Content Delivery Network
Getting Started
Product Documentation
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Getting Started
Overview

You can connect to CDN to deliver contents on your origin server to service nodes closest to end users, which directly respond to user requests to effectively reduce user access latency and improve availability.

To configure CDN, you must sign up for a Tencent Cloud account, activate CDN, add a domain name, and configure CNAME. The steps are detailed in this document.

Step 1. Sign up for a Tencent Cloud account

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

Click here to sign up

Step 2. Activate the CDN service

1. Complete identity verification

Registered users must first complete identity verification in order to activate CDN. You can verify your identity in the CDN Console or Account Center. For more information on the verification process, please see Identity verification guide.

Click here to go to

2. Provide additional service information

Log in to the CDN Console, confirm your identity verification information, select the service, and click Next.
3. Select a billing method

CDN provides two billing methods: bill-by-traffic and bill-by-bandwidth. You can choose according to your business type. For more information, please see Billing Descriptions. Accept the terms of service and click Activate CDN to start using the acceleration service.

Step 3. Connect a domain name
You need to add an accelerated domain name for your acceleration service. Through accelerated domain name, CDN caches resources on an origin server into a CDN cache node closest to the client to accelerate resource access. For more information, please see Connecting a domain name.

Step 4. Configure CNAME

After connecting your domain name to CDN, you need to configure the CNAME with your domain name provider. The CDN service will be available after the configuration takes effect. For more information, please see Configuring CNAME.
Adding Domain Names

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After activating CDN, you can log in to the CDN Console and select Domain Management on the left sidebar. Click Create a Distribution to add an acceleration domain name. After the domain name is added, its configuration will be distributed to the CDN cache nodes across the entire network without directly affecting your business in the production environment. To activate acceleration, you need to configure a CNAME record. For specific directions, please see CNAME Configuration.

Creating a Distribution

Access the domain name management page and click Create a Distribution.

The distribution creation page consists of three parts:

- Domain configuration
- Origin configuration
- Service configuration

Based on your selected domain and origin configurations, CDN will recommend service configuration, which can be submitted without modification.

Part 1. Domain configuration

Enter your business domain name in the domain name field and select the project, region, and service type:
**Domain Configuration**

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Description</th>
</tr>
</thead>
</table>
| Domain        | 1. The domain name can contain up to 50 characters.  
2. The domain name should have obtained an ICP filing from the MIIT.  
3. Subdomain names in the format of `a.test.com` or `a.b.test.com` and wildcard domain names in the format of `*.test.com` or `*.a.test.com` are supported.  
4. If the domain name is a wildcard domain or has been configured by another user, you need to complete **ownership verification** to access or retrieve it.  
**Note:**  
1. After a wildcard domain name is configured, its subdomain names and second-level wildcard domain names cannot be configured under another account.  
2. Domain names in the format of `*.test.com` and `*.a.test.com` cannot be configured at the same time. |
<p>| Project       | Project is a set of resources shared by all Tencent Cloud products. You can manage it on the <strong>project management</strong> page. |</p>
<table>
<thead>
<tr>
<th>Configuration</th>
<th>Description</th>
</tr>
</thead>
</table>
| Region       | Mainland China: access requests of global users will be scheduled to cache nodes in mainland China for acceleration. Overseas: access requests of global users will be scheduled to cache nodes outside mainland China for acceleration. Global: access requests of global users will be scheduled to the nearest optimal node for acceleration.  

**Note:** Acceleration service in and outside mainland China are billed separately. For more information on billing policies, please see [here](#). |
| Service type | CDN optimizes acceleration performance based on service type. For the best acceleration result, we recommend you select the service type similar to that of your actual business.  

Static acceleration: suitable for small-scale resource acceleration scenarios such as ecommerce, websites, and game images.  
Download acceleration: suitable for download scenarios such as game installation, source audio/video file download, and mobile phone firmware distribution.  
Streaming VOD acceleration: suitable for scenarios such as online education and VOD. |
| Internet protocol | IPv4: nodes can be accessed only through IPv4 addresses. IPv4+IPv6: nodes can be accessed through both IPv4 and IPv6 addresses. Only when this option is selected can an IPv6 origin server be configured.  

