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

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Sign up

Denodo Data Virtualization Training

3 days (21 hours)

Presentation

Master data virtualization with Denodo thanks to this comprehensive training course, designed to federate your heterogeneous sources, accelerate your analytical projects and secure access to information.

The course begins with the fundamentals of data virtualization: Denodo architecture, connecting to various sources, creating basic views and modeling derived views. You'll learn how to structure your data without duplication, while optimizing accessibility.

You'll then delve into advanced functions: complex joins, parameterized views, caching, performance, security and metadata documentation. The aim: to build robust, auditable and scalable models.

You'll learn how to expose your data as REST, SOAP or GraphQL services, schedule cache refreshes and integrate Denodo into a DevOps approach with Git, VQL and administration APIs.

As with all our training courses, this one will be presented with the latest Denodo updates.

Objectives

- Understand Denodo's architecture, key components and real-time data virtualization concepts.
- Know how to connect, model, transform and document heterogeneous data sources in a Denodo project
- Master the creation of advanced virtual views, performance optimization and fine-tuned access security management
- Be able to expose views via REST, SOAP or GraphQL services and automate processing with the with the Scheduler

- Industrialize deployments via VQL and Git, integrate Denodo into a DevOps approach, and monitor platform performance.

Target audience

- Developers
- Data analysts

Prerequisites

- Basic knowledge of database management systems

Denodo Data Virtualization training program

Introduction to Data Virtualization

- Key concepts of data virtualization
- Advantages vs. physical integration
- Typical use cases: BI, self-service, MDM

Denodo Platform architecture

- Main components: VDP Server, Design Studio, Scheduler
- Real-time operation
- Integration into existing IT architecture

Getting started with Denodo

- Installation and initial configuration
- Design Studio interface: navigation and tools
- Connecting to data sources

Creation of Virtual Basic Views

- Importing data sources
- Creating basic views
- Data exploration and preview

Modeling and Deployable Views

- Creating Derived Views
- Joins, unions and projections
- Calculations, functions and aliases

Advanced modeling functions

- Hierarchical views
- Use of Parameters and Input Values
- Creating virtual Stored Procedures
- Managing materialized views

Performance optimization

- Push-down queries
- Query Plans and diagnostic tools
- Load balancing and parallelism
- Caching strategies

Security and governance

- User and role management
- View and line access control
- Masking of sensitive data
- Audit and traceability

Metadata and Data Catalogs

- Creation of tags, descriptions and categories
- Automatic view documentation
- Integration with external cataloging tools

Publication of Data Services

- REST / SOAP exposure
- View publishing via GraphQL
- Parameters and pagination
- Security of exposed APIs

Scheduling and Automation

- Presentation of the Scheduler module
- Job creation: refresh cache, CSV export
- Monitoring and alerts

DevOps and CI/CD integration

- Version control with Git
- Automated deployment via VQL scripts
- Administration REST API

Surveillance and monitoring

- Performance monitoring
- System logs and analytics
- Integration with external tools

Companies concerned

This 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 forthcoming training course, 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 training: 60% hands-on, 40% theory. Training material distributed in digital format to all participants.

Organization

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

Validation

At the end of the session, a multiple-choice questionnaire is used to check that skills have been correctly acquired.

Certification

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