

Pub/Sub: Qwik Start - Python

GSP094



- Pub/Sub enables reliable, asynchronous messaging where producers publish to topics and subscribers consume via subscriptions.
- Messages persist up to seven days for guaranteed delivery even during temporary subscriber unavailability.
- This lab introduces Pub/Sub fundamentals using the Python client library for hands-on practice.
- Master creating, deleting, and listing Pub/Sub topics and subscriptions programmatically.
- Practice publishing messages to topics and consuming them with pull subscribers in Python.



https://partner.skills.google(paths/69/course_templates/637/labs/592549)



Contents

Pub/Sub: Qwik Start - Python

(Optional) You can list the active account name with this command:

gcloud auth list

4. Click Authorize.

Output:

```
ACTIVE: *
ACCOUNT: student-02-77569a450c62@qwiklabs.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:

Lab instructions and tasks

0/100

GSP094

Overview

Setup and Requirements

Task 1. Create a virtual environment

Task 2. Install the client library

Task 3. Pub/Sub - the Basics

Task 4. Create a topic

Task 5. Create a subscription

Task 6. Publish messages

Task 7. View messages

Task 8. Take your...

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)[Previous](#)[Next >](#)

ENG

IN



06:47 PM

26-12-2025

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) +

Open Editor |

i Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again [Dismiss](#)

Welcome to Cloud Shell! Type "help" to get started, or type "gemini" to try prompting with Gemini CLI.
Your Cloud Platform project in this session is set to **qwiklabs-gcp-03-fb33c6f20604**.
Use `gcloud config set project [PROJECT_ID]` to change to a different project.
student_02_77569a450c62@cloudshell:~ **(qwiklabs-gcp-03-fb33c6f20604)**\$ gcloud auth list
Credentials
Accounts

ACTIVE: *

ACCOUNT: student-02-77569a450c62@qwiklabs.net

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

student_02_77569a450c62@cloudshell:~ **(qwiklabs-gcp-03-fb33c6f20604)**\$ gcloud config list project
[core]
project = qwiklabs-gcp-03-fb33c6f20604

Your active configuration is: [cloudshell-26968]
student_02_77569a450c62@cloudshell:~ **(qwiklabs-gcp-03-fb33c6f20604)**\$



Contents

Pub/Sub: Qwik Start - Python

00:42:20

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)

Task 1. Create a virtual environment

Python virtual environments are used to isolate package installation from the system.

1. Install the `virtualenv` environment:

```
sudo apt-get install -y virtualenv
```

2. Build the virtual environment:

```
python3 -m venv venv
```

3. Activate the virtual environment:

