+33 (0)1 48 10 09 46
formation@ambient-it.net
140 Avenue Jean Lolive 93500 Pantin - France

Updated on 24/04/2025

Sign up

SnowPro® training: Advanced Data Engineer certification (DEA-C02)

ALL-IN-ONE: EXAM INCLUDED IN PRICE: ADVANCED DATA ENGINEER COURSE

3 days (21 hours)

PRESENTATION

SnowPro® Advanced Data Engineer certification attests to your fundamental skills in data management and performance optimization with Snowflake.

With our training and program, you'll develop essential practical and theoretical skills, aimed at strengthening your expertise in data movement, performance optimization, data protection, security and data transformation with Snowflake.

Our training covers crucial aspects such as data loading, data pipeline design, query optimization, data retrieval, and security management. With a perfect balance between in-depth theory and practical work, this course offers you comprehensive preparation in the essential disciplines of using Snowflake.

Each module tests your knowledge and skills in specific areas of movement and data optimization.

Training is constantly updated to reflect the latest trends and developments in data management and optimization.

OBJECTIVES

- Understand the basic concepts of Snowflake and its architecture
- Learn how to load and manage data in various formats in Snowflake
- Design, build and optimize continuous data pipelines

- Troubleshoot and optimize queries to improve performance
- Implement data recovery and protection functionalities
- Managing data security and governance
- Use advanced data transformation techniques

TARGET AUDIENCE

- Database administrators
- Data analysts
- BI Developers
- Data solutions architects
- Data Engineer
- Software Engineer

Prerequisites

- 2+ yearspractical experience as a Snowflake Practitioner in a data engineering role
- SnowPro Core certification
- Basic knowledge of databases and SQL
- Familiarity with data management concepts

Technical requirements

- Access to a Snowflake account (a free trial can be used)
- A computer capable of running data management tools
- Compatible web browsers to access the Snowflake interface
- Stable Internet connection

Note: Ambient IT is not the owner of SnowPro® Advanced Data Engineer; this certification belongs to Snowflake® Inc.

OUR SNOWPRO® ADVANCED DATA ENGINEER TRAINING PROGRAM

[DAY 1]

Introduction to Snowflake

- Introduction to the Snowflake platform and certification overview
- Loading data into Snowflake: methods and considerations
- Managing data in different formats and configuring courses
- Troubleshooting data ingestion: identifying and solving problems

- Design and management of continuous data pipelines

PERFORMANCE OPTIMIZATION

- Troubleshooting underperforming queries: methods and tools
- Configuration for optimum performance: scaling and clustering
- Use caching functions to optimize performance
- Monitoring and management of continuous data pipelines

DATA STORAGE AND PROTECTION

- Implementation of data recovery functions: Time Travel and Fail-safe
- Impact of streams on Time Travel and use of system functions for micro-partitions
- Using Time Travel and Cloning to create new development environments

[DAY 2]

SAFETY IN SNOWFLAKE

- Snowflake security principles: authentication and role-based access control (RBAC)
- Use of defined system roles and data governance management
- Dynamic masking and external tokenization policies for data security

DATA TRANSFORMATION

- Defining and using user-defined functions (UDFs) in SQL, JavaScript and Snowpark
- Creating and using external functions
- Designing and using stored procedures: transaction management in Snowpark and SQL
- Handling semi-structured data and using Snowpark to transform data

CASE STUDIES AND EXERCISES

- Practical exercises on loading and ingesting data
- Case studies in query optimization and performance configuration
- Simulation of a data recovery and security scenario

[DAY 3]

REVISION AND EXAM SIMULATION

- Review key concepts and best practices in data engineering with Snowflake
- Open discussion of challenges and possible solutions
- Exam simulation to prepare for SnowPro® Advanced Data Engineer certification

FEEDBACK ON USE CASES AND BEST PRACTICES

- Analysis of real-life use cases and discussion of industry best practices
- Tips for managing production environments and advanced troubleshooting
- Strategies for maintaining the security and performance of data systems
- Participant feedback and training evaluation
- Discussion of next steps and ongoing preparation for certification
- Presentation of certificates of attendance and end of course

Companies concerned

This training course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.