

Content Delivery Network Statistics and Analysis Product Documentation



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Statistics and Analysis

Statistics Overview

Last updated : 2019-09-23 16:54:10

CDN provides the following six tools for data analysis and query to help you understand these factors more clearly: how users are accessing your business resources, the statistical analysis of data consumption generated by your business on CDN, the bandwidth generated by your origin server when receiving back-to-origin requests as well as the speed:

Statistic	Description
Usage	Query for real-time traffic and bandwidth consumption generated by projects and domains on CDN, provides TOP usage analysis regarding provinces and ISPs, provides analysis of popular URLs
Access	Query for real-time number of requests generated by projects and domains, provides TOP analysis for number of requests of provinces and ISPs, provides analysis of popular URLs
Status Code	Provides statistics of HTTP status codes returned by projects and domains, in response to user requests, including the statistics of 2XX, 3XX, 4XX, 5XX
Origin	Query for real-time back-to-origin traffic and bandwidth of projects and domains, as well as the speed for back-to-origin accesses
Global Status	Review the status of the entire CDN network
Monthly Report	Provides analytical report regarding monthly CDN usage

Statistics of Usage

Last updated : 2018-03-19 19:23:54

Log in to [CDN Console](#), and click "Usage" page under "Statistics" to review the curve graph of detailed real-time bandwidth and traffic consumption as well as other data including the analysis of ISPs, provinces and popular URLs. You can also query for historical data. Details will be described below.

Query Criteria

The usage statistics page includes the following query criteria:

The screenshot shows the 'Usage statistics' interface in the Tencent Cloud CDN console. On the left is a sidebar with a menu including 'Overview', 'Domain Management', 'Purge Cache', 'Statistics' (expanded), and 'Usage' (selected). The main panel has a title 'Usage statistics' and a set of filters. At the top are time range buttons: 'Today' (active), 'Yesterday', 'Last 7 days', 'Last 15 days', 'Last 30 days', and a date picker showing '2017-05-19'. Below these are dropdown menus for 'Projects' (All projects), 'Domains' (All domains), 'Regions' (All regions), 'Carrier' (All Carriers), 'Network layer' (Edge server), and 'Temporal granularity' (5 minutes). A blue 'Check' button is located at the bottom left of the filter area.

Note:

- Time range: The earliest selectable time is 2015-01-01, you can select a query time span of up to 90 days;
- Project: Query for usage data based on project is supported;
- Domain: Query for usage data based on specified domain is supported;
- Region: Query for usage data based on specified region is supported. Currently you cannot select both "Region" and "Carrier", when you select regions, the carrier will need to be "All carriers";
- Carrier: Query for usage data based on specified carrier is supported. Currently you cannot select both "Region" and "Carrier", when you select a carrier, the region will need to be "All regions";
- Network layer: Query for usage data of edge nodes or intermediate nodes is supported;
- Temporal granularity: This refers to the temporal granularity with which bandwidth and traffic data will be presented. This is related to the selected time span:

If the selected time span is 1 day, you can query data with a temporal granularity of 5 minutes, 15 minutes, 30 minutes, 2 hours or 4 hours;

If the selected time span is 2-3 days, you can query data with a temporal granularity of 15 minutes, 30 minutes, 2 hours or 4 hours;

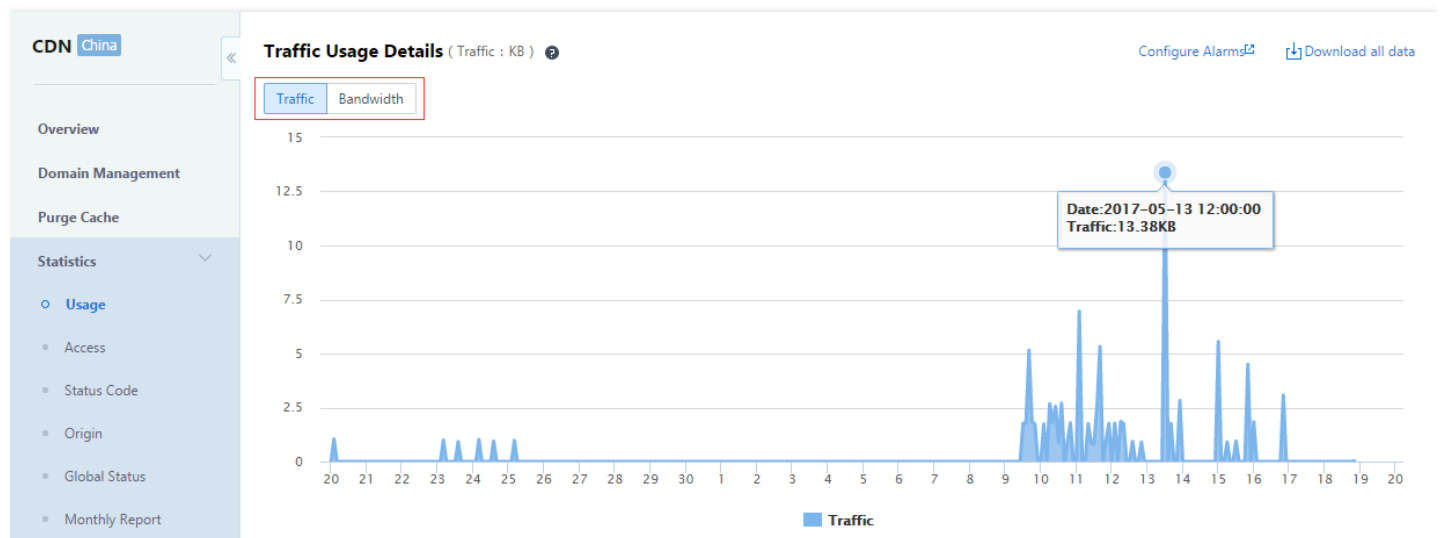
If the selected time span is 4-7 days, you can query data with a temporal granularity of 2 hours, 4 hours or 1 day;

If the selected time span is more than 30 days, you can only query data with a temporal granularity of 4 hours or 1 day;

Data Result Description

Statistics of Traffic and Bandwidth

Displays the curve graph of traffic and bandwidth statistical data:



