SQL Server Integration Services (SSIS) Training Course 55321

Days: 5

Prerequisites: 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.

Audience: This course is ideal for database professionals and BI developers responsible for building SSIS-driven ETL solutions and performing data cleansing. It's especially suited for those working on data warehouse implementations or managing large-scale data integration projects with Microsoft SQL Server.

Description: Struggling to keep up with data quality and loading challenges? Analysts spend up to 80% of their time managing pipelines and cleansing data, leaving just 20% for real insights. The SQL Server Integration Services (SSIS) training course teaches you how to efficiently design and optimize ETL workflows, so your team can focus on delivering impactful business intelligence instead of slogging through manual data prep.

The SQL Server Integration Services (SSIS) training course teaches you how to design, configure, and secure efficient ETL workflows. You'll build SSIS packages that connect to multiple data sources, transform complex datasets, and load results into SQL Server or other destinations with precision.

You'll also learn to design control flows, use precedence constraints effectively, optimize package execution, cleanse and validate server data, follow deployment best practices, and maintain a secure SSIS Catalog. By course completion, you'll have the skills to deliver reliable, high-quality BI solutions that grow with your organization.

Course Objectives: By the end of this SQL Server Integration Services course, you will be able to:

- Create sophisticated SSIS packages for extracting, transformation, and loading data

- Use containers to control repetitive tasks and transactions efficiently

- Configure packages to dynamically adapt to environment changes

- Cleanse data using Data Quality Services for business intelligence accuracy

- Troubleshoot and debug packages for reliable package execution

- Create, manage, and secure the SSIS Catalog

- Deploy, configure, and schedule packages for automated execution

OUTLINE:

MODULE 1: SSIS OVERVIEW

- Import/Export Wizard and Exporting Data
- Common Import Concerns and Quality Checking Data

MODULE 2: WORKING WITH SOLUTIONS AND PROJECTS

- SQL Server Data Tools Overview
- Understanding Solutions, Projects, and Visual Studio Interface

MODULE 3: BASIC CONTROL FLOW

- Working with Tasks, Precedence Constraints, and Connection Managers
- Annotating, Grouping, and Managing Package/Task Properties

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- Favorite Tasks for Common Scenarios

MODULE 4: COMMON TASKS

- Analysis Services Processing and Data Profiling
- Execute Package/Process Tasks and Expression Tasks
- File System, FTP, and Hadoop Tasks
- Script Task Basics, Send Mail, Web Service, and XML Tasks

MODULE 5: DATA FLOW SOURCES, DESTINATIONS, AND TRANSFORMATIONS

- Data Flow Task and SSIS Toolbox Overview
- Working with Data Sources and Destinations (Databases, Flat Files, Excel)
- Configuring Transformations to cleanse and shape data

MODULE 6: MAKING PACKAGES DYNAMIC

- Parameters (Package, Project, SQL) and Variables
- Using Expressions in Tasks and Connection Managers
- Post-Deployment Dynamic Configurations

MODULE 7: CONTAINERS

- Sequence Containers, For Loops, and Foreach Loops

MODULE 8: TROUBLESHOOTING AND PACKAGE RELIABILITY

- Error Handling: Redirecting Rows, Logging, Event Handlers
- Using Breakpoints, Checkpoints, and Transactions
- Managing MaximumErrorCount for Stability

MODULE 9: DEPLOYING TO THE SSIS CATALOG

- Understanding the SSIS Catalog and Deployment Models
- Deploying Projects, Managing Environments, and Executing Packages (SSMS, Command Line)

MODULE 10: INSTALLING AND ADMINISTERING SSIS

- Installing and Upgrading SSIS
- Managing the Catalog, Built-in Reports, Logging, and Operation Histories
- Automating Package Execution

MODULE 11: SECURING THE SSIS CATALOG

- Principals, Securables, and Permissions Management
- Granting Permissions and Configuring Proxy Accounts