Content Delivery Network

Getting Started

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Contents

1 Domain Name Requirements

Table 1-1 lists requirements for domain names that require Content Delivery Network (CDN) acceleration.

Table 1-1 Domain name requirements

Service Area	Requirement
Outside Chinese mainland	The domain name has passed content moderation.
Europe	The domain name has passed content moderation.
Chinese mainland	• Your HUAWEI ID has completed real-name authentication. • The domain name has been licensed by the Ministry of Industry and Information Technology (MIIT) and the Internet Content Provider (ICP) license is still valid. • The domain name has passed content moderation.

NOTE

Outside Chinese mainland indicates countries and regions other than the Chinese mainland. Hong Kong (China), Macao (China), and Taiwan (China) are included.

CDN does not support the access of websites that violate related laws and regulations, including but not limited to:

- Websites that contain pornographic content or content related to gambling, illegal drugs, frauds, or infringement
- Gaming websites that run on illegal private servers
- Websites that provide pirated games/software/videos
- P2P lending websites
- Unofficial lottery websites
- Unlicensed hospital and pharmaceutical websites

- Inaccessible websites or websites that do not contain any substantial information

  NOTE

  - If your domain name content violates related laws and regulations, you shall bear the related risks.
  - If any pornographic content or content related to gambling, illegal drugs, or frauds is found on your domain name, the domain name and other domain names that use the same origin server will be deleted from CDN and can no longer access CDN. Acceleration domain name quota of the account will be reduced to 0.
  - There is no limit on the domain name server (DNS) provider.
  - Root domain name and common domain names need to be added to the CDN console separately for acceleration.

2 Overview

2.1 Before You Access CDN

Before using CDN acceleration, learn about concepts of acceleration domain names and origin servers, billing, security, and how to verify the acceleration effect. This helps you quickly enable and use CDN.

Domain Name and Origin Server

Prepare a domain name for acceleration and an origin server (service server) based on the domain name admission conditions, content moderation requirements, and domain name description in the **Restrictions**.

Billing Options

Understanding CDN billing details helps you select a proper billing option when enabling CDN and reduce costs. Huawei Cloud CDN charges you for basic and value-added services.

- The basic service fee is charged based on traffic or bandwidth generated when users access CDN points of presence (PoPs).
- The value-added service fee is charged based on the number of whole site acceleration requests.

Table 2-1 Billing options

Billing Item	Billed By	Description
Basic service fee	**Traffic**	• Suits you if your domain name traffic curve fluctuates greatly, bandwidth usage is always less than 30%, and the bandwidth has a peak. • You can buy traffic packages of appropriate specifications to save money. For details, see **Prepaid Traffic Packages**.

Billing Item	Billed By	Description
	Peak bandwidth	• Suits you if your domain name's daily bandwidth usage is always greater than 30% and the traffic curve is stable. • Requires account top-ups. The monthly usage fee will be deducted from your account balance. • Submit a service ticket to request this billing option.
	95th percentile bandwidth	Suits you if your service traffic is heavy and your monthly expenditure will be greater than $15,000 USD. Contact your account manager and request these billing options.
	Average daily peak bandwidth	
Value-added service fee	Whole site acceleration request	If you use whole site acceleration, you will be charged by the number of requests.

Resource Type and Service Type

CDN caches content to speed up content delivery. It caches static resources on CDN PoPs so that users can get the resources from the nearest PoP. Whole site acceleration speeds up the transmission of dynamic and pseudo-static resources through network routing.

Table 2-2 Resource types

Resource Type	Description
Static	The same file is obtained for each request. Examples: images, videos, files (HTML, CSS, and JS) on websites, software installation packages, APK files, and compressed packages
Dynamic	Different files are obtained for each request. Examples: files (ASP, JSP, PHP, PERL, and CGI) on websites, APIs, and database interaction requests
Pseudo-static	Pseudo-static resources, such as HTML files, appear to be static on websites, but are actually processed using dynamic scripts such as ASP. Pseudo-static resources are essentially dynamic and are processed as dynamic content.

CDN provides four service types. Select a service type based on the resource characteristics of your website to achieve better acceleration.

Table 2-3 Service types

Service Type	Scenario
Website	Web portals, e-commerce platforms, news apps, and user generated content (UGC)-focused apps
File download	Download clients, game clients, app stores, and websites that provide download services based on HTTP or HTTPS
On-demand services	On-demand video/audio services, such as online education websites, video sharing websites, TV VOD platforms, and music and video apps
Whole site	Websites that consist of both dynamic and static content and for sites with abundant ASP, JSP, or PHP requests

Service Area

CDN provides three service areas. Select one based on the distribution of your end users to improve user experience.

Service Area	Acceleration Effect	Scenario
Chinese mainland	All user requests are scheduled to PoPs in the Chinese mainland.	Users are mainly located in the Chinese mainland.
Outside Chinese mainland	All user requests are scheduled to PoPs outside the Chinese mainland.	Users are mainly located outside the Chinese mainland.
Global	User requests are scheduled to the optimal CDN PoP nearby.	Users are distributed around the world.
Europe	All user requests are scheduled to PoPs in Europe.	Users are mainly located in Europe.

