

CDN

Billing

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1 Billing Items

Huawei Cloud Content Delivery Network (CDN) or Whole Site Acceleration (WSA) charges you for basic and value-added services.

- The basic service fee is charged based on traffic or bandwidth generated when users access edge 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 **Dashboard** page and 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.
- The change from traffic-based or peak bandwidth-based billing to 95th peak bandwidth or average daily peak bandwidth billing takes effect in the current month. The change from 95th peak bandwidth or average daily peak bandwidth billing to other billing options takes effect on the first day of the next month, and you are billed using the original option until the change takes effect.
- CDN or WSA is billed separately in the Chinese mainland and outside the Chinese mainland. Traffic packages in a region cannot be used to deduct traffic generated in another region.
- CDN or WSA outside the Chinese mainland can be billed by region. You can submit a service ticket to apply for that. For details about regions, see [Charging Regions Outside the Chinese Mainland](#).

Pricing Details

- Huawei Cloud CDN is billed separately in the Chinese mainland and outside the Chinese mainland with different prices. For details, see [Pricing Details](#).
- Huawei Cloud WSA is billed by region with different prices. For details, see [Pricing Details](#).

Charging Regions Outside the Chinese Mainland

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

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 or WSA.

Billing Details

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

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.

Pricing Details

- For details about the CDN price of this billing option, see [Pricing Details](#). You can also purchase [prepaid traffic packages](#) to deduct traffic used and save more costs.
- For details about the WSA price of this billing option, see [Pricing Details](#).

Example

Traffic-based billing has five tiers: 0 TB to 10 TB (included), 10 TB to 50 TB (included), 50 TB to 100 TB (included), 100 TB to 1 PB (included), and over 1 PB.

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
<p>Billing item: peak bandwidth</p> <p>Payment: post payment</p> <p>Billing method: You are billed in peak bandwidth tiers.</p> <p>Conversion rule: 1 Mbit/s = 1,000 kbit/s</p>	<p>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.</p>	<p>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.</p>

 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, $1 \text{ Mbit/s} \times 100\% \div 8 \text{ bits per byte} \times 60 \text{ seconds} \times 60 \text{ minutes} \times 24 \text{ hours} \div 1,024 \text{ MB per GB} = 10.54 \text{ GB}$

Pricing Details

- For details about the CDN price of this billing option, see [Pricing Details](#).
- For details about the WSA price of this billing option, see [Pricing Details](#).

Example

Peak bandwidth-based billing has five tiers: 0 Mbit/s to 100 Mbit/s (included), 100 Mbit/s to 500 Mbit/s (included), 500 Mbit/s to 5 Gbit/s (included), 5 Gbit/s to 20 Gbit/s (included), and over 20 Gbit/s.

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 $M_3/\text{Mbit/s}$. Therefore, the bill amount of the company on that day is $2,000 \text{ Mbit/s} \times M_3/\text{Mbit/s}$.

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 $M_2/\text{Mbit/s}$. Therefore, the bill amount of the company on that day is $300 \text{ Mbit/s} \times M_2/\text{Mbit/s}$.

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 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 or WSA 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.
- CDN or WSA is billed separately in the Chinese mainland and outside the Chinese mainland. When applying for the average daily peak bandwidth billing option, confirm the region where your contract takes effect.

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 or WSA 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](#). To save money, you can also buy [WSA request packages](#) 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](#). On the right of the **Dashboard** page, click **Buy** (if you have purchased a traffic package before) or **Buy Resource Package** (if no package is available), 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](#).
- CDN provides you with more preferential **off-peak traffic packages** and **combined traffic packages**.
 - A normal traffic package can be used to deduct traffic generated all day.
 - An off-peak traffic package can be used to deduct traffic generated from 00:00 to 18:00 GMT+08:00.
 - A combined traffic package contains all-day and off-peak traffic in a given ratio.

NOTE

- Deduction sequence during off-peak hours: off-peak traffic packages > normal traffic packages > account balance.

Billing Details

Specifications: 500 GB to 1 PB.

