

[Cloud SQL](https://cloud.google.com/sql/) (<https://cloud.google.com/sql/>)

[Documentation](https://cloud.google.com/sql/docs/) (<https://cloud.google.com/sql/docs/>)

[MySQL](https://cloud.google.com/sql/docs/mysql/) (<https://cloud.google.com/sql/docs/mysql/>) [Guides](#)

Connecting MySQL client using public IP

MySQL | [PostgreSQL](https://cloud.google.com/sql/docs/postgres/connect-admin-ip) (<https://cloud.google.com/sql/docs/postgres/connect-admin-ip>) | [SQL Server](https://cloud.google.com/sql/docs/sqlserver/connect-admin-ip) (<https://cloud.google.com/sql/docs/sqlserver/connect-admin-ip>)

This page describes how to connect a [mysql client](https://dev.mysql.com/doc/refman/5.7/en/mysql.html) (<https://dev.mysql.com/doc/refman/5.7/en/mysql.html>), either running locally on your client machine or in the Cloud Shell, to your Cloud SQL instance.

Need help? For help troubleshooting the proxy, see [Troubleshooting Cloud SQL Proxy connections](https://cloud.google.com/sql/docs/mysql/sql-proxy#troubleshooting) (<https://cloud.google.com/sql/docs/mysql/sql-proxy#troubleshooting>). Or, see our [Cloud SQL Support page](https://cloud.google.com/sql/docs/mysql/support) (<https://cloud.google.com/sql/docs/mysql/support>).

Note: For information about connecting a client to a Cloud SQL instance using the Cloud SQL Proxy, see [Connecting mysql client using the Cloud SQL Proxy](https://cloud.google.com/sql/docs/mysql/connect-admin-proxy) (<https://cloud.google.com/sql/docs/mysql/connect-admin-proxy>). For information about connecting using private IP, see [Configuring private IP connectivity](https://cloud.google.com/sql/docs/mysql/configure-private-ip) (<https://cloud.google.com/sql/docs/mysql/configure-private-ip>).

Before you begin

Before you can start using a client, you must have:

- Created a Cloud SQL instance, including configuring the default user.

See [Creating Instances](https://cloud.google.com/sql/docs/mysql/create-instance) (<https://cloud.google.com/sql/docs/mysql/create-instance>) and [Configuring the default user account](https://cloud.google.com/sql/docs/mysql/create-manage-users#user-root) (<https://cloud.google.com/sql/docs/mysql/create-manage-users#user-root>).

- Determined how you will connect to your instance.

For the connection options and how to choose from among them, see [Connection Options for External Applications](https://cloud.google.com/sql/docs/mysql/external-connection-methods) (<https://cloud.google.com/sql/docs/mysql/external-connection-methods>).

Using a local client

Using a local client to connect to your Cloud SQL instance involves three high-level tasks:

1. [Install the client](#) (#install-mysql-client).
2. [Configure access to your Cloud SQL instance](#) (#configure-instance-mysql).
3. [Connect to your Cloud SQL instance](#) (#connect).

Install the client

To install the client:

DEBIAN/UBUNTU	CENTOS/RHEL	MORE ▾
Install the MySQL client from the package manager:		
<pre>sudo apt-get update sudo apt-get install mysql-client</pre>		

For more information about installing MySQL, see the MySQL Reference Manual [Installing and Upgrading MySQL](https://dev.mysql.com/doc/refman/5.7/en/installing.html) (<https://dev.mysql.com/doc/refman/5.7/en/installing.html>).

Configure access to your Cloud SQL instance

To configure access to your instance:

1. From the client machine, use [What's my IP](http://ipv4.whatismyv6.com) (<http://ipv4.whatismyv6.com>) to see the IP address of the client machine.
2. Copy that IP address.
3. Go to the Cloud SQL Instances page in the Google Cloud Console.

[GO TO THE CLOUD SQL INSTANCES PAGE](https://console.cloud.google.com/sql/instances) ([HTTPS://CONSOLE.CLOUD.GOOGLE.COM/SQL/INSTANCES](https://console.cloud.google.com/sql/instances))

4. Click the instance to open its **Overview** page, and record its IP address.
5. Select the **Connections** tab.
6. Under **Authorized networks**, click **Add network** and enter the IP address of the machine where the client is installed.

★ **Note:** The IP address of the instance and the mysql client IP address you authorize must be the *same* IP version: either IPv4 or IPv6.

