This page walks you through the setup steps required to use the Cloud Spanner API.

If you want to use Cloud Spanner without using the API, see Quickstart using the console
(/spanner/docs/quickstart-console).

Your development machine should have the following installed:

- The Google Cloud SDK, which includes setting up the gcloud command-line tool (/sdk/gcloud/)
  (download (/sdk)).

1. Go to the **Projects** page in the Google Cloud Console.

   Go to the Projects page (https://console.cloud.google.com/project)

2. Create a new Cloud Console project, or open an existing project by clicking on the project name.

3. Open a terminal window, and set your project as the default project for the `gcloud` command-line tool,
   replacing `MY_PROJECT_ID` with your project ID (not your project name):

4.

5. Make sure that billing is enabled for your Google Cloud project. Learn how to confirm billing is
   enabled for your project (/billing/docs/how-to/modify-project).

You can also <u>learn about Cloud Spanner pricing</u> (/spanner/pricing).

6. Enable the Cloud Spanner API for the project.

<u>Enable the Cloud Spanner API</u> (https://console.cloud.google.com/flows/enableapi?apiid=spanner.googleapis.com)

Cloud Spanner uses <u>OAuth 2.0</u> (http://tools.ietf.org/html/rfc6749) for API authentication and authorization.

To run your code locally during development and testing, use the <u>Google Cloud SDK</u> (/sdk/) (the `gcloud` command-line tool) along with <u>Application Default Credentials</u> (https://developers.google.com/identity/protocols/application-default-credentials). At a command prompt, run:

After you authenticate using the `gcloud auth application-default login` command, API client libraries that use the application default credentials automatically pick up the created credentials. You need to run the command only once per local user environment.

Using `gcloud auth application-default login` is suitable for local development. When you are ready to use Cloud Sp production environment, learn about other options for credentials in <u>Getting credentials for server-centric flow</u> s/authentication#getting_credentials_for_server-centric_flow).

Now that you've set up your development environment and authentication, run the <u>gcloud command-line</u> (/spanner/docs/gcloud-spanner) tool to interact with Cloud Spanner:

You should see a list of the Cloud Spanner instance configurations that your project can access, including regional and multi-region configurations. Learn more about these in <u>Instances</u> (/spanner/docs/instances).

You've completed the setup!

Learn how to use the Cloud Client Libraries to create a Cloud Spanner instance, database, tables, and indexes. Then store, query, and read data in Cloud Spanner.

- [Getting started with Cloud Spanner in C#](/spanner/docs/getting-started/csharp) (/spanner/docs/getting-started/csharp)

- [Getting started with Cloud Spanner in Go](/spanner/docs/getting-started/go) (/spanner/docs/getting-started/go)

- [Getting started with Cloud Spanner in Java](/spanner/docs/getting-started/java) (/spanner/docs/getting-started/java)

- [Getting started with Cloud Spanner in Node.js](/spanner/docs/getting-started/nodejs) (/spanner/docs/getting-started/nodejs)

- [Getting started with Cloud Spanner in PHP](/spanner/docs/getting-started/php) (/spanner/docs/getting-started/php)

- [Getting started with Cloud Spanner in Python](/spanner/docs/getting-started/python) (/spanner/docs/getting-started/python)

- [Getting started with Cloud Spanner in Ruby](/spanner/docs/getting-started/ruby) (/spanner/docs/getting-started/ruby)

- [Getting started with Cloud Spanner in REST](/spanner/docs/getting-started/rest) (/spanner/docs/getting-started/rest)

- [Getting started with Cloud Spanner in gcloud](/spanner/docs/getting-started/gcloud) (/spanner/docs/getting-started/gcloud)