Validity period: one month, six months, or 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 and traffic generated for whole site acceleration. The number of requests for whole site acceleration are billed separately.

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

Usage scope: Chinese mainland or International. Traffic packages can be used to deduct fees of traffic generated only in the Chinese mainland or outside the Chinese mainland. If you have enabled region-based billing outside the Chinese mainland, international traffic packages cannot be used to deduct the traffic generated outside the Chinese mainland.

Notes

1. Traffic packages can be used only when traffic-based billing is used.
2. If you have enabled global acceleration and want to purchase traffic packages, you must purchase a traffic package separately for the Chinese mainland and for outside the Chinese mainland.
3. All domain names in your account with the same service area as that of a traffic package share the traffic package.

Example: A customer purchases a 200 TB normal **Chinese mainland** traffic package. The customer has a domain name and the service area of the domain name is global. This traffic package can be used to deduct the traffic generated by PoPs in the Chinese mainland, but cannot be used to deduct the traffic generated by PoPs outside the Chinese mainland. To deduct traffic generated by PoPs outside the Chinese mainland, the customer must purchase an **International** traffic package.

4. 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.

Example: A customer purchases two **Chinese mainland** traffic packages.

Traffic package 1: 500 GB normal traffic package, which is valid for six months, from June 6, 2021 to December 6, 2021.

Traffic package 2: 200 TB normal traffic package, which is valid for one year, from July 6, 2021 to July 6, 2022.

Fee deduction: Traffic package 1 is used first. After traffic package 1 is used up, traffic package 2 is used.

5. 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.
6. A package can be used only by the buyer account.

7. 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.
8. CDN cannot share a traffic package with the Live or Video on Demand (VOD) service.

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](#). On the right of the **Dashboard** page, click **Buy** (if you have purchased a package before) or **Buy Resource Package** (if no package is available). For details about the package prices, see [Pricing Details](#).
- You can view the basic information about purchased packages on the **Resource Packages** page. For details, see [Resource Package Management](#).

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 have enabled global acceleration, you must purchase a package of whole site acceleration requests separately for the Chinese mainland and for outside the Chinese mainland.
2. All domain names in your account with the same service area as that of a package share the package.
3. 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.
4. 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.
5. A package can be used only by the buyer account.

5 Billing Examples

Billing Scenarios

A customer enabled CDN on January 10, 2023 and chose to be billed by traffic. The customer added three acceleration domain names.

Domain Name	Service Type	Service Area
A	Whole site	Global
B	File download	Chinese mainland
C	On-demand service	Outside Chinese mainland

After using CDN for a period of time, the customer found that traffic packages were more cost-effective and purchased the following two traffic packages at 09:00 (GMT+08:00) on April 5, 2023.

- 500 GB traffic package in the Chinese mainland valid for one month
- 1 TB traffic package outside the Chinese mainland valid for one year

The following table lists traffic and number of requests generated from April to May.

Domain Name	Usage in April Before 05:00 on April 5	Usage in April After 05:00 on April 5	Usage in May
A	<ul style="list-style-type: none"> • Traffic in the Chinese mainland: 40 GB • Traffic outside the Chinese mainland: 20 GB • Requests in the Chinese mainland: 40,000 • Requests outside the Chinese mainland: 30,000 	<ul style="list-style-type: none"> • Traffic in the Chinese mainland: 320 GB • Traffic outside the Chinese mainland: 180 GB • Requests in the Chinese mainland: 160,000 • Requests outside the Chinese mainland: 130,000 	<ul style="list-style-type: none"> • Traffic in the Chinese mainland: 400 GB • Traffic outside the Chinese mainland: 200 GB • Requests in the Chinese mainland: 200,000 • Requests outside the Chinese mainland: 150,000
B	Traffic in the Chinese mainland: 40 GB	Traffic in the Chinese mainland: 200 GB	Traffic in the Chinese mainland: 230 GB
C	Traffic outside the Chinese mainland: 50 GB	Traffic outside the Chinese mainland: 210 GB	Traffic outside the Chinese mainland: 260 GB

