

Serverless Cloud Function

Getting Started

Product Documentation



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Getting Started

Creating Event Function in Console

Last updated : 2023-02-01 17:37:37

This document describes how to quickly create an event-triggered function in the console.

Compared with event-triggered functions, the HTTP-triggered functions provided by SCF focus more on optimizing web services. Click [here](#) to understand and quickly create an HTTP-triggered function.

Step 1. Sign up for a Tencent Cloud account

If you already have a Tencent Cloud account, ignore this step.

[Sign Up for Tencent Cloud](#)

Step 2: Topping Up Online

New SCF users are entitled to a certain monthly free tier of resource usage and invocations within three months of activation. SCF can be billed in a prepaid (subscription package) or postpaid (pay-as-you-go) manner. If you need to use other postpaid Tencent Cloud resources, top up your account first as instructed in [Payment Methods](#) before making purchases.

Step 3. Authorizing TKE

Log in to the [Tencent Cloud console](#), select **Products** > **Serverless Cloud Function** to enter the SCF console, and follow the prompts to authorize SCF. (If you have already authorized SCF, skip this step.)

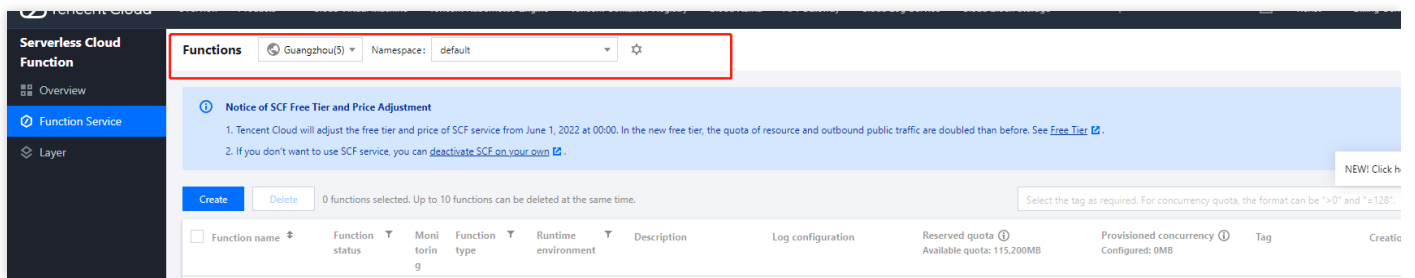
[Click here to authorize](#)

Step 4. Create a function

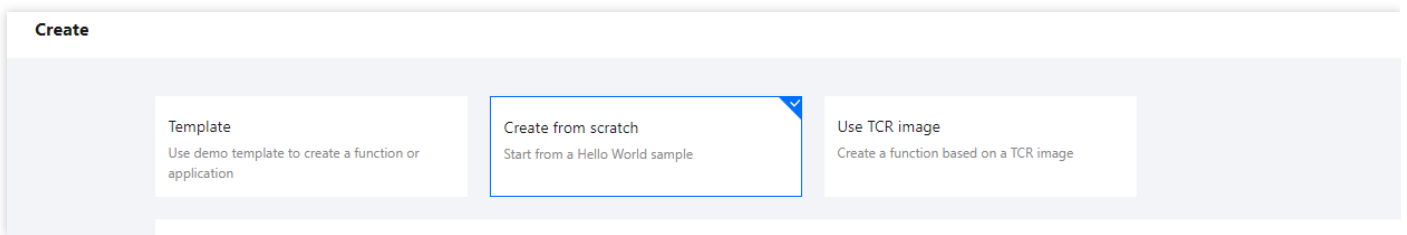
[Click here to enter the](#)