```
source venv/bin/activate
```

- Lab instructions and tasks 0/100
- GSP094
 - Overview
 - Setup and Requirements
 - Task 1. Create a virtual environment
 - Task 2. Install the client library
 - Task 3. Pub/Sub - the Basics
 - Task 4. Create a topic
 - Task 5. Create a subscription
 - Task 6. Publish messages
 - Task 7. View messages
 - Task 8. Topic viewer

[Previous](#)[Next](#)

Dashboard – qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)\$ sudo apt-get install -y virtualenv

You are running apt-get inside of Cloud Shell. Note that your Cloud Shell machine is ephemeral and no system-wide change will persist beyond session end.

To suppress this warning, create an empty ~/.cloudshell/no-apt-get-warning file.
The command will automatically proceed in 5 seconds or on any key.

Visit <https://cloud.google.com/shell/help> for more information.

Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
 python3-distlib python3-filelock python3-platformdirs python3-virtualenv python3-wheel-whl
Recommended packages:
 python3-distutils
The following NEW packages will be installed:
 python3-distlib python3-filelock python3-platformdirs python3-virtualenv python3-wheel-whl virtualenv
0 upgraded, 6 newly installed, 0 to remove and 2 not upgraded.
Need to get 486 kB of archives.
After this operation, 1,796 kB of additional disk space will be used.
Get:1 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-distlib all 0.3.8-1 [318 kB]
Get:2 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-filelock all 3.13.1-1 [10.8 kB]
Get:3 http://archive.ubuntu.com/ubuntu noble/main amd64 python3-platformdirs all 4.2.0-1 [16.1 kB]
Get:4 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-wheel-whl all 0.42.0-2 [67.8 kB]
Get:5 http://archive.ubuntu.com/ubuntu noble/universe amd64 python3-virtualenv all 20.25.0+ds-2 [70.8 kB]
Get:6 http://archive.ubuntu.com/ubuntu noble/universe amd64 virtualenv all 20.25.0+ds-2 [1,978 B]
Fetched 486 kB in 1s (358 kB/s)

9+ 14°C Mostly clear

Search

ENG IN

06:52 PM 26-12-2025

Dashboard – qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Fetched 486 kB in 1s (358 kB/s)
debconf: delaying package configuration, since apt-utils is not installed
Selecting previously unselected package python3-distlib.
(Reading database ... 130293 files and directories currently installed.)
Preparing to unpack .../0-python3-distlib_0.3.8-1_all.deb ...
Unpacking python3-distlib (0.3.8-1) ...
Selecting previously unselected package python3-filelock.
Preparing to unpack .../1-python3-filelock_3.13.1-1_all.deb ...
Unpacking python3-filelock (3.13.1-1) ...
Selecting previously unselected package python3-platformdirs.
Preparing to unpack .../2-python3-platformdirs_4.2.0-1_all.deb ...
Unpacking python3-platformdirs (4.2.0-1) ...
Selecting previously unselected package python3-wheel-whl.
Preparing to unpack .../3-python3-wheel-whl_0.42.0-2_all.deb ...
Unpacking python3-wheel-whl (0.42.0-2) ...
Selecting previously unselected package python3-virtualenv.
Preparing to unpack .../4-python3-virtualenv_20.25.0+ds-2_all.deb ...
Unpacking python3-virtualenv (20.25.0+ds-2) ...
Selecting previously unselected package virtualenv.
Preparing to unpack .../5-virtualenv_20.25.0+ds-2_all.deb ...
Unpacking virtualenv (20.25.0+ds-2) ...
Setting up python3-filelock (3.13.1-1) ...
Setting up python3-distlib (0.3.8-1) ...
Setting up python3-platformdirs (4.2.0-1) ...
Setting up python3-wheel-whl (0.42.0-2) ...
Setting up python3-virtualenv (20.25.0+ds-2) ...
Setting up virtualenv (20.25.0+ds-2) ...
Processing triggers for man-db (2.12.0-4build2) ...
student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)\$

9+ 14°C Mostly clear

Search

ENG IN

06:52 PM 26-12-2025

Dashboard – qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
Selecting previously unselected package python3-distlib.  
(Reading database ... 130293 files and directories currently installed.)  
Preparing to unpack .../0-python3-distlib_0.3.8-1_all.deb ...  
Unpacking python3-distlib (0.3.8-1) ...  
Selecting previously unselected package python3-filelock.  
Preparing to unpack .../1-python3-filelock_3.13.1-1_all.deb ...  
Unpacking python3-filelock (3.13.1-1) ...  
Selecting previously unselected package python3-platformdirs.  
Preparing to unpack .../2-python3-platformdirs_4.2.0-1_all.deb ...  
Unpacking python3-platformdirs (4.2.0-1) ...  
Selecting previously unselected package python3-wheel-whl.  
Preparing to unpack .../3-python3-wheel-whl_0.42.0-2_all.deb ...  
Unpacking python3-wheel-whl (0.42.0-2) ...  
Selecting previously unselected package python3-virtualenv.  
Preparing to unpack .../4-python3-virtualenv_20.25.0+ds-2_all.deb ...  
Unpacking python3-virtualenv (20.25.0+ds-2) ...  
Selecting previously unselected package virtualenv.  
Preparing to unpack .../5-virtualenv_20.25.0+ds-2_all.deb ...  
Unpacking virtualenv (20.25.0+ds-2) ...  
Setting up python3-filelock (3.13.1-1) ...  
Setting up python3-distlib (0.3.8-1) ...  
Setting up python3-platformdirs (4.2.0-1) ...  
Setting up python3-wheel-whl (0.42.0-2) ...  
Setting up python3-virtualenv (20.25.0+ds-2) ...  
Setting up virtualenv (20.25.0+ds-2) ...  
Processing triggers for man-db (2.12.0-4build2) ...  
student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$ python3 -m venv venv  
student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$ source venv/bin/activate  
(venv) student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$
```

9+ 14°C Mostly clear

Search

Cloud Shell

ENG IN

06:53 PM 26-12-2025



Contents

Pub/Sub: Qwik Start - Python

00:38:59
End Lab Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)

Task 2. Install the client library

- Run the following to install the client library:

```
pip install --upgrade google-cloud-pubsub
```

- Get the sample code by cloning a GitHub repository:

```
git clone https://github.com/googleapis/python-pubsub.git
```

- Navigate to the directory:

```
cd python-pubsub/samples/snippets
```

Task 3. Pub/Sub - the Basics

Lab instructions and tasks

0/100

GSP094

Overview

Setup and Requirements

Task 1. Create a virtual environment

Task 2. Install the client library

Task 3. Pub/Sub - the Basics

Task 4. Create a topic

Task 5. Create a subscription

Task 6. Publish messages

Task 7. View messages

Task 8. Take your

[Previous](#)[Next](#)

Dashboard - qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) + Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