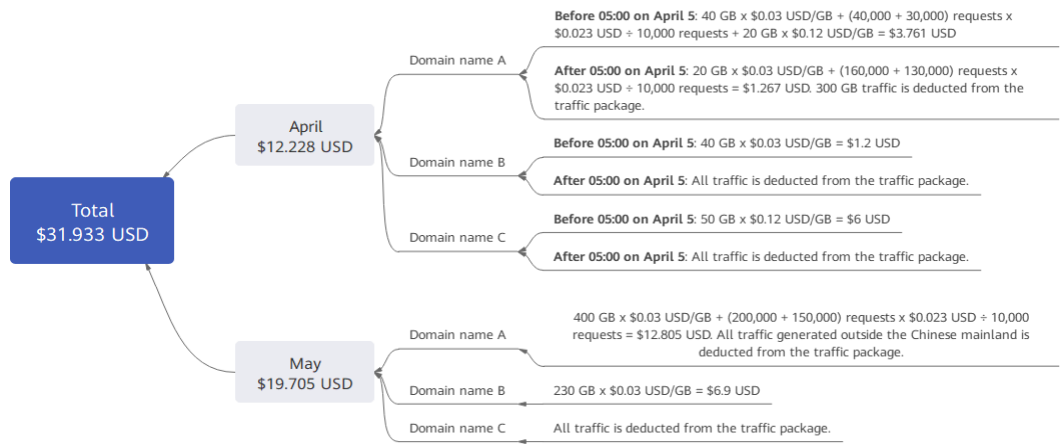
So how was the customer billed in April and May 2023?

Billing Analysis

According to the CDN traffic-based billing rules, the bill of the traffic generated in an hour will be generated 4 hours later. If a traffic package is purchased, it takes effect immediately and can be used to deduct the traffic generated after the purchase. Therefore:

- Fee for traffic generated before 05:00 on April 5, 2023 was deducted from the account balance or expenditure quota, and that for traffic generated after 05:00 on April 5, 2023 was deducted from the traffic packages.
- The fee for whole site acceleration requests was deducted from the account balance or expenditure quota.

Assume that the unit price for traffic in the Chinese mainland is \$0.03 USD/GB, that for traffic outside the Chinese mainland is \$0.12 USD/GB, and that for whole site acceleration requests is \$0.023 USD/10,000 requests. The fee that the customer needed to pay in April and May would be calculated as follows:




NOTE

The preceding prices are for reference only. The actual prices and the number of decimal places after the settlement amount are subject to the [Pricing Details](#).

6 Changing the Billing Option

You can change the billing option to a suitable one based on your service requirements.

Procedure

1. Log in to the [CDN console](#).
2. In the navigation pane, choose **Dashboard**.
3. In the upper right corner, view the billing option of each region. To change the billing option, click the  icon next to it.
4. Select the target billing option and click **OK**.

Important Notes

- If you change from billing by traffic or peak bandwidth to another one, the change will take effect at 00:00:00 on the night of the day you submitted the change.
- If you change from billing by 95th percentile bandwidth or average daily peak bandwidth to another one, the change will take effect from 00:00:00 on the first day of the next month.
- You can change the billing option from 95th percentile bandwidth or average daily peak bandwidth billing to traffic or bandwidth billing on the console. To change the billing option from traffic or bandwidth billing to 95th percentile bandwidth or average daily peak bandwidth billing, contact the key account manager of Huawei Cloud.
- If you have submitted a billing option change, you can still change the billing option before the submitted change takes effect, and the final billing option is subject to your last change.

7 Traffic Package Renewal

If you have purchased a traffic package, you can renew it or purchase it again. You can perform the operations on the [Renewals](#) page.

Precautions

1. No discount is provided for traffic package renewal.
2. If you renew a traffic package, the renewed traffic package will take effect when the original traffic package expires.
3. If you buy a traffic package again, you can specify the new traffic package to take effect immediately or at a specific time.