1. Click **Function Service** on the left sidebar to enter the **Function Service** page.

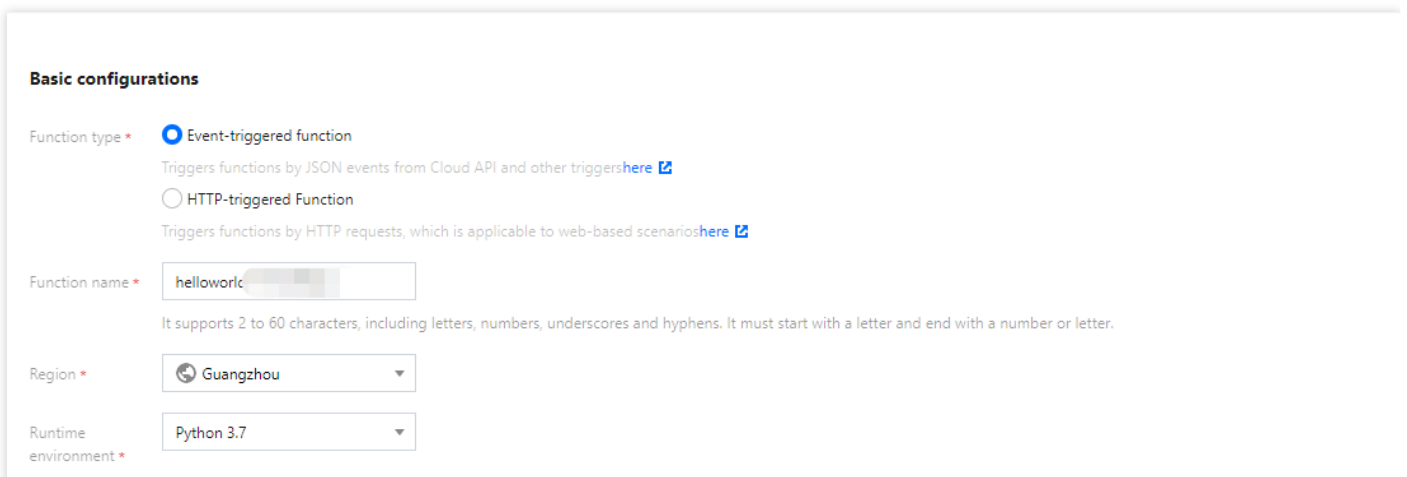
2. Select **Guangzhou** at the top of the page and click **Create** as shown below:



3. On the **Create function** page, select **Create from scratch** as shown below:



4. Configure the basic information of the function as shown below:



- **Function type:** Select **Event-triggered function**.
- **Function name:** The function name is automatically populated by default and can be modified as needed.
- **Region:** The region is automatically populated by default and can be modified as needed.
- **Runtime environment:** **Python 3.7** is automatically populated by default and can be modified as needed.
- **Time zone:** SCF uses the UTC time by default, which you can modify by configuring the `TZ` environment variable. After you select a time zone, the `TZ` environment variable corresponding to the time zone will be added automatically.

5. Keep the default options for **Function codes**, **Log configuration**, and **Advanced configuration**.

6. Select **Create trigger** > **Custom** to create a trigger as shown below:

Trigger configurations

Create trigger Tencent Cloud CMQ will be discontinued by June 2022. No more CMQ triggers can be created. Existing CMQ triggers are not affected. For details, see [CMQ Documentation](#).

Custom

Triggered alias/version

Trigger method

For API gateway triggers, the format of contents returned from SCF should be constructed in integration response method. For details, please see [here](#).

API service type Create API service Use an existing API service

API Service

Request method

Publishing environment

Authentication method

Integration response Enable

Base64 encoding Enable

Tag Enable
 Follow the function
 Custom tags

Create later

- **Trigger method:** Select **API Gateway trigger**.
- **Integration Response:** Deselect **Enable integration response**.
Keep the default options for other parameter.

