

# Cloud Load Balancer

## API 참조

## 제품 문서



Tencent Cloud

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# API 참조

## History

최종 업데이트 날짜: : 2023-10-24 11:15:59

### Release 31

Release time: 2023-10-24 11:13:16

Release updates:

Improvement to existing documentation.

New APIs:

- [InquiryPriceCreateLoadBalancer](#)
- [InquiryPriceModifyLoadBalancer](#)
- [InquiryPriceRefundLoadBalancer](#)
- [InquiryPriceRenewLoadBalancer](#)
- [ModifyLoadBalancersProject](#)

Modified APIs:

- [CreateLoadBalancer](#)
  - New input parameters:Egress

New data structures:

- [ItemPrice](#)
- [Price](#)

Modified data structures:

- [Listener](#)
  - **Modified members:** IdleConnectTimeout
- [LoadBalancer](#)
  - New members:Egress
- [LoadBalancerDetail](#)
  - New members:Egress
  - **Modified members:** LoadBalancerDomain
- [ZoneResource](#)

- New members:Egress

## Release 30

Release time: 2023-07-28 17:36:27

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateLoadBalancer](#)
  - New input parameters:DynamicVip
- [ModifyLoadBalancerAttributes](#)
  - New input parameters:ModifyClassicDomain

New data structures:

- [SpecAvailability](#)
- [TypeInfo](#)

Modified data structures:

- [Resource](#)
  - New members:TypeSet
- [TargetHealth](#)
  - **Modified members:** HealthStatusDetial
  - **Deprecate members:** HealthStatusDetial

## Release 29

Release time: 2023-04-19 10:28:26

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateListener](#)
  - New input parameters:IdleConnectTimeout

- [ModifyListener](#)
  - New input parameters:IdleConnectTimeout

Modified data structures:

- [IdleLoadBalancer](#)
  - New members:Domain
- [Listener](#)
  - New members:IdleConnectTimeout

## Release 28

Release time: 2023-04-04 17:16:14

Release updates:

Improvement to existing documentation.

Modified APIs:

- [ModifyDomainAttributes](#)
  - New input parameters:Quic

## Release 27

Release time: 2023-03-17 11:21:01

Release updates:

Improvement to existing documentation.

New APIs:

- [ModifyFunctionTargets](#)

Modified APIs:

- [DescribeTargets](#)
  - New input parameters:Filters

Modified data structures:

- [LoadBalancer](#)

- New members:LoadBalancerDomain
- [LoadBalancerTraffic](#)
  - New members:Domain
- [RuleTargets](#)
  - New members:FunctionTargets
- [TargetHealth](#)
  - New members:HealthStatusDetail

## Release 26

Release time: 2023-03-13 17:28:52

Release updates:

Improvement to existing documentation.

New APIs:

- [DeregisterFunctionTargets](#)
- [RegisterFunctionTargets](#)

New data structures:

- [FunctionInfo](#)
- [FunctionTarget](#)
- [ResourceAvailability](#)

Modified data structures:

- [CertificateOutput](#)
  - New members:ExtCertIds
- [Listener](#)
  - New members:TargetGroupList, MaxConn, MaxCps
- [LoadBalancerDetail](#)
  - New members:SlaveZone, Zones, SniSwitch, LoadBalancerDomain
- [Resource](#)
  - New members:AvailabilitySet
- [RuleOutput](#)
  - New members:TargetGroupList
- [ZoneInfo](#)
  - New members:EdgeZone

- [ZoneResource](#)
  - New members:ZoneResourceType, EdgeZone

## Release 25

Release time: 2023-01-30 15:05:42

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateListener](#)
  - New input parameters:MultiCertInfo, MaxConn, MaxCps
- [ModifyDomainAttributes](#)
  - New input parameters:MultiCertInfo
- [ModifyListener](#)
  - New input parameters:MultiCertInfo, MaxConn, MaxCps

New data structures:

- [CertInfo](#)
- [MultiCertInfo](#)

Modified data structures:

- [RuleInput](#)
  - New members:MultiCertInfo

## Release 24

Release time: 2022-11-03 16:06:25

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeResources](#)
- [SetCustomizedConfigForLoadBalancer](#)

New data structures:

- [Resource](#)
- [ZoneResource](#)

## Release 23

Release time: 2022-10-11 11:16:46

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeIdleLoadBalancers](#)

Modified APIs:

- [CreateTopic](#)
  - New input parameters:StorageType

New data structures:

- [IdleLoadBalancer](#)

## Release 22

Release time: 2022-08-01 16:49:40

Release updates:

Improvement to existing documentation.

Modified APIs:

- [ModifyListener](#)
  - New input parameters:TargetType

## Release 21

Release time: 2022-07-26 10:18:45



Release updates:

Improvement to existing documentation.

Modified data structures:

- [Listener](#)
  - New members:AttrFlags

## Release 20

Release time: 2022-05-19 15:55:19

Release updates:

Improvement to existing documentation.

Modified data structures:

- [HealthCheck](#)
  - New members:ExtendedCode

## Release 19

Release time: 2022-02-23 11:17:29

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateClsLogSet](#)
  - **Modified input parameters:** Period
- [CreateTopic](#)
  - New input parameters:Period
- [ModifyDomainAttributes](#)
  - New input parameters:NewDomains

Modified data structures:

- [LoadBalancerDetail](#)
  - New members:Domains
- [RuleInput](#)

- New members:Domains
- **Modified members:** Domain
- [RuleOutput](#)
  - New members:Domains

## Release 18

Release time: 2022-02-21 10:08:15

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeCrossTargets](#)
- [MigrateClassicalLoadBalancers](#)

Modified APIs:

- [CreateLoadBalancer](#)
  - New output parameters:DealName
- [DescribeTaskStatus](#)
  - New input parameters:DealName
  - New output parameters:LoadBalancerIds

New data structures:

- [CrossTargets](#)

## Release 17

Release time: 2022-01-07 17:22:32

Release updates:

Improvement to existing documentation.

New APIs:

- [CloneLoadBalancer](#)
- [DescribeLoadBalancerOverview](#)

Modified data structures:

- [LoadBalancer](#)
  - New members:ClusterIds, AttributeFlags

## Release 16

Release time: 2021-12-15 12:04:59

Release updates:

Improvement to existing documentation.

New APIs:

- [ModifyLoadBalancerSla](#)

New data structures:

- [SlaUpdateParam](#)

## Release 15

Release time: 2021-11-16 16:44:31

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeLBListeners](#)

Modified APIs:

- [CreateLoadBalancer](#)
  - New input parameters:LoadBalancerPassToTarget
- [CreateLoadBalancerSnatIps](#)
  - New input parameters:Number
- [ModifyListener](#)
  - New input parameters:SessionType

New data structures:

- [LBItem](#)
- [LbRsItem](#)
- [LbRsTargets](#)
- [ListenerItem](#)
- [RulesItems](#)

Modified data structures:

- [HealthCheck](#)
  - New members:SourceIpType

## Release 14

Release time: 2021-09-15 10:35:49

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeCustomizedConfigAssociateList](#)
- [DescribeCustomizedConfigList](#)

Modified APIs:

- [CreateLoadBalancer](#)
  - New input parameters:SlaType
- [ModifyLoadBalancerAttributes](#)
  - New input parameters>DeleteProtect

New data structures:

- [BindDetailItem](#)
- [ConfigListItem](#)

## Release 13

Release time: 2021-09-07 15:41:14

Release updates:

Improvement to existing documentation.

Modified data structures:

- [LoadBalancerDetail](#)
  - New members:TargetHealth

## Release 12

Release time: 2021-05-31 16:19:16

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateListener](#)
  - New input parameters:DeregisterTargetRst
- [ModifyListener](#)
  - New input parameters:DeregisterTargetRst

Modified data structures:

- [Listener](#)
  - New members:DeregisterTargetRst

## Release 11

Release time: 2021-04-22 18:37:22

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateClsLogSet](#)
  - New input parameters:LogsetType
- [CreateTopic](#)
  - New input parameters:TopicType
- [DescribeClsLogSet](#)
  - New output parameters:HealthLogsetId

- [SetLoadBalancerCisLog](#)
  - New input parameters:LogType

Modified data structures:

- [LoadBalancer](#)
  - New members:HealthLogSetId, HealthLogTopicId

## Release 10

Release time: 2021-04-07 19:45:51

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateLoadBalancer](#)
  - New input parameters:SlaveZoneId

Modified data structures:

- [TargetGroupBackend](#)
  - New members:ZoneId
- [ZoneInfo](#)
  - New members:ZoneRegion, LocalZone

## Release 9

Release time: 2021-03-08 18:37:21

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateListener](#)
  - New input parameters:EndPoint

## Release 8

Release time: 2021-02-23 15:57:44

Release updates:

Improvement to existing documentation.

Modified APIs:

- [AutoRewrite](#)
  - New input parameters: RewriteCodes, TakeUrls

Modified data structures:

- [Listener](#)
  - New members: Toa
- [LoadBalancer](#)
  - New members: NfvInfo
- [LoadBalancerDetail](#)
  - New members: SecurityGroup, LoadBalancerPassToTarget
- [RewriteLocationMap](#)
  - New members: RewriteCode, TakeUrl, SourceDomain
- [RewriteTarget](#)
  - New members: RewriteCode, TakeUrl, RewriteType

## Release 7

Release time: 2021-01-22 11:18:07

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateLoadBalancer](#)
  - New input parameters: EipAddressId

## Release 6

Release time: 2020-12-22 17:25:37

Release updates:

Improvement to existing documentation.

New APIs:

- [DescribeLoadBalancerTraffic](#)

New data structures:

- [LoadBalancerTraffic](#)

## Release 5

Release time: 2020-12-17 16:35:31

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateLoadBalancer](#)
  - New input parameters:BandwidthPackageId, SnatPro, SnatIps

Modified data structures:

- [LoadBalancer](#)
  - New members:Zones

## Release 4

Release time: 2020-10-28 09:59:32

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateLoadBalancer](#)
  - New input parameters:Vip, ExclusiveCluster, ClusterTag



## Release 3

Release time: 2020-10-16 18:20:33

Release updates:

Improvement to existing documentation.

Modified APIs:

- [CreateListener](#)
  - New input parameters:KeepaliveEnable
- [ModifyListener](#)
  - New input parameters:KeepaliveEnable

## Release 2

Release time: 2020-08-06 19:25:09

Release updates:

Improvement to existing documentation.

New APIs:

- [CreateClsLogSet](#)
- [CreateTopic](#)
- [DescribeClsLogSet](#)

## Existing Release

Release time: 2020-07-30 19:25:18

Existing APIs/data structures are as follows:

Improvement to existing documentation.

Existing APIs:

- [AssociateTargetGroups](#)
- [AutoRewrite](#)
- [BatchDeregisterTargets](#)
- [BatchModifyTargetWeight](#)

- [BatchRegisterTargets](#)
- [CreateListener](#)
- [CreateLoadBalancer](#)
- [CreateLoadBalancerSnatIps](#)
- [CreateRule](#)
- [CreateTargetGroup](#)
- [DeleteListener](#)
- [DeleteLoadBalancer](#)
- [DeleteLoadBalancerListeners](#)
- [DeleteLoadBalancerSnatIps](#)
- [DeleteRewrite](#)
- [DeleteRule](#)
- [DeleteTargetGroups](#)
- [DeregisterTargetGroupInstances](#)
- [DeregisterTargets](#)
- [DeregisterTargetsFromClassicalLB](#)
- [DescribeBlockIPList](#)
- [DescribeBlockIPTask](#)
- [DescribeClassicalLBByInstanceId](#)
- [DescribeClassicalLBHealthStatus](#)
- [DescribeClassicalLBListeners](#)
- [DescribeClassicalLBTargets](#)
- [DescribeListeners](#)
- [DescribeLoadBalancerListByCertId](#)
- [DescribeLoadBalancers](#)
- [DescribeRewrite](#)
- [DescribeTargetGroupInstances](#)
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- [DescribeTargetHealth](#)
- [DescribeTargets](#)
- [DescribeTaskStatus](#)
- [DisassociateTargetGroups](#)
- [ManualRewrite](#)
- [ModifyBlockIPList](#)
- [ModifyDomain](#)
- [ModifyDomainAttributes](#)
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- [ModifyLoadBalancerAttributes](#)
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- [BasicTargetGroupInfo](#)
- [BatchTarget](#)
- [BlockedIP](#)
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- [ClassicalHealth](#)
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- [ClassicalLoadBalancerInfo](#)
- [ClassicalTarget](#)
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- [ClusterItem](#)
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- [ExtraInfo](#)
- [Filter](#)
- [HealthCheck](#)
- [InternetAccessible](#)
- [LBChargePrepaid](#)
- [Listener](#)

- [ListenerBackend](#)
- [ListenerHealth](#)
- [LoadBalancer](#)
- [LoadBalancerHealth](#)
- [RewriteLocationMap](#)
- [RewriteTarget](#)
- [RsWeightRule](#)
- [RuleHealth](#)
- [RuleInput](#)
- [RuleOutput](#)
- [RuleTargets](#)
- [SnatIp](#)
- [TagInfo](#)
- [Target](#)
- [TargetGroupAssociation](#)
- [TargetGroupBackend](#)
- [TargetGroupInfo](#)
- [TargetGroupInstance](#)
- [TargetHealth](#)
- [TargetRegionInfo](#)
- [ZoneInfo](#)

# Introduction

최종 업데이트 날짜: : 2023-03-17 11:27:43

Tencent Cloud Load Balancer (CLB) distributes requests from clients to multiple real servers associated with the CLB in the same region as specified by setting a virtual IP address (VIP).

CLB virtualizes the servers bound to it to build a high-availability service pool, checks their health, and automatically isolates unhealthy servers from healthy ones, thus resolving single points of failure issues and improving the overall service capabilities of the applications. CLB strictly isolates the traffic of each tenant and provides active protection against DDoS attacks. Public network CLB supports [Anti-DDoS Basic] (<https://cloud.tencent.com/document/product/1020>) by default.

Tencent Cloud CLB is a solution for multiple servers to serve at the same time, and must be used together with real servers.

## Notes:

- All CLB APIs described here have been upgraded to API 3.0. All new CLB-related features will be added to these APIs. We recommend that you use API 3.0.
- The features of old APIs remain available. For more information, see [here](#).

# API Category

최종 업데이트 날짜: : 2023-10-24 11:15:59

## Instance APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">DescribeLoadBalancers</a>	Queries the list of CLB instances	20
<a href="#">CloneLoadBalancer</a>	Clones a CLB instance	20
<a href="#">CreateLoadBalancer</a>	Purchases a CLB instance	20
<a href="#">ModifyLoadBalancerAttributes</a>	Modifies the attributes of a CLB instance	20
<a href="#">DescribeLoadBalancersDetail</a>	Queries CLB instance details	20
<a href="#">DeleteLoadBalancer</a>	Deletes one or more CLB instances	20

## Listener APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">CreateListener</a>	Creates a CLB listener	20
<a href="#">CreateRule</a>	Creates a forwarding rule for a layer-7 CLB listener	20
<a href="#">DescribeListeners</a>	Queries the list of CLB listeners	20
<a href="#">ModifyListener</a>	Modifies the attributes of a CLB listener	20
<a href="#">ModifyRule</a>	Modifies a forwarding rule of a CLB listener	20
<a href="#">ModifyDomain</a>	Modifies a domain name of a layer-7 forwarding rule	20
<a href="#">ModifyDomainAttributes</a>	Modifies the domain name-level attributes of a	20

	layer-7 listener's forwarding rule	
<a href="#">DeleteListener</a>	Deletes a CLB listener	20
<a href="#">DeleteLoadBalancerListeners</a>	Deletes multiple CLB listeners	20
<a href="#">DeleteRule</a>	Deletes a rule from a layer-7 CLB listener	20

## Backend Service APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">RegisterTargets</a>	Binds real servers to a listener	20
<a href="#">BatchRegisterTargets</a>	Binds CVM instances or ENIs in batches	20
<a href="#">ModifyTargetPort</a>	Modifies the port of a real server bound to a listener	20
<a href="#">ModifyTargetWeight</a>	Modifies the forwarding weight of a real server bound to a listener	20
<a href="#">BatchModifyTargetWeight</a>	Batch modifies the forwarding weights of real servers bound to a listener	20
<a href="#">DeregisterTargets</a>	Unbinds real servers from a CLB listener	20
<a href="#">BatchDeregisterTargets</a>	Unbinds layer-4/layer-7 real servers in batches	20
<a href="#">DescribeTargetHealth</a>	Queries the health check status of a real server of a CLB instance	20
<a href="#">DeregisterFunctionTargets</a>	Unbinding an SCF function from a forwarding rule	20
<a href="#">DescribeCrossTargets</a>	Queries information of CVMs and ENIs that use cross-region binding 2.0	20
<a href="#">ModifyFunctionTargets</a>	Modifies the cloud functions associated with a forwarding rule	20
<a href="#">RegisterFunctionTargets</a>	Binds an SCF function with a forwarding rule	20
<a href="#">DescribeTargets</a>	Queries the list of CVM instances bound to a	20

CLB instance

## Target Group APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">CreateTargetGroup</a>	Creates a target group	20
<a href="#">DeleteTargetGroups</a>	Deletes target groups	20
<a href="#">DescribeTargetGroups</a>	Queries target group information	20
<a href="#">DescribeTargetGroupList</a>	Gets a target group list	20
<a href="#">ModifyTargetGroupAttribute</a>	Modifies target group attribute	20
<a href="#">AssociateTargetGroups</a>	Binds target groups to rules	20
<a href="#">DisassociateTargetGroups</a>	Unbinds target groups from a rule	20
<a href="#">RegisterTargetGroupInstances</a>	Registers servers to a target group	20
<a href="#">DeregisterTargetGroupInstances</a>	Unbinds a server from a target group	20
<a href="#">DescribeTargetGroupInstances</a>	Gets servers bound to a target group	20
<a href="#">ModifyTargetGroupInstancesPort</a>	Modifies server ports of a target group in batches	20
<a href="#">ModifyTargetGroupInstancesWeight</a>	Modifies server weights of a target group in batches	20

## Redirection APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">ManualRewrite</a>	Creates a redirection relationship between CLB forwarding rules manually	20



<a href="#">AutoRewrite</a>	Automatically generates a redirection relationship between CLB forwarding rules	20
<a href="#">DeleteRewrite</a>	Deletes the redirection relationship between CLB forwarding rules	20
<a href="#">DescribeRewrite</a>	Queries the redirection relationship between CLB forwarding rules	20

## Other APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">DescribeClsLogSet</a>	Gets the CLB exclusive logset	20
<a href="#">CreateLoadBalancerSnatIps</a>	Adds SNAT IP	20
<a href="#">DeleteLoadBalancerSnatIps</a>	Deletes SNAT IP	20
<a href="#">DescribeLoadBalancerListByCertId</a>	Queries a CLB instance by the certificate ID	20
<a href="#">DescribeQuota</a>	Queries quotas	20
<a href="#">ModifyLoadBalancersProject</a>	Modifies the projects of CLB instances	20
<a href="#">ReplaceCertForLoadBalancers</a>	Replaces a certificate associated with a CLB instance	20
<a href="#">SetLoadBalancerClsLog</a>	Sets the CLS topic of a CLB instance	20
<a href="#">SetLoadBalancerSecurityGroups</a>	Configures security groups for a CLB instance	20
<a href="#">SetSecurityGroupForLoadbalancers</a>	Binds or unbinds a security group for multiple CLB instances	20
<a href="#">CreateClsLogSet</a>	Creates a CLB exclusive logset	20
<a href="#">CreateTopic</a>	Creates a topic	20
<a href="#">DescribeBlockIPTask</a>	Queries the execution status of an async IP blocking (blocklisting) task	20

<a href="#">DescribeLoadBalancerTraffic</a>	Queries CLB instances with high traffic under the current account	20
<a href="#">DescribeResources</a>	Queries the list of AZs and resources supported for the user in the current region	20
<a href="#">DescribeTaskStatus</a>	Queries the status of an async task	20
<a href="#">InquiryPriceCreateLoadBalancer</a>	Queries the price of creating a CLB instance.	20
<a href="#">InquiryPriceModifyLoadBalancer</a>	Queries the price of adjusting the specification of a CLB instance	20
<a href="#">InquiryPriceRenewLoadBalancer</a>	Queries the price to renew a prepaid CLB instance	20

## Classic CLB APIs

API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">DescribeClassicalLBListeners</a>	Gets the list of classic CLB listeners	20
<a href="#">DescribeClassicalLBTargets</a>	Gets the list of real servers bound to a classic CLB	20
<a href="#">DescribeClassicalLBHealthStatus</a>	Gets the real server health status of a classic CLB	20
<a href="#">RegisterTargetsWithClassicalLB</a>	Binds real servers to a classic CLB	20
<a href="#">DeregisterTargetsFromClassicalLB</a>	Unbinds real servers from a classic CLB	20
<a href="#">DescribeClassicalLBByInstanceId</a>	Queries the classic CLB bound to a real server	20
<a href="#">MigrateClassicalLoadBalancers</a>	Upgrades Classic CLB instances to application CLB instances	20

## Load Balancing APIs

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API Name	Feature	Frequency Limit (maximum requests per second)
<a href="#">DescribeBlockIPList</a>	Queries the list of blocked IPs (blocklist) of a CLB instance	20
<a href="#">DescribeCustomizedConfigList</a>	Querying configuration details	20
<a href="#">DescribeIdleLoadBalancers</a>	Queries the list of CLB instances	20
<a href="#">DescribeLBListeners</a>	Queries CLB instances bound to the CVM or ENI	20
<a href="#">ModifyBlockIPList</a>	Modifies the client IP blocklist of a CLB instance	20
<a href="#">SetCustomizedConfigForLoadBalancer</a>	Creates or manages user-defined CLB configuration template	20
<a href="#">DescribeCustomizedConfigAssociateList</a>	Queries the bound server or configured location	20
<a href="#">DescribeLoadBalancerOverview</a>	Queries the CLB instance status statistics	20
<a href="#">InquiryPriceRefundLoadBalancer</a>	Queries the refund amount of returning a CLB instance.	20
<a href="#">ModifyLoadBalancerSla</a>	Upgrades to an LCU-supported instance	20

# Making API Requests

## Request Structure

최종 업데이트 날짜: : 2023-03-13 17:31:06

### 1. Service Address

The API supports access from either a nearby region (at `clb.tencentcloudapi.com`) or a specified region (at `clb.ap-guangzhou.tencentcloudapi.com` for Guangzhou, for example).

We recommend using the domain name to access the nearest server. When you call an API, the request is automatically resolved to a server in the region **nearest** to the location where the API is initiated. For example, when you initiate an API request in Guangzhou, this domain name is automatically resolved to a Guangzhou server, the result is the same as that of specifying the region in the domain like "`clb.ap-guangzhou.tencentcloudapi.com`".

**Note: For latency-sensitive businesses, we recommend that you specify the region in the domain name.**

Tencent Cloud currently supports the following regions:

Hosted region	Domain name
Local access region (recommended, only for non-financial availability zones)	<code>clb.tencentcloudapi.com</code>
South China (Guangzhou)	<code>clb.ap-guangzhou.tencentcloudapi.com</code>
East China (Shanghai)	<code>clb.ap-shanghai.tencentcloudapi.com</code>
North China (Beijing)	<code>clb.ap-beijing.tencentcloudapi.com</code>
Southwest China (Chengdu)	<code>clb.ap-chengdu.tencentcloudapi.com</code>
Southwest China (Chongqing)	<code>clb.ap-chongqing.tencentcloudapi.com</code>
Hong Kong, Macao, Taiwan (Hong Kong, China)	<code>clb.ap-hongkong.tencentcloudapi.com</code>
Southeast Asia (Singapore)	<code>clb.ap-singapore.tencentcloudapi.com</code>
Southeast Asia (Bangkok)	<code>clb.ap-bangkok.tencentcloudapi.com</code>

South Asia (Mumbai)	clb.ap-mumbai.tencentcloudapi.com
Northeast Asia (Seoul)	clb.ap-seoul.tencentcloudapi.com
Northeast Asia (Tokyo)	clb.ap-tokyo.tencentcloudapi.com
U.S. East Coast (Virginia)	clb.na-ashburn.tencentcloudapi.com
U.S. West Coast (Silicon Valley)	clb.na-siliconvalley.tencentcloudapi.com
North America (Toronto)	clb.na-toronto.tencentcloudapi.com
Europe (Frankfurt)	clb.eu-frankfurt.tencentcloudapi.com

## 2. Communications Protocol

All the Tencent Cloud APIs communicate via HTTPS, providing highly secure communication tunnels.