Procedure

1. Log in to [Huawei Cloud console](#). Choose **Service List > Content Delivery & Edge Computing > Content Delivery Network**.
The CDN console is displayed.
2. On the top menu bar, choose **Billing > Renewal**.
3. On the **Renewals** page, you can perform the following operations on a traffic package:
Renew it to extend its validity period or restore the package quota. For details, see [Renewal Rules](#).
Buy it again and define its validity period. For details, see [Buying Again](#).

8 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](#).
- View the outstanding amount of your account in the [Billing Center](#). 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 if you use CDN services that need to be deducted from your account balance, such as pay-per-use CDN services and whole site acceleration.
- If your account enters the retention period due to outstanding payments, CDN will disable services for your domain names and delete their CNAME resolution. In this case, the domain names cannot be accessed.

Balance Alert

- If you are using a traffic package, you are advised to enable the [usage alert](#) function. If the remaining quota of the traffic package drops below a configured threshold, an SMS message or email will be sent to you.

9 Bills

You can view CDN bills on the **Billing** page in Billing Center. For details, see [Bills](#).

Precautions

- CDN does not support bill generation by domain name, enterprise project, or tag. You can use [cost splitting](#) to view the amortized costs.
- Traffic statistics on the CDN console are the logged traffic statistics. However, the billable traffic is 10% higher than the logged statistics because TCP/IP packet headers and TCP retransmissions also consume traffic.
- If you have purchased a traffic package, you cannot view the package bill by package ID. You can query the bill by package name. For details about how to obtain the package name, see [Resource Packages](#).

Bill Reporting Period

The usage of pay-per-use resources is reported to the billing system at a fixed interval for settlement. Pay-per-use products can be settled by hour, day, or month based on the usage type. For details about the fee deduction rules, see [Bill Run for Pay-per-Use Resources](#).

- CDN traffic is billed by hour. Traffic used in an hour will be settled 4 hours later.
- CDN peak bandwidth is billed by day. The system settles the bandwidth at about 20:00 (GMT+08:00) the next day.
- In the average daily peak bandwidth and 95th percentile bandwidth billing options, the system settles the bandwidth at about 20:00 (GMT+08:00) on the first day of the next month.

Example: If traffic-based billing is used, the fee generated from 08:00 to 09:00 is deducted at about 13:00. On the **Billing Center > Billing > Expenditure Details** page, **Expenditure Time** indicates the time when a pay-per-use product is used.

Viewing Bills of a Specific Resource

- CDN is billed by account. Bills cannot be queried by resource (acceleration domain name). For details about how to view the cost of each acceleration domain name, see [Cost Management](#).

- A resource ID in a CDN bill is in the format of UUID + Billing region + Billing option. The UUID is generated by account. The resource ID is used only for billing and cannot be queried on the CDN console.
- For details about the mapping between resource IDs and usage types in bills, see [Mapping Between Usage Types and Resource IDs in CDN Bills](#).

Checking CDN Usage Based on Bills

To check whether the CDN usage is consistent with that in bills, log in to the CDN console, choose **Dashboard** in the navigation pane, and check the billing option on the right. The following table lists whether a billing option supports CDN usage check and the check methods.

Billing Option	Usage Type	Usage Check Method
Traffic	<ul style="list-style-type: none">• Traffic outside the Chinese mainland• Traffic• Bandwidth in other Asia Pacific regions• Bandwidth in Hong Kong (China), Macao (China), Taiwan (China), Japan, and South Korea• Bandwidth in Europe• Bandwidth in India• Bandwidth in the Middle East and Africa• Bandwidth in North America• Bandwidth in Oceania• Bandwidth in South America	<ul style="list-style-type: none">• To check the total amount, see Checking the total usage.• Usage cannot be checked by enterprise project, domain name, or tag. However, you can split costs by enterprise project, domain name, or tag. For details, see Enabling Cost Splitting.

