

# **Cloud Load Balancer**

## **Release Notes and Announcements**

### **Product Documentation**



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# Release Notes and Announcements

## CLB Release Notes

Last updated : 2024-01-04 09:44:16

### January 2023

Update	Description	Release Date	Documentation
Support for RSA and ECC certificates by HTTPS listeners	HTTPS listeners support the RSA and ECC certificates in SSL parsing, which use different encryption algorithms.	2023-01-30	<a href="#">Managing Certificates</a>

### December 2022

Update	Description	Release Date	Documentation
Log sampling	CLB supports log collection through sampling, to reduce the amount of reported data and reduce costs	2022-12-28	Log sampling

### September 2022

Update	Description	Release Date	Documentation
Enabling or disabling CLB instances and listeners	When a CLB instance is disabled, it cannot receive or forward traffic.	2022-09-08	Enabling or disabling CLB instances

### January 2022

Update	Description	Release Date	Documentation

Obtaining real client IPs through TOA	In hybrid cloud deployment and NAT64 CLB scenarios, layer-4 CLB (only TCP) can obtain the real client IP through TOA.	2022-01-13	<a href="#">Obtaining Real Client IPs via TOA in Hybrid Cloud Deployment</a>
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## August 2021

Update	Description	Release Date	Documentation
Cloning CLB instances	This feature allows you to easily copy the configuration of existing CLB instances, including instance attributes, listeners, security groups, and logs.	August 11, 2021	<a href="#">Cloning CLB Instances</a>

## May 2021

Update	Description	Release Date	Documentation
Supports health check logs	CLB supports configuring layer-4 and layer-7 health check logs to be stored in CLS, reporting logs every minute, and querying logs with multiple rules in real time.	May 21, 2021	<a href="#">Configuring Health Check Logs</a>

## January 2021

Update	Description	Release Date	Documentation
Supports binding CLB instances with SCF functions	CLB instances support binding with SCF functions, enabling more convenient and cost-effective public network access for SCF.	January 28, 2021	<a href="#">Binding with SCF</a>

## December 2020

Update	Description	Release Date	Documentation

Supports static single-line IP CLB instances	In some districts, the ISP of CLB instances can be China Mobile, China Unicom, or China Telecom, and the bandwidth price is lower than the general BGP IP price.	2020-12-03	<a href="#">Overview</a>
Optimizes health check	TCP listeners support HTTP health checks and UDP listeners support checking ports.	December 14, 2020	<a href="#">Health Check</a>

## September 2020

Update	Description	Release Date	Documentation
Fully supports custom layer-7 configurations on CLB instances	CLB fully supports setting the layer-7 configuration parameters of CLB instances.	September 22, 2020	<a href="#">Layer-7 Custom Configurations of CLB Instances</a>
CLB cross-region binding 2.0	CLB supports binding CVM instances across regions through CCN, allowing you to select CVM instances of different regions and bind to them across VPCs or regions.	September 10, 2020	<a href="#">Cross-region Binding v2.0 (New)</a>
Supports hybrid cloud deployment	CLB instances can be directly bound to IPs of local IDCs.	September 10, 2020	<a href="#">Hybrid Cloud Deployment</a>

## June 2020

Update	Description	Release Date	Documentation
Supports the QUIC protocol	Layer-7 HTTPS listeners support the QUIC protocol to establish a QUIC connection between clients and CLB instances.	2020-06-29	<a href="#">Using QUIC Protocol on CLB</a>

## May 2020

Update	Description	Release Date	Documentation

Security groups can be bound to private network CLB instances	Security groups can be bound to private network CLB instances to isolate private network traffic.	May 27, 2020	<a href="#">Configuring a CLB Security Group</a>
Supports "Allow Traffic by Default" on security groups	After "Allow Traffic by Default" is enabled, client IPs and service ports to the Internet do not need to be opened in the backend CVM security group. Access traffic from a CLB instance only needs to pass through the CLB security group, while the backend CVM allows CLB traffic by default and does not need to open any ports.	May 27, 2020	<a href="#">CLB Security Group Configuration</a>
Updates the default domain name policy for layer-7 listeners	The default domain name is changed from optional to required for layer-7 listeners. Each listener must and can only have one default domain name configured.	May 15, 2020	<a href="#">Default Domain Name Policy for Forwarded Domain Name</a>