7. Click **Complete**. You can view the created function on the [Functions](#) page.

Step 5. Test in the cloud

- Function deployment test
- Trigger configuration test

On the **Function Management** page, select **Function code** and click **Test** to run the code with the test result returned as shown below:

Function management version: \$LATEST | Operation ▾

Function configuration **Function Codes** Layer Management Monitoring Information Log Query

Submitting Method Online editing ▾ Execution index.main_handler Runtime Environment Python2.7 [Development Tutorial of Python2.7](#) Download ▾

Cloud Studio Edit Selection View Go Terminal Help Test Template: Hello World event template **Test** Deploy ▾

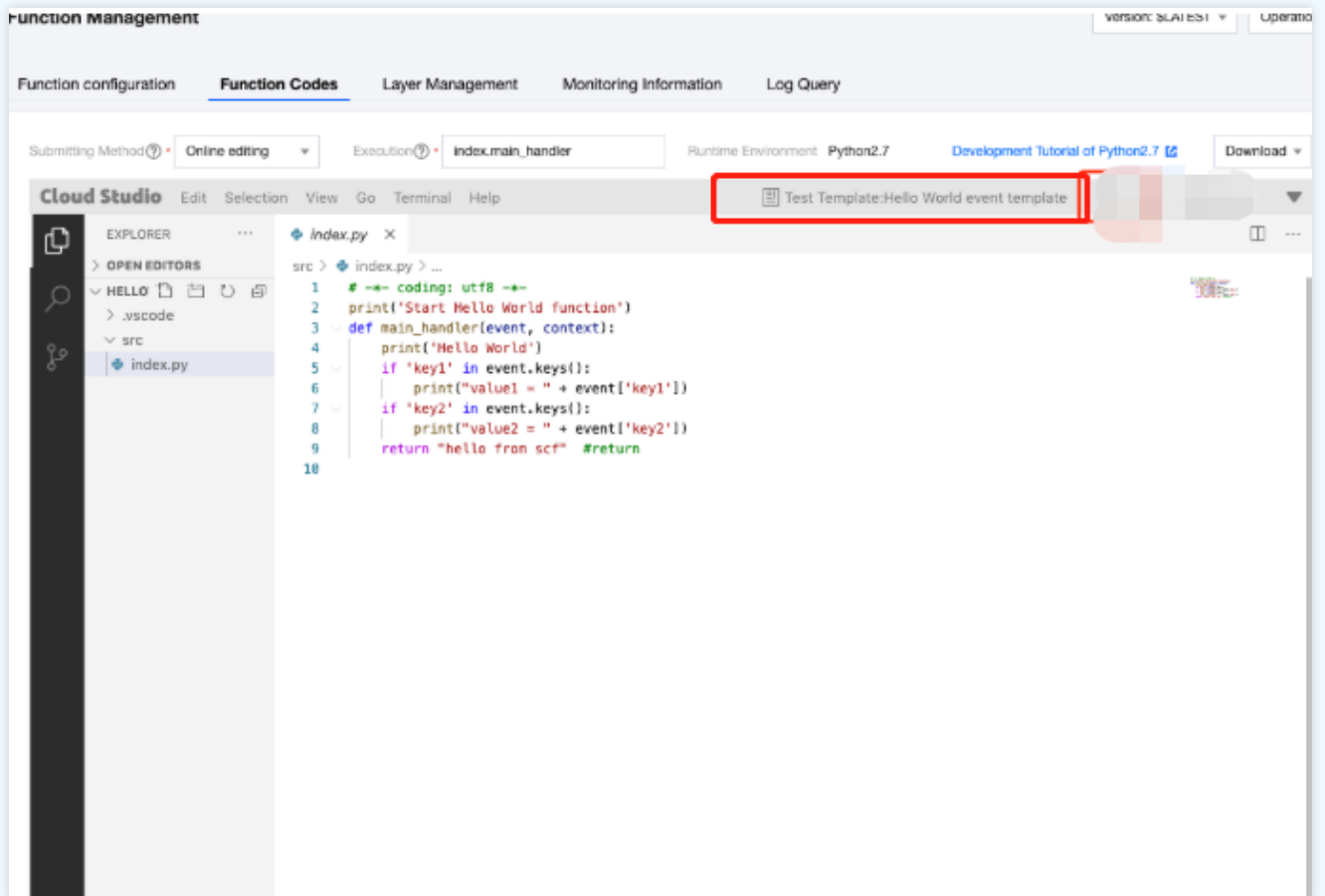
```
src > index.py > ...
1  # -*- coding: utf8 -*-
2  print('Start Hello World function')
3  def main_handler(event, context):
4      print('Hello World')
5      if 'key1' in event.keys():
6          print("value1 = " + event['key1'])
7      if 'key2' in event.keys():
8          print("value2 = " + event['key2'])
9      return "hello from scf" #return
10
```

