Pub/Sub: Qwik Start - Console

Objective

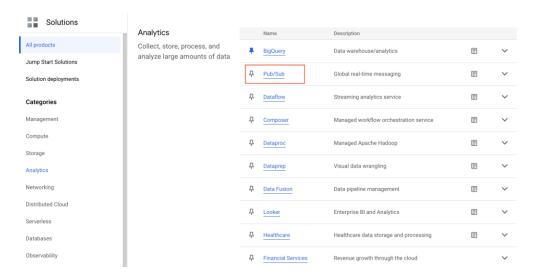
This lab introduces the use of **Google Cloud Pub/Sub**, a messaging service that enables event-driven architectures and real-time messaging between applications. The goal was to:

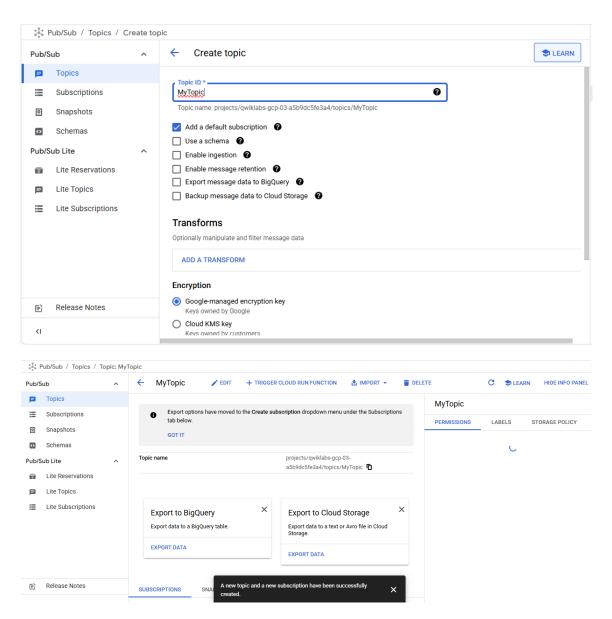
- Create a topic to which data is published.
- Create a **subscription** to access the topic's messages.
- Publish a message to the topic.
- Consume the message using a pull subscriber.

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.

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



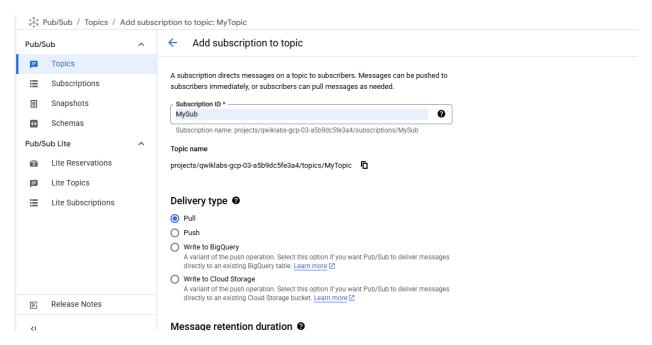


- 2. Click Create topic.
- 3. The topic must have a unique name. For this lab, name your topic MyTopic. In the **Create a topic** dialog:
- a. For Topic ID, type MyTopic.
- b. Leave other fields at their default value.
- c. Click Create.

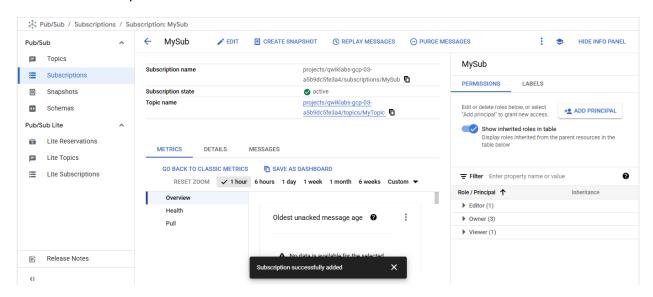
Task 2. Add a subscription

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**.

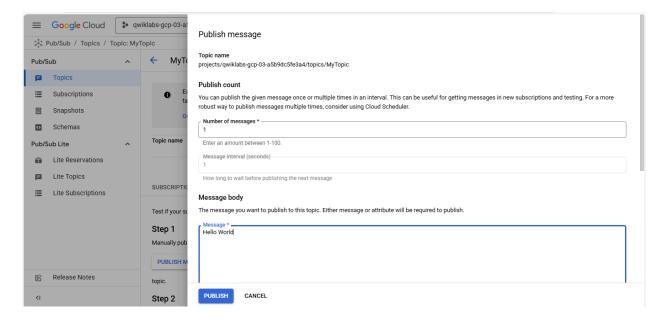


- 2. In the Add subscription to topic dialog:
- a. Type a name for the subscription, such as MySub
- b. Set the Delivery Type to Pull.
- c. Leave all other options at the default values.



Task 3. 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.



Task 4. 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

```
CLOUD SHELL
Terminal (qwiklabs-qcp-03-a5b9dc5fe3a4) x + ▼

Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to qwiklabs-gcp-03-a5b9dc5fe3a4.
Use 'goloud config set project [ROJECT_ID]' to change to a different project.
student_01_fd827e106326@cloudshell:~ (qwiklabs-gcp-03-a5b9dc5fe3a4)$ gcloud pubsub subscriptions pull --auto-ack MySub
DATA: Hello World
MESSAGE_ID: 15133602338985371
ORDERING KEY:
ATTRIBUTES:
DELIVERY ATTEMPT:
ACK_STATUS: SUCCESS
student_01_fd827e106326@cloudshell:~ (qwiklabs-gcp-03-a5b9dc5fe3a4)$
```

Conclusion

In this lab, the complete lifecycle of a Pub/Sub message system was demonstrated. The experience provided insights into how decoupled, event-driven systems work in cloud

environments. The lab showed how to set up a topic, create a subscription, publish messages, and pull messages using the **gcloud CLI**—all through the Google Cloud Console and Cloud Shell.

Skills Gained

- Hands-on with Google Cloud Pub/Sub
- Using Cloud Shell and gcloud CLI
- Understanding asynchronous messaging systems
- Creating and managing topics and subscriptions