## April 2020

Update	Description	Release Date	Documentation
Deactivates the feature for storing CLB access logs in COS	You can no longer store new access logs in COS after May 15, 2020 00:00:00, (or after April 26, 2020 00:00:00 in the Guangzhou region). The feature will be officially deactivated in all regions on June 30, 2020 00:00:00. To use the updated feature, see <a href="#">Storing Access Logs in CLS</a> .	April 21, 2020	-

## November 2019

Update	Description	Release Date	Documentation
Shared bandwidth package is supported for CLB	IP bandwidth package is supported for CLB instances of bill-by-IP	November 20, 2019	<a href="#">Bandwidth Package - Product Overview</a>

instances	accounts.		
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## October 2019

Update	Description	Release Date	Documentation
Supports IPv6	IPv6 CLB can be bound to the IPv6 address of a CVM instance and provides an IPv6 VIP address. A CLB instance using the IPv6 single-stack technology can collaborate with IPv4 CLB to implement IPv6/IPv4 dual-stack communication.	2019-10-17	<a href="#">Creating IPv6 CLB Instances</a>
Access logs can be stored in CLS	CLB supports storing layer-7 access logs in CLS with online search at 1-minute granularity.	2019-10-15	<a href="#">Storing Access Logs in CLS</a>
Private network CLB instances support redirection	Private network layer-7 CLB instances support redirection configurations.	2019-10-15	<a href="#">Configuring Layer-7 Redirection</a>

## May 2019

Update	Description	Release Date	Documentation
Supports tag authentication	CLB supports tag-based permission management.	May 7, 2019	<a href="#">Tag - Product Overview</a>

## April 2019

Update	Description	Release Date	Documentation
Supports binding ENIs	CLB can be bound with ENIs to forward traffic to the corresponding private IPs of ENIs on the same CVM instance.	April 30, 2019	<a href="#">Binding an ENI</a>



## November 2018

Update	Description	Release Date	Documentation
Supports Anycast CLB	Anycast CLB supports dynamic acceleration in multiple regions. The CLB VIP is published in multiple regions, and the client connects to the nearest POP, the traffic can be forwarded to a CVM instance through the high-speed Internet of Tencent Cloud IDC.	November 27, 2018	<a href="#">Creating an Anycast Instance</a>

## October 2018

Update	Description	Release Date	Documentation
Supports TCP SSL protocol	CLB supports the TCP SSL protocol, which is suitable for scenarios that require ultra-high performance and large-scale TLS offloading.	October 12, 2018	<a href="#">Configuring a TCP SSL Listener</a>

## August 2018

Update	Description	Release Date	Documentation
Supports SNI	CLB supports multi-domain SNI certificate to configure different certificates for domain names under one listener.	2018-08-21	<a href="#">Multi-domain SNI Certificate Supported by CLB</a>

## April 2018

Update	Description	Release Date	Documentation
Supports security groups	Public network CLB can be bound with security groups to control and isolate inbound and outbound traffic.	April 15, 2018	<a href="#">Configuring a CLB Security Group</a>

## March 2018

Update	Description	Release Date	Documentation
Supports custom layer-7 configurations on CLB instances	CLB supports setting the layer-7 configuration parameters of CLB instances.	March 27, 2018	<a href="#">Layer-7 Custom Configurations of CLB Instances</a>
Access logs can be stored in COS	Public network layer-7 CLB supports storing access logs in COS to facilitate analysis and troubleshooting.	March 2018	<a href="#">Storing Request Logs in COS</a>