Python 2.7.13 64-bit 0 0 Auto-deployment: Off Ln 1, Col 1 Spaces: 4 LF Python Layout: U.S.

Deploy Test [Switch to Old Editor](#) [Editor Instructions](#)

Note

- If you need to replace the test template or its content, you can directly edit the function content or select **Current test template**, replace it, and then click **Save** as shown below:



- Different test templates simulate different trigger message sources, and the messages passed between different triggers and SCF are data structures agreed upon in advance. For more information, see [Trigger Overview](#).

The following information will appear:

Execution Summary ✔ Successful test

Request ID: `cf99a03b-1a51-...`

Runtime `1ms` Execution memory `20.2421875MB`

Returned result 📄

`"hello from scf"`

Execution log

START RequestId: `cf99a03b-1a51-...`

Event RequestId: `cf99a03b-1a51-...`

Start Hello World function

Hello World

value1 = test value 1

value2 = test value 2

END RequestId: `cf99a03b-1a51-4...`

Report RequestId: `cf99a03b-1a51-4d2a-...` - Duration:1ms Memory:128MB MemUsage:20.2422MB

During this test, SCF will get the data structures of the "Hello World event template" in the `event` parameter of the `main_handler`.

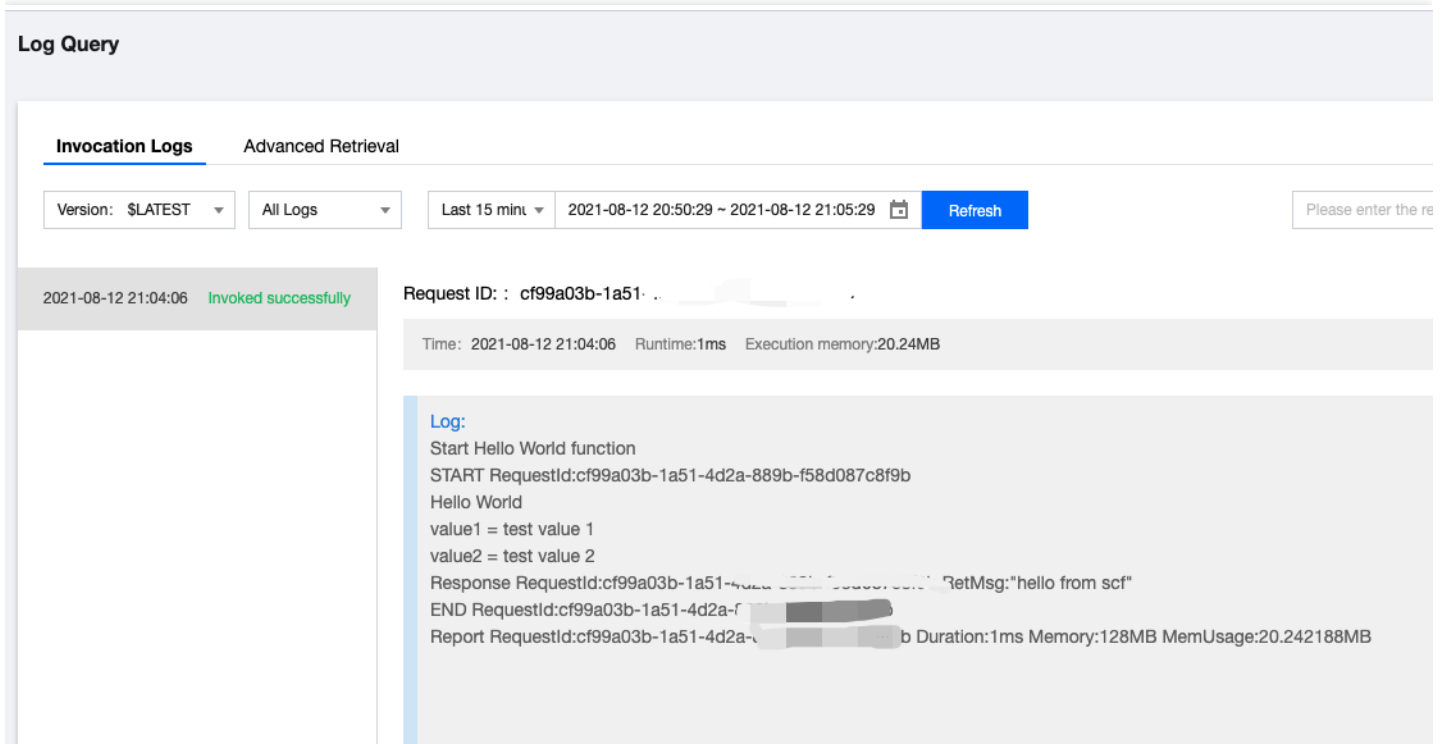
```
{
  "key1": "test value 1",
  "key2": "test value 2"
}
```

