DEPLOYMENT PLAN

Table of Contents

List of GCP Services Used

- Cloud Functions- Cloud Functions is Google Cloud's event-driven serverless compute platform. Run your code locally or in the cloud without having to provision servers.

- Cloud Pub/Sub- Pub/Sub is a fully managed real-time messaging service that allows you to send and receive messages between independent applications.

- BigQuery- Serverless, highly scalable, and cost-effective cloud data warehouse designed for business agility.

Creating the Pub/Sub Topic

- Login to the GCP Console and search for Pub/Sub.
- Once Pub/Sub is opened, click on the create topic icon.
- Create a Pub/Sub topic by providing it a topic id & encryption.

Creating the Cloud Function

- Login to the GCP Console and search for Cloud Functions.
- Fill in the required fields and add Cloud Pub/Sub as a trigger.
- Choose the topic created in the above step.
- Select runtime as Python 3.7 and add the script present in main.py to the cloud function.
- Add the function to execute and create the cloud function.

Managing Infrastructure

- No need to manage the infrastructure as we are running the code on serverless platform.

Architecture (Recommendation)

- As we are getting times at a low frequency, we can directly pass them to Pub/Sub.
- The Cloud function will run, after the message is published in Pub/Sub.
- It would be a good approach to write the output of the cloud function in BigQuery or Cloud Storage.