Note:

- The minimum granularity for traffic and bandwidth statistics is five minutes, that is, the statistical data from 2016-10-25 15:00:00 to 15:04:59 will be shown at the statistical point of 2016-10-25 15:05:00;
- The latency of real-time data is about five minutes, that is, the statistical point of 2016-10-25 15:05:00 will appear around 2016-10-25 15:10:00;
- Accelerated domains that were once connected and then deleted will be displayed in gray in the "All domains" drop-down box;
- Note about statistics:

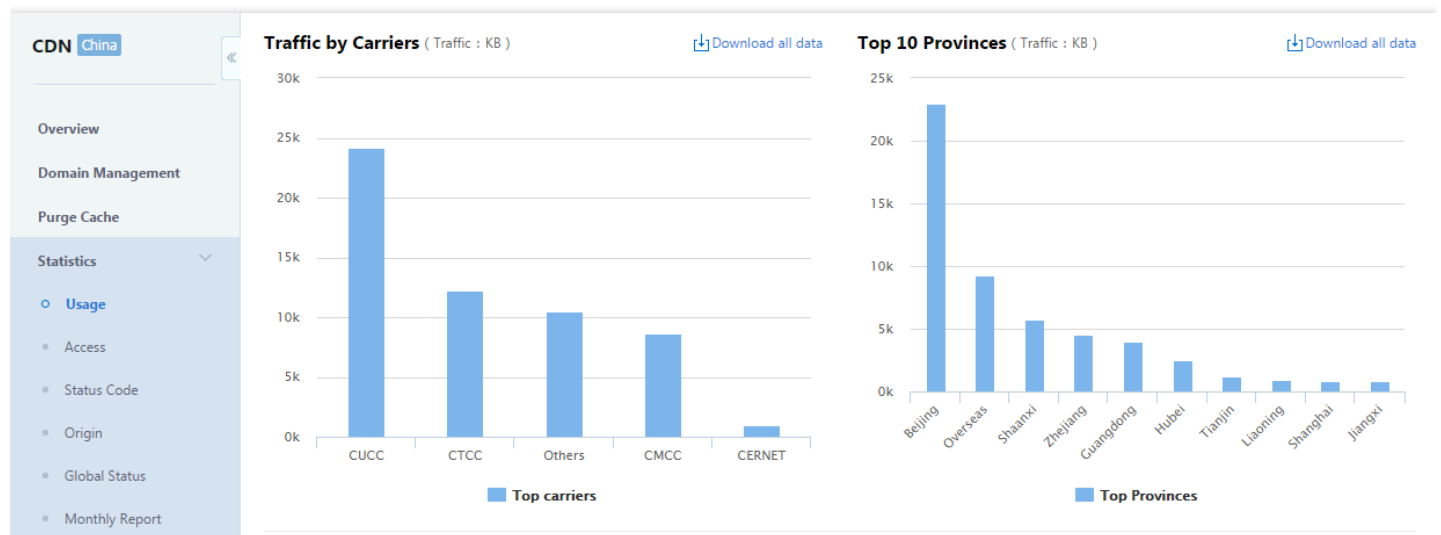
If the domain has not been connected to CDN for the specified time range, it will not be covered in statistics even if it is checked;

If the domain has been deleted for the specified time range, it will not be covered in statistics even if it is checked;

If the domain experienced three stages (not connected, connected and deleted) for the specified time range, the statistical data for unconnected and deleted time period will be filled by 0.

Carrier and Province Analysis

The usage statistics are ranked and analyzed based on provinces and carriers:



Note:

- Carrier and province data is analyzed through logs, thus the data belongs to application layer. There will be deviations between this data and the statistics of traffic and bandwidth NIC data in the previous figure;
- Latency of data statistics during peak hours is less than 30 minutes;
- The record of carrier and province data will only be kept for 90 days, if the query time range exceeds the limit of 90 days, the data will not be displayed.

Domain Bandwidth/Traffic Usage Details

Domains and their detailed traffic and bandwidth are displayed according to selected query criteria (sorted from high to low). You can click "Download all data" to download detailed data:

CDN China

Overview

Domain Management

Purge Cache

Statistics

Usage

Access

Status Code

Origin

Global Status

Monthly Report

Logs

Traffic/Bandwidth Usage Details

Download all data

Domain	Category	Traffic	Peak Bandwidth
		96.07KB	333bps

Total 1 items

Lines per page: 10

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1/1

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Note:

- The details of domain bandwidth and traffic are statistics of NIC data;
- The record of detailed bandwidth and traffic data will only be kept for 90 days, if the query time range exceeds the limit of 90 days, the data will not be displayed.

TOP100 URL

TOP100 analysis for traffic usage and bandwidth usage towards individual URL resources is carried out according to the selected query criteria, to help you locate popular resources:

CDN China

Overview

Domain Management

Purge Cache

Statistics

Usage

Access

Status Code

Origin

Global Status

Monthly Report

Logs

Traffic/Bandwidth usage Top100

Download all data

URL	Traffic Usage	Bandwidth Usage
	50.83KB	1bps
	861B	0bps
	802B	0bps
	396B	0bps
	396B	0bps
	396B	0bps

Total 13 items

Lines per page: 10

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1/2

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Note:

- TOP100 URL analysis is done through logs, there will be a latency of 1-2 hours;
- The record of TOP100 data will only be kept for 90 days, if the query time range exceeds the limit of 90 days, the data will not be displayed.

