GCP Sandbox Set-Up

Optimizing SQL for Analytics in the Cloud

Prerequisites

Recommended browsers:

- Chrome is preferred
- Safari, Firefox, Microsoft Edge also officially supported
- Use an up-to-date version of whichever browser you choose

Needed:

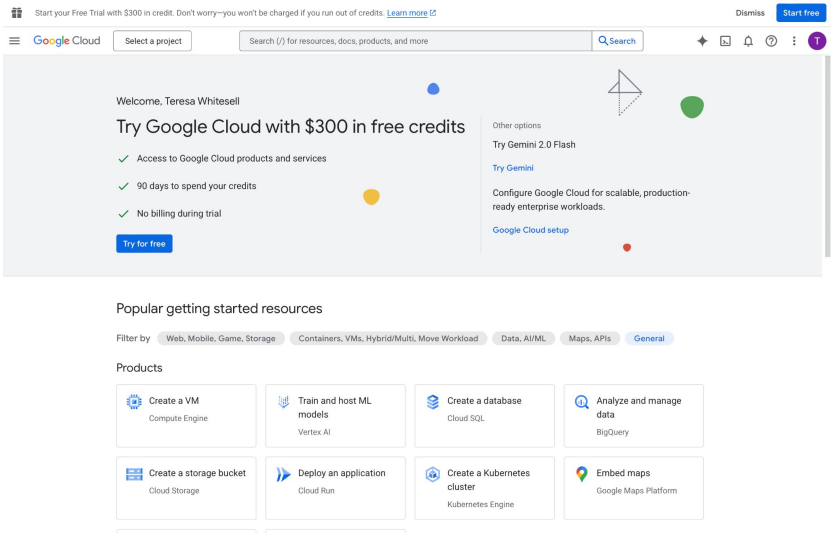
- Standard Google account (like a Gmail address)

You will not need to provide any credit card or other payment information.

Access the Google Cloud Console

Go to https://console.cloud.google.com/

(You may be prompted to agree to terms of service)



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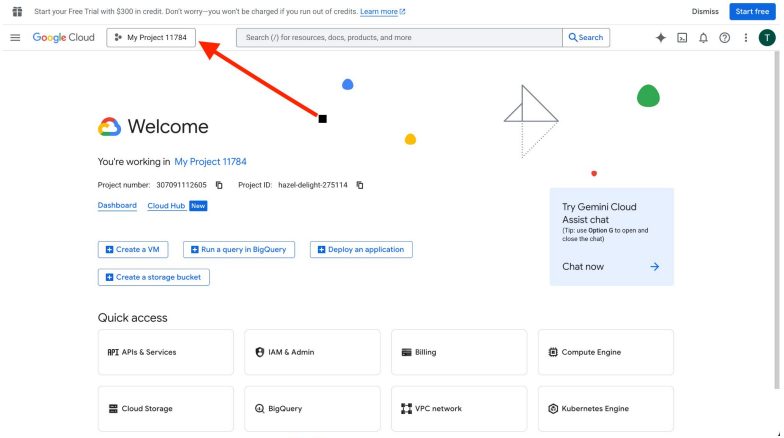
Create a New Project

Projects are the top-level organizational unit in Google Cloud. All your work will live inside a project.

1. In the top-left corner, click the project dropdown menu (it may say “My First Project” or “Select a project”).



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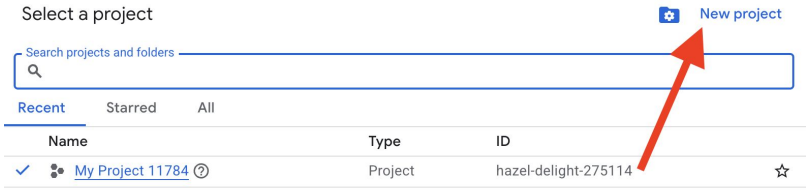
Create a New Project

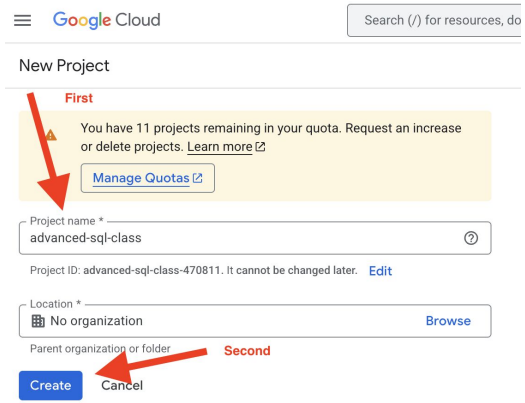
2. In the dialog box, click the “New Project” button.



Create a New Project

3. Give your project a descriptive name such as advanced-sql-class. Leave organization (and Location if available) blank. Then click “Create”.

