Content Delivery Network

Billing

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HUAWEI TECHNOLOGIES CO., LTD.

Security Declaration

Vulnerability

Huawei's regulations on product vulnerability management are subject to the *Vul. Response Process.* For details about this process, visit the following web page:
https://www.huawei.com/en/psirt/vul-response-process
For vulnerability information, enterprise customers can visit the following web page:
https://securitybulletin.huawei.com/enterprise/en/security-advisory

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1 Billing Items

Huawei Cloud Content Delivery Network (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.

Billing Options

Billing Item	Billed By	Description	Reference
Basic service fee	Traffic	You are billed by the traffic used per hour. You can also buy traffic packages to deduct traffic used.	**Billing by Traffic** **Prepaid Traffic Packages**
	Peak bandwidth	The system measures and records a peak bandwidth every 5 minutes, so 288 records are collected per day. The highest peak bandwidth per day is used as the billable bandwidth.	**Billing by Peak Bandwidth**
	95th percentile bandwidth	In each calendar month, the peak bandwidth is measured and recorded on each valid day. At the end of the month, the records are sorted from the highest to the lowest, and the top 5% of the records are thrown away. Then the highest bandwidth value in the remaining records is the billable bandwidth of the month and a bill is generated based on the contract price.	**Billing by 95th Percentile Bandwidth**

Billing Item	Billed By	Description	Reference
	Average daily peak bandwidth	At the end of each calendar month, the system calculates the average of peak bandwidth of valid days in this month. The average value is the billable bandwidth of the month and a bill is generated based on the contract price.	**Billing by Average Daily Peak Bandwidth**
	Prepaid traffic package	You can purchase a traffic package that suits your needs. Your traffic package is used first. Traffic consumed beyond the package will be billed on a pay-per-use basis.	**Prepaid Traffic Packages**
Value-added service fee	Number of whole site acceleration requests	You are billed by the number of whole site acceleration requests for dynamic and static content.	**Value-added Service Billing**

📖 **NOTE**

- On the **Analytics** page on the CDN console, the logged traffic statistics of acceleration domain names are displayed. These statistics are obtained from logs at the application level. However, the billable traffic (the actual network traffic) is 7% to 15% higher than the statistics displayed on the CDN console because the traffic consumed by TCP/IP packet headers and TCP retransmissions also needs to be counted in. Therefore, the billable traffic will be typically 10% higher than the statistics displayed on the CDN console.

- CDN billing is global. All acceleration domain names under an account use the same billing option.

- CDN is billed by region. For details, see **Charging Regions**. Traffic packages in a region cannot be used to deduct traffic generated in another region.

Pricing Details

CDN services are charged by region and have different prices. For details, see **Pricing Details**.

Charging Regions

Charging Region	Country and Region (Divided Based on Huawei's Internal Businesses)
Chinese mainland	Chinese mainland (excluding Hong Kong, Macao, and Taiwan)
Asia Pacific 1	Hong Kong (China), Japan, Macao (China), South Korea, and Taiwan (China)
Asia Pacific 2	India

Charging Region	Country and Region (Divided Based on Huawei's Internal Businesses)
Asia Pacific 3	Bangladesh, Brunei, Cambodia, Indonesia, Kazakhstan, Kyrgyzstan, Laos, Malaysia, Mongolia, Myanmar, Nepal, Philippines, Singapore, Sri Lanka, Thailand, Uzbekistan, and Vietnam
Europe	Austria, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Luxembourg, Moldova, Netherlands, Poland, Portugal, Romania, Serbia, Spain, Sweden, Switzerland, Türkiye, and United Kingdom
Middle East and Africa	Angola, Armenia, Azerbaijan, Bahrain, Cyprus, Djibouti, Egypt, Georgia, Ghana, Iraq, Israel, Jordan, Kenya, Kuwait, Madagascar, Mauritius, Nigeria, Oman, Pakistan, Qatar, Saudi Arabia, South Africa, Tanzania, United Arab Emirates, and Yemen
North America	Canada and the United States
Oceania	Australia, Fiji, and New Zealand
South America	Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, and Peru

2 Billing Options

2.1 Billing by Traffic

Scenarios

- Traffic-based billing is suitable if your site traffic fluctuates greatly, daily bandwidth usage is less than 30%, and there are spikes in bandwidth usage.
- You can select traffic-based billing when enabling CDN.

