

Building Streaming Data Analytics with Amazon Kinesis

AWS Classroom Training

Course description

In this course, you design and build a data analytics solution for streaming data analytics using Amazon Kinesis. You will also learn to apply best practices to support security, performance, and cost optimization of data analytics pipeline components.

- Course level: Intermediate
- Duration: 4 hours

Activities

This course includes presentations, demonstrations, and labs.

Course objectives

In this course, you will learn to:

- Describe the data analytics pipeline and its application across various analytics use cases.
- Design and implement streaming data solutions for real-time applications
- Use Amazon Kinesis in real-time data analytics use cases
- Secure, monitor, and optimize streaming data analytics solutions with Amazon Kinesis

Intended audience

This course is intended for:

- Data engineers, architects, and developers who want to build and manage streaming data analytics pipelines

Prerequisites

We recommend that attendees of this course have:

- AWS Technical Essentials

Course outline

Introduction

- Introduction to bootcamp
- Access to resources (Hands-on lab interface, instructions)

Module 1: Overview of data analytics and the data pipeline

Building Streaming Data Analytics with Amazon Kinesis

AWS Classroom Training

- Introduction to several common use cases and analytics architectures
- Describe the analytics pipeline functional units and the commonality to most analytics use cases.
- Describe methods of data ingestion and storage.

Module 2: Data Analytics pipeline using streaming services

- Why streaming data analytics
- Streaming data solutions in the data analytics pipeline
- Describe streaming concepts.

Module 3: Introduction and overview of streaming services

- Introduction to Kinesis services
- Use cases for services in Kinesis family
- Introduce how streaming services work together.
- **Hands-on Lab:** Real-time ingestion of IoT data

Module 4: Using Amazon Kinesis in real-time analytics use cases

- Kinesis architecture – creating streams
- Processing and analytics
- **Hands-on Lab:** Real-time Data Analytics with Kinesis Data Analytics and Apache Flink

Module 5: Wrap Up

- Recap