

# Cloud SQL for PostgreSQL: Qwik Start

**GSP152**



# Overview

In this lab you'll learn how to create and connect to a Google Cloud SQL PostgreSQL instance and perform basic SQL operations using the Cloud Console and the psql client.

## Setup and Requirements

### Qwiklabs setup

#### Before you click the **Start Lab** button

Read these instructions. Labs are timed and you cannot pause them. The timer, which starts when you click **Start Lab**, shows how long Google Cloud resources will be made available to you.

This Qwiklabs hands-on lab lets you do the lab activities yourself in a real cloud environment, not in a simulation or demo environment. It does so by giving you new, temporary credentials that you use to sign in and access Google Cloud for the duration of the lab.

#### What you need

To complete this lab, you need:

- Access to a standard internet browser (Chrome browser recommended).
  - Time to complete the lab.
- Note:** If you already have your own personal Google Cloud account or project, do not use it for this lab.


**Note:** If you are using a Pixelbook, open an Incognito window to run this lab.


#### How to start your lab and sign in to the Google Cloud Console


1. Click the **Start Lab** button. If you need to pay for the lab, a pop-up opens for you to select your payment method. On the left is a panel populated with the temporary credentials that you must use for this lab.

[Open Google Console](#)

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked. [Learn more.](#)


Username  
google2727032\_student@qwiklabs.n 

Password  
k68CZxsxMZ 

GCP Project ID  
qwiklabs-gcp-4fbfecac8667e457 

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- Copy the username, and then click **Open Google Console**. The lab spins up resources, and then opens another tab that shows the **Sign in** page.


  
**Sign in**  
Use your Google Account


[Forgot email?](#)


**Tip:** Open the tabs in separate windows, side-by-side.

If you see the **Choose an account** page, click **Use Another**

  
**Choose an account**

 Your.Email@gmail.com

 google1381214\_student@qwiklabs.net  
Signed out

 **Use another account**

**Account.**

3. In the **Sign in** page, paste the username that you copied from the Connection Details panel. Then copy and paste the password.

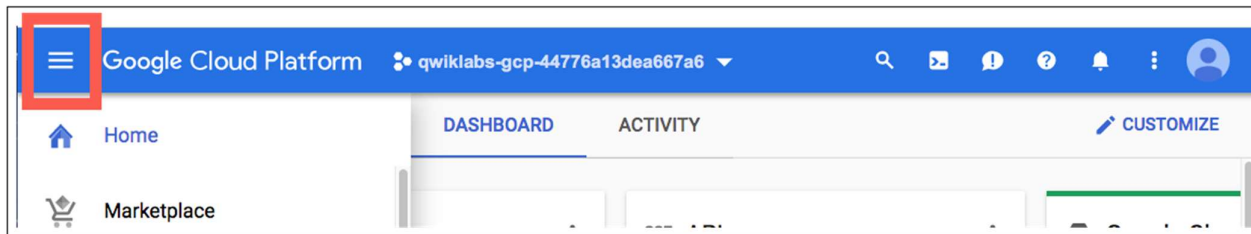
**Important:** You must use the credentials from the Connection Details panel. Do not use your Qwiklabs credentials. If you have your own Google Cloud account, do not use it for this lab (avoids incurring charges).

4. Click through the subsequent pages:

- Accept the terms and conditions.
- Do not add recovery options or two-factor authentication (because this is a temporary account).
- Do not sign up for free trials.

After a few moments, the Cloud Console opens in this tab.

**Note:** You can view the menu with a list of Google Cloud Products and Services by clicking the **Navigation menu** at the top-left.








## Create a Cloud SQL instance

Click on the menu icon in the top left of the screen to see the **Navigation menu**.



In the left menu of the Console, click on **SQL**.

## STORAGE

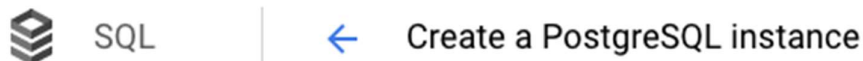
-  Bigtable
-  Datastore
-  Storage
-  SQL
-  Spanner

Click **Create Instance**.

