Pub/Sub is a messaging service for exchanging event data among applications and services. A producer of data publishes messages to a Pub/Sub topic. A consumer creates a subscription to that topic. Subscribers either pull messages from a subscription or are configured as webhooks for push subscriptions. Every subscriber must acknowledge each message within a configurable window of time.

This page shows how to publish and consume messages with a pull subscriber.

**Note:** If you are new to Pub/Sub, we recommend that you start with the <u>interactive tutorial</u> (https://console.cloud.google.com/cloudpubsub?tutorial=pubsub\_quickstart).

1. <u>Sign in</u> (https://accounts.google.com/Login) to your Google Account.

If you don't already have one, <u>sign up for a new account</u> (https://accounts.google.com/SignUp).

2. Set up a Cloud Console project.

## Click to:

- Create or select a project.
- Enable the Pub/Sub API for that project.

You can view and manage these resources at any time in the <u>Cloud Console</u> (https://console.cloud.google.com/).

3. <u>Install and initialize the Cloud SDK</u> (/sdk/docs/).



Note: You can also use the Cloud Shell

(https://console.cloud.google.com/home/dashboard?cloudshell=true) to run **gcloud** commands without needing to install the Cloud SDK.

You can use the <code>gcloud</code> command-line tool to perform operations in Pub/Sub. The <code>gcloud</code> command-line tool is included in the <code>Cloud SDK</code> (/sdk/docs/) you installed in <code>Before</code> you begin (/pubsub/docs/quickstart-cli#before-you-begin). See the <code>gcloud</code> pubsub section (/sdk/gcloud/reference/pubsub/) in the <code>gcloud</code> reference (/sdk/gcloud/reference/) for a complete list of Pub/Sub <code>gcloud</code> commands.

This self-contained example, meant to run in bash or the Cloud Shell, shows the steps required:

- 1. Create a topic.
- 2. Subscribe to the topic.
- 3. Publish a message to the topic.
- 4. Receive the message.

This example uses a pull subscription. Pub/Sub also supports push subscriptions, as described in the <u>Subscriber</u> (/pubsub/docs/subscriber#push\_pull) guide.

You can perform all administrative operations through the API, and most through the gcloud tool and Cloud Console UI.

Note that additional resources and links are available on the <u>Pub/Sub support page</u> (/pubsub/docs/support).

See the <u>Publisher</u> (/pubsub/docs/publisher) and <u>Subscriber</u> (/pubsub/docs/subscriber) guides to learn more about the concepts discussed in this page.

Get started with Pub/Sub in your language of choice at  $\underline{\text{Pub/Sub Client Libraries}}$  (/pubsub/docs/reference/libraries) .

See <u>Quickstart</u>: <u>Using Client Libraries</u> (/pubsub/docs/quickstart-client-libraries)

for a walkthrough of how to use client library APIs to perform basic Pub/Sub tasks.

For a detailed overview of Pub/Sub, see What Is Pub/Sub? (/pubsub/docs/overview)