(venv) student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)\$ pip install --upgrade google-cloud-pubsub

```
Collecting google-cloud-pubsub
  Downloading google_cloud_pubsub-2.34.0-py3-none-any.whl.metadata (10 kB)
Collecting grpcio<2.0.0,>=1.51.3 (from google-cloud-pubsub)
  Downloading grpcio-1.76.0-cp312-cp312-manylinux2014_x86_64.manylinux_2_17_x86_64.whl.metadata (3.7 kB)
Collecting google-auth<3.0.0,>=2.14.1 (from google-cloud-pubsub)
  Downloading google_auth-2.45.0-py2.py3-none-any.whl.metadata (6.8 kB)
Collecting google-api-core!=2.0.*,!=2.1.*,!=2.10.*,!=2.2.*,!=2.3.*,!=2.4.*,!=2.5.*,!=2.6.*,!=2.7.*,!=2.8.*,!=2.9.*,<3.0.0,>=1.34.0 (from google-api-core[grpc] !=2.0.*,!=2.1.*,!=2.10.*,!=2.2.*,!=2.3.*,!=2.4.*,!=2.5.*,!=2.6.*,!=2.7.*,!=2.8.*,!=2.9.*,<3.0.0,>=1.34.0->google-cloud-pubsub)
  Downloading google_api_core-2.28.1-py3-none-any.whl.metadata (3.3 kB)
Collecting proto-plus<2.0.0,>=1.22.0 (from google-cloud-pubsub)
  Downloading proto_plus-1.27.0-py3-none-any.whl.metadata (2.2 kB)
Collecting protobuf!=4.21.0,!=4.21.1,!=4.21.2,!=4.21.3,!=4.21.4,!=4.21.5,<7.0.0,>=3.20.2 (from google-cloud-pubsub)
  Downloading protobuf-6.33.2-cp39-abi3-manylinux2014_x86_64.whl.metadata (593 bytes)
Collecting grpc-google-iam-v1<1.0.0,>=0.12.4 (from google-cloud-pubsub)
  Downloading grpc_google_iam_v1-0.14.3-py3-none-any.whl.metadata (9.2 kB)
Collecting grpcio-status>=1.33.2 (from google-cloud-pubsub)
  Downloading grpcio_status-1.76.0-py3-none-any.whl.metadata (1.1 kB)
Collecting opentelemetry-api>=1.27.0 (from google-cloud-pubsub)
  Downloading opentelemetry_api-1.39.1-py3-none-any.whl.metadata (1.5 kB)
Collecting opentelemetry-sdk>=1.27.0 (from google-cloud-pubsub)
  Downloading opentelemetry_sdk-1.39.1-py3-none-any.whl.metadata (1.5 kB)
Collecting googleapis-common-protos<2.0.0,>=1.56.2 (from google-api-core!=2.0.*,!=2.1.*,!=2.10.*,!=2.2.*,!=2.3.*,!=2.4.*,!=2.5.*,!=2.6.*,!=2.7.*,!=2.8.*,!=2.9.*,<3.0.0,>=1.34.0->google-api-core[grpc] !=2.0.*,!=2.1.*,!=2.10.*,!=2.2.*,!=2.3.*,!=2.4.*,!=2.5.*,!=2.6.*,!=2.7.*,!=2.8.*,!=2.9.*,<3.0.0,>=1.34.0->google-cloud-pubsub)
  Downloading googleapis_common_protos-1.72.0-py3-none-any.whl.metadata (9.4 kB)
Collecting requests<3.0.0,>=2.18.0 (from google-api-core!=2.0.*,!=2.1.*,!=2.10.*,!=2.2.*,!=2.3.*,!=2.4.*,!=2.5.*,!=2.6.*,!=2.7.*,!=2.8.*,!=2.9.*,<3.0.0,>=1.34.0->google-api-core[grpc] !=2.0.*,!=2.1.*,!=2.10.*,!=2.2.*,!=2.3.*,!=2.4.*,!=2.5.*,!=2.6.*,!=2.7.*,!=2.8.*,!=2.9.*,<3.0.0,>=1.34.0->google-cloud-pubsub)
  Downloading requests-2.32.5-py3-none-any.whl.metadata (4.9 kB)
```

