

Connect to Cloud SQL for MySQL from Cloud Shell

MySQL | [PostgreSQL \(/sql/docs/postgres/quickstart\)](/sql/docs/postgres/quickstart) | [SQL Server \(/sql/docs/sqlserver/quickstart\)](/sql/docs/sqlserver/quickstart)

This page shows you how to create and connect to a MySQL instance and perform basic SQL operations by using the Google Cloud console and a client. The resources created in this quickstart typically cost less than a dollar, assuming you complete the steps, including the cleanup, in a timely manner.

To follow step-by-step guidance for this task directly in the Google Cloud console, click **Guide me**:

[Guide me \(https://console.cloud.google.com/freetrial?redirectPath=/?walkthrough_id=sql-mysql-quickstart\)](https://console.cloud.google.com/freetrial?redirectPath=/?walkthrough_id=sql-mysql-quickstart)

Before you begin

Note: The name you use for your project must be between 4 and 30 characters. When you type the name, the form suggests a project ID, which you can edit. The project ID must be between 6 and 30 characters, with a lowercase letter as the first character. You can use a dash, lowercase letter, or digit for the remaining characters, but the last character cannot be a dash.

1. Start by creating a Google Cloud account. With this account, you get \$300 in free credits, plus free usage of over 20 products, up to monthly limits.

[Create an account \(https://console.cloud.google.com/freetrial\)](https://console.cloud.google.com/freetrial)

2. In the Google Cloud console, on the project selector page, select or create a Google Cloud project.

★ **Note:** If you don't plan to keep the resources that you create in this procedure, create a project instead of selecting an existing project. After you finish these steps, you can delete the project, removing all resources associated with the project.

[Go to project selector \(https://console.cloud.google.com/projectselector2/home/dashboard\)](https://console.cloud.google.com/projectselector2/home/dashboard)

3. Make sure that billing is enabled for your Google Cloud project (/billing/docs/how-to/verify-billing-enabled#console).
4. Enable the necessary Google Cloud APIs.

`Console` `gcloud` (#gcloud)
(#console)

In the Google Cloud console, go to the **APIs** page.

[Go to APIs](https://console.cloud.google.com/apis) (https://console.cloud.google.com/apis)

Enable the Cloud SQL Admin API.

Create a Cloud SQL instance

In this quickstart, you use the Google Cloud console. To use the `gcloud CLI` (/sdk/gcloud), `cURL`, or `PowerShell`, see Create instances (/sql/docs/mysql/create-instance).

1. In the Google Cloud console, go to the **Cloud SQL Instances** page.

[Go to Cloud SQL Instances](https://console.cloud.google.com/sql) (https://console.cloud.google.com/sql)

2. Click **Create Instance**.
3. Click **Choose MySQL**.
4. Enter `myinstance` for **Instance ID**.
5. Enter a password for the `root` user.
6. Click **Create**.


You're returned to the instances list. You can click the new instance right away to see the details, but it won't be available for other operations until it initializes and starts.

★ **Note:** In this example, the instance is created using default settings, including a public IP address.

Connect to your instance

In this quickstart, we'll use the `mysql` client in Cloud Shell to connect to your instance.

Note: Cloud Shell doesn't work with a private IP address. These instructions are only for an instance with a public IP address.

1. Optional: If you're running a local instance of MySQL, stop it before connecting to your Cloud SQL instance. Otherwise, you might encounter errors such as `address already in use`.
2. In the [Google Cloud console](https://console.cloud.google.com/) (<https://console.cloud.google.com/>), click the Cloud Shell icon () in the upper right corner.

When Cloud Shell finishes initializing, a message, such as the following one, appears:

```
Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to sample-project.
Use "gcloud config set project [PROJECT_ID]" to change to a different projec
username@sample-project:~ (sample-project)$
```

3. At the Cloud Shell prompt, connect to your Cloud SQL instance. Use the `gcloud sql connect` command as follows. Replace the instance name if your instance name is different.

```
gcloud sql connect myinstance --user=root
```

4. Click **Authorize** in the message box to authorize Cloud Shell to make API calls.

A message indicates that your IP is being allowlisted for incoming connections, after which you're prompted to enter your password.