Billing Details

Billing Rule	Billing Period	Description
Billing item: traffic **Payment**: post payment **Billing method**: You are billed in traffic tiers. The traffic usage is accumulated in each calendar month. **Conversion rule**: 1 GB = 1,024 MB	You are billed on an **hourly** basis. The usage in an hour is usually billed 4 hours later. **Example**: Fees generated from 18:00 to 19:00 are deducted at about 23:30 (subject to the system).	You are billed by the traffic used per hour.

☐ **NOTE**

- Bandwidth usage = Traffic used per day (GB)/(Peak bandwidth (Mbit/s) x 10.54). The number 10.54 indicates that a bandwidth of 1 Mbit/s at 100% usage generates a daily traffic of approximately 10.54 GB, that is, 1 Mbit/s x 100% ÷ 8 bits per byte x 60 seconds x 60 minutes x 24 hours ÷ 1,024 MB per GB = 10.54 GB
- Fees for bills generated from 23:00 to 00:00 will be deducted at about 15:20 on the following day.

Example

Traffic-based billing has .

Example: The traffic consumed by company A from January 1 to January 10 is 10,000 GB (about 9.77 TB), and the traffic consumed from 00:00 to 01:00 on January 11 is 300 GB. By 01:00:00 on January 11, the total consumed traffic is 10,300 GB (about 10.06 TB). Of the 300 GB used from 00:00 to 01:00 on January 11, 240 GB is billed at the 0 TB to 10 TB tier with a unit price of M_1/GB. The remaining 60 GB is billed at the 10 TB to 50 TB tier with a unit price of M_2/GB. In short, for the period from 00:00 to 01:00 on January 11, you would be billed **240 GB x M_1/GB + 60 GB x M_2/GB**.

Bill Run Time

The system generates a bill for fee deduction 4 hours after a billing cycle ends. The bill for a month will be usually generated on the third day of the next month. The actual bill generation time may vary slightly from month to month.

2.2 Billing by Peak Bandwidth

Scenarios

- Peak bandwidth–based billing suits you if the traffic curve of your site is stable and the daily bandwidth usage is greater than 30%.
- You can choose to be billed by peak bandwidth.

Billing Details

Billing Rule	Billing Period	Description
Billing item: peak bandwidth **Payment**: post payment **Billing method**: You are billed in peak bandwidth tiers. **Conversion rule**: 1 Mbit/s = 1,000 kbit/s	You are billed on a **daily** basis. The usage for each day (00:00:00 to 23:59:59) will be billed on the following day.	The system measures and records a peak bandwidth every 5 minutes, so 288 records are collected per day. The highest peak bandwidth per day is used as the billable bandwidth.

📖 **NOTE**

- Bandwidth usage = Traffic used per day (GB)/(Peak bandwidth (Mbit/s) x 10.54). The number 10.54 indicates that a bandwidth of 1 Mbit/s at 100% usage generates a daily traffic of approximately 10.54 GB, that is, 1 Mbit/s x 100% ÷ 8 bits per byte x 60 seconds x 60 minutes x 24 hours ÷ 1,024 MB per GB = 10.54 GB

Example

Peak bandwidth–based billing has .

Example 1: Company B's peak bandwidth on a day is 2,000 Mbit/s, falling in the 500 Mbit/s to 5 Gbit/s tier. The unit price for this tier is M_3/Mbit/s. Therefore, the bill amount of the company on that day is 2,000 Mbit/s x M_3/Mbit/s.

Example 2: Company B's peak bandwidth on a day is 300 Mbit/s, falling in the 100 Mbit/s to 500 Mbit/s tier. The unit price for this tier is M_2/Mbit/s. Therefore, the bill amount of the company on that day is 300 Mbit/s x M_2/Mbit/s.

Bill Run Time

The system generates a bill at about 20:00:00 (GMT+08:00) on the next day for fee deduction. A monthly bill will be generated on the third day of the next month. The actual bill generation time may vary slightly from month to month.

2.3 Billing by 95th Percentile Bandwidth

Scenarios

This billing option suits you if your monthly expenditure for CDN is greater than $15,000 USD or your monthly expenditure for Whole Site Acceleration (WSA) is greater than $1,500 USD. Contact your account manager and apply for it.

Billing Details

Billing Rule	Billing Period	Description
Billing item: peak bandwidth **Payment**: post payment **Billing method**: You are billed by peak bandwidth at the contract price. **Conversion rule**: 1 Mbit/s = 1,000 kbit/s	You are billed on a **monthly** basis. The usage for each month will be billed in the following month.	In each calendar month, the peak bandwidth is measured and recorded on each valid day. At the end of the month, the records are sorted from the highest to the lowest, and the top 5% of the records are thrown away. Then the highest bandwidth value in the remaining records is the billable bandwidth of the month.