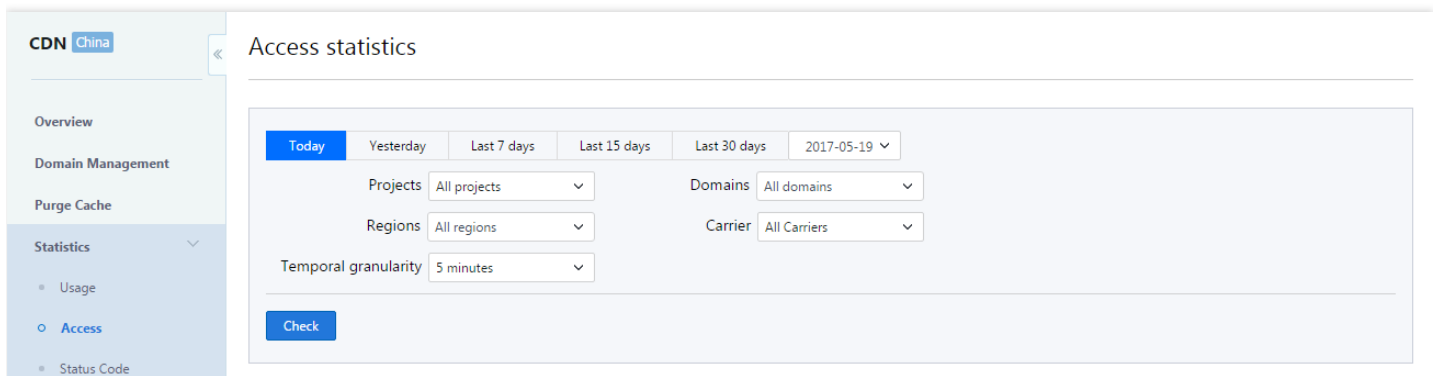
Statistics of Access

Last updated : 2018-03-19 19:24:24

Log in to [CDN Console](#), and click "Access" page under "Statistics" to review real-time statistics of request quantity, number of IP visits, hit rates. You can check the historical record within 90 days.

Query Criteria Instruction

The following criteria are supported when querying access statistics:



Note:

- Time selection: The query for access statistics for the last 90 days is supported with a query span of up to 90 days.
- Project: Query for usage data based on project is supported;
- Domain: Query for usage data based on specified domain is supported;
- Region: Query for usage data based on specified region is supported. Currently you cannot select both "Region" and "Carrier", when you select regions, the carrier will need to be "All carriers";
- Carrier: Query for usage data based on specified carrier is supported. Currently you cannot select both "Region" and "Carrier", when you select a carrier, the region will need to be "All regions";
- Temporal granularity: This refers to the temporal granularity with which bandwidth and traffic data will be presented. This is related to the selected time span:

If the selected time span is 1 day, you can query data with a temporal granularity of 5 minutes, 15 minutes, 30 minutes, 2 hours or 4 hours;

If the selected time span is 2-3 days, you can query data with a temporal granularity of 15 minutes, 30 minutes, 2 hours or 4 hours;

If the selected time span is 4-7 days, you can query data with a temporal granularity of 2

hours, 4 hours or 1 day;

If the selected time span is more than 30 days, you can only query data with a temporal granularity of 4 hours or 1 day;

Data Result Description

Access Statistics

The figure shows the data under the specified query criteria:



- Network-wide statistics for number of requests of OC nodes;
- Statistics for number of IP visits: This statistic is obtained by calculating all request IPs within 5 minutes after removing duplicates;
- Hit rate: Hit rate (%) = (number of requests - number of back-to-origin requests) / number of requests.

Note:

- For access statistics, there is a statistical point every five minutes, that is, the statistical data from 2016-10-25 15:00:00 to 15:04:59 will be presented at the statistical point of 2016-10-25 15:05:00;
- The latency of real-time data is about five minutes, that is, the statistical point of 2016-10-25 15:05:00 will appear around 2016-10-25 15:10:00;
- All domains connected within 90 days will be covered in the "All Domains" drop-down box, including those that have been deleted;
- Note about statistics:

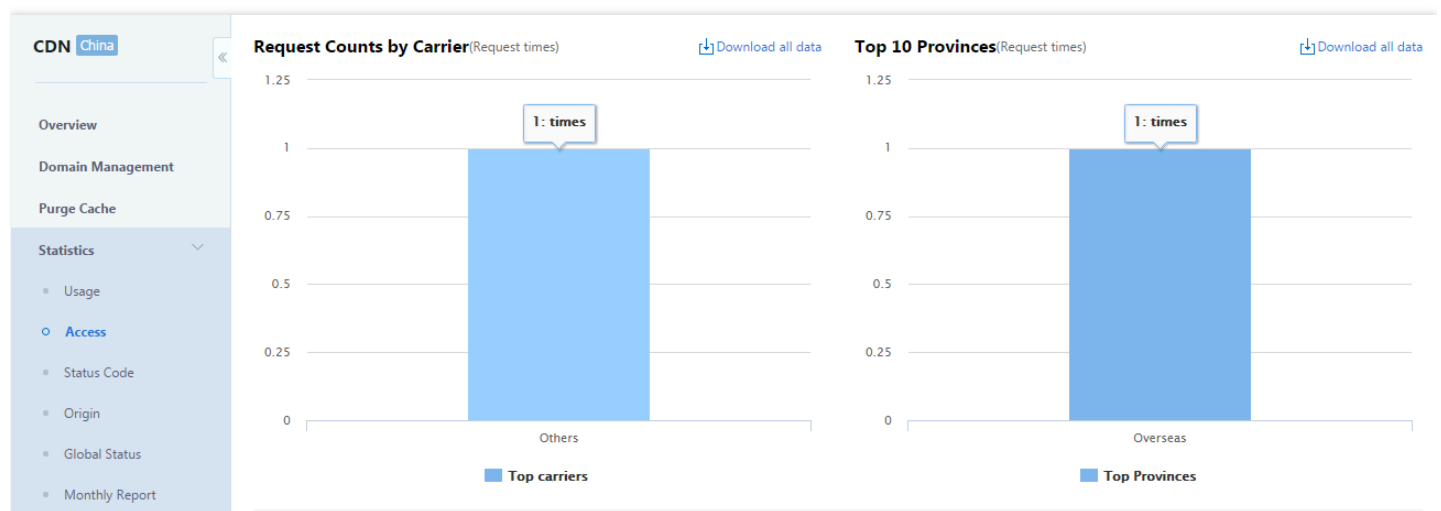
If the domain has not been connected to CDN for the specified time range, it will not be covered in statistics even if it is checked;

If the domain has been deleted for the specified time range, it will not be covered in statistics even if it is checked;

If the domain experienced three stages (not connected, connected and deleted) for the specified time range, the statistical data for unconnected and deleted time period will be filled by 0.

