

# **Bandwidth Package**

## **Operation Guide**

### **Product Documentation**



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# Contents

## Operation Guide

- Viewing the Billable Bandwidth

- Changing Billing Mode

- Managing IP Bandwidth Packages

  - Creating an IP Bandwidth Package

  - Deleting an IP Bandwidth Package

  - Adding Resources

  - Removing Resources

- Managing Device Bandwidth Packages

  - Creating a Device Bandwidth Package

  - Deleting a Device Bandwidth Package

- Migrating a Bandwidth Package

- Checking Account Type

# Operation Guide

## Viewing the Billable Bandwidth

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The actual BWP charges depend on the monthly peak. You can check the billable monthly peak of any bandwidth package on the Bandwidth Package console.

## Calculation Rule

### Monthly top 5 billing

**Daily peak:** the maximum bandwidth value (outbound or inbound bandwidth) is collected every 10 seconds, and the peak bandwidth within 5 minutes is taken as a sample point. All the 288 sample points on the day are sorted in descending order, and the fifth highest value is used as the daily peak bandwidth.

**Monthly top 5 bandwidth:** the daily peaks of the valid days in the current month are sorted in descending order, and the average of the top 5 values is used as the monthly peak bandwidth, i.e. billable bandwidth. The monthly peak bandwidth is updated at 00:00:00 every day. For example, suppose you view the monthly billable bandwidth on January 20, 2021, the value is calculated on the daily peaks from January 1 to January 19, 2021.

### Monthly 95th percentile

**95th percentile of the monthly peak bandwidth:** the maximum bandwidth value (outbound or inbound bandwidth) of the bandwidth package is collected every 10 seconds, and the peak bandwidth within 5 minutes is taken as a sample point. All sample points of the current month are sorted in descending order, and the top 5% are removed. The highest value of the remaining sample points is used as the 95th percentile of the monthly peak bandwidth, i.e. billable bandwidth. The monthly peak bandwidth is updated at 00:00:00 every day. For example, suppose you view the monthly billable bandwidth on January 20, 2021, the value is calculated on the daily peaks from January 1, 2021 00:00:00 to January 19, 2021 23:59:59.

## Directions

1. Log in to the [VPC console](#) and click **Bandwidth Package** on the left sidebar.
2. At the top left of the **Bandwidth Package** page, choose the region you want to check the bandwidth.
3. Click the ID/Name of the target instance in the list.
4. View the current billable bandwidth (after peak clipping) on the instance details page.

## Documentation

[Billing Overview](#)

# Changing Billing Mode

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You can change the billing mode for BWP. This document describes how to do so.

## Note:

You can change the billing mode anytime before the bill is generated, and the latest billing mode will be used for your bill. See [Product Pricing](#) for more details.

## Preparation

The billing mode must be monthly 95th percentile billing .

## Note:

Monthly 95th percentile billing is available only to customers with monthly network product consumption greater than 15,000 USD. For more information, contact your sales rep or [submit a ticket](#). The monthly 95th percentile prices are subject to change in some regions.

## Changing Billing Mode

1. Log in to [VPC Console](#).
2. Click **Bandwidth Package** on the left sidebar. Locate the target bandwidth package instance. In the **Operation** column, select **More -> Modify Billing Mode**.
3. Select the billing mode from the dialog box and click **OK**.

Modify Billing Mode

You've selected the following bandwidth packages:

ID/Name	Region	Current Billing Mode
bwp-83nv7xls	Guangzhou	Pay as you go - Top 5 Bil...

Billing Mode

☒ Pay as you go - Top 5 Billing

☐ Pay as you go - Monthly 95th Percentile

You can change the billing mode anytime before the bill is generated. Your bill will be generated using the latest billing mode. For learn more about billing, please see[Billing Modes](#) .

OK

Cancel

# Managing IP Bandwidth Packages

## Creating an IP Bandwidth Package

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This document describes how to create an IP bandwidth package under your bill-by-IP account.

## Restrictions

The Bandwidth Package (BWP) is currently in beta test. To try it out, please [submit a ticket](#).

A bill-by-IP account only supports creating an IP bandwidth package. If you have a bill-by-CVM account and want to use IP bandwidth packages, please [submit a ticket](#) to change to bill-by-IP account. To learn about your account type, see [Checking Account Type](#).

Tencent Cloud provides the following bandwidth packages according to the bandwidth type.

