

Content Delivery Network

Best Practice

Product Documentation



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CDN - CVM

Overview

Last updated : 2020-08-17 11:48:33

This document describes how to use Tencent Cloud CDN to accelerate access to CVM.

Content Delivery Network (CDN)

By delivering resources to high numbers of globally deployed cache nodes and leveraging Tencent's independently developed GSLB scheduling system, CDN enables nearby access to required resources for end users. This reduces access delays caused by network congestion, distance, and ISP issues and effectively improves the download speed, responsiveness, and user experience.

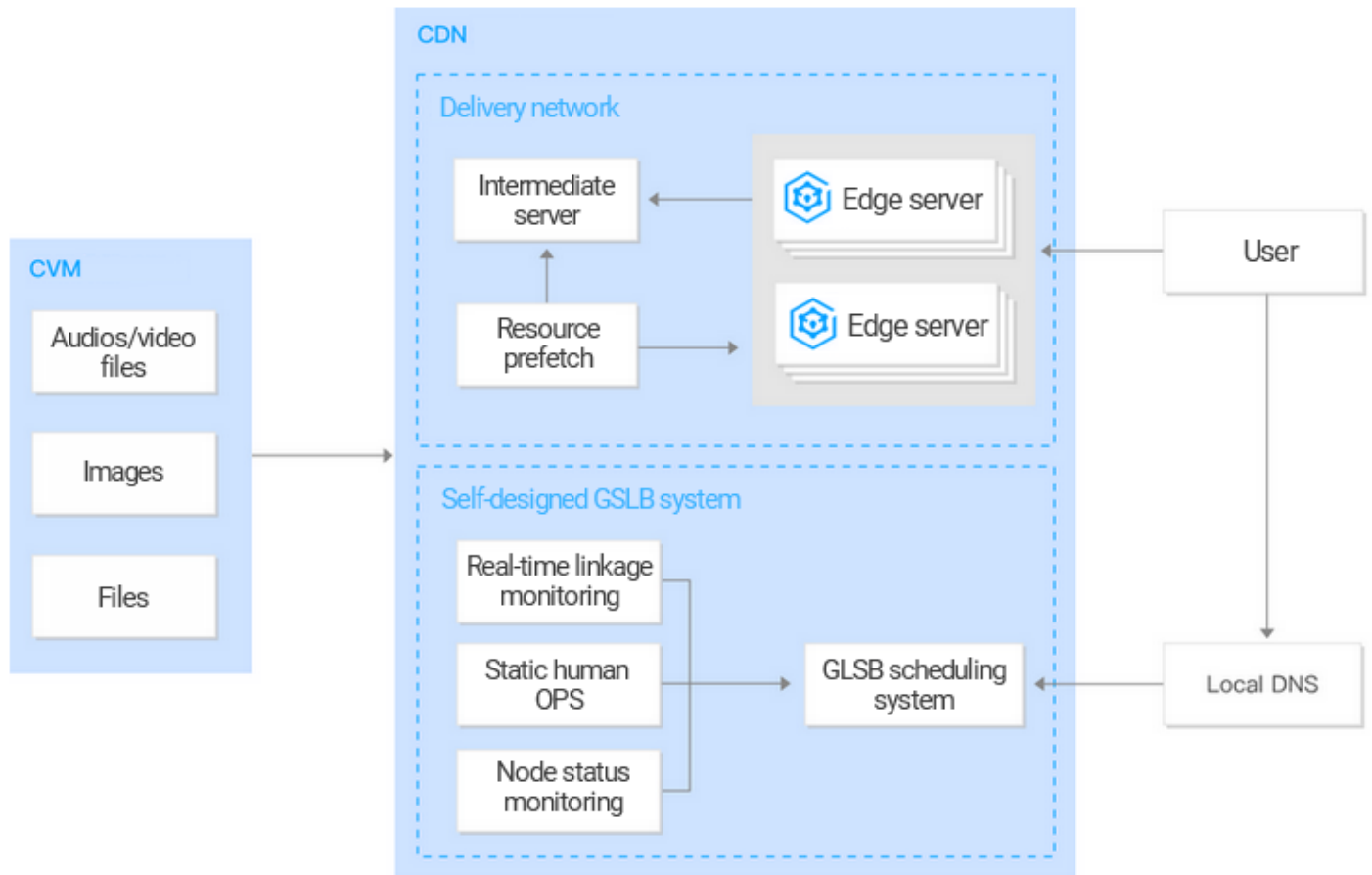
Cloud Virtual Machine (CVM)

CVM provides scalable virtual computing resources in the cloud. You can launch CVM instances on different operating systems and load them into your custom application environment. As your business needs change, you can scale your computing resources in real time and adjust your CVM instance specifications accordingly.

Content Delivery Practices

CDN can accelerate global delivery of static resources such as massive amounts of audio/video files, images, and files stored in CVM. With CDN's global cache nodes and scheduling capabilities, frequently requested resources can be delivered to edge servers in advance. When they are accessed or downloaded by end users, the cached resources on a nearby node will be returned.

CDN acceleration for CVM not only reduces the pressure on the origin server, transfer delay, and bandwidth costs, but also significantly improves the service availability.



⚠ Note :

Tencent Cloud Enterprise Content Delivery Network (ECDN) can be used to accelerate the delivery of dynamic/static resources or dynamic resources stored in CVM.