NOTE

- **Outside Chinese mainland** indicates countries and regions other than the Chinese mainland. Hong Kong (China), Macao (China), and Taiwan (China) are included.
- The service area of a domain name has nothing to do with the origin location. You can choose the service area that suits your services best.

(Optional) Security

If your website has high security requirements, configure security settings to prevent malicious traffic or attacks.

Function	Description
HTTPS certificate	Enable HTTPS acceleration to encrypt requests between clients and CDN PoPs, securing data transmission.
Access control	Identity and filter visitors using referer validation, IP address access control lists (ACLs), token authentication, and User-Agent ACLs, restrict access sources, and prevent malicious traffic and attacks.

Acceleration Effect Evaluation

You can use a third-party dialing test tool to test the response speed of websites. The test method is as follows:

1. Test the response speed of accessing a resource after CDN acceleration is used.
2. Test the response speed of accessing the same resource directly from the origin server.
3. Compare the preceding two data.

Important notes:

1. If you test the access to an uncached resource, CDN needs to pull it from the origin server. Accessing it through CDN will be more time-consuming. Use a cached resource for test.
2. This solution is used for qualitative analysis on the acceleration effect. If you require professional evaluation, contact professional analysis platforms (such as Tingyun and Bonree).

   NOTE

   - This solution is for reference only. The final interpretation and copyright belong to third-party websites used for testing. The websites do not belong to Huawei Cloud. Please be careful when visiting them.

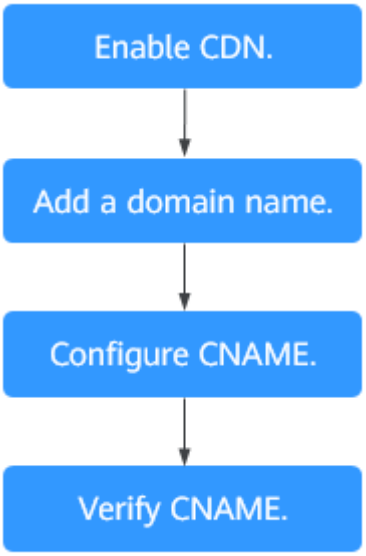
2.2 Access Process

Access Process

This section helps you get started with CDN. If you are using CDN for the first time, follow the procedure below to quickly enable it and accelerate your content delivery.

Figure 2-1 describes the process of using CDN.

Figure 2-1 Process



For details about each step, see **Table 2-4**.

Table 2-4 Access procedure

No.	Step	Description
1	**Enabling CDN**	Enable CDN.
2	**Adding a Domain Name**	If you want to use CDN to accelerate delivery of resources on your site, add the domain name of the site and configure origin details. CDN caches origin content on points of presence (PoPs) so that your content loads faster.
3	**(Optional) Testing a Domain Name**	Test your domain name before adding a CNAME record to the domain's DNS records to ensure that your domain configurations are correct.
4	Configuring a CNAME Record • **Adding a CNAME Record on Huawei Cloud DNS**	If you have added a domain name, the system automatically assigns a CNAME to it. The CNAME cannot be accessed directly. Add this CNAME to your domain's DNS records and point the domain name to it. Then requests for your domain name will be redirected to CDN PoPs for acceleration. The CNAME configuration method varies depending on the DNS provider.
5	**Checking Whether the CNAME Record Has Taken Effect**	The length of time before the CNAME record takes effect depends on the DNS provider. You can check whether the CNAME record has taken effect by yourself.

3 Enabling CDN

Enable CDN before you use it. This section describes how to enable CDN.

Prerequisites

- You have registered a HUAWEI ID and have specified a payment method.

  NOTE

  You need to complete real-name authentication when you:

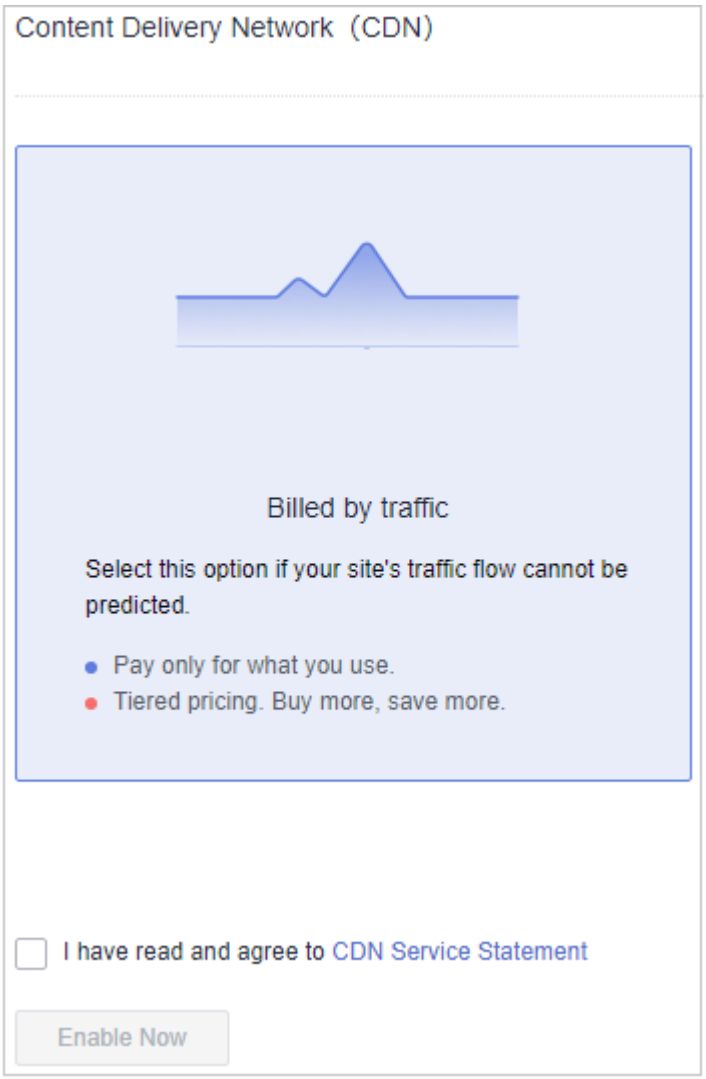
  - Purchase and use cloud services on Huawei Cloud PoPs in the Chinese mainland. Real-name authentication is required by the laws and regulations in the Chinese mainland.
  - Purchase a cloud service whose region includes Chinese mainland.

Precautions

- By default, traffic-based billing is enabled. To enable peak bandwidth–based billing, submit a service ticket.

Procedure

1. Log in to **Huawei Cloud console**. Choose **Service List** > **Content Delivery & Edge Computing** > **Content Delivery Network**.
2. On the displayed page, read and agree to the service statement, and click **Enable Now**.



4 Enabling WSA

Enable Whole Site Acceleration (WSA) before you use it. This section describes how to enable WSA.

Prerequisites

You have enabled CDN.

Precautions

- By default, traffic-based billing is enabled. To enable peak bandwidth–based billing, submit a service ticket.
- If you have a whole site acceleration domain name or have added such domain names in the past year, enabling WSA is optional. You can still add whole site acceleration domain names. Fees of these domain names are charged by CDN. To enable WSA, submit a service ticket.

Procedure

1. Log in to **Huawei Cloud console**. Choose **Service List** > **Content Delivery & Edge Computing** > **Content Delivery Network**.

   The CDN console is displayed.
2. In the navigation pane, choose **Domains**.
3. On the **Domains** page, click **Add Domain Names**.
4. Select **Whole site** for **Service Type**. If you have not enabled WSA, you will be prompted to enable it.
5. Click **Enable Now** in the prompt.
6. Select a billing option, read and agree to the service statement, and click **Enable Now** to enable WSA.

5 Adding a Domain Name

If you want to use CDN to accelerate access to your site, add the domain name of your site to CDN. CDN caches origin content on PoPs so that your content loads faster.

Preparations

- Enable CDN for your account by referring to **Enabling CDN**.
- Prepare a domain name for acceleration and an origin server (service server) based on the domain name admission conditions, content moderation requirements, and domain name description in the **Restrictions**.

Procedure

1. Log in to **Huawei Cloud console**. Choose **Service List** > **Content Delivery & Edge Computing** > **Content Delivery Network**.

   The CDN console is displayed.
2. In the navigation pane, choose **Domains**.
3. On the **Domains** page, click **Add Domain Names** and specify domain parameters.

