



Data to Dashboards <

Data to Dashboard - Real-time Data Processing and Analysis

Prerequisites

Introduction

Ingesting Real-time Data Streams

▼ Data Processing using Amazon Managed Apache Flink

Overview

Preparation

Run Studio Notebook

► Deliver Processed Data using Amazon Data Firehose

► Visualize Real-time data using Amazon QuickSight

Conclusion & Next Steps

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[Open AWS console \(us-east-1\)](#)

[Get AWS CLI credentials](#)

Exit event

[Event dashboard](#) > Data Processing using Amazon M...

Data Processing using Amazon Managed Apache Flink

Real-time data processing is a critical component in modern data architectures, enabling businesses to extract valuable insights and make informed decisions as events unfold. Apache Flink, a powerful open-source stream processing framework, has emerged as a leading solution for handling real-time data streams.

In this module, we'll explore [Amazon Managed Apache Flink](#) , a fully managed service that simplifies the deployment and management of Apache Flink applications and leverage its [Studio Notebooks powered by Apache Zeppelin](#) to interactively query data streams in real time, and easily build and run stream processing applications using standard SQL, Python, and Scala. With a few clicks in the AWS Management console, you can launch a serverless notebook to query data streams and get results in seconds.

Apache Zeppelin provides Studio notebooks with a complete suite of analytics tools, including the following:

1. Data Visualization
2. Exporting data to files
3. Controlling the output format for easier analysis

With a notebook, you model queries using the Apache Flink Table API & SQL in SQL, Python, or Scala, or DataStream API in Scala. With a few clicks, you can then promote the Studio notebook to a continuously-running, non-interactive, Managed Service for Apache Flink stream-processing application for your production workloads.

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