9+ 14°C Mostly clear

Search

Cloud Shell

ENG IN

06:54 PM 26-12-2025

Dashboard - qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```

Downloading importlib_metadata-8.7.1-py3-none-any.whl (27 kB)
Downloading pyasn1_modules-0.4.2-py3-none-any.whl (181 kB)
  181.3/181.3 kB 6.0 MB/s eta 0:00:00
Downloading requests-2.32.5-py3-none-any.whl (64 kB)
  64.7/64.7 kB 4.6 MB/s eta 0:00:00
Downloading rsa-4.9.1-py3-none-any.whl (34 kB)
Downloading typing_extensions-4.15.0-py3-none-any.whl (44 kB)
  44.6/44.6 kB 2.0 MB/s eta 0:00:00
Downloading certifi-2025.11.12-py3-none-any.whl (159 kB)
  159.4/159.4 kB 7.1 MB/s eta 0:00:00
Downloading charset_normalizer-3.4.4-cp312-cp312-manylinux2014_x86_64.manylinux_2_17_x86_64.manylinux_2_28_x86_64.whl (153 kB)
  153.5/153.5 kB 7.4 MB/s eta 0:00:00
Downloading idna-3.11-py3-none-any.whl (71 kB)
  71.0/71.0 kB 5.3 MB/s eta 0:00:00
Downloading pyasn1-0.6.1-py3-none-any.whl (83 kB)
  83.1/83.1 kB 6.2 MB/s eta 0:00:00
Downloading urllib3-2.6.2-py3-none-any.whl (131 kB)
  131.2/131.2 kB 9.1 MB/s eta 0:00:00
Downloading zipp-3.23.0-py3-none-any.whl (10 kB)
Installing collected packages: zipp, urllib3, typing-extensions, pyasn1, protobuf, idna, charset_normalizer, certifi, cachetools, rsa, requests, pyasn1-modules, proto-plus, importlib-metadata, grpcio, googleapis-common-protos, opentelemetry-api, grpcio-status, google-auth, opentelemetry-semantic-conventions, grpc-google-iam-v1, google-api-core, opentelemetry-sdk, google-cloud-pubsub
Successfully installed cachetools-6.2.4 certifi-2025.11.12 charset_normalizer-3.4.4 google-api-core-2.28.1 google-auth-2.45.0 google-cloud-pubsub-2.34.0 googleapis-common-protos-1.72.0 grpc-google-iam-v1-0.14.3 grpcio-1.76.0 grpcio-status-1.76.0 idna-3.11 importlib-metadata-8.7.1 opentelemetry-api-1.39.1 opentelemetry-sdk-1.39.1 opentelemetry-semantic-conventions-0.60b1 proto-plus-1.27.0 protobuf-6.33.2 pyasn1-0.6.1 pyasn1-modules-0.4.2 requests-2.32.5 rsa-4.9.1 typing-extensions-4.15.0 urllib3-2.6.2 zipp-3.23.0
(venv) student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$
(venv) student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$
(venv) student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$

```

9+ 14°C Mostly clear

Search

Cloud Shell Icons

ENG IN 06:54 PM 26-12-2025

Dashboard - qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
159.4/159.4 kB 7.1 MB/s eta 0:00:00
Downloading charset_normalizer-3.4.4-cp312-cp312-manylinux2014_x86_64.manylinux_2_17_x86_64.manylinux_2_28_x86_64.whl (153 kB)
153.5/153.5 kB 7.4 MB/s eta 0:00:00
Downloading idna-3.11-py3-none-any.whl (71 kB)
71.0/71.0 kB 5.3 MB/s eta 0:00:00
Downloading pyasn1-0.6.1-py3-none-any.whl (83 kB)
83.1/83.1 kB 6.2 MB/s eta 0:00:00
Downloading urllib3-2.6.2-py3-none-any.whl (131 kB)
131.2/131.2 kB 9.1 MB/s eta 0:00:00
Downloading zipp-3.23.0-py3-none-any.whl (10 kB)
Installing collected packages: zipp, urllib3, typing-extensions, pyasn1, protobuf, idna, charset_normalizer, certifi, cachetools, rsa, requests, pyasn1-modules, proto-plus, importlib-metadata, grpcio, googleapis-common-protos, opentelemetry-api, grpcio-status, google-auth, opentelemetry-semantic-conventions, grpc-google-iam-v1, google-api-core, opentelemetry-sdk, google-cloud-pubsub
Successfully installed cachetools-6.2.4 certifi-2025.11.12 charset_normalizer-3.4.4 google-api-core-2.28.1 google-auth-2.45.0 google-cloud-pubsub-2.34.0 googleapis-common-protos-1.72.0 grpc-google-iam-v1-0.14.3 grpcio-1.76.0 grpcio-status-1.76.0 idna-3.11 importlib-metadata-8.7.1 opentelemetry-api-1.39.1 open-telemetry-sdk-1.39.1 opentelemetry-semantic-conventions-0.60b1 proto-plus-1.27.0 protobuf-6.33.2 pyasn1-0.6.1 pyasn1-modules-0.4.2 requests-2.32.5 rsa-4.9.1 typing-extensions-4.15.0 urllib3-2.6.2 zipp-3.23.0
(venv) student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$
(venv) student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$
(venv) student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$ git clone https://github.com/googleapis/python-pubsub.git
Cloning into 'python-pubsub'...
remote: Enumerating objects: 14274, done.
remote: Counting objects: 100% (163/163), done.
remote: Compressing objects: 100% (80/80), done.
remote: Total 14274 (delta 119), reused 83 (delta 83), pack-reused 14111 (from 2)
Receiving objects: 100% (14274/14274), 6.33 MiB | 13.89 MiB/s, done.
Resolving deltas: 100% (9614/9614), done.
(venv) student_02_77569a450c62@cloudshell:~ (qwiklabs-gcp-03-fb33c6f20604)$ cd python-pubsub/samples/snippets
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$
```

9+ 14°C Mostly clear

Search

ENG IN

06:55 PM 26-12-2025



Contents

Pub/Sub: Qwik Start - Python

Dashboard

Catalog

Paths

Collections

00:36:42

End Lab

Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)

Task 4. Create a topic

To publish data to Pub/Sub you create a topic and then configure a publisher to the topic.

1. In Cloud Shell, your Project ID should automatically be stored in the environment variable `GOOGLE_CLOUD_PROJECT`:

```
echo $GOOGLE_CLOUD_PROJECT
```

2. Ensure the output is the same as the Project ID in your CONNECTION DETAILS.

`publisher.py` is a script that demonstrates how to perform basic operations on topics with the Cloud Pub/Sub API. View the content of publisher script:

```
cat publisher.py
```

Note: Alternatively, you can use the shell editors that are installed on Cloud Shell, such as nano or vim or use the Cloud Shell code editor to view `python-`

Lab instructions and tasks

0/100

GSP094

Overview

Setup and Requirements

Task 1. Create a virtual environment

Task 2. Install the client library

Task 3. Pub/Sub - the Basics

Task 4. Create a topic

Task 5. Create a subscription

Task 6. Publish messages

Task 7. View messages

Task 8. Topic viewer

[Previous](#)[Next](#)



Contents

Pub/Sub: Qwik Start - Python

00:36:34

Time limit

Dashboard

Catalog

Paths

Collections

Pub/Sub: Qwik Start - Python

`publisher.py` is a script that demonstrates how to perform basic operations on topics with the Cloud Pub/Sub API. View the content of publisher script:

`cat publisher.py`

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.