Figure 5-1 Adding a domain name

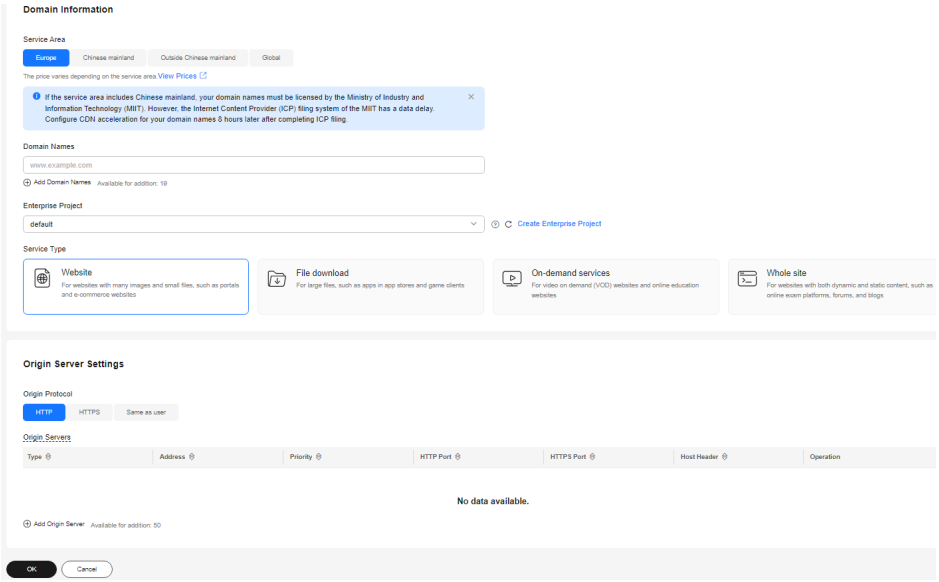


Table 5-1 Parameter description

Parameter	Item	Description
Domain Names	-	• A domain name can contain up to 200 characters, including letters, digits, hyphens (-), periods (.), and asterisks (*). Start with a letter, digit, or asterisk. • Each label of a domain name (for example, ***** in ***.***.com**) can contain up to 63 characters. • You can add up to 100 domain names under each account. • CDN does not allow access from websites containing illicit content. For details, see "Content moderation" in **Restrictions**. The existing domain names connected to CDN are reviewed regularly. If a domain name involves any violations, the CDN acceleration service will be suspended for the domain name and other domain names in your account. • If a domain name has been in the **Disabled** or **Rejected** state for more than 120 days, CDN starts the domain name deletion process and deletes the domain name records after confirmation. If CDN acceleration is required for the domain name, add the domain name again. • If a domain name has not been accessed for more than 180 days, CDN starts the domain name suspension process and disables CDN acceleration for the domain name after confirmation. • An acceleration domain name must be unique. • You can add a domain name including a wildcard (*). For example, if you add ***.test.com** to CDN as an acceleration domain name and have it resolved to the CNAME provided by CDN, all of the level-2 domain names under ***.test.com**, such as **a.test.com**, will enjoy CDN acceleration by default. However, level-3 domain names (such as **b.a.test.com**) would not. 1. If you add a wildcard domain name to a particular account, you cannot add any of the level-2 domain names under that domain name to other accounts. 2. You will be billed for the acceleration service provided to all of the level-2 domain names under a wildcard domain name. If there are multiple level-2 domain names, billing will be based on the traffic generated by the wildcard domain name, not on each of the level-2 domain names.
Enterprise Project	-	This parameter is only available if Enterprise Project Management Service is enabled..

Parameter	Item	Description
Service Area	Europe	User requests are scheduled to PoPs in Europe. You do not need to apply for a license from the MIIT.
	Outside Chinese mainland	User requests are scheduled to PoPs outside the Chinese mainland. You do not need to apply for a license from the MIIT.
	Chinese mainland	User requests are scheduled to PoPs in the Chinese mainland. You need to apply for a license from the MIIT.
	Global	User requests are scheduled to PoPs nearby. You need to apply for a license from the MIIT.
Service Type	Website	CDN is perfect for web portals, e-commerce platforms, news apps, and user generated content (UGC)-focused apps. The cache format includes but is not limited to .zip, .exe, .wmv, .gif, .png, .bmp, .wma, .rar, .jpeg, and .jpg.
	File download	CDN is useful for download clients, game clients, app stores, and websites that provide download services based on HTTP or HTTPS.
	On-demand services	CDN accelerates delivery of on-demand services, such as online education, video sharing, music or video on demand, and other audiovisual content.
	Whole site	CDN is a good option for websites that consist of both dynamic and static content and for sites that involve a large number of ASP, JSP, or PHP requests. **NOTE** WSA is an independent cloud service and is billed separately. It shares the same console with CDN. You need to enable WSA before adding **Whole site** domain names. For details about how to enable WSA, see **Enabling WSA**.

Parameter	Item	Description
Origin Protocol	-	Protocol used by CDN PoPs to pull content from the origin server. • **HTTP** • **HTTPS** (Ensure that the origin server supports HTTPS access.) • **Same as user**: The origin protocol is the same as the client access protocol. For example, if a client accesses CDN using HTTP, CDN also uses HTTP for origin pull.