## September 2017

Update	Description	Release Date	Documentation
Supports cross-region binding	You can select and bind real servers across VPCs and regions.	September 2017	<a href="#">Cross-Region Binding 2.0 (New)</a>

## June 2017

Update	Description	Release Date	Documentation
Supports CAM authentication	Cloud Access Management (CAM) is used to manage access permissions for resources under Tencent Cloud accounts. You can use identity management and policy management to control which sub-accounts can access CLB resources.	July 2017	<a href="#">Cloud Access Management - Overview</a>

## April 2017

Update	Description	Release Date	Documentation
Supports layer-7 redirection	You can configure redirection on layer-7 HTTP/HTTPS listeners, such as redirection	April 8, 2017	<a href="#">Configuring Layer-7</a>

	from HTTP to HTTPS.		<a href="#">Redirection</a>
Weighted least-connection scheduling is supported for round robin algorithms	The weighted least-connection scheduling is based on the processing capabilities and weights of real servers to balance loads.	April 8, 2017	<a href="#">Weighted Least-Connection Scheduling</a>

## November 2016

Update	Description	Release Date	Documentation
Supports layer-7 domain name and URL forwarding	CLB supports layer-7 HTTP/HTTPS protocols to provide flexible forwarding capabilities based on domain names and URL paths.	November 2016	<a href="#">Layer-7 Domain Name Forwarding and URL Rules</a>

## April 2016

Update	Description	Release Date	Documentation
Supports layer-7 HTTP and HTTPS protocols	Layer-7 HTTP and HTTPS protocols are application layer protocols. Layer-7 listeners support session persistence based on cookies and health check based on HTTP return codes.	April 2016	<a href="#">Layer-7 Listener</a>

## April 2015

Update	Description	Release Date	Documentation
Supports VPC	A Virtual Private Cloud (VPC) is a custom logically isolated network space in Tencent Cloud. CLB instances in VPC can help you deploy and isolate services flexibly.	April 2015	<a href="#">Virtual Private Cloud</a>

## December 2014

Update	Description	Release	Documentation
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		Date	
Releases Cloud Load Balancer	CLB provides secure and fast traffic distribution services. It can seamlessly allocate the load balancing capacity required for application traffic, and automatically distribute application access traffic among CVM instances in the cloud to enhance fault tolerance.	December 2014	<a href="#">Cloud Load Balancer</a>

# [April 15, 2024] Domain Name Upgrade for Domain Name-based Public Network CLB

Last updated : 2024-04-02 11:15:56

Dear Tencent Cloud user,

Thank you for your long-term attention and support to Tencent Cloud. For a securer Cloud Load Balancer (CLB) service, we will upgrade the domain name of Tencent Cloud domain name-based public network CLB from April 15, 2024 at 00:00:00 (UTC+8). After then, you cannot use the default domain name to access Tencent Cloud. For example, if xxxxxx-gz-tencentclb.com is detected for the Guangzhou region, access to it will be denied.

## New Domain Name:

By default, the new domain name is used for domain name-based public network CLB instances created after April 15, 2024 at 00:00:00 (UTC+8). You cannot use the default domain name to access Tencent Cloud.

## Old Domain Name:

The default domain name used for domain name-based public network CLB instances created before April 15, 2024 at 00:00:00 (UTC+8) is not affected. But we recommend you upgrade it as soon as possible.

The platform strictly complies with related laws and regulations of China. Such restrictions may be applied to existing domain names in the future.

On the platform side, it is recommended to resolve your custom domain name to the default domain name provided by the platform side using CNAME. For operation details, see [Configure CLB Forwarding Domain Name](#).

## Advantages of Configuring Your Custom Domain Name

**Enhance Brand Image:** Configure a custom domain name to your service. Your personalized domain name enhances brand image and professionalism and increases user trust.

**Prevent Domain Name Blocking:** Some applications or platforms may block the default domain name of Cloud Load Balancer. By binding your custom domain name, you can ensure that your service is always accessible.