Bandwidth Type	Restrictions
<a href="#">BGP Bandwidth Package</a>	It can be manually created in the console.
<a href="#">Dedicated BGP Bandwidth Package</a>	
<a href="#">AIA BGP Bandwidth Package</a>	It is auto-created when an Anycast EIP or static single-line EIP is created, and cannot be manually created.

## Directions

1. Log in to the [VPC console](#) and click **Bandwidth Package** on the left sidebar.
2. Select a region, and click **+New** in the upper-left corner.
3. In the pop-up dialog box, enter the bandwidth package name, select a billing mode, and then click **OK**.



## Create Bandwidth Package

Name

test-bwpl

Line Type



General BGP



Dedicated BGP

Billing Mode



Pay as you go - Top 5 Billing



Pay as you go - Monthly 95th Percentile

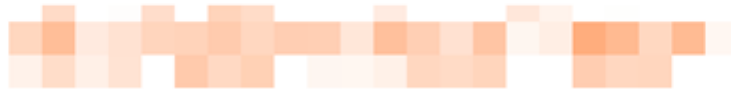
Billing Description

Bill by the fifth highest bandwidth value collected per day. For details, please see [Billing Details](#).

Advanced Options

▶ Tag

Unit Price



OK

Close

Parameter	Description
Name	Supported characters: a-z, 0-9, ., and - Length: 1-60 characters
Line Type	General BGP: A bandwidth package using BGP IP lines. Dedicated BGP: A bandwidth package using dedicated BGP IP lines. Currently, only bill-by-IP accounts support dedicated BGP bandwidth packages. If you have a bill-by-CVM account and want to use IP bandwidth packages, please <a href="#">submit a ticket</a> to change to bill-by-IP account. To learn about your account type, see <a href="#">Checking Account Type</a> .
Billing Mode/Billing Description	Pay as you go - Top 5 Billing: Bill by the fifth highest bandwidth value collected per day Pay as you go - Monthly 95th Percentile: Bill by 95th percentile of the monthly peak bandwidth For more information, see <a href="#">Billing Modes</a> .

Advanced Options	Tags (key-value pairs) used to categorize and manage bandwidth package resources
Unit Price	As detailed in <a href="#">Product Pricing</a>

## See Also

[Adding Resources](#)

# Deleting an IP Bandwidth Package

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This document describes how to delete an IP bandwidth package under your bill-by-IP account.

## Prerequisites

Before deleting an IP bandwidth package, ensure that all resources contained have been removed. For detailed directions, see [Removing Resources](#).

## Directions

1. Log in to the [VPC console](#).
2. Click **Bandwidth Package** on the left sidebar.
3. Select the region, locate the bandwidth package you want to delete, and click **Delete** under its **Operation** column.

ID/Name	Monitoring	Line Type	Status	Billing Mode ▾	Bandwid
		General BGP	Running	Pay as you go - Top 5 Billing	-
		General BGP	Running	Pay as you go - Top 5 Billing	-

4. Click **Confirm** in the pop-up dialog box to confirm the deletion.

**Are you sure you want to delete this bandwidth package?**

Confirm

Cancel

# Adding Resources

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## Note:

Bandwidth Package is a monthly-billed pay-as-you-go service. To activate the service, please contact your sales rep. After creating a bandwidth package, you need to add EIPs and CLBs to the package to share the bandwidth.

## Restrictions

1. Only bill-by-traffic EIPs and CLBs can be added to the bandwidth package. Monthly subscription EIPs and CLBs cannot be added to the bandwidth package.
2. After an EIP or CLB is added to the bandwidth package, the EIP or CLB will be billed in the package. No additional fees will be charged for the traffic and bandwidth. However, idle EIP fees will still incur.
3. An EIP that is not bound to instances will incur an idle fee, regardless of whether the EIP is added to the bandwidth package. Please bind the EIP to an instance to avoid unnecessary fees.
4. Up to 100 resources, including EIPs and CLBs, can be added to a single bandwidth package.

## Directions

1. Log in to the [VPC console](#).
2. Click **Bandwidth Package** on the left sidebar.
3. Select a region. Locate the target bandwidth package instance in the list, and click its ID/Name to go to the instance details page.
4. In the "Bandwidth Package Resources" section on the details page, click **Add Resource**.
5. In the pop-up window, select the resource type and resource instance and click **OK**.