Billing Option	Usage Type	Usage Check Method
Peak bandwidth fee	<ul style="list-style-type: none"> Peak bandwidth in the Chinese mainland Peak bandwidth outside the Chinese mainland Bandwidth in other Asia Pacific regions Bandwidth in Hong Kong (China), Macao (China), Taiwan (China), Japan, and South Korea Bandwidth in Europe Bandwidth in India Bandwidth in the Middle East and Africa Bandwidth in North America Bandwidth in Oceania Bandwidth in South America 	<ul style="list-style-type: none"> Usage cannot be checked. You can use cost categories to group costs to different departments or enterprise projects. For details, see Viewing Costs by Cost Category. CDN costs can be split.
95th percentile bandwidth	<ul style="list-style-type: none"> 95th percentile bandwidth in the Chinese mainland 95th percentile bandwidth outside the Chinese mainland 	Usage cannot be checked by enterprise project, domain name, or tag. For details about how to split costs by enterprise project, domain name, or tag, see Enabling Cost Splitting .
Average daily peak bandwidth	<ul style="list-style-type: none"> Average daily peak bandwidth in the Chinese mainland Average daily peak bandwidth outside the Chinese mainland 	

- Checking the **total usage**

Example: Assume that you changed the billing option from peak bandwidth to traffic on May 12, 2023. The change took effect at 00:00 on May 13, 2023. Then, you changed the billing option from traffic to peak bandwidth on May 30, 2023 and the change took effect at 00:00 on May 31, 2023. Therefore, you were billed by traffic from May 13, 2023 to May 30, 2023. The service area of domain names under this account is Chinese mainland. To check bills, perform the following operations:

- a. Log in to the CDN console, choose **Analytics > Data Export**, click **Create Export Task**, and set the parameters.
 - **Task Name:** user-defined
 - **Export Mode:** All
 - **Period:** May 13, 2023 – May 30, 2023
 - **Data:** Statistics
 - **Granularity:** 1 hour
 - **Metric:** Traffic
 - **Region:** Chinese mainland
- b. Click **OK**. After the task is complete, download the Excel file.
- c. Calculate the sum of all usage values to obtain the total CDN usage.

2023-05-30 15:00:00 UTC+0800	11802764700
2023-05-30 16:00:00 UTC+0800	6047580220
2023-05-30 17:00:00 UTC+0800	6318963121
2023-05-30 18:00:00 UTC+0800	6012626
2023-05-30 19:00:00 UTC+0800	850962842
2023-05-30 20:00:00 UTC+0800	6006696
2023-05-30 21:00:00 UTC+0800	6017929
2023-05-30 22:00:00 UTC+0800	6015025
2023-05-30 23:00:00 UTC+0800	756197166
	5252506754351

- d. Go to the Billing Center. In the navigation pane, choose **Billing > Expenditure Items**. Select a billing cycle, search for CDN fees, and click



on the right to download the bill.

- e. In the exported bill, filter **Usage Type** by traffic.

Total usage = **Usage + Package Usage** = 5,252,506,434,878

Usage Type Code	Usage	Unit	Usage	Package Usage
Traffic	size	/GB	4715635522878	536870912000

- f. The value obtained in step 5 (5,252,506,434,878 bytes) slightly differs from that obtained in step 3 (5,252,506,754,351 bytes). CDN traffic is charged in GB, and the conversion results of the two values are both 4891.778 GB, which does not affect the charged fee.

NOTE

The exported bills may be the logged traffic statistics. However, the billable traffic is 10% higher than the logged statistics because TCP/IP packet headers and TCP retransmissions also consume traffic. Therefore, the usage exported from the CDN console must be multiplied by 1.1.