Carrier and Province Analysis

The number of requests are ranked and analyzed based on provinces and carriers:



Note:

- Carrier and province data is analyzed through logs, thus the data belongs to application layer. There will be deviations between this data and the statistics of traffic and bandwidth NIC data in the previous figure;
- Latency of data statistics during peak hours is less than 30 minutes;
- The record of carrier and province data will only be kept for 90 days, if the query time range exceeds the limit of 90 days, the data will not be displayed.

Domain Access Status Statistics

You can click "Download all data" to download detailed data about the domain, number of requests, number of IP visits, hit rate according to the selected query criteria:

<div>CDN China</div> <div>Overview</div> <div>Domain Management</div> <div>Purge Cache</div> <div>Statistics</div> <div>Usage</div> <div>Access</div> <div>Status Code</div> <div>Origin</div> <div>Global Status</div> <div>Monthly Report</div>	Domain access status statistics Download all data				
	Domain	Category	Requests	IP access count	Hit rate
		Own origin	1 times	1 times	0

TOP100 URL

TOP100 analysis for requests towards individual URL resources is carried out according to the selected query criteria to help you locate popular resources:

Status Code	Top 100 Most-accessed Domains Download all data	
	Origin	
	Global Status	
	Monthly Report	
	Sorry, no relevant data found	

Note:

- TOP100 URL analysis is done through logs, there will be a latency of 1-2 hours;
- The record of TOP100 data will only be kept for 90 days, if the query time range exceeds the limit of 90 days, the data will not be displayed.

Statistics of Status Codes

Last updated : 2018-03-19 19:25:12

Log in to [CDN Console](#), and click "Status Code" under "Statistics" to review statistics of 2XX, 3XX, 4XX, 5XX status codes.

Query Criteria Instruction

The following query criteria are supported when querying status code statistics:

The screenshot shows the 'Status code statistics' page in the Tencent Cloud CDN Console. The left sidebar has a menu with 'Overview', 'Domain Management', 'Purge Cache', 'Statistics', and 'Status Code' (selected). The main content area has a title 'Status code statistics' and a form with the following controls:

- Time range: Today, Yesterday, Last 7 days, Last 15 days, Last 30 days (selected), and a date range selector (2017-04-20 To 2017-05-19).
- Projects: All projects (dropdown).
- Domains: All domains (dropdown).
- Network layer: Edge server (dropdown).
- Temporal granularity: 2 hours (dropdown).
- A 'Check' button at the bottom left of the form.

Note:

- Time selection: The query for statistical data for the last 90 days is supported with a query span of up to 90 days.
- Project: Query for usage data based on project is supported;
- Domain: Query for usage data based on specified domain is supported;
- Network layer: Query for status code statistics of edge nodes or intermediate nodes is supported;
- Temporal granularity: This refers to the temporal granularity with which bandwidth and traffic data will be presented. This is related to the selected time span:

If the selected time span is 1 day, you can query data with a temporal granularity of 5 minutes, 15 minutes, 30 minutes, 2 hours or 4 hours;

If the selected time span is 2-3 days, you can query data with a temporal granularity of 15 minutes, 30 minutes, 2 hours or 4 hours;

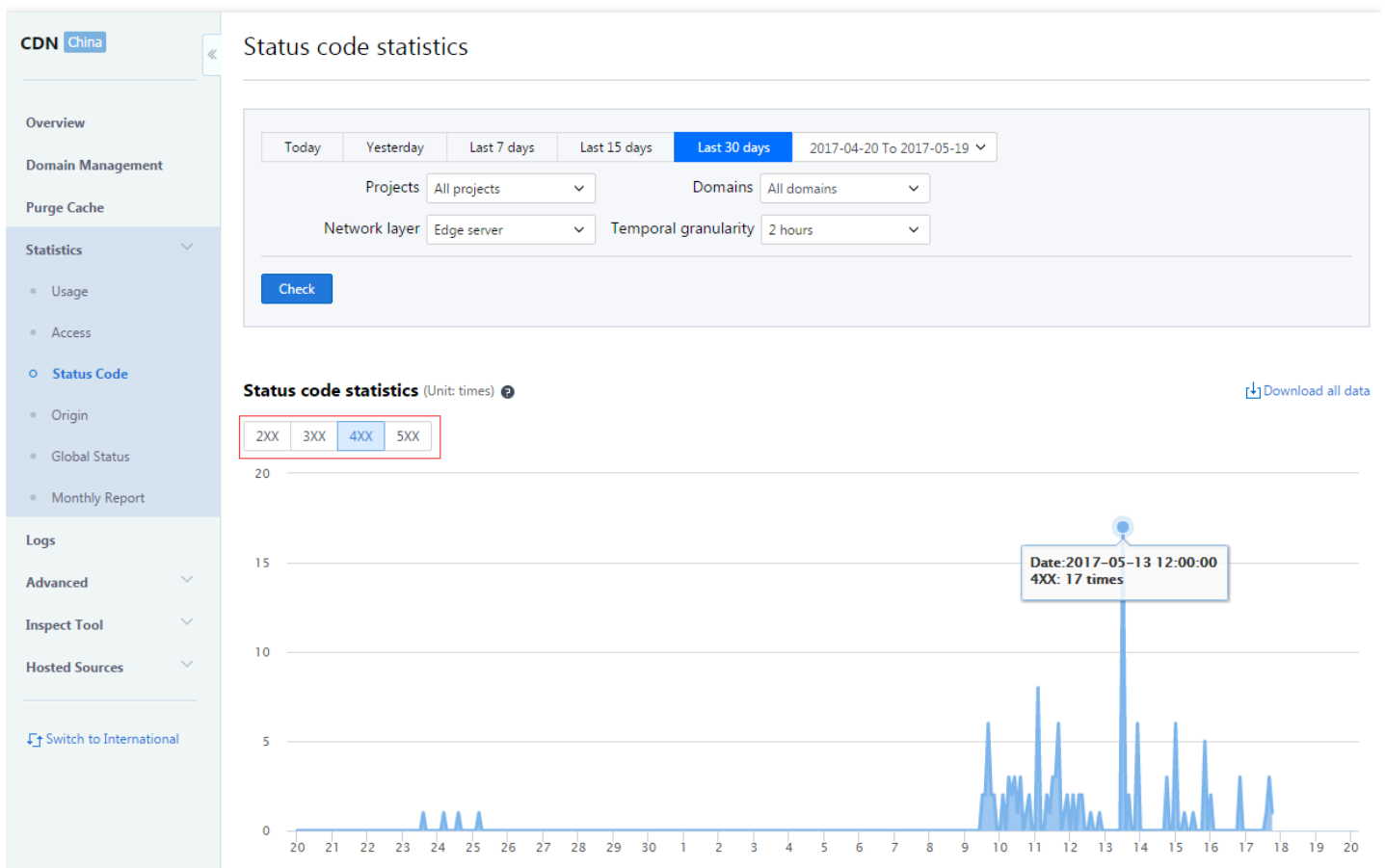
If the selected time span is 4-7 days, you can query data with a temporal granularity of 2 hours, 4 hours or 1 day;

