

Monitoring BigQuery Reservations

Viewing project and reservation slot usage using INFORMATION_SCHEMA

Project and reservation usage information is available for querying with [INFORMATION_SCHEMA](/bigquery/docs/information-schema-jobs#examples) (/bigquery/docs/information-schema-jobs#examples) job views. Reservation names are stored in the `reservation_id` field of the [job views](/bigquery/docs/information-schema-jobs#schema) (/bigquery/docs/information-schema-jobs#schema).

Viewing project and reservation slot usage in Cloud Monitoring

Information is available from the "Slots Allocated" metric in Cloud Monitoring. This metric information includes a per-reservation and per-job breakdown of slot usage. The information can also be visualized by using the custom charts metric explorer.

Metrics Explorer

The screenshot shows the Metrics Explorer interface. At the top, there are tabs for 'METRIC' and 'VIEW OPTIONS', with 'VIEW OPTIONS' selected. A dropdown menu is open, showing search results for 'slots/allocated' under the 'Global' resource type. The results list several metrics, with 'Slots used by project, reservation, and job...' selected. The chart area is currently empty, displaying a 'Select a metric to start' message and a time axis from 7:10 to 7:50.

The number of slots in use might appear higher than your reservation slot count because of how BigQuery provisions resources to reservations. You are not charged for slots beyond your reservation slot count.

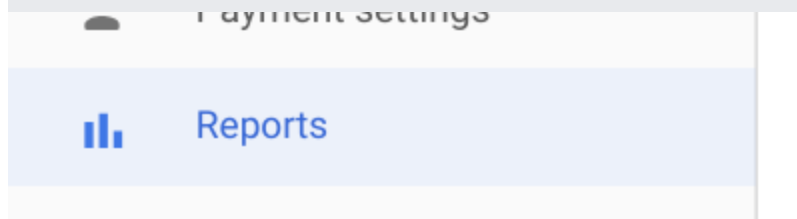
Additionally, you can monitor how your slots are consumed by using the following tools:

- [Audit logs](/bigquery/docs/reference/auditlogs) (/bigquery/docs/reference/auditlogs), specifically slot-ms consumed
- [Jobs API](/bigquery/docs/reference/rest/v2/jobs) (/bigquery/docs/reference/rest/v2/jobs)

Viewing your flat-rate bill


To view your flat-rate bill in real time:

1. In the Google Cloud Console, go to the **Billing** (<https://console.cloud.google.com/billing>) portal.
2. Navigate to the **Reports** section.



1. Optionally, set the following settings under **filters**:
 - a. Group by SKU.
 - b. Filter for "BigQuery".

Cloud Console displays your BigQuery flat-rate spend for each region and for each commitment type (annual and monthly):

| SKU | Product | SKU ID | Usage | Cost | Pr |
|--|--------------------------|----------------|-------------|----------|----|
|  BigQuery Flat Rate Monthly for US (multi-region) | BigQuery Reservation API | A6C7-E8E9-430F | 10.11 month | \$202.25 | |

BigQuery flat-rate pricing is in calendar-months. Your bill doesn't change due to variability in month length. All equal, your rate remains the same month to month.

Reservation cost attribution

Starting in May 2020, we will pilot a new feature that allows users to attribute reservation fees back to the specific query usage across any projects that utilized that reservation. This feature results in more accurate net costs on a per-project basis.

In preparation, all [BigQuery Reservations API](#)

(</bigquery/docs/reservations-details#enabling-reservations-api>) customers will see a new "**Analysis Slots Attribution**" line item in their Cloud Billing data. This includes both the Billing UI and the Billing Export. **The cost for this new item is zero. These changes will not affect your invoice totals.**

We will send out further communication about this feature soon.

Audit logs

Creating, deleting, and updating resources related to [BigQuery Reservations](#)

(</bigquery/docs/reservations-concepts>) are recorded in the owner project's audit logs. See the [BigQuery audit log](#) (/bigquery/docs/reference/auditlogs#auditlog_format) section for more information.

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