Mapping Between Usage Types and Resource IDs in CDN Bills

Table 9-1 Mapping

Specifications	Usage Type	Resource ID	Conversion Rule
Chinese mainland	Number of requests	{UUID}-wsa-Request	-
	Traffic	{UUID}	1,024
	Peak bandwidth in the Chinese mainland	{UUID}	1,000
	95th percentile bandwidth in the Chinese mainland	{UUID}	1,000
	Average daily peak bandwidth in the Chinese mainland	{UUID}	1,000
Outside the Chinese mainland	Number of requests outside the Chinese mainland	{UUID}-wsa-Request-ov	-
	Traffic outside the Chinese mainland	{UUID}OverseaFlux	1,024
	Peak bandwidth outside the Chinese mainland	{UUID}OverseaBandwidth	1,000
	95th percentile bandwidth outside the Chinese mainland	{UUID}OverseaBandwidth	1,000
	Average daily peak bandwidth outside the Chinese mainland	{UUID}OverseaBandwidth	1,000
Region-based billing outside the Chinese mainland	Bandwidth in other Asia Pacific regions	{UUID}OverseaAsiapacificBandwidth	1,000
	Bandwidth in Hong Kong (China), Macao (China), Taiwan (China), Japan, and South Korea	{UUID}OverseaEastasia-Bandwidth	1,000
	Bandwidth in Europe	{UUID}OverseaEuropeBandwidth	1,000
	Bandwidth in India	{UUID}OverseaIndiaBandwidth	1,000
	Bandwidth in the Middle East and Africa	{UUID}OverseaMeAfrica-Bandwidth	1,000

Specifications	Usage Type	Resource ID	Conversion Rule
	Bandwidth in North America	{UUID}OverseasNorthAmericaBandwidth	1,000
	Bandwidth in Oceania	{UUID}OverseasOceaniaBandwidth	1,000
	Bandwidth in South America	{UUID}OverseasSouthAmericaBandwidth	1,000
	Traffic in other Asia Pacific regions	{UUID}OverseasAsiapacificFlux	1,024
	Traffic in Hong Kong (China), Macao (China), Taiwan (China), Japan, and South Korea	{UUID}OverseasEastasiaFlux	1,024
	Traffic in Europe	{UUID}OverseasEuropeFlux	1,024
	Traffic in India	{UUID}OverseasIndiaFlux	1,024
	Traffic in the Middle East and Africa	{UUID}OverseasMeAfricaFlux	1,024
	Traffic in North America	{UUID}OverseasNorthAmericaFlux	1,024
	Traffic in Oceania	{UUID}OverseasOceaniaFlux	1,024
	Traffic in South America	{UUID}OverseasSouthAmericaFlux	1,024

 **NOTE**

- UUIDs are generated by account. Different resource IDs of the same account share the same UUID.
- Only customers who have enabled region-based billing outside the Chinese mainland have IDs of region-based resources outside the Chinese mainland.
- The bandwidth and traffic in the Chinese mainland use the same resource ID. Therefore, the billing option cannot be identified based on the resource ID.

10 Cost Management

When using CDN, you can split costs by enterprise project, domain name, or tag by referring to instructions in [Enabling Cost Splitting](#).

Prerequisites

- To split costs by tag, [activate cost tags](#) first.
- You have enabled [cost splitting](#).

Precautions

- Currently, peak bandwidth billing does not support cost splitting.
- Huawei Cloud helps you split costs after the bill is generated on the 3rd of each month. The split cost is included in the amortized cost. You can view or export the amortized cost for each month after the 4th day of the following month to obtain the splitting result or details.
- In the month you enabled cost splitting, the split usage only reflects the usage starting after the day cost splitting was enabled, so the results may be inaccurate.