4. In the **Origin Server Settings** area, click **Add Origin Server** to add an origin server for the domain names.

Figure 5-2 Adding an origin server

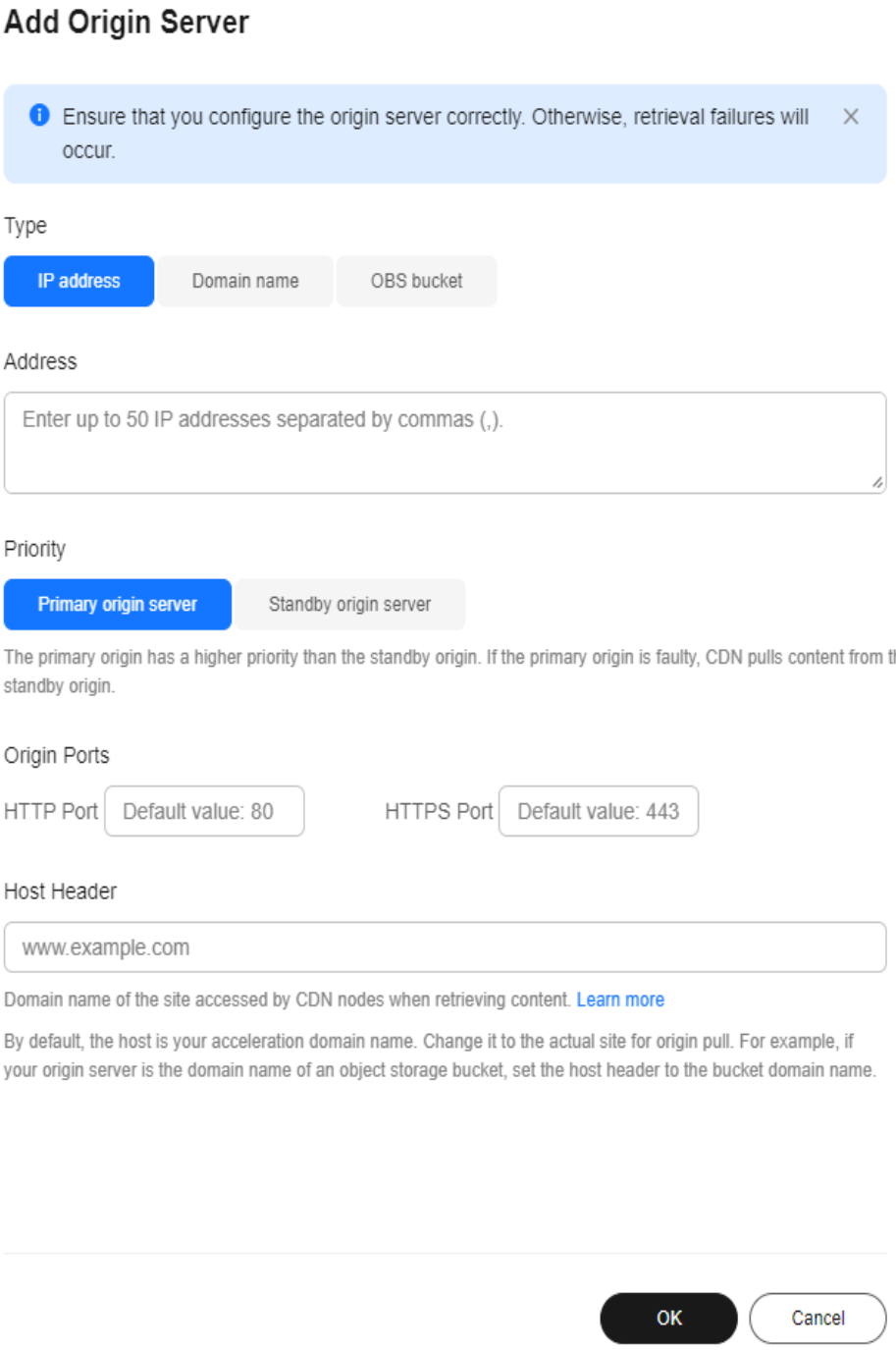


Table 5-2 Parameters

Parameter	Description
Type	**IP address** • CDN PoPs access the IP address directly to pull origin content. • IPv4 is supported, but IPv6 is not supported. • If multiple IP addresses are configured, CDN uses the **load balancing mechanism** to pull content from the origin server.
	Domain name • Start with a letter or digit. Enter up to 255 characters, including letters, digits, hyphens (-), and periods (.). • An origin domain cannot be the same as an acceleration domain name. • You can also enter the domain name of an object storage bucket in this field. **NOTE** • You cannot use **private object storage buckets** as origin servers when you set **Type** to **Domain name**. • If you use an object storage bucket as your origin server, the object storage service will charge the CDN origin pull traffic based on its billing standards.
	OBS bucket Select an OBS bucket domain name under your account or customize one. **Notes:** 1. If your OBS private bucket is unsuitable as an origin for your domain name, do not set the private bucket as the origin server. 2. If an OBS private bucket is configured as an origin server, enable **OBS authorization** and select the **Private bucket** option. Otherwise, origin pull will fail. 3. If you have enabled **static website hosting** for your OBS bucket, select the **Static website hosting** checkbox when adding a domain name. In this way, the list of all files in the bucket will not be displayed when users access the bucket. 4. If OBS buckets are configured as origin servers for CDN, OBS charges the traffic for pulling content from the OBS buckets. 5. When back-to-source by mirroring is configured on OBS and range requests are enabled on CDN, if the mirror origin server does not comply with the RFC Range Requests standard, the response to range requests is not 206 and CDN fails to pull content. In this case, submit a service ticket.
Address	Address accessed by CDN PoPs during origin pull.