**Enhance Access Experience:** Accessing services with your custom domain name makes it easy for your users to memorize. Compared with using a default domain name, it is more concise and user-friendly, allowing easy access and sharing.

**Ensure Service Continuity:** After binding your custom domain name to the service, users can still access your service using the same domain name even if the services change later, ensuring link persistence and long-term accessibility.

# [July 25, 2023] Adding Rate Limits on Shared CLB Instances

Last updated : 2024-01-04 09:44:16

Tencent Cloud plans to add rate limits on shared CLB instances. For new users, the rate limits take effect starting from 12:00:00, July 25, 2023 (UTC+8). For existing users, the rate limits take effect starting from 12:00:00, August 25, 2023 (UTC+8). Please check the performance metrics of your share CLBs and make adjustments if necessary before the effective date of the service adjustment.

If you have any questions, please [submit a ticket](#).

User type	Description	Metric quota	Before adjustment	After adjustment	Effective time
New users	Users who do not have any shared CLB instances under their root accounts by 12:00:00, July 25, 2023 (UTC+8).	50,000 concurrent connections 5,000 new connections per second 5,000 QPS	N/A	Apply rate limits based on the instance specifications	12:00:00, July 25, 2023 (UTC+8)
Existing users	Users who have shared CLB instances under their root accounts by 12:00:00, July 25, 2023 (UTC+8).		To meet the excess performance requirement, a shared CLB instance takes extra resources from the shared cluster, which may cause performance preemption.		12:00:00, August 25, 2023 (UTC+8)

## Suggestions

Method 1: Upgrade the shared instance to an LCU-supported instance. See [Upgrading to LCU-supported Instance](#).

Method 2: Create more CLBs to distribute the traffic. See [Creating a CLB instance](#).

## FAQs

### Where can I check the performance of my shared CLBs?

You can check the monitoring data, set alerts to get notifications or add the CLB to Tencent Smart Advisor.

Method 1: [Check monitoring data in the console](#) or [configure alert policies](#).

Shared CLB metrics and CLB instance-based monitoring/alert metrics

Shared CLB metrics	CLB instance-based monitoring/alert metrics
Max concurrent connections	Client-to-CLB concurrent connections (ClientConcurConn): Number of concurrent connections initiated from the client to the CLB or listener
Number of new connections per second	Client-to-CLB new connections (ClientNewConn): Number of new connections initiated from the client to the CLB or listener
Queries per Second (QPS)	Requests per second (TotalReq): Number of requests per second of a CLB instance This metric only available for layer-7 listeners.

Method 2: Add the shared CLB instance to Tencent Smart Advisor, which supports rate limit checking.

Go to the [Tencent Smart Advisor console](#).

### **I am using shared CLBs now. If I create a shared CLB after 12:00 PM, July 25, 2023 (UTC+8). Is it affected by the rate limits?**

If you create shared CLBs between 12:00:00 PM, July 25 to 12:00:00 PM, August 25, 2023 (UTC+8), these shared CLB instances are not affected by the rate limit.

After that, all shared CLB instances under your account are subject to rate limits regardless of their creation time.

### **Why are there rate limits on shared CLB instances?**

To meet the excess performance requirement, a shared CLB instance takes extra resources from the shared cluster, which may cause performance preemption. The performance of CLB instances and clusters will be affected. The rate limit is to ensure the stability of load balancing service. Your services will not be affected if your performance requirements are within the range of 50,000 concurrent connections, 5,000 new connections per second and 5,000 QPS.

If you require higher performance, please upgrade to LCU-supported instances. For more information, see [Upgrading to LCU-supported Instances](#).

### **What if I don't want to use shared CLBs anymore?**

For monthly-subscribed CLBS, you can [delete instances](#) directly.