Implementation

CDN acceleration can be implemented for CVM in the following way:

Bind the CDN acceleration domain name to the CVM domain name or IP address and enable the CDN acceleration service. For detailed directions, please see [Implementation via CDN Console](#).

Via CDN Console

Last updated : 2020-08-21 14:09:31

This document describes how to accelerate access to CVM instances through CDN in the console.

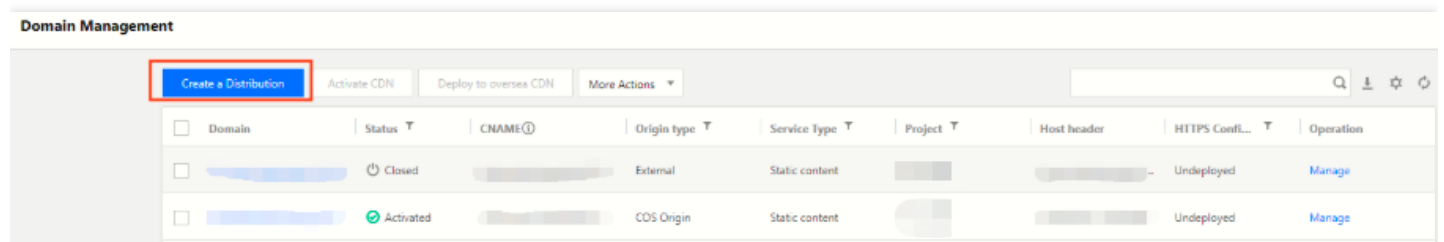
Prerequisites

1. You have signed up for a Tencent Cloud account and verified your identity.
2. You have activated the CVM service. For more information, please see [Getting started with CVM](#).

Operation Guide

Adding a domain name

Log in to the [CDN Console](#), click **Domain Management** on the left sidebar to enter the domain name management page, and click **Create Distribution**.



Configuring the domain name

Domain Configuration

Domain

The origin of service domains must be the same

Project

Origin Type

IPv6 NEW

Origin Settings

Enter multiple origin server IPs (one per line) or ONE domain; supported ports: 0-65535

1. Enter the **domain name** to be accelerated.

Wildcard domain names are supported, such as `*.test.com`. Up to 10 domain names can be connected in batches in one single operation.

The domain name should meet the following conditions:

- ICP filing for services in Mainland China has been obtained from the MIIT for the domain name
- The domain name has never been connected to Tencent Cloud CDN

2. Select the **project** of the domain name.

The project is shared by all Tencent Cloud products. You can add a project in [Project Management](#).

3. Select **Origin Server Type** and enter the **Origin Server Configuration**.

For more information on origin server types, please see [Connecting domain names to CDN](#).

Enter your **CVM public network address** in the origin server settings.

Configuring the acceleration service

Based on your business needs, select **Business Type** and set **Basic Configuration** and **Cache Expiration Configuration**.

Acceleration Service ConfigurationsService Type

The business type cannot be modified once confirmed. Please double check it before continuing.

Basic Configuration Ignore query string ⓘ

Cache Rules

Type	Content	Purge Time	Operation
All	All contents	<input type="text" value="30"/>	
<input type="text" value="File ext"/>	<input type="text" value=".php;.jsp;.asp;.as"/>	<input type="text" value="0"/> ...	Delete
<input type="button" value="Add"/>			

1. Business Type

The business type determines the resource platform to be scheduled by the domain name. The acceleration configuration varies by resource platform. Please select a business type based on your business conditions:

- Static acceleration: Suitable for static resource acceleration scenarios such as ecommerce, websites, and gaming images.
- Download acceleration: Suitable for scenarios such as game installations, audio/video downloads, and mobile phone firmware package distribution.
- Streaming VOD acceleration: Suitable for VOD acceleration scenarios.

2. Basic Configuration

CDN provides the Ignore Query String switch, which allows you to control whether to filter parameters after "?" in end users' request URLs. You can use this feature for flexible version control or token-based authentication. For more information, please see [Ignore query string configuration](#).

3. Cache expiration configuration

Cache expiration configuration refers to the set of expiration rules that CDN cache nodes should comply with when caching your business content. For more information, please see [Cache expiration configuration](#).

Completing the connection

After entering all configuration items on the **Create Distribution** page, click **Submit** to add the domain name and wait for domain name configuration to be delivered over the entire network, which usually takes 5 to 10 minutes.

Configuring CNAME

After successfully adding a domain name, You can view the acceleration CNAME assigned by CDN on the **Domain Management** page. You need to add a CNAME record for the domain name through your DNS service provider (such as DNSPod). Acceleration services will become available after **the DNS configuration takes effect**. For more information, please see [CNAME Configuration](#).

According to regulations, if the origin server is at an accelerated domain name of Tencent Cloud CVM, the domain name configured for the host header should obtain an ICP filing for services in Mainland China through Tencent Cloud. For more information, please see [Host header configuration](#).

CDN - COS

Overview

Last updated : 2020-12-02 10:12:15

This document describes how to use Tencent Cloud CDN to accelerate access to COS.

Content Delivery Network (CDN)

By delivering resources to high numbers of globally deployed cache nodes and leveraging Tencent's independently developed GSLB scheduling system, CDN enables nearby access to required resources for end users. This reduces access delays caused by network congestion, distance, and ISP issues and effectively improves the download speed, responsiveness, and user experience.

