

Course : Snowflake, getting started

Practical course - 2d - 14h00 - Ref. SWF

Price : 1680 CHF E.T.



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Snowflake, the first data warehouse in the cloud, combines the power of data warehouses with the flexibility of the cloud. The aim of this training course is to introduce you to the Snowflake tool through its various functionalities and its differences in the construction of a data warehouse.

Teaching objectives

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

- ✓ Discover Snowflake's key concepts and architecture
- ✓ Understanding and using the different user roles
- ✓ Create and transform data in Snowflake databases
- ✓ Import complex structured and semi-structured data
- ✓ Use cache to optimize requests and costs
- ✓ Creating data pipes and streams

Intended audience

Project managers, BI experts, DBA system engineers.

Prerequisites

Good knowledge of SQL and Database Management Systems (DBMS).

Practical details

Hands-on work

Apports théoriques illustrés par des exercices pratiques pour chaque fonctionnalité, formant un fil rouge.

Teaching methods

The experience of our trainers enables us to enrich the training with concrete examples of implementation.

Course schedule

PARTICIPANTS

Project managers, BI experts, DBA system engineers.

PREREQUISITES

Good knowledge of SQL and Database Management Systems (DBMS).

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.

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.

1 Introduction

- A brief history of data warehouses.
- A reminder of the fundamentals of a data warehouse.
- The evolution of traditional architecture.
- Cloud computing.

Storyboarding workshops

2 Snowflake: key concepts and architecture

- Snowflake, a Software as a Service (SaaS): benefits, virtual computing instances, storage service.
- Three-layer architecture: data base storage, query processing, cloud services.
- Snowflake connection: web interface, SnowSQL, drivers, connectors.
- Storage hierarchy: data bases and schemas, tables, views, stages.

Demonstration

Snowflake ecosystem. Connect to Snowflake.

3 Getting started with Snowflake WebUI

- Introduction and "user roles".
- Data base navigation: database and object property panel, use hyperlinks, view privileges.
- Data exploration: navigation, SQL input and worksheet results panes. Worksheet exploration.
- View detailed statistics.
- Export data via clipboard or file.

Hands-on work

Create an account. Display help panel. Change role. Identify current database/objects/schema. Create a SQL select statement. Explore and display data.

4 Warehouse Snowflake - DB objects - Transformations

- Notion of warehouse in the Snowflake sense.
- Use of context menu, SQL script to specify warehouse.
- Feature "Code Highlight".
- Database objects. Importing data into the database.
- Transformations: SQL functions REPLACE, CONCAT. ETL & ELT. Import a text file into a worksheet.

Hands-on work

Create warehouse, DB, table, file format for import. Perform transformations.

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.

5 Advanced storage and querying

- Staging data: uploading and organizing data.
- Data storage structures: entity, attribute and relationship, sequence.
- Semi-structured data: definition, formats usable with Snowflake, storage in a VARIANT column.
- Complex semi-structured data: query, use of FLATTEN, GET, GET_PATH functions.

Hands-on work

Load data into a course. Create a sequence. Use a sequence with the NEXT VALUE function. Perform queries.

6 Performance

- Different levels of cache: Result cache, Local Disk cache, Remote Disk.
- Optimize cache usage.
- Best practices in management optimization: warehouses, costs.
- Best practices in security and role management.

Hands-on work

Cache analysis, optimize its use.

7 Design & Deploy

- Schedule executions using Tasks.
- Object replication using cloning and time travel.
- Pipeline creation and data streaming (change data capture).

Hands-on work

Plan executions. Cloning. Create pipelines and streams.

8 Business case presentation

- Case study: 360° vision of a supply chain.
- Conclusion.

Storyboarding workshops

Dates and locations

REMOTE CLASS

2026 : 4 June, 14 Sep., 19 Nov.