Bind resources

☒ Elastic IP/Public IP    ☐ Cloud Load Balancer

Please select

1/100 selected

Search by resource ID/name/IP

ID/Name	Associate with Ins...
<input checked="" type="checkbox"/>	-
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

ID/Name	Associate with I...
	-

OK

Close

# Removing Resources

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## Note:

Bandwidth Package is a monthly-billed pay-as-you-go service. To activate the service, please contact your sales rep. After an EIP or CLB is removed from a bandwidth package, the billing mode will change to bill-by-traffic.

1. Log in to the [VPC console](#).
2. Click **Bandwidth Package** on the left sidebar.
3. Select a region. Locate the target bandwidth package instance in the list, and click its ID/Name to go to the instance details page.
4. In the "Bandwidth Package Resources" section on the details page, select the target EIP, click **Remove Resource**, and then confirm the deletion.

**Bandwidth Package Resources**

Add Resource

Remove Resource

Public IP

Load balancer

☒

ID/Name

☒

# Managing Device Bandwidth Packages

## Creating a Device Bandwidth Package

Last updated : 2024-01-09 16:30:00

This document describes how to create a device bandwidth package under your bill-by-CVM account.

### Note:

Bandwidth Package is a monthly-billed pay-as-you-go service. To activate the service, please contact your sales rep.

## Restrictions

Only a bill-by-CVM account can create a device bandwidth package. You can check your account type as instructed in [Checking Account Type](#).

Only one device bandwidth package can be activated in a region.

After a device bandwidth package is created in a region, all CVMs and CLBs in the region will be automatically billed in the bandwidth package, and no other billing mode is used in the region. The original fees billed by monthly subscription will be refunded after being converted based on the number of hours actually used.

## Directions

1. Log in to the [VPC console](#) and click **Bandwidth Package** on the left sidebar.
2. Select a region, and click **+New** in the upper-left corner.
3. In the pop-up window, enter the bandwidth package name, select a billing mode, and then click **Create**.
4. (Optional) After the bandwidth package is created, we recommend that you set a bandwidth cap for the following resources:

Set a bandwidth cap for CVM instances as instructed in [Adjusting Network Configuration](#).

Set a bandwidth cap for CLB instances as instructed in [Adjusting Public Network Configuration](#).

# Deleting a Device Bandwidth Package

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This document describes how to delete a device bandwidth package under your bill-by-CVM account.

## Restrictions

After the device bandwidth package is deleted, all CVMs in this region will switch to bill-by-traffic. The bandwidth caps of these CVMs will be lowered to the [bandwidth cap of bill-by-traffic mode](#), if they're higher.

## Directions

1. Log in to the [VPC console](#).
2. Click **Bandwidth Package** on the left sidebar.
3. Select the region, locate the bandwidth package you want to delete, and click **Delete** under its **Operation** column.
4. Click **Confirm** in the pop-up dialog box to confirm the deletion.



# Migrating a Bandwidth Package

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This document introduces how to migrate the resources in a BWP to other BWPs.

## Restrictions

Only bill-by-IP accounts support this resource migration feature, and traditional account types need to be upgraded before using this feature. For more information about Upgrading, please see [Checking Account Type](#).

This migration feature is only supported by BGP BWPs and AIA BGP BWPs, but not by Anycast accelerated BGP BWPs and China Mobile/Unicom/Telecom BWPs. For more information about different types of BWPs, please see [Bandwidth Type](#).

BGP IPs can only be migrated in BGP BWPs, while AIA BGP IPs can only be migrated in AIA BGP BWPs.

## Directions

1. Log in to the [VPC console](#) and click **Bandwidth Package** on the left sidebar.
2. Select the region in the upper-left corner of the "Bandwidth Package" page, and click the target instance ID in the instance list.
3. Select the public IP or CLB resource to be migrated, and click **Migrating a Bandwidth Package** on the instance details page.
4. Select the bandwidth package to be migrated to, and click **OK** in the pop-up window "Migrating a Bandwidth Package".

# Checking Account Type

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Tencent Cloud accounts include bill-by-IP and bill-by-CVM accounts. We recommend that you upgrade your bill-by-CVM accounts to bill-by-IP accounts as the former cannot support new features later.

## Note:

Note: Downgrading from "bill-by-IP" to "bill-by-CVM" is not allowed.

