IBM - Introduction to Setting Data in Motion with Confluent Cloud

Course Number: CFLTCLOUDG

Duration: 1 days

Course Description

Unlock the full power of Confluent Cloud. Designed to help teams scale mission-critical workloads quickly and securely, this course delivers the practical skills needed to maximize your streaming environment. You?ll learn architectural best practices, master fully managed tools including Schema Registry, Connectors, and Flink SQL and discover how to automate your infrastructure deployments using Terraform.

Skills Gained

After this course, participants will be able to:

- Apply best practices when designing their Confluent Cloud Organization.
- Set appropriate security configurations to their User and Service accounts using API Keys, RBAC, and ACLs.
- Use Confluent CLI and APIs to perform common operations.
- Manage Confluent Cloud components such as Schema Registry, Connectors, Kafka clusters and Environments.
- Perform stream processing in Confluent Cloud with Flink SQL.
- Automate the infrastructure deployment in Confluent Cloud using Terraform.

Who Can Benefit

This course is ideal for Data Engineers, Cloud/DevOps Engineers, Application Developers, and Data Architects looking to quickly master building, securing, and automating real-time streaming infrastructure on Confluent Cloud.

Prerequisites

This is a basic level course and requires no or little prior working knowledge of Confluent Cloud.

Course Details

Outline

Module 1: Introduction to Confluent Cloud

- Confluent Cloud - Fully Managed Service for Apache® Kafka
- Confluent Cloud Organization
- Confluent Cloud Accounts
- Lab Module 1: Introduction to Confluent Cloud

Module 2: Access Confluent Cloud

- Confluent Cloud Console
- Confluent CLI
- Confluent Cloud APIs
- Kafka Clients
- Confluent Cloud Security
- Lab Module 2: Accessing Confluent Cloud

Module 3: Confluent Cloud Components

- Schema Registry Fundamentals
- Connect Fundamentals
- Flink SQL Fundamentals Lab Module
- Lab Module 3: Working with Flink SQL, Connectors and Schemas

Module 4: Automate, Deploy, and Manage in Confluent Cloud

- Terraform and Confluent Cloud Provider
- Lab Module 4: Automation with Terraform