

# Alibaba Cloud Alibaba Cloud CDN

## Service Management

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# Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 <b>Danger:</b> Resetting will result in the loss of user configuration data.
	This warning information indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 <b>Warning:</b> Restarting will cause business interruption. About 10 minutes are required to restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 <b>Notice:</b> Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 <b>Note:</b> You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
<b>Bold</b>	It is used for buttons, menus, page names, and other UI elements.	Click OK.
Courier font	It is used for commands.	Run the <code>cd / d C :/ windows</code> command to enter the Windows system folder.
<i>Italics</i>	It is used for parameters and variables.	<code>bae log list --instanceid Instance_ID</code>
[ ] or [a b]	It indicates that it is an optional value, and only one item can be selected.	<code>ipconfig [-all -t]</code>

Style	Description	Example
<code>{}</code> or <code>{a b}</code>	It indicates that it is a required value, and only one item can be selected.	<code>swich {stand   slave}</code>



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# 1 Data monitoring

Data Monitoring includes Resource Monitoring and Real-time Monitoring.

## Resource Monitoring

You can select Domain Name, Region, Operator, Time Granularity (1 minute, 5 minute or 1 hour) and Time Range (Today, Yesterday, 7 Days, 30 Days or Custom) to view the specific condition in the following dimensions:

Items	Metrics
Traffic Bandwidth	Bandwidth, Traffic
Back-to-origin Statistics	Back-to-origin Bandwidth, Back-to-origin Traffic
Number of Visits	Number of requests, QPS.
HTTPS Hit Rate	N/A
HTTPCODE	5xx, 4xx, 3xx, 2xx

A difference exists between the graph data and the billing data in Resource Monitoring. For example, a 30-day statistical curve takes a granularity of 14400s, while the billing statistical curve takes a granularity of 300s. As a result, the graph, ignoring some metering points, is mainly used to show the trends of bandwidth. The billing data, with more precise granularity, always serves as the basis to calculate your bandwidth usage.



Note:

HTTP Hit Rate is not available for selecting Region or Operator.

## Real-time Monitoring

You can select the Domain Name, Region, Operator or the Time Range you want to view (Past 1 Hour, Past 6 hours, Past 12 hours or Custom) to view the specific condition in the following dimensions:

Items	Metrics
Basic Data	Bandwidth, Traffic, Number of requests, QPS
Back-to-origin Traffic	Back-to-origin Traffic, Back-to-origin Bandwidth

Items	Metrics
Quality monitoring	Request Hit Rate, Byte Hit Rate, 5xx status code, 4xx status code, 3xx status code, 2xx status code.

## Procedure

1. Log on to the [CDN console](#).
2. In the left-side navigation pane, choose Data Monitoring > Resource Monitoring or Data Monitoring > Real-time Monitoring. In the main workspace, select monitoring items and metrics, and click Query.

Resource Monitoring:

Real-time Monitoring:

## 2 Statistical Analysis

In Statistical Analysis, you can check data of PV and UV, Area and ISP, Domain Name Rankings, Popular Referer, and Popular URLs. You can also export detailed raw data, such as network bandwidth, traffic, the traffic-based ranking of domain names, visitor area, operator distribution, and so on.

**Note:**

The precision of original data collection varies according to time spans, which are 300s, 3600s, and 14400s for daily export, weekly export, and monthly export, respectively.

Item	Index	Time Span
PV and UV	PV, UV, regional user distribution, and operator proportions	Today, yesterday, past 7 days, past 30 days, and custom (within 90 days).
Area and ISP	Ranking, region, total traffic, traffic proportion, number of visits, by QPS, response time.	Today, yesterday, past 7 days, past 30 days, and custom (within 90 days).
Domain Name Rankings	Access rankings for each CDN domain name	Today, yesterday, past 7 days, past 30 days, and custom (within 90 days).
Popular Referer	Traffic, traffic proportion, number of visits, and visits proportion	You can view the daily data within your customized days (at most 90 days).
Popular URLs	Traffic, traffic proportion, number of visits, and visits proportion	You can view the daily data within your customized days (at most 90 days).

### Procedure

1. Log on to the [CDN console](#).
2. In the left-side navigation pane, choose Statistical Analysis. In the main workspace, select monitoring items and metrics, and click Query.

## 3 Usage Query

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### 3.1 Usage Query

#### Introduction

You can use this function to obtain the actual usage of traffic, bandwidth, or requests during a certain period. You can customize the time span (3 months at most) to query

.

You can query the data by the following dimensions:

- Domain name or user
- Traffic, bandwidth, or requests.
- Billing regions. For more information, see [Billing regions](#).



#### Note:

You cannot export data from the Usage page. To export the data you require, go to Billing export or Detail export.

#### Procedure

1. Log on to the [CDN Console](#).
2. On CDN Overview page, click Usage on the left.
3. On the Usage page, configure all conditions, including traffic/bandwidth/requests, time range, and billing regions. Then click Query.

#### Other Checklist

- You can click Billing Information to query your billing list by day.
- You can click [Billing Export](#) to export your billing list.
- You can click [Detailed Data Export](#) to export detailed data.
- You can also click Usage Bag to check the Usage Bag Name, Total, Remaining, Effective Date, Expiry Date, and Status of each usage bag.