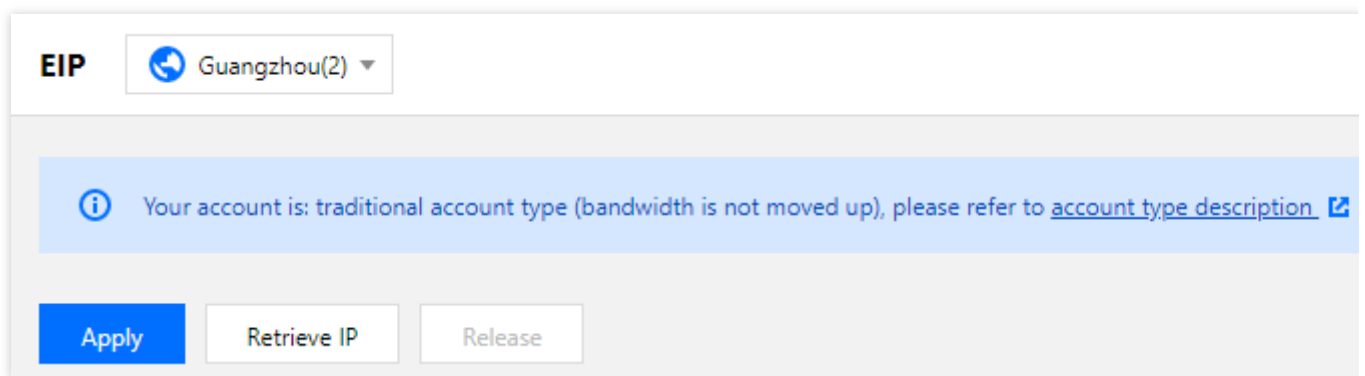
# Checking Account Type

All Tencent Cloud accounts registered after June 17, 2020 00:00:00 will be bill-by-IP accounts. For Tencent Cloud accounts registered before June 17, 2020, check your account types in the console.

Log in to [Public IP Console](#). Check if there is a prompt message at the top of the "Public IP" page.

If no, you have a bill-by-IP account.

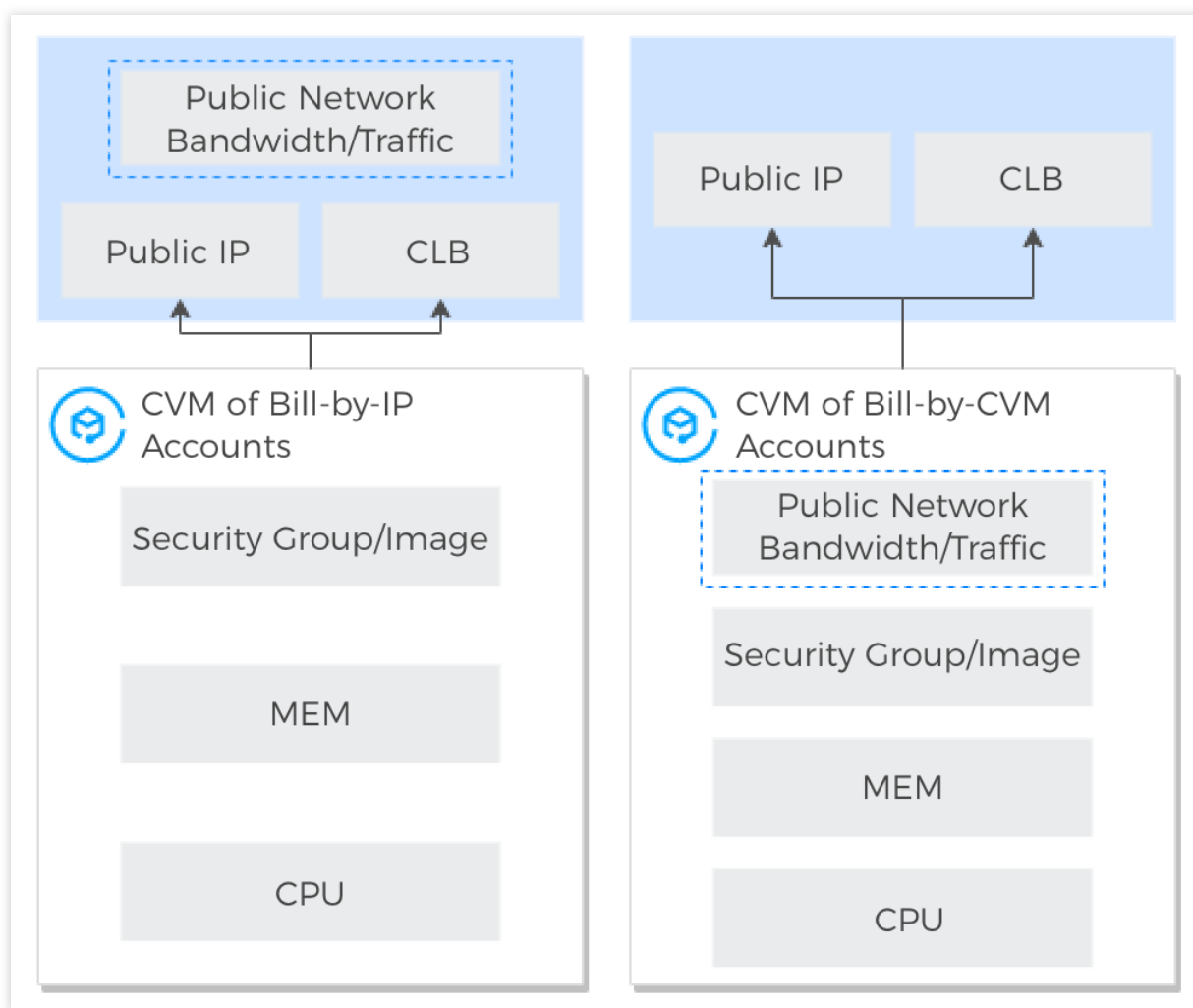
If yes, you have a bill-by-CVM account.