5. Enter your root password.

The `mysql` prompt appears.

Create a database and upload data

1. Create a SQL database on your Cloud SQL instance:

```
CREATE DATABASE guestbook;
```

2. Insert sample data into the guestbook database:

```
USE guestbook;  
CREATE TABLE entries (guestName VARCHAR(255), content VARCHAR(255),  
    entryID INT NOT NULL AUTO_INCREMENT, PRIMARY KEY(entryID));  
INSERT INTO entries (guestName, content) values ("first guest", "I got h  
INSERT INTO entries (guestName, content) values ("second guest", "Me too
```

3. Retrieve the data:

```
SELECT * FROM entries;
```

The result is:

```
+-----+-----+-----+  
| guestName | content | entryID |  
+-----+-----+-----+  
| first guest | I got here! | 1 |  
| second guest | Me too! | 2 |  
+-----+-----+-----+  
2 rows in set (0.00 sec)  
mysql>
```

Clean up

To avoid incurring charges to your Google Cloud account for the resources used on this page, follow these steps.

1. In the Google Cloud console, go to the **Cloud SQL Instances** page.

[Go to Cloud SQL Instances \(https://console.cloud.google.com/sql\)](https://console.cloud.google.com/sql)

2. Select the `myinstance` instance to open the **Instance details** page.

3. In the icon bar at the top of the page, click **Delete**.
4. In the **Delete instance** window, type your instance's name and then click **Delete**.

Optional cleanup steps

If you're not using the APIs that were enabled as part of this quickstart, you can disable them.

- APIs that were enabled within this quickstart:
 - Cloud SQL Admin API

1. In the Google Cloud console, go to the **APIs** page.

[Go to APIs](https://console.cloud.google.com/apis) (<https://console.cloud.google.com/apis>)

2. Select the Cloud SQL Admin API and then click the **Disable API** button.

What's next

- Learn about [creating Cloud SQL instances](/sql/docs/mysql/create-instance) (/sql/docs/mysql/create-instance).
- Learn about creating [MySQL users](/sql/docs/mysql/create-manage-users) (/sql/docs/mysql/create-manage-users) and [databases](/sql/docs/mysql/create-manage-databases) (/sql/docs/mysql/create-manage-databases) for your Cloud SQL instance.
- See the [Cloud SQL pricing information](/sql/docs/mysql/pricing) (/sql/docs/mysql/pricing).
- In this quickstart you connected to the instance by using Cloud Shell. Learn about all of the [connectivity options](/sql/docs/mysql/connect-overview#connection_options) (/sql/docs/mysql/connect-overview#connection_options) in Cloud SQL. How you connect depends on your networking configuration, such as if your Cloud SQL instance has a public or private IP address. See how to configure your Cloud SQL instance with a [public IP](/sql/docs/mysql/configure-ip) (/sql/docs/mysql/configure-ip) and a [private IP](/sql/docs/mysql/configure-private-ip) (/sql/docs/mysql/configure-private-ip) address.
- Learn about connecting to a Cloud SQL instance from other Google Cloud applications:
 - [From an application running on the App Engine standard environment](/sql/docs/mysql/connect-app-engine) (/sql/docs/mysql/connect-app-engine)
 - [From an application running on Compute Engine](/sql/docs/mysql/connect-compute-engine) (/sql/docs/mysql/connect-compute-engine)
 - [From an application running on GKE](/sql/docs/mysql/connect-kubernetes-engine) (/sql/docs/mysql/connect-kubernetes-engine)
 - [From Cloud Run functions](/sql/docs/mysql/connect-functions) (/sql/docs/mysql/connect-functions)
 - [From Cloud Run](/sql/docs/mysql/connect-run) (/sql/docs/mysql/connect-run)

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