Cloud Object Storage (COS)

You can store all your static resources such as static scripts, audio/video files, images, and attachments in standard storage in COS, which features unlimited capacity and high-frequency reads/writes to provide scalable and reliable storage for static resources and reduce pressure on resource servers.

Content Delivery Practices

CDN can accelerate global delivery of static resources such as static scripts, audio/video files, images, and attachments stored in COS. With CDN's global cache nodes and scheduling capabilities, frequently requested resources can be delivered to edge servers in advance. When they are accessed or downloaded by end users, the cached resources on a nearby node will be returned. This reduces both pressure on the origin server as well as transfer delay, significantly improving the user

experience.



Note :

[Tencent Cloud Enterprise Content Delivery Network \(ECDN\)](#) can be used to accelerate the delivery of dynamic/static resources or dynamic resources stored in COS.

Implementation

CDN acceleration can be implemented for COS in the following two ways. Choose either of them to complete acceleration :

- Point the COS endpoint to the CDN acceleration domain name and bind your domain name to the CDN acceleration domain name (through CNAME). For detailed directions, please see [Implementation via CDN Console](#).
- Bind your domain name to the COS endpoint and enable CDN acceleration. For detailed directions, please see [Implementation via COS Console](#).

Via CDN Console

Last updated : 2020-08-21 14:08:17

This document describes how to accelerate access to resources in COS through CDN.

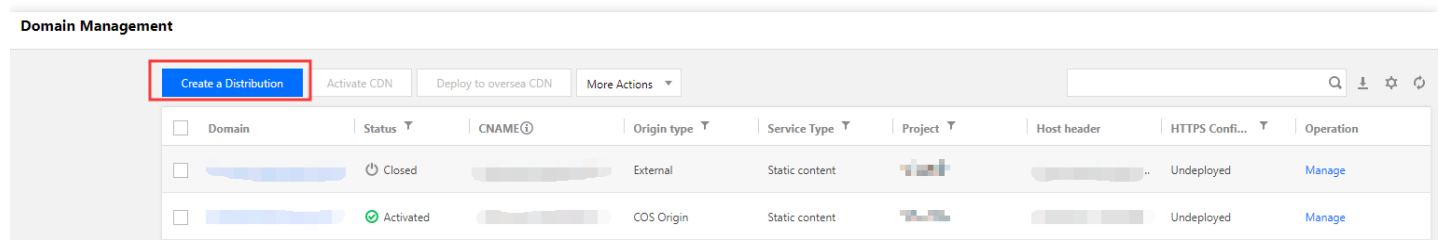
Prerequisites

1. You have signed up for a Tencent Cloud account and verified your identity.
2. A COS bucket has been created. For more information, please see [Creating Buckets](#).

Operation Guide

Adding a domain name

Log in to the [CDN Console](#), click **Domain Management** on the left sidebar to enter the domain name management page, and click **Create Distribution**.



Selecting COS as origin server

Domain Configuration

Domain

The origin of service domains must be the same

Project

Origin Type

bucket setting

Private bucket access

1. Enter the **domain name** to be accelerated.

Wildcard domain names are supported, such as `*.test.com`. Up to 10 domain names can be connected in batches in one single operation.

The domain name should meet the following conditions:

- ICP filing for services in Mainland China has been obtained from the MIIT for the domain name
- The domain name has never been connected to Tencent Cloud CDN

2. Select the **project** of the domain name.

The project is shared by all Tencent Cloud products. You can add a project in [Project Management](#).

3. Select **COS** from the **Origin Type** drop-down list under **Domain Configuration**.

4. Select the domain name of the corresponding **bucket**.

5. Enable **Private Bucket Access**. You should authorize the CDN service first. After the service authorization is confirmed, you can manually enable this feature.

- COS V5 is fully deployed for connecting a COS origin server domain name to CDN. If you want to use a COS V4 bucket as an origin server, you need to go to the COS V4 Console and enable acceleration service for the corresponding bucket.
- If your COS V5 bucket is private, you need to first allow the CDN service to access the corresponding COS bucket and then enable origin-pull access. Resources in all private

buckets will then be delivered over the CDN public network, which involves relatively high security risks.

Configuring the acceleration service

Based on your business needs, select **Business Type** and set **Basic Configuration** and **Cache Expiration Configuration**.

Acceleration Service Configurations

Service Type

The business type cannot be modified once confirmed. Please double check it before continuing.

Basic Configuration Ignore query string [i](#)

Cache Rules

Type	Content	Purge Time	Operation
All	All contents	<input type="text" value="30"/>	
<input type="text" value="File ext"/>	<input type="text" value=".php;.jsp;.asp;.as"/>	<input type="text" value="0"/> ...	Delete
<input type="button" value="Add"/>			

1. Business Type

The business type determines the resource platform to be scheduled by the domain name. The acceleration configuration varies by resource platform. Please select a business type based on your business conditions:

- Static acceleration: Suitable for static resource acceleration scenarios such as ecommerce, websites, and gaming images.
- Download acceleration: Suitable for scenarios such as game installations, audio/video downloads, and mobile phone firmware package distribution.
- Streaming VOD acceleration: Suitable for VOD acceleration scenarios.

2. Basic Configuration

CDN provides the Ignore Query String switch, which allows you to control whether to filter parameters after "?" in end users' request URLs. You can use this feature for flexible version control or token-based authentication. For more information, please see [Ignore query string configuration](#).