# Account Types

**Bill-by-IP account** manages bandwidth and traffic on IP or CLB. For such an account, public IP or CLB, instead of CVM, has the public network bandwidth and traffic resources.

**Bill-by-CVM account** manages bandwidth and traffic on CVM. For such an account, network bandwidth and traffic can be purchased on CVM, instead of public IP or CLB.



## Account Upgrade

### Advantages

A comparison between the advantages of bill-by-IP and bill-by-CVM accounts is shown below:

Item	Bill-by-IP account	Bill-by-CVM account
Whether the network bandwidth under the account can be migrated to other CVM instances	Yes, as the public network fees are billed by IP.	No, as the public network fees are billed on the bound CVM instance.
Elastic IPv6 billing	IPv6 and IPv4 can be added into the same bandwidth package and billed together.	IPv6 can only be billed separately.
NAT gateway billing	Bill by traffic and bill by bandwidth package are supported.	Only bill by traffic is supported.

Is it necessary to purchase public network for CLB backend CVM	No. Only bandwidth needs to be purchased for CLB, which facilitates management.	Yes. Purchasing public network for all CLB backend CVMs is needed, which complicates management.
New network-related features	Both the existing and new features are supported.	Only the existing features are supported.

## Impacts of upgrade

### Impact on network fees

The account upgrade has no impact on the public network price.

After the upgrade, the network billing mode and price of the CVM billed by traffic will remain unchanged. The changes of other CVMs' network billing modes are detailed below:

CVM Billing Mode	Network Billing Mode	Public IP	Impact
Pay-as-you-go	Bill by hourly bandwidth	The instance has multiple public IPs	The network billing mode of all public IPs is converted to bill by traffic. No refund is involved.

### Impact on bandwidth cap

If the public IP is bound with the CVM, its bandwidth cap after the upgrade is the same as that of the CVM before the upgrade.

If the public network IP is bound with NAT gateway or CLB instead of CVM, its bandwidth cap after the upgrade is the maximum value in the past 7 days.

If the public IP is not bound with any resources, its bandwidth cap is specified as 100 M.

### Impact on IP address

The account upgrade has no impact on the public or private IP addresses.

### Impact on network connection

When there are no more than 500 CVM instances, the upgrade lasts about 5 minutes. The more CVM instances, the longer the upgrade lasts. During the upgrade, the network will not be disconnected, but try not to purchase new services or operate in the console.

### Impact on API call

After the upgrade, when calling the API for creating an EIP, `InternetChargeType` (billing mode) and `InternetMaxBandwidthOut` (bandwidth cap) must be specified. For details, please see the API document [AllocateAddresses](#).

After the upgrade, when calling the APIs for creating CVMs or AS services, if `InternetChargeType` is set as `BANDWIDTH_PACKAGE` (bill by bandwidth package), `BandwidthPackageId` (ID of the bandwidth package to be added) must be specified.

## Upgrade mode

Tencent Cloud will send upgrade notices to bill-by-CVM accounts in batches. To upgrade your account, you can also [submit a ticket](#).

### Note:

Because some upgrade scenarios will change the CVM billing mode, if your CVM is purchased in promotional campaigns and its billing mode is non-switchable according to the campaign rules, your account upgrade is not supported.