If the selected time span is more than 30 days, you can only query data with a temporal granularity of 4 hours or 1 day;

Data Result Description

Status Code Statistics

Displays the statistical data curve graph of 2XX, 3XX, 4XX, 5XX status codes:



Statistics Instruction:

- 2XX: Statistics of status code 200 and 206;

- 3XX: Statistics of status code 304;
- 4XX: Statistics of status code 404 and 416;
- 5XX: Statistics of status code 500.

Note:

- The minimum granularity of status code statistics is five minutes, that is, the statistical data from 2016-10-25 15:00:00 to 15:04:59 will be shown at the statistical point of 2016-10-25 15:05:00;
- The latency of real-time data is about five minutes, that is, the statistical point of 2016-10-25 15:05:00 will appear around 2016-10-25 15:10:00;
- Domains added within 90 days by the user, including deleted domains, will be displayed in the "All domains" drop-down box;
- Note about statistics:

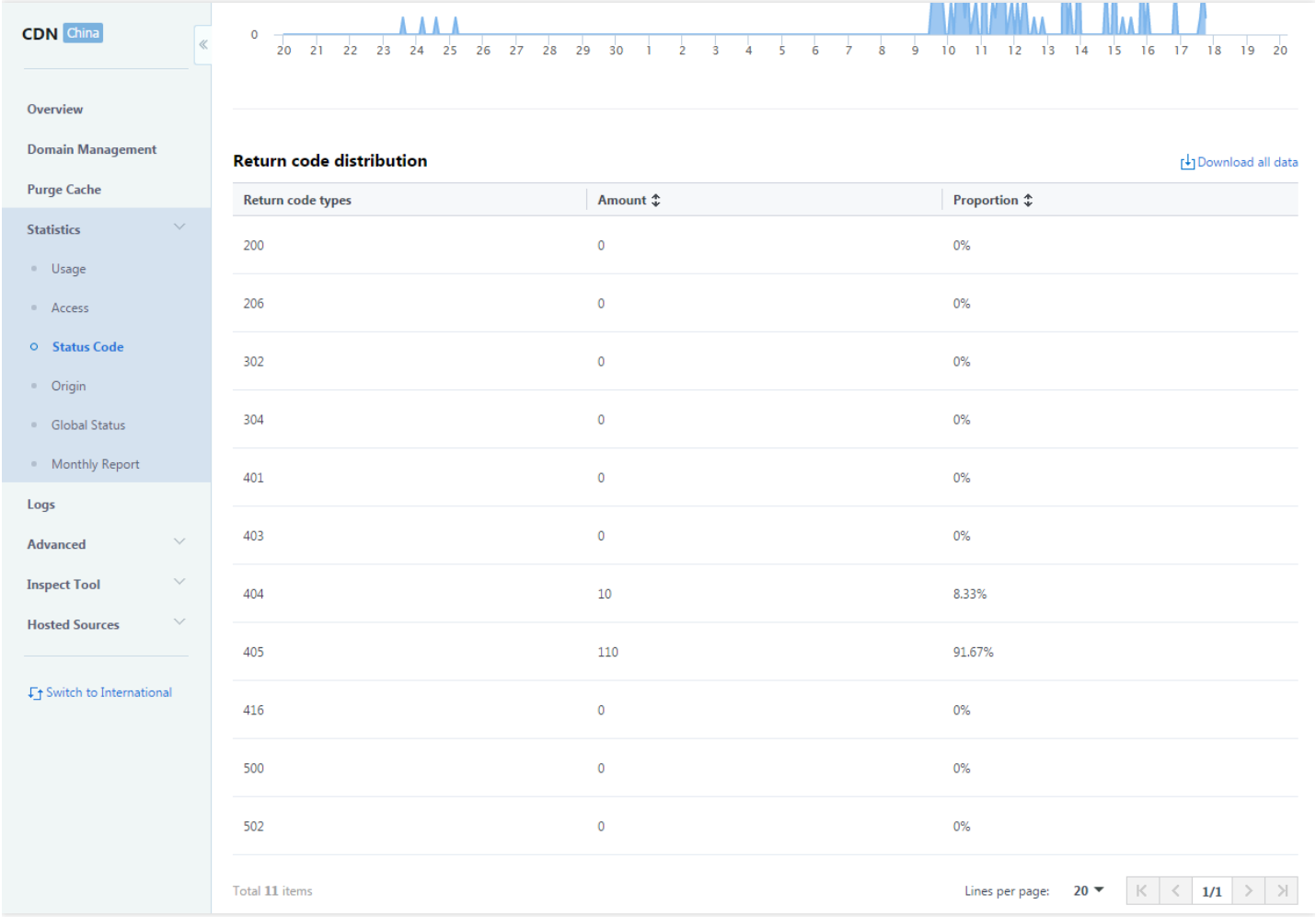
If the domain has not been connected to CDN for the specified time range, it will not be covered in statistics even if it is checked;

If the domain has been deleted for the specified time range, it will not be covered in statistics even if it is checked;

If the domain experienced three stages (not connected, connected and deleted) for the specified time range, the statistical data for unconnected and deleted time period will be filled by 0.