## 3. Request Methods

Supported HTTP request methods:

- POST (recommended)
- GET

The Content-Type types supported by POST requests:

- application/json (recommended). The TC3-HMAC-SHA256 signature algorithm must be used.
- application/x-www-form-urlencoded. The HmacSHA1 or HmacSHA256 signature algorithm must be used.
- multipart/form-data (only supported by certain APIs). You must use TC3-HMAC-SHA256 to calculate the signature.

The size of a GET request packet is up to 32 KB. The size of a POST request is up to 1 MB when the HmacSHA1 or HmacSHA256 signature algorithm is used, and up to 10 MB when TC3-HMAC-SHA256 is used.

## 4. Character Encoding

Only UTF-8 encoding is used.

# Common Params

최종 업데이트 날짜: : 2023-03-13 17:31:07

Common parameters are used for all APIs authenticating requestors. Common parameters must be included in all API requests, and they will not be described in individual API documents.

The exact contents of the common parameters will vary depending on the version of the signature method you use.

## Common parameters for Signature Algorithm v3

When the TC3-HMAC-SHA256 algorithm is used, the common parameters should be uniformly placed in the HTTP request header, as shown below:

Parameter Name	Type	Required	Description
X-TC-Action	String	Yes	The name of the API for the desired operation. For the specific value, see description of common parameter <code>Action</code> in the input parameters in r documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .
X-TC-Region	String	Yes	Region parameter, which is used to identify the region to which the data y work with belongs. For values supported for an API, see the description c parameter <code>Region</code> in the input parameters in related API documentati parameter is not required for some APIs (which will be indicated in relatec documentation), and will not take effect even it is passed.
X-TC-Timestamp	Integer	Yes	The current UNIX timestamp that records the time when the API request for example, 1529223702. Note: If the difference between the UNIX times server time is greater than 5 minutes, a signature expiration error may oc
X-TC-Version	String	Yes	API version of the action. For the valid values, see the description of the c parameter <code>Version</code> in the API documentation. For example, the versi 2017-03-12.
Authorization	String	Yes	The HTTP authentication request header, for example: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/Date/service/tc3_requ SignedHeaders=content-type;host, Signature=fe5f80f77d5fa3beca038a248ff027d0445342fe2855ddc96317 Here: - TC3-HMAC-SHA256: Signature method, currently fixed as this value; - Credential: Signature credential; AKIDEXAMPLE is the SecretId; Date is UTC time, and this value must match the value of X-TC-Timestamp (a co

			<p>parameter) in UTC time format; service is the name of the product/service generally a domain name prefix. For example, a domain name cvm.tencent refers to the CVM product and the value would be cvm;</p> <ul style="list-style-type: none"> <li>- SignedHeaders: The headers that contains the authentication information type and host are the required headers;</li> <li>- Signature: Signature digest.</li> </ul>
X-TC-Token	String	No	The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.

Assuming you want to query the list of Cloud Virtual Machine instances in the Guangzhou region, the request structure in the form of request URL, request header and request body may be as follows:

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Limit=10&Offset=0

Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3EXAMPLE/2018-10-09/cvm/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
Content-Type: application/x-www-form-urlencoded
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1539084154
X-TC-Region: ap-guangzhou
```

The following example shows you how to structure an HTTP POST (application/json) request:

```
https://cvm.tencentcloudapi.com/

Authorization: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/2018-05-30/cvm/tc3_request, SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b13162d9279b0855cfba6789a8edb4c
Content-Type: application/json
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1527672334
X-TC-Region: ap-guangzhou

{"Offset":0,"Limit":10}
```

Example of an HTTP POST (multipart/form-data) request structure (only supported by specific APIs):

```
https://cvm.tencentcloudapi.com/
```

```
Authorization: TC3-HMAC-SHA256 Credential=AKIDEXAMPLE/2018-05-30/cvm/tc3_request,
SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b1316
2d9279b0855cfba6789a8edb4c
```

```
Content-Type: multipart/form-data; boundary=58731222010402
```

```
Host: cvm.tencentcloudapi.com
```

```
X-TC-Action: DescribeInstances
```

```
X-TC-Version: 2017-03-12
```

```
X-TC-Timestamp: 1527672334
```

```
X-TC-Region: ap-guangzhou
```

```
--58731222010402
```

```
Content-Disposition: form-data; name="Offset "
```

```
0
```

```
--58731222010402
```

```
Content-Disposition: form-data; name="Limit "
```

```
10
```

```
--58731222010402--
```

## Common parameters for Signature Algorithm v1

To adopt the HmacSHA1 and HmacSHA256 signature methods, common parameters must be put into the request string, as shown below:

Parameter Name	Type	Required	Description
Action	String	Yes	The name of the API for the desired operation. For the specific value, see the description of common parameter <code>Action</code> in the input parameters in related API documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .
Region	String	Yes	Region parameter, which is used to identify the region to which the data you want to work with belongs. For values supported for an API, see the description of common parameter <code>Region</code> in the input parameters in related API documentation. Note: This parameter is not required for some APIs (which will be indicated in related API documentation), and will not take effect even if it is passed.



Timestamp	Integer	Yes	The current UNIX timestamp that records the time when the API request was initiated, for example, 1529223702. If the difference between the value and the current system time is too large, a signature expiration error may occur.
Nonce	Integer	Yes	A random positive integer used along with <code>Timestamp</code> to prevent replay attacks.
SecretId	String	Yes	The identifying SecretId obtained on the <a href="#">Cloud API Key</a> page. A SecretId corresponds to a unique SecretKey which is used to generate the request signature (Signature).
Signature	String	Yes	Request signature used to verify the validity of this request. This is calculated based on the actual input parameters. For more information about how this is calculated, see the API authentication documentation.
Version	String	Yes	API version of the action. For the valid values, see the description of the common input parameter <code>Version</code> in the API documentation. For example, the version of CVM is 2017-03-12.
SignatureMethod	String	No	Signature method. Currently, only HmacSHA256 and HmacSHA1 are supported. The HmacSHA256 algorithm is used to verify the signature only when this parameter is specified as HmacSHA256. In other cases, the signature is verified with HmacSHA1.
Token	String	No	The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.

Assuming you want to query the list of Cloud Virtual Machine instances in the Guangzhou region, the request structure in the form of request URL, request header and request body may be as follows:

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=37ac2f4fde00b0ac9bd9eadeb459b1bbbee224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
```

```
Host: cvm.tencentcloudapi.com
Content-Type: application/x-www-form-urlencoded
```

Example of an HTTP POST request structure:

```
https://cvm.tencentcloudapi.com/
```

```
Host: cvm.tencentcloudapi.com
```

```
Content-Type: application/x-www-form-urlencoded
```

```
Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=37ac2f4fde00b0ac9bd9eadeb459b1bbee224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKIDEXAMPLE
```

# Signature v3

최종 업데이트 날짜: : 2020-09-10 17:35:15

TencentCloud API authenticates every single request, i.e., the request must be signed using the security credentials in the designated steps. Each request has to contain the signature information (Signature) in the common request parameters and be sent in the specified way and format.

## Applying for Security Credentials

The security credential used in this document is a key, which includes a SecretId and a SecretKey. Each user can have up to two pairs of keys.

- SecretId: Used to identify the API caller, which is just like a username.
- SecretKey: Used to authenticate the API caller, which is just like a password.
- **You must keep your security credentials private and avoid disclosure; otherwise, your assets may be compromised. If they are disclosed, please disable them as soon as possible.**

You can apply for the security credentials through the following steps:

1. Log in to the [Tencent Cloud Console](#).
2. Go to the [TencentCloud API Key](#) console page.
3. On the [TencentCloud API Key](#) page, click **Create** to create a SecretId/SecretKey pair.

## Using the Resources for Developers

TencentCloud API comes with SDKs for seven commonly used programming languages, including [Python](#), [Java](#), [PHP](#), [Go](#), [NodeJS](#) and [.NET](#). In addition, it provides [API Explorer](#) which enables online call, signature verification, and SDK code generation. If you have any troubles calculating a signature, consult these resources.

## TC3-HMAC-SHA256 Signature Algorithm

Compatible with the previous HmacSHA1 and HmacSHA256 signature algorithms, the TC3-HMAC-SHA256 signature algorithm is more secure and supports larger requests and JSON format with better performance. We recommend using TC3-HMAC-SHA256 to calculate the signature.

TencentCloud API supports both GET and POST requests. For the GET method, only the Content-Type: application/x-www-form-urlencoded protocol format is supported. For the POST method, two protocol formats,

Content-Type: application/json and Content-Type: multipart/form-data, are supported. The JSON format is supported by default for all business APIs, and the multipart format is supported only for specific business APIs. In this case, the API cannot be called in JSON format. See the specific business API documentation for more information. The POST method is recommended, as there is no difference in the results of both the methods, but the GET method only supports request packets up to 32 KB.

The following uses querying the list of CVM instances in the Guangzhou region as an example to describe the steps of signature splicing. We chose this API because:

1. CVM is activated by default, and this API is often used;
2. It is read-only and does not change the status of existing resources;
3. It covers many types of parameters, which allows it to be used to demonstrate how to use arrays containing data structures.

In the example, we try to choose common parameters and API parameters that are prone to mistakes. When you actually call an API, please use parameters based on the actual conditions. The parameters vary by API. Do not copy the parameters and values in this example.

Assuming that your SecretId and SecretKey are `AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****` and `Gu5t9xGARNpq86cd98joQYCN3*****`, respectively, if you want to view the status of the instance in the Guangzhou region whose CVM instance name is "unnamed" and have only one data entry returned, then the request may be:

```
curl -X POST https://cvm.tencentcloudapi.com \
-H "Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff" \
-H "Content-Type: application/json; charset=utf-8" \
-H "Host: cvm.tencentcloudapi.com" \
-H "X-TC-Action: DescribeInstances" \
-H "X-TC-Timestamp: 1551113065" \
-H "X-TC-Version: 2017-03-12" \
-H "X-TC-Region: ap-guangzhou" \
-d '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}'
```

The signature calculation process is explained in detail below.

## 1. Concatenating the CanonicalRequest String

Concatenate the canonical request string (CanonicalRequest) in the following pseudocode format:

```
CanonicalRequest =
HTTPRequestMethod + '\n' +
CanonicalURI + '\n' +
```

```
CanonicalQueryString + '\n' +
CanonicalHeaders + '\n' +
SignedHeaders + '\n' +
HashedRequestPayload
```

Field Name	Explanation
HTTPRequestMethod	HTTP request method (GET or POST). This example uses <code>POST</code> .
CanonicalURI	URI parameter. Slash ("/") is used for API 3.0.
CanonicalQueryString	<p>The query string in the URL of the originating HTTP request. This is always an empty string for POST requests, and is the string after the question mark (?) for GET requests. For example: <code>Limit=10&amp;Offset=0</code>.</p> <p>Note: <code>CanonicalQueryString</code> must be URL-encoded, referencing <a href="#">RFC3986</a>, the UTF8 character set. We recommend using the programming language library. All special characters must be encoded and capitalized.</p>
CanonicalHeaders	<p>Header information for signature calculation, including at least two headers of <code>host</code> and <code>content-type</code>. Custom headers can be added to participate in the signature process to improve the uniqueness and security of the request.</p> <p>Concatenation rules:</p> <ol style="list-style-type: none"> <li>Both the key and value of the header should be converted to lowercase with the leading and trailing spaces removed, so they are concatenated in the format of <code>key:value\n</code> format;</li> <li>If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase).</li> </ol> <p>The calculation result in this example is <code>content-type:application/json; charset=utf-8\nhost:cvm.tencentcloudapi.com\n</code>.</p> <p>Note: <code>content-type</code> must match the actually sent content. In some programming languages, a charset value would be added even if it is not specified. In this case, the request sent is different from the one signed, and the server will return an error indicating signature verification failed.</p>
SignedHeaders	<p>Header information for signature calculation, indicating which headers of the request participate in the signature process (they must each individually correspond to the headers in CanonicalHeaders). <code>Content-type</code> and <code>host</code> are required headers.</p> <p>Concatenation rules:</p> <ol style="list-style-type: none"> <li>Both the key and value of the header should be converted to lowercase;</li> <li>If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase) and separated by semicolons (;).</li> </ol> <p>The value in this example is <code>content-type;host</code></p>
HashedRequestPayload	Hash value of the request payload (i.e., the body, such as <code>{"Limit": 1, "Filter</code>

```
[{"Values": ["unnamed"], "Name": "instance-name"}]}
```

 in this example  
 The pseudocode for calculation is  
 Lowercase(HexEncode(Hash.SHA256(RequestPayload))) by SHA256 hashing the payload of the HTTP request, performing hexadecimal encoding, and finally converting the encoded string to lowercase letters. For GET requests, `RequestPayload` is always an empty string. The calculation result in this example is  
 99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907

According to the rules above, the `CanonicalRequest` string obtained in the example is as follows:

**POST**

/

**content-type**:application/json; charset=utf-8

**host**:cvm.tencentcloudapi.com

**content-type;host**

99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907

## 2. Concatenating the String to Be Signed

The string to sign is concatenated as follows:

```
StringToSign =
Algorithm + \n +
RequestTimestamp + \n +
CredentialScope + \n +
HashedCanonicalRequest
```

Field Name	Explanation
Algorithm	Signature algorithm, which is currently always <code>TC3-HMAC-SHA256</code> .
RequestTimestamp	Request timestamp, i.e., the value of the common parameter <code>X-TC-Timestamp</code> in request header, which is the UNIX timestamp of the current time in seconds, such as <code>1551113065</code> in this example.
CredentialScope	Scope of the credential in the format of <code>Date/service/tc3_request</code> , including date, requested service and termination string (tc3_request). <b>Date is a date in UTC time, whose value should match the UTC date converted by the common parameter X-TC-Timestamp</b> ; <code>service</code> is the product name, which should match the domain name of the product called. The calculation result in this example is <code>20180525/cvm/tc3_request</code> .

HashedCanonicalRequest	Hash value of the CanonicalRequest string concatenated in the steps above. The pseudocode for calculation is Lowercase(HexEncode(Hash.SHA256(CanonicalRequest))). The calculation result in this example is 2815843035062fffd6f2a44ea8a34818b0dc46f024b8b3786976a3ad
------------------------	---

Note:

1. Date has to be calculated from the timestamp "X-TC-Timestamp" and the time zone is UTC+0. If you add the system's local time zone information (such as UTC+8), calls can succeed both day and night but will definitely fail at 00:00. For example, if the timestamp is 1551113065 and the time in UTC+8 is 2019-02-26 00:44:25, the UTC+0 date in the calculated Date value should be 2019-02-25 instead of 2019-02-26.
2. Timestamp must be the same as your current system time, and your system time and standard time must be synced; if the difference between Timestamp and your current system time is larger than five minutes, the request will fail. If your system time is out of sync with the standard time for a while, the request will fail and return a signature expiration error.

According to the preceding rules, the string to be signed obtained in the example is as follows:

```
TC3-HMAC-SHA256
1551113065
2019-02-25/cvm/tc3_request
2815843035062fffd6f2a44ea8a34818b0dc46f024b8b3786976a3adda7a
```

### 3. Calculating the Signature

1) Calculate the derived signature key with the following pseudocode:

```
SecretKey = "Gu5t9xGARNpq86cd98joQYCN3*****"
SecretDate = HMAC_SHA256("TC3" + SecretKey, Date)
SecretService = HMAC_SHA256(SecretDate, Service)
SecretSigning = HMAC_SHA256(SecretService, "tc3_request")
```

Field Name	Explanation
SecretKey	The original SecretKey, i.e., Gu5t9xGARNpq86cd98joQYCN3*****.
Date	The Date field information in Credential, such as 2019-02-25 in this example.
Service	Value in the Service field in Credential, such as cvm in this example.

2) Calculate the signature with the following pseudocode:

```
Signature = HexEncode(HMAC_SHA256(SecretSigning, StringToSign))
```

#### 4. Concatenating the Authorization

The Authorization is concatenated as follows:

```
Authorization =
Algorithm + ' ' +
'Credential=' + SecretId + '/' + CredentialScope + ', ' +
'SignedHeaders=' + SignedHeaders + ', ' +
'Signature=' + Signature
```

Field Name	Explanation
Algorithm	Signature algorithm, which is always <code>TC3-HMAC-SHA256</code> .
SecretId	The SecretId in the key pair, i.e., <code>AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****</code> .
CredentialScope	Credential scope (see above). The calculation result in this example is <code>2019-02-25/cvm/tc3_request</code> .
SignedHeaders	Header information for signature calculation (see above), such as <code>content-type;host</code> in this example.
Signature	Signature value. The calculation result in this example is <code>c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff</code> .

According to the rules above, the value obtained in the example is:

```
TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff
```

The following example shows a finished authorization header:

```
POST https://cvm.tencentcloudapi.com/
Authorization: TC3-HMAC-SHA256 Credential=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=c492e8e41437e97a620b728c301bb8d17e7dc0c17eeabce80c20cd70fc3a78ff
Content-Type: application/json; charset=utf-8
Host: cvm.tencentcloudapi.com
```



```
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1551113065
X-TC-Region: ap-guangzhou

{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}
```

## 5. Signature Demo

When calling API 3.0, you are recommended to use the corresponding Tencent Cloud SDK 3.0 which encapsulates the signature process, enabling you to focus on only the specific APIs provided by the product when developing. See [SDK Center](#) for more information. Currently, the following programming languages are supported:

- [Python](#)
- [Java](#)
- [PHP](#)
- [Go](#)
- [NodeJS](#)
- [.NET](#)

To further explain the signing process, we will use a programming language to implement the process described above. The request domain name, API and parameter values in the sample are used here. This goal of this example is only to provide additional clarification for the signature process, please see the SDK for actual usage.

The final output URL might be: `https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceId=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Signature=EliP9YW3pW28FpsEdkXt%2F%2B WcGel%3D&Timestamp=1465185768&Version=2017-03-12.`

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.

Note: In the example below, even if you use the same programming language, the order of the parameters in the URL may be different for each execution. However, the order does not matter, as long as all the parameters are included in the URL and the signature is calculated correctly.

Note: The following code is only applicable to API 3.0. It cannot be directly used in other signature processes. Even with an older API, signature calculation errors may occur due to the differences in details. Please refer to the corresponding documentation.

### Java

```
import java.nio.charset.Charset;
import java.nio.charset.StandardCharsets;
import java.security.MessageDigest;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.TimeZone;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.xml.bind.DatatypeConverter;

public class TencentCloudAPITC3Demo {
    private final static Charset UTF8 = StandardCharsets.UTF_8;
    private final static String SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    private final static String SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";
    private final static String CT_JSON = "application/json; charset=utf-8";

    public static byte[] hmac256(byte[] key, String msg) throws Exception {
        Mac mac = Mac.getInstance("HmacSHA256");
        SecretKeySpec secretKeySpec = new SecretKeySpec(key, mac.getAlgorithm());
        mac.init(secretKeySpec);
        return mac.doFinal(msg.getBytes(UTF8));
    }

    public static String sha256Hex(String s) throws Exception {
        MessageDigest md = MessageDigest.getInstance("SHA-256");
        byte[] d = md.digest(s.getBytes(UTF8));
        return DatatypeConverter.printHexBinary(d).toLowerCase();
    }

    public static void main(String[] args) throws Exception {
        String service = "cvm";
        String host = "cvm.tencentcloudapi.com";
        String region = "ap-guangzhou";
        String action = "DescribeInstances";
        String version = "2017-03-12";
        String algorithm = "TC3-HMAC-SHA256";
        String timestamp = "1551113065";
        //String timestamp = String.valueOf(System.currentTimeMillis() / 1000);
        SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd");
        // Pay attention to the time zone; otherwise, errors may occur
        sdf.setTimeZone(TimeZone.getTimeZone("UTC"));
        String date = sdf.format(new Date(Long.valueOf(timestamp + "000")));

        // ***** Step 1: Concatenate the CanonicalRequest string *****
        String httpRequestMethod = "POST";
    }
}
```

```
String canonicalUri = "/";
String canonicalQueryString = "";
String canonicalHeaders = "content-type:application/json; charset=utf-8\n" + "host:" + host + "\n";
String signedHeaders = "content-type;host";

String payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}] }";
String hashedRequestPayload = sha256Hex(payload);
String canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
System.out.println(canonicalRequest);

// ***** Step 2: Concatenate the string to sign *****
String credentialScope = date + "/" + service + "/" + "tc3_request";
String hashedCanonicalRequest = sha256Hex(canonicalRequest);
String stringToSign = algorithm + "\n" + timestamp + "\n" + credentialScope + "\n" + hashedCanonicalRequest;
System.out.println(stringToSign);

// ***** Step 3: Calculate the signature *****
byte[] secretDate = hmac256(("TC3" + SECRET_KEY).getBytes(UTF8), date);
byte[] secretService = hmac256(secretDate, service);
byte[] secretSigning = hmac256(secretService, "tc3_request");
String signature = DatatypeConverter.printHexBinary(hmac256(secretSigning, stringToSign)).toLowerCase();
System.out.println(signature);

// ***** Step 4: Concatenate the Authorization *****
String authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
System.out.println(authorization);

TreeMap<String, String> headers = new TreeMap<String, String>();
headers.put("Authorization", authorization);
headers.put("Content-Type", CT_JSON);
headers.put("Host", host);
headers.put("X-TC-Action", action);
headers.put("X-TC-Timestamp", timestamp);
headers.put("X-TC-Version", version);
headers.put("X-TC-Region", region);

StringBuilder sb = new StringBuilder();
sb.append("curl -X POST https://").append(host)
.append(" -H \"Authorization: ").append(authorization).append("\")")
```

```

.append(" -H \"Content-Type: application/json; charset=utf-8\"")
.append(" -H \"Host: ").append(host).append("\"")
.append(" -H \"X-TC-Action: ").append(action).append("\"")
.append(" -H \"X-TC-Timestamp: ").append(timestamp).append("\"")
.append(" -H \"X-TC-Version: ").append(version).append("\"")
.append(" -H \"X-TC-Region: ").append(region).append("\"")
.append(" -d ").append(payload).append(" ");
System.out.println(sb.toString());
}
}

```

## Python

```

# -*- coding: utf-8 -*-
import hashlib, hmac, json, os, sys, time
from datetime import datetime

# Key Parameters
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"

service = "cvm"
host = "cvm.tencentcloudapi.com"
endpoint = "https://" + host
region = "ap-guangzhou"
action = "DescribeInstances"
version = "2017-03-12"
algorithm = "TC3-HMAC-SHA256"
#timestamp = int(time.time())
timestamp = 1551113065
date = datetime.utcnow().timestamp(timestamp).strftime("%Y-%m-%d")
params = {"Limit": 1, "Filters": [{"Name": "instance-name", "Values": ["unnamed"]}]}

# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = "POST"
canonical_uri = "/"
canonical_querystring = ""
ct = "application/json; charset=utf-8"
payload = json.dumps(params)
canonical_headers = "content-type:%s\nhost:%s\n" % (ct, host)
signed_headers = "content-type;host"
hashed_request_payload = hashlib.sha256(payload.encode("utf-8")).hexdigest()
canonical_request = (http_request_method + "\n" +
canonical_uri + "\n" +
canonical_querystring + "\n" +

```

```

canonical_headers + "\n" +
signed_headers + "\n" +
hashed_request_payload)
print(canonical_request)

# ***** Step 2: Concatenate the string to sign *****
credential_scope = date + "/" + service + "/" + "tc3_request"
hashed_canonical_request = hashlib.sha256(canonical_request.encode("utf-8")).hexdigest()
string_to_sign = (algorithm + "\n" +
str(timestamp) + "\n" +
credential_scope + "\n" +
hashed_canonical_request)
print(string_to_sign)

# ***** Step 3: Calculate the Signature *****
# Function for computing signature digest
def sign(key, msg):
return hmac.new(key, msg.encode("utf-8"), hashlib.sha256).digest()
secret_date = sign(("TC3" + secret_key).encode("utf-8"), date)
secret_service = sign(secret_date, service)
secret_signing = sign(secret_service, "tc3_request")
signature = hmac.new(secret_signing, string_to_sign.encode("utf-8"), hashlib.sha256).hexdigest()
print(signature)

# ***** Step 4: Concatenate the Authorization *****
authorization = (algorithm + " " +
"Credential=" + secret_id + "/" + credential_scope + ", " +
"SignedHeaders=" + signed_headers + ", " +
"Signature=" + signature)
print(authorization)

print('curl -X POST ' + endpoint
+ ' -H "Authorization: ' + authorization + '" '
+ ' -H "Content-Type: application/json; charset=utf-8" '
+ ' -H "Host: ' + host + '" '
+ ' -H "X-TC-Action: ' + action + '" '
+ ' -H "X-TC-Timestamp: ' + str(timestamp) + '" '
+ ' -H "X-TC-Version: ' + version + '" '
+ ' -H "X-TC-Region: ' + region + '" '
+ " -d '" + payload + "'")