7. Click **Done**. Then click **Save** at the bottom of the page to save your changes.
8. Connect to your instance, either with SSL (#connect-ssl) or without SSL (#connect).

Connect to your Cloud SQL instance without encryption

Note: This procedure configures an unencrypted connection to your database. If your database contains sensitive data, you should [connect to your instance using SSL](#) (#connect-ssl).

To connect to your instance:

1. Confirm that you have installed the client (#install-mysql-client) and configured access to your instance (#configure-instance-mysql).
2. Start the mysql client:

```
mysql --host=[INSTANCE_IP] --user=root --password
```



3. Enter your password.
4. You should see the mysql prompt.

Connect to your Cloud SQL instance using SSL

To connect using SSL, you need:

- A Certificate Authority (CA) certificate in a **server-ca.pem** file.
- A client public key certificate in a **client-cert.pem** file.
- A client private key in a **client-key.pem** file.

If you lack a client certificate and a corresponding private key, create a new client certificate (<https://cloud.google.com/sql/docs/mysql/configure-ssl-instance#new-client>).

Before you begin, confirm that you have installed the client (#install-mysql-client) and configured access to your instance (#configure-instance-mysql).

To connect to your instance using SSL:

1. Start the mysql client:

```
mysql --ssl-ca=server-ca.pem --ssl-cert=client-cert.pem --ssl-key=client-key.pem  
--host=[INSTANCE_IP] --user=root --password
```

2. Enter the password.

3. At the MySQL prompt, enter the \s command to verify that your connection is using SSL.

4. Look for the output line with **SSL**:

```
...  
SSL:                Cipher in use is DHE-RSA-AES256-SHA  
...
```

Warning: MySQL client versions prior to 5.7.3 consider the `--ssl` options as advisory, and silently fall back to unencrypted connections if the server does not accept an encrypted connection. For more information, see [Using Encrypted Connections \(https://dev.mysql.com/doc/refman/5.7/en/encrypted-connections.html\)](https://dev.mysql.com/doc/refman/5.7/en/encrypted-connections.html) in the MySQL Reference Manual. To avoid this issue, you can configure the instance so that only SSL connections can connect to it (for more information, see [Configuring SSL for Instances \(https://cloud.google.com/sql/docs/mysql/configure-ssl-instance\)](https://cloud.google.com/sql/docs/mysql/configure-ssl-instance)).

For information about troubleshooting connection issues over IP, see [Diagnosing Issues with Cloud SQL Instances](https://cloud.google.com/sql/docs/mysql/diagnose-issues#connection)

(<https://cloud.google.com/sql/docs/mysql/diagnose-issues#connection>).

Using the client in the Cloud Shell

1. Go to the Google Cloud Console.

GO TO THE GOOGLE CLOUD CONSOLE (HTTPS://CONSOLE.CLOUD.GOOGLE.COM/)

2. Click the Cloud Shell icon  towards the right in the tool bar.

The Cloud Shell takes a few moments to initialize.

3. At the Cloud Shell prompt, use the built-in client to connect to your Cloud SQL instance:

```
gcloud sql connect [INSTANCE_ID] --user=root
```



4. Enter your password.

The `gcloud sql` command group does not support connecting to a Cloud SQL instance using SSL/TLS.

What's next

- Learn about the [two levels of access control](https://cloud.google.com/sql/docs/mysql/instance-access-control) (<https://cloud.google.com/sql/docs/mysql/instance-access-control>) for Cloud SQL instances.
- Create [users](https://cloud.google.com/sql/docs/mysql/create-manage-users) (<https://cloud.google.com/sql/docs/mysql/create-manage-users>) and [databases](https://cloud.google.com/sql/docs/mysql/create-manage-databases) (<https://cloud.google.com/sql/docs/mysql/create-manage-databases>).
- Learn about [options for connecting to your instance from your application](https://cloud.google.com/sql/docs/mysql/external-connection-methods) (<https://cloud.google.com/sql/docs/mysql/external-connection-methods>).
- Learn about the [mysql client](https://dev.mysql.com/doc/refman/5.7/en/mysql.html) (<https://dev.mysql.com/doc/refman/5.7/en/mysql.html>).
- Learn about [options for support](https://cloud.google.com/sql/docs/support) (<https://cloud.google.com/sql/docs/support>).

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