Status Code Distribution

Detailed statistics regarding the number and proportion of status codes:



Origin Server Statistics

Last updated : 2018-05-09 17:44:02

Log in to [CDN Console](#), and click "Origin" page under "Statistics" to review statistical data such as back-to-origin bandwidth, back-to-origin traffic and back-to-origin speed.

Query Criteria Instruction

The following query criteria are supported when querying back-to-origin statistic data:

CDN China

Origin Server

Overview

Domain Management

Purge Cache

Statistics

- Usage
- Access
- Status Code
- Origin

Today Yesterday Last 7 days Last 15 days Last 30 days 2017-05-19

Projects All projects Domains All domains

Temporal granularity 5 minutes

Check

Origin-Pull Consumption Origin-Pull Failures 404 Status Code

Note:

- Project: Query for usage data based on project is supported;
- Domain: Query for usage data based on specified domain is supported;
- Temporal granularity: This refers to the temporal granularity with which bandwidth and traffic data will be presented. This is related to the selected time span:

If the selected time span is 1 day, you can query data with a temporal granularity of 5 minutes, 15 minutes, 30 minutes, 2 hours or 4 hours;

If the selected time span is 2-3 days, you can query data with a temporal granularity of 15 minutes, 30 minutes, 2 hours or 4 hours;

If the selected time span is 4-7 days, you can query data with a temporal granularity of 2 hours, 4 hours or 1 day;

If the selected time span is more than 30 days, you can only query data with a temporal granularity of 4 hours or 1 day;

- The minimum granularity of back-to-origin statistics is five minutes, that is, the statistical data from 2016-10-25 15:00:00 to 15:04:59 will be shown at the statistical point of 2016-10-25 15:05:00;
- The latency of real-time data is about five minutes, that is, the statistical point of 2016-10-25 15:05:00 will appear around 2016-10-25 15:10:00;
- All domains that have been connected by the user will be displayed in the "All domains" drop-down box; deleted domains are grayed out:

If the domain has not been connected to CDN for the specified time range, it will not be covered in statistics even if it is checked;

If the domain has been deleted for the specified time range, it will not be covered in statistics even if it is checked;

If the domain experienced three stages (not connected, connected and deleted) for the specified time range, the statistical data for unconnected and deleted time period will be filled by 0.

Data Result Description

Note about statistics:

Back-to-origin failure rate statistics, back-to-origin failure analysis, and 404 status code are obtained from the statistical analysis of logs, thus such data are collected from the hosting source dimension:

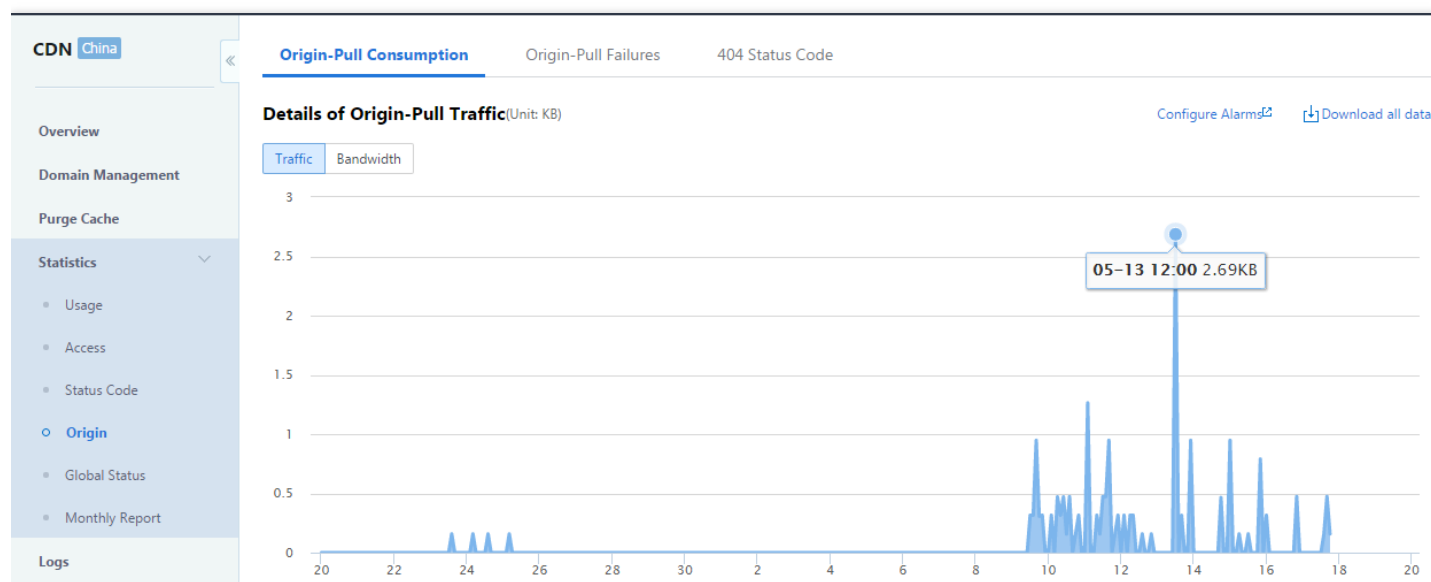
Connect the accelerated domain "www.a.com" and set its hosting source to "www.c.com";
Connect the accelerated domain "www.b.com", and set its hosting source to "www.c.com";

In this situation, the query results regarding relevant information of "www.a.com" or "www.b.com" are the same, which will be the statistics of the origin server "www.c.com".

The statistics of back-to-origin bandwidth and back-to-origin speed are collected independently without following the above logic.