```

## Golang

```
package main

import (
    "crypto/hmac"
    "crypto/sha256"
    "encoding/hex"
    "fmt"
    "time"
)

func sha256hex(s string) string {
    b := sha256.Sum256([]byte(s))
    return hex.EncodeToString(b[:])
}

func hmacsha256(s, key string) string {
    hashed := hmac.New(sha256.New, []byte(key))
    hashed.Write([]byte(s))
    return string(hashed.Sum(nil))
}

func main() {
    secretId := "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
    secretKey := "Gu5t9xGARNpq86cd98joQYCN3*****"
    host := "cvm.tencentcloudapi.com"
    algorithm := "TC3-HMAC-SHA256"
    service := "cvm"
    version := "2017-03-12"
    action := "DescribeInstances"
    region := "ap-guangzhou"
    //var timestamp int64 = time.Now().Unix()
    var timestamp int64 = 1551113065

    // step 1: build canonical request string
    httpRequestMethod := "POST"
    canonicalURI := "/"
    canonicalQueryString := ""
    canonicalHeaders := "content-type:application/json; charset=utf-8\n" + "host:" +
        host + "\n"
    signedHeaders := "content-type;host"
    payload := `{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-na
me"}]}`
    hashedRequestPayload := sha256hex(payload)
    canonicalRequest := fmt.Sprintf("%s\n%s\n%s\n%s\n%s\n%s",
        httpRequestMethod,
        canonicalURI,
```

```
canonicalQueryString,  
canonicalHeaders,  
signedHeaders,  
hashedRequestPayload)  
fmt.Println(canonicalRequest)  
  
// step 2: build string to sign  
date := time.Unix(timestamp, 0).UTC().Format("2006-01-02")  
credentialScope := fmt.Sprintf("%s/%s/tc3_request", date, service)  
hashedCanonicalRequest := sha256hex(canonicalRequest)  
string2sign := fmt.Sprintf("%s\n%d\n%s\n%s",  
algorithm,  
timestamp,  
credentialScope,  
hashedCanonicalRequest)  
fmt.Println(string2sign)  
  
// step 3: sign string  
secretDate := hmacsha256(date, "TC3"+secretKey)  
secretService := hmacsha256(service, secretDate)  
secretSigning := hmacsha256("tc3_request", secretService)  
signature := hex.EncodeToString([]byte(hmacsha256(string2sign, secretSigning)))  
fmt.Println(signature)  
  
// step 4: build authorization  
authorization := fmt.Sprintf("%s Credential=%s/%s, SignedHeaders=%s, Signature=%  
s",  
algorithm,  
secretId,  
credentialScope,  
signedHeaders,  
signature)  
fmt.Println(authorization)  
  
curl := fmt.Sprintf(`curl -X POST https://%s\  
-H "Authorization: %s"\  
-H "Content-Type: application/json; charset=utf-8"\  
-H "Host: %s" -H "X-TC-Action: %s"\  
-H "X-TC-Timestamp: %d"\  
-H "X-TC-Version: %s"\  
-H "X-TC-Region: %s"\  
-d '%s'`, host, authorization, host, action, timestamp, version, region, payload)  
fmt.Println(curl)  
}
```

## PHP

```
<?php
$secretId = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
$secretKey = "Gu5t9xGARNpq86cd98joQYCN3*****";
$host = "cvm.tencentcloudapi.com";
$service = "cvm";
$version = "2017-03-12";
$action = "DescribeInstances";
$region = "ap-guangzhou";
// $timestamp = time();
$timestamp = 1551113065;
$algorithm = "TC3-HMAC-SHA256";

// step 1: build canonical request string
$httpRequestMethod = "POST";
$canonicalUri = "/";
$canonicalQueryString = "";
$canonicalHeaders = "content-type:application/json; charset=utf-8\n"."host:". $host. "\n";
$signedHeaders = "content-type;host";
$payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}';
$hashedRequestPayload = hash("SHA256", $payload);
$canonicalRequest = $httpRequestMethod. "\n"
.$canonicalUri. "\n"
.$canonicalQueryString. "\n"
.$canonicalHeaders. "\n"
.$signedHeaders. "\n"
.$hashedRequestPayload;
echo $canonicalRequest.PHP_EOL;

// step 2: build string to sign
$date = gmdate("Y-m-d", $timestamp);
$credentialScope = $date. "/" . $service. "/tc3_request";
$hashedCanonicalRequest = hash("SHA256", $canonicalRequest);
$stringToSign = $algorithm. "\n"
.$timestamp. "\n"
.$credentialScope. "\n"
.$hashedCanonicalRequest;
echo $stringToSign.PHP_EOL;

// step 3: sign string
$secretDate = hash_hmac("SHA256", $date, "TC3". $secretKey, true);
$secretService = hash_hmac("SHA256", $service, $secretDate, true);
$secretSigning = hash_hmac("SHA256", "tc3_request", $secretService, true);
$signature = hash_hmac("SHA256", $stringToSign, $secretSigning);
echo $signature.PHP_EOL;
```



```
// step 4: build authorization
$authorization = $algorithm
." Credential=".$secretId."/".$credentialScope
.", SignedHeaders=content-type;host, Signature=".$signature;
echo $authorization.PHP_EOL;

$curl = "curl -X POST https://".$host
.' -H "Authorization: '.$authorization.'"
.' -H "Content-Type: application/json; charset=utf-8"
.' -H "Host: '.$host.'"
.' -H "X-TC-Action: '.$action.'"
.' -H "X-TC-Timestamp: '.$timestamp.'"
.' -H "X-TC-Version: '.$version.'"
.' -H "X-TC-Region: '.$region.'"
." -d ".$payload."";
echo $curl.PHP_EOL;
```

## Ruby

```
# -*- coding: UTF-8 -*-
# require ruby>=2.3.0
require 'digest'
require 'json'
require 'time'
require 'openssl'

# Key Parameters
secret_id = 'AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****'
secret_key = 'Gu5t9xGARNpq86cd98joQYCN3*****'

service = 'cvm'
host = 'cvm.tencentcloudapi.com'
endpoint = 'https://' + host
region = 'ap-guangzhou'
action = 'DescribeInstances'
version = '2017-03-12'
algorithm = 'TC3-HMAC-SHA256'
# timestamp = Time.now.to_i
timestamp = 1551113065
date = Time.at(timestamp).utc.strftime('%Y-%m-%d')

# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = 'POST'
canonical_uri = '/'
canonical_querystring = ''
```

```
canonical_headers = "content-type:application/json; charset=utf-8\nhost:#{host}
\n"
signed_headers = 'content-type;host'
# params = { 'Limit' => 1, 'Filters' => [{ 'Name' => 'instance-name', 'Values' =>
['unnamed'] }] }
# payload = JSON.generate(params, { 'ascii_only' => true, 'space' => ' ' })
# json will generate in random order, to get specified result in example, we hard
-code it here.
payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-nam
e"}]}'
hashed_request_payload = Digest::SHA256.hexdigest(payload)
canonical_request = [
http_request_method,
canonical_uri,
canonical_querystring,
canonical_headers,
signed_headers,
hashed_request_payload,
].join("\n")

puts canonical_request

# ***** Step 2: Concatenate the string to sign *****
credential_scope = date + '/' + service + '/' + 'tc3_request'
hashed_request_payload = Digest::SHA256.hexdigest(canonical_request)
string_to_sign = [
algorithm,
timestamp.to_s,
credential_scope,
hashed_request_payload,
].join("\n")
puts string_to_sign

# ***** Step 3: Calculate the Signature *****
digest = OpenSSL::Digest.new('sha256')
secret_date = OpenSSL::HMAC.digest(digest, 'TC3' + secret_key, date)
secret_service = OpenSSL::HMAC.digest(digest, secret_date, service)
secret_signing = OpenSSL::HMAC.digest(digest, secret_service, 'tc3_request')
signature = OpenSSL::HMAC.hexdigest(digest, secret_signing, string_to_sign)
puts signature

# ***** Step 4: Concatenate the Authorization *****
authorization = "#{algorithm} Credential=#{secret_id}/#{credential_scope}, Signed
Headers=#{signed_headers}, Signature=#{signature}"
puts authorization

puts 'curl -X POST ' + endpoint \
```

```
+ ' -H "Authorization: ' + authorization + "' ' \
+ ' -H "Content-Type: application/json; charset=utf-8"' \
+ ' -H "Host: ' + host + "' ' \
+ ' -H "X-TC-Action: ' + action + "' ' \
+ ' -H "X-TC-Timestamp: ' + timestamp.to_s + "' ' \
+ ' -H "X-TC-Version: ' + version + "' ' \
+ ' -H "X-TC-Region: ' + region + "' ' \
+ " -d '" + payload + "'"
```

## DotNet

```
using System;
using System.Collections.Generic;
using System.Security.Cryptography;
using System.Text;

public class Application
{
    public static string SHA256Hex(string s)
    {
        using (SHA256 algo = SHA256.Create())
        {
            byte[] hashbytes = algo.ComputeHash(Encoding.UTF8.GetBytes(s));
            StringBuilder builder = new StringBuilder();
            for (int i = 0; i < hashbytes.Length; ++i)
            {
                builder.Append(hashbytes[i].ToString("x2"));
            }
            return builder.ToString();
        }
    }

    public static byte[] HmacSHA256(byte[] key, byte[] msg)
    {
        using (HMACSHA256 mac = new HMACSHA256(key))
        {
            return mac.ComputeHash(msg);
        }
    }

    public static Dictionary<String, String> BuildHeaders(string secretid,
        string secretkey, string service, string endpoint, string region,
        string action, string version, DateTime date, string requestPayload)
    {
        string datestr = date.ToString("yyyy-MM-dd");
        DateTime startTime = new DateTime(1970, 1, 1, 0, 0, 0, 0, DateTimeKind.Utc);
        long requestTimestamp = (long)Math.Round((date - startTime).TotalMilliseconds, Mi
```

```
dpointRounding.AwayFromZero) / 1000;
// ***** Step 1: Concatenate the CanonicalRequest string *****
string algorithm = "TC3-HMAC-SHA256";
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string contentType = "application/json";
string canonicalHeaders = "content-type:" + contentType + "; charset=utf-8\n" +
"host:" + endpoint + "\n";
string signedHeaders = "content-type;host";
string hashedRequestPayload = SHA256Hex(requestPayload);
string canonicalRequest = httpRequestMethod + "\n"
+ canonicalUri + "\n"
+ canonicalQueryString + "\n"
+ canonicalHeaders + "\n"
+ signedHeaders + "\n"
+ hashedRequestPayload;
Console.WriteLine(canonicalRequest);
Console.WriteLine("-----");

// ***** Step 2: Concatenate the string to sign *****
string credentialScope = datestr + "/" + service + "/" + "tc3_request";
string hashedCanonicalRequest = SHA256Hex(canonicalRequest);
string stringToSign = algorithm + "\n" + requestTimestamp.ToString() + "\n" + cre
dentialScope + "\n" + hashedCanonicalRequest;
Console.WriteLine(stringToSign);
Console.WriteLine("-----");

// ***** Step 3: Calculate the signature *****
byte[] tc3SecretKey = Encoding.UTF8.GetBytes("TC3" + secretkey);
byte[] secretDate = HmacSHA256(tc3SecretKey, Encoding.UTF8.GetBytes(datestr));
byte[] secretService = HmacSHA256(secretDate, Encoding.UTF8.GetBytes(service));
byte[] secretSigning = HmacSHA256(secretService, Encoding.UTF8.GetBytes("tc3_requ
est"));
byte[] signatureBytes = HmacSHA256(secretSigning, Encoding.UTF8.GetBytes(stringTo
Sign));
string signature = BitConverter.ToString(signatureBytes).Replace("-", "").ToLower
();
Console.WriteLine(signature);
Console.WriteLine("-----");

// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " "
+ "Credential=" + secretid + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", "
+ "Signature=" + signature;
Console.WriteLine(authorization);
```

```
Console.WriteLine("-----");

Dictionary<string, string> headers = new Dictionary<string, string>();
headers.Add("Authorization", authorization);
headers.Add("Host", endpoint);
headers.Add("Content-Type", contentType + "; charset=utf-8");
headers.Add("X-TC-Timestamp", requestTimestamp.ToString());
headers.Add("X-TC-Version", version);
headers.Add("X-TC-Action", action);
headers.Add("X-TC-Region", region);
return headers;
}

public static void Main(string[] args)
{
    // SecretID and SecretKey
    string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
    string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";

    string service = "cvm";
    string endpoint = "cvm.tencentcloudapi.com";
    string region = "ap-guangzhou";
    string action = "DescribeInstances";
    string version = "2017-03-12";

    // The timestamp `2019-02-26 00:44:25` used here is only for reference. In a project, use the following parameter:
    // DateTime date = DateTime.UtcNow;
    // Enter the correct time zone. We recommend using UTC timestamp to avoid errors.
    DateTime date = new DateTime(1970, 1, 1, 0, 0, 0, 0, DateTimeKind.Utc).AddSeconds(1551113065);
    string requestPayload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"\\u672a\\u547d\\u540d\"], \"Name\": \"instance-name\"}]\"}";

    Dictionary<string, string> headers = BuildHeaders(SECRET_ID, SECRET_KEY, service, endpoint, region, action, version, date, requestPayload);

    Console.WriteLine("POST https://cvm.tencentcloudapi.com");
    foreach (KeyValuePair<string, string> kv in headers)
    {
        Console.WriteLine(kv.Key + ": " + kv.Value);
    }
    Console.WriteLine();
    Console.WriteLine(requestPayload);
}
}
```

## NodeJS

```
const crypto = require('crypto');

function sha256(message, secret = '', encoding) {
  const hmac = crypto.createHmac('sha256', secret)
  return hmac.update(message).digest(encoding)
}

function getHash(message, encoding = 'hex') {
  const hash = crypto.createHash('sha256')
  return hash.update(message).digest(encoding)
}

function getDate(timestamp) {
  const date = new Date(timestamp * 1000)
  const year = date.getUTCFullYear()
  const month = ('0' + (date.getUTCMonth() + 1)).slice(-2)
  const day = ('0' + date.getUTCDate()).slice(-2)
  return `${year}-${month}-${day}`
}

function main(){

const SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
const SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****"

const endpoint = "cvm.tencentcloudapi.com"
const service = "cvm"
const region = "ap-guangzhou"
const action = "DescribeInstances"
const version = "2017-03-12"
//const timestamp = getTime()
const timestamp = 1551113065
const date = getDate(timestamp)

// ***** Step 1: Concatenate the CanonicalRequest string *****
const signedHeaders = "content-type;host"

const payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}]}"

const hashedRequestPayload = getHash(payload);
const httpRequestMethod = "POST"
const canonicalUri = "/"
const canonicalQueryString = ""
const canonicalHeaders = "content-type:application/json; charset=utf-8\n" + "host:" + endpoint + "\n"

const canonicalRequest = httpRequestMethod + "\n"
```

```
+ canonicalUri + "\n"
+ canonicalQueryString + "\n"
+ canonicalHeaders + "\n"
+ signedHeaders + "\n"
+ hashedRequestPayload
console.log(canonicalRequest)
console.log("-----")

// ***** Step 2: Concatenate the string to sign *****
const algorithm = "TC3-HMAC-SHA256"
const hashedCanonicalRequest = getHash(canonicalRequest);
const credentialScope = date + "/" + service + "/" + "tc3_request"
const stringToSign = algorithm + "\n" +
timestamp + "\n" +
credentialScope + "\n" +
hashedCanonicalRequest
console.log(stringToSign)
console.log("-----")

// ***** Step 3: Calculate the signature *****
const kDate = sha256(date, 'TC3' + SECRET_KEY)
const kService = sha256(service, kDate)
const kSigning = sha256('tc3_request', kService)
const signature = sha256(stringToSign, kSigning, 'hex')
console.log(signature)
console.log("-----")

// ***** Step 4: Concatenate the Authorization *****
const authorization = algorithm + " " +
"Credential=" + SECRET_ID + "/" + credentialScope + ", " +
"SignedHeaders=" + signedHeaders + ", " +
"Signature=" + signature
console.log(authorization)
console.log("-----")

const Call_Information = 'curl -X POST ' + "https://" + endpoint
+ ' -H "Authorization: ' + authorization + '"'
+ ' -H "Content-Type: application/json; charset=utf-8"'
+ ' -H "Host: ' + endpoint + '"'
+ ' -H "X-TC-Action: ' + action + '"'
+ ' -H "X-TC-Timestamp: ' + timestamp.toString() + '"'
+ ' -H "X-TC-Version: ' + version + '"'
+ ' -H "X-TC-Region: ' + region + '"'
+ " -d '" + payload + '"'
console.log(Call_Information)
}
main()
```

## C++

```
#include <iostream>
#include <iomanip>
#include <sstream>
#include <string>
#include <stdio.h>
#include <time.h>
#include <openssl/sha.h>
#include <openssl/hmac.h>

using namespace std;

string get_data(int64_t &timestamp)
{
    string utcDate;
    char buff[20] = {0};
    // time_t timenow;
    struct tm sttime;
    sttime = *gmtime(&timestamp);
    strftime(buff, sizeof(buff), "%Y-%m-%d", &sttime);
    utcDate = string(buff);
    return utcDate;
}

string int2str(int64_t n)
{
    std::stringstream ss;
    ss << n;
    return ss.str();
}

string sha256Hex(const string &str)
{
    char buf[3];
    unsigned char hash[SHA256_DIGEST_LENGTH];
    SHA256_CTX sha256;
    SHA256_Init(&sha256);
    SHA256_Update(&sha256, str.c_str(), str.size());
    SHA256_Final(hash, &sha256);
    std::string NewString = "";
    for(int i = 0; i < SHA256_DIGEST_LENGTH; i++)
    {
        sprintf(buf, sizeof(buf), "%02x", hash[i]);
        NewString = NewString + buf;
    }
    return NewString;
}
```



```
}
string HmacSha256(const string &key, const string &input)
{
    unsigned char hash[32];

    HMAC_CTX *h;
    #if OPENSSSL_VERSION_NUMBER < 0x10100000L
    HMAC_CTX hmac;
    HMAC_CTX_init(&hmac);
    h = &hmac;
    #else
    h = HMAC_CTX_new();
    #endif

    HMAC_Init_ex(h, &key[0], key.length(), EVP_sha256(), NULL);
    HMAC_Update(h, ( unsigned char* )&input[0], input.length());
    unsigned int len = 32;
    HMAC_Final(h, hash, &len);

    #if OPENSSSL_VERSION_NUMBER < 0x10100000L
    HMAC_CTX_cleanup(h);
    #else
    HMAC_CTX_free(h);
    #endif

    std::stringstream ss;
    ss << std::setfill('0');
    for (int i = 0; i < len; i++)
    {
        ss << hash[i];
    }

    return (ss.str());
}
string HexEncode(const string &input)
{
    static const char* lut = "0123456789abcdef";
    size_t len = input.length();

    string output;
    output.reserve(2 * len);
    for (size_t i = 0; i < len; ++i)
    {
        const unsigned char c = input[i];
        output.push_back(lut[c >> 4]);
        output.push_back(lut[c & 15]);
    }
}
```

```
return output;
}

int main()
{
string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";

string service = "cvm";
string host = "cvm.tencentcloudapi.com";
string region = "ap-guangzhou";
string action = "DescribeInstances";
string version = "2017-03-12";
int64_t timestamp = 1551113065;
string date = get_data(timestamp);

// ***** Step 1: Concatenate the CanonicalRequest string *****
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string canonicalHeaders = "content-type:application/json; charset=utf-8\nhost:" +
host + "\n";
string signedHeaders = "content-type;host";
string payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}] }";
string hashedRequestPayload = sha256Hex(payload);
string canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
cout << canonicalRequest << endl;
cout << "-----" << endl;

// ***** Step 2: Concatenate the string to sign *****
string algorithm = "TC3-HMAC-SHA256";
string RequestTimestamp = int2str(timestamp);
string credentialScope = date + "/" + service + "/" + "tc3_request";
string hashedCanonicalRequest = sha256Hex(canonicalRequest);
string stringToSign = algorithm + "\n" + RequestTimestamp + "\n" + credentialScope + "\n" + hashedCanonicalRequest;
cout << stringToSign << endl;
cout << "-----" << endl;

// ***** Step 3: Calculate the signature *****
string kKey = "TC3" + SECRET_KEY;
string kDate = HmacSha256(kKey, date);
string kService = HmacSha256(kDate, service);
string kSigning = HmacSha256(kService, "tc3_request");
```

```

string signature = HexEncode(HmacSha256(kSigning, stringToSign));
cout << signature << endl;
cout << "-----" << endl;

// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + creden
tialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
cout << authorization << endl;
cout << "-----" << endl;

string headers = "curl -X POST https://" + host + "\n"
+ " -H \"Authorization: \" + authorization + "\n"
+ " -H \"Content-Type: application/json; charset=utf-8\" + "\n"
+ " -H \"Host: \" + host + "\n"
+ " -H \"X-TC-Action: \" + action + "\n"
+ " -H \"X-TC-Timestamp: \" + RequestTimestamp + "\n"
+ " -H \"X-TC-Version: \" + version + "\n"
+ " -H \"X-TC-Region: \" + region + "\n"
+ " -d '" + payload;
cout << headers << endl;
return 0;
};

```

## Signature Failure

The following situational error codes for signature failure may occur. Please resolve the errors accordingly.

Error Code	Description
AuthFailure.SignatureExpire	Signature expired. Timestamp and server time cannot differ by more than five minutes.
AuthFailure.SecretIdNotFound	The key does not exist. Please go to the console to check whether it is disabled or you copied fewer or more characters.
AuthFailure.SignatureFailure	Signature error. It is possible that the signature was calculated incorrectly, the signature does not match the content actually sent, or the SecretKey is incorrect.
AuthFailure.TokenFailure	Temporary certificate token error.
AuthFailure.InvalidSecretId	Invalid key (not a TencentCloud API key type).

# Signature

최종 업데이트 날짜: : 2021-09-16 15:16:50

Tencent Cloud API authenticates each access request, i.e. each request needs to include authentication information (Signature) in the common parameters to verify the identity of the requester.

The Signature is generated by the security credentials which include SecretId and SecretKey. If you don't have the security credentials yet, go to the [TencentCloud API Key](#) page to apply for them; otherwise, you cannot invoke the TencentCloud API.

## 1. Applying for Security Credentials

Before using the TencentCloud API for the first time, go to the [TencentCloud API Key](#) page to apply for security credentials.

Security credentials consist of SecretId and SecretKey:

- SecretId is used to identify the API requester.
- SecretKey is used to encrypt the signature string and verify it on the server.
- **You must keep your security credentials private and avoid disclosure.**

You can apply for the security credentials through the following steps:

1. Log in to the [Tencent Cloud Console](#).
2. Go to the [TencentCloud API Key](#) page.
3. On the [API Key Management](#) page, click **Create Key** to create a SecretId/SecretKey pair.

Note: Each account can have up to two pairs of SecretId/SecretKey.

## 2. Generating a Signature

With the SecretId and SecretKey, a signature can be generated. The following describes how to generate a signature:

Assume that the SecretId and SecretKey are:

- SecretId: AKIDz8krbsJ5yKBZQpn74WFkmLPx3\*\*\*\*\*
- SecretKey: Gu5t9xGARNpq86cd98joQYCN3\*\*\*\*\*

**Note: This is just an example. For actual operations, please use your own SecretId and SecretKey.**

Take the Cloud Virtual Machine's request to view the instance list (DescribeInstances) as an example. When you invoke this API, the request parameters may be as follows:

Parameter name	Description	Parameter value
Action	Method name	DescribeInstances
SecretId	Key ID	AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****
Timestamp	Current timestamp	1465185768
Nonce	Random positive integer	11886
Region	Region where the instance is located	ap-guangzhou
InstanceIds.0	ID of the instance to query	ins-09dx96dg
Offset	Offset	0
Limit	Allowed maximum output	20
Version	API version number	2017-03-12

## 2.1. Sorting Parameters

First, sort all the request parameters in an ascending lexicographical order (ASCII code) by their names. Notes: (1) Parameters are sorted by their names instead of their values; (2) The parameters are sorted based on ASCII code, not in an alphabetical order or by values. For example, InstanceIds.2 should be arranged after InstanceIds.12. You can complete the sorting process using a sorting function in a programming language, such as the ksort function in PHP. The parameters in the example are sorted as follows:

```
{
  'Action' : 'DescribeInstances',
  'InstanceIds.0' : 'ins-09dx96dg',
  'Limit' : 20,
  'Nonce' : 11886,
  'Offset' : 0,
  'Region' : 'ap-guangzhou',
  'SecretId' : 'AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****',
  'Timestamp' : 1465185768,
  'Version' : '2017-03-12',
}
```

When developing in another programming language, you can sort these sample parameters and it will work as long as you obtain the same results.