☐ NOTE

- **Valid day**: Any day when traffic is consumed is considered a valid day.
- **Measurement point**: The bandwidth used is sampled every 5 minutes. There are 288 data samples per day.
- CDN billing by region: CDN is billed separately in the Chinese mainland and outside the Chinese mainland. When applying for the 95th peak bandwidth billing option, confirm the region where your contract takes effect.

Example

Company C's 95th percentile bandwidth billing took effect on October 1, 2020, and the contract price is **M**/Mbit/s per month.

Suppose that there are **X** valid days in October, so there are **288 x X** measurement points. The top 5% of these bandwidth values are thrown away, and the highest bandwidth value in the remaining records is the billable bandwidth, which is marked as **Max95**. Therefore, the billable amount for company C in October is **Max95 x M x (X/Total days in October)**.

Bill Run Time

The system generates a bill at about 20:00:00 (GMT+08:00) on the first day of the next month for fee deduction. The actual bill generation time may vary slightly from month to month.

2.4 Billing by Average Daily Peak Bandwidth

Scenarios

This billing option suits you if your monthly expenditure for CDN is greater than $15,000 USD or your monthly expenditure for WSA is greater than $1,500 USD. Contact your account manager and apply for it.

Billing Details

Billing Rule	Billing Period	Description
Billing item: peak bandwidth **Payment**: post payment **Billing method**: You are billed by average daily peak bandwidth at the contract price. **Conversion rule**: 1 Mbit/s = 1,000 kbit/s	You are billed on a **monthly** basis. The usage for each month will be billed in the following month.	At the end of each calendar month, the system calculates the average of peak bandwidth of valid days in this month. The average value is the billable bandwidth of the month and a bill is generated based on the contract price.

📖 **NOTE**

- **Valid day**: Any day when traffic is consumed is considered a valid day.
- **Measurement point**: The bandwidth used is sampled every 5 minutes. There are 288 data samples per day.

Example

Company D pays for CDN based on the average daily peak bandwidth. The billing option took effect on December 15, 2020, and the contract price is **M**/Mbit/s per month.

Suppose there are **X** days in December counted as valid days, and the peak bandwidth of valid days are recorded as **Max_1**, **Max_2**, ..., **Max_X**. Then the average peak bandwidth is **Average (Max_1, Max_2, …, Max_X)**. Therefore, the billable amount of the company in December is:

Average (Max_1, Max_2, …, Max_X) x M x (X/Total days in December)

Bill Run Time

The system generates a bill at about 20:00:00 (GMT+08:00) on the first day of the next month for fee deduction. The actual bill generation time may vary slightly from month to month.

3 Value-added Service Billing

The CDN value-added service is billed based on the number of whole site acceleration requests.

If you add a domain name and set its **Service Type** to **Whole site**, fees generated by this domain name will be charged based on **WSA billing rules**. WSA pricing includes a basic fee for site acceleration and fee for value-added services. WSA counts both dynamic and static content requests. For pricing details, see **Pricing Details**. You can also buy **Packages of Whole Site Acceleration Requests** to deduct the number of requests for this domain name.

4 Prepaid Resource Packages

4.1 Prepaid Traffic Packages

Scenarios

If you choose traffic-based billing when enabling CDN and your site will generate a large volume of traffic, you are advised to buy traffic packages of appropriate specifications to save money.

Purchase

- Log in to the **CDN console**. In the navigation pane, choose **Resource Packages**, click **Buy Package** on the right, and buy traffic packages. For details about the prices, see **Pricing Details**.

- For details about how to view the purchased traffic packages, see **Resource Package Management**.

Billing Details

Specifications: 500 GB to 1 PB.

Validity period: one year

Conversion rule: 1 GB = 1,024 MB

Payment: one-off payment. Packages take effect immediately after purchase. Traffic packages cannot be unsubscribed from.

Deduction: Your traffic package is used first if you have one. Traffic consumed beyond the package will be billed on a pay-per-use basis. Traffic deducted from a package will not be counted during tiered pricing.

Billing item: traffic generated when users access CDN PoPs

Billing cycle: an hour. Traffic used in an hour will be deducted from a traffic package 4 hours later.

Usage scope: by region. Traffic packages in a region can be used to deduct fees of traffic generated in this region. For details about the regions, see **Charging Regions**.