Parameter	Description
Bucket	This parameter is mandatory when **Type** is set to **OBS bucket**. • **Public bucket**: public read. All users can read objects in the bucket. • **Private bucket**: Only users granted permissions by the ACL can access the bucket.
Priority	The origin server can be primary or standby. The priority of the primary origin server is higher than that of the standby origin server. CDN PoPs preferentially pull content from the primary origin server. If the primary origin server is faulty, CDN PoPs pull content from the standby origin server. • Configure at least one primary origin server.
Origin Ports	Port numbers for CDN PoPs to pull content. By default, the HTTP port is 80 and the HTTPS port is 443. • If **Type** is set to **OBS bucket**, the port numbers cannot be changed.
Host Header	A host is specified in the HTTP request header. It is the domain name of the site accessed by CDN PoPs when CDN pulls content from the origin server. CDN obtains resources from the corresponding site based on the host details during origin pull. After a domain name is added, the default host will be the domain name. Change the host in a timely fashion if either of the following conditions is met: • If you set **Type** to **Domain name** and enter the domain name of an object storage bucket, set the host to the domain name of the object storage bucket. • If you want CDN to pull content from a custom domain name, specify the host. For example, suppose an origin server is bound to two sites, **www.origin01.com** and **www.origin02.com**, and the domain name connected to CDN is **www.example01.com**. If you need CDN to pull content from **www.origin02.com**, you would need to set the host to **www.origin02.com**.

5. Click **OK**. To add multiple origin servers, repeat **4**. You can add up to 50 origin servers.
6. After adding origin servers, click **OK** in the lower left corner of the page.

NOTE

- The configuration takes 5 to 10 minutes to take effect. When **Status** of the domain name becomes **Enabled**, the domain name has been added.

Recommended Configuration

You can also follow the instructions of **(Optional) Recommended Configurations** to configure cache rules and HTTPS certificates for domain names, to improve access performance, cache hit ratio, and access security.

Configuring CNAME Resolution

After a domain name is added, the system automatically assigns a CNAME to this domain name. The CNAME cannot be accessed directly. You must **add the CNAME** to your domain's DNS records. Then requests for your domain name will be redirected to CDN PoPs for acceleration.

6 (Optional) Testing a Domain Name

Test your domain name before adding a CNAME record to the domain's DNS records to ensure that your domain configurations are correct.

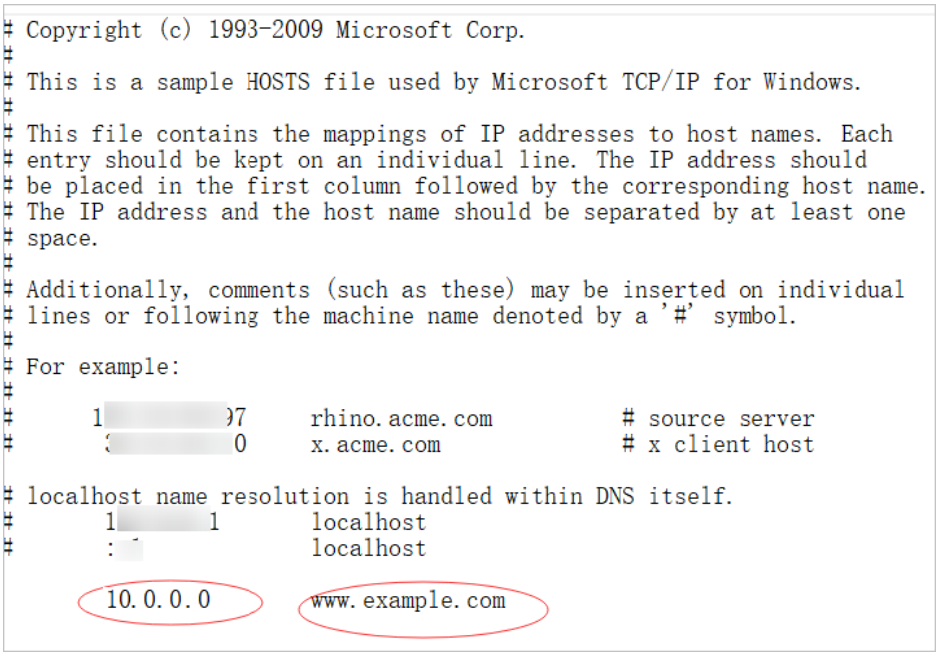
1. Ping the CNAME for the domain name you added to obtain the IP address.

   For this example, we assume that the added domain name is www.example.com, the generated CNAME is www.example.com.7fb73989.cdnhwcedi10.com, and the IP address obtained by pinging www.example.com.7fb73989.cdnhwcedi10.com is 10.0.0.0.

2. Edit the **hosts** file on the local PC.

   If you use a Windows system, map the domain name www.example.com to the IP address 10.0.0.0 in the **hosts** file in the **C:\Windows\System32\drivers\etc** directory.

   Figure 6-1 Testing the domain name



3. Access your domain name to test services. If the test results meet your expectation, the configurations are correct.

4. Add a CNAME record to your domain's DNS records. For details, see **Configuring a CNAME Record**.

7 (Optional) Recommended Configurations

After adding an acceleration domain name, configure cache rules, smart compression, and secure acceleration to improve the cache hit ratio, optimize the acceleration effect, and enhance security.