## 3.2 Billing export

### Introduction

You can export actual usage data by day or by month, so as to compare it with the report output from the billing center.

- You can only export data by account.
- You can only export data for one day, or for a whole month.
- Export format: PDF.

### Procedure

1. Log on to the [CDN Console](#).
2. On CDN Overview page, click Usage.
3. On the Usage page, select the date, then click Query.
4. Click Download at the end of the line you choose.

## 3.3 Detail Data Export

### Introduction

With this feature, you can export detail data for traffic/bps data or request times, so that you can calculate or review the usage you actually paid for,

- You can export data by account, resource group, or domain name.
- At the same time, all domain names of the resource group are also exported.
- You can export up to 100 domain names at a time. Only the resource group details are exported if you export over 100 domain names.
- The time span for all exported data is five minute.
- Download data format: CSV.
- You cannot export repeated time span.

### Procedure

1. Log on to the CDN console, enter the Domain Names page, select the domain name, then click Manage.
2. On the Usage > Detail Data Export page, click Create Task.
3. Enter Task Name (required), the choose Type, Inquiry Time(required), Export Content, and Export Frequency.

#### 4. Click Confirm.

## 4 Log Management

### 4.1 Log Downloading

- You can query the log files in the Log Management within 4 hours.
- Log files are segmented on an hour basis.
- You can download the log files within 1 month.
- Name a log file based on the rule: Acceleration domain name\_year\_month\_date\_start time\_end time .
- Log field format description.

#### Sample log content

```
[ 9 / Jun / 2015 : 01 : 58 : 09 + 0800 ] 188 . 165 . 15 . 75 -  
1542 "-" " GET http :// www . aliyun . com / index . html " 200  
191 2830 MISS " Mozilla / 5 . 0 ( compatible ; AhrefsBot / 5 .  
0 ; + http :// ahrefs . com / robot / )" " text / html "
```

#### Log field description

Field	Parameter
time	[9/Jun/2015:01:58:09 +0800]
access ip	188.165.15.75
proxy IP	-
Responsetime (Unit: ms)	1542
referer	-
method	GET
access url	<a href="http://www.aliyun.com/index.html">http://www.aliyun.com/index.html</a>
httpcode	200
requestsize (Unit: byte)	191
responsesize (Unit: byte)	2830
cache hit status	MISS
UA header	Mozilla/5.0 (compatible; AhrefsBot/5.0; + <a href="http://ahrefs.com/robot/">http://ahrefs.com/robot/</a> )
File type	text/html

## 4.2 Configure log storage

This topic describes how to configure the CDN log storage service. The log storage service uses Function Compute to store logs for a long time period. You can analyze the logs to get your CDN service quality and client access behavior.

### Prerequisites

Function Compute must be activated. After CDN is authorized with Function Compute, you can create a Function Compute instance to store logs. Alternatively, you can log on to the [Function Compute console](#) and use an existing Function Compute instance to store logs.

### Context

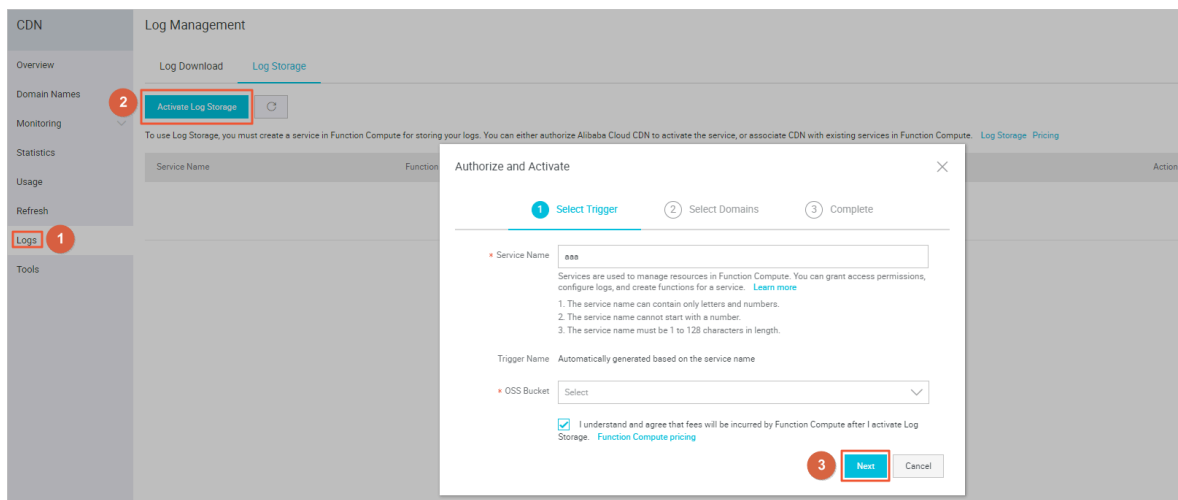
- The CDN offline log service stores logs for only one month by default. However, you can use the CDN log storage service to store logs to OSS, where logs can be stored for a longer period of time.
- The log storage service is free of charge. However, you will consume Function Compute resources during the log storage process. As such, you are billed when the amount of Function Compute resources you consume in a month exceeds the specified quota. For more information about Function Compute pricing, see [Function Compute billing methods](#).
- CDN is seamlessly integrated with Function Compute. This allows you to configure functions for processing a wide range of events and receive only the events from the domains with specific name fields. After receiving the specified types of events that meet the filter criteria you have defined, CDN automatically calls the functions to process the events.
- Function Compute supports such CDN services as log storage, refresh and preload, resource release, domain name addition and deletion, and domain name enabling and disabling. For more information, see [CDN events trigger](#).