Step 6. View logs and monitoring data

- View logs
- View monitoring data

- Configure alarms

On the details page of a created function, select **Log Query** on the left to view the detailed logs of the function as shown below:



Log Query

Invocation Logs Advanced Retrieval

Version: \$LATEST All Logs Last 15 min 2021-08-12 20:50:29 ~ 2021-08-12 21:05:29 Refresh Please enter the re

2021-08-12 21:04:06 Invoked successfully

Request ID : cf99a03b-1a51-...

Time: 2021-08-12 21:04:06 Runtime:1ms Execution memory:20.24MB

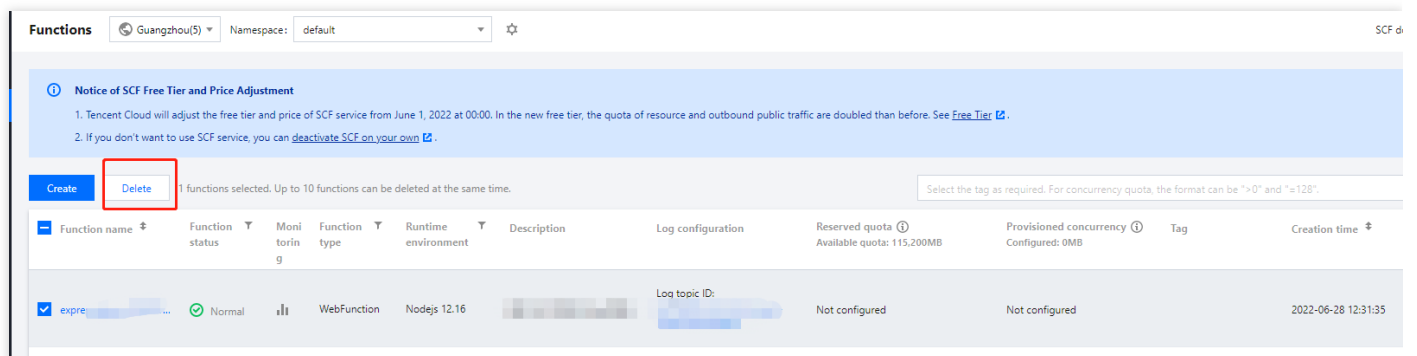
Log:
Start Hello World function
START RequestId:cf99a03b-1a51-4d2a-889b-f58d087c8f9b
Hello World
value1 = test value 1
value2 = test value 2
Response RequestId:cf99a03b-1a51-4d2a-889b-f58d087c8f9b RetMsg:"hello from scf"
END RequestId:cf99a03b-1a51-4d2a-889b-f58d087c8f9b
Report RequestId:cf99a03b-1a51-4d2a-889b-f58d087c8f9b Duration:1ms Memory:128MB MemUsage:20.242188MB