Improving Cache Hit Ratio and Optimizing the Acceleration Effect

Scenario	Configuration Item	Description
The cache hit ratio is low and the acceleration effect is not obvious.	Cache Rules	Set a proper cache TTL and priority for different resources to improve the cache hit ratio, reduce the origin pull ratio, and relieve the pressure on the origin server. **Notes:** 1. The cache rule priority is an integer ranging from 1 to 100. A greater number indicates a higher priority. 2. If you modify or add a cache rule, purge the cache of the corresponding resource. 3. Set the cache TTL of dynamic resources to **0**, so dynamic resources are not cached. Otherwise, access exceptions may occur. 4. Check the cache settings on the origin server. If **no-cache**, **private**, or **no-store** is configured for a resource on the origin server and **Origin Cache Control** is enabled on the CDN console, CDN cannot cache the resource. CDN needs to pull the resource from the origin server each time it is requested. This does not achieve acceleration.

Scenario	Configuration Item	Description
	Smart Compression	Compress static content on your websites to reduce the file size, speed up file transfer, and save bandwidth. • Smart compression includes gzip compression and Brotli compression. The performance of Brotli compression is 15% to 25% higher than that of gzip compression. • With smart compression, CDN automatically compresses .js, .html, .css, .xml, .json, .shtml and .htm files.
	URL Parameters	Ignore URL parameters to improve the cache hit ratio and speed up content distribution. • If resources do not change with URL parameters, ignore the URL parameters. • If resources change with URL parameters, retain the URL parameters.

Improving Access Performance

Scenario	Configuration Item	Description
Improving origin pull efficiency and reducing pull consumption	Range Requests	Configure range requests to accelerate distribution of large files during origin pull and reduce bandwidth consumption. • Range requests are enabled by default for download acceleration. • The origin server must support the **Range** header.
Redirection enabled for origin server resources	Redirect from Origin	If 301 or 302 redirection is configured for the origin server address, the origin server returns status code 301 or 302 to CDN for a pull request. If this function is enabled on CDN, CDN PoPs will redirect to the address specified in the 301 or 302 response to obtain the resource, cache the resource, and return the resource to the user.

Improving Website Security

Scenario	Configuration Item	Description
Improving security performance	HTTPS	Configure an SSL certificate to improve the domain name security.
	Access Control	Identify and filter visitors to restrict their access and improve CDN resource security.

8 Configuring a CNAME Record

8.1 Overview

Background

If you have added a domain name, the system automatically assigns a CNAME to it. The CNAME cannot be accessed directly. You must add the CNAME to your domain's DNS records. Then requests for your domain name will be redirected to CDN PoPs for acceleration.

What Is DNS Resolution?

When you use DNS for the first time, you may have some questions, such as "What is DNS resolution?", "Why is DNS resolution required?", "How is DNS resolution done?", and "What is an A record?". If you have similar questions, visit Domain Name Service Help Center to find the answers.

How Do I Add a CNAME Record?

If your DNS provider is Huawei Cloud, see **Adding a CNAME Record on Huawei Cloud DNS**.

DNS Conflicts

When you add a CNAME record, you may be informed of a DNS conflict, for example, an existing A record may conflict with the CNAME record, or an existing MX record may conflict with the CNAME record. For details, see **Why Is a Message Indicating Conflict with an Existing Record Set Displayed When I Add a Record Set?**

Table 8-1 Restrictions between record types

-	NS	CNAME	A	AAAA	MX	TXT	PTR	SRV	CAA
NS	No limit[a]	Conflict	No limit	No limit	No limit	No limit	No limit	No limit	No limit
CNAME	Conflict[b]	No limit	Conflict	Conflict	Conflict	Conflict	Conflict	Conflict	Conflict
A	No limit	Conflict	No limit	No limit	No limit	No limit	No limit	No limit	No limit
AAAA	No limit	Conflict	No limit	No limit	No limit	No limit	No limit	No limit	No limit
MX	No limit	Conflict	No limit	No limit	No limit	No limit	No limit	No limit	No limit
TXT	No limit	Conflict	No limit	No limit	No limit	No limit	No limit	No limit	No limit
PTR	No limit	Conflict	No limit	No limit	No limit	No limit	No limit	No limit	No limit
SRV	No limit	Conflict	No limit	No limit	No limit	No limit	No limit	No limit	No limit
CAA	No limit	Conflict	No limit	No limit	No limit	No limit	No limit	No limit	No limit

a: NS record sets can be added for primary domains (for example, example.com). There are no restrictions on subdomains (for example, www.example.com).

b: For primary domains (for example, example.com), you can add CNAME record sets and NS record sets at the same time. However, CNAME record sets conflict with NS record sets for subdomains (for example, www.example.com), and therefore they cannot be added at the same time.

- **Conflict**: The two types of record sets cannot coexist in the same resolution line.
- **No limit**: The two types of record sets can coexist without restrictions.

Two common record set conflicts are:

1. A CNAME record conflicts with an A record.
   - How do I resolve this problem?

     Delete the A record and then configure the CNAME record.
   - Do I need to keep the A record for my website so that it remains accessible?