Notes

1. Traffic packages can be used only when traffic-based billing is used.
2. If you purchase multiple traffic packages, the traffic quota increases but the validity period is not extended. The traffic package with the earliest expiration date is used first.
3. A traffic package will automatically expire when it reaches the end of its validity period, and any remaining traffic in the package can no longer be used. Traffic consumed beyond the package will be billed on a pay-per-use basis.
4. A package can be used only by the buyer account.
5. If you change traffic-based billing to another billing option, your purchased packages will be frozen until the billing option is changed back to the traffic-based billing.

4.2 Packages of Whole Site Acceleration Requests

Scenarios

If you set the service type of a domain name to whole site acceleration, you will be charged for the number of requests. You can purchase a **package of whole site acceleration requests** to deduct the fee for such requests.

Purchase

- Log in to the **CDN console**. In the navigation pane, choose **Resource Packages**. Then click **Buy Package** in the upper right corner. For details about the package prices, see **Pricing Details**.

Billing Details

Specifications: 1 million to 10 billion requests.

Subscription period: one year.

Payment: one-off payment. Packages take effect immediately after purchase. The packages cannot be unsubscribed from.

Deduction method: Your package is used first if you have one. Usage beyond the package will be billed on a pay-per-use basis.

Billing item: HTTP and HTTPS requests generated when users access a domain name whose service type is whole site acceleration.

Billing cycle: varies according to the basic billing option.

- By traffic: an hour. Requests generated in an hour will be deducted from a request package 4 hours later.
- By peak bandwidth: a day. Requests generated from 00:00:00 to 23:59:59 on a day will be deducted from a request package on the next day.

- By 95th peak bandwidth or average daily peak bandwidth:
  - If independent WSA billing is enabled for your account, WSA charges the basic service fee of whole site acceleration domain names. Whole site acceleration requests cannot be deducted from request packages.
  - If independent WSA billing is disabled for your account, CDN charges the basic service fee of whole site acceleration domain names. Whole site acceleration requests can be deducted from request packages. The billing cycle is a day. Requests generated from 00:00:00 to 23:59:59 on a day will be deducted from a request package on the next day.

Usage scope: **Chinese mainland** or **International**. Packages can be used to deduct fees of requests generated only in the Chinese mainland or outside the Chinese mainland.

Notes

1. If you purchase multiple packages, the request quantity quota increases but the validity period is not extended. The package with the earliest expiration date is used first.

2. A package will automatically expire when it reaches the end of its validity period, and any remaining quota in the package can no longer be used. Usage beyond the package will be billed on a pay-per-use basis.

3. A package can be used only by the buyer account.

5 Expiration and Overdue Payment

Handling Arrears

- If your account is in arrears, your cloud resources will enter a grace period and then retention period. For details about how to handle service suspension due to arrears, see **Resource Suspension and Release**.

- Pay the outstanding amount by referring to **Making Repayments (Postpaid Direct Customers)**.

About Arrears

- During the grace period, the CDN service is not stopped, but domain names cannot be added to CDN.

- When your account balance is used up and your account enters the retention period due to using other Huawei Cloud services, you cannot use CDN for acceleration.

6 Stopping Billing

CDN is pay-per-use. You can select a mode of stopping billing for a domain name:

1. Suspending billing: **Enabling/Disabling CDN for a Domain Name**

   The configuration of the domain name on CDN PoPs is temporarily retained. If a user has a resolution cache on the local DNS or uses a host to forcibly resolve the domain name to a CDN PoP, CDN will refuse to provide services after receiving the request. However, traffic and request data will be generated. You need to pay for the traffic and request data.

2. Stopping billing: **Deleting a Domain Name**

   All settings of the domain name will be deleted from CDN PoPs and the domain name will no longer be charged by CDN.

   > 📖 **NOTE**
   >
   > Before disabling CDN for a domain name or deleting a domain name, resolve the domain name to the origin server to prevent service loss.

7 High Bill Risk Warning

If your site is attacked or has malicious traffic coming, there may be sudden traffic spikes that result in a bill higher than your normal expenditures. This part describes the potential risks and solutions.

Risks

- Attacks and malicious traffic generate excessive bandwidth usage, and you need to pay significantly more than you usually do.
- The bill fee may exceed your account balance, resulting in an outstanding amount. For details about how to handle the outstanding amount, see **Expiration and Overdue Payment**.

Solutions

You can use the protection and notification functions by referring to the suggestions in **Table 7-1** to reduce the risks caused by burst bandwidth.