3. Cache expiration configuration

Cache expiration configuration refers to the set of expiration rules that CDN cache nodes should comply with when caching your business content. For more information, please see [Cache expiration configuration](#).

Completing the connection

After entering all configuration items on **Create Distribution** page, click **Submit** to add the domain name and wait for domain name configuration to be delivered over the entire network, which usually takes 5 to 10 minutes.

Configuring CNAME

After successfully adding a domain name, you can view the acceleration CNAME assigned by CDN on the **Domain Management** page. You need to add a CNAME record for the domain name through your DNS service provider (such as DNSPod). Acceleration services will become available after **the DNS configuration takes effect**. For more information, please see [CNAME Configuration](#).

Via COS Console

Last updated : 2020-08-21 14:08:56

This document describes how to accelerate access to resources in COS through CDN in the COS Console.

Prerequisites

1. You have registered for a Tencent Cloud account and verified your identity.
2. You have activated the CDN service. For more information, please see [Getting Started](#).

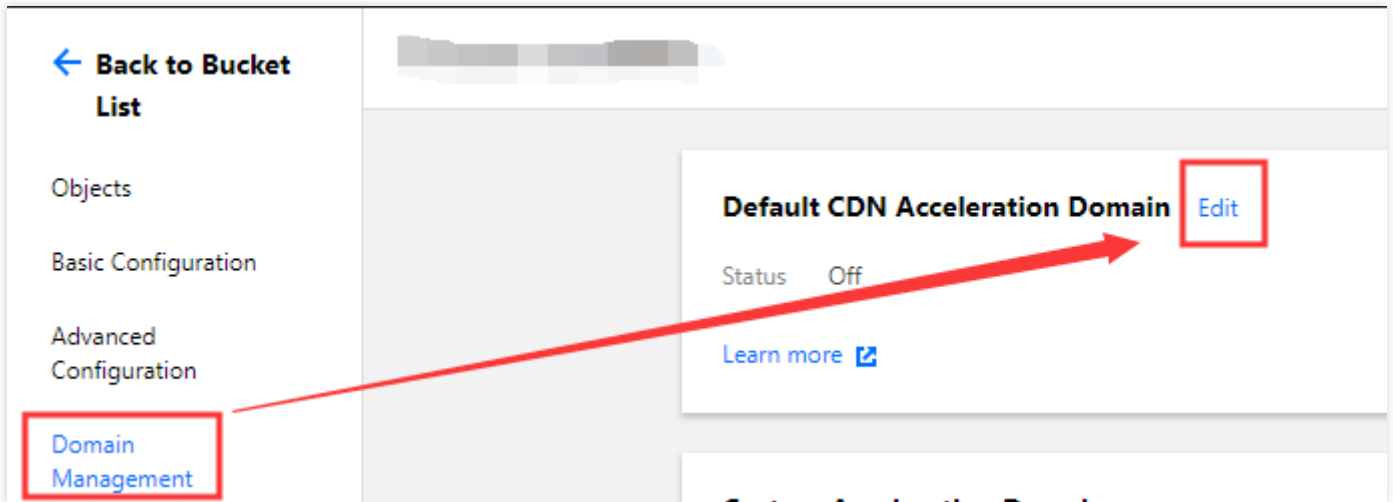
Operation Guide

Creating a bucket

For more information on how to create a bucket, please see [Creating Buckets](#).

Configuring Acceleration

1. After creating a bucket, enter its configuration management page directly. You can also click **Configuration Management** in the "Operation" column of the bucket in the bucket list to enter its configuration management page.
2. Enable the **default acceleration domain name**.
Generated by the system, the **default acceleration domain name** is the domain name passing through CDN cache nodes. You can choose to enable or disable it.
(1) Click **Edit** next to the **default acceleration domain name** to manually enable or disable it on the default acceleration configuration page.



(2) Configure the default acceleration:

The screenshot shows the 'Default CDN Acceleration Domain' configuration panel. The 'Status' toggle is turned on. The 'Acceleration Domain Name' is 'myqcloud.com'. The 'Acceleration Region' is 'Acceleration in Mainland China'. The 'Origin Server Type' is 'Default origin server'. The 'Origin Server Domain Name' is 'myqcloud.com'. The 'Origin-pull Authentication' toggle is turned off, and the 'Add CDN Service Authorization' link is visible. There are 'Save' and 'Cancel' buttons at the bottom.

Origin server type: Default type is **default origin server**, but if you have enabled static website for the origin server bucket and want to accelerate content delivery for the static website, select **static website origin server**.

Origin-Pull Authentication: For public-read buckets, origin-pull authentication does not need to be enabled. For private-read buckets, CDN service authorization must be added and origin-pull authentication must be enabled manually. For more information, please see [Enabling Origin-pull Authentication](#).

CDN service authorization: Click **Add CDN service authorization** to select and grant CDN

access to resources in the bucket.

Are you sure you want to add CDN service authorization? ✕

The following authorization will be added to the Bucket Policy:

Effect	Allow
User	Tencent Cloud CDN service
Resource	<input checked="" type="radio"/> The whole bucket <input type="radio"/> Specific resources
Actions	Get Object, Head Object, Options Object

I agree to this authorization and understand that the CDN service can access this bucket.

(3) After completing the configuration, click **Save** to activate CDN acceleration.