Back-to-origin Traffic and Bandwidth

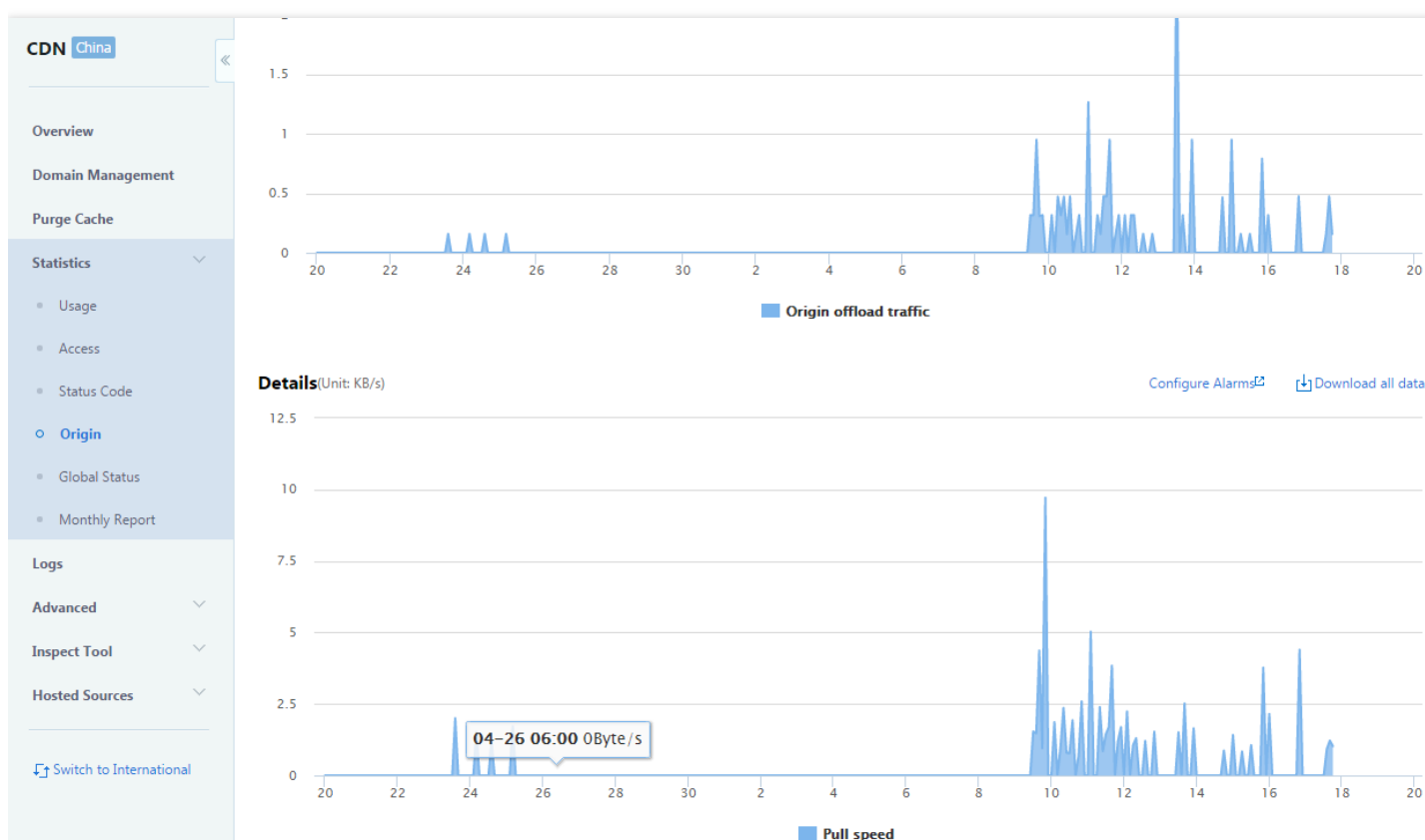
Displays statistical curve graph of back-to-origin traffic and back-to-origin bandwidth:



Back-to-origin Speed

CDN provides back-to-origin speed monitoring to give you a better understanding of the quality of back-to-origin links. Back-to-origin speed is calculated by dividing the total traffic of all back-

to-origin requests with the time spent by all back-to-origin requests, during the statistical cycle.



Back-to-origin Failure Rate

Displays the statistical curve graph of real-time back-to-origin failure rate:

