

# **Content Delivery Network**

## **Best Practice**

### **Product Documentation**



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# Contents

## Best Practice

### CDN - CVM

Overview

Via CDN Console

### CDN - COS

Overview

Via CDN Console

Via COS Console

# Best Practice

## CDN - CVM

### Overview

Last updated : 2020-02-19 19:20:40

In this paper, an example of Tencent Cloud CDN accelerating Cloud Virtual Machine CVM is introduced in detail.

## CDN

Tencent Cloud CDN distributes resources publish to the massive cache node all over the country, combined with Tencent's GSLB scheduling system, so that its users can get the resources they need nearby, avoid Access delay problems caused by network congestion, region, ISP and other factors, effectively improve download speed, reduce response time, and provide a smooth user experience.

## CVM

Tencent Cloud CVM provides scalable virtual computing resources in the cloud, allowing you to select a variety of operating systems to CVM instances and load them into your custom application environment. Later, with the change of business volume, you can expand or reduce computing resources in real time and adjust your CVM specifications.

## Accelerate distribution practice

Tencent Cloud CDN can accelerate the global distribution of static resources (such as a large number of audio and video, pictures, files, etc.) hosted by users on CVM. Using Tencent Cloud CDN global cache node and scheduling capabilities, you can advance hot resources from deliver to Edge server, and when end users issue resource Access / download requests, they can get the resources they need nearby.

Tencent Cloud CDN accelerated CVM, relieved real server's pressure, reduced transmission delay and bandwidth costs, and significantly improved availability.

To speed up the distribution of mixed or dynamic resources stored in CVM, you can use Tencent Cloud to accelerate ECDN.

## Operation realization

CDN accelerates the operation of CVM as follows:

Bind the accelerated domain name on CDN to the CVM domain name or IP address, and enable the CDN acceleration service. For instructions, see [Implemented through the CDN console](#) .

# Via CDN Console

Last updated : 2020-03-04 17:46:51

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

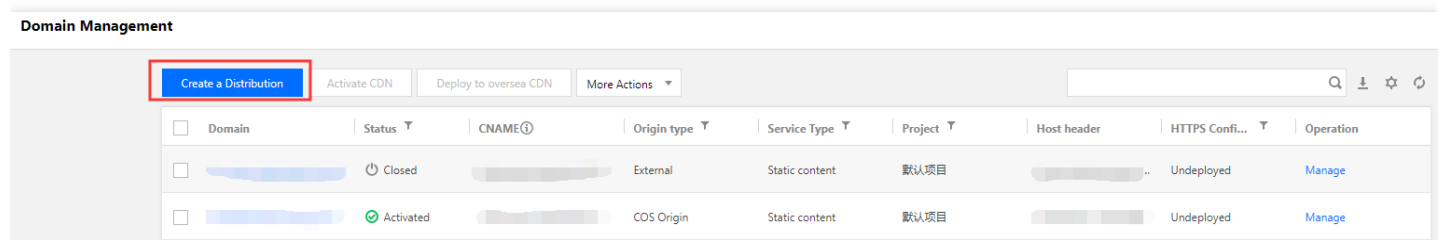
## Prerequisites

1. You have signed up for a Tencent Cloud account and verified your identity.
2. You have activated the CVM service.

## 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 the domain name has been obtained from the MIIT
- 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 Configurations**

Service Type

Static content ▼

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	30	
File ext ▼	.php;.jsp;.asp;.as	0 ...	Delete
Add			

Submit

**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 through Tencent Cloud. For more information, please see [Host header configuration](#).

# CDN - COS

## Overview

Last updated : 2020-02-19 19:20:40

In this paper, an example of Tencent Cloud CDN accelerating Cloud Object Storage COS is introduced in detail.

### CDN

Tencent Cloud CDN distributes resources publish to the massive cache node all over the country, combined with Tencent's GSLB scheduling system, so that its users can get the resources they need nearby, avoid Access delay problems caused by network congestion, region, ISP and other factors, effectively improve download speed, reduce response time, and provide a smooth user experience.

### COS

Users can host all their static resources (including static scripts, audio and video, pictures, attachments and other files) in Tencent Cloud COS's standard storage, and take advantage of unlimited capacity and high-frequency read-write characteristics to provide scalable and reliable storage for static resources to reduce the pressure on the resource server.

## Accelerate distribution practice

Tencent Cloud CDN can accelerate the global distribution of static resources (including static scripts, audio and video, pictures, attachments and other files) stored on COS. Using Tencent Cloud CDN global cache node and scheduling capabilities, you can advance hot resources from deliver to Edge server, and when end users issue resource Access / download requests, they can get the resources they need nearby. The pressure of real server is reduced, the transmission delay is reduced, and the user experience is significantly improved.

To speed up the distribution of mixed or dynamic resources stored in COS, you can use Tencent Cloud to accelerate ECDN.

## Operation realization

The specific operation implementation of COS accelerated by CDN is as follows:

- Point the COS domain name to the CDN accelerated domain name, and then bind the user domain name to the CDN accelerated domain name (CNAME). For specific operation procedures, see [Implemented through the CDN console](#) .
- Bind the user domain name to the COS domain name and enable CDN acceleration. For specific operation procedures, see [Implemented through the COS console](#) .