**Note:** IPv6 is only supported in mainland China. |

**Part 2. Origin configuration**

Configure business origin server information. If the CDN node has no resource cache, the node will pull the resource from the origin server and cache it.
**Configuration description:**

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Description</th>
</tr>
</thead>
</table>
| Origin type        | External: select this if you already have your own stable business server (i.e., origin server).  
                    **COS origin:** if resources have already been stored in COS, the bucket can be directly selected as the origin server. |
| Origin address     | External origin server:  
                    1. Multiple IPs can be configured as the origin server, which will be polled during origin-pull.  
                    2. If multiple IPs are used, you can configure weighted origin-pull in the format of `IP:port:weight(1-100)`. The port can be omitted and the format becomes `IP::weight`.  
                    3. You can configure one domain name as the origin server, which should be different from the business acceleration domain name.  
                    **COS:**  
                    1. Select from the drop-down list the bucket to be configured as the origin server.  
                    2. If the bucket is private read/write, first grant CDN access to the bucket. Otherwise, origin-pull will fail. |
### Origin-pull protocol
This can be selected based on the protocols supported by the origin server:
- HTTP: HTTP/HTTPS access requests use HTTP origin-pull.
- HTTPS: HTTP/HTTPS access requests use HTTPS origin-pull (the origin server must support HTTPS access).
- Follow protocol: HTTP access requests use HTTP origin-pull, while HTTPS access requests use HTTPS origin-pull (the origin server must support HTTPS access).

### Origin domain
This refers to the site domain name accessed on the origin server by a CDN node during origin-pull.
If a subdomain name is configured, it will be the same as the acceleration domain name by default and can be customized.
If a wildcard domain name is configured, it will be the actual access subdomain name by default and can be customized.

### Part 3. Service configuration
Configure the node acceleration service:

#### Service Configurations

<table>
<thead>
<tr>
<th>Basic Configuration</th>
<th>Ignore query string</th>
<th>Active Range Forwarding</th>
</tr>
</thead>
</table>

#### Cache Configuration

<table>
<thead>
<tr>
<th>Type</th>
<th>Content</th>
<th>Purge Time</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>All contents</td>
<td>30 days</td>
<td></td>
</tr>
</tbody>
</table>

- File ext: `.php,.jsp,.asp,.aspx` | 0 days | Delete

*Rules are executed from the bottom to the top. The lower rules are with higher priorities.*

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### Configuration description:

<table>
<thead>
<tr>
<th>Configuration</th>
<th>Description</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Configuration</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic configuration</td>
<td>A node caches resources by following the Key-Value mapping, where Key is the resource URL. If &quot;Ignore Query String&quot; is enabled, parameters after &quot;?&quot; in the URL will be ignored before mapping. Otherwise, Key will be a complete resource URL. By default, this feature is enabled for download and streaming VOD acceleration, but not for static acceleration.</td>
</tr>
<tr>
<td>Enable Range GETs</td>
<td>This specifies whether to process partial requests during origin-pull. It can be enabled only if the origin server supports Range GETs. This feature is enabled for COS origin server by default.</td>
</tr>
<tr>
<td>Cache configuration</td>
<td>This specifies the expiration period of the node cache, which is 30 days for all files by default. The configured expiration period is an estimate. The actual expiration period may be shorter depending on the available storage capacity of the node.</td>
</tr>
</tbody>
</table>

**Completing the Configuration**

Click **Submit** to add the domain name and wait for the domain name configuration to be distributed across the entire network. This will take about 5–10 minutes.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Success</td>
</tr>
</tbody>
</table>

When the distribution is completed, CDN will allocate a corresponding CNAME address to you, which needs to be configured before taking effect. For detailed directions, please see **CNAME Configuration**.
Domain Name Ownership Verification

If the domain name is a wildcard one or has been connected to by another user, you need to verify ownership before accessing or retrieving it. DNS verification is used. The verification steps are as follows:

1. Click **Verification Method** to get the resolution record information to be added for DNS verification. Do not close this page before verification is completed.

2. At your DNS service provider, add a TXT record and enter `_cdnauth` as its host record and the record value randomly generated on the "Verification Method" page as its record value.

