

# Latihan 1 Use BigQuery to import data

The screenshot shows the Google Cloud Platform BigQuery console. The left sidebar displays the Explorer view with the project 'jervinproject-315412' and the dataset 'datasetlatihan' containing the table 'sampleinfotable'. The main panel shows the 'sampleinfotable' schema with the following fields:

| Field name                     | Type      | Mode     | Policy Tags | Description |
|--------------------------------|-----------|----------|-------------|-------------|
| Account_ID                     | STRING    | NULLABLE |             |             |
| Line_Item                      | STRING    | NULLABLE |             |             |
| Start_Time                     | TIMESTAMP | NULLABLE |             |             |
| End_Time                       | TIMESTAMP | NULLABLE |             |             |
| Project                        | INTEGER   | NULLABLE |             |             |
| Measurement1                   | STRING    | NULLABLE |             |             |
| Measurement1_Total_Consumption | FLOAT     | NULLABLE |             |             |
| Measurement1_Units             | STRING    | NULLABLE |             |             |
| Cost                           | FLOAT     | NULLABLE |             |             |
| Currency                       | STRING    | NULLABLE |             |             |
| Project_Number                 | INTEGER   | NULLABLE |             |             |
| Project_ID                     | STRING    | NULLABLE |             |             |
| Project_Name                   | STRING    | NULLABLE |             |             |
| Project_Labels                 | STRING    | NULLABLE |             |             |
| Description                    | STRING    | NULLABLE |             |             |

Below the schema, there are tabs for 'JOB HISTORY', 'QUERY HISTORY', and 'SAVED QUERIES'. The 'JOB HISTORY' tab is selected, showing a 'Personal history Project history' section with a search bar and a 'Filter queries' button.

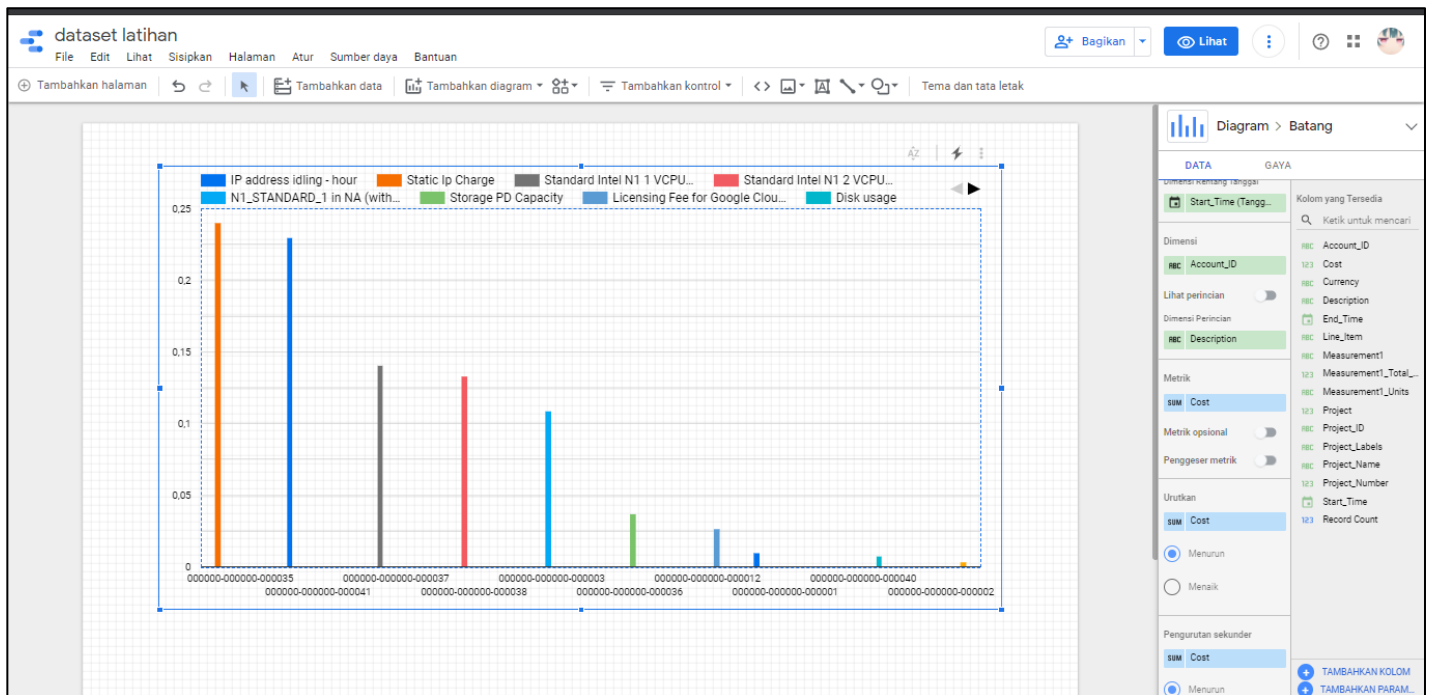
# Latihan 2 Examine the table

The screenshot shows the Google Cloud Platform BigQuery console with the 'sampleinfotable' dataset selected. The 'PREVIEW' tab is active, displaying the first 11 rows of the table. The data includes account IDs, line items, start and end times, project IDs, and measurement details.