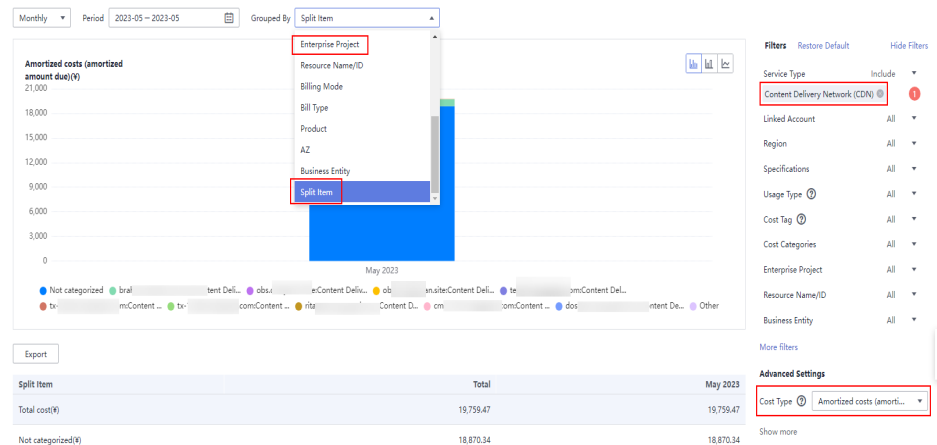
Procedure

1. Log in to the [console](#) and choose **Billing > Cost Center** in the upper right corner.
2. In the navigation pane of Cost Center, choose **Cost Analysis**.
3. Select the query period and set filters and advanced settings to query the corresponding cost allocation details.

CDN fees are generated by domain name. In **Cost Analysis**, domain names are called **Split Item**.

- **Service Type: Content Delivery Network (CDN)**
- **Cost Type: Amortized costs (amortized amount due)**
- **Grouped By: Split Item, Enterprise Project, and Cost Tag.**

Figure 10-1 Cost analysis



Example of CDN Cost Splitting

Example 1: Take CDN expenditures billed by 95th percentile bandwidth as an example. Suppose you have three domain names (1, 2, and 3) with their respective bandwidths (1, 2, and 3). The amortized cost for domain name 1 is calculated as follows: Amortized cost = Bandwidth 1 / (Bandwidth 1 + Bandwidth 2 + Bandwidth 3) x CDN monthly-settled fee

Example 2: Take CDN expenditures billed by traffic as an example. Suppose you have three domain names (1, 2, and 3) with their respective traffics (1, 2, and 3). The amortized cost on the current day for domain name 1 is calculated as follows: Amortized cost = Traffic 1 / (Traffic 1 + Traffic 2 + Traffic 3) x CDN traffic fee on the current day

Example 3: Suppose you changed the tag value of CDN resources from **N** to **M** on April 9, 2023. If you want to split costs on May 4, 2023, the amortized costs for April would be attributed to tag **M**.

11 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.

12 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 12-1](#) to reduce the risks caused by burst bandwidth.

Table 12-1 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 .
Association between CDN and Cloud Eye	You can view basic data (such as traffic, bandwidth, and status codes) of domain names under your account in real time and set alarms. When the monitoring metrics trigger the alarm conditions, alarms are sent by email or SMS, helping you detect potential risks in a timely manner. For details, see Cloud Eye Monitoring .
Usage cap	When a usage cap is set, CDN will disable the acceleration service for your domain names when the access bandwidth reaches the threshold you specify to avoid excessive fee.

Solution	Description
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 [Basic Service Billing](#). 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.

13 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 [Basic Service Billing](#).
 - 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 \$0.023 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 \$0.023 USD/10,000 requests.

14 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.



Special Offers

OBS provides pull traffic packages to reduce your traffic costs. Traffic generated during origin pull will be preferentially deducted from pull traffic packages. For details, see [OBS Pricing Details](#).

Important Notes

To use an OBS bucket as the origin server, you can set the origin server type to **OBS bucket** or **Domain name**. For details, see [Modifying Origin Server Details](#). The OBS bucket version or the way domain names access CDN determines whether you can purchase OBS pull traffic packages.

- If you set the origin server type to **OBS bucket** and select an OBS bucket of 3.0 or later version, you can buy OBS pull traffic packages.
- If you set the origin server type to **OBS bucket** and select an OBS bucket of earlier than 3.0, or set the type to **Domain name** and enter the domain name of an OBS bucket, you cannot use OBS pull traffic packages. You are charged based on the billing standard of Internet outbound traffic.

- Purchase a pull traffic package in the region where your OBS bucket is located. Otherwise, traffic cannot be deducted from the traffic package.