## 2.2. Concatenating a Request String

This step generates a request string.

Format the request parameters sorted in the previous step into the form of "parameter name"="parameter value". For example, for the Action parameter, its parameter name is "Action" and its parameter value is "DescribeInstances", so it will become Action=DescribeInstances after formatted.

**Note: The "parameter value" is the original value but not the value after URL encoding.**

Then, concatenate the formatted parameters with "&". The resulting request string is as follows:

```
Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0
&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Timestamp=1465
185768&Version=2017-03-12
```

## 2.3. Concatenating the Signature Original String

This step generates a signature original string.

The signature original string consists of the following parameters:

1. HTTP method: POST and GET modes are supported, and GET is used here for the request. Please note that the method name should be in all capital letters.
2. Request server: the domain name of the request to view the list of instances (DescribeInstances) is cvm.tencentcloudapi.com. The actual request domain name varies by the module to which the API belongs. For more information, see the instructions of the specific API.
3. Request path: The request path in the current version of TencentCloud API is fixed to /.
4. Request string: the request string generated in the previous step.

The concatenation rule of the signature original string is: Request method + request host + request path + ? + request string

The concatenation result of the example is:

```
GETcvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&L
imit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WF
kmLPx3*****&Timestamp=1465185768&Version=2017-03-12
```

## 2.4. Generating a Signature String

This step generates a signature string.

First, use the HMAC-SHA1 algorithm to sign the **signature original string** obtained in the previous step, and then

encode the generated signature using Base64 to obtain the final signature.

The specific code is as follows with the PHP language being used as an example:

```
$secretKey = 'Gu5t9xGARNpq86cd98joQYCN3*****';  
$srcStr = 'GETcvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Timestamp=1465185768&Version=2017-03-12';  
$signStr = base64_encode(hash_hmac('sha1', $srcStr, $secretKey, true));  
echo $signStr;
```

The final signature is:

```
zmmjn35mikh6pM3V7sUEuX4wyYM=
```

When developing in another programming language, you can sign and verify the original in the example above and it works as long as you get the same results.

### 3. Encoding a Signature String

The generated signature string cannot be directly used as a request parameter and must be URL encoded.

For example, if the signature string generated in the previous step is `zmmjn35mikh6pM3V7sUEuX4wyYM=`, the final signature string request parameter (Signature) is `zmmjn35mikh6pM3V7sUEuX4wyYM%3D`, which will be used to generate the final request URL.

**Note:** If your request method is GET, or the request method is POST and the Content-Type is `application/x-www-form-urlencoded`, then all the request parameter values need to be URL encoded (except the parameter key and the symbol of `=`) when sending the request. Non-ASCII characters need to be encoded with UTF-8 before URL encoding.

**Note:** The network libraries of some programming languages automatically URL encode all parameters, in which case there is no need to URL encode the signature string; otherwise, two rounds of URL encoding will cause the signature to fail.

**Note:** Other parameter values also need to be encoded using [RFC 3986](#). Use `%XY` in percent-encoding for special characters such as Chinese characters, where "X" and "Y" are hexadecimal characters (0-9 and uppercase A-F), and using lowercase will cause an error.

### 4. Signature Failure

The following situational error codes for signature failure may occur. Please resolve the errors accordingly.

Error code	Error description
AuthFailure.SignatureExpire	The signature is expired
AuthFailure.SecretIdNotFound	The key does not exist
AuthFailure.SignatureFailure	Signature error
AuthFailure.TokenFailure	Token error
AuthFailure.InvalidSecretId	Invalid key (not a TencentCloud API key type)

## 5. Signature Demo

When calling API 3.0, you are recommended to use the corresponding Tencent Cloud SDK 3.0 which encapsulates the signature process, enabling you to focus on only the specific APIs provided by the product when developing. See [SDK Center](#) for more information. Currently, the following programming languages are supported:

- [Python](#)
- [Java](#)
- [PHP](#)
- [Go](#)
- [NodeJS](#)
- [.NET](#)

To further explain the signing process, we will use a programming language to implement the process described above. The request domain name, API and parameter values in the sample are used here. This goal of this example is only to provide additional clarification for the signature process, please see the SDK for actual usage.

The final output URL might be:

```
https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****&Signature=zmmjn35mikh6pM3V7sUEuX4wyYM%3D&Timestamp=1465185768&Version=2017-03-12
```

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.



Note: In the example below, even if you use the same programming language, the order of the parameters in the URL may be different for each execution. However, the order does not matter, as long as all the parameters are included in the URL and the signature is calculated correctly.

Note: The following code is only applicable to API 3.0. It cannot be directly used in other signature processes. Even with an older API, signature calculation errors may occur due to the differences in details. Please refer to the corresponding documentation.

## Java

```
import java.io.UnsupportedEncodingException;
import java.net.URLEncoder;
import java.util.Random;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.xml.bind.DatatypeConverter;
public class TencentCloudAPIDemo {
    private final static String CHARSET = "UTF-8";
    public static String sign(String s, String key, String method) throws Exception {
        Mac mac = Mac.getInstance(method);
        SecretKeySpec secretKeySpec = new SecretKeySpec(key.getBytes(CHARSET), mac.getAlgorithm());
        mac.init(secretKeySpec);
        byte[] hash = mac.doFinal(s.getBytes(CHARSET));
        return DatatypeConverter.printBase64Binary(hash);
    }
    public static String getStringToSign(TreeMap<String, Object> params) {
        StringBuilder s2s = new StringBuilder("GETcvm.tencentcloudapi.com/?");
        // When signing, the parameters need to be sorted in lexicographical order. TreeMap
        // is used here to guarantee the correct order.
        for (String k : params.keySet()) {
            s2s.append(k).append("=").append(params.get(k).toString()).append("&");
        }
        return s2s.toString().substring(0, s2s.length() - 1);
    }
    public static String getUrl(TreeMap<String, Object> params) throws UnsupportedEncodingException {
        StringBuilder url = new StringBuilder("https://cvm.tencentcloudapi.com/?");
        // There is no requirement for the order of the parameters in the actual request
        // URL.
        for (String k : params.keySet()) {
            // The request string needs to be URL encoded. As the Key is all in English letters,
            // only the value is URL encoded here.
            url.append(k).append("=").append(URLEncoder.encode(params.get(k).toString(), CHARSET)).append("&");
        }
    }
}
```

```

}
return url.toString().substring(0, url.length() - 1);
}
public static void main(String[] args) throws Exception {
    TreeMap<String, Object> params = new TreeMap<String, Object>(); // TreeMap enable
    s automatic sorting
    // A random number should be used when actually calling, for example: params.put
    ("Nonce", new Random().nextInt(Integer.MAX_VALUE));
    params.put("Nonce", 11886); // Common parameter
    // The current time of the system should be used when actually calling, for examp
    le: params.put("Timestamp", System.currentTimeMillis() / 1000);
    params.put("Timestamp", 1465185768); // Common parameter
    params.put("SecretId", "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"); // Common paramet
    er
    params.put("Action", "DescribeInstances"); // Common parameter
    params.put("Version", "2017-03-12"); // Common parameter
    params.put("Region", "ap-guangzhou"); // Common parameter
    params.put("Limit", 20); // Business parameter
    params.put("Offset", 0); // Business parameter
    params.put("InstanceIds.0", "ins-09dx96dg"); // Business parameter
    params.put("Signature", sign(getStringToSign(params), "Gu5t9xGARNpq86cd98joQYCN3*
    *****", "HmacSHA1")); // Common parameter
    System.out.println(getUrl(params));
}
}

```

## Python

Note: If running in a Python 2 environment, the following requests dependency package must be installed first: `pip install requests`.

```

# -*- coding: utf8 -*-
import base64
import hashlib
import hmac
import time
import requests
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"
def get_string_to_sign(method, endpoint, params):
    s = method + endpoint + "/"
    query_str = "&".join("%s=%s" % (k, params[k]) for k in sorted(params))
    return s + query_str
def sign_str(key, s, method):
    hmac_str = hmac.new(key.encode("utf8"), s.encode("utf8"), method).digest()
    return base64.b64encode(hmac_str)

```

```
if __name__ == '__main__':
    endpoint = "cvm.tencentcloudapi.com"
    data = {
        'Action': 'DescribeInstances',
        'InstanceIds.0': 'ins-09dx96dg',
        'Limit': 20,
        'Nonce': 11886,
        'Offset': 0,
        'Region': 'ap-guangzhou',
        'SecretId': secret_id,
        'Timestamp': 1465185768, # int(time.time())
        'Version': '2017-03-12'
    }
    s = get_string_to_sign("GET", endpoint, data)
    data["Signature"] = sign_str(secret_key, s, hashlib.sha1)
    print(data["Signature"])
    # An actual invocation would occur here, which may incur fees after success
    # resp = requests.get("https://" + endpoint, params=data)
    # print(resp.url)
```

## Golang

```
package main
import (
    "bytes"
    "crypto/hmac"
    "crypto/sha1"
    "encoding/base64"
    "fmt"
    "sort"
)
func main() {
    secretId := "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
    secretKey := "Gu5t9xGARNpq86cd98joQYCN3*****"
    params := map[string]string{
        "Nonce": "11886",
        "Timestamp": "1465185768",
        "Region": "ap-guangzhou",
        "SecretId": secretId,
        "Version": "2017-03-12",
        "Action": "DescribeInstances",
        "InstanceIds.0": "ins-09dx96dg",
        "Limit": "20",
        "Offset": "0",
    }
    var buf bytes.Buffer
```

```
buf.WriteString("GET")
buf.WriteString("cvm.tencentcloudapi.com")
buf.WriteString("/")
buf.WriteString("?")
// sort keys by ascii asc order
keys := make([]string, 0, len(params))
for k, _ := range params {
    keys = append(keys, k)
}
sort.Strings(keys)
for i := range keys {
    k := keys[i]
    buf.WriteString(k)
    buf.WriteString("=")
    buf.WriteString(params[k])
    buf.WriteString("&")
}
buf.Truncate(buf.Len() - 1)
hashed := hmac.New(sha1.New, []byte(secretKey))
hashed.Write(buf.Bytes())
fmt.Println(base64.StdEncoding.EncodeToString(hashed.Sum(nil)))
}
```

## PHP

```
<?php
$secretId = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
$secretKey = "Gu5t9xGARNpq86cd98joQYCN3*****";
$params["Nonce"] = 11886;//rand();
$params["Timestamp"] = 1465185768;//time();
$params["Region"] = "ap-guangzhou";
$params["SecretId"] = $secretId;
$params["Version"] = "2017-03-12";
$params["Action"] = "DescribeInstances";
$params["InstanceIds.0"] = "ins-09dx96dg";
$params["Limit"] = 20;
$params["Offset"] = 0;
ksort($params);
$signStr = "GETcvm.tencentcloudapi.com/?";
foreach ( $params as $key => $value ) {
    $signStr = $signStr . $key . "=" . $value . "&";
}
$signStr = substr($signStr, 0, -1);
$signature = base64_encode(hash_hmac("sha1", $signStr, $secretKey, true));
echo $signature.PHP_EOL;
// need to install and enable curl extension in php.ini
```

```
// $param["Signature"] = $signature;
// $url = "https://cvm.tencentcloudapi.com/?".http_build_query($param);
// echo $url.PHP_EOL;
// $ch = curl_init();
// curl_setopt($ch, CURLOPT_URL, $url);
// $output = curl_exec($ch);
// curl_close($ch);
// echo json_decode($output);
```

## Ruby

```
# -*- coding: UTF-8 -*-
# require ruby>=2.3.0
require 'time'
require 'openssl'
require 'base64'
secret_id = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
secret_key = "Gu5t9xGARNpq86cd98joQYCN3*****"
method = 'GET'
endpoint = 'cvm.tencentcloudapi.com'
data = {
  'Action' => 'DescribeInstances',
  'InstanceIds.0' => 'ins-09dx96dg',
  'Limit' => 20,
  'Nonce' => 11886,
  'Offset' => 0,
  'Region' => 'ap-guangzhou',
  'SecretId' => secret_id,
  'Timestamp' => 1465185768, # Time.now.to_i
  'Version' => '2017-03-12',
}
sign = method + endpoint + '/*?'
params = []
data.sort.each do |item|
  params << "#{item[0]}=#{item[1]}"
end
sign += params.join('&')
digest = OpenSSL::Digest.new('sha1')
data['Signature'] = Base64.encode64(OpenSSL::HMAC.digest(digest, secret_key, sign))
puts data['Signature']
# require 'net/http'
# uri = URI('https://' + endpoint)
# uri.query = URI.encode_www_form(data)
# p uri
```

```
# res = Net::HTTP.get_response(uri)
# puts res.body
```

## DotNet

```
using System;
using System.Collections.Generic;
using System.Net;
using System.Security.Cryptography;
using System.Text;
public class Application {
public static string Sign(string signKey, string secret)
{
string signRet = string.Empty;
using (HMACSHA1 mac = new HMACSHA1(Encoding.UTF8.GetBytes(signKey)))
{
byte[] hash = mac.ComputeHash(Encoding.UTF8.GetBytes(secret));
signRet = Convert.ToBase64String(hash);
}
return signRet;
}
public static string MakeSignPlainText(SortedDictionary<string, string> requestParams, string requestMethod, string requestHost, string requestPath)
{
string retStr = "";
retStr += requestMethod;
retStr += requestHost;
retStr += requestPath;
retStr += "?";
string v = "";
foreach (string key in requestParams.Keys)
{
v += string.Format("{0}={1}&", key, requestParams[key]);
}
retStr += v.TrimEnd('&');
return retStr;
}
public static void Main(string[] args)
{
string SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****";
string SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****";
string endpoint = "cvm.tencentcloudapi.com";
string region = "ap-guangzhou";
string action = "DescribeInstances";
string version = "2017-03-12";
double RequestTimestamp = 1465185768;
```

```
// long timestamp = ToTimestamp() / 1000;
// string requestTimestamp = timestamp.ToString();
Dictionary<string, string> param = new Dictionary<string, string>();
param.Add("Limit", "20");
param.Add("Offset", "0");
param.Add("InstanceIds.0", "ins-09dx96dg");
param.Add("Action", action);
param.Add("Nonce", "11886");
// param.Add("Nonce", Math.Abs(new Random().Next()).ToString());
param.Add("Timestamp", RequestTimestamp.ToString());
param.Add("Version", version);
param.Add("SecretId", SECRET_ID);
param.Add("Region", region);
SortedDictionary<string, string> headers = new SortedDictionary<string, string>(param, StringComparer.Ordinal);
string sigInParam = MakeSignPlainText(headers, "GET", endpoint, "/");
Console.WriteLine(sigInParam);
string sigOutParam = Sign(SECRET_KEY, sigInParam);
Console.WriteLine("GET https://cvm.tencentcloudapi.com");
foreach (KeyValuePair<string, string> kv in headers)
{
    Console.WriteLine(kv.Key + ": " + kv.Value);
}
Console.WriteLine("Signature" + ": " + WebUtility.UrlEncode(sigOutParam));
Console.WriteLine();
string result = "https://cvm.tencentcloudapi.com/?";
foreach (KeyValuePair<string, string> kv in headers)
{
    result += WebUtility.UrlEncode(kv.Key) + "=" + WebUtility.UrlEncode(kv.Value) + "&";
}
result += WebUtility.UrlEncode("Signature") + "=" + WebUtility.UrlEncode(sigOutParam);
Console.WriteLine("GET " + result);
}
```

## NodeJS

```
const crypto = require('crypto');
function get_req_url(params, endpoint){
    params['Signature'] = escape(params['Signature']);
    const url_strParam = sort_params(params)
    return "https://" + endpoint + "/" + url_strParam.slice(1);
}
function formatSignString(reqMethod, endpoint, path, strParam){
```

```
let strSign = reqMethod + endpoint + path + "?" + strParam.slice(1);
return strSign;
}
function sha1(secretKey, strsign){
let signMethodMap = {'HmacSHA1': "sha1"};
let hmac = crypto.createHmac(signMethodMap['HmacSHA1'], secretKey || "");
return hmac.update(Buffer.from(strsign, 'utf8')).digest('base64')
}
function sort_params(params){
let strParam = "";
let keys = Object.keys(params);
keys.sort();
for (let k in keys) {
//k = k.replace(/_/g, '.');
strParam += ("&" + keys[k] + "=" + params[keys[k]]);
}
return strParam
}
function main(){
const SECRET_ID = "AKIDz8krbsJ5yKBZQpn74WFkmLPx3*****"
const SECRET_KEY = "Gu5t9xGARNpq86cd98joQYCN3*****"
const endpoint = "cvm.tencentcloudapi.com"
const Region = "ap-guangzhou"
const Version = "2017-03-12"
const Action = "DescribeInstances"
const Timestamp = 1465185768
// const Timestamp = Math.round(Date.now() / 1000)
const Nonce = 11886
//const nonce = Math.round(Math.random() * 65535)
let params = {};
params['Action'] = Action;
params['InstanceIds.0'] = 'ins-09dx96dg';
params['Limit'] = 20;
params['Offset'] = 0;
params['Nonce'] = Nonce;
params['Region'] = Region;
params['SecretId'] = SECRET_ID;
params['Timestamp'] = Timestamp;
params['Version'] = Version;
strParam = sort_params(params)
const reqMethod = "GET";
const path = "/";
strSign = formatSignString(reqMethod, endpoint, path, strParam)
console.log(strSign)
console.log("-----")
params['Signature'] = sha1(SECRET_KEY, strSign)
console.log(params['Signature'])
```



```
console.log("-----")
const req_url = get_req_url(params, endpoint)
console.log(params['Signature'])
console.log("-----")
console.log(req_url)
}
main()
```

# Responses

최종 업데이트 날짜: : 2020-02-10 15:16:08

## Response for Successful Requests

For example, when calling CAM API (version: 2017-03-12) to view the status of instances (DescribeInstancesStatus), if the request has succeeded, you may see the response as shown below:

```
{
  "Response": {
    "TotalCount": 0,
    "InstanceStatusSet": [],
    "RequestId": "b5b41468-520d-4192-b42f-595cc34b6c1c"
  }
}
```

- The API will return `Response` , which contains `RequestId` , as long as it processes the request. It does not matter if the request is successful or not.
- RequestId is the unique ID of an API request. Contact us with this ID when an exception occurs.
- Except for the fixed fields, all fields are action-specified. For the definitions of action-specified fields, see the corresponding API documentation. In this example, `TotalCount` and `InstanceStatusSet` are the fields specified by the API `DescribeInstancesStatus` . `0` `TotalCount` means that the requester owns 0 CVM instance so the `InstanceStatusSet` is empty.

## Response for Failed Requests

If the request has failed, you may see the response as shown below:

```
{
  "Response": {
    "Error": {
      "Code": "AuthFailure.SignatureFailure",
      "Message": "The provided credentials could not be validated. Please ensure your signature is correct."
    },
    "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
  }
}
```

- The presence of the `Error` field indicates that the request has failed. A response for a failed request will include `Error`, `Code` and `Message` fields.
- `Code` is the code of the error that helps you identify the cause and solution. There are two types of error codes so you may find the code in either common error codes or API-specified error codes.
- `Message` explains the cause of the error. Note that the returned messages are subject to service updates. The information the messages provide may not be up-to-date and should not be the only source of reference.
- `RequestId` is the unique ID of an API request. Contact us with this ID when an exception occurs.

## Common Error Codes

If there is an `Error` field in the response, it means that the API call failed. The `Code` field in `Error` indicates the error code. The following table lists the common error codes that all actions can return.

Error Code	Description
<code>AuthFailure.InvalidSecretId</code>	Invalid key (not a TencentCloud API key type).
<code>AuthFailure.MFAFailure</code>	MFA failed.
<code>AuthFailure.SecretIdNotFound</code>	The key does not exist.
<code>AuthFailure.SignatureExpire</code>	Signature expired.
<code>AuthFailure.SignatureFailure</code>	Signature error.
<code>AuthFailure.TokenFailure</code>	Token error.
<code>AuthFailure.UnauthorizedOperation</code>	The request does not have CAM authorization.
<code>DryRunOperation</code>	DryRun Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used.
<code>FailedOperation</code>	Operation failed.
<code>InternalError</code>	Internal error.
<code>InvalidAction</code>	The API does not exist.
<code>InvalidParameter</code>	Incorrect parameter.
<code>InvalidParameterValue</code>	Invalid parameter value.
<code>LimitExceeded</code>	Quota limit exceeded.

Error Code	Description
MissingParameter	A parameter is missing.
NoSuchVersion	The API version does not exist.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	Resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	Resource is unavailable.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedProtocol	HTTPS request method error. Only GET and POST requests are supported.
UnsupportedRegion	API does not support the requested region.

# Instance APIs

## DescribeLoadBalancers

최종 업데이트 날짜: : 2023-10-24 11:16:15

### 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the list of CLB instances in a region.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeLoadBalancers.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerIds.N	No	Array of String	CLB instance IDs. There can be up to 20 IDs.
LoadBalancerType	No	String	CLB instance network type: OPEN: public network; INTERNAL: private network.
Forward	No	Integer	CLB instance type. 1: generic CLB instance; 0: classic CLB instance

LoadBalancerName	No	String	CLB instance name.
Domain	No	String	The domain name that Tencent Cloud assigned for the CLB instance.
LoadBalancerVips.N	No	Array of String	VIP address of a CLB instance (there can be multiple addresses)
BackendPublicIps.N	No	Array of String	Public IPs of the backend services bound with the load balancer. Only the public IPs of CVMs are supported now.
BackendPrivateIps.N	No	Array of String	Private IPs of the backend services bound with the load balancer. Only the private IPs of CVMs are supported now.
Offset	No	Integer	Data offset. Default value: 0.
Limit	No	Integer	Number of returned CLB instances. Default value: 20. Maximum value: 100.
OrderBy	No	String	Sort by parameter. Value range: LoadBalancerName, CreateTime, Domain, LoadBalancerType.
OrderType	No	Integer	1: reverse; 0: sequential. Default value: reverse by creation time
SearchKey	No	String	Search field which fuzzy matches name, domain name, or VIP.
ProjectId	No	Integer	ID of the project to which a CLB instance belongs, which can be obtained through the DescribeProject API.
WithRs	No	Integer	Whether a CLB instance is bound to a real server. 0: no; 1: yes; -1: query all.
VpcId	No	String	VPC where a CLB instance resides, such as vpc-bhqkbhdx. Basic network does not support queries by VpcId.
SecurityGroup	No	String	Security group ID, e.g., <code>sg-m1cc****</code> .
MasterZone	No	String	Primary AZ ID, e.g., <code>100001</code> (Guangzhou Zone 1).
Filters.N	No	Array of Filter	Each request can have up to 10 <code>Filters</code> and 100 <code>Filter.Values</code> . Detailed filter conditions: <ul style="list-style-type: none"> <li>internet-charge-type - Type: String - Required: No - Filter by CLB network billing mode, including</li> </ul>

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### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Total number of CLB instances that meet the filter criteria. This value is independent of the Limit in the input parameter.
LoadBalancerSet	Array of <a href="#">LoadBalancer</a>	Array of returned CLB instances.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the CLB instances bound to a specific backend server

This example shows you how to query the CLB instances bound to the backend server `172.26.0.11`.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeLoadBalancers
<Common request parameters>

{
  "BackendPrivateIps": [
    "172.26.0.11"
  ],
  "WithRs": "1"
}
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "LoadBalancerSet": [
```

```
{
  "LoadBalancerId": "abc",
  "LoadBalancerName": "abc",
  "LoadBalancerType": "abc",
  "Forward": 1,
  "Domain": "abc",
  "LoadBalancerVips": [
    "abc"
  ],
  "Status": 1,
  "CreateTime": "abc",
  "StatusTime": "abc",
  "ProjectId": 1,
  "VpcId": "abc",
  "OpenBgp": 1,
  "Snat": true,
  "Isolation": 1,
  "Log": "abc",
  "SubnetId": "abc",
  "Tags": [
    {
      "TagKey": "abc",
      "TagValue": "abc"
    }
  ],
  "SecureGroups": [
    "abc"
  ],
  "TargetRegionInfo": {
    "Region": "abc",
    "VpcId": "abc"
  },
  "AnycastZone": "abc",
  "AddressIPVersion": "abc",
  "NumericalVpcId": 1,
  "VipIsp": "abc",
  "MasterZone": {
    "ZoneId": 1,
    "Zone": "abc",
    "ZoneName": "abc",
    "ZoneRegion": "abc",
    "LocalZone": true,
    "EdgeZone": true
  },
  "BackupZoneSet": [
    {
      "ZoneId": 1,
```