| Row | Account_ID           | Line_Item   | Start_Time              | End_Time                | Project      | Measurement1                       |
|-----|----------------------|---|-------------------------|-------------------------|--------------|------------------------------------|
| 1   | 000000-000000-000040 | com.google.cloud/services/cloud-sql/DiskSpaceGb                                 | 2016-12-13 08:00:00 UTC | 2016-12-14 08:00:00 UTC | 449712193911 | com.google.cloud/services/cloud-s  |
| 2   | 000000-000000-000041 | com.google.cloud/services/cloud-sql/IpAddress                                   | 2016-12-13 08:00:00 UTC | 2016-12-14 08:00:00 UTC | 449712193911 | com.google.cloud/services/cloud-s  |
| 3   | 000000-000000-000042 | com.googleapis/services/pubsub/MessageOperations                                | 2016-12-13 08:00:00 UTC | 2016-12-14 08:00:00 UTC | 449712193911 | com.googleapis/services/pubsub/N   |
| 4   | 000000-000000-000043 | com.googleprod/services/stackdriver/Billable_monitored_resource_usage_free_tier | 2016-12-13 08:00:00 UTC | 2016-12-14 08:00:00 UTC | 449712193911 | com.googleprod/services/stackdriv  |
| 5   | 000000-000000-000000 | com.google.cloud/services/cloud-sql/DiskSpaceGb                                 | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC | 449712193911 | com.google.cloud/services/cloud-s  |
| 6   | 000000-000000-000001 | com.google.cloud/services/cloud-sql/IpAddress                                   | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC | 449712193911 | com.google.cloud/services/cloud-s  |
| 7   | 000000-000000-000006 | com.google.cloud/services/cloud-storage/ClassAResquestNearline                  | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC | 449712193911 | com.google.cloud/services/cloud-st |
| 8   | 000000-000000-000035 | com.google.cloud/services/compute-engine/StaticIpCharge                         | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC | 449712193911 | com.google.cloud/services/comput   |
| 9   | 000000-000000-000039 | com.googleprod/services/stackdriver/Billable_monitored_resource_usage_free_tier | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC | 449712193911 | com.googleprod/services/stackdriv  |
| 10  | 000000-000000-000002 | com.google.cloud/services/cloud-sql/StoragePdSsd                                | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC | 574501435005 | com.google.cloud/services/cloud-s  |
| 11  | 000000-000000-000003 | com.google.cloud/services/cloud-sql/VmN1Standard1Na                             | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC | 574501435005 | com.google.cloud/services/cloud-s  |

At the bottom, there are tabs for 'JOB HISTORY', 'QUERY HISTORY', and 'SAVED QUERIES'. The 'JOB HISTORY' tab is selected, showing a 'Personal history Project history' section with a search bar and a 'Filter queries' button.

## Latihan 3 Visualizing BigQuery Data



## Hadiah 1 row table

The screenshot shows the Google Cloud Platform BigQuery console interface. The main area displays the details of a table named 'sampleinfotable'. The table information is as follows:

| Table ID               | jervinproject-315412:datasetlatihan.sampleinfotable |
|------------------------|---|
| Table size             | 12.7 KB   |
| Long-term storage size | 0 B   |
| Number of rows         | 44  |
| Created                | Jun 9, 2021, 2:24:33 PM UTC+8                       |
| Last modified          | Jun 9, 2021, 2:24:33 PM UTC+8                       |
| Table expiration       | Aug 8, 2021, 2:24:33 PM UTC+8                       |
| Data location          | US  |
| Description            |   |

The bottom section of the console shows the 'Job history' tab, which includes a 'Personal history Project history' section and a 'Filter queries' input field.

## Hadiah 2 Network Internet Ingress from EMEA to Americas menggunakan 9.738.199

The screenshot shows the Google Cloud Platform BigQuery interface. The query editor contains the following SQL query:

```
1 SELECT * FROM jervinproject-315412.datasetlatihan.sampleinfotable where Description = 'Network Internet Ingress from EMEA to Americas'
```

The query results are displayed in a table with the following columns: Measurement1\_Total\_Consumption, Measurement1\_Units, Cost, Currency, Project\_Number, Project\_ID, Project\_Name, Project\_Labels, and Description. The results show a single row with the following values:

| Measurement1_Total_Consumption | Measurement1_Units | Cost | Currency | Project_Number | Project_ID      | Project_Name    | Project_Labels | Description                                    |
|--------------------------------|--------------------|------|----------|----------------|-----------------|-----------------|----------------|--|
| 9738199.0                      | bytes              | 0.0  | USD      | 574501435005   | deadpool-cpb100 | deadpool-cpb100 | null           | Network Internet Ingress from EMEA to Americas |

## Hadiah 3&4 COMPOSE NEW QUERY.

The screenshot shows the Google Cloud Platform BigQuery interface. The query editor contains the following SQL query:

```
1 SELECT * FROM 'jervinproject-315412.datasetlatihan.sampleinfotable'
2 WHERE Cost > 0
```

