

BigQuery Health Check Metadata Download Guide



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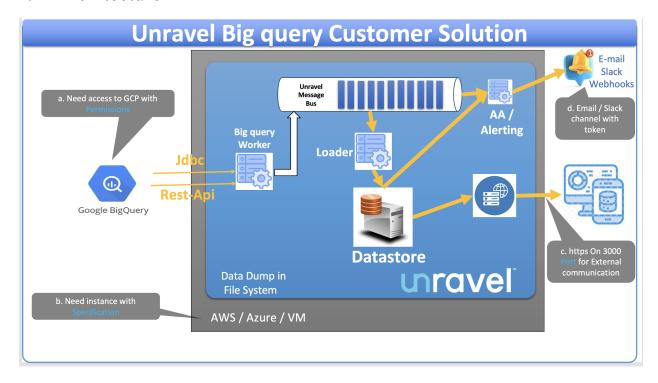
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1.1 Objectives

Health check download for bigquery unravel product.



1.2 Architecture



1.3 Pre-requisite

A. BigQuery Permissions/roles required:

- a. Health check data download from bigguery
 - i. For querying INFORMATION_SCHEMA.JOBS & INFORMATION_SCHEMA.JOBS_TIMELINE view data ask your administrator to grant you the <u>BigQuery Resource Viewer</u> (roles/bigquery.resourceViewer) IAM role on your project. This predefined role contains the **bigquery.jobs.listAll** permission, which is required to query the INFORMATION_SCHEMA.JOBS & INFORMATION_SCHEMA.JOBS_TIMELINE view.
 - ii. For querying INFORMATION_SCHEMA.RESERVATIONS view, you need the **bigquery.reservations.list** Identity and Access Management (IAM) permission for the project. Each of the following predefined IAM roles includes the required permission:
 - A. roles/bigquery.resourceAdmin
 - B. roles/bigguery.resourceEditor
 - C. roles/bigquery.resourceViewer
 - D. roles/bigquery.user
 - E. roles/bigquery.admin



1.4 Download BigQuery Metadata for health check.

Do the following to download BigQuery metadata:

- Download the following files from this location : https://github.com/unraveldata-org/BigQuery-data-loader/tree/main/BigQuery%20Queries
 - download_bigquery_jobs_data.txt
 - download_bigquery_jobs_timeline_data.txt
 - download_bigquery_assignment_data.txt
 - download_bigquery_reservation_data.txt
 - download_billing_data.txt
- Create a gcs bucket and replace <u>example-bucket/folder_name/</u> in above txt files with your valid gcs URI (Please find the steps below on How to create a gcs bucket).
- 3. For each region, replace the \$region with your region in above files. Replace \$admin_project_id with your admin project id.
- 4. In download_billing_data.txt replace, \$project , \$dataset, and \$table_name with the project, dataset and table_name where you have exported the billing data.

For Example:

\$project = unravel-flat-rate-test

\$dataset = all billing data

\$table name = gcp billing export resource v1 016A85 2365E3 979331

- 5. Execute each of the above BigQuery for each region(s) on the BigQuery console on your project.
- 6. Check in the gcs bucket, there must be some csv files created with prefix YOUR_REGION_JOBS_*, YOUR_REGION_JOBS_TIMELINE_*, YOUR_REGION_RESERVATIONS_*, YOUR_REGION_ASSIGNMENTS_* in the gcs bucket folder that you have defined in the export bigquery options.
- 7. Select each of these files and click on Download.

Steps for creating a gcs bucket:

- Go to the Cloud Storage Buckets page: https://console.cloud.google.com/storage/browser in the Google Cloud console.
- 2. Click + Create.



- 3. On the Create a bucket page, enter the following information:
 - a. Name your bucket: Enter a unique name for your bucket. The name must start with a lowercase letter or number, and it can contain up to 63 characters. It can also contain dashes and periods.
 - b. Choose where to store your data: Select a location for your bucket. You can choose a location in the same region as your project, or you can choose a different region.
 - c. Choose a storage class for your data: Select a storage class for your bucket. The storage class determines how long your data is kept and how much it costs to store.
- 4. Click Create.
- 5. Create new folder in bucket [OPTIONAL]

1.5 Output Files (Sample)



1.6 Video Guide

Part 1 (for downloading JOBS & JOBS_TIMELINE Data):

https://drive.google.com/file/d/1KNPY6LctE4ys9uv_SHdkGLrXeJWYnv5q/view?usp=drive_lin_k

Part 2 (for downloading ASSIGNMENTS & RESERVATION Data):

https://drive.google.com/file/d/1YoWsnvzT2bPYAkwUnKLK1EcDJcS-gtuf/view?usp=drive_lin k

Part 3 (for downloading BILLING Data):

https://drive.google.com/file/d/13nSEWrUMV7oLHukemh3tod58ySfYGNiu/view?usp=drive_link