Definition of Done - MVP

MVP Services

Clarify Connectivity Requirements

On-prem to GCP as well as GCP to On-prem services

Connectivity requirements are being captured and documented here

Resource hierarchy needs to be documented

Shared VPC

Host Projects

Service Projects

Personas

Two main personas

- 1. Admin to be used by Platform engineering team
- 2. User to be used by users; developers, analytical users

Above categorization hopefully results in 2 sets of permissions being identified

We should be able to apply each of these sets to many service accounts

Admin Role should have the ability to perform all the following activities

- Managing Quotasimplementing guard rails
- Service project creation
- · Admin Role should have the ability to perform IAC, Manage ephemeral cluster, Project level administration

	Google Services	Owner	Platform Engineering Role (Admin)	Consumer Role (Developer)
1	Google Cloud Storage (GCS)	Kasi Viswanadham Vallabhaneni Karthike yan Chelliah	 Ability to Create buckets (Single / /Dual Region/Multi Region) Create "fine-grained" ACLS on bucket level Ability to create folders , Place Data, Retrieve data Data transfer <> GCS & DataMovers <> GCS 	Ability to create folders , Place Data, Retrieve data Data transfer - GCS & DataMovers <> GCS
2	Cloud Dataproc	Kasi Viswanadham Vallabhaneni Karthike yan Chelliah	Ability to create, edit, start/stop and delete cluster Ability to submit Spark, MR jobs to the cluster Ability to create and execute work flows. Ability to use shared subnets in respective regions allocated to respective environments Should be able to SSH to cluster hosts from jump host Should be able to connect to enterprise nexus repo (nondefault os packages, python modules) VIA PSC Should be able to create custom image Validate connectivity to other Google services BQ,GCS,Gleud SQL, PubSub, cloud KMS (read & write), Bigtable	Ability to create, edit, start/stop and delete cluster Ability to submit Spark, MR jobs to the cluster Ability to create and execute work flows. Ability to use shared subnets in respective regions allocated to respective environments Should be able to SSH to cluster hosts from jump host Validate connectivity to other Google services BQ,GCS, Cloud SQL, PubSub, cloud KMS (read & write)
3	Cloud SQL	Karthik Kuppuraj	 Ability to create CloudSQL instances Ability to create database structures (instance, databases, accounts) and submit jobs Ability to administer jobs and queries Ability to grant object level permissions Ability to do DB admin tasks 	Ability to connect and use CloudSQL instances, submit jobs Ability to do SUID operations on database objects Access job execution logs Ability to use CloudSQL API's

4	Google Compute Engine (GCE)	Kasi Viswanadham Vallabhaneni	Ability to create compute instance with default images along with GPU Ability to start/stop/edit/delete instance Should be able to use shared subnets in respective regions (e.g. US east 4 / US Central) allocated to respective environments (e.g. E1, E2, E3) Should be able to SSH to GCE instance from jumphost Should be able to connect to nexus-repo as well as Docker proxy VIA PSC. Validate the connectivity to other Google services BQ, GCS, Cloud SQL, PubSub (read & write)	Should be able to SSH to GCE instance from jumphost Validate the connectivity to other Google services BQ,GCS,Cloud SQL, PubSub (read & write)
5	Cloud VPN			
6	Cloud IAM			
7	Persistent Disk			
8	VM Manager			
9	OS Login			
10	Cloud Console			
11	VPC			
12	Cloud DNS			
13	Cloud Monitoring			
14	Cloud Logging			
15	Resource Manager			
16	Cloud Identity /Workspaces			
17	VPC Service Controls			
18	Cloud Key Management	Manisha Gureja Sulabh Shukla Karthik Kuppuraj	GCP KMS keyring create and maintain GCP KMS key create and Maintain Import Onpem KMS keys to GCP KMS (from respective Onprem environment edgenode) Perform Decrypt functions in GCP	KMS keyring List and Get KMS crypto keys List and Get Ability to list the import jobs Ability to perform Encrypt / Decrypt functions
19	Cloud Bigtable	Kasi Viswanadham Vallabhaneni Karthikeyan Chelliah	Ability to create instance/cluster and setup replication Create/read/load/delete table Validate the connectivity to other Google services GCE, DP,BT and Dataflow	Create/read/load/delete table Validate the connectivity to other Google services GCE,DP,BT and Dataflow
20	Cloud Composer	Kunal Jain	Ability to create Environment Run Dags and Trigger jobs Admin access to Airflow Web UI. RBAC enabled Need connectivity to DP, DF, BQ, GCS, Cloud KMS	Run Dags and Trigger jobs Need connectivity to DP, DF, BQ, GCS, Cloud KMS
21	Cloud Dataflow	Kunal Jain	Ability to view and submit dataflow job Validate connectivity to other Google services BQ,GCS,Gledud SQL, PubSub, cloud KMS (read & write), Bigtable	Ability to view and submit dataflow job Validate connectivity to other Google services BQ,GCS, Cloud SQL, PubSub, cloud KMS (read & write), Bigtable
22	Big Query	Karthik Kuppuraj	Ability to create high level structures(Datasets & Below) and submit jobs Ability to administer jobs and queries Import/Export data from GCS Connect from data processing frameworks (dataflow, dataproc etc) Ability to grant object level permissions Create and maintain row and column level policies Ability to perform encryption and decryptions on data Create and maintain WLM configurations Ability to use API's (cloud asset, data transfer, storage read/write) Workload monitoring via admin panels and cloud monitoring	Ability to create database objects (Tables,Views,SPs) and submit jobs Import/Export data from GCS Submit jobs to read/write data from processing frameworks (dataflow, dataproc etc) Ability to use API's (Storage read/write, BigQuery API) for data access Access job execution logs Ability to perform data encryption/decryption
23	Pub/Sub	Kunal Jain	Ability to create topics, subscriptions, schemas and snapshots Ability to publish to topics and consume from topics	Ability to publish to topics and consume from topics

24	Data Catalog	Umesh Singh Chauhan Satish Anupindi	Add/Remove/Edit/Search Tag Templates Add/Remove/Edit/Search existing Tags for their specific dataset	 Not expecting direct permissions on GDC. Users will request to add /remove/udpdate/search tag changes through Lumi Portal, which would call necessary GDC APIs.
25	Cloud DLP	Umesh Singh Chauhan Akshay Pore	create/remove/start/stop DLP jobs create/edit dashboards create/edit/remove DLP job triggers inspection template/ data profile/ estimate/ de-identification / infoType permissions for administrative functions	create/edit dashboards
26	Cloud Asset Inventory	Karthik Kuppuraj	Ability to use Cloud Asset API's Export asset inventory metadata and take asset snapshot create, delete, and update events for assets Monitor resource and policy changes view insights generated from assets and manage insights in Recommender	Ability to use Cloud Asset API's Export asset inventory metadata create, delete, and update events for assets Monitor resource and policy changes View insights generated from assets and view insights in Recommender
27	Google Kubernetes Engine (GKE)	Kasi Viswanadham Vallabhaneni Karthikeyan Chelliah Kunal Jain	Ability to manage clusters and their Kubernetes API objects	Ability to access clusters and their Kubernetes API objects

Post MVP Services