The query results are displayed in a table with the following columns: Job information, Results, JSON, and Execution details. The results show a list of rows with the following values:

| Job information      | Results   | JSON                    | Execution details       |
|----------------------|---|-------------------------|-------------------------|
| 000000-000000-000005 | com.google.cloud/services/cloud-storage/ClassAResultMultiRegional     | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000007 | com.google.cloud/services/cloud-storage/ClassBRequestMultiRegional    | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000012 | com.google.cloud/services/compute-engine/Licensed1001006Core          | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000018 | com.google.cloud/services/compute-engine/NetworkInterRegionEgressNaNa | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000022 | com.google.cloud/services/compute-engine/NetworkInterZoneEgress       | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000025 | com.google.cloud/services/compute-engine/NetworkInternetEgressNaCn    | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000026 | com.google.cloud/services/compute-engine/NetworkInternetEgressNaEu    | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000027 | com.google.cloud/services/compute-engine/NetworkInternetEgressNaNa    | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000036 | com.google.cloud/services/compute-engine/StoragePdCapacity            | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000037 | com.google.cloud/services/compute-engine/VmimageN1Standard_1          | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |
| 000000-000000-000038 | com.google.cloud/services/compute-engine/VmimageN1Standard_2          | 2016-12-12 08:00:00 UTC | 2016-12-13 08:00:00 UTC |

## Hadiah 5 & 6

The screenshot shows the Google Cloud Platform BigQuery console. The query editor contains the following SQL:

```
1 SELECT
2   product,
3   resource_type,
4   start_time,
5   end_time,
6   cost,
7   project_id,
8   project_name,
9   project_labels_key,
10  currency,
11  currency_conversion_rate,
12  usage_amount,
13  usage_unit
14 FROM
15   `cloud-training-prod-bucket.arch_infra.billing_data`
```

The query results table shows the following data:

| Row | product       | resource_type                          | start_time              | end_time                | cost   | project_id      | project_name    | project_labels_key | currency | currency_conversion_rate | usage_amount | usage_unit |
|-----|---------------|--|-------------------------|-------------------------|--------|-----------------|-----------------|--------------------|----------|--------------------------|--------------|------------|
| 1   | Cloud Storage | Class A Request Multi-Regional Storage | 2017-01-19 20:00:00 UTC | 2017-01-19 21:00:00 UTC | 5.0E-6 | deadpool-cpb100 | deadpool-cpb100 | null               | USD      | 1.0                      | 259200.0     |            |
| 2   | Cloud Storage | Class A Request Multi-Regional Storage | 2017-01-20 20:00:00 UTC | 2017-01-20 21:00:00 UTC | 5.0E-6 | deadpool-cpb100 | deadpool-cpb100 | null               | USD      | 1.0                      | 259200.0     |            |

The screenshot shows the Google Cloud Platform BigQuery console. The query editor contains the following SQL:

```
1 SELECT
2   product,
3   resource_type,
4   start_time,
5   end_time,
6   cost,
7   project_id,
8   project_name,
9   project_labels_key,
10  currency,
11  currency_conversion_rate,
12  usage_amount,
13  usage_unit
14 FROM
15   `cloud-training-prod-bucket.arch_infra.billing_data`
16 WHERE
17   cost > 3
18
```

The query results table shows the following data:

| Row | product        | resource_type                                | start_time              | end_time                | cost     | project_id       | project_name | project_labels_key | currency | currency_conversion_rate | usage_amount | usage_unit |
|-----|----------------|--|-------------------------|-------------------------|----------|------------------|--------------|--------------------|----------|--------------------------|--------------|------------|
| 1   | Compute Engine | Standard Intel N1 1 VCPU running in Americas | 2017-03-09 08:00:00 UTC | 2017-03-09 09:00:00 UTC | 3.42     | train-infra      | train-infra  | null               | USD      | 1.0                      | 259200.0     |            |
| 2   | Compute Engine | Standard Intel N1 4 VCPU running in Americas | 2017-02-02 08:00:00 UTC | 2017-02-02 09:00:00 UTC | 5.816665 | learn-gcp-154920 | learn-gcp    | null               | USD      | 1.0                      | 104700.0     |            |
| 3   | Compute Engine | Standard Intel N1 1 VCPU running in Americas | 2017-03-12 08:00:00 UTC | 2017-03-12 09:00:00 UTC | 3.2775   | train-infra      | train-infra  | null               | USD      | 1.0                      | 248400.0     |            |
| 4   | Compute Engine | Standard Intel N1 1 VCPU running in Americas | 2017-03-10 08:00:00 UTC | 2017-03-10 09:00:00 UTC | 3.42     | train-infra      | train-infra  | null               | USD      | 1.0                      | 259200.0     |            |
| 5   | Compute Engine | Standard Intel N1 1 VCPU running in Americas | 2017-03-11 08:00:00 UTC | 2017-03-11 09:00:00 UTC | 3.42     | train-infra      | train-infra  | null               | USD      | 1.0                      | 259200.0     |            |