


# 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**, `qwiklabs-gcp-01-0554e0785ed0`. The output contains a line that declares the **Project\_ID** for this session:

```
Your Cloud Platform project in this session is set to quiklabs-gcp-01-0554e0785ed0
```

`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`

4. Click **Authorize**.
- Output:**

```
ACTIVE: *
ACCOUNT: student-01-80e5ba95b705@quiklabs.net

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`

## Output:

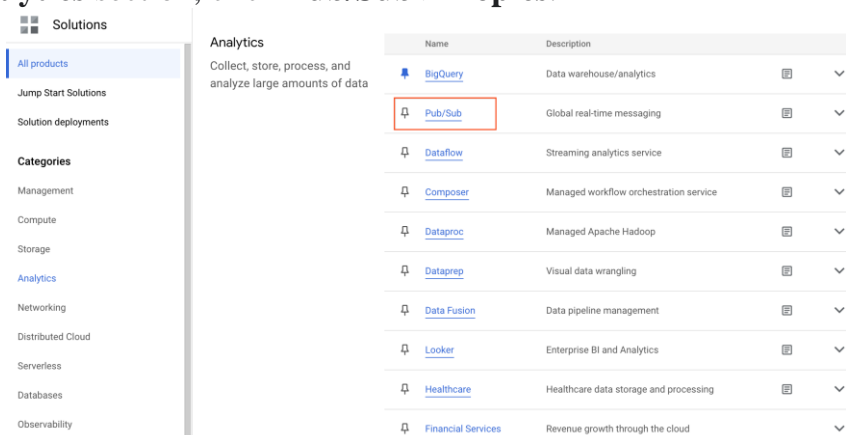
```
[core]
project = qwiklabs-gcp-01-0554e0785ed0
```

**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.

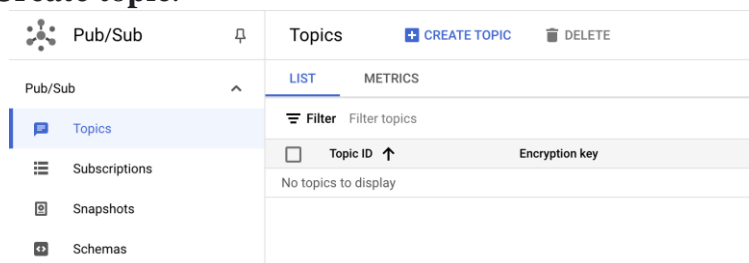
1. From the **Navigation menu** () click **View All Products**. Go to **Analytics** section, click **Pub/Sub > Topics**.



The screenshot shows the Google Cloud console interface. On the left is the 'Solutions' navigation menu with 'All products' selected. The main area is titled 'Analytics' and contains a table of various services. The 'Pub/Sub' service is highlighted with a red box.

Name	Description
<a href="#">BigQuery</a>	Data warehouse/analytics
<a href="#">Pub/Sub</a>	Global real-time messaging
<a href="#">Dataflow</a>	Streaming analytics service
<a href="#">Composer</a>	Managed workflow orchestration service
<a href="#">Dataproc</a>	Managed Apache Hadoop
<a href="#">Dataprep</a>	Visual data wrangling
<a href="#">Data Fusion</a>	Data pipeline management
<a href="#">Looker</a>	Enterprise BI and Analytics
<a href="#">Healthcare</a>	Healthcare data storage and processing
<a href="#">Financial Services</a>	Revenue growth through the cloud

2. Click **Create topic**.



The screenshot shows the 'Pub/Sub' section of the Google Cloud console. The 'Topics' tab is selected, and the 'CREATE TOPIC' button is visible. Below the button, there is a 'Filter' section and a table with columns 'Topic ID' and 'Encryption key'. The table currently shows 'No topics to display'.

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 \*  ?

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

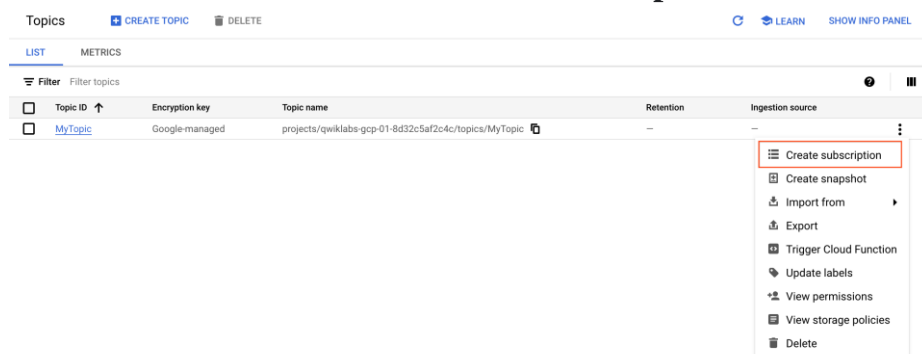
[CREATE](#)

You've created a topic.

## 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**.



2. 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 \*  
MySub

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

3. 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 \*

1

Enter an amount between 1-100.

#### Message interval (seconds)

1

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 \*

Hello World

Message size should not exceed 10MB.

### Message attributes

PUBLISH

CANCEL

## 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`

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

```
afnqseuf 0J 82q2peap8JSe6cJonqameJJ:~ (dmTKTepa-dcb-0J-8q3Zc2seZScqC) & █  
ACK SLVLN2: SUCCESS  
DETAILS: VLEWBL:  
VLEWBL2:  
ORDERING KEY:  
MESSAGE ID: JT838q2e28230021  
DVLV: HEJJO MOJTG  
afnqseuf 0J 82q2peap8JSe6cJonqameJJ:~ (dmTKTepa-dcb-0J-8q3Zc2seZScqC) & асJonq бnpaлp aлpacиTбeиoвa бнJT --aлfo-ack wлaлp
```

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