     As long as the CNAME record is configured, all client requests will be sent to CDN. In this case, you do not need to configure an A record.

For details about how the CNAME record works, see **How CDN Works**.

2. A CNAME record conflicts with an MX record.

   For details, see **Why Is a Message Indicating Conflict with an Existing Record Set Displayed When I Add a Record Set?**

8.2 Adding a CNAME Record on Huawei Cloud DNS

If your domain name is resolved using the DNS service Huawei Cloud provides, then follow the steps in this section to add a CNAME record. **download.game-apk1.com** is used as an example.

Procedure

- **Obtain the CNAME of the domain name.**

1. Log in to **Huawei Cloud console**. Choose **Service List** > **Content Delivery & Edge Computing** > **Content Delivery Network**.

   The CDN console is displayed.

2. In the navigation pane, choose **Domains**.

   On the **Domains** page, copy the CNAME **download.game-apk1.com.*****.cdnhwcedi10.com**.

- **Add a CNAME record.**

1. Log in to the and choose **Service List** > **Networking** > **Domain Name Service**.

   The DNS console is displayed.

2. In the navigation pane, choose **Public Zones**.

   The public zone list is displayed.

3. Click the domain name you want to add a record set to. In this example, the domain name is **game-apk1.com**.
4. Click **Add Record Set** in the upper right corner.
5. Configure the parameters as instructed. **Table 8-2** describes the parameters.

Table 8-2 Parameter description

Parameter	Parameter description	Example Value
Name	Domain name prefix	• **Name** for www.huaweicloud.com is **www**. • **Name** for testcdn.huaweicloud.com is **testcdn**.
Type	Type of the record set **NOTE** A CNAME record cannot coexist with an A record. Otherwise, DNS resolution will fail.	CNAME – Map one domain to another

Parameter	Parameter description	Example Value
Line	Used when the DNS server is resolving a domain name. It returns the IP address of the server according to the visitor source.	Default
TTL (s)	Cache duration of the record set on a local DNS server. If your service address changes frequently, set **TTL** to a smaller value.	Retain the default value.
Value	Domain name to be pointed to, that is, the CNAME allocated by CDN	download.game-apk1.com.7fb73989.cdnhwcedi10.com
Weight	If a resolution line in a zone contains multiple record sets of the same type, you can set different weights to each record set.	-

6. Click **OK**.

NOTE

- After the CNAME resolution takes effect, the status changes to . However, CNAME resolution may fail the verification and the status changes to , indicating that no CNAME record is configured for the domain name. If you have correctly configured the CNAME record, ignore the error message.
- A CNAME record takes effect immediately after being added. If you modify the CNAME record, then the change takes effect within 72 hours.
- If you encounter a resolution conflict, see **DNS Conflicts**.

9 Checking Whether the CNAME Record Has Taken Effect

The length of time before the CNAME record takes effect depends on the DNS provider. To check whether a CNAME record has taken effect:

Open the command line interface that comes with Windows and run the following command:

```
nslookup -qt=cname Acceleration domain name
```

If the CNAME is displayed, the CNAME record has taken effect.

Now CDN acceleration has been enabled.

10 FAQ

Why Do I Get Request Timed Out When Trying to Ping an Acceleration Domain Name?

For security purposes, ping operations are not allowed. You can run the **nslookup** command to check whether CDN has taken effect. For details, see **Checking Whether the CNAME Record Has Taken Effect**.

What Are the Differences Between an Acceleration Domain Name and an Origin Domain?

- Acceleration domain names are provided by you for CDN acceleration. A domain name is an identification string that defines a realm of administrative autonomy, authority, or control within the Internet, such as a website, an email address, or an FTP server.
- An origin domain is the domain name of your origin server.

Can Multiple Acceleration Domain Names Use the Same Origin Server IP Address?

Yes. Different acceleration domain names can use the same origin IP address.

Can an Origin Domain Name Be the Same as an Acceleration Domain Name?

No.

When a user requests content on an acceleration domain name, if the desired content is not cached on CDN PoPs, CDN PoPs need to pull content from the origin server. If the origin domain is the same as the acceleration domain name, the user's request will be repeatedly directed to CDN PoPs, and CDN PoPs will not be able to pull content from the origin server.

Can Wildcards Be Used as Part of an Acceleration Domain Name?

Yes. A wildcard, *, allows multiple level-2 domain names to be included by the same value. All these secondary domain names point to the same IP address. If you add ***.test.com** to CDN as an acceleration domain name and have it resolved

to the CNAME provided by CDN, all of the level-2 domain names under ***.test.com**, such as **a.test.com**, will enjoy CDN acceleration by default. However, level-3 domain names (such as **b.a.test.com**) would not.

The following are the rules for adding wildcards to domain names:

- If you add a wildcard domain name to a particular account, you cannot add any of the level-2 domain names under that domain name to other accounts.
- You will be billed for the acceleration service provided to all of the level-2 domain names under a wildcard domain name. If there are multiple level-2 domain names, billing will be based on the traffic generated by the wildcard domain name, not on each of the level-2 domain names.