For more information on logs, see [Viewing Execution Logs](#).

Step 7. Delete the function

After the function starts running, it consumes resources. In order to avoid unnecessary fees, this step shows you how to clear all resources.

1. Select **Functions** on the left sidebar, select the function to be deleted, and click **Delete** as shown below:



Functions Guangzhou(5) Namespace: default SCF d

Notice of SCF Free Tier and Price Adjustment
1. Tencent Cloud will adjust the free tier and price of SCF service from June 1, 2022 at 00:00. In the new free tier, the quota of resource and outbound public traffic are doubled than before. See [Free Tier](#).
2. If you don't want to use SCF service, you can [deactivate SCF on your own](#).

Create **Delete** 1 functions selected. Up to 10 functions can be deleted at the same time. Select the tag as required. For concurrency quota, the format can be ">0" and "=128".

| Function name | Function status | Monitoring | Function type | Runtime environment | Description | Log configuration | Reserved quota Available quota: 115,200MB | Provisioned concurrency Configured: 0MB | Tag | Creation time |
|---------------|-----------------|------------|---------------|---------------------|-------------|-------------------|--|--|-----|---------------------|
| ☑️ expre... | 🟢 Normal | 📊 | WebFunction | Nodejs 12.16 | | Log topic ID: ... | Not configured | Not configured | | 2022-06-28 12:31:35 |

2. Confirm the information in the **Delete Function** pop-up window and click **OK**.

FAQs

See [General](#) for solutions.

If the problem persists, [submit a ticket](#) for assistance.

Creating Function with Serverless Cloud Framework

Last updated : 2023-05-05 15:38:06

Scenario

This document describes how to use the SCF component provided by Serverless Cloud Framework to create and deploy an SCF project. For more information, see [Components Overview](#).

