

Research and write about - Big Data Service in Google Cloud

Big data has been emerging topic since the rise of internet, social media, and other technology. With the help of big data, unravelling the hidden insights has been possible which has helped in increasing productivity and understanding different trends. Although the result of the big data is very rewarding the cost and effort of maintaining infrastructure for big data is very high so most of the organization are using big data service provider for this purpose. Google cloud platform is one of those cloud service providers for big data.

Some of the Big data services provided by Google cloud are

Cloud Pub Sub

It is a message queue broker that allows application to exchange data with speed and reliability in asynchronous manner. It is based on publish-subscription model. This service is like Apache Kafka, RabbitMQ, Azure Service Bus, and Amazon SQS. It has highly reliable communication layer. The payment model is pay per transferred data in GB.

Big Query

It is a data warehouse tool and allows to store and query huge datasets ranging up to hundreds of petabytes. It is quite like relational database by its structure. It supports batch and streaming writing into database along with the SQL and can be integrated with other GCP services. It supports complex queries and has built in ML tools and the data sets used can be shared among different datasets. Stored information and Executed queries are paid separately.

Cloud Storage

Cloud Storage is used for storage of files. Any files of any size can be stored there. These files are immutable and versioned. It provides API services for most of the programming languages and operating systems. There are several pricing plans for this service. It is analogous to Amazon S3 and Azure Blob Storage.

Google Cloud IOT Core

It is IOT registry provided by google. It allows multiple devices to connect with google platform and communicate by sending and receiving messages. To send and receive message it uses Google cloud Pub Sub. It provides secure connection over HTTPS and MQTT. Other services like Google IOT core are Azure IOT and AWS IOT.

Cloud Dataproc

It is a service that provides fast and reliable environment to run Apache Spark and Hadoop on cloud. It covers all the solution required to deploy and maintain the cluster and Hadoop cluster and manage Spark on top of it. With the Cloud Dataproc, number of the cluster and their size can be easily modified as per requirement. It offers very fast deployment and autoscaling features.