# [July 3, 2023] CLB API Authentication Upgrade

Last updated : 2024-01-04 09:44:16

Tencent Cloud Load Balancing (CLB) plans to undergo an upgrade to add authentication to 29 APIs during July 3 to July 7, 2023. After the upgrade, you need to authorize your sub-account to access these APIs (See [Creating Custom Policy](#)).

If you have any questions, please [submit a ticket](#).

## Upgraded APIs

### Note:

Among the 29 APIs, 6 of them can be invoked by the user ([CreateClsLogSet](#), [CreateTopic](#), [DescribeClsLogSet](#), [DescribeCustomizedConfigAssociateList](#), [DescribeResources](#) and `ModifyLoadBalancerSla` ). The rest APIs are invoked by console operations.

API	Description
<a href="#">CreateClsLogSet</a>	Creates a logset for CLB
<a href="#">CreateTopic</a>	Creates create a log topic
<a href="#">DescribeClsLogSet</a>	Gets the CLB exclusive logset
<a href="#">DescribeCustomizedConfigAssociateList</a>	Gets the bound <code>server</code> or configured <code>location</code> of the CLB instance
<a href="#">DescribeResources</a>	Queries the list of AZs and resources supported for the user in the current region.
<code>ModifyLoadBalancerSla</code>	Upgrades the instance to an LCU-supported instance
<code>AddCustomizedConfig</code>	Creates a custom configuration
<code>AssociateCustomizedConfig</code>	Associates a custom configuration to a server or location.
<code>CheckLcuUpgrade</code>	Checks whether the history data of the shared CLB instance exceeds the quotas of target specification



DeleteCustomizedConfig	Deletes a custom configuration
DescribeCLBWhiteList	Queries whether the user is in the allowlist of a feature in the EC regions
DescribeLBActionLimit	Queries the operation limits of a CLB instance
DescribeLBConfLimit	Queries the configuration limits of a CLB instance
DescribeLBOperateProtect	Queries whether operation protection is enabled for the CLB instance
DescribeLcuPriceResult	Queries the result of an async task to estimate the LCU fee of a CLB instance
DescribeLoadBalancersFeature	Queries the features supported by the CLB instance
DescribeLoadBalancersForVpc	Queries the basic information of a CLB instance
DescribeMasterZones	Queries the secondary AZs based on the primary AZ of a region
DescribeRegions	Queries the regions available to the user
DescribeSlaCapacity	Queries the details of an LCU-supported instance specification
DescribeTaskStatus	Queries the status of an async task
DescribeZone	Queries the list of AZs in the specified region
DescribeZoneSla	Queries available LCU-supported instance specifications in the specified AZ
DisassociateCustomizedConfig	Unbind a custom configuration with a CLB instance
InquiryPriceCreateLoadBalancer	Queries the price to create a CLB
InquiryPriceModifyLoadBalancer	Queries the price to change the configuration of a CLB
InquiryPriceRefundLoadBalancer	Queries the refundable amount of returning a CLB instance
InquiryPriceRenewLoadBalancer	Queries the price of renewing a monthly-subscribed CLB instance
MeasureLcuPrice	Queries the estimated LCU fee of a CLB instance

# [June 9, 2023] Adjusting the Grace Period for Pay-as-you-go CLB Instances

Last updated : 2024-01-04 09:44:16

To avoid incurring a high bill during the grace period, Tencent Cloud plans to shorten the grace period for pay-as-you-go CLB instances from 24 hours to 2 hours starting from July 18, 2023 at 12:00:00 PM (UTC+8). It means that when your account is overdue for 2 hours, the CLB service is suspended and the billing stops. For more information, see [Payment Overdue](#).

For any questions, please [submit a ticket](#).

# [March 6, 2023] Launching Domain Name-Based Public CLBs

Last updated : 2024-01-04 09:44:16

Dear Tencent Cloud user,

For a better service, we are going to upgrade the architecture of Tencent Cloud Load Balancer (CLB) starting from March 6, 2023 at 00:00:00 (UTC+8). After the upgrade, the public network CLB service will be delivered through domain names, and VIPs may change dynamically with business requests and will no longer be displayed in the console.

