

Python Quickstartbookmark_border

 cloud.google.com/functions/docs/quickstart-python

Cloud Functions is a serverless execution environment for building and connecting cloud services. With Cloud Functions you write simple, single-purpose functions that are attached to events emitted from your cloud infrastructure and services. Your function is triggered when an event being watched is fired.

This page shows you how to create and deploy a Python Cloud Function using the Cloud Console. When this function is triggered by an HTTP request, it writes a message:

```
def hello_world(request):
    """Responds to any HTTP request.
    Args:
        request (flask.Request): HTTP request object.
    Returns:
        The response text or any set of values that can be turned into a
        Response object using
        `make_response`
    <https://flask.palletsprojects.com/en/1.1.x/api/#flask.Flask.make_response>`.
    """
    request_json = request.get_json()
    if request.args and 'message' in request.args:
        return request.args.get('message')
    elif request_json and 'message' in request_json:
        return request_json['message']
    else:
        return f'Hello World!'
```

Note: To learn how to write a Cloud Function from scratch and use the `gcloud` command-line tool to deploy and test it, see [Your First Function: Python](#).

Before you begin

1. In the Google Cloud Console, on the project selector page, select or create a Google Cloud project.

Note: If you don't plan to keep the resources that you create in this procedure, create a project instead of selecting an existing project. After you finish these steps, you can delete the project, removing all resources associated with the project.

[Go to project selector](#)

2. Make sure that billing is enabled for your Cloud project. [Learn how to confirm that billing is enabled for your project](#).
3. Enable the Cloud Functions and Cloud Build APIs.
[Enable the APIs](#)

Create a function

1. Open the Functions Overview page in the Cloud Console:

Go to the Cloud Functions Overview page

Make sure that the project for which you **enabled Cloud Functions** is selected.

2. Click **Create function**.
3. Name your function.
4. In the **Trigger** field, select **HTTP**.
5. In the **Authentication** field, select **Allow unauthenticated invocations**.
6. Click **Save** to save your changes, and then click **Next**.
7. In the **Source code** field, select **Inline editor**. In this exercise, you will use the default function provided in the editor.
8. Use the **Runtime** dropdown to select the desired Python runtime.

Deploy the function

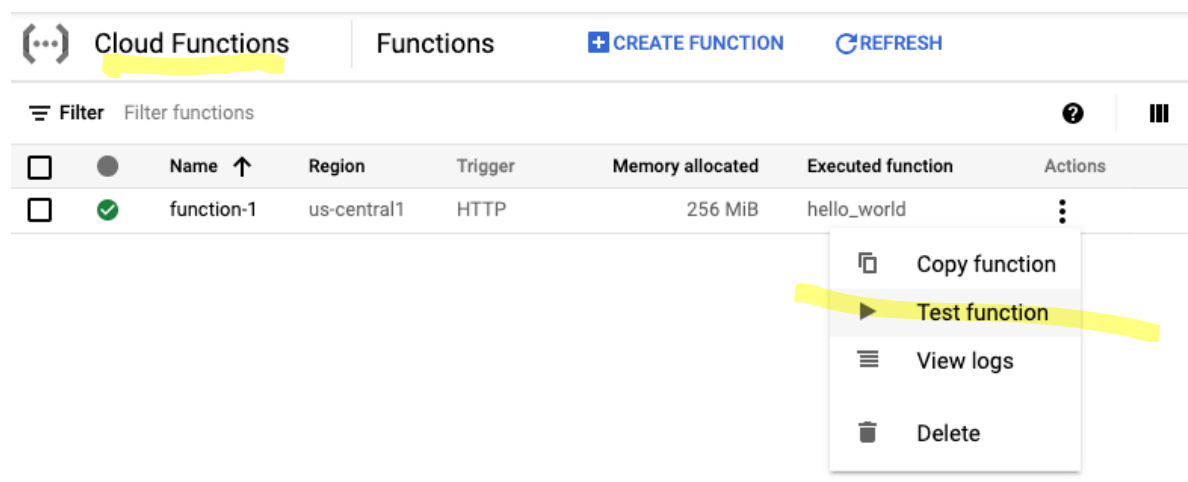
1. At the bottom of the page, click **Deploy**.
2. After clicking **Deploy**, Cloud Console redirects to the Cloud Functions Overview page.

While the function is being deployed, the icon next to it is a small spinner. After it finishes deploying, the spinner turns to a green check mark:

Cloud Functions		Functions		+ CREATE FUNCTION		REFRESH	
Filter		Filter functions					
<input type="checkbox"/>	<input type="radio"/>	Name ↑	Region	Trigger	Memory allocated	Executed function	Actions
<input type="checkbox"/>	<input checked="" type="radio"/>	function-1	us-central1	HTTP	256 MiB	hello_world	⋮

Test the function

1. Display the menu for your function, and click **Test function**.



2. On the testing page, click **Test the function**.

The **Output** screen displays the text `"Hello World!"`

3. Now change the message. In the **Triggering Event** field, enter the text `{"message": "Hello, YOUR_NAME!"}`, replacing `YOUR_NAME` with a name, and click **Test the function**.

For example, suppose you entered the name "Rowan". In the **Output** field, you would see the message `Hello, Rowan!`.

In the **Logs** field, a status code of 200 indicates success.

Logs  Fetched (up to 100 entries). [View all logs](#)

 	2021-02-13T03:12:35.596209761Z	function-1	g6o0swoxmqb8	Function execution started
 	2021-02-13T03:12:35.797879235Z	function-1	g6o0swoxmqb8	Function execution took 203 ms, finished with status code: 200

View logs

Check the logs to see your actions in the log history:

Back on the Cloud Functions Overview page, display the menu for your function, and click **View logs**.

Your log history appears.

Query preview

resource.type="cloud_function" resource.labels.function_name="function-1" reso...

Save

Stream logs

Run query

Query results

Jump to now

Actions

Configure

SEVERITY	TIMESTAMP	PST	SUMMARY
<div> <div></div> <div>To view more results, expand the time range for this query.</div> <div>Extend time by: 1 hour</div> <div>Edit time</div> </div>			
> i	2021-02-12 19:02:45.838 PST	IAM	cloudfunctions.googleapis.com ...
> i	2021-02-12 19:02:47.448 PST	IAM	cloudfunctions.googleapis.com ...
> i	2021-02-12 19:04:50.182 PST	IAM	cloudfunctions.googleapis.com ...
> i	2021-02-12 19:05:51.461 PST	IAM	cloudfunctions.googleapis.com ...
> i	2021-02-12 19:12:35.596 PST	function-1 g6o8swoxmqb8	Function execution started
> i	2021-02-12 19:12:35.797 PST	function-1 g6o8swoxmqb8	Function execution took 203 ms, finished with status code: 200

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