[Learn more.](#)[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)[Previous](#)

0/100

Lab instructions and tasks

GSP094

Overview

Setup and Requirements

Task 1. Create a virtual environment

Task 2. Install the client library

Task 3. Pub/Sub - the Basics

Task 4. Create a topic

Task 5. Create a subscription

Task 6. Publish messages

Task 7. View messages

Task 8. Topic viewer

3. For information about the publisher script:

`python publisher.py -h`*Example output:*

```
usage: publisher.py [-h]
                    project
                    {list,create,delete,publish,publish-with-custom-
                     attributes,publish-with-futures,publish-with-error-handler,publish-with-
```

[Next](#)



Contents

Pub/Sub: Qwik Start - Python

Dashboard

Catalog

Paths

Collections

00:36:27

Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)

Publishes multiple messages to a Pub/Sub topic with an error handler.
publish-with-batch-settings Publishes multiple messages to a Pub/Sub topic with batch settings.
optional arguments:
-h, --help show this help message and exit

4. Run the publisher script to create Pub/Sub Topic:

```
python publisher.py $GOOGLE_CLOUD_PROJECT create MyTopic
```

Example output:

```
Topic created: name: "projects/qwiklabs-gcp-fe27729bc161fb22/topics/MyTopic"
```

Test Completed Task

Lab instructions and tasks

0/100

GSP094

Overview

Setup and Requirements

Task 1. Create a virtual environment

Task 2. Install the client library

Task 3. Pub/Sub - the Basics

Task 4. Create a topic

Task 5. Create a subscription

Task 6. Publish messages

Task 7. View messages

Task 8. Test your

[Previous](#)[Next](#)

```
)  
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ python publisher.py -h  
usage: publisher.py [-h]  
                    project_id  
                    {list,create,pubsub-publish-otel-tracing,create_kinesis_ingestion,create_cloud_storage_ingestion,create_aws_msk_ingestion,create_azure_  
event_hubs_ingestion,create_confluent_cloud_ingestion,create_smt,update_kinesis_ingestion,delete,publish,publish-with-custom-attributes,publish-with-error-  
handler,publish-with-batch-settings,publish-with-flow-control,publish-with-retry-settings,publish-with-ordering-keys,resume-publish-with-ordering-keys,data-  
ch-subscription}
```

This application demonstrates how to perform basic operations on topics with the Cloud Pub/Sub API.

For more information, see the README.md under /pubsub and the documentation at <https://cloud.google.com/pubsub/docs>.

positional arguments:

list Lists all Pub/Sub topics in the given project

`create` Create a new Pub/Sub topic

pubsub-publish-otel-tracing

Publish to `topic_id` in `topic_project_id` with OpenTelemetry enabled. Export the OpenTelemetry traces to Google Cloud Trace in project `trace_project_id` Args: topic_project_id: project ID of the topic to publish to. trace_project_id: project ID to export Cloud Trace to. topic_id: topic ID to publish to. Returns: None

```
create_kinesis_ingestion
Create a new Pub/Sub topic with AWS Kinesis Ingestion Settings.
```

Dashboard - qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
Create a new Pub/Sub topic with Confluent Cloud Ingestion Settings.  
create_smt Create a new Pub/Sub topic with a UDF SMT.  
update_kinesis_ingestion Update Pub/Sub topic with AWS Kinesis Ingestion Settings.  
delete Deletes an existing Pub/Sub topic.  
publish Publishes multiple messages to a Pub/Sub topic.  
publish-with-custom-attributes Publishes multiple messages with custom attributes to a Pub/Sub topic.  
publish-with-error-handler Publishes multiple messages to a Pub/Sub topic with an error handler.  
publish-with-batch-settings Publishes multiple messages to a Pub/Sub topic with batch settings.  
publish-with-flow-control Publishes messages to a Pub/Sub topic with flow control settings.  
publish-with-retry-settings Publishes messages with custom retry settings.  
publish-with-ordering-keys Publishes messages with ordering keys.  
resume-publish-with-ordering-keys Resume publishing messages with ordering keys when unrecoverable errors occur.  
detach-subscription Detaches a subscription from a topic and drops all messages retained in it.  
  
options:  
-h, --help show this help message and exit  
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ python publisher.py $GOOGLE_CLOUD_PROJECT create MyTopic  
Created topic: projects/qwiklabs-gcp-03-fb33c6f20604/topics/MyTopic  
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$
```

9+ 14°C Mostly clear

Search

06:58 PM 26-12-2025

Dashboard - qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
publish-with-custom-attributes
    Publishes multiple messages with custom attributes to a Pub/Sub topic.
publish-with-error-handler
    Publishes multiple messages to a Pub/Sub topic with an error handler.
publish-with-batch-settings
    Publishes multiple messages to a Pub/Sub topic with batch settings.
publish-with-flow-control
    Publishes messages to a Pub/Sub topic with flow control settings.
publish-with-retry-settings
    Publishes messages with custom retry settings.
publish-with-ordering-keys
    Publishes messages with ordering keys.
resume-publish-with-ordering-keys
    Resume publishing messages with ordering keys when unrecoverable errors occur.
detach-subscription
    Detaches a subscription from a topic and drops all messages retained in it.

options:
-h, --help
    show this help message and exit
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ python publisher.py $GOOGLE_CLOUD_PROJECT create MyTopic
Created topic: projects/qwiklabs-gcp-03-fb33c6f20604/topics/MyTopic
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ python publisher.py $GOOGLE_CLOUD_PROJECT list
name: "projects/qwiklabs-gcp-03-fb33c6f20604/topics/MyTopic"
message_storage_policy {
    allowed_persistence_regions: "us-east1"
}

(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$
```

9+ 14°C Mostly clear

Search

06:59 PM 26-12-2025



Contents

Pub/Sub: Qwik Start - Python

Dashboard

Catalog

Paths

Collections

00:32:27
End Lab Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)

Task 5. Create a subscription

1. Create a Pub/Sub subscription for topic with `subscriber.py` script:

```
python subscriber.py $GOOGLE_CLOUD_PROJECT create MyTopic MySub
```



Test Completed Task

Click **Check my progress** to verify your performed task. If you have successfully created a Cloud Pub/Sub subscription, you will see an assessment score.

Create a subscription.