3. Wait for TXT resolution to take effect and click **Verify**. If "Verification failed" is displayed, wait for the DNS record to take effect before trying again and check whether the TXT record has been entered correctly.
After your domain name is bound to CDN, the system automatically assigns you a CNAME domain name suffixed with `.cdn.dnsv1.com` which can be viewed on the Domain Name Management page in the CDN Console. It cannot be accessed directly. Instead, you need to complete the CNAME configuration with the domain name service provider first. When the configuration takes effect, you can use the CDN acceleration service.

### CNAME verification

The time it takes for a CNAME record to take effect varies by DNS service provider. It is generally within half an hour. You can also run ping on the command line to check whether the CNAME record is in effect. If a domain name suffixed with `.sp.spcdntip.com` can be pinged, the domain name CNAME record has taken effect.
Basic Concepts
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Origin server
This refers to your stably running business server. On the CDN Console, you can select an external server or COS as the origin server.

External origin
This refers to a server where your own web service is deployed. When connecting to an acceleration domain name, you can enter the server's public IP address as the origin server.

COS origin
If resources have already been stored in COS, a bucket can be selected as the origin server.

Edge server
This refers to a network node that CDN uses to cache the content of your origin server in order to quickly respond to user requests from different regions.

CNAME record
A CNAME (Canonical Name) record refers to the alias record in a domain name resolution. For example, a server named host.example.com provides both WWW and MAIL services. To make it easier for users to access those services, two CNAME records (www.example.com and mail.example.com) can be added for this server at its DNS service provider, and all requests to access these two CNAME records will be forwarded to host.example.com.

CNAME domain name
This refers to a domain name suffixed with .cdn.dnsv1.com that is assigned by the system to the connected acceleration domain name configured on the CDN Console. You need to configure a CNAME record at your domain name service provider. After the record takes effect, CDN will take care of domain name resolution, and all requests made to this domain name will be forwarded to the edge servers of CDN.

Static content
This refers to content that stays the same in the responses to multiple requests for the same resource. Examples include html, css and js files, images, videos, software installation packages, APK files, and compressed files.
Dynamic content

This refers to content that varies in the responses to multiple requests for the same resource. Examples include APIs and .jsp, .asp, .php, .perl, and .cgi files.

Origin-pull

In CDN, an origin-pull means that when a user sends a request from a browser, the server that responds to the request is the server of the source website rather than a cache server on a CDN node. Generally, if the content is not cached on the cache server or is modified on the origin server, it will be pulled from the origin server.

Origin domain

This refers to the site domain name accessed on the origin server by a CDN node during origin-pull. For more information, please see Origin Server Configuration.

Domain name

This refers to a set of server addresses that users can easily remember and use, and can be a website, email, FTP, etc. It is used to identify a computer’s electronic location (sometimes referred to as geographic location) during data transfer.
Domain Name Connection

How do I connect a domain name?
You can connect a domain name on the CDN Console. For more information, please see Adding Domain Names.

Does CDN support connecting wildcard domain names?
Yes. CDN supports connecting wildcard domain names, but verification is needed. Upload the verification files provided by Tencent Cloud to the root directory of the website, and establish the connection to the wildcard domain name after the verification is completed successfully.
In addition:

1. If a wildcard domain name such as *.test.com is already connected to Tencent Cloud, then none of its sub-domain names can be connected to another account.
2. If the wildcard domain name *.test.com is already connected to your account, then wildcard domain names in formats such as *.path.test.com cannot be connected to your account.

How long does it take to configure CDN?
Generally, it takes less than 30 minutes for the CDN configuration to take effect. If the configuration does not take effect within 30 minutes after configuration, you can submit a ticket for assistance.

Are there any requirements for connecting a domain name to CDN?
Yes. Before a domain name is connected to CDN for acceleration, it must obtain the ICP filing from the MIIT, and the business contents on the origin server must be legally compliant.

Can I configure multiple origin server IPs?
Yes. After you configure multiple IPs, CDN will randomly access one of the IPs when forwarding a request to the origin server. If the number of origin-pull failures with this IP exceeds the threshold, it will be isolated for 300 seconds by default and will no longer be used for origin-pull.

How do I bind CNAME to a domain name after the domain name is connected to CDN?
Please see CNAME Configuration for how to bind CNAME with your DNS service provider.