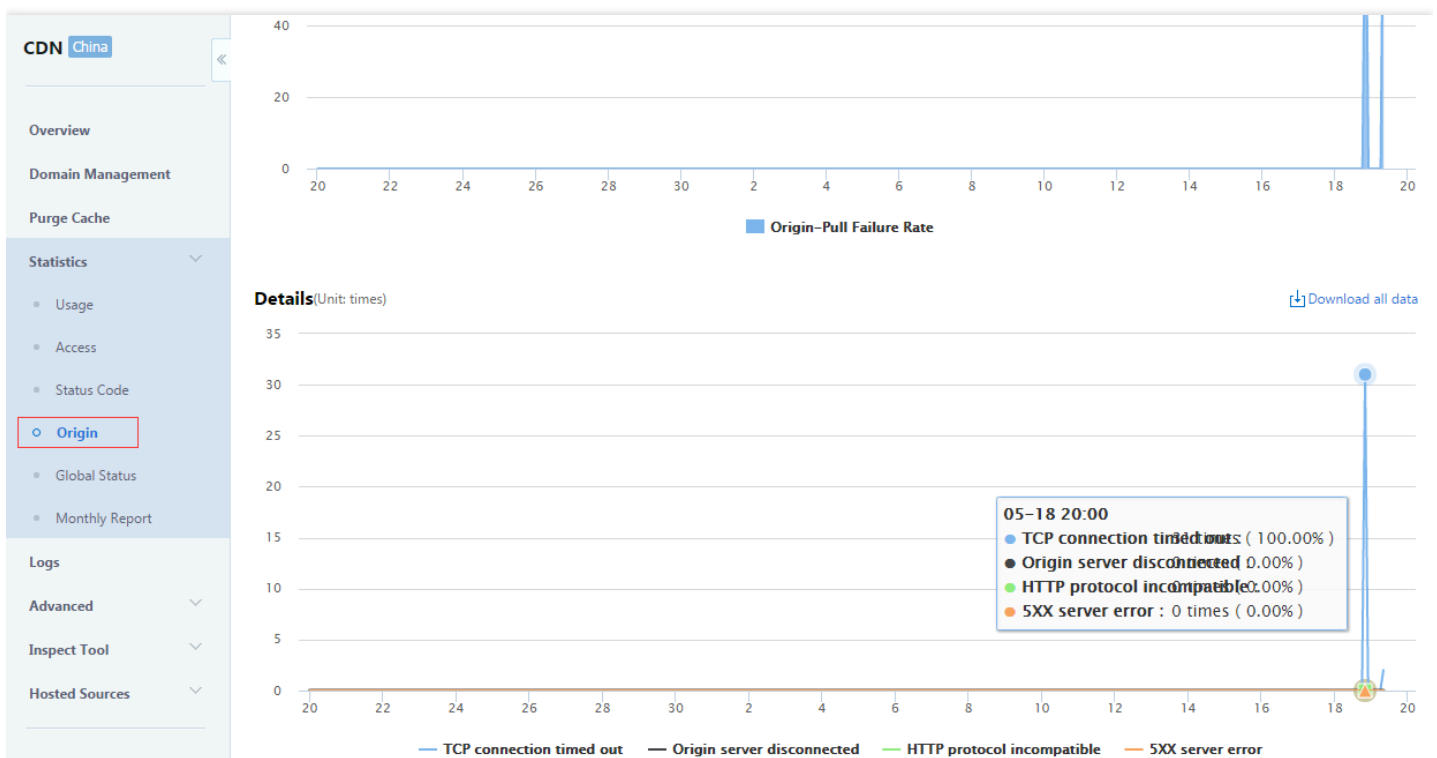


Note:

- Back-to-origin failure rate = number of failed back-to-origin requests / total number of back-to-origin requests. Situations when a request is considered failed include TCP connection timeout, origin server disconnection, incompatible HTTP protocols and 5XX server error. For more details, please refer to the following "Details of Back-to-origin Failure";
- Statistical data regarding back-to-origin failure rate is provided starting from 2016-10-15. Currently you cannot query for data before this date;
- You can configure real-time alarms against back-to-origin failure rate for CDN domains and projects in [Cloud Monitoring](#).

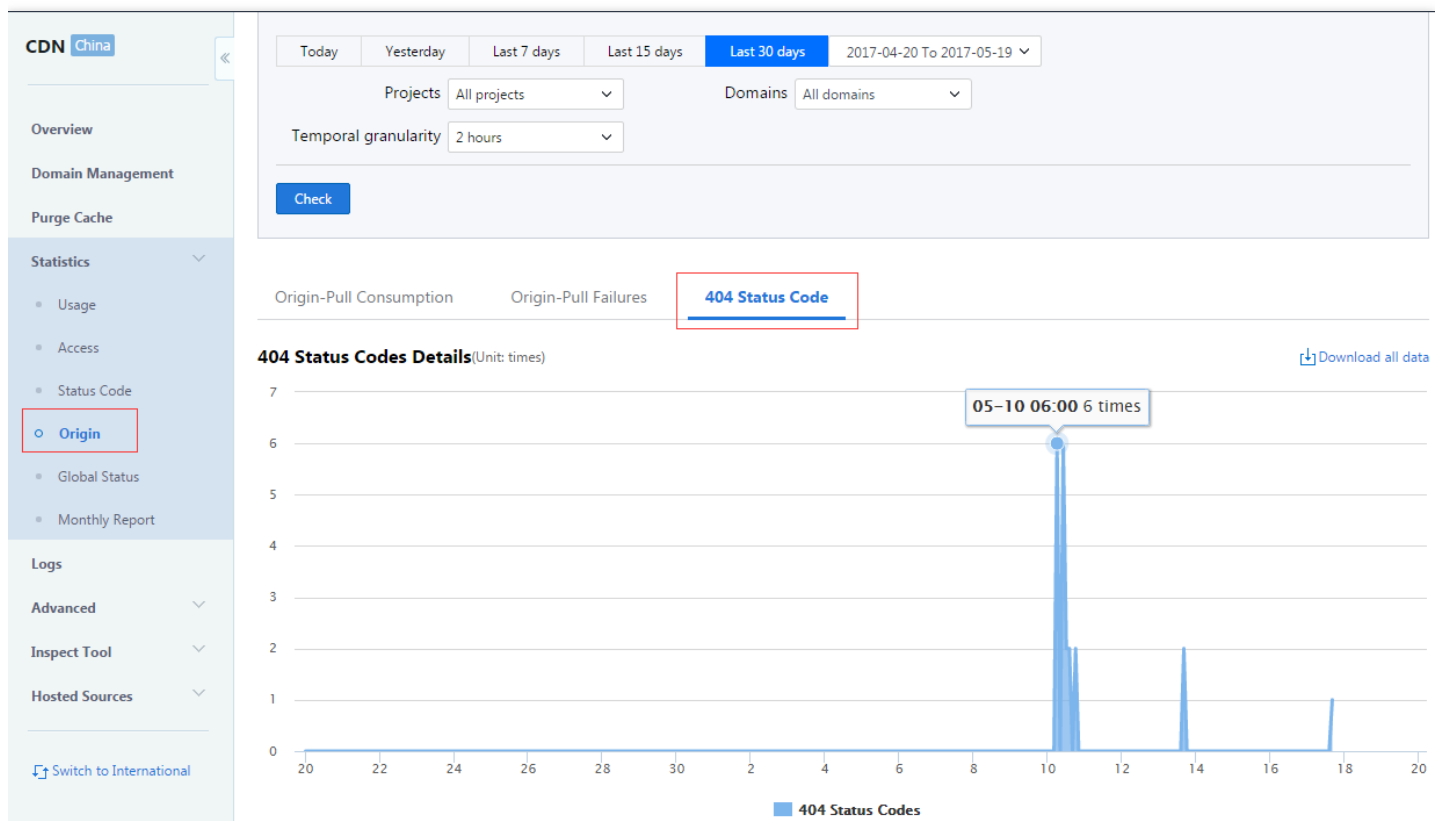
Details of Back-to-origin Failure Types

In correspondence with back-to-origin failure rate, real-time statistics and proportions of various types of back-to-origin failures are displayed:



404 Status Code Statistics

Provides statistics of 404 status codes that are generated for back-to-origin requests:



Note:

- Statistical data regarding 404 status codes is provided starting from 2016-10-15. Currently you cannot query for data before this date;