list-style-type: none">■ Overview of Integration Services Logging■ Enabling and Configuring Logging
Lab : Implementing Logging
<ul style="list-style-type: none">■ Configuring Logging■ Implementing Custom Logging

Module 6: Debugging and Error Handling

The students will be introduced to how to debug Integration Services packages by using the debugging tools in Business Intelligence Development Studio. It then explains how to implement error-handling logic in an Integration Services package.

Lessons
<ul style="list-style-type: none">■ Debugging a Package■ Implementing Error Handling
Lab : Debugging and Error Handling
<ul style="list-style-type: none">■ Debugging a Package■ Implementing Error Handling■ Controlling Failure Behavior

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Module 7: Implementing Checkpoints and Transactions

The students will be introduced to what checkpoints are and how to implement them. It then discusses transactions, and describes how to implement transactional data access logic in an Integration Services package.

Lessons
<ul style="list-style-type: none">■ Implementing Checkpoints■ Implementing Transactions
Lab : Implementing Checkpoints and Transactions
<ul style="list-style-type: none">■ Implementing Checkpoints in a Package■ Implementing Transactions in a Package■ Implementing a Native Transaction

Module 8: Configuring and Deploying Packages

The students will be introduced to how to create Package Configurations and how to deploy Integration Services packages to production servers.

Lessons
<ul style="list-style-type: none">■ Package Configurations■ Deploying Packages
Lab : Configuring and Deploying Packages
<ul style="list-style-type: none">■ Creating a Package Configuration■ Preparing a Package for Deployment■ Deploying a Package

Module 9: Managing and Securing Packages

The students will be introduced to the management tasks that relate to Integration Services packages and explained how to perform those tasks by using the Integration Services management tools. It also describes how to secure Integration Services packages.

Lessons
<ul style="list-style-type: none">■ Managing Packages■ Securing Packages
Lab : Managing and Securing Packages
<ul style="list-style-type: none">■ Importing a Package■ Configuring and Monitoring a Package■ Scheduling a Package■ Securing a Package