### Procedure

1. Log on to the [Alibaba Cloud CDN console](#).
2. In the left-side navigation pane, click Logs.
3. On the Log Management page, click the Log Storage tab.



4. On the Log Storage tab page, click **Activate Log Storage**.
5. In the **Authorize and Activate** dialog box, enter a service name in the **Service Name** field, select an OSS bucket from the **OSS Bucket** drop-down list, and click **Next**.



6. Click the **Authorize** button next to **Service Authentication**.  
Function Compute is authorized to write data to OSS buckets and execute functions.
7. Click the **Authorize** button next to **Authorize Trigger**.  
CDN is authorized to access Function Compute.

## 8. Select domains and click Create.

Authorize and Activate

✓ Select Trigger

2 Select Domains

3 Complete

Service Authorization

Authorize

Authorize Function Compute to write to OSS and execute functions

Authorize Trigger

Authorize

You must authorize CDN to access Function Compute.

Select Domains

0 Item

Search

0 Item

Search

We recommend that you bind a domain to one Function Compute service only. Binding a domain to multiple Function Compute services may result in service failures.

CreateCancel

## 9. Click Done.

Authorize and Activate

✓ Select Trigger

✓ Select Domains

3 Complete

✓ The Log Storage service is configured.

Newly generated logs for the specified domains will be pushed to OSS based on your trigger. You can manage the trigger in the Function Compute console, or view the stored logs in OSS.

Done

## 5 Diagnostic Tools

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An IP address detection tool is provided in order to verify whether a specified IP address is an Alibaba Cloud CDN node IP address or an IP address from a third-party node.

## 6 Domain Names

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### 6.1 Set httpDNS

#### Introduction

- A traditional DNS resolution is implemented by accessing the local DNS of a carrier in order to obtain the resolution result. However, this action can easily allow for DNS hijacking, DNS errors, and inter-network traffics, and lead to slowed, or failed , website access.
- httpDNS is a DNS service that uses HTTP protocol to directly access the Alibaba Cloud CDN server. Because it bypasses the carrier's local DNS, it can avoid DNS hijacking and obtain real-time accurate DNS resolution results.
- Principle: Initiate a request to access a designated Alibaba Cloud CDN httpDNS server through HTTP protocol. The httpDNS server performs domain resolution based on second-level DNS nodes distributed everywhere, obtains the domain name resolution result, and returns the result.

#### httpDNS interface

Direct access through an HTTP interface is supported. The access method is as follows.

##### 1. Service URL

```
http :// umc . danuoyi . alicdn . com / multi_dns_ resolve
```

##### 2. Request method: POST

##### 3. Supported parameter: client\_ip = x . x . x . x . This parameter can be ignored if the IP address of the client initiating the httpDNS request is used.

##### 4. Request example: Multiple domains to be resolved are placed in the body of a POST request and are separated by whitespaces (blank spaces, TABs, newline characters).

```
# curl ' http :// umc . danuoyi . alicdn . com / multi_dns_ resolve ? client_ip = 182 . 92 . 253 . 16
```

```
' - d ' d . tv . taobao . com '
```

5. Returned format: json data is returned. After resolution, domain IP addresses are extracted and polling can be performed among them. TTL cache and expiration rules must be followed.

```
{" dns ":[{" host ":" d . tv . taobao . com "," ips ":[{" ip ":" 115 . 238 . 23 . 240 "," spdy ": 0 },{" ip ":" 115 . 238 . 23 . 250 "," spdy ": 0 }]," ttl ": 300 ," port ": 80 }]," port ": 80 }
```

## 6. Request example with multiple domains

### • Request example

```
# curl ' http :// umc . danuoyi . alicdn . com / multi_dns_
resolve ? client_ip = 182 . 92 . 253 . 16
' - d ' d . tv . taobao . com vmtstvcdn . alicdn . com '
```

### • Return example

```
{" dns ":[{" host ":" vmtstvcdn . alicdn . com "," ips ":[{" ip ":" 115 . 238 . 23 . 250 "," spdy ": 0 },{" ip ":" 115 . 238 . 23 . 240 "," spdy ": 0 }]," ttl ": 300 ," port ": 80 },{" host ":" d . tv . taobao . com "," ips ":[{" ip ":" 115 . 238 . 23 . 240 "," spdy ": 0 },{" ip ":" 115 . 238 . 23 . 250 "," spdy ": 0 }]," ttl ": 300 ," port ": 80 }]," port ": 80 }
```