(Best practice is to use lowercase and dashes instead of spaces for the project name)



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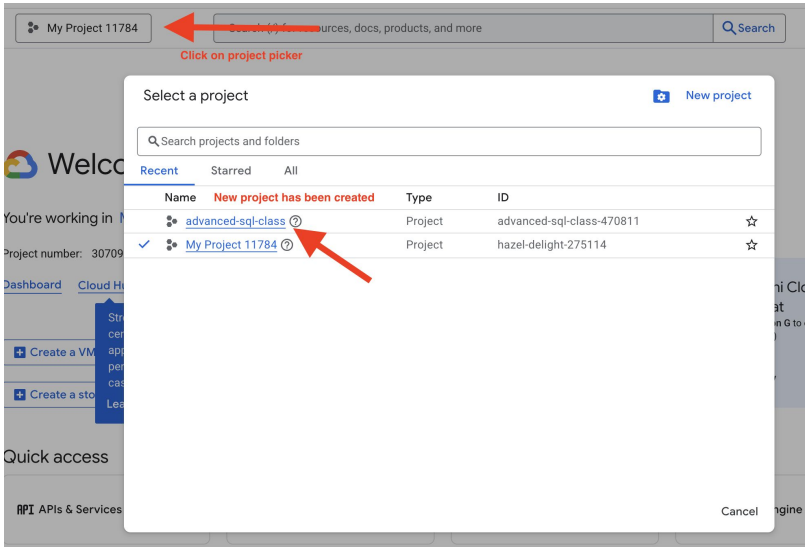
Create a New Project

Google Cloud will provision your new project. When it's ready you'll be able to navigate to it using the project drop-down menu (also known as the project picker).



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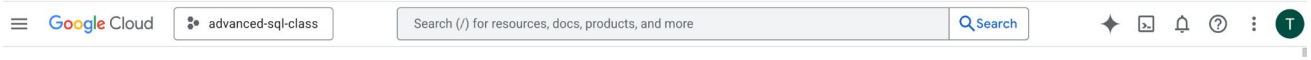
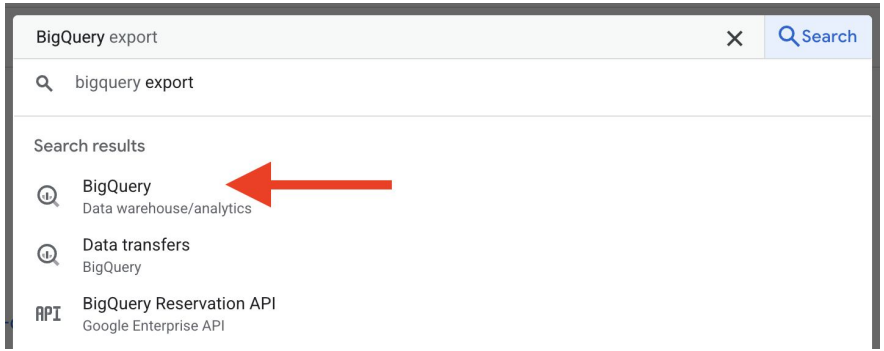
Navigate to BigQuery

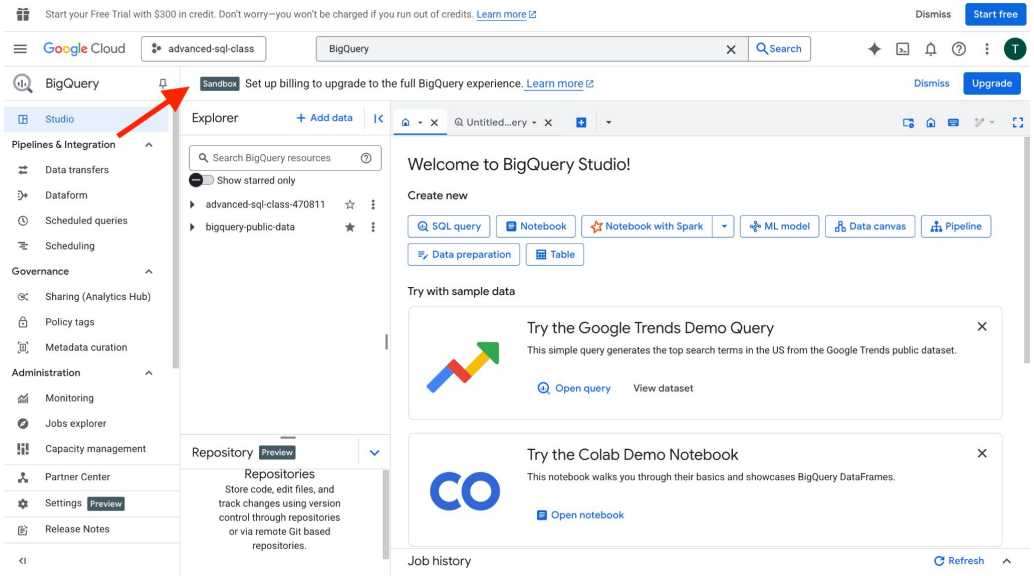
1. Type “BigQuery” in the search bar at the top of the console and select “BigQuery” from the results.





Navigate to BigQuery

You should now see the BigQuery page enabled as a sandbox (you'll only see the sandbox banner the first time you navigate to BigQuery)



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Important Usage Limitations

BigQuery is a wonderful tool but there are some limits to be aware of in the sandbox.

- Query Processing: you're allowed 1 TB of data processed by queries per month (rolling)
- Active Storage: limited to 10 GB of active storage for datasets you upload (public datasets do not count towards this limit)
- Data Retention: All tables, views, and partitions created by the user expire after 60 days so do not rely on the BigQuery sandbox for long-term data storage

If these limits are exceeded you'll be blocked from running further queries until the next month, or you can upgrade to a paid account.

If you choose to upgrade to a paid account, set up cost controls right away to avoid unanticipated charges.

Setting up cost controls for BigQuery

Querying Public Datasets

1. You should see a project named “bigquery-public-data” in the Explorer pane. (If not, click the “+ Add data” and select “Star a project by name”. Type bigquery-public-data and clink “Star”.
2. Expand bigquery-public-data using the arrow beside the name to see the datasets within it.
3. Click on the arrow beside a dataset to see the tables contained within the dataset then click on a table name.