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Quix training

2 days (14 hours)

Presentation

Quix is an innovative real-time data processing platform that enables companies to capture, process and analyze massive data flows with ease.

Developed to offer a turnkey solution, Quix is based on a modern, flexible architecture, integrating tools such as Kafka for flow management, Python for advanced analysis, and powerful APIs to meet the needs of data teams.

Unlike traditional batch solutions, Quix stands out for its ability to process data in a continuous flow, enabling real-time decision-making. Compared with Flink and Spark, [it is much faster and more scalable](#), thanks in particular to its C# Core implementation.

Its microservice-oriented architecture makes it particularly well-suited to production environments requiring high scalability, and its native integration with platforms such as Apache Kafka and Microsoft Azure facilitates adoption by technical teams.

This ability to process both real-time flows and historical data makes it possible to handle a wide variety of use cases, such as predictive maintenance, fraud detection or industrial process automation.

In this training course, your team will learn how to fully exploit Quix's capabilities to analyze data flows, automate decision-making and create high-performance, robust processing pipelines.

Our training will be based on the [latest Quix Cloud resources](#).

Objectives

- Understand the fundamentals of Quix and its key features
- Set up and manage real-time data pipelines with Quix
- Using Python to analyze and transform Quix data streams
- Create dashboards for real-time data visualization
- Apply security and access management best practices on Quix

Target audience

- Data Analysts
- Developers
- Big Data engineers
- Data solutions architects
- Technical project managers

Prerequisites

- Knowledge of Python (intermediate level recommended)
- Basic knowledge of data flow management (Kafka, MQTT, etc.)
- Experience in data manipulation and analysis (recommended, but not mandatory)

Quix training program

Introduction to the Quix platform

- What is Quix: Overview of the platform and its uses
- The benefits of real-time data for businesses
- Comparison with other data processing solutions
- Quix's main features: flow and template management
- Getting started with Quix: account creation and user interface
- Examples of Quix-based applications

Understanding data flows

- What is a data stream and how can it be used?
- Streaming concepts: ingestion, transformation and publication
- Introduction to communication protocols (Kafka, MQTT, etc.)
- Setting up a data pipeline with Quix
- Inbound and outbound flow management: rules and best practices
- Case study: monitoring industrial equipment

Data processing and analysis

- Real-time data modeling and transformation.
- Using Python to manipulate data on Quix

- Integration of predictive models and analysis algorithms
- Real-time anomaly detection with Quix
- Automate analysis processes with scripts
- Practical example: analyzing IoT sensor data

Visualization and Reporting

- Integrated tools for real-time flow visualization
- Creating customized dashboards with Quix
- Automatic report generation from data streams
- Real-time monitoring of key performance indicators (KPIs)
- Integration with third-party tools (PowerBI,Tableau)
- Case study : Real-time performance monitoring of production lines

Security, Access Management and Deployment

- Data security best practices on Quix
- Manage access rights to projects and data flows
- Backup strategies and disaster recovery
- Setting up production environments with Quix
- Real-time monitoring and maintenance of flow systems
- Use case: securing and auditing sensitive data

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 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, with 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.