```
"Zone": "abc",
"ZoneName": "abc",
"ZoneRegion": "abc",
"LocalZone": true,
"EdgeZone": true
},
],
"IsolatedTime": "abc",
"ExpireTime": "abc",
"ChargeType": "abc",
"NetworkAttributes": {
  "InternetChargeType": "abc",
  "InternetMaxBandwidthOut": 0,
  "BandwidthpkgSubType": "abc"
},
"PrepaidAttributes": {
  "RenewFlag": "abc",
  "Period": 0
},
"LogSetId": "abc",
"LogTopicId": "abc",
"AddressIPv6": "abc",
"ExtraInfo": {
  "ZhiTong": true,
  "TgwGroupName": "abc"
},
"IsDDos": true,
"ConfigId": "abc",
"LoadBalancerPassToTarget": true,
"ExclusiveCluster": {
  "L4Clusters": [
    {
      "ClusterId": "abc",
      "ClusterName": "abc",
      "Zone": "abc"
    }
  ],
  "L7Clusters": [
    {
      "ClusterId": "abc",
      "ClusterName": "abc",
      "Zone": "abc"
    }
  ],
  "ClassicalCluster": {
    "ClusterId": "abc",
    "ClusterName": "abc",
```

```
"Zone": "abc"
}
},
"IPv6Mode": "abc",
"SnatPro": true,
"SnatIps": [
{
"SubnetId": "abc",
"Ip": "abc"
}
],
"SlaType": "abc",
"IsBlock": true,
"IsBlockTime": "abc",
"LocalBgp": true,
"ClusterTag": "abc",
"MixIpTarget": true,
"Zones": [
"abc"
],
"NfvInfo": "abc",
"HealthLogSetId": "abc",
"HealthLogTopicId": "abc",
"ClusterIds": [
"abc"
],
"AttributeFlags": [
"abc"
],
"LoadBalancerDomain": "abc",
"Egress": "abc"
}
],
"RequestId": "abc"
}
}
```

## Example2 Fuzzy querying CLB instances by the name, domain name, and VIP

### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeLoadBalancers
<Common request parameters>
```

```
{
  "SearchKey": "test_LB"
}
```

## Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "LoadBalancerSet": [
      {
        "LoadBalancerId": "abc",
        "LoadBalancerName": "abc",
        "LoadBalancerType": "abc",
        "Forward": 1,
        "Domain": "abc",
        "LoadBalancerVips": [
          "abc"
        ],
        "Status": 1,
        "CreateTime": "abc",
        "StatusTime": "abc",
        "ProjectId": 1,
        "VpcId": "abc",
        "OpenBgp": 1,
        "Snat": true,
        "Isolation": 1,
        "Log": "abc",
        "SubnetId": "abc",
        "Tags": [
          {
            "TagKey": "abc",
            "TagValue": "abc"
          }
        ],
        "SecureGroups": [
          "abc"
        ],
        "TargetRegionInfo": {
          "Region": "abc",
          "VpcId": "abc"
        },
        "AnycastZone": "abc",
        "AddressIPVersion": "abc",
        "NumericalVpcId": 1,

```

```
"VipIsp": "abc",
"MasterZone": {
  "ZoneId": 1,
  "Zone": "abc",
  "ZoneName": "abc",
  "ZoneRegion": "abc",
  "LocalZone": true,
  "EdgeZone": true
},
"BackupZoneSet": [
  {
    "ZoneId": 1,
    "Zone": "abc",
    "ZoneName": "abc",
    "ZoneRegion": "abc",
    "LocalZone": true,
    "EdgeZone": true
  }
],
"IsolatedTime": "abc",
"ExpireTime": "abc",
"ChargeType": "abc",
"NetworkAttributes": {
  "InternetChargeType": "abc",
  "InternetMaxBandwidthOut": 0,
  "BandwidthpkgSubType": "abc"
},
"PrepaidAttributes": {
  "RenewFlag": "abc",
  "Period": 0
},
"LogSetId": "abc",
"LogTopicId": "abc",
"AddressIPv6": "abc",
"ExtraInfo": {
  "ZhiTong": true,
  "TgwGroupName": "abc"
},
"IsDDos": true,
"ConfigId": "abc",
"LoadBalancerPassToTarget": true,
"ExclusiveCluster": {
  "L4Clusters": [
    {
      "ClusterId": "abc",
      "ClusterName": "abc",
      "Zone": "abc"
    }
  ]
}
```

```
}
],
"L7Clusters": [
{
"ClusterId": "abc",
"ClusterName": "abc",
"Zone": "abc"
}
],
"ClassicalCluster": {
"ClusterId": "abc",
"ClusterName": "abc",
"Zone": "abc"
}
},
"IPv6Mode": "abc",
"SnatPro": true,
"SnatIps": [
{
"SubnetId": "abc",
"Ip": "abc"
}
],
"SlaType": "abc",
"IsBlock": true,
"IsBlockTime": "abc",
"LocalBgp": true,
"ClusterTag": "abc",
"MixIpTarget": true,
"Zones": [
"abc"
],
"NfvInfo": "abc",
"HealthLogSetId": "abc",
"HealthLogTopicId": "abc",
"ClusterIds": [
"abc"
],
"AttributeFlags": [
"abc"
],
"LoadBalancerDomain": "abc",
"Egress": "abc"
}
],
"RequestId": "abc"
```

```
}  
}
```

## Example3 Querying CLB instances by IDs

### Input Example

```
POST / HTTP/1.1  
Host: clb.tencentcloudapi.com  
Content-Type: application/json  
X-TC-Action: DescribeLoadBalancers  
<Common request parameters>  
  
{  
  "LoadBalancerIds": [  
    "lb-rbw5****"  
  ]  
}
```

### Output Example

```
{  
  "Response": {  
    "TotalCount": 1,  
    "LoadBalancerSet": [  
      {  
        "LoadBalancerId": "abc",  
        "LoadBalancerName": "abc",  
        "LoadBalancerType": "abc",  
        "Forward": 1,  
        "Domain": "abc",  
        "LoadBalancerVips": [  
          "abc"  
        ],  
        "Status": 1,  
        "CreateTime": "abc",  
        "StatusTime": "abc",  
        "ProjectId": 1,  
        "VpcId": "abc",  
        "OpenBgp": 1,  
        "Snat": true,  
        "Isolation": 1,  
        "Log": "abc",  
        "SubnetId": "abc",  
        "Tags": [  

```

```
{
  "TagKey": "abc",
  "TagValue": "abc"
},
"SecureGroups": [
  "abc"
],
"TargetRegionInfo": {
  "Region": "abc",
  "VpcId": "abc"
},
"AnycastZone": "abc",
"AddressIPVersion": "abc",
"NumericalVpcId": 1,
"VipIsp": "abc",
"MasterZone": {
  "ZoneId": 1,
  "Zone": "abc",
  "ZoneName": "abc",
  "ZoneRegion": "abc",
  "LocalZone": true,
  "EdgeZone": true
},
"BackupZoneSet": [
  {
    "ZoneId": 1,
    "Zone": "abc",
    "ZoneName": "abc",
    "ZoneRegion": "abc",
    "LocalZone": true,
    "EdgeZone": true
  }
],
"IsolatedTime": "abc",
"ExpireTime": "abc",
"ChargeType": "abc",
"NetworkAttributes": {
  "InternetChargeType": "abc",
  "InternetMaxBandwidthOut": 0,
  "BandwidthpkgSubType": "abc"
},
"PrepaidAttributes": {
  "RenewFlag": "abc",
  "Period": 0
},
"LogSetId": "abc",
```

```
"LogTopicId": "abc",
"AddressIPv6": "abc",
"ExtraInfo": {
  "ZhiTong": true,
  "TgwGroupName": "abc"
},
"IsDDos": true,
"ConfigId": "abc",
"LoadBalancerPassToTarget": true,
"ExclusiveCluster": {
  "L4Clusters": [
    {
      "ClusterId": "abc",
      "ClusterName": "abc",
      "Zone": "abc"
    }
  ],
  "L7Clusters": [
    {
      "ClusterId": "abc",
      "ClusterName": "abc",
      "Zone": "abc"
    }
  ],
  "ClassicalCluster": {
    "ClusterId": "abc",
    "ClusterName": "abc",
    "Zone": "abc"
  }
},
"IPv6Mode": "abc",
"SnatPro": true,
"SnatIps": [
  {
    "SubnetId": "abc",
    "Ip": "abc"
  }
],
"SlaType": "abc",
"IsBlock": true,
"IsBlockTime": "abc",
"LocalBgp": true,
"ClusterTag": "abc",
"MixIpTarget": true,
"Zones": [
  "abc"
],
```



```
"NfvInfo": "abc",
"HealthLogSetId": "abc",
"HealthLogTopicId": "abc",
"ClusterIds": [
  "abc"
],
"AttributeFlags": [
  "abc"
],
"LoadBalancerDomain": "abc",
"Egress": "abc"
}
],
"RequestId": "abc"
}
}
```

## Example4 Querying CLB instances by the instance type, project, name, and VIP

### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeLoadBalancers
<Common request parameters>

{
  "ProjectId": "0",
  "LoadBalancerType": "OPEN",
  "LoadBalancerVips": [
    "XX.XX.XX.XX"
  ],
  "LoadBalancerName": "test_LB"
}
```

### Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "LoadBalancerSet": [
      {
        "LoadBalancerId": "abc",
        "LoadBalancerName": "abc",

```

```
"LoadBalancerType": "abc",
"Forward": 1,
"Domain": "abc",
"LoadBalancerVips": [
  "abc"
],
"Status": 1,
"CreateTime": "abc",
"StatusTime": "abc",
"ProjectId": 1,
"VpcId": "abc",
"OpenBgp": 1,
"Snat": true,
"Isolation": 1,
"Log": "abc",
"SubnetId": "abc",
"Tags": [
  {
    "TagKey": "abc",
    "TagValue": "abc"
  }
],
"SecureGroups": [
  "abc"
],
"TargetRegionInfo": {
  "Region": "abc",
  "VpcId": "abc"
},
"AnycastZone": "abc",
"AddressIPVersion": "abc",
"NumericalVpcId": 1,
"VipIsp": "abc",
"MasterZone": {
  "ZoneId": 1,
  "Zone": "abc",
  "ZoneName": "abc",
  "ZoneRegion": "abc",
  "LocalZone": true,
  "EdgeZone": true
},
"BackupZoneSet": [
  {
    "ZoneId": 1,
    "Zone": "abc",
    "ZoneName": "abc",
    "ZoneRegion": "abc",
```

```
"LocalZone": true,
"EdgeZone": true
},
],
"IsolatedTime": "abc",
"ExpireTime": "abc",
"ChargeType": "abc",
"NetworkAttributes": {
  "InternetChargeType": "abc",
  "InternetMaxBandwidthOut": 0,
  "BandwidthpkgSubType": "abc"
},
"PrepaidAttributes": {
  "RenewFlag": "abc",
  "Period": 0
},
"LogSetId": "abc",
"LogTopicId": "abc",
"AddressIPv6": "abc",
"ExtraInfo": {
  "ZhiTong": true,
  "TgwGroupName": "abc"
},
"IsDDos": true,
"ConfigId": "abc",
"LoadBalancerPassToTarget": true,
"ExclusiveCluster": {
  "L4Clusters": [
    {
      "ClusterId": "abc",
      "ClusterName": "abc",
      "Zone": "abc"
    }
  ],
  "L7Clusters": [
    {
      "ClusterId": "abc",
      "ClusterName": "abc",
      "Zone": "abc"
    }
  ],
  "ClassicalCluster": {
    "ClusterId": "abc",
    "ClusterName": "abc",
    "Zone": "abc"
  }
},
```

```
"IPv6Mode": "abc",
"SnatPro": true,
"SnatIps": [
  {
    "SubnetId": "abc",
    "Ip": "abc"
  }
],
"SlaType": "abc",
"IsBlock": true,
"IsBlockTime": "abc",
"LocalBgp": true,
"ClusterTag": "abc",
"MixIpTarget": true,
"Zones": [
  "abc"
],
"NfvInfo": "abc",
"HealthLogSetId": "abc",
"HealthLogTopicId": "abc",
"ClusterIds": [
  "abc"
],
"AttributeFlags": [
  "abc"
],
"LoadBalancerDomain": "abc",
"Egress": "abc"
}
],
"RequestId": "abc"
}
}
```

## Example5 Querying CLB instances by the specific tag key-value pair

### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeLoadBalancers
<Common request parameters>

{
  "ProjectId": "0",
```

```
"LoadBalancerType": "OPEN",
"Filters": [
{
"Values": [
"test_tag_value2",
"test_tag_value1"
],
"Name": "tag:test_tag_key"
}
],
"LoadBalancerName": "test_LB"
}
```

## Output Example

```
{
"Response": {
"TotalCount": 1,
"LoadBalancerSet": [
{
"LoadBalancerId": "abc",
"LoadBalancerName": "abc",
"LoadBalancerType": "abc",
"Forward": 1,
"Domain": "abc",
"LoadBalancerVips": [
"abc"
],
"Status": 1,
"CreateTime": "abc",
"StatusTime": "abc",
"ProjectId": 1,
"VpcId": "abc",
"OpenBgp": 1,
"Snat": true,
"Isolation": 1,
"Log": "abc",
"SubnetId": "abc",
"Tags": [
{
"TagKey": "abc",
"TagValue": "abc"
}
],
"SecureGroups": [
"abc"

```

```
],
"TargetRegionInfo": {
  "Region": "abc",
  "VpcId": "abc"
},
"AnycastZone": "abc",
"AddressIPVersion": "abc",
"NumericalVpcId": 1,
"VipIsp": "abc",
"MasterZone": {
  "ZoneId": 1,
  "Zone": "abc",
  "ZoneName": "abc",
  "ZoneRegion": "abc",
  "LocalZone": true,
  "EdgeZone": true
},
"BackupZoneSet": [
  {
    "ZoneId": 1,
    "Zone": "abc",
    "ZoneName": "abc",
    "ZoneRegion": "abc",
    "LocalZone": true,
    "EdgeZone": true
  }
],
"IsolatedTime": "abc",
"ExpireTime": "abc",
"ChargeType": "abc",
"NetworkAttributes": {
  "InternetChargeType": "abc",
  "InternetMaxBandwidthOut": 0,
  "BandwidthpkgSubType": "abc"
},
"PrepaidAttributes": {
  "RenewFlag": "abc",
  "Period": 0
},
"LogSetId": "abc",
"LogTopicId": "abc",
"AddressIPv6": "abc",
"ExtraInfo": {
  "ZhiTong": true,
  "TgwGroupName": "abc"
},
"IsDDos": true,
```

```
"ConfigId": "abc",
"LoadBalancerPassToTarget": true,
"ExclusiveCluster": {
  "L4Clusters": [
    {
      "ClusterId": "abc",
      "ClusterName": "abc",
      "Zone": "abc"
    }
  ],
  "L7Clusters": [
    {
      "ClusterId": "abc",
      "ClusterName": "abc",
      "Zone": "abc"
    }
  ],
  "ClassicalCluster": {
    "ClusterId": "abc",
    "ClusterName": "abc",
    "Zone": "abc"
  }
},
"IPv6Mode": "abc",
"SnatPro": true,
"SnatIps": [
  {
    "SubnetId": "abc",
    "Ip": "abc"
  }
],
"SlaType": "abc",
"IsBlock": true,
"IsBlockTime": "abc",
"LocalBgp": true,
"ClusterTag": "abc",
"MixIpTarget": true,
"Zones": [
  "abc"
],
"NfvInfo": "abc",
"HealthLogSetId": "abc",
"HealthLogTopicId": "abc",
"ClusterIds": [
  "abc"
],
"AttributeFlags": [
```

```
"abc"
],
"LoadBalancerDomain": "abc",
"Egress": "abc"
}
],
"RequestId": "abc"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.



InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.RegionNotFound	Invalid region.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFilter	Incorrect <code>Filter</code> parameter.
InvalidParameterValue.Length	Wrong parameter length.
InvalidParameterValue.Range	Wrong parameter value range.
UnauthorizedOperation	Unauthorized operation.
UnsupportedOperation	Unsupported operation.

# CreateLoadBalancer

최종 업데이트 날짜: : 2023-10-24 11:16:15

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (CreateLoadBalancer) is used to create a CLB instance. To use the CLB service, you first need to purchase one or more instances. After this API is called successfully, a unique instance ID will be returned. There are two types of instances: public network and private network. For more information, see the product types in the product documentation.

Note: (1) To apply for a CLB instance in the specified AZ and cross-AZ disaster recovery, please [submit a ticket](#); (2) Currently, IPv6 is supported only in Beijing, Shanghai, and Guangzhou regions.

This is an async API. After it is returned successfully, you can call the DescribeLoadBalancers API to query the status of the instance (such as creating and normal) to check whether it is successfully created.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API CreateLoadBalancer.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API 03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerType	Yes	String	CLB instance network type:

			OPEN: public network; INTERNAL: private ne
Forward	No	Integer	CLB instance type. Valid value: 1 (generic CLI instance).
LoadBalancerName	No	String	CLB instance name, which takes effect only w one instance is to be created in the request. It consist 1 to 60 letters, digits, hyphens (-), or underscores (_). Note: if the name of the new CLB instance alre exists, a default name will be generated autom
VpcId	No	String	Network ID of the target device on the CLB ba such as <code>vpc-12345678</code> , which can be obt through the <code>DescribeVpcEx</code> API. If this p is not entered, <code>DefaultVPC</code> is used by del parameter is required when creating a private instance.
SubnetId	No	String	A subnet ID must be specified when you purch private network CLB instance in a VPC, and th this instance will be generated in this subnet. parameter is required for creating a CLB insta
ProjectId	No	Integer	ID of the project to which a CLB instance belo which can be obtained through the <code>DescribeProject</code> API. If this parameter entered, the default project will be used.
AddressIPVersion	No	String	It's only applicable to public network CLB insta version. Values: <code>IPV4</code> , <code>IPV6</code> and <code>IPv6FullChain</code> (case-insensitive). Defau <code>IPV4</code> . Note: <code>IPV6</code> indicates IPv6 NAT6v <code>IPv6FullChain</code> indicates IPv6.
Number	No	Integer	Number of CLBs to be created. Default value:
MasterZoneId	No	String	ID of the primary AZ for cross-AZ disaster rec such as <code>100001</code> or <code>ap-guangzhou-1</code> . available to public CLB instances. Note: The traffic only goes to the primary AZ ir cases. The secondary AZ is used only when th AZ is unavailable. To query the list of primary region, use <a href="#">DescribeResources</a> .
ZoneId	No	String	Specifies an AZ ID for creating a CLB instance <code>ap-guangzhou-1</code> , which is applicable on

			public network CLB instances.
InternetAccessible	No	<a href="#">InternetAccessible</a>	It only works on LCU-supported instances on networks and all instances on public networks
Viplsp	No	String	ISP of VIP. Values: <code>CMCC</code> (China Mobile), <code>CUCC</code> (China Unicom) and <code>CTCC</code> (China Telecom) need to activate static single-line IPs. This feature is beta and is only available in Guangzhou, Shenzhen, Nanjing, Jinan, Hangzhou, Fuzhou, Beijing, Shijiazhuang, Wuhan, Changsha, Chengdu and Chongqing regions. To try it out, please contact your sales rep. If it's specified, the network billing mode will be <code>BANDWIDTH_PACKAGE</code> . If it's not specified, <code>InternetChargeType</code> is used by default. To query ISPs supported in your region, please use <a href="#">DescribeResources</a> .
Tags.N	No	Array of <a href="#">TagInfo</a>	Tags the CLB instance when purchasing it. Up to 10 key value pairs are supported.
Vip	No	String	Specifies the VIP for the application of a CLB instance. This parameter is optional. If you do not specify this parameter, the system automatically assigns a public IP address as the parameter. IPv4 and IPv6 CLB instances support this parameter, but IPv6 NAT64 CLB instances do not. Note: If the specified VIP is occupied or is not in the IP range of the specified VPC subnet, you cannot create the CLB instance in a private network. For IPv6 BGP CLB instances in a public network, you must specify this parameter.
BandwidthPackageId	No	String	Bandwidth package ID. If this parameter is specified, the network billing mode will be <code>BANDWIDTH_PACKAGE</code> . If it is not specified, the network billing mode will be <code>InternetChargeType</code> . <code>InternetChargeType</code> will only support bill-by-bandwidth package ( <code>BANDWIDTH_PACKAGE</code> ).
ExclusiveCluster	No	<a href="#">ExclusiveCluster</a>	Information about the dedicated CLB instance. You must specify this parameter when you create a dedicated CLB instance in a private network.
SlaType	No	String	Specification of LCU-supported instance. <ul style="list-style-type: none"> <li>This parameter is required to create LCU-supported instances. Values: <ul style="list-style-type: none"> <li><code>SLA</code>: Super Large 4. When you have created Super Large models, <code>SLA</code> refers to Super Large 4.</li> </ul> </li> </ul>

			<ul style="list-style-type: none"> <li><code>clb.c2.medium</code> : Standard</li> <li><code>clb.c3.small</code> : Advanced 1</li> <li><code>clb.c3.medium</code> : Advanced 1</li> <li><code>clb.c4.small</code> : Super Large 1</li> <li><code>clb.c4.medium</code> : Super Large 2</li> <li><code>clb.c4.large</code> : Super Large 3</li> <li><code>clb.c4.xlarge</code> : Super Large 4</li> </ul> <p>For Super Large 2 and above models, please <a href="#">submit a ticket</a>.</p> <ul style="list-style-type: none"> <li>This parameter is not required for creating instances.</li> </ul> <p>For more details, see <a href="#">Instance Specifications</a>.</p>
ClientToken	No	String	A unique string supplied by the client to ensure request is idempotent. Its maximum length is 64 characters. If this parameter is not specified, the idempotency of the request cannot be guaranteed.
SnatPro	No	Boolean	Whether Binding IPs of other VPCs feature snat
SnatIps.N	No	Array of <a href="#">SnatIp</a>	Creates <code>SnatIp</code> when the binding IPs of other VPC feature is enabled
ClusterTag	No	String	Tag for the STGW exclusive cluster.
SlaveZoneId	No	String	Specifies the secondary AZ ID for cross-AZ disaster recovery, such as <code>100001</code> or <code>ap-guangzhou-2</code> . It is applicable only to public network CLB. Note: The traffic only goes to the secondary AZ when the primary AZ is unavailable. You can query the primary and secondary AZ of a region by calling <a href="#">DescribeResources</a> .
EipAddressId	No	String	Unique ID of an EIP, which can only be used when binding the EIP of a private network CLB instance. Example: <code>eip-11112222</code> .
LoadBalancerPassToTarget	No	Boolean	Whether to allow CLB traffic to the target group. <code>true</code> : allows CLB traffic to the target group and verifies security groups only on CLB; <code>false</code> : allows CLB traffic to the target group and verifies security groups on both CLB and backend instances.
DynamicVip	No	Boolean	Upgrades to domain name-based CLB

Egress	No	String	Network egress point
--------	----	--------	----------------------

### 3. Output Parameters

Parameter Name	Type	Description
LoadBalancerIds	Array of String	Array of unique CLB instance IDs. This field may return <code>null</code> in some cases, such as there is delay during instance creation. You can query the IDs of the created instances by invoking <code>DescribeTaskStatus</code> with the <code>RequestId</code> or <code>DealName</code> returned by this API. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
DealName	String	Order ID. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating a public network CLB instance

This example shows you how to create a public network CLB instance in a VPC.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateLoadBalancer
<Common request parameters>

{
  "Forward": "1",
  "ProjectId": "0",
  "LoadBalancerType": "OPEN",
  "VpcId": "vpc-30xqxt9p",
```

```
"LoadBalancerName": "test"
}
```

### Output Example

```
{
  "Response": {
    "LoadBalancerIds": [
      "lb-6efswuxa"
    ],
    "DealName": "20220101660009831340631",
    "RequestId": "9b3f0b57-fb64-4918-8dd6-ce02604fb52c"
  }
}
```

### Example2 Creating a private network CLB instance

This example shows you how to create a private network CLB instance in a VPC.

### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateLoadBalancer
<Common request parameters>

{
  "Forward": "1",
  "SubnetId": "subnet-k57djpow",
  "LoadBalancerType": "INTERNAL",
  "VpcId": "vpc-30xqxt9p",
  "LoadBalancerName": "test_internal"
}
```

### Output Example

```
{
  "Response": {
    "LoadBalancerIds": [
      "lb-kmfrnqci"
    ],
    "DealName": "20211230660009761735781",
    "RequestId": "7ffa6830-cd1b-4bc4-8e24-1688885f594a"
  }
}
```

```
}  
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
InvalidParameterValue.Range	Wrong parameter value range.



---

LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.
UnsupportedOperation	Unsupported operation.