Why can a domain name be disabled but not deleted?
Please check whether the user is a collaborator. The collaborator's permission is configured by the creator of the CDN service. If the creator does not assign the relevant permission to the collaborator, the collaborator cannot perform the operation. If you are sure that the collaborator has been granted the permission but still cannot perform the operation, submit a ticket for assistance.

**Will the domain name configuration be retained after the acceleration service is disabled?**

Yes. After the acceleration service is disabled, the domain name configuration will be retained, but the acceleration service will no longer be available. In this case, any user requests will be forwarded to the origin server for origin-pull.

**Will the domain name configuration be retained after an acceleration domain name is deleted?**

No. After the domain name is deleted, its configuration will not be retained.

**How do I disable the acceleration service?**

You can disable the acceleration service on the CDN Console. For detailed directions, please see [Disabling an Acceleration Service](#).

**How do I delete an acceleration domain name?**

You can delete an acceleration domain name on the CDN Console. For detailed directions, please see [Deleting an Acceleration Domain Name](#).

**How do I unblock a domain name?**

Please submit a ticket for assistance.

**What business types does CDN support?**

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 audio/video on demand acceleration scenarios.
- **LVB acceleration**: suitable for live video broadcast and interactive live video broadcast acceleration scenarios.
How do I modify the project of a CDN domain name?

1. Log in to the CDN Console, select Domain Management on the left sidebar, and click Manage on the right of the domain name you want to edit.

2. Click the Basic Configuration tab to see the basic information module, where you can view the basic information of the domain name, including the project. For users using the CDN permission system, please perform this operation carefully, as it may change the permissions of sub-users.

3. Click Modify on the right of the project and select a new project in the drop-down list.

You can also manage your projects on the Project Management page.

Are there any requirements for connecting a domain name to CDN?

Yes. The following are the requirements for connecting a domain name to CDN:

1. The domain name can contain up to 50 characters. CDN currently does not support Chinese domain names (even after transcoding).
2. If mainland China CDN is used, the domain name must have an ICP filing issued by the MIIT.
3. The domain name is a sub-domain name in the format of test.com or a.test.com or a wildcard domain name in the format of *.test.com or *.a.test.com.
4. If the domain name is a wildcard one or has been connected by another user, you need to verify your ownership before connecting or retrieving it.

**My domain name has already obtained an ICP filing from the MIIT. Why does the system prompt that it does not have an ICP filing when I try to connect it to CDN?**

After you obtain your ICP filing, it takes some time to sync the information from the MIIT to Tencent Cloud CDN. Please wait 24 hours and try again.

**Can I configure ports for acceleration domain names/origin servers?**

- CDN acceleration domain name port: currently, CDN acceleration ports can only be 80, 443, and 8080 by default.
- Origin server port: ports in the range of 1–65535 can be configured after the origin server address.

**What is CDN origin domain configuration?**

Origin domain is the website domain name accessed on the origin server during origin-pull on a CDN node. Origin server and origin domain: the IP/domain name configured on the origin server allows the CDN node to find the corresponding origin server during origin-pull. There can be multiple websites on the server, and the origin domain indicates on which website the resource resides.

**How do I tell whether CDN has taken effect?**

Ping the domain name and view the returned result. If cdntip.com is displayed in the returned result, CDN connection has succeeded.

**What should I do if files cannot be downloaded from CDN?**

If files cannot be downloaded from CDN, we recommend you troubleshoot using the following methods:

1. Check whether files can be downloaded normally from the origin server.
2. Check whether the CDN domain name is correctly configured on the CDN Console > Basic Configuration > Origin Domain. Please make sure that the configured origin domain can be accessed properly. Otherwise, origin-pull may fail, which will affect your business.
3. Check the security policy of the origin server. Please check whether the origin-pull failure is caused by the security policy configured on the origin server. If so, please contact us to get the intermediate IP range and whitelist the origin server.

**What should I do if I cannot log in to the WordPress backend after CDN acceleration is configured?**
WordPress involves dynamic requests. If the cache is configured inappropriately, login exceptions may occur. We recommend you set the cache expiration time of the corresponding dynamic file type to 0, so that files of this type will not be automatically cached. Common dynamic file types include .asp, .jsp, .php, .perl, and .cgi. For detailed directions, please see Cache Expiration Configuration.