15 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 .
Association between CDN and Cloud Eye	You can view basic data (such as traffic, bandwidth, and status codes) of domain names under your account in real time and set alarms. When the monitoring metrics trigger the alarm conditions, alarms are sent by email or SMS, helping you detect potential risks in a timely manner. For details, see Cloud Eye Monitoring .
Usage cap	When a usage cap is set, CDN will disable the acceleration service for your domain names when the access bandwidth reaches the threshold you specify to avoid excessive fee.
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.

 NOTE

To ensure the integrity of statistics and accuracy of bills, a bill is usually generated after a billing cycle ends. For details, see [Basic Service Billing](#). 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.

Why Is the Traffic Usage in a Traffic Package Different from That Shown in Analytics?

Traffic displayed in **Analytics** is updated with a latency of about 1 hour, but traffic used in an hour will be deducted from a traffic package 4 hours later.

If Global Acceleration Is Configured, Are the Traffic and Bandwidth Consumptions in and Outside the Chinese Mainland Billed Separately?

Yes. The traffic and bandwidth consumed in the Chinese mainland and outside the Chinese mainland are billed based on different unit prices.

If I Purchase Only an International Traffic Package, How Will I Be Billed for Traffic Generated in the Chinese Mainland?

Chinese and international traffic packages are billed separately.

- If you purchase only an international traffic package, traffic generated in the Chinese mainland will be billed on a pay-per-use basis. For details, see [Price Calculator](#).
- If you purchase only a Chinese mainland traffic package, traffic generated outside the Chinese mainland will be billed on a pay-per-use basis.

Why Is the Consumed Traffic Not Deducted from My Purchased Traffic Package?

Check whether you are billed by traffic consumed. Traffic can be deducted from your traffic package only when traffic-based billing is used.

Does CDN Charge for HTTP/HTTPS Requests?

- If you enabled whole site acceleration, besides the basic fees (traffic or bandwidth fees), requests are charged as well.
- Other acceleration types, such as website acceleration and file download acceleration, only generate basic fees (traffic or bandwidth fees).

Can Multiple Acceleration Domain Names Share the Same Traffic Package?

Yes. If you purchase a traffic package of a service area, all domain names under your account with the same service area share this package.

Do CDN Traffic Packages Expire?

A CDN traffic package is valid for one month, six months, or one year. After this period elapses, the traffic package becomes invalid.

How Do I Set an Alert for the Remaining Traffic in a Traffic Package?

1. Log in to [Huawei Cloud console](#) and go to the **Billing Center**.
2. In the navigation pane, choose **Resource Packages**.
3. Click **Usage Alert**. In the dialog box displayed, enable the **Enable/Disable** switch and set a remaining usage threshold.
4. Click **OK**.

A Change History

Released On	Description
2024-05-22	This issue is the ninth official release. <ul style="list-style-type: none">• Whole site acceleration request packages are available.
2023-07-10	This issue is the eighth official release. <ul style="list-style-type: none">• Added sections "Billing Examples", "Cost Management", and "Stopping Billing."• Added the description about how to check usage in section "Bills."
2023-06-26	This issue is the seventh official release. <ul style="list-style-type: none">• Off-peak traffic packages are supported in the Chinese mainland.
2023-01-04	This issue is the sixth official release. <ul style="list-style-type: none">• You can change the billing mode from 95th percentile bandwidth or average daily peak bandwidth billing to traffic-based or bandwidth-based on the console.
2022-11-29	This issue is the fifth official release. <ul style="list-style-type: none">• Removed the description of expenditure quota alert because this function was removed from the Billing Center.
2022-11-11	This issue is the fourth official release. <ul style="list-style-type: none">• Added section "Viewing Expenditure Bills."

Released On	Description
2022-10-27	This issue is the third official release. <ul style="list-style-type: none"><li data-bbox="927 342 1398 409">• Modified section "Traffic Package Renewal" to adapt to the new UI.
2022-01-19	This issue is the second official release. <ul style="list-style-type: none"><li data-bbox="927 477 1422 544">• Added section "OBS Billing for CDN Acceleration."
2021-07-13	This issue is the first official release.