Course : SQL Server Integration Services

Versions 2022 to 2012
Practical course - 2d - 14h00 - Ref. NAI
Price : 1680 CHF E.T.

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SQL Server Integration Services (SSIS) is a powerful ETL tool used in integration and BI projects. In this training course, you will learn how to implement an ETL solution with SSIS. You'll learn how to process and feed data, secure and optimize data flows.

🎯 Teaching objectives

At the end of the training, the participant will be able to:

- ✓ Navigate the SQL Server Data Tools development tool and create an SSIS project
- ✓ Implement a control flow and a data flow
- ✓ Feeding a slowly varying dimension, to load a table of facts
- ✓ Set up breakpoints in package flows
- ✓ Measure, monitor and improve the performance of an SSIS package

Intended audience
Business intelligence developers, project managers and architects.

Prerequisites
Good knowledge of RDBMS and SQL language. Basic knowledge of the data warehouse concept.

Practical details
Exercise
Exercises after each theoretical input.

Course schedule

1 Introduction

- Concepts of data warehouse, datamart and Extract-Transform-Load (ETL).
- Introducing IS. SSIS project concept.
- SQL Server Data Tools (SSDT) development tool.

Demonstration
Presentation of the tool interface.

2 Implementing a control flow

- Control flow tasks. Precedence constraints.
- Sequence and loop containers.
- Variables, parameters and expressions.

Exercise
Implementing control flows. Use of precedence constraints. Add loop containers.

3 Creating a data stream

- Data sources and destinations (connection type).
- The "Change Data Capture" component.
- Quality control, "Data Quality Services" (DQS).

Exercise
Implement a simple data flow. Add components. Use DQS to manage data quality and consistency.

4 Using packages to load a multidimensional database

- Slowly varying dimension supply (SCD).
- Loading fact tables.

Exercise
Use components to feed a slowly varying dimension, to load a fact table.

5 Package logging and reliability

- Implementation. Using the event handler.
- Debugging and error handling.
- Setting up stop-off points and transactions.

Exercise
Use custom logging. Analyze a control flow in debug mode. Analyze a data stream with the viewer.

6 Solution deployment

- Different types of deployment (project/package).
- Types of package and deployment configurations.
- Configure package execution options.

Exercise
Deploying a project with a set of packages. Definition and configuration. Set up environments (development, production...).

7 Performance and monitoring

- Measure package performance.
- Monitoring reports.
- Data Taps, trace data in a stream.

Exercise
Exploit package execution reports. Data Taps: intercept and verify data passing through an integration flow.

Dates and locations

REMOTE CLASS
2026 : 5 Mar., 4 June, 15 Oct.