Default CDN Acceleration Domain

Status	🕒 Deploying
Acceleration Domain Name	myqcloud.com
Acceleration Region	Acceleration in Mainland China
Origin Server Type	Default origin server
Origin Server Domain Name	myqcloud.com
Origin-pull Authentication	Enable
CDN Authentication	🚫 Off (please go to CDN Console Authentication Configuration to open token-based authentication and then prevent malicious users from stealing content)

[Learn more](#) 🔗

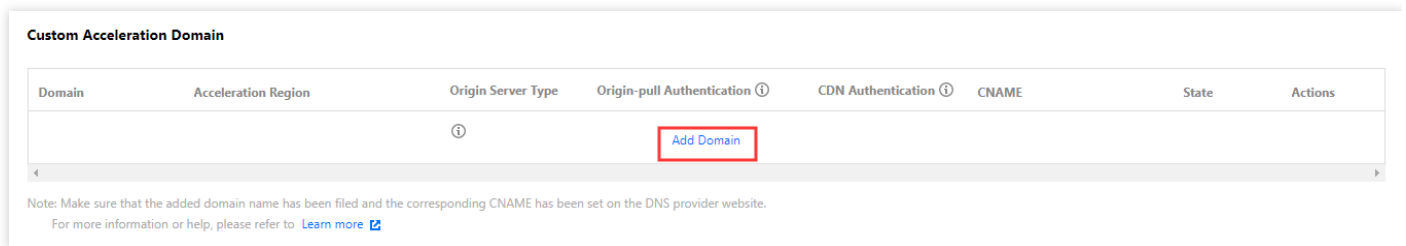
For private-read buckets, if both origin-pull authentication and CDN service authorization are enabled, signature is not required for access to origin server via CDN, and cached resources in CDN will be distributed on the public network, which will affect data security. Therefore, we recommended you enable CDN authentication.

3. Enable *custom acceleration domain name**.

You can bind a filed custom domain name to the bucket and enable CDN acceleration.

A maximum of 10 custom domain names can be added on the COS Console

(1) Click **Add domain name** in the **custom acceleration domain name** module to add a filed custom domain name.



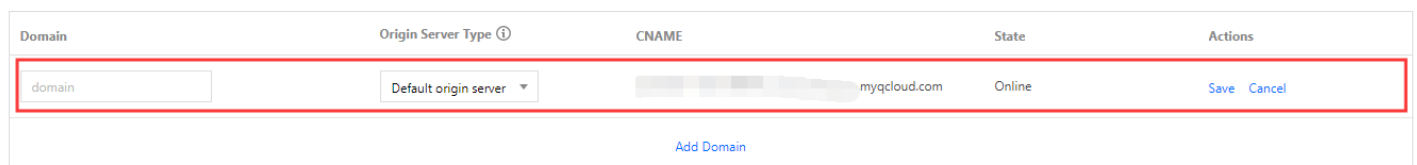
(2) Configuration to add domain names:

Domain Name: Enter the custom domain name to be bound (e.g. `www.example.com`). Ensure that the ICP filing for services in Mainland China has been obtained from the MIIT for the domain name, and a corresponding CNAME has been configured for the domain name with the DNS service provider. For more information, please see [CNAME Configuration](#).

Origin-Pull Authentication: for private-read buckets, please manually enable **origin-pull authentication** to protect the origin server.

After completing the configuration, click **Save**.

Custom Origin Server Domain



Note: This bucket provides service in Mainland China. Please make sure that your domain has been filed. Domain that is not filed cannot be bound to the bucket in Mainland China as a custom domain. Meanwhile, set corresponding CNAME records on DNS service provider website and route to COS. For more information or help, please refer to [Help of Custom Origin Domain](#)

For private-read buckets, if both origin-pull authentication and CDN service authorization are enabled, signature is not required for access to origin server via CDN, and cached resources in CDN will be distributed on the public network, which will affect data security. Therefore, we recommend you enable CDN authentication.

(3) After the configuration is saved, CDN authentication switch will be displayed in the **CDN Authentication** column. You can manually enable CDN authentication for the custom domain name. **CDN Authentication:** Timestamp authentication can be configured to prevent stealing by malicious users. You can enable the feature after adding the domain name.

For more information on how to configure CDN acceleration in the COS Console, please see [Overview](#).

Regularly Storing CDN Logs

Last updated : 2020-06-02 11:38:03

Regularly Storing CDN Logs

This document describes how to use Tencent Cloud SCF to create two functions in order to regularly store CDN logs into COS.

Key Steps

This document describes how to create the "storage" and "task distribution" functions, use them together, and configure a timer trigger in order to regularly store CDN logs into COS.