# ModifyLoadBalancerAttributes

최종 업데이트 날짜: : 2023-10-24 11:16:14

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to modify the attributes of a CLB instance such as name and cross-region attributes.

This is an async API. After it is returned successfully, you can check the task result by calling

`DescribeTaskStatus` with the returned `RequestID` .

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyLoadBalancerAttributes.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	Unique CLB ID
LoadBalancerName	No	String	CLB instance name
TargetRegionInfo	No	<a href="#">TargetRegionInfo</a>	The backend service information of cross-region binding 1.0

InternetChargeInfo	No	<a href="#">InternetAccessible</a>	Network billing parameter
LoadBalancerPassToTarget	No	Boolean	Whether the target opens traffic from CLB to the internet. If yes (true), only security groups on CLB will be verified; if no (false), security groups on both CLB and backend instance need to be verified.
SnatPro	No	Boolean	Whether to enable cross-region binding 2.0
DeleteProtect	No	Boolean	Specifies whether to enable deletion protection.
ModifyClassicDomain	No	Boolean	Modifies the second-level domain name of CLB from mycloud.com to tencentclb.com. Note that the sub-domain names will be changed as well. After the modification, mycloud.com will be invalidated.

### 3. Output Parameters

Parameter Name	Type	Description
DealName	String	This parameter can be used to query whether CLB billing mode switch is successful. Note: this field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Renaming a CLB instance

Modifies a CLB instance.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyLoadBalancerAttributes
<Common request parameters>
```

```
{
  "LoadBalancerName": "newlbname",
  "LoadBalancerId": "lb-6efswuxa"
}
```

### Output Example

```
{
  "Response": {
    "DealName": null,
    "RequestId": "78a40898-8210-44c7-8bc6-f83e50878d12"
  }
}
```

## 5. Developer Resources

### SDK

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### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
------------	-------------

FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.RegionNotFound	Invalid region.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# DescribeLoadBalancersDetail

최종 업데이트 날짜: : 2023-10-24 11:16:14

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query CLB instance details, including listener, rules, and target real servers.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeLoadBalancersDetail.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Limit	No	Integer	Number of CLB instance lists returned. Default value: 20; maximum value: 100.
Offset	No	Integer	Starting offset of the CLB instance list returned. Default value: 0.
Fields.N	No	Array of String	List of fields. Only fields specified will be returned. If it's left blank, <code>null</code> is returned. The fields <code>LoadBalancerId</code> and <code>LoadBalancerName</code> are added by default. For details about fields, see <a href="#">LoadBalancerDetail</a> .
TargetType	No	String	Target type. Valid values: NODE and GROUP. If the list of fields

			contains <code>TargetId</code> , <code>TargetAddress</code> , <code>TargetPort</code> , <code>TargetWeight</code> and other fields, <code>Target</code> of the target group or non-target group must be exported.
Filters.N	No	Array of <a href="#">Filter</a>	<p>Filter condition of querying lists describing CLB instance details:</p> <ul style="list-style-type: none"> <li><code>loadbalancer-id</code> - String - Required: no - (Filter condition) CLB instance ID, such as "lb-12345678".</li> <li><code>project-id</code> - String - Required: no - (Filter condition) Project ID, such as "0" and "123".</li> <li><code>network</code> - String - Required: no - (Filter condition) Network type of the CLB instance, such as "Public" and "Private".</li> <li><code>vip</code> - String - Required: no - (Filter condition) CLB instance VIP, such as "1.1.1.1" and "2204::22:3".</li> <li><code>target-ip</code> - String - Required: no - (Filter condition) Private IP of the target real servers, such as "1.1.1.1" and "2203::214:4".</li> <li><code>vpcid</code> - String - Required: no - (Filter condition) Identifier of the VPC instance to which the CLB instance belongs, such as "vpc-12345678".</li> <li><code>zone</code> - String - Required: no - (Filter condition) Availability zone where the CLB instance resides, such as "ap-guangzhou-1".</li> <li><code>tag-key</code> - String - Required: no - (Filter condition) Tag key of the CLB instance, such as "name".</li> <li><code>tag:*</code> - String - Required: no - (Filter condition) CLB instance tag, followed by tag key after the colon ':'. For example, use {"Name": "tag:name", "Values": ["zhangsan", "lisi"]} to filter the tag key "name" with the tag value "zhangsan" and "lisi".</li> <li><code>fuzzy-search</code> - String - Required: no - (Filter condition) Fuzzy search for CLB instance VIP and CLB instance name, such as "1.1".</li> </ul>

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Total number of lists describing CLB instance details.
LoadBalancerDetailSet	Array of <a href="#">LoadBalancerDetail</a>	List of CLB instance details. Note: this field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

## Example1 Querying CLB instance details

### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeLoadBalancingDetail
<common request parameters>

{
  "Limit": "20",
  "Offset": "0"
}
```

### Output Example

```
{
  "Response": {
    "TotalCount": 0,
    "LoadBalancerDetailSet": [],
    "RequestId": "d09b91ba-a81e-4ca3-b423-c64e60127c64"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface



- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFilter	Incorrect <code>Filter</code> parameter.
InvalidParameterValue.Length	Wrong parameter length.
InvalidParameterValue.Range	Wrong parameter value range.
UnauthorizedOperation	Unauthorized operation.

# DeleteLoadBalancer

최종 업데이트 날짜: : 2023-10-24 11:16:15

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (DeleteLoadBalancer) is used to delete one or more specified CLB instances.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestId as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteLoadBalancer.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerIds.N	Yes	Array of String	Array of IDs of the CLB instances to be deleted. Array length limit: 20.

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Deleting a CLB instance

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeleteLoadBalancer
&LoadBalancerIds.0=lb-hsb93u5o
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "db141822-c025-4765-88d4-02bdec0e67ed"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# CloneLoadBalancer

최종 업데이트 날짜: : 2023-10-24 11:16:15

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to create a clone of the source CLB instance with the same forwarding rules and binding relations. Note that this API is asynchronous, which means that changes to the source CLB after invocation of the API are not included in the clone.

Limits:

Instance attribute restrictions

Only pay-as-you-go instances can be cloned. Monthly-subscribed instances cannot be cloned.

CLB instances without any billable items cannot be cloned.

Classic CLB instances and CLB u200dinstances created for Anti-DDoS service cannot be cloned.

Classic network-based instances cannot be cloned.

IPv6 instances, IPv6 NAT64 instances, and instances bound with both IPv4 and IPv6 cannot be cloned.

The following settings will not be cloned: **Custom configuration**, **Redirection configurations**, and **Allow Traffic by Default** in security groups.

Before cloning an instance, make sure all certificates used on the instance are valid. Cloning will fail if there are any expired certificates.

Listener restrictions

Instances with QUIC listeners or port range listeners cannot be cloned.

Private network CLB instances with TCP\_SSL listeners cannot be cloned.

Instances with layer-7 listeners that have no forwarding rules cannot be cloned.

u200dInstances u200dwith more than 50 listeners cannot be cloned.

Backend service restrictions

Instances with target groups and SCF cloud functions as the backend services cannot be cloned.

Notes:

If you are using a BGP bandwidth package, you need to pass the package ID.

To create a dedicated cluster-based CLB by cloning the source CLB, you need to pass the cluster ID. Otherwise, a normal CLB is created.

This API is only available for beta users. To try it out, [submit a ticket](#).

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CloneLoadBalancer.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
LoadBalancerName	No	String	Clones the name of the CLB instance. The name must be 1-60 characters containing letters, numbers, "-" or "_". Note: if the name of a new CLB instance already exists a default name will be generated automatically.
ProjectId	No	Integer	ID of the project to which a CLB instance belongs, which can be obtained through the <code>DescribeProject</code> API. If this parameter is not passed in, the default project will be used.
MasterZoneId	No	String	Sets the primary AZ ID for cross-AZ disaster recovery, such as <code>100001</code> or <code>ap-guangzhou-1</code> , which is applicable only to public network CLB. Note: A primary AZ loads traffic, while a secondary AZ does not load traffic by default and will be used only if the primary AZ becomes unavailable. The platform will automatically select the optimal secondary AZ. You can use the <code>DescribeResource</code> API to query the primary AZ list of a region.
SlaveZoneId	No	String	Specifies the secondary AZ ID for cross-AZ disaster

			recovery, such as <code>100001</code> or <code>ap-guangzhou-1</code> . It is applicable only to public network CLB. Note: A secondary AZ will load traffic if the primary AZ is faulty. You can use the <code>DescribeMasterZones</code> API to query the primary and secondary AZ list of a region.
ZoneId	No	String	Specifies an AZ ID for creating a CLB instance, such as <code>ap-guangzhou-1</code> , which is applicable only to public network CLB instances.
InternetAccessible	No	<a href="#">InternetAccessible</a>	CLB network billing mode. This parameter is applicable only to public network CLB instances.
VipIsp	No	String	ISP of VIP. Values: <code>CMCC</code> (China Mobile), <code>CUCC</code> (China Unicom) and <code>CTCC</code> (China Telecom). You need to activate static single-line IPs. This feature is beta and is only available in Guangzhou, Shanghai, Nanjing, Jinan, Hangzhou, Fuzhou, Beijing, Shijiazhuang, Wuhan, Changsha, Chengdu and Chongqing regions. To try it out, please contact your sales rep. If it's specified, the network billing mode must be <code>BANDWIDTH_PACKAGE</code> . If it's not specified, <code>BG</code> is used by default. To query ISPs supported in a region, please use <a href="#">DescribeResources</a> .
Vip	No	String	Applies for CLB instances for a specified VIP
Tags.N	No	Array of <a href="#">TagInfo</a>	Tags a CLB instance when purchasing it
ExclusiveCluster	No	<a href="#">ExclusiveCluster</a>	Dedicated cluster information
BandwidthPackageId	No	String	Bandwidth package ID. If this parameter is specified, the network billing mode ( <code>InternetAccessible.InternetChargeType</code> ) will only support bill-by-bandwidth package ( <code>BANDWIDTH_PACKAGE</code> ).
SnatPro	No	Boolean	Whether to support binding cross-VPC IPs or cross-region IPs
SnatIps.N	No	Array of <a href="#">SnatIp</a>	Creates <code>SnatIp</code> when the binding IPs of other VPC feature is enabled
ClusterIds.N	No	Array of String	ID of the public network CLB dedicated cluster
SlaType	No	String	Specification of the LCU-supported instance.

ClusterTag	No	String	Tag of the STGW dedicated cluster
Zones.N	No	Array of String	Availability zones for nearby access of private network CLB instances to distribute traffic
EipAddressId	No	String	Unique ID of an EIP, which can only be used when binding the EIP of a private network CLB instance (e.g. <code>eip-11112222</code> )

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Cloning a CLB instance

This example shows you how to clone a CLB instance.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CloneLoadBalancer
<Common request parameters>

{
  "LoadBalancerId": "lb-p10fcs**"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "83129908-a282-4f9f-8ab-131a3025****"
```



```
}  
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	CAM signature/authentication error
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
FailedOperation.InvalidLBStatus	Exceptional CLB instance status
InternalError	Internal error.
InvalidParameter	Parameter error.

InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.
InvalidParameter.LocationNotFound	Unable to find eligible forwarding rules.
InvalidParameter.PortCheckFailed	Listener port checks failed due to port conflicts or other reasons.
InvalidParameter.ProtocolCheckFailed	Listener protocol checks failed because the protocol used is incompatible with the corresponding operation.
InvalidParameter.RegionNotFound	Invalid region.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
OperationDenied	Operation denied.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
ResourceInUse	The resource is occupied.
ResourceInsufficient	Insufficient resources.
ResourcesSoldOut	The resources have been sold out.

# Listener APIs

## ModifyDomain

최종 업데이트 날짜: : 2023-10-24 11:16:13

### 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (ModifyDomain) is used to modify a domain name under a layer-7 CLB listener.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDomain.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID.
ListenerId	Yes	String	CLB listener ID.
Domain	Yes	String	Legacy domain name under a listener.
NewDomain	Yes	String	New domain name. Length limit: 1-120. There are three usage

formats: non-regular expression, wildcard, and regular expression. A non-regular expression can only contain letters, digits, "-", and ".". In a wildcard, "\*" can only be at the beginning or the end. A regular expressions must begin with a "~".

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the domain name of a forwarding rule under an HTTP listener

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=ModifyDomain
&LoadBalancerId=lb-cuxw2rm0
&ListenerId=lbl-d1ubsydq
&Domain=foo.net
&NewDomain=bar.net
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "RequestId": "db141822-c025-4765-88d4-02bdec0e67ed"
  }
}
```

### 5. Developer Resources

#### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.

# DescribeListeners

최종 업데이트 날짜: : 2023-10-24 11:16:13

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to get the list of listeners by CLB ID, listener protocol, or listener port. If no filter is specified, all listeners for the CLB instance will be returned.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeListeners.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID.
ListenerIds.N	No	Array of String	Array of CLB listener IDs to query (100 IDs at most).
Protocol	No	String	Type of the listener protocols to be queried. Values: TCP , UDP , HTTP , HTTPS , TCP_SSL and QUIC`.
Port	No	Integer	Port of the listeners to be queried

### 3. Output Parameters

Parameter Name	Type	Description
Listeners	Array of <a href="#">Listener</a>	Listener list
TotalCount	Integer	Total number of listeners (with filters of port, protocol, and listener ID applied). Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the information of all listeners of a CLB instance

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeListeners
&LoadBalancerId=lb-anig7ewx
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "Listeners": [
      {
        "ListenerId": "lbl-hd9nfp6o",
        "ListenerName": "12345",
        "CreateTime": "2020-12-31 12:03:36",
        "Protocol": "TCP",
        "Port": 333,
        "EndPort": 0,
        "HealthCheck": {
          "HealthSwitch": 1,
          "TimeOut": 2,
          "IntervalTime": 5,
          "HealthNum": 3,
```

```
"UnHealthNum": 3,
"CheckPort": null,
"CheckType": "TCP",
"HttpCheckDomain": null,
"HttpCheckPath": null,
"HttpCheckMethod": null,
"HttpVersion": null,
"HttpCode": null,
"ContextType": null,
"SendContext": null,
"RecvContext": null,
"ExtendedCode": null,
"SourceIpType": 0
},
"Certificate": null,
"Scheduler": "WRR",
"SessionExpireTime": 0,
"SniSwitch": 0,
"Rules": null,
"TargetType": "NODE",
"TargetGroup": null,
"KeepaliveEnable": null,
"SessionType": "NORMAL",
"Toa": false,
"DeregisterTargetRst": false,
"MaxConn": 100,
"MaxCps": 100,
"IdleConnectTimeout": 0,
"AttrFlags": [
  "abc"
],
"TargetGroupList": null
}
],
"RequestId": "3ddae670-4a89-4919-af6e-0d6bf195c92e"
}
}
```

## Example2 Querying listeners by port, protocol, and listener ID

### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeListeners
&LoadBalancerId=lb-aniq7ewx
&Protocol=TCP
&Port=333
```



```
&ListenerIds.0=lbl-hd9nfp6o
&<Common request parameters>
```

## Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "Listeners": [
      {
        "ListenerId": "lbl-hd9nfp6o",
        "ListenerName": "12345",
        "CreateTime": "2020-12-31 12:03:36",
        "Protocol": "TCP",
        "Port": 333,
        "EndPort": 0,
        "HealthCheck": {
          "HealthSwitch": 1,
          "TimeOut": 2,
          "IntervalTime": 5,
          "HealthNum": 3,
          "UnHealthNum": 3,
          "CheckPort": null,
          "CheckType": "TCP",
          "HttpCheckDomain": null,
          "HttpCheckPath": null,
          "HttpCheckMethod": null,
          "HttpVersion": null,
          "HttpCode": null,
          "ContextType": null,
          "SendContext": null,
          "RecvContext": null,
          "ExtendedCode": null,
          "SourceIpType": 0
        },
        "Certificate": null,
        "Scheduler": "WRR",
        "SessionExpireTime": 0,
        "SniSwitch": 0,
        "Rules": null,
        "TargetType": "NODE",
        "TargetGroup": null,
        "KeepaliveEnable": null,
        "SessionType": "NORMAL",
        "Toa": false,
        "DeregisterTargetRst": false,
      }
    ]
  }
}
```

```
"MaxConn": 100,
"MaxCps": 100,
"IdleConnectTimeout": 0,
"AttrFlags": [
  "abc"
],
"TargetGroupList": null
}
],
"RequestId": "3ddae670-4a89-4919-af6e-0d6bf195c92e"
}
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.

InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.RegionNotFound	Invalid region.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.InvalidFilter	Incorrect <code>Filter</code> parameter.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.

# CreateListener

최종 업데이트 날짜: : 2023-10-24 11:16:14

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to create a listener for a CLB instance.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestId as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateListener.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
Ports.N	Yes	Array of Integer	Specifies for which ports to create listeners. Each port corresponds to a new listener.
Protocol	Yes	String	Listener protocol. Values: TCP   UDP   HTTP   HTTPS   TCP_SSL   QUIC

ListenerNames.N	No	Array of String	List of names of the listeners to be created. The array of names and array of ports are in one-to-one correspondence. If you do not want to name them now, you do not need to provide this parameter.
HealthCheck	No	<a href="#">HealthCheck</a>	Health check parameter. It is only applicable only to TCP, UDP, TCP_SSL and QUIC listeners.
Certificate	No	<a href="#">CertificateInput</a>	Certificate information. This parameter is only applicable to TCP_SSL listeners and HTTPS listeners with the SNI feature not enabled. <code>Certificate</code> and <code>MultiCertInfo</code> cannot be specified at the same time.
SessionExpireTime	No	Integer	Session persistence time in seconds. Value range: 30-3,600. The default value is 0, indicating that session persistence is not enabled. This parameter is applicable only to TCP/UDP listeners.
Scheduler	No	String	Listener forwarding mode. u200dValues: <code>WRR</code> (weighted round robin) and <code>LEAST_CONN</code> (least connections). Default value: <code>WRR</code> . This parameter is only applicable to TCP, UDP, TCP_SSL and QUIC listeners.
SniSwitch	No	Integer	Whether to enable the SNI feature. This parameter is applicable only to HTTPS listeners
TargetType	No	String	Target real server type. <code>NODE</code> : binding a general node; <code>TARGETGROUP</code> : binding a target group.
SessionType	No	String	Session persistence type. Valid values: Normal: the default session persistence type; QUIC_CID: session persistence by QUIC connection ID. The <code>QUIC_CID</code> value can only be configured in UDP listeners. If this field is not specified, the default session persistence type will be used.
KeepaliveEnable	No	Integer	Whether to enable a persistent connection. This parameter is applicable only to HTTP and HTTPS listeners. Valid values: 0 (disable; default value) and 1 (enable).
EndPort	No	Integer	This parameter is used to specify the end port and is required when creating a port range listener. Only one member can be passed in when inputting the

			<code>Ports</code> parameter, which is used to specify the start port. If you want to try the port range feature, please <a href="#">submit a ticket</a> .
DeregisterTargetRst	No	Boolean	Whether to send the TCP RST packet to the client when unbinding a real server. This parameter is applicable to TCP listeners only.
MultiCertInfo	No	<a href="#">MultiCertInfo</a>	Certificate information. You can specify multiple server-side certificates with different algorithm types. This parameter is only applicable to HTTPS listeners with the SNI feature not enabled. <code>Certificate</code> and <code>MultiCertInfo</code> cannot be specified at the same time.
MaxConn	No	Integer	Maximum number of concurrent listener connections. It's available for TCP/UDP/TCP_SSL/QUIC listeners. If it's set to <code>-1</code> or not specified, the listener speed is not limited.
MaxCps	No	Integer	Maximum number of new listener connections. It's available for TCP/UDP/TCP_SSL/QUIC listeners. If it's set to <code>-1</code> or not specified, the listener speed is not limited.
IdleConnectTimeout	No	Integer	Connection idle timeout period (in seconds). It's only available to TCP listeners. Value range: 300-900 for shared and dedicated instances; 300-2000 for LCU-supported CLB instances. It defaults to 900. To set a period longer than 2000 seconds (up to 3600 seconds), please submit a <a href="#">submit</a> .

### 3. Output Parameters

Parameter Name	Type	Description
ListenerIds	Array of String	Array of unique IDs of the created listeners
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Creating two TCP listeners to listen on two ports respectively

This example shows you how to create two TCP listeners, `lis0` and `lis1`, to listen on port 7569 and 7570.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateListener
<common request parameters>

{
  "ListenerNames": [
    "lis1",
    "lis0"
  ],
  "Protocol": "TCP",
  "Ports": [
    "7570",
    "7569"
  ],
  "LoadBalancerId": "lb-cuxw2rm0"
}
```

#### Output Example

```
{
  "Response": {
    "ListenerIds": [
      "lbl-d1ubsydq",
      "lbl-4udz130k"
    ],
    "RequestId": "8f272cef-14ff-458c-b67e-1bd21bd2942b"
  }
}
```

### Example2 Creating a TCP listener and configuring the health check settings

This example shows you how to create a TCP listener and configure the health check settings.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateListener
<common request parameters>
```

```
{
  "HealthCheck": {
    "UnHealthNum": "4",
    "HealthNum": "4",
    "IntervalTime": "7",
    "TimeOut": "5",
    "HealthSwitch": "1"
  },
  "Protocol": "TCP",
  "Ports": [
    "7571"
  ],
  "LoadBalancerId": "lb-cuxw2rm0"
}
```

### Output Example

```
{
  "Response": {
    "ListenerIds": [
      "lb1-lbbxvq26"
    ],
    "RequestId": "ffff13c83-dcb5-481a-ba7c-30e92c276c19"
  }
}
```

### Example3 Creating an HTTPS listener and binding it with an existing certificate

This example shows you how to create an HTTPS listener and bind it with an existing certificate.

### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateListener
<common request parameters>

{
```



```
"Protocol": "HTTPS",
"Ports": [
"7572"
],
"Certificate": {
"SSLMode": "UNIDIRECTIONAL",
"CertId": "MsJyaXVm"
},
"LoadBalancerId": "lb-cuxw2rm0"
}
```

## Output Example

```
{
"Response": {
"ListenerIds": [
"lb1-4fbxq45k"
],
"RequestId": "db8ae69f-ebda-402b-8d02-ead459aa6ff9"
}
}
```

## Example4 Creating an HTTPS listener and binding it with a new certificate

This example shows you how to create an HTTPS listener and bind it with a new certificate.

## Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateListener
<common request parameters>

{
"Protocol": "HTTPS",
"Ports": [
"7573"
],
"Certificate": {
"SSLMode": "UNIDIRECTIONAL",
"CertContent": "-----BEGINCERTIFICATE-----\\nMIIEjTCCA3WgAwIBAgIQ4ZHUAVOv4yrsz13
1Lfo3TANBqkqhkig9w0BAQsFADBy\\nMQswCQYDVQQGEwJDTjE1MCMGA1UEChMcVHJ1c3RBc2lhIFR1Y2
hub2xvZ211cywg\\nSW5jLjEdMBSGA1UECxMURG9tYWwluIFZhbG1kYXRlZCBTU0wxHTAbBgNVBAMTFFRy
\\ndXN0QXNpYSBUTFMgU1NBIE5BMB4XDTE4MDEwOTAwMDAwMFoXDTE5MDEwOTEyMDAw\\nMFowFjEUMBI
GA1UEAxMLZmx5Zmx5Lm5hbWUwgEiMA0GCSqGSIb3DQEBAQUAA4IB\\nDwAwggEKAoIBAQC1pnigB7r3a
```

```

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---",
"CertName": "my-cert",
"CertKey": "-----BEGINRSAPRIVATEKEY-----\\nMIEoAIBAAKCAQEApaz4oAe692ob+wTLkMPSsw
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-----ENDRSAPRIVATEKEY-----"
},
"LoadBalancerId": "lb-cuxw2rm0"
}

```

## Output Example

```
{
  "Response": {
    "ListenerIds": [
      "lbl-bzfmg9m6"
    ],
    "RequestId": "6082314c-030c-429d-9eae-2dc6b159b5b9"
  }
}
```

## Example5 Creating a UDP listener with the default Ping health check

This example shows you how to create a UDP listener with the default Ping health check.

### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateListener
<common request parameters>
```

```
{
  "HealthCheck": {
    "HealthSwitch": "1"
  },
  "Protocol": "UDP",
  "ListenerNames": [
    "lis_test"
  ],
  "Ports": [
    "432"
  ],
  "LoadBalancerId": "lb-6wlxe9rj"
}
```

### Output Example

```
{
  "Response": {
    "ListenerIds": [
      "lbl-aev333n1"
    ],
    "RequestId": "3b81f03e-6088-448d-abaf-8a487d4f985a"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.PortCheckFailed	Listener port checks failed due to port conflicts or other reasons.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.

