

Apache Superset Training: Open-Source Data Visualization

2 days (14 hours)

Presentation

Our Apache Superset training course will teach you complete mastery of this open-source data visualization tool.

Our program will introduce you to this technology, starting with its installation and configuration in a Business Intelligence context. You'll learn about the different installation methods, including Docker Compose and Kubernetes.

You'll learn how to connect various SQL database sources and CSV files. You'll also learn how to design [customizeddashboards](#), high-performance .

As always, our Apache Superset training course will be based on the latest version of the tool: [Apache Superset 4.1](#).

Objectives

- Understand the architecture and key components of Apache Superset.
- Create and customize interactive dashboards adapted to business needs.
- Configure secure connections to different data sources.
- Use advanced features to optimize your data analysis.
- Integrate Superset securely into your production environments.

Target audience

- Data Analysts
- BI Engineers

- Data Scientists
- Data Engineers
- Developers

PREREQUISITES

- Basic knowledge of Python and/or SQL
- Familiarity with relational and non-relational databases
- Basic knowledge of data visualization

Technical requirements

- A computer with 8GB of Ram and Docker and Git installed

Apache Superset training program

Introduction to Apache Superset

- Presentation of the tool, its functions and use cases
- Positioning in the BI tools ecosystem
- Architecture and deployment modes
- Practical work: Basic installation and getting to grips with the interface

Basic data exploration and visualization

- Key concepts in data visualization
- Superset display types
- Connecting to data sources
- Basic visualizations
- Dashboards
- Practical work: Creating a Dashboard from imported data

Exploration and visualization of complex data

- Superset multi-service installation
- Data visualization over time
- Visualizing geospatial data
- Complex, interactive visualizations
- Practical work: Creating a multi-source interactive Dashboard

Exposure, Alerts and Reports

- Sharing and distribution methods
- Alerts
- Reports
- TP: Sharing your work

Templating and extensions

- Templating Jinja
- Add-on plugins
- Practical work: Getting to grips with Jinja and integrating plugins

Integration and customization

- Extend functionality with visualization plug-ins
- REST API for automated integrations
- Embedding dashboards in external applications
- Practical: Using the REST API to automate dashboard saving and management

Administration and security

- Securing Superset
- User and role management
- Configuring permissions and data access
- Superset object management via API
- Practical work: Administering your local Superset instance

Monitoring, Performance and Scalability

- Advanced connection configuration
- Query caching
- Asynchronous requests
- Event logging
- Kubernetes deployment
- Practical work: Operating your local Superset instance

Conclusion and outlook

- Other Superset configurations
- Roadmap Superset
- Documentary resources
- REX and Questions/Answers from participants

Companies concerned

This course is aimed at both individuals and companies, large or small,

wishing to train its teams in a new advanced IT 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 enabling 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 with regard to 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.