There are four key steps:

- A. Prepare the Tencent Cloud API access key and COS information
- B. Create the storage function (cdn-save-log-into-cos)
- C. Create the task function (cdn-dispatch-log-jobs)
- D. Configure the timer

Directions

A. Prepare the following resources before creating the functions

1. Tencent Cloud API access key

Go to the [access key management page](#), query or create a key, and record the following information:

Access credential name (`SecretId`), such as `AKIDRVI54XXn10r58oZpmzbB0nwt47x01LRv`

Access credential key (`SecretKey`), such as `3t0SYPHRIpjmAAUPfKM8b4yXnff4Aq56`

2. COS bucket

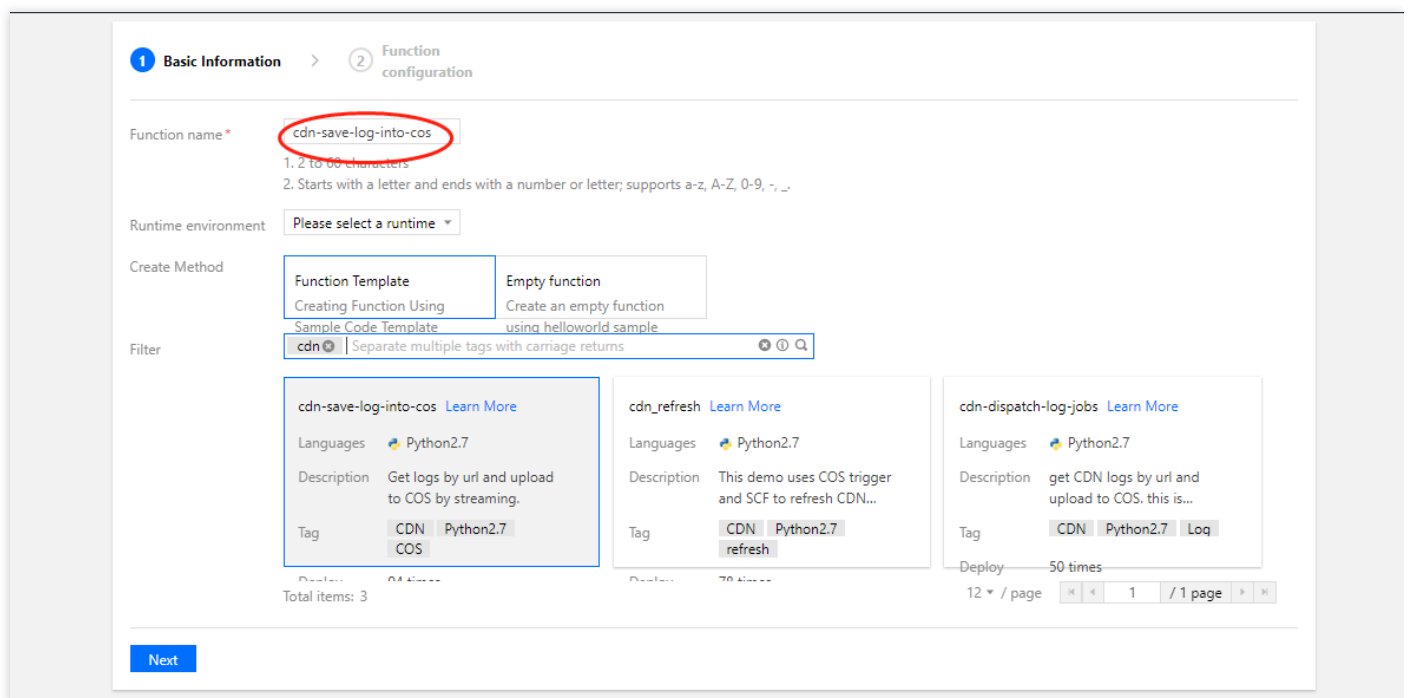
Log in to the [COS Console](#), access the **Bucket List** to query or create a bucket, access the bucket to view its **Basic Information**, and record the following information:

Bucket name (`Bucket Name`), such as `examples-1251002854`

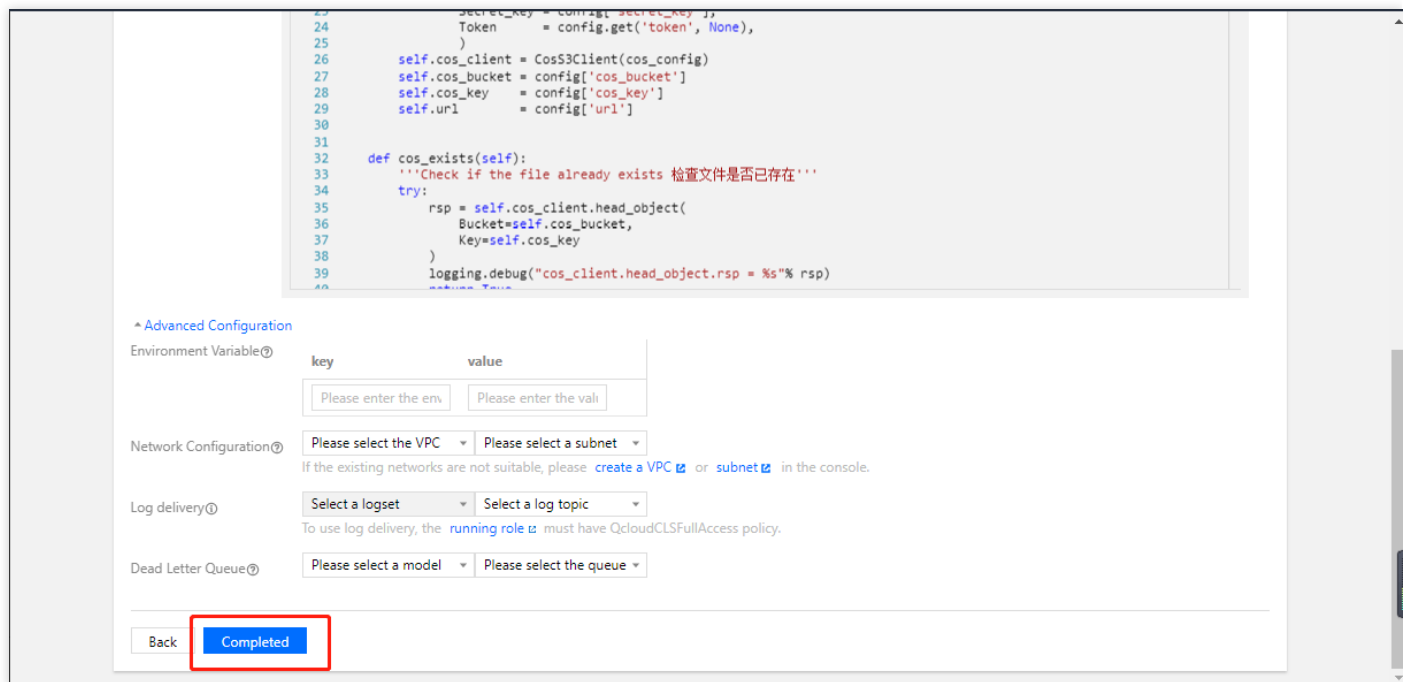
Bucket region (`Region`), such as `ap-chengdu`

