## **IAM Roles**

It’s going to be useful to know the most important roles for every Service

* Different between job User role and User for BigQuery.
* Dataproc Worker, Dataflow Developer.
* Billing Administrator Role Account.
* Difference between Writer and Reader role for BigQuery.
* Which roles can you administrate for Pub/Sub service?
* Aggregated logs for multiple projects.
* Dealing with roles cross projects, what are the best practice for that, create a group of users for those projects? hierarchy? Service Accounts for Cloud Storage and BigQuery?

BigQuery uses Identity and Access Management (IAM) to manage access to resources. The three types of resources available in BigQuery are organizations, projects, and datasets. In the IAM policy hierarchy, datasets are child resources of projects. Tables and views are child resources of datasets — they inherit permissions from their parent dataset.  
To grant access to a resource, assign one or more roles to a user, group, or service account. Organization and project roles affect the ability to run jobs or manage the project’s resources, whereas dataset roles affect the ability to access or modify the data inside of a particular dataset.

Service accounts have IAM roles granted to them. Specifying a user-managed service account when creating a Cloud Dataproc cluster allows you to create and utilize clusters with fine-grained access and control to Cloud resources. Using multiple user-managed service accounts with different Cloud Dataproc clusters allows for clusters with different access to Cloud resources.  
Service accounts used with Cloud Dataproc must have Dataproc/Dataproc Worker role (or have all the permissions granted by Dataproc Worker role).