AWS – Building Data Lakes on Amazon Web Services

Description

In this 1-day course, you will learn how to build an operational data lake that supports analysis of both structured and unstructured data. You will learn the components and functionality of the services involved in creating a data lake. You will use AWS Lake Formation to build a data lake, AWS Glue to build a data catalog, and Amazon Athena to analyze data. The course lectures and labs further your learning with the exploration of several common data lake architectures.

Course Content Module 1: Introduction to data lakes

- Describe the value of data lakes
- · Compare data lakes and data warehouses
- Describe the components of a data lake
- · Recognize common architectures built on data lakes

Module 2: Data ingestion, cataloging, and preparation

- Describe the relationship between data lake storage and data ingestion
- Describe AWS Glue crawlers and how they are used to create a data catalog
- · Identify data formatting, partitioning, and compression for efficient storage and query

Module 3: Data processing and analytics

- Recognize how data processing applies to a data lake
- Use AWS Glue to process data within a data lake
- Describe how to use Amazon Athena to analyze data in a data lake

Module 4: Building a data lake with AWS Lake Formation

- Describe the features and benefits of AWS Lake Formation
- Use AWS Lake Formation to create a data lake
- Understand the AWS Lake Formation security model

Module 5: Additional Lake Formation configurations

- · Automate AWS Lake Formation using blueprints and workflows
- Apply security and access controls to AWS Lake Formation
- Match records with AWS Lake Formation FindMatches
- Visualize data with Amazon QuickSight

Module 6: Architecture and course review

- Post course knowledge check
- Architecture review
- Course review

Lab / Exercises

Official AWS Labs

Documentation

• Digital courseware included

Participant profiles

- Data platform engineers
- Solutions architects
- IT professionals

Prerequisites

- Completed the <u>AWS Technical Essentials</u> classroom training or have equivalent experience
- One year of experience building data analytics pipelines or have completed the Data Analytics Fundamentals digital course

Objectives

- Apply data lake methodologies in planning and designing a data lake
- Articulate the components and services required for building an AWS data lake
- Secure a data lake with appropriate permission
- Ingest, store, and transform data in a data lake
- Query, analyze, and visualize data within a data lake

Niveau

Intermédiaire Virtual Classroom Registration Price (CHF) 850 Duration (in Days) 1 Reference AWS-303