B. Create the storage function (cdn-save-log-into-cos)

1. Log in to the [SCF Console](#) and click **Function Service**.
2. Select **Create** and enter **cdn-save-log-into-cos** as the function name.
3. Select **Function Template**, search with the keyword "CDN", select the "cdn-save-log-into-cos" template, and click "Next" to access the function configuration page:

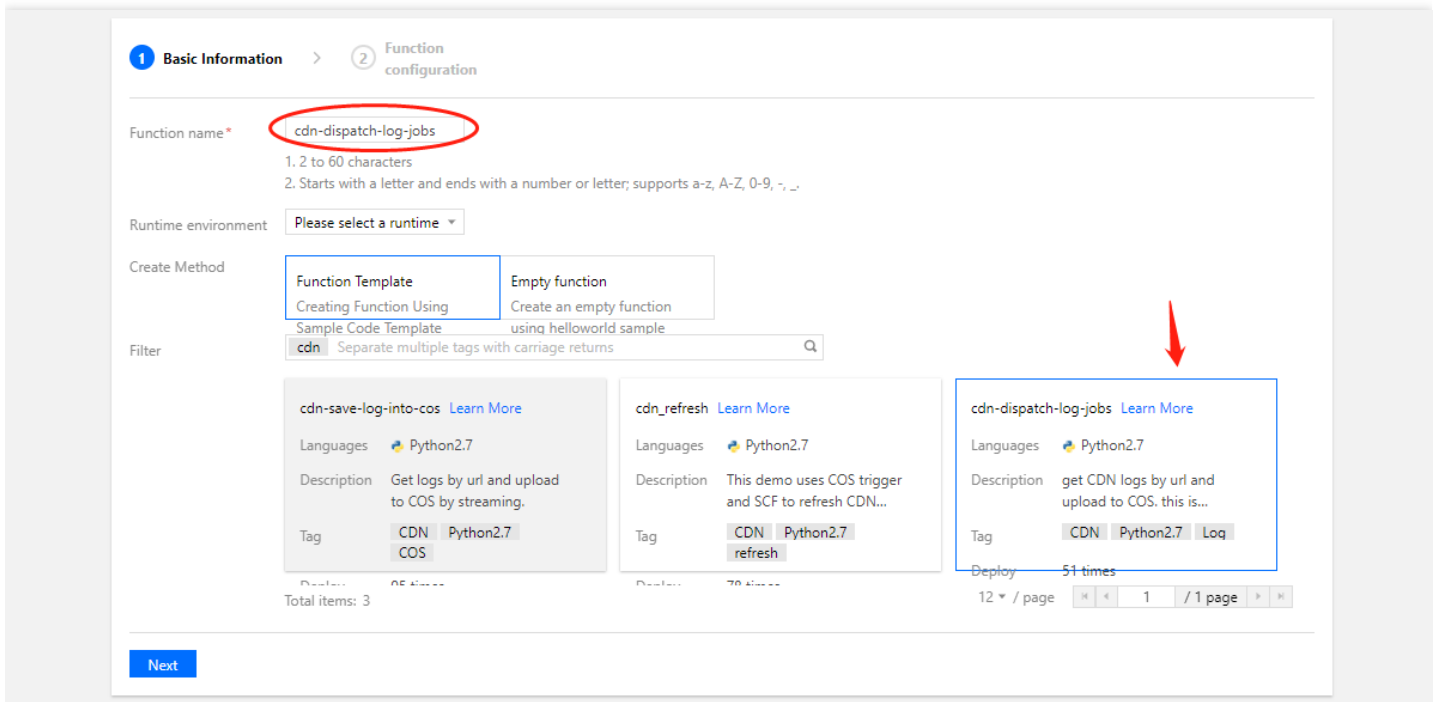


4. Click **Complete** to create the function.



C. Create the task function (cdn-dispatch-log-jobs)

1. Log in to the [SCF Console](#) and click **Create**.
2. Select **Function Template**, search with the keyword "CDN", and select the "cdn-dispatch-log-jobs" template.
3. Enter **cdn-dispatch-log-jobs** as the function name and click "Next".
4. Click **Complete** to create the function.