Click **PostgreSQL**, then **Next**.

Create your instance with the following settings:

- Enter myinstance for **Instance ID**.
- Enter a password for the postgres user. Save or remember this password, you'll need it in the next section.



### Instance ID

Cannot be changed later. Use lowercase letters, numbers, and hyphens. Start with a letter.

### Default user password

Set a password for the 'postgres' user. A password is required for the user to login.

[Learn more](#)



### Location

For better performance, keep your data close to the services that need it.

#### Region

#### Zone

### Database version

PostgreSQL 9.6

 [Show configuration options](#)

Leave the default values for the other fields.

Click **Create**.

You are returned to the instances list. Your new instance is greyed out while it initializes and starts.

After a few minutes your instance is created and you can continue to the next section. If it seems to be taking a long time refresh your browser.

## Test Completed Task

Click **Check my progress** to verify your performed task. If you have completed the task successfully you will be granted with an assessment score.

## Test your Understanding

Below are multiple choice questions to reinforce your understanding of this lab's concepts. Answer them to the best of your abilities.

What PostgreSQL Database version used in lab to create Cloud SQL instance?



5.7



9.6



5.6



1.0

Submit

# Connect to your instance using the psql client in the Cloud Shell

In the Cloud Console, click the Cloud Shell icon in the upper right corner.



Then click "Start Cloud Shell".

At the Cloud Shell prompt, connect to your Cloud SQL instance by running:

```
gcloud sql connect myinstance --user=postgres
content copy
```

Enter your postgres password. **Note:** The cursor will not move. Press **Enter** when you're done typing.

You should now see the `psql` prompt.

## Upload data into the postgres database

Insert sample data into the postgres database:

```
CREATE TABLE guestbook (guestName VARCHAR(255), content VARCHAR(255),
                          entryID SERIAL PRIMARY KEY);
INSERT INTO guestbook (guestName, content) values ('first guest', 'I got here!');
INSERT INTO guestbook (guestName, content) values ('second guest', 'Me too!');
content copy
```

Retrieve the data:

```
SELECT * FROM guestbook;
content copy
```

You should now see:

```
guestname | content | entryid
-----+-----+-----
first guest | I got here! | 1
second guest | Me too! | 2
(2 rows)
postgres=>content copy
```

You have created a Google Cloud SQL PostgreSQL instance and connected to it.

# Test your Understanding

Below are multiple choice questions to reinforce your understanding of this lab's concepts. Answer them to the best of your abilities.

What is the name of default database in Postgres Cloud SQL instance?

☐

information\_schema

☐

performance\_schema

☐

guestbook

☐

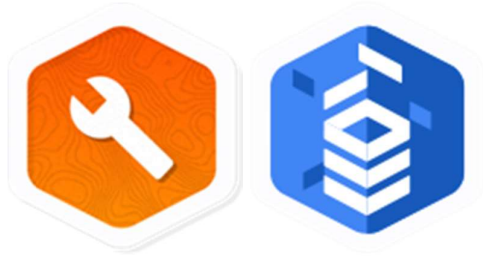
postgres

Submit



# Congratulations!

## Finish Your Quest



Continue your Quest with [Baseline: Deploy & Develop](#) or [Cloud SQL](#). A Quest is a series of related labs that form a learning path. Completing this Quest earns you the badge above, to recognize your achievement. You can make your badge (or badges) public and link to them in your online resume or social media account. Enroll in [Baseline: Deploy & Develop](#) or [Cloud SQL](#) and get immediate completion credit if you've taken this lab. [See other available Qwiklabs Quests](#).

## Next Steps / Learn More

This lab is also part of a series of labs called Qwik Starts. These labs are designed to give you a little taste of the many features available with Google Cloud. Search for "Qwik Starts" in the [lab catalog](#) to find the next lab you'd like to take!

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