This demo gives a brief introduction to Cloud Pub/Sub's command-line interface using the gcloud command.

- 1. Select/create a project
- 2. Select Cloud pub sub from the navigation menu
- 3. Enable the API
- 4. Create your first topic
- Open Google Cloud Shell
- \$ gcloud pubsub topics create my-topic
- 5. Add a subscription
- \$ gcloud pubsub subscriptions \ create my-sub --topic my-topic \ --ack-deadline=60

This command creates a subscription named my-sub attached to the topic my-topic.

All the messages published to my-topic will be delivered to this subscription.

You may notice the --ack-deadline=60 option. ack-deadline stands for Acknowledgement deadline. This new subscription has a 60 seconds Acknowledgement deadline.

6. List topics and subscriptions

Before sending our first message, lets check if the topic and the subscription

were successfully created.

Lets List our topic and subscription using the following command:

- \$ gcloud pubsub topics list
- \$ gcloud pubsub subscriptions list
- 7. Publish messages to the topic
- Send two messages with the following commands:
 - \$ gcloud pubsub topics publish my-topic \backslash --message hello
- \$ gcloud pubsub topics publish my-topic \ --message goodbye

Each of these commands sends a message.

The first message is hello and the second is goodbye.

When you successfully publish a message, you should see the messageId returned from the server.

This is a unique id automatically assigned by the server to each message.

- $8.\ \mbox{Pull}$ messages from the subscription
- \$ gcloud pubsub subscriptions \ pull --auto-ack --limit=2 my-sub

You likely saw the two messages that you have just published. The messages have the data, hello and goodbye, as well as MESSAGE_ID. The MESSAGE_ID is a unique id of the message that the server assigned.

Note: Cloud Pub/Sub doesn't guarantee the order of the messages. It is also possible that you saw only one message. In that case, try running the same command several times until you see the other message.

Acknowledge and acknowledgement deadline

After you pull a message and correctly process it, you must notify Cloud Pub/Sub that you successfully received the message. This action is called acknowledge.

You may have noticed the --auto-ack flag passed along with the pull command. The --auto-ack flag automatically pulls the message and acknowledges it.

- 9. Manual acknowledgement
- Send a new message $\$ gcloud pubsub $\$ topics publish my-topic --message $\$ thanks

- Pull messages again \$ gcloud pubsub subscriptions \ pull my-subAcknowledge the message \$ gcloud pubsub subscriptions ack \ my-sub -- ack-ids [ACK_ID]
- 10. View/manage topics & subscriptions from the GUI