5. Click the **Function Code** tab. In the code editing box, modify the Python code by entering the following configuration information:

In the `config` variable on row 143, enter the corresponding configuration information:

- Set fields such as `secret_id` , `secret_key` , `cos_region` , `cos_bucket` , and `scf_region` .
- If you set the function name as instructed in step B and do not want to modify it, you can retain the original value of `scf_function` .
- The default value of `cdn_host` is an empty array (i.e., the logs of all domain names under the account will be stored). If needed, you can enter the list of specified domain names.


```

139     return {"status": "jobs dispatched", "count_url": cnt, "count_host": len(hosts)}
140
141
142 def run_app():
143     config = {
144         'secret_id': 'xxxxxx',
145         'secret_key': 'xxxxxx',
146
147         # The region of COS bucket.
148         'cos_region': 'ap-xxxx',
149         'cos_bucket': 'xxxxxxx-1251002854',
150         'cos_path': '/cdnlog/(host)s/(day)s/(filename)s',
151
152         # SCF configuration, region and function names need to be consistent with the storage
153         # function.
154         'scf_region': 'ap-xxxx',
155         'scf_function': 'cdn-save-log-into-cos',
156
157         # CDN configuration.
158         # If the domain name list is empty, it means to synchronize the logs of all domain
159         # names under the entire account.
160         'cdn_host': [],
161         #'cdn_host': ['tx-cdn.talebook.org', 'js.talebook.org'],
162     }

```

6. Click **Save**.

7. Click **Test** to check whether the code runs properly. After the testing program stops running, you can access the COS Console and check whether the corresponding logs are stored in COS.

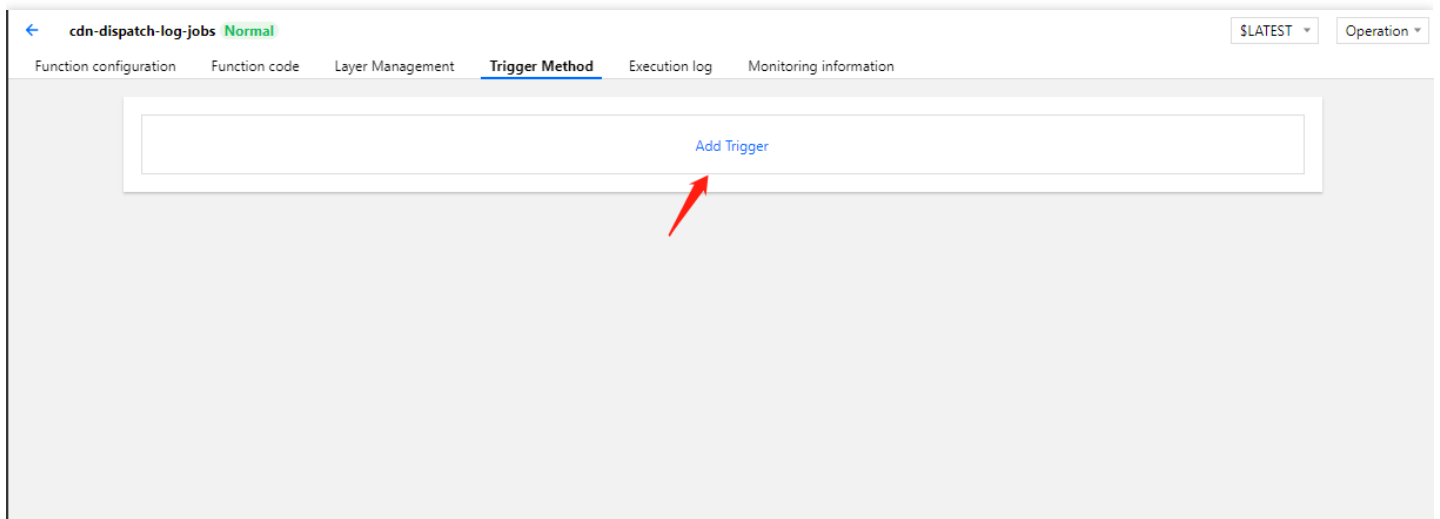
D. Configure the timer

After you create the two functions above, the list on the SCF Console will be as shown below:

1. Click **cdn-dispatch-log-jobs** to access its details.

Function Name	Function Type	Memory	Runtime Environment	Description	Tag	Creation Time	Last Modified	Operation
cdn-dispatch-log-jobs	Normal	1024M	Python2.7	get CDN logs by url and upload to COS. this is control function.		2020-05-11 16:19:43	2020-05-11 16:19:44	Delete Copy
cdn-save-log-into-cos	Normal	1024M	Python2.7	Get logs by url and upload to COS by streaming.		2020-05-11 16:01:25	2020-05-11 16:01:26	Delete Copy

2. Click the **Trigger Management** tab and click **Create a Trigger**.



3. Select **Scheduled triggering** as the trigger method, enter a custom scheduled task name, select **Every 5 mins** as the trigger period, and click **Submit**.

The 'Add Trigger' form is shown with the following fields and values:

- Trigger Method: Scheduled triggering
- Scheduled task name: timetest
- Trigger period: Every 5 mins (Execute once at)
- Remarks: No
- Enable Now:

If it's checked, the scheduled trigger will be activated and executed at the start point of next period.

Buttons: Save, Cancel

Once you complete all the steps above, CDN logs will be regularly stored into COS.