For CLB users registered after the upgrade, the upgraded CLB service is used by default. For more information, see [Getting Started with Domain Name-Based CLB](#).

Existing users registered before the upgrade can choose to use the original CLB service, or try the upgraded CLB service by applying for beta test or upgrading existing instances.

## CLB Service Comparison Before and After the Upgrade

Item	After Upgrade	Before Upgrade
SLA	99.99%	99.95%
Domain names supported	Yes	No
Automatic VIP scaling supported	Yes	No
VIP changes	VIPs may change dynamically with business requests and will no longer be displayed in the console.	VIPs are fixed.
Health check source IP	100.64.0.0/10 IP range by default, helping prevent IP conflicts	CLB instance VIP by default, which can be switched to the 100.64.0.0/10 IP range

## Directions for Trying the Upgraded CLB Service

### Note:

These directions are intended for existing users registered before the upgrade. For new CLB users registered after the upgrade, the upgraded CLB service is used by default.

Method 1: Apply for beta test and purchase upgraded instances based on your use scenarios.

[Optional upgrade to domain name-based CLB](#) to apply for beta test in transition mode. After the application is approved, create a CLB instance and choose the dynamic IP mode. The created instance provides the upgraded CLB service.

[Complete upgrade to domain name-based CLB](#) to apply for beta test in one-click update mode. After the application is approved, CLB instances created provide the upgraded CLB service by default.

**Note:**

In the beta test, you can no longer create a CLB instance with a fixed IP address.

Method 2: Upgrade your existing CLB instances. For more information, see [Directions for Upgrading to Domain Name-Based CLB](#).

**Preparations**

1. Configure your business service to be accessible through CNAME resolution.
2. Change the health check source IP to the 100.64.0.0/10 IP range. For more information, see [Changing Health Check Source IP](#).

**Impact**

The upgrade does not affect the forwarding service of CLB or change the usage fee.

After the upgrade, CLB implements automatic VIP scaling based on business requests. VIPs change dynamically and will **no longer be displayed** in the console.

After the upgrade, the health check source IP of CLB uses the 100.64.0.0/10 IP range by default. For more information, see [Changing Health Check Source IP](#).

After the upgrade, rollback is not supported.

# [Feb. 24, 2023] Changing Health Check Source IP to 100.64.0.0/10 IP Range

Last updated : 2024-01-04 09:44:16

Dear user,

Starting from February 24, 2023 at 12:00:00 (UTC+8), the health check source IP address of each Tencent Cloud Load Balancer (CLB) instance will be upgraded from a CLB VIP to the 100.64.0.0/10 IP range. This can help prevent IP conflicts and better control the real server policies.

For new CLB users after the upgrade, 100.64.0.0/10 IP range is used by default. Existing users can choose to remain the current VIP unchanged, or change to 100.64.0.0/10 in the console or by using API.

User Type	Description
New users	Users who do not have any CLB instances by 12:00:00 (UTC+8) February 24, 2023.
Existing users	Users who have CLB instances by 12:00:00 (UTC+8) February 24, 2023.

## Reminders

For CLB instances whose health check source IP address falls into the 100.64.0.0/10 IP range, you do not need to add this IP range to the allowlist of the security group of the associated real servers. If the real servers are configured with other security policies (such as iptables), this IP range must be added to the allowlist. Otherwise, health check failures may be caused.

If the associated real servers are under the same account as the CLB instances, 100.64.0.0/10 is added to the allowlist of the security group of the real servers by default. For real servers under a different account from the CLB instances, you need to log in with the related account and upgrade the CLB configurations.

## Console Operations

See [Changing Health Check Source IP](#).

## API Operations

For layer-4 listeners, call [ModifyListener](#) and set `SourceIpType` to `1` .

For layer-7 listeners, call [ModifyRule](#) and set `SourceIpType` to `1` .

If you have any questions, please [submit a ticket](#).