Table 7-1 Solutions

Solution	Description
Access control	You can use access control functions such as referer validation, IP address access control lists (ACLs), and token authentication for domain names to avoid unnecessary traffic or bandwidth consumption. For details, see **Access Control**.
Request rate limiting	If **request rate limiting** is enabled, when a single request reaches the rate limit, the access speed of the user is limited to reduce the risk of burst bandwidth.
IP access frequency	You can enable the **IP access frequency** function to restrict the number of queries per seconds (QPS) to a URL sent from a single IP address to a single PoP to defend against CC attacks and malicious theft and reduce the risk of high bills.

□ **NOTE**

To ensure the integrity of statistics and accuracy of bills, a bill is usually generated after a billing cycle ends. For details, see **Billing Options**. Therefore, the bill time is later than the time when resources are consumed, so you cannot check the real-time resource consumption through bills. This is due to the distributed architecture of CDN PoPs. This method is widely used.

8 Billing for Whole Site Acceleration

Scenarios

If you add a domain name and set its **Service Type** to **Whole site**, you will be billed by WSA for fees generated by this domain name. WSA pricing includes a basic fee and fee for value-added services. For details, see **Pricing Details**.

Billing Details

1. Basic service fee

   – You will be billed according to billing rules listed in **Billing Options**.

   – Traffic generated by whole site acceleration can be deducted from traffic packages.

   > **☐ NOTE**
   >
   > WSA is an independent service of Huawei Cloud. If you switch the charging of whole site acceleration domain names to WSA (by enabling WSA), CDN traffic packages cannot be used to deduct the traffic generated by these domain names.

2. Value-added service fee

   – You will be billed based on the number of user requests for dynamic and static content sent to the system. The billing standards for the number of requests for dynamic and static content are the same.

   – Requests generated by whole site acceleration can be deducted from a package of whole site acceleration requests.

Example

Example 1: Assume that a customer has not enabled WSA.

The customer added a domain name whose **Service Type** is **Whole site**, selected the traffic-based billing mode for CDN, and purchased a CDN traffic package and a WSA request package. Since the customer has not enabled WSA, the basic fee for whole site acceleration is charged by CDN and this fee can be deducted from the CDN traffic package. The total fee consists of the following two parts:

1. Basic service fee: The fee is deducted from the CDN traffic package. Extra usage is pay-per-use.

2. Value-added service fee: The fee is deducted from the WSA request package. Extra requests are pay-per-use. Fee = Number of requests x Price of each request $0.026 USD/10,000 requests.

Example 2: Assume that a customer has enabled WSA.

The customer added a domain name whose **Service Type** is **Whole site**, selected the traffic-based billing mode for WSA, and purchased a WSA traffic package and a request package. Since the customer has enabled WSA, the basic fee for whole site acceleration is charged by WSA. This fee cannot be deducted from CDN traffic packages. The total fee consists of the following two parts:

1. Basic service fee: The fee is deducted from the WSA traffic package. Extra usage is pay-per-use.

2. Value-added service fee: The fee is deducted from the WSA request package. Extra requests are pay-per-use. Fee = Number of requests x Price of each request $0.026 USD/10,000 requests.

9 OBS Billing for CDN Acceleration

If you store content in OBS buckets for users to download, you are advised to use OBS together with CDN to improve the download speed and save traffic costs.

Billing Rules

- CDN charges you for traffic generated when users access CDN PoPs.
- OBS charges you for outbound traffic to CDN PoPs.

The following figure shows the billing.

10 Billing FAQ

Will I Be Billed If My Domain Name Is Under Attack?

Yes. The consumed traffic or bandwidth will be billed. For details, see **Billing Items**.

If a domain name is under attack and the attacks affect other CDN users or pose risks to CDN, CDN will ban the domain name, change its status to **Disabled**, and disable the acceleration service for it. The domain name cannot be accessed but its configuration is retained. When the attack stops, contact customer service to unban the domain name.

- The following table lists the solutions.

Solution	Description
Access control	You can use access control functions such as referer validation, IP address ACLs, and token authentication for domain names to avoid unnecessary traffic or bandwidth consumption. For details, see **Access Control**.

☐ **NOTE**

To ensure the integrity of statistics and accuracy of bills, a bill is usually generated after a billing cycle ends. For details, see **Billing Options**. Therefore, the bill time is later than the time when resources are consumed, so you cannot check the real-time resource consumption through bills. This is due to the distributed architecture of CDN PoPs. This method is widely used.