

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

PARTICIPANTS

Business intelligence developers, project managers and architects.

PREREQUISITES

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

TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects.

They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more.

Participants also complete a placement test before and after the course to measure the skills they've developed.

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...).

TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.

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.