---

MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# CreateRule

최종 업데이트 날짜: : 2023-10-24 11:16:14

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (CreateRule) is used to create a forwarding rule under an existing layer-7 CLB listener, where real servers must be bound to the rule instead of the listener.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	Listener ID
Rules.N	Yes	Array of	Information of the new forwarding rule

		RuleInput	
--	--	-----------	--

### 3. Output Parameters

Parameter Name	Type	Description
LocationIds	Array of String	Array of unique IDs of created forwarding rules
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating a forwarding rule

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=CreateRule
&LoadBalancerId=lb-cuxw2rm0
&ListenerId=lbl-4fbxq45k
&Rules.0.Domain=foo.net
&Rules.0.Url=/bar
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "LocationIds": [
      "loc-ho6lvh8m"
    ],
    "RequestId": "6c915c06-53e0-4717-9358-09b32cf47f08"
  }
}
```

### 5. Developer Resources

## SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.



# ModifyListener

최종 업데이트 날짜: : 2023-10-24 11:16:12

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (ModifyListener) is used to modify the attributes of a CLB listener, such as listener name, health check parameter, certificate information, and forwarding policy.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyListener.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	CLB listener ID
ListenerName	No	String	New listener name

SessionExpireTime	No	Integer	Session persistence time in seconds. Value range: 30-3,600. The default value is 0, indicating that session persistence is not enabled. This parameter is applicable only to TCP/UDP listeners.
HealthCheck	No	<a href="#">HealthCheck</a>	Health check parameter. It is only applicable only to TCP, UDP, TCP_SSL and QUIC listeners.
Certificate	No	<a href="#">CertificateInput</a>	Certificate information. This parameter is only applicable to HTTPS/TCP_SSL/QUIC listeners. <code>Certificate</code> and <code>MultiCertInfo</code> cannot be both specified.
Scheduler	No	String	Forwarding method of a listener. Value range: WRR, LEAST_CONN. They represent weighted round robin and least connections, respectively. Default value: WRR.
SniSwitch	No	Integer	Whether to enable the SNI feature. This parameter is applicable only to HTTPS listeners. Note: The SNI feature can be enabled but cannot be disabled once enabled.
TargetType	No	String	Target backend type. <code>NODE</code> : A single node; <code>TARGETGROUP</code> : A target group.
KeepaliveEnable	No	Integer	Whether to enable a persistent connection. This parameter is applicable only to HTTP and HTTPS listeners.
DeregisterTargetRst	No	Boolean	Whether to send the TCP RST packet to the client when unbinding a real server. This parameter is applicable to TCP listeners only.
SessionType	No	String	Session persistence type. <code>NORMAL</code> : default session persistence type (L4/L7 session persistence); <code>QUIC_CID</code> : session persistence by QUIC connection ID. The <code>QUIC_CID</code> value can only be configured in UDP listeners.
MultiCertInfo	No	<a href="#">MultiCertInfo</a>	Certificate information. You can specify multiple server-side certificates with different algorithm types. This parameter is only applicable to HTTPS listeners with the SNI feature not enabled. <code>Certificate</code> and <code>MultiCertInfo</code> cannot be specified at the same time.

MaxConn	No	Integer	The maximum number of concurrent connections at the listener level. This parameter takes effect only on LCU-supported instances and TCP/UDP/TCP_SSL/QUIC listeners. Value range: 1 to the maximum concurrency of the instance. -1 indicates that no limit is set on concurrent connections.
MaxCps	No	Integer	The maximum number of new connections at the listener level. This parameter takes effect only on LCU-supported instances and TCP/UDP/TCP_SSL/QUIC listeners. Value range: 1 to the maximum number of new connections of the instance. -1 indicates that no limit is set on concurrent connections.
IdleConnectTimeout	No	Integer	Connection idle timeout period (in seconds). It's only available to TCP listeners. Value range: 300-900 for shared and dedicated instances; 300-2000 for LCU-supported CLB instances. It defaults to 900. To set a period longer than 2000 seconds (up to 3600 seconds), please submit a <a href="#">submit</a> .

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the name, health check parameters, and forwarding policy of a TCP listener

This example shows you how to modify the name, health check parameters, and forwarding policy of a TCP listener.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
```

```
X-TC-Action: ModifyListener
<Common request parameters>

{
  "HealthCheck": {
    "UnHealthNum": "5",
    "HealthNum": "5",
    "IntervalTime": "60",
    "TimeOut": "35",
    "HealthSwitch": "1"
  },
  "LoadBalancerId": "lb-cuxw2rm0",
  "ListenerId": "lbl-d1ubsydq",
  "ListenerName": "newlis",
  "Scheduler": "LEAST_CONN",
  "SessionExpireTime": "120"
}
```

## Output Example

```
{
  "Response": {
    "RequestId": "8cd88c83-fd30-47c0-8e7a-89bf13a7a83c"
  }
}
```

## Example2 Modifying the certificate bound to an HTTPS listener

This example shows you how to modify the certificate bound to an HTTPS listener.

## Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyListener
<Common request parameters>

{
  "ListenerId": "lbl-4fbxq45k",
  "Certificate": {
    "SSLMode": "UNIDIRECTIONAL",
    "CertId": "Nb1DY3hQ"
  },
  "LoadBalancerId": "lb-cuxw2rm0"
}
```

## Output Example

```
{
  "Response": {
    "RequestId": "b64574f9-5bc7-4a63-a9d7-3671b6a6d62b"
  }
}
```

# 5. Developer Resources

## SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

# 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.

---

InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.

# ModifyRule

최종 업데이트 날짜: : 2023-10-24 11:16:12

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (ModifyRule) is used to modify the attributes of a forwarding rule under a layer-7 CLB listener, such as forwarding path, health check attribute, and forwarding policy.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	CLB listener ID
LocationId	Yes	String	ID of the forwarding rule to be modified.

Url	No	String	New forwarding path of the forwarding rule. This parameter is not required if the URL does not need to be modified.
HealthCheck	No	<a href="#">HealthCheck</a>	Health check information
Scheduler	No	String	Request forwarding method of the rule. Value range: WRR, LEAST_CONN, IP_HASH They represent weighted round robin, least connections, and IP hash, respectively. Default value: WRR.
SessionExpireTime	No	Integer	Session persistence time
ForwardType	No	String	Forwarding protocol between CLB instance and real server. Default value: HTTP. Valid values: HTTP, HTTPS, and TRPC.
TrpcCallee	No	String	TRPC callee server route, which is required when <code>ForwardType</code> is "TRPC". This is now only for internal usage.
TrpcFunc	No	String	TRPC calling service API, which is required when <code>ForwardType</code> is "TRPC". This is now only for internal usage.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the health check parameter and forwarding policy of a forwarding rule

Modifies the health check parameter and forwarding policy of a forwarding rule

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=ModifyRule
&LoadBalancerId=lb-cuxw2rm0
```



```
&ListenerId=lbl-4fbxq45k
&LocationId=loc-9dr7bsl3
&Url=/bar
&Scheduler=LEAST_CONN
&SessionExpireTime=75
&HealthCheck.HealthSwitch=1
&HealthCheck.IntervalTime=50
&HealthCheck.HealthNum=3
&HealthCheck.UnHealthNum=3
&HealthCheck.HttpCode=7
&HealthCheck.HttpCheckPath=/check
&HealthCheck.HttpCheckDomain=foo.net
&HealthCheck.HttpCheckMethod=GET
&<Common request parameters>
```

## Output Example

```
{
  "Response": {
    "RequestId": "6d846dfd-27f3-4d74-bc00-ec9ae0570cb0"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.

# ModifyDomainAttributes

최종 업데이트 날짜: : 2023-10-24 11:16:13

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to modify the domain name-level attributes of a layer-7 listener's forwarding rule, such as modifying the domain name, changing the DefaultServer, enabling/disabling HTTP/2, and modifying certificates.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestId as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyDomainAttributes.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	CLB listener ID
Domain	Yes	String	The domain name, which must be associated with an existing forwarding rule. If there are

			multiple domain names, you only need to specify one.
NewDomain	No	String	The one domain name to modify. <code>NewDomain</code> and <code>NewDomains</code> can not be both specified.
Certificate	No	<a href="#">CertificateInput</a>	Certificate information of the domain name. It is only applicable to listeners with SNI enabled. <code>Certificate</code> and <code>MultiCertInfo</code> cannot be specified at the same time.
Http2	No	Boolean	Whether to enable HTTP/2. Note: HTTP/2 can be enabled only for HTTPS domain names.
DefaultServer	No	Boolean	Whether to set this domain name as the default domain name. Note: Only one default domain name can be set under one listener.
Quic	No	Boolean	Whether to enable QUIC. Note: QUIC can be enabled only for HTTPS domain names.
NewDefaultServerDomain	No	String	Specifies a new default domain name for the listener. This field is used when the original default domain name is disabled. If there are multiple domain names, specify one of them.
NewDomains.N	No	Array of String	The new domain names to modify. <code>NewDomain</code> and <code>NewDomains</code> can not be both specified.
MultiCertInfo	No	<a href="#">MultiCertInfo</a>	Certificate information of the domain name. It is only applicable to listeners with SNI enabled. You can specify multiple server-side certificates with different algorithm types. <code>Certificate</code> and <code>MultiCertInfo</code> cannot be specified at the same time.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Modifying the domain name attributes of a layer-7 listener

This example shows you how to modify the domain name attributes of a layer-7 listener.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyDomainAttributes
<Common request parameters>

{
  "Domain": "foo.net",
  "ListenerId": "lbl-n8mb2r3a",
  "LoadBalancerId": "lb-1wv10ejw"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "db141822-c025-4765-88d4-02bdec0e67ed"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.

# DeleteListener

최종 업데이트 날짜: : 2023-10-24 11:16:14

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to delete a listener from a CLB instance (layer-4 or layer-7).

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteListener.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	ID of the listener to be deleted

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Deleting a listener

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeleteListener
&LoadBalancerId=lb-cuxw2rm0
&ListenerId=lbl-4udz130k
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "eeb315e4-7333-4f0e-814f-2f44ffd13e4c"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)



## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.

# DeleteLoadBalancerListeners

최종 업데이트 날짜: : 2023-10-24 11:16:13

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to delete multiple listeners of a CLB instance.

This is an async API. After it is returned successfully, you can call the `DescribeTaskStatus` API with the returned `RequestID` as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteLoadBalancerListeners.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerIds.N	No	Array of String	Array of listener IDs to delete (20 IDs at most). If this parameter is left empty, all listeners of the CLB instance will be deleted.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Deleting all listeners of a CLB instance

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeleteLoadBalancerListeners
&LoadBalancerId=lb-db2nt5l2
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "RequestId": "c1157c81-f3dc-4f2a-9346-76f161d548eb"
  }
}
```

#### Example2 Deleting multiple listeners of a CLB instance

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeleteLoadBalancerListeners
&LoadBalancerId=lb-db2nt5l2
&ListenerIds.0=lbl-jmgysito
&ListenerIds.1=lbl-3bgc6o9a
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "RequestId": "9706db49-a5d4-413a-9610-7aa1075517e1"
  }
}
```

```
}  
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
MissingParameter	Missing parameter.

UnauthorizedOperation

Unauthorized operation.

# DeleteRule

최종 업데이트 날짜: : 2023-10-24 11:16:13

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (DeleteRule) is used to delete a forwarding rule under a layer-7 CLB instance listener

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteRule.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	CLB listener ID
LocationIds.N	No	Array of String	Array of IDs of the forwarding rules to be deleted

Domain	No	String	The domain name associated with the forwarding rule to delete. If the rule is associated with multiple domain names, specify any one of them.
Url	No	String	The forwarding path of the forwarding rule to delete.
NewDefaultServerDomain	No	String	Specifies a new default domain name for the listener. This field is used when the original default domain name is disabled. If there are multiple domain names, specify one of them.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Deleting a forwarding rule

##### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DeleteRule
<Common request parameters>

{
  "Url": "/bar2",
  "Domain": "foo.net",
  "ListenerId": "lbl-4fbxq45k",
  "LoadBalancerId": "lb-cuxw2rm0"
}
```

##### Output Example

```
{
  "Response": {
    "RequestId": "ba2d4eb1-c7c5-480c-98e4-9b7b6a0fd498"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
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- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.



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InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.

# Backend Service APIs

## RegisterTargets

최종 업데이트 날짜: : 2023-10-24 11:16:17

### 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (RegisterTargets) is used to bind one or more real servers to a CLB listener or layer-7 forwarding rule. Before using this API, you need to create relevant layer-4 listeners or layer-7 forwarding rules. For the former (TCP/UDP), only the listener ID needs to be specified, while for the latter (HTTP/HTTPS), the forwarding rule also needs to be specified through LocationId or Domain+Url.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RegisterTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	CLB listener ID

Targets.N	Yes	Array of <a href="#">Target</a>	List of real servers to be bound. Array length limit: 20.
LocationId	No	String	Forwarding rule ID. When binding a real server to a layer-7 forwarding rule, you must provide either this parameter or Domain+Url.
Domain	No	String	Target forwarding rule domain name. This parameter does not take effect if LocationId is specified.
Url	No	String	Target forwarding rule URL. This parameter does not take effect if LocationId is specified.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Registering CVM to TCP listener

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=RegisterTargets
&LoadBalancerId=lb-cuxw2rm0
&ListenerId=lbl-d1ubsydq
&Targets.0.InstanceId=ins-dm4xtz0i
&Targets.0.Port=233
&Targets.0.Weight=10
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "RequestId": "898b431c-2745-4b27-80f6-e6e8038a0683"
```

```
}  
}
```

## Example2 Registering CVM to the forwarding rule of HTTP listener (with the rule specified by Domain and Url)

### Input Example

```
https://clb.tencentcloudapi.com/?Action=RegisterTargets  
&LoadBalancerId=lb-cuxw2rm0  
&ListenerId=lbl-4fbxq45k  
&Domain=foo.net  
&Url=/bar8  
&Targets.0.InstanceId=ins-dm4xtz0i  
&Targets.0.Port=233  
&Targets.0.Weight=10  
&<Common request parameters>
```

### Output Example

```
{  
  "Response": {  
    "RequestId": "11b4338f-2d00-4766-bc67-581d959b3488"  
  }  
}
```

## Example3 Registering CVM to the forwarding rule of HTTP listener (with the rule specified by LocationId)

### Input Example

```
https://clb.tencentcloudapi.com/?Action=RegisterTargets  
&LoadBalancerId=lb-cuxw2rm0  
&ListenerId=lbl-4fbxq45k  
&LocationId=loc-r2q3jd4c  
&Targets.0.InstanceId=ins-dm4xtz0i  
&Targets.0.Port=334  
&Targets.0.Weight=10  
&<Common request parameters>
```

### Output Example

```
{
  "Response": {
    "RequestId": "d4846a22-e758-407f-a526-db3f2d37d00e"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.

InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# BatchRegisterTargets

최종 업데이트 날짜: : 2023-10-24 11:16:19

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to batch bind CVM instances or ENIs. Up to 500 servers can be bound in a batch. It supports cross-region binding, layer-4 and layer-7 (TCP/UDP/HTTP/HTTPS) protocols, and VPC-based CLBs only.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: BatchRegisterTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
Targets.N	Yes	Array of <a href="#">BatchTarget</a>	Binding target

### 3. Output Parameters

Parameter Name	Type	Description
FailListenerIdSet	Array of String	IDs of the listeners failed to bind. If this is blank, all listeners are bound successfully. Note: This field may return null, indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Binding a CVM or ENI

##### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: BatchRegisterTargets
<Common request parameters>

{
  "Targets": [
    {
      "InstanceId": "ins-xxx",
      "ListenerId": "lbl-xxxx",
      "Weight": "10",
      "Port": "80"
    }
  ],
  "LoadBalancerId": "lb-xxxx"
}
```

##### Output Example

```
{
  "Response": {
    "FailListenerIdSet": [],
    "RequestId": "83129908-a282-4f9f-8ab-131a3025ba22"
  }
}
```



```
}  
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.
InvalidParameter.LocationNotFound	Unable to find eligible forwarding rules.

InvalidParameter.PortCheckFailed	Listener port checks failed due to port conflicts or other reasons.
InvalidParameter.ProtocolCheckFailed	Listener protocol checks failed because the protocol used is incompatible with the corresponding operation.
InvalidParameter.RegionNotFound	Invalid region.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# ModifyTargetPort

최종 업데이트 날짜: : 2023-10-24 11:16:17

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (ModifyTargetPort) is used to modify the port of a real server bound to a listener.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyTargetPort.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	CLB listener ID
Targets.N	Yes	Array of <a href="#">Target</a>	List of real servers for which to modify the ports
NewPort	Yes	Integer	New port of the real server bound to a listener or forwarding rule

LocationId	No	String	Forwarding rule ID. When binding a real server to a layer-7 forwarding rule, you must provide either this parameter or Domain+Url.
Domain	No	String	Target rule domain name. This parameter does not take effect if LocationId is specified.
Url	No	String	Target rule URL. This parameter does not take effect if LocationId is specified.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the port of a bound real server

This example shows you how to change the port of the CVM instance `ins-dm4xtz0i` bound to the listener `lb1-d1ubsydq` from 233 to 334.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=ModifyTargetPort
&LoadBalancerId=lb-cuxw2rm0
&ListenerId=lb1-d1ubsydq
&Targets.0.InstanceId=ins-dm4xtz0i
&Targets.0.Port=233
&NewPort=334
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "a2764f3c-f173-421c-8e42-7b1e7a608ffd"
```

```
}  
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.Length	Wrong parameter length.

UnauthorizedOperation

Unauthorized operation.

# ModifyTargetWeight

최종 업데이트 날짜: : 2023-10-24 11:16:17

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (ModifyTargetWeight) is used to modify the forwarding weight of a real server bound to a CLB instance. This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyTargetWeight.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	CLB listener ID
LocationId	No	String	Forwarding rule ID. When binding a real server to a layer-7 forwarding rule, you must provide either this parameter or Domain+Url.
Domain	No	String	Target rule domain name. This parameter does not take effect if

			LocationId is specified.
Url	No	String	Target rule URL. This parameter does not take effect if LocationId is specified.
Targets.N	No	Array of <a href="#">Target</a>	List of real servers for which to modify the weights
Weight	No	Integer	New forwarding weight of a real server. Value range: 0-100. Default value: 10. If the Targets.Weight parameter is set, this parameter will not take effect.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the weight of the real server bound to a layer-4 listener

This example shows you how to change the weight of the real server `ins-dm4xtz0i` (bound port: 334) bound to the listener `lbl-d1ubsydq` to 8.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=ModifyTargetWeight
&LoadBalancerId=lb-cuxw2rm0
&ListenerId=lbl-d1ubsydq
&Targets.0.InstanceId=ins-dm4xtz0i
&Targets.0.Port=334
&Weight=8
&<Common request parameters>
```

#### Output Example



```
{
  "Response": {
    "RequestId": "85c7b3e8-7fd8-4c62-8b3b-7ba52d7a1dca"
  }
}
```

## 5. Developer Resources

### SDK

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### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.

---

InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.

# BatchModifyTargetWeight

최종 업데이트 날짜: : 2023-10-24 11:16:19

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to modify forwarding weights of real servers bound to CLB listeners in batches. Up to 500 servers can be unbound in a batch. As this API is async, you should check whether the task is successful by passing the RequestId returned to the API call `DescribeTaskStatus`.

This API is supported by CLB layer-4 and layer-7 listeners, but not Classis CLB counterparts.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: BatchModifyTargetWeight.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ModifyList.N	Yes	Array of <a href="#">RsWeightRule</a>	List of weights to be modified in batches

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying real server weights in batches

This example shows you how to modify the weight of the real server `ins-19404p15` (port 110) bound to the forwarding rule `loc-o8cnyw6c` under the listener `lbl-4b5hnc9a` in the CLB instance `lb-dx98lwo0` to 50, and modify the weight of the real server `ins-19411tzv` (port 80) bound to the forwarding rule `loc-8c5pdrb8` under the listener `lbl-20jjtaaw` to 30.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=BatchModifyTargetWeight
&LoadBalancerId=lb-dx98lwo0
&ModifyList.0.ListenerId=lbl-4b5hnc9a
&ModifyList.0.LocationId=loc-o8cnyw6c
&ModifyList.0.Targets.0.InstanceId=ins-19404p15
&ModifyList.0.Targets.0.Port=110
&ModifyList.0.Targets.0.Weight=50
&ModifyList.1.ListenerId=lbl-20jjtaaw
&ModifyList.1.LocationId=loc-8c5pdrb8
&ModifyList.1.Targets.0.InstanceId=ins-19411tzv
&ModifyList.1.Targets.0.Port=80
&ModifyList.1.Targets.0.Weight=30
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "83329908-a282-4f9f-8ab-031a3025b377"
  }
}
```

## Example2 Batch modifying the weights of servers bound to layer-4 and layer-7 listeners

This example shows you how to modify the weights of servers for the layer-4 and layer-7 listeners under a CLB instance at the same time.

### Input Example

```
https://clb.tencentcloudapi.com/?Action=BatchModifyTargetWeight
&LoadBalancerId=lb-1kkno9qf
&ModifyList.0.ListenerId=lbl-mhtffs09
&ModifyList.0.Targets.0.InstanceId=ins-kjp6cb2f
&ModifyList.0.Targets.0.Port=79
&ModifyList.0.Targets.0.Weight=50
&ModifyList.1.ListenerId=lbl-661zpn3b
&ModifyList.1.LocationId=loc-78p1r0vb
&ModifyList.1.Targets.0.EniIp=10.202.0.96
&ModifyList.1.Targets.0.Port=123
&ModifyList.1.Targets.0.Weight=30
&<Common request parameters>
```

### Output Example

```
{
  "Response": {
    "RequestId": "38bab2ce-616d-412c-a4b0-36110d5b17a3"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.

# DeregisterTargets

최종 업데이트 날짜: : 2023-10-24 11:16:18

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (DeregisterTargets) is used to unbind one or more real servers from a CLB listener or forwarding rule. For layer-4 listeners, only the listener ID needs to be specified. For layer-7 listeners, the forwarding rule also needs to be specified through LocationId or Domain+Url.

This is an async API. After it is returned successfully, you can call the DescribeTaskStatus API with the returned RequestID as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeregisterTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID in the format of "lb-12345678"
ListenerId	Yes	String	Listener ID in the format of "lbi-12345678"
Targets.N	Yes	Array of <a href="#">Target</a>	List of real servers to be unbound. Array length limit: 20.

LocationId	No	String	Forwarding rule ID in the format of "loc-12345678". When unbinding a server from a layer-7 forwarding rule, you must provide either this parameter or Domain+Url.
Domain	No	String	Target rule domain name. This parameter does not take effect if LocationId is specified.
Url	No	String	Target rule URL. This parameter does not take effect if LocationId is specified.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Unbinding a CVM instance from the list of bound listeners

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeregisterTargets
&LoadBalancerId=lb-cuxw2rm0
&ListenerId=lbl-d1ubsydq
&Targets.0.InstanceId=ins-dm4xtz0i
&Targets.0.Port=334
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "RequestId": "4d1df727-d61c-45bf-936b-cb0368fb2a7d"
  }
}
```



## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.Length	Wrong parameter length.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.

# BatchDeregisterTargets

최종 업데이트 날짜: : 2023-10-24 11:16:19

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to batch unbind real servers of the layer-4 and layer-7 VPC-based CLBs. Up to 500 real servers can be unbound in a batch.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: BatchDeregisterTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
Targets.N	Yes	Array of <a href="#">BatchTarget</a>	Unbinding targets

### 3. Output Parameters

Parameter Name	Type	Description
FailListenerIdSet	Array of String	IDs of the listeners failed to unbind
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Unbinding an ENI

##### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: BatchDeregisterTargets
<Common request parameters>

{
  "Targets": [
    {
      "InstanceId": "ins-xxx",
      "ListenerId": "lbl-xxxx",
      "Weight": "10",
      "Port": "80"
    }
  ],
  "LoadBalancerId": "lb-xxxx"
}
```

##### Output Example

```
{
  "Response": {
    "FailListenerIdSet": [],
    "RequestId": "83129908-a282-4f9f-8ab-131a3025ba22"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.
InvalidParameter.LocationNotFound	Unable to find eligible forwarding rules.
InvalidParameter.PortCheckFailed	Listener port checks failed due to port conflicts or other reasons.