Prerequisites

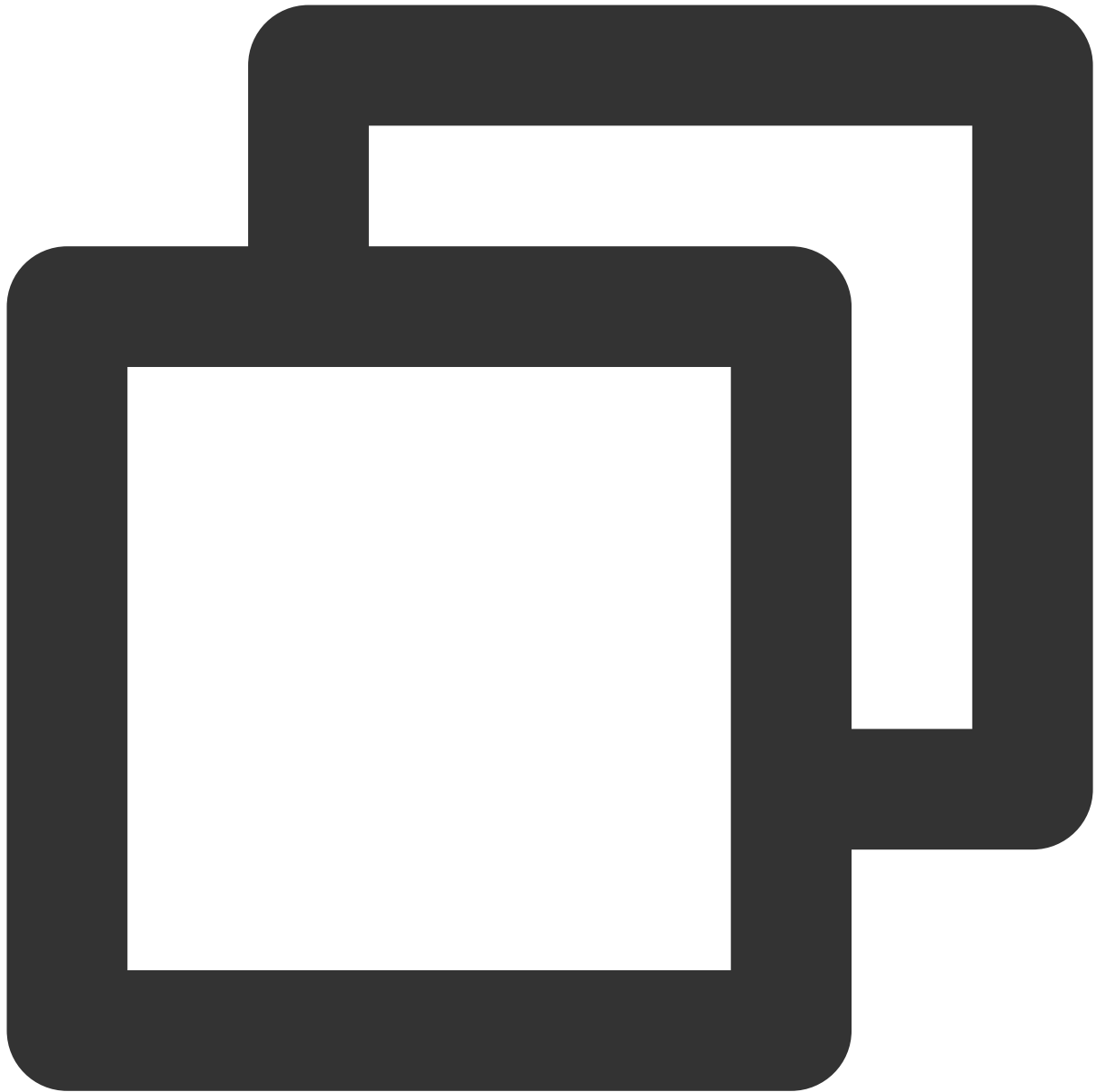
Install Serverless Cloud Framework. For more information, see [Installation](#).

Your account has the Serverless Framework permissions. For more information, see [Permission Management](#).

Directions

Creating a function

Run the following command to create a function in the Node.js language:



```
scf init scf-nodejs --name example
```

Note:

`scf-nodejs` in the command can be replaced with a template for another programming language. SCF supports the following components: `scf-golang`, `scf-nodejs`, `scf-php`, and `scf-python`.

Deploying the function

Run the following command in the `scf-demo` directory to deploy the function:



```
scf deploy
```

A QR code will pop up. Please scan it to authorize and start deployment. After successful deployment, SCF resources will be automatically created.

Note

If authentication fails, authorize as instructed in [Account and Permission Configuration](#).

View function information

Run the following command to view the information of the deployed SCF resources:



```
scf info
```

Removing function

Run the following command to remove the deployed SCF resources:



```
scf remove
```

Relevant Features

To use Serverless Cloud Framework to manipulate SCF functions, see ****Serverless Cloud Framework [Overview](#)****. Serverless Web IDE is a browser-based integrated development environment. It delivers an on-cloud development experience comparable to native IDEs. For more information on its features for SCF, see [Serverless Web IDE](#).

The SCF SDK integrates function business flow APIs, which simplifies the invocation of functions. For more information on its feature for functions, see [SDK for Python](#) and [Node.js SDK](#).