[Check my progress](#)

Assessment Completed! Subscription present in the topic.

2. This command returns a list of subscribers in given project:

100/100	Lab instructions and tasks
GSP094	
Overview	
Setup and Requirements	
Task 1. Create a virtual environment	
Task 2. Install the client library	
Task 3. Pub/Sub - the Basics	
Task 4. Create a topic	
Task 5. Create a subscription	
Task 6. Publish messages	
Task 7. View messages	
Task 8. Test your code	

[Previous](#)[Next](#)

Dashboard – qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud Project: qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) + Open Editor ⚙️ 🔍 ⌂ ⌃ ⌄ ⌅ ⌆ ⌇ ⌈ ⌉ ⌊ ⌋

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ python subscriber.py $GOOGLE_CLOUD_PROJECT create MyTopic MySub
Subscription created: name: "projects/qwiklabs-gcp-03-fb33c6f20604/subscriptions/MySub"
topic: "projects/qwiklabs-gcp-03-fb33c6f20604/topics/MyTopic"
push_config {
}
ack_deadline_seconds: 10
message_retention_duration {
    seconds: 604800
}
expiration_policy {
    ttl {
        seconds: 2678400
    }
}
state: ACTIVE

(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ █
```

9+ 14°C ENG IN 07:00 PM
Mostly clear

Search ⚙️ 🔍 ⌂ ⌃ ⌄ ⌅ ⌆ ⌇ ⌈ ⌉ ⌊ ⌋

07:00 PM 26-12-2025



Contents

Pub/Sub: Qwik Start - Python

00:32:10

Assessment Completed! Subscription present in the topic.

100/100

Lab instructions and tasks



Associate Cloud Engineer > Set Up an App Dev Environment on Google Cloud > Pub/Sub: Qwik Start - Python

2. This command returns a list of subscribers in given project:

```
python subscriber.py $GOOGLE_CLOUD_PROJECT list-in-project
```

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)

```
projects/qwiklabs-gcp-7877af129f04d8b3/subscriptions/MySub
```

3. Check out the subscription you just made in the console. In the left pane, click Subscriptions. You should see the subscription name and other details.

4. For information about the subscriber script:

```
python subscriber.py -h
```

GSP094

Overview

Setup and Requirements

Task 1. Create a virtual environment

Task 2. Install the client library

Task 3. Pub/Sub - the Basics

Task 4. Create a topic

Task 5. Create a subscription

Task 6. Publish messages

Task 7. View messages

Task 8. Take your

[Previous](#)[Next](#)

Dashboard – qwiklabs-gcp-03-fb X + – ○ X

<https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true> | 

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud  **qwiklabs-gcp-03-fb33c6f20604** Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal **(qwiklabs-gcp-03-fb33c6f20604)** + - Open Editor 

i Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#) Don't show again Dismiss

```
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ python subscriber.py $GOOGLE_CLOUD_PROJECT create MyTopic MySub
Subscription created: name: "projects/qwiklabs-gcp-03-fb33c6f20604/subscriptions/MySub"
topic: "projects/qwiklabs-gcp-03-fb33c6f20604/topics/MyTopic"
push_config {
}
ack_deadline_seconds: 10
message_retention_duration {
    seconds: 604800
}
expiration_policy {
    ttl {
        seconds: 2678400
    }
}
state: ACTIVE

(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ python subscriber.py $GOOGLE_CLOUD_PROJECT list-in-project
projects/qwiklabs-gcp-03-fb33c6f20604/subscriptions/MySub
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ █
```

9+ 14°C Mostly clear

 Search 

ENG IN 07:00 PM 26-12-2025 07:00 PM 26-12-2025

Dashboard - qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) + Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
in-project
projects/qwiklabs-gcp-03-fb33c6f20604/subscriptions/MySub
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ python subscriber.py -h
usage: subscriber.py [-h]
  project_id
    {list-in-topic,list-in-project,otel-subscribe,create,create-with-dead-letter-policy,create-push,create-push-no-wrapper,create-with-ordering,create-with-filtering,create-with-exactly-once,create-biquery,create-cloudstorage,create-with-smt,delete,update-push,update-dead-letter-policy,remove-dead-letter-policy,optimistic-subscribe,receive,receive-custom-attributes,receive-flow-control,receive-blocking-shutdown,receive-messages-with-exactly-once-delivery-enabled,receive-synchronously,receive-synchronously-with-lease,listen-for-errors,receive-messages-with-delivery-attempts,receive-messages-with-concurrency-control}
  ...
This application demonstrates how to perform basic operations on
subscriptions with the Cloud Pub/Sub API.

For more information, see the README.md under /pubsub and the documentation
at https://cloud.google.com/pubsub/docs.
```

positional arguments:

project_id	Your Google Cloud project ID {list-in-topic,list-in-project,otel-subscribe,create,create-with-dead-letter-policy,create-push,create-push-no-wrapper,create-with-ordering,create-with-filtering,create-with-exactly-once,create-biquery,create-cloudstorage,create-with-smt,delete,update-push,update-dead-letter-policy,remove-dead-letter-policy,optimistic-subscribe,receive,receive-custom-attributes,receive-flow-control,receive-blocking-shutdown,receive-messages-with-exactly-once-delivery-enabled,receive-synchronously,receive-synchronously-with-lease,listen-for-errors,receive-messages-with-delivery-attempts,receive-messages-with-concurrency-control}
list-in-topic	Lists all subscriptions for a given topic.
list-in-project	Lists all subscriptions in the current project.
otel-subscribe	Subscribe to `subscription_id` in `subscription_project_id` with OpenTelemetry enabled. Export the OpenTelemetry traces to Google Cloud Trace in project `trace_project_id` Args: subscription_project_id: project ID of the subscription. cloud_trace_project_id: project ID to export Cloud Trace to. subscription_id: subscription ID to subscribe from. timeout: time until which to subscribe

