


# Pub/Sub: Qwik Start - Console

## Activate Cloud Shell

Cloud Shell is a virtual machine that is loaded with development tools. It offers a persistent 5GB home directory and runs on the Google Cloud. Cloud Shell provides command-line access to your Google Cloud resources.

1. Click **Activate Cloud Shell**  at the top of the Google Cloud console.
2. Click through the following windows:
  - Continue through the Cloud Shell information window.
  - Authorize Cloud Shell to use your credentials to make Google Cloud API calls.

When you are connected, you are already authenticated, and the project is set to your **Project\_ID**, `PROJECT_ID`. The output contains a line that declares the **Project\_ID** for this session:

```
Your Cloud Platform project in this session is set to "PROJECT ID"
gcloud is the command-line tool for Google Cloud. It comes pre-installed on Cloud Shell
and supports tab-completion.
```

3. (Optional) You can list the active account name with this command:  
`gcloud auth list`  
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4. Click **Authorize**.  
**Output:**

```
ACTIVE: *
ACCOUNT: "ACCOUNT"

To set the active account, run:
$ gcloud config set account `ACCOUNT`
```

5. (Optional) You can list the project ID with this command:  
`gcloud config list project`  
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**Output:**

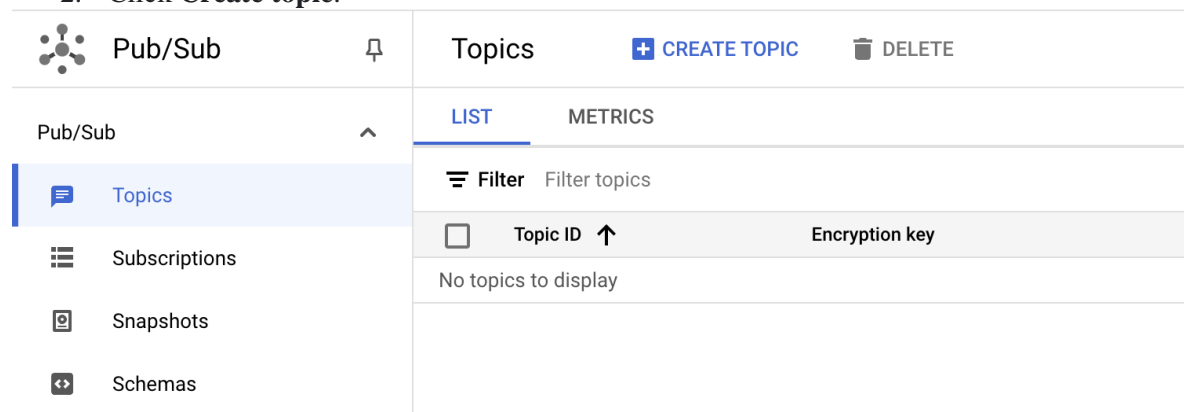
```
[core]
project = "PROJECT_ID"
```

**Note:** For full documentation of `gcloud`, in Google Cloud, refer to [the gcloud CLI overview guide](#).

## Task 1. Setting up Pub/Sub

To use Pub/Sub, you create a topic to hold data and a subscription to access data published to the topic.

1. From the **Navigation menu** () click **View All Products**. Go to **Analytics** section, click **Pub/Sub > Topics**.
2. Click **Create topic**.



3. The topic must have a unique name. For this lab, name your topic `MyTopic`. In the **Create a topic** dialog:
  - For **Topic ID**, type `MyTopic`.
  - Leave other fields at their default value.
  - Click **Create**.

Topic ID \*

MyTopic

?

Topic name: projects/qwiklabs-gcp-01-8d32c5af2c4c/topics/MyTopic

☒ Add a default subscription

?

☐ Use a schema

?

☐ Enable ingestion

?

☐ Enable message retention

?

☐ Export message data to BigQuery

?

☐ Backup message data to Cloud Storage

?

Encryption

☒ Google-managed encryption key

Keys owned by Google

☐ Cloud KMS key

Keys owned by customers

CREATE

## Task 2. Add a subscription

Now you'll make a subscription to access the topic.

1. Click **Topics** in the left panel to return to the **Topics** page. For the topic you just made click the three dot icon > **Create subscription**.

Topics

+

CREATE TOPIC

DELETE

↻

LEARN

SHOW INFO PANEL

LIST

METRICS

≡

Filter

Filter topics

?

≡

<input type="checkbox"/>	Topic ID ↑	Encryption key	Topic name	Retention	Ingestion source
<input type="checkbox"/>	<a href="#">MyTopic</a>	Google-managed	projects/qwiklabs-gcp-01-8d32c5af2c4c/topics/MyTopic <div></div>	—	—

Create subscription

Create snapshot

Import from

Export

Trigger Cloud Function

Update labels

View permissions

View storage policies

Delete

- In the **Add subscription to topic** dialog:
  - Type a name for the subscription, such as MySub
  - Set the Delivery Type to **Pull**.
  - Leave all other options at the default values.

[←](#)

## Add subscription to topic

subscribers immediately, or subscribers can pull messages as needed.

Subscription ID \*

Subscription name: projects/qwiklabs-gcp-03-8ea56b7cabda/subscriptions/MySub

Topic name

projects/qwiklabs-gcp-03-8ea56b7cabda/topics/MyTopic

Delivery type

If Pull, subscribers must request delivery. If Push, Pub/Sub delivers messages as soon as they are published.

☒ Pull
 ☐ Push

- Click **Create**.  
Your subscription is listed in the Subscription list.

## Task 4. Publish a message to the topic

1. Navigate back to **pub/sub > Topics** and open **MyTopics** page.
2. In the Topics details page, click **Messages** tab and then click **Publish Message**.
3. Enter `Hello World` in the **Message** field and click **Publish**.

### Publish message

#### Topic name

projects/qwiklabs-gcp-04-417eafdb59c9/topics/MyTopic

#### Publish count

You can publish the given message once or multiple times in an interval. This can be useful for getting messages in new subscriptions and testing. For a more robust way to publish messages multiple times, consider using Cloud Scheduler.

Number of messages \*

Enter an amount between 1-100.

Message interval (seconds)

How long to wait before publishing the next message

#### Message body

The message you want to publish to this topic. Either message or attribute will be required to publish.

Message \*

Message size should not exceed 10MB.

#### Message attributes

## Task 5. View the message

To view the message, use the subscription (`MySub`) to pull the message (`Hello World`) from the topic (`MyTopic`).

- Enter the following command in Cloud Shell:

```
gcloud pubsub subscriptions pull --auto-ack MySub
```

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The message appears in the DATA field of the command output.

```
student_01_8545be9b812e@cloudshell:~ (qwiklabs-gcp-01-8d32c5af2c4c)$ gcloud pubsub subscriptions pull --auto-ack MySub
DATA: Hello World
MESSAGE_ID: 11938495658530057
ORDERING_KEY:
ATTRIBUTES:
DELIVERY_ATTEMPT:
ACK_STATUS: SUCCESS
student_01_8545be9b812e@cloudshell:~ (qwiklabs-gcp-01-8d32c5af2c4c)$
```

You created a Pub/Sub topic, published to the topic, created a subscription, then used the subscription to pull data from the topic.