

Updated on 13/05/2024

Sign up

KQL Training

2 days (14 hours)

Presentation

Our KQL training course will help you master the syntax and advanced functions of the Azure environment. Kusto Query Language is the language used to query Azure services and unlock functions such as machine learning and time series analysis.

Our program will teach you the basics of KQL and its ecosystem, as well as its various interactions with Microsoft Azure. First, you'll learn how to manipulate data, with basic commands and [data aggregation](#).

Our training also covers more advanced functions such as date and string manipulation, and complex aggregation functions that will enable you to manipulate sets of multiple values. The course includes a number of practical exercises to validate the skills acquired.

Like all our training courses, it will run on the latest version of the tool: [Azure Data Explorer 1.33](#)

Objectives

- Understanding the fundamentals of KQL
- Handling data
- Using advanced functions
- Visualize data for reporting

Target audience

- **Data Scientists**
- Data analysts

Prerequisites

- Knowledge of Azure services
- Knowledge of data management

KQL TRAINING PROGRAM

INTRODUCTION AND FUNDAMENTALS

- Introducing KQL and its ecosystem
- Demonstration of the Azure Data Explorer platform
- Understanding of basic KQL concepts and syntax
- Exploring available data types and data structures
- Examples of simple queries for initial familiarization

DATA HANDLING

- Using basic commands
- Data projection and extension techniques
- Finding unique values
- Data aggregation
- Importance of filtration and query conditions

SCALAR OPERATORS AND FUNCTIONS

- Date and string manipulation
- Conditional and transformation commands
- Mathematical and logical functions to enrich queries
- Management of nulls and default values
- Case studies to reinforce understanding of scalar operators

ADVANCED AGGREGATIONS

- Exploring complex aggregation functions
- Explore multiple value sets
- Understanding grouping functions and advanced statistics
- Practical experience with real data sets to consolidate knowledge
- Techniques for optimizing aggregation query performance

WORKING WITH DATASETS

- Merging and joining datasets

- Creating and manipulating data tables
- Advanced techniques for managing large volumes of data
- Query optimization for improved performance
- Case studies to integrate the concepts learned

VISUALIZATION AND REPORTING

- Data visualization techniques
- Export results for use in other tools (e.g., Power BI)
- Create and use functions to simplify recurring queries
- Best practices for documenting and sharing requests
- Hands-on workshops to create interactive reports

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, 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.