9+ 14°C Mostly clear

Search

07:00 PM 26-12-2025 ENG IN

Dashboard - qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case St... GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) + Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
update-dead-letter-policy
    Update a subscription's dead letter policy.
remove-dead-letter-policy
    Remove dead letter policy from a subscription.
optimistic-subscribe
    Optimistically subscribe to messages instead of making calls to verify existence of a subscription first and then subscribing to messages from it. This avoids admin operation calls to verify the existence of a subscription and reduces the probability of running out of quota for admin operations.
receive
    Receives messages from a pull subscription.
receive-custom-attributes
    Receives messages from a pull subscription.
receive-flow-control
    Receives messages from a pull subscription with flow control.
receive-blocking-shutdown
    Shuts down a pull subscription by awaiting message callbacks to complete.
receive-messages-with-exactly-once-delivery-enabled
    Receives messages from a pull subscription with exactly-once delivery enabled. This is a preview feature. For more details, see: https://cloud.google.com/pubsub/docs/exactly-once-delivery.
receive-synchronously
    Pulling messages synchronously.
receive-synchronously-with-lease
    Pulling messages synchronously with lease management
listen-for-errors
    Receives messages and catches errors from a pull subscription.
receive-messages-with-delivery-attempts
receive-messages-with-concurrency-control

options:
-h, --help
    show this help message and exit
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$
```

9+ 14°C Mostly clear

Search

07:00 PM 26-12-2025



Contents

Pub/Sub: Qwik Start - Python

Dashboard

Catalog

Paths

Collections

00:31:25
End Lab

Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)

Task 6. Publish messages

Now that you've set up `MyTopic` (the topic) and a subscription to `MyTopic` (`MySub`), use `gcloud` commands to publish a message to `MyTopic`.

1. Publish the message "Hello" to `MyTopic`:

```
gcloud pubsub topics publish MyTopic --message "Hello"
```

2. Publish a few more messages to `MyTopic`—run the following commands (replacing `<YOUR NAME>` with your name and `<FOOD>` with a food you like to eat):

```
gcloud pubsub topics publish MyTopic --message "Publisher's name is <YOUR NAME>"
```

```
gcloud pubsub topics publish MyTopic --message "Publisher likes to eat <FOOD>"
```

- 100/100
- Lab instructions and tasks
- GSP094
 - Overview
 - Setup and Requirements
 - Task 1. Create a virtual environment
 - Task 2. Install the client library
 - Task 3. Pub/Sub - the Basics
 - Task 4. Create a topic
 - Task 5. Create a subscription
 - Task 6. Publish messages
 - Task 7. View messages
 - Task 8. Take your

[Previous](#)[Next](#)



Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)

1. Publish the message "Hello" to MyTopic:

```
gcloud pubsub topics publish MyTopic --message "Hello"
```

2. Publish a few more messages to MyTopic—run the following commands (replacing <YOUR NAME> with your name and <FOOD> with a food you like to eat):

```
gcloud pubsub topics publish MyTopic --message "Publisher's name is <YOUR NAME>"
```

```
gcloud pubsub topics publish MyTopic --message "Publisher likes to eat <FOOD>"
```

```
gcloud pubsub topics publish MyTopic --message "Publisher thinks Pub/Sub is awesome"
```

100/100

Lab instructions and tasks

GSP094

Overview

Setup and Requirements

Task 1. Create a virtual environment

Task 2. Install the client library

Task 3. Pub/Sub - the Basics

Task 4. Create a topic

Task 5. Create a subscription

Task 6. Publish messages

Task 7. View messages

Task 8. Take your

[Previous](#)[Next](#)

Dashboard - qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud Project: qwiklabs-gcp-03-fb33c6f20604

Search (/) for resources, docs, products, and more

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604)

Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ gcloud pubsub topics publish MyTopic --message "Hello"  
messageIds:  
- '17622047709716461'  
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ gcloud pubsub topics publish MyTopic --message "Publisher's name is <YOUR NAME>"  
messageIds:  
- '17621407021242311'  
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ gcloud pubsub topics publish MyTopic --message "Publisher's name is stu23edv"  
messageIds:  
- '17622375832142544'  
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ gcloud pubsub topics publish MyTopic --message "Publisher likes to eat Pizza!!!!"  
gcloud pubsub topics publish MyTopic --message "Publisher likes to eat Pizza"  
gcloud pubsub topics publish MyTopic --message "Publisher's name is stu23edv"  
!"  
> gcloud pubsub topics publish MyTopic --message "Publisher likes to eat Pizza"  
gcloud pubsub topics publish MyTopic --message "Publisher's name is stu23edv"  
!!!^C  
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ gcloud pubsub topics publish MyTopic --message "Publisher likes to eat pizza"  
messageIds:  
- '17621813852389596'  
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ gcloud pubsub topics publish MyTopic --message "Publisher thinks Pub/Sub is awesome"  
messageIds:  
- '17622415374133415'  
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$
```

9+ 14°C Mostly clear

Search

Cloud Shell

ENG IN

07:02 PM 26-12-2025

Task 7. View messages

00:29:36
End Lab Time limit

Caution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)

[Open Google Cloud Console](#)

Username
student-02-77569a450c62

Password
1gd108qixhdc

Project ID
qwiklabs-gcp-03-fb33c6f

Student Resources
[Simplify Event Driven Processing](#)

Now that you've published messages to MyTopic, pull and view the messages using MySub.

