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Sign up

Microsoft Fabric training: real-time data analysis

3 days (21 hours)

Presentation

Our Microsoft Fabric training course will enable you to create all-in-one data analysis workflows. Mastering this tool will enable you to store, move and analyze data in real time, bringing your different services together in the same place using [Onelake](#).

This Microsoft Fabric training course will teach you how to configure your data flows with different tools such as Spark or Delta Lake to [create](#) high-performance data [lakehouses](#) for data analysis.

You'll also learn how to create and secure data warehouses. You'll also learn how to perform real-time analysis using Synapse. You'll also learn how to use templates with G2 to [create](#) and execute data pipelines.

At the end of this course, you'll be able to guarantee the integrity of your data analysis by mastering the advanced features of Microsoft Fabric.

Objectives

- Configuring Microsoft Fabric
- Using Microsoft Fabric with tools like Spark or Delta Lake
- Create and monitor data warehouses
- Analyze data in real time

Target audience

- Data Analysts
- Data scientists

Prerequisites

- Basic knowledge of Spark
- Knowledge of Microsoft Azure

Microsoft fabric training program

Introduction to Microsoft Fabric

- Why use Microsoft Fabric?
- Comparison with other platforms
- Introducing Onelake
- Installation and configuration

Basic concepts

- Lakehouses
- Data and tables
- SQL
- KQL
- Data creation and integration

Lakehouse: creation and configuration

- Using Lakehouses fabric
- Exploring and transforming data
- Setting up a lakehouse
- Putting it into practice: creating and integrating data

Using Apache Spark

- Configuring Spark in a Microsoft Fabric space
- Scenarios for Spark notebooks
- Spark tasks
- Spark SQL
- Data visualization and analysis

Use with Delta Lake

- Delta Lake's basic concept in Fabric
- Creating and managing Delta tables with Spark
- Delta tables and streaming data

- Putting it into practice: controlling a Delta table with Spark

Use with Data Factory

- The role of pipelines
- Creating pipelines with templates
- Using "copy data"
- Pipeline management and execution
- Putting it into practice: integrating data into a pipeline

Data integration with G2

- The role of data flows
- Creating a G2 dataflow for Microsoft Fabric
- Include a G2 flow in a pipeline
- Putting it into practice: managing a G2 data stream in Fabric

Data warehouses

- Introduction to data warehouses
- Querying and transforming data
- Data preparation and reporting
- Warehouse safety
- Putting it into practice: managing data in a warehouse

Real-time analysis

- Introduction to real-time analysis
- KQL tables
- KQL queries
- Creating a KQL database
- Putting it into practice: Synapse real-time analysis

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 confirmed, 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 with regard to the training to come, within the limits imposed by the format selected. This

The questionnaire also enables us to anticipate any internal connection or security problems (intra-company or virtual classroom) that 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.