# Via CDN Console

Last updated : 2020-03-03 15:14:21

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

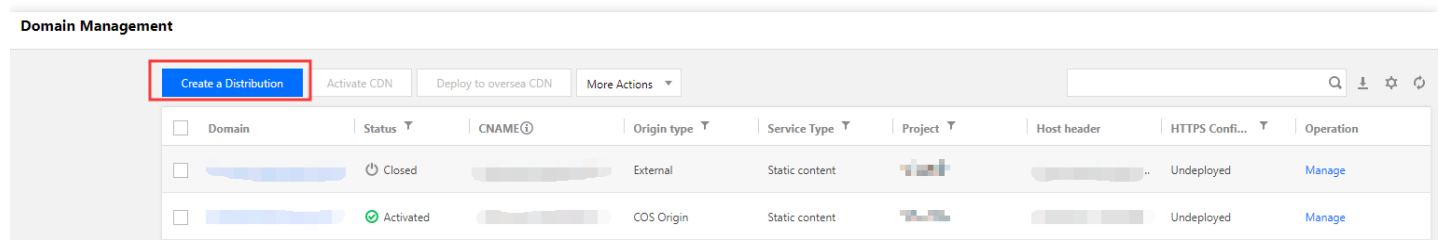
## Prerequisites

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 the domain name has been obtained from the MIIT
- 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"/> ...	<a href="#">Delete</a>
<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 : 2020-01-20 10:40:47

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

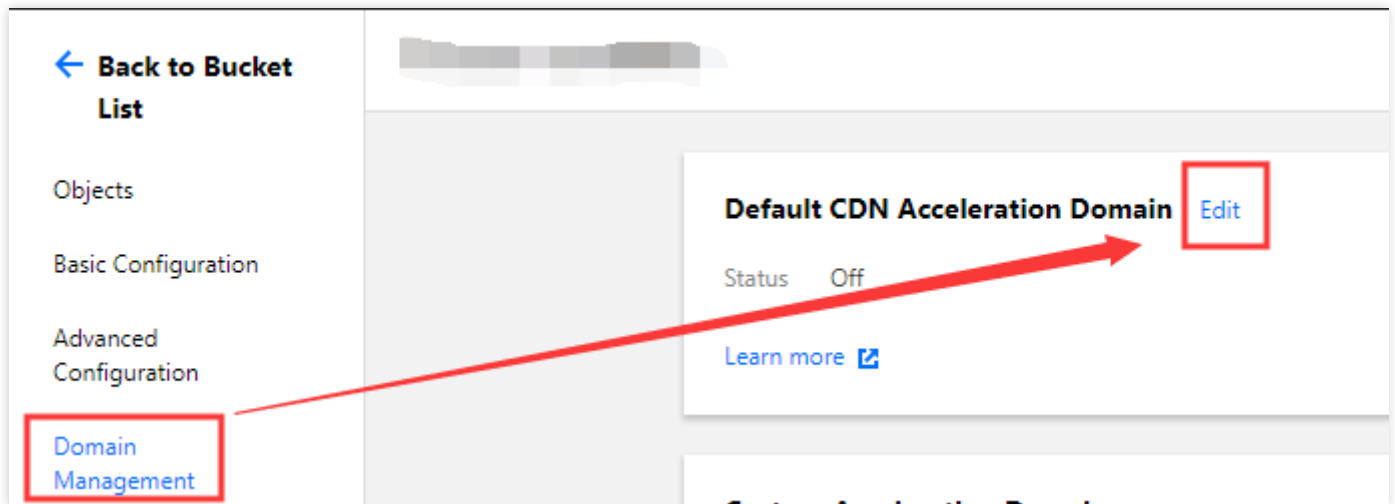
### Creating a bucket

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:

**Default CDN Acceleration Domain**

Status

Acceleration Domain Name

Acceleration Region  Acceleration in Mainland China  Acceleration outside Mainland China

Origin Server Type  Default origin server  Static website origin server ⓘ

Origin Server Domain Name

Origin-pull Authentication  [Add CDN Service Authorization](#)

You need to authorize the CDN service and enable origin-pull authorization if the bucket allows private read.  
You do not need to authorize the CDN service and enable origin authorization if the bucket allows public read.

[Save](#) [Cancel](#)

[Learn more](#)

**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	<span>🕒</span> 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	<span>🚫</span> Off ( please go to CDN Console <a href="#">Authentication Configuration</a> 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.

**Custom Acceleration Domain**

Domain	Acceleration Region	Origin Server Type	Origin-pull Authentication ⓘ	CDN Authentication ⓘ	CNAME	State	Actions
		ⓘ	<b>Add Domain</b>				

Note: Make sure that the added domain name has been filed and the corresponding CNAME has been set on the DNS provider website.  
For more information or help, please refer to [Learn more](#).

(2) Configuration to add domain names:

**Domain Name:** Enter the custom domain name to be bound (e.g. `www.example.com` ). Ensure that the domain name has ICP filing, 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

Domain	Origin Server Type ⓘ	CNAME	State	Actions
domain	Default origin server	myqcloud.com	Online	<a href="#">Save</a> <a href="#">Cancel</a>

[Add 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](#).