1. Use MySub to pull the message from MyTopic:

```
python subscriber.py $GOOGLE_CLOUD_PROJECT receive MySub
```

Example output:

```
Listening for messages on projects/qwiklabs-gcp-  
7877af129f04d8b3/subscriptions/MySub  
Received message: Message {  
    data: 'Publisher thinks Pub/Sub is awesome'  
    attributes: {}  
}  
Received message: Message {  
    data: 'Hello'  
    attributes: {}  
}  
Received message: Message {
```

- 100/100
- Lab instructions and tasks
- GSP094
 - Overview
 - Setup and Requirements
 - Task 1. Create a virtual environment
 - Task 2. Install the client library
 - Task 3. Pub/Sub - the Basics
 - Task 4. Create a topic
 - Task 5. Create a subscription
 - Task 6. Publish messages
 - Task 7. View messages
 - Task 8. Take your

[Previous](#)[Next](#)

Dashboard - qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud qwiklabs-gcp-03-fb33c6f20604 Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal (qwiklabs-gcp-03-fb33c6f20604) + Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
update-dead-letter-policy
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ gcloud pubsub topics publish MyTopic --message "
(venv) student_02_77569a450c62@cloudshell:~/python-pubsub/samples/snippets (qwiklabs-gcp-03-fb33c6f20604)$ python subscriber.py $GOOGLE_CLOUD_PROJECT receive MySub
Listening for messages on projects/qwiklabs-gcp-03-fb33c6f20604/subscriptions/MySub..

Received Message {
  data: b"Publisher's name is stu23edv"
  ordering_key: ''
  attributes: {}
}.
Received Message {
  data: b"Publisher's name is <YOUR NAME>"
  ordering_key: ''
  attributes: {}
}.
Received Message {
  data: b'Publisher likes to eat pizza'
  ordering_key: ''
  attributes: {}
}.
Received Message {
  data: b'Hello'
  ordering_key: ''
  attributes: {}
}.
Received Message {
  data: b'Publisher thinks Pub/Sub is awesome'
  ordering_key: ''
```

9+ 14°C Mostly clear

Search

Cloud Shell Icons

ENG IN 07:03 PM 26-12-2025

Dashboard – qwiklabs-gcp-03-fb

https://console.cloud.google.com/home/dashboard?project=qwiklabs-gcp-03-fb33c6f20604&pli=1&cloudshell=true

Free AI Paraphrasing... Transcript of Case Study GCP-LAB Hydra datawarehouse Products

Google Cloud Terminal (qwiklabs-gcp-03-fb33c6f20604) Search (/) for resources, docs, products, and more Search

CLOUD SHELL Terminal Open Editor

Gemini CLI is available in Cloud Shell terminal! Type gemini to try it. [Learn more](#)

Don't show again Dismiss

```
ve MySub
Listening for messages on projects/qwiklabs-gcp-03-fb33c6f20604/subscriptions/MySub..

Received Message {
  data: b"Publisher's name is stu23edv"
  ordering_key: ''
  attributes: {}
}.
Received Message {
  data: b"Publisher's name is <YOUR NAME>"
  ordering_key: ''
  attributes: {}
}.
Received Message {
  data: b'Publisher likes to eat pizza'
  ordering_key: ''
  attributes: {}
}.
Received Message {
  data: b'Hello'
  ordering_key: ''
  attributes: {}
}.
Received Message {
  data: b'Publisher thinks Pub/Sub is awesome'
  ordering_key: ''
  attributes: {}
}.
```

9+ 14°C Mostly clear

Search

07:03 PM 26-12-2025



Contents

Pub/Sub: Qwik Start - Python

Dashboard

Catalog

Paths

Collections

00:28:06
End Lab
Time limitCaution: When you are in the console, do not deviate from the lab instructions. Doing so may cause your account to be blocked.
[Learn more.](#)[Open Google Cloud Console](#)

Username

student-02-77569a450c62



Password

1gd108qixhdc



Project ID

qwiklabs-gcp-03-fb33c6f



Student Resources

[Simplify Event Driven Processing](#)

Task 8. Test your understanding

Below are multiple-choice questions to reinforce your understanding of this lab's concepts. Answer them to the best of your abilities.

Google Cloud Pub/Sub service allows applications to exchange messages reliably, quickly, and asynchronously.

 True False

A _____ is a shared string that allows applications to connect with one another.

 subscription message

Setup and Requirements 100/100

Task 1. Create a virtual environment

Task 2. Install the client library

Task 3. Pub/Sub - the Basics

Task 4. Create a topic

Task 5. Create a subscription

Task 6. Publish messages

Task 7. View messages

Task 8. Test your understanding

Congratulations!

[Previous](#)[Next](#)

Contents
Pub/Sub: Qwik Start - Python

messages reliably, quickly, and asynchronously.

 True False

A _____ is a shared string that allows applications to connect with one another.

 subscription message topicSubmit

Setup and Requirements 100/100

Task 1. Create a virtual environment

Task 2. Install the client library

Task 3. Pub/Sub - the Basics

Task 4. Create a topic

Task 5. Create a subscription

Task 6. Publish messages

Task 7. View messages

Task 8. Test your understanding

Congratulations!

Congratulations!PreviousNext