Building Resilient Streaming Analytics Systems on Google Cloud

Introduction

Introduction to Processing Streaming Data

• Processing streaming data

Serverless Messaging with Pub/Sub

- Module introduction
- Introduction to Pub/Sub
- Pub/Sub Push versus Pull
- Publishing with Pub/Sub code
- LAB : Streaming Data Processing: Publish Streaming Data into PubSub

Dataflow Streaming Features

- Module introduction
- Streaming data challenges
- Dataflow windowing
- LAB : Streaming Data Processing: Streaming Data Pipelines

High-Throughput BigQuery and Bigtable Streaming Features

- Module introduction
- Streaming into BigQuery and visualizing results
- LAB : Streaming Data Processing: Streaming Analytics and Dashboards
- High-throughput streaming with Cloud Bigtable

- Optimizing Cloud Bigtable performance
- LAB : Streaming Data Processing: Streaming Data Pipelines into Bigtable

Advanced BigQuery Functionality and Performance

- Module introduction
- Analytic window functions
- GIS functions
- Demo: GIS Functions and Mapping with BigQuery
- Performance considerations
- LAB : Optimizing your BigQuery Queries for Performance
- Cost considerations
- LAB : Partitioned Tables in Google BigQuery