InvalidParameter.ProtocolCheckFailed	Listener protocol checks failed because the protocol used is incompatible with the corresponding operation.
InvalidParameter.RegionNotFound	Invalid region.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.Length	Wrong parameter length.
InvalidParameterValue.Range	Wrong parameter value range.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# DescribeTargetHealth

최종 업데이트 날짜: : 2023-10-24 11:16:18

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (DescribeTargetHealth) is used to query the health check result of a real server of a CLB instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeTargetHealth.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerIds.N	Yes	Array of String	List of IDs of CLB instances to be queried

## 3. Output Parameters

Parameter Name	Type	Description

LoadBalancers	Array of <a href="#">LoadBalancerHealth</a>	CLB instance list Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying real server health status of a CLB instance

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeTargetHealth
<Common request parameters>

{
  "LoadBalancerIds": [
    "lb-qc2iq5yc"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "LoadBalancers": [
      {
        "Listeners": [
          {
            "Rules": [
              {
                "Url": "/",
                "Domain": "www.123.com",
                "LocationId": "loc-5t7526km",
                "Targets": []
              }
            ],
            "Port": 666,
            "Protocol": "HTTP",
            "ListenerId": "lbl-j36caqde",

```

```
"ListenerName": "http-111"
},
{
  "Rules": [
    {
      "Url": null,
      "Domain": null,
      "LocationId": "loc-ewygg6i0",
      "Targets": [
        {
          "HealthStatus": false,
          "IP": "172.16.0.6",
          "TargetId": "ins-19425500",
          "Port": 2020
        },
        {
          "HealthStatus": true,
          "IP": "172.16.0.12",
          "TargetId": "ins-19425y2y",
          "Port": 80
        }
      ]
    }
  ],
  "Port": 789,
  "Protocol": "TCP",
  "ListenerId": "lbl-fs9naq76",
  "ListenerName": "tcp_test"
},
{
  "Rules": [
    {
      "Url": "/",
      "Domain": "www.456.com",
      "LocationId": "loc-8gdc4qcq",
      "Targets": []
    }
  ],
  "Port": 777,
  "Protocol": "HTTP",
  "ListenerId": "lbl-9nj07x0m",
  "ListenerName": "http-222"
},
{
  "Rules": [],
  "Port": 1949,
  "Protocol": "HTTPS",
```



```
"ListenerId": "lb1-087wrv48",
"ListenerName": "https-000"
},
"LoadBalancerName": "lb-test123",
"LoadBalancerId": "lb-qc2iq5yc"
},
"RequestId": "9d45e1ec-720c-4ce1-860e-e338e273e77e"
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
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### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.

InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.
UnsupportedOperation	Unsupported operation.

# DeregisterFunctionTargets

최종 업데이트 날짜: : 2023-10-30 11:34:49

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to unbind a SCF function with a CLB forwarding rule. For L7 listeners, you need to specify the forwarding rule by using `LocationId` or `Domain+Url`.

This is an async API. After it is returned successfully, you can call the [DescribeTaskStatus](#) API with the returned RequestID to check whether this task is successful.

Limits:

- Binding with SCF is only available in Guangzhou, Shenzhen Finance, Shanghai, Shanghai Finance, Beijing, Chengdu, Hong Kong (China), Singapore, Mumbai, Tokyo, and Silicon Valley.
- SCF functions can only be bound with CLB instances of bill-by-IP accounts but not with bill-by-CVM accounts. If you are using a bill-by-CVM account, we recommend upgrading it to a bill-by-IP account.
- SCF functions cannot be bound with classic CLB instances.
- SCF functions cannot be bound with classic network-based CLB instances.
- SCF functions in the same region can be bound with CLB instances. SCF functions can only be bound across VPCs but not regions.
- SCF functions can only be bound with IPv4 and IPv6 NAT64 CLB instances, but currently not with IPv6 CLB instances.
- SCF functions can only be bound with layer-7 HTTP and HTTPS listeners, but not with layer-7 QUIC listeners or layer-4 (TCP, UDP, and TCP SSL) listeners.
- Only SCF event-triggered functions can be bound with CLB instances.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeregisterFunctionTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID.
ListenerId	Yes	String	CLB listener ID.
FunctionTargets.N	Yes	Array of <a href="#">FunctionTarget</a>	List of functions to be unbound
LocationId	No	String	The ID of target forwarding rule. To unbind a function from an L7 forwarding rule, either <code>LocationId</code> or <code>Domain+Url</code> is required.
Domain	No	String	Domain name of the target forwarding rule. It is ignored if <code>LocationId</code> is specified.
Url	No	String	URL of the target forwarding rule. It is ignored if <code>LocationId</code> is specified.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Unbinding an SCF function from a forwarding rule

This example shows you how to unbind a function from a load balancer forwarding rule.

### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeregisterFunctionTargets
&LoadBalancerId=lb-cuxw2rm0
&ListenerId=lbl-d1ubsydq
&LocationId=loc-abcd1234
&FunctionTargets.0.Weight=66
&FunctionTargets.0.Function.FunctionNamespace=ns_test
&FunctionTargets.0.Function.FunctionName=name_test
&FunctionTargets.0.Function.FunctionQualifier=version_test
&<Common request parameters>
```

### Output Example

```
{
  "Response": {
    "RequestId": "11b4338f-2d00-4766-bc67-581d959b3488"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.Length	Wrong parameter length.
MissingParameter	Missing parameter.
ResourceNotFound	Resources do not exist.
UnauthorizedOperation	Unauthorized operation.

# DescribeCrossTargets

최종 업데이트 날짜: : 2023-10-24 11:16:18

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

Queries information of CVMs and ENIs that use cross-region binding 2.0

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeCrossTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Limit	No	Integer	Number of real server lists returned. Default value: 20; maximum value: 100.
Offset	No	Integer	Starting offset of the real server list returned. Default value: 0.
Filters.N	No	Array of <a href="#">Filter</a>	Filter conditions to query CVMs and ENIs <ul style="list-style-type: none"> <li><code>vpc-id</code> - String - Required: No - (Filter condition) Filter by VPC ID, such as "vpc-12345678".</li> <li><code>ip</code> - String - Required: No - (Filter condition) Filter by real server IP, such as "192.168.0.1".</li> <li><code>listener-id</code> - String - Required: No - (Filter condition) Filter by listener ID, such as "lbl-12345678".</li> </ul>

- `location-id` - String - Required: No - (Filter condition) Filter by forwarding rule ID of the layer-7 listener, such as "loc-12345678".

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Total number of real server lists
CrossTargetSet	Array of <a href="#">CrossTargets</a>	Real server list
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying information of CVMs and ENIs that use cross-region binding 2.0

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeCrossTargets
&Offset=0
&Limit=20
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "CrossTargetSet": [
      {
        "LocalVpcId": "vpc-test1234",
        "VpcId": "vpc-test4321",
        "IP": "10.22.106.8",
        "VpcName": "Test",
        "EniId": "eni-test1234",
        "InstanceId": "ins-test1234",
        "InstanceName": "test",
        "Region": "ap-shanghai"
      }
    ]
  }
}
```



```
}
],
"TotalCount": 1,
"RequestId": "7717db32-9080-4391-acd7-18f8bbd0664d"
}
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.

---

InvalidParameterValue.InvalidFilter	Incorrect <code>Filter</code> parameter.
InvalidParameterValue.Length	Wrong parameter length.
InvalidParameterValue.Range	Wrong parameter value range.
UnauthorizedOperation	Unauthorized operation.

# ModifyFunctionTargets

최종 업데이트 날짜: : 2023-10-24 11:16:17

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to modify the cloud functions associated with a load balancing forwarding rule.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyFunctionTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	CLB listener ID
FunctionTargets.N	Yes	Array of <a href="#">FunctionTarget</a>	The backend cloud functions to modify
LocationId	No	String	Forwarding rule ID. When binding a real server to a layer-7 forwarding rule, you must provide either this parameter or <code>Domain + Url</code> .

Domain	No	String	Target rule domain name. This parameter does not take effect if <code>LocationId</code> is specified.
Url	No	String	Target rule URL. This parameter does not take effect if <code>LocationId</code> is specified.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Modifying the cloud functions associated with a forwarding rule

##### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyFunctionTargets
<Common request parameters>

{
  "LocationId": "loc-xxxxxxx",
  "ListenerId": "lbl-xxxxxxx",
  "FunctionTargets": [
    {
      "Function": {
        "FunctionNamespace": "ns_test",
        "FunctionName": "name_test",
        "FunctionQualifier": "version_test"
      },
      "Weight": "66"
    }
  ],
  "LoadBalancerId": "lb-xxxxxxx"
}
```

## Output Example

```
{
  "Response": {
    "RequestId": "85c7b3e8-7fd8-4c62-8b3b-7ba52d7a1dca"
  }
}
```

# 5. Developer Resources

## SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

# 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	CAM signature/authentication error
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.

---

InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
ResourceNotFound	Resources do not exist.
UnauthorizedOperation	Unauthorized operation.

# RegisterFunctionTargets

최종 업데이트 날짜: : 2023-11-14 14:45:54

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to bind an SCF function with the L7 forwarding rule of a CLB instance. Note that you need to create an L7 listener (HTTP, HTTPS) and forwarding rule first.

This is an async API. After it is returned successfully, you can call the `DescribeTaskStatus` API with the returned `RequestID` as an input parameter to check whether this task is successful.

### Limits:

- Binding with SCF is only available in Guangzhou, Shenzhen Finance, Shanghai, Shanghai Finance, Beijing, Chengdu, Hong Kong (China), Singapore, Mumbai, Tokyo, and Silicon Valley.
- SCF functions can only be bound with CLB instances of bill-by-IP accounts but not with bill-by-CVM accounts. If you are using a bill-by-CVM account, we recommend upgrading it to a bill-by-IP account. For more information, please see [Checking Account Type](#).
- SCF functions cannot be bound with classic CLB instances.
- SCF functions cannot be bound with classic network-based CLB instances.
- SCF functions in the same region can be bound with CLB instances. SCF functions can only be bound across VPCs but not regions.
- SCF functions can only be bound with IPv4 and IPv6 NAT64 CLB instances, but currently not with IPv6 CLB instances.
- SCF functions can only be bound with layer-7 HTTP and HTTPS listeners, but not with layer-7 QUIC listeners or layer-4 (TCP, UDP, and TCP SSL) listeners.
- Only SCF event-triggered functions can be bound with CLB instances.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RegisterFunctionTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID.
ListenerId	Yes	String	CLB listener ID.
FunctionTargets.N	Yes	Array of <a href="#">FunctionTarget</a>	SCF functions to be bound.
LocationId	No	String	ID of the target forwarding rule. To bind an SCF function to a L7 forwarding rule, this parameter or <code>Domain+Url</code> is required.
Domain	No	String	Domain name of the target forwarding rule. It is ignored if <code>LocationId</code> is specified.
Url	No	String	URL of the target forwarding rule. It is ignored if <code>LocationId</code> is specified.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Binding an SCF function with a forwarding rule



This example shows you how to bind an SCF function to the L7 forwarding rule of a load balancer.

### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RegisterFunctionTargets
<Common request parameters>

{
  "LocationId": "loc-abcd1234",
  "ListenerId": "lbl-dlub****",
  "FunctionTargets": [
    {
      "Function": {
        "FunctionNamespace": "ns_test",
        "FunctionName": "name_test",
        "FunctionQualifier": "version_test"
      },
      "Weight": "66"
    }
  ],
  "LoadBalancerId": "lb-cuxw****"
}
```

### Output Example

```
{
  "Response": {
    "RequestId": "11b4338f-2d00-4766-bc67-581d959b3488"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)

- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.
InvalidParameter.LocationNotFound	Unable to find eligible forwarding rules.
InvalidParameter.ProtocolCheckFailed	Listener protocol checks failed because the protocol used is incompatible with the corresponding operation.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
ResourceNotFound	Resources do not exist.

---

Error Code	Description
UnauthorizedOperation	Unauthorized operation.

# DescribeTargets

최종 업데이트 날짜: : 2023-10-24 11:16:18

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (DescribeTargets) is used to query the list of real servers bound to some listeners of a CLB instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID.
ListenerIds.N	No	Array of String	List of listener IDs (20 IDs at most).
Protocol	No	String	Listener protocol type
Port	No	Integer	Listener port
Filters.N	No	Array of <a href="#">Filter</a>	Query the list of backend services associated with a load balancer <ul style="list-style-type: none"> <li><code>location-id</code> - String - Optional - Rule ID, such as "loc-12345678".</li> </ul>

- `private-ip-address` - String - Optional - Backend service private IP, such as `172.16.1.1`

### 3. Output Parameters

Parameter Name	Type	Description
Listeners	Array of <a href="#">ListenerBackend</a>	Information of real servers bound to the listener Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying all backend services bound to a CLB instance

This example shows you how to query all real servers bound to a CLB instance.

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeTargets
&LoadBalancerId=lb-10iq9lou
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "Listeners": [
      {
        "ListenerId": "lbl-4fo6k8na",
        "Protocol": "HTTP",
        "Port": 80,
        "Rules": [
          {
            "LocationId": "loc-o9732aw0",
            "Domain": "www.123.com",
            "Url": "/"
          }
        ]
      }
    ]
  }
}
```

```
"Targets": [
  {
    "Type": "cvm",
    "PrivateIpAddresses": [
      "172.16.0.12"
    ],
    "EniId": "",
    "PublicIpAddresses": null,
    "InstanceName": "abcd1234",
    "Port": 555,
    "Weight": 10,
    "InstanceId": "ins-19425y2y",
    "RegisteredTime": "2019-07-12 16:22:02"
  }
],
"FunctionTargets": []
},
"Targets": null
},
{
  "ListenerId": "lbl-4ue2rp12",
  "Protocol": "TCP",
  "Port": 888,
  "Rules": null,
  "Targets": [
    {
      "Type": "cvm",
      "PrivateIpAddresses": [
        "172.16.0.12"
      ],
      "EniId": "",
      "PublicIpAddresses": null,
      "InstanceName": "abcd1234",
      "Port": 666,
      "Weight": 40,
      "InstanceId": "ins-19425y2y",
      "RegisteredTime": "2019-07-12 16:22:54"
    }
  ]
}
],
"RequestId": "a5cbe92d-c7f2-41d4-8343-3cb42c3fd1dd"
}
```

## Example2 Querying backend services by the rule ID

This example shows you to query backend services associated with a rule by specifying the rule ID ( `location-id` ).

### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeTargets
&LoadBalancerId=lb-12345678
&Filters.0.Name=location-id
&Filters.0.Values.0=loc-12345678
&<Common request parameters>
```

### Output Example

```
{
  "Response": {
    "Listeners": [
      {
        "ListenerId": "lbl-12345678",
        "Protocol": "HTTP",
        "Port": 80,
        "Rules": [
          {
            "LocationId": "loc-12345678",
            "Domain": "123.com",
            "Url": "/",
            "Targets": [
              {
                "Type": "CVM",
                "InstanceId": "ins-12345678",
                "Port": 80,
                "Weight": 10,
                "PublicIpAddresses": null,
                "PrivateIpAddresses": [
                  "172.16.0.100"
                ],
                "InstanceName": "123",
                "RegisteredTime": "2023-01-01",
                "EniId": "eni-12345678"
              }
            ],
            "FunctionTargets": null
          }
        ],
        "Targets": null,

```

```
"EndPort": 0
}
],
"RequestId": "038afb75-7303-48da-abdc-e25f0cbfda0f"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.



---

InvalidParameterValue.InvalidFilter	Incorrect <code>Filter</code> parameter.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.
UnsupportedOperation	Unsupported operation.

# Target Group APIs

## DescribeTargetGroups

최종 업데이트 날짜: : 2023-10-24 11:16:01

### 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the target group information.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeTargetGroups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TargetGroupIds.N	No	Array of String	Target group ID, which is exclusive of <code>Filters</code> .
Limit	No	Integer	Limit of the number of displayed results. Default value: 20.
Offset	No	Integer	Starting display offset
Filters.N	No	Array of	Filter array, which is exclusive of <code>TargetGroupIds</code> . Valid values: <code>TargetGroupVpcId</code> and <code>TargetGroupName</code> .

[Filter](#)

### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of displayed results
TargetGroupSet	Array of <a href="#">TargetGroupInfo</a>	Information set of displayed target groups
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying target groups by IDs

This example shows you how to query target groups by IDs

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeTargetGroups
<Common request parameters>

{
  "TargetGroupIds": [
    "lbtg-5xunivs0"
  ]
}
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 1,
    "RequestId": "6a932437-5ce7-4c30-a4ce-7076ef654dcd",
    "TargetGroupSet": [
```

```
{
  "UpdatedTime": "2020-09-22 00:00:00",
  "TargetGroupId": "lbtg-xxxxxxx",
  "VpcId": "vpc-xxxxxxx",
  "CreatedTime": "2020-09-22 00:00:00",
  "AssociatedRule": [
    {
      "Domain": "www.xxxx.com",
      "Protocol": "TCP",
      "Url": "/xxxx",
      "LoadBalancerName": "test_xxx",
      "ListenerId": "lbl-xxxxxxx",
      "LocationId": "loc-xxxxxxx",
      "ListenerName": "test_xxx",
      "LoadBalancerId": "lb-xxxxxxx",
      "Port": 80
    },
    {
      "Domain": "www.xxxx.com",
      "Protocol": "TCP",
      "Url": "/xxxx",
      "LoadBalancerName": "test_xxx",
      "ListenerId": "lbl-xxxxxxx",
      "LocationId": "loc-xxxxxxx",
      "ListenerName": "test_xxx",
      "LoadBalancerId": "lb-xxxxxxx",
      "Port": 801
    }
  ],
  "Port": 1,
  "TargetGroupName": "test_xxxx"
}
```

## Example2 Querying target group information by filter

This example shows you how to query target groups.

### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeTargetGroups
```

<Common request parameters>

```
{
  "Filters": [
    {
      "Values": [
        "vpc-i1cnjuhx"
      ],
      "Name": "TargetGroupVpcId"
    }
  ]
}
```

## Output Example

```
{
  "Response": {
    "TotalCount": 3,
    "TargetGroupSet": [
      {
        "TargetGroupId": "lbtg-5xunivs0",
        "VpcId": "vpc-i1cnjuhx",
        "TargetGroupName": "tg111_for_l4",
        "Port": 111,
        "CreatedTime": "2019-07-14 16:18:43",
        "UpdatedTime": "2019-07-14 16:18:43",
        "AssociatedRule": [
          {
            "LocationId": "loc-jjqr0ric",
            "Domain": "aaaa.com",
            "Url": "/",
            "ListenerId": "lbl-m2q6sp9m",
            "Port": 80,
            "Protocol": "http",
            "LoadBalancerId": "lb-phbx2420",
            "LoadBalancerName": "lb-12f60e5",
            "ListenerName": "aaa"
          },
          {
            "LocationId": null,
            "Domain": null,
            "Url": null,
            "ListenerId": "lbl-ow27ut6y",
            "Port": 777,
            "Protocol": "tcp",
            "LoadBalancerId": "lb-phbx2420",

```

```
"LoadBalancerName": "lb-12f60e5",
"ListenerName": "asdfsdf"
}
],
},
{
"TargetGroupId": "lbtg-dxnp10nc",
"VpcId": "vpc-i1cnjuhx",
"TargetGroupName": "tg111_for_141563508267",
"Port": 111,
"CreatedTime": "2019-07-19 11:51:08",
"UpdatedTime": "2019-07-19 11:51:07",
"AssociatedRule": []
},
{
"TargetGroupId": "lbtg-bjfi6nt6",
"VpcId": "vpc-i1cnjuhx",
"TargetGroupName": "tg111_for_141563508507",
"Port": 111,
"CreatedTime": "2019-07-19 11:55:08",
"UpdatedTime": "2019-07-19 11:55:08",
"AssociatedRule": []
}
],
"RequestId": "412c7de5-47f6-4153-bf1b-77ef37e15244"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# DescribeTargetGroupList

최종 업데이트 날짜: : 2023-10-24 11:16:01

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to get the target group list.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeTargetGroupList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TargetGroupIds.N	No	Array of String	Target group ID array
Filters.N	No	Array of <a href="#">Filter</a>	Filter array, which is exclusive of <code>TargetGroupIds</code> . Valid values: <code>TargetGroupVpcId</code> and <code>TargetGroupName</code> . Target group ID will be used first.
Offset	No	Integer	Starting display offset
Limit	No	Integer	Limit of the number of displayed results. Default value: 20.



### 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of displayed results
TargetGroupSet	Array of <a href="#">TargetGroupInfo</a>	Information set of displayed target groups
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the list of target groups

This example shows you how to query the list of target groups.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeTargetGroupList
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 2,
    "TargetGroupSet": [
      {
        "TargetGroupId": "lbtg-pcsv4t9o",
        "VpcId": "vpc-i1cnjuhx",
        "TargetGroupName": "czh_vpc0",
        "Port": 443,
        "CreatedTime": "2019-07-30 16:04:22",
        "UpdatedTime": "2019-07-30 16:04:22",
        "AssociatedRule": null
      },
      {
        "TargetGroupId": "lbtg-5xunivs0",
        "VpcId": "vpc-i1cnjuhx",
        "TargetGroupName": "kkkkk",

```

```
"Port": 19999,
"CreatedTime": "2019-07-14 16:18:43",
"UpdatedTime": "2019-07-29 11:37:10",
"AssociatedRule": null
}
],
"RequestId": "ed30f949-2bea-48a6-8ba0-7f2f33743d4d"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
InternalServerError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.

---

InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# DescribeTargetGroupInstances

최종 업데이트 날짜: : 2023-10-24 11:16:01

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to get the information of servers bound to a target group.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeTargetGroupInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Filters.N	Yes	Array of <a href="#">Filter</a>	Filter. Currently, only filtering by <code>TargetGroupId</code> , <code>BindIP</code> , or <code>InstanceId</code> is supported.
Limit	No	Integer	Number of displayed results. Default value: 20
Offset	No	Integer	Display offset. Default value: 0

## 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Number of results returned for the current query
TargetGroupInstanceSet	Array of <a href="#">TargetGroupBackend</a>	Information of the bound server
RealCount	Integer	The actual total number of bound instances, which is not affected by the setting of <code>Limit</code> , <code>Offset</code> and the CAM permissions.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the servers bound to a target group

This example shows you how to query the servers bound to a target group.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeTargetGroupInstances
&Filters.0.Name=TargetGroupId
&Filters.0.Values.0=lbtg-5xunivs0
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 2,
    "TargetGroupInstanceSet": [
      {
        "TargetGroupId": "lbtg-5xunivs0",
        "Type": "CVM",
        "InstanceId": "ins-197234qt",
        "InstanceName": "Not named",
        "Port": 3333,
        "Weight": 43,
        "PublicIpAddresses": [],
        "PrivateIpAddresses": [
          "172.16.0.32"
        ],
      }
    ],
  }
}
```

```
"EniId": null,
"RegisteredTime": "2019-07-24 20:02:43"
},
{
"TargetGroupId": "lbtg-5xunivs0",
"Type": "CVM",
"InstanceId": "ins-197234qt",
"InstanceName": "Not named",
"Port": 2222,
"Weight": 55,
"PublicIpAddresses": [],
"PrivateIpAddresses": [
"172.16.0.32"
],
"EniId": null,
"RegisteredTime": "2019-07-23 21:01:08"
}
],
"RealCount": 2,
"RequestId": "94240d7f-8bc1-422a-81b9-5ea76d486a66"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# CreateTargetGroup

최종 업데이트 날짜: : 2023-10-24 11:16:02

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to create a target group. This feature is in beta test, if you want to try it out, please [submit a ticket](#).

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateTargetGroup.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TargetGroupName	No	String	Target group name (up to 50 characters)
VpcId	No	String	<code>vpcid</code> attribute of a target group. If this parameter is left empty, the default VPC will be used.
Port	No	Integer	Default port of a target group, which can be used for subsequently added servers.
TargetGroupInstances.N	No	Array of	Real server bound to a target group



		TargetGroupInstance	
--	--	---------------------	--

### 3. Output Parameters

Parameter Name	Type	Description
TargetGroupId	String	ID generated after target group creation
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating a target group

This example shows you how to create a target group.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateTargetGroup
<Common request parameters>

{
  "VpcId": "vpc-i1cnjuhx",
  "Port": "80",
  "TargetGroupName": "czhtest"
}
```

#### Output Example

```
{
  "Response": {
    "TargetGroupId": "lbtg-81*****",
    "RequestId": "9a4096dd-45a1-4e03-be8e-482a2fb48b59"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	Quota exceeded.
UnauthorizedOperation	Unauthorized operation.

# ModifyTargetGroupAttribute

최종 업데이트 날짜: : 2023-10-24 11:16:00

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to rename a target group or modify its default port attribute.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyTargetGroupAttribute.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TargetGroupId	Yes	String	Target group ID
TargetGroupName	No	String	New name of target group
Port	No	Integer	New default port of target group

## 3. Output Parameters

Parameter	Type	Description
-----------	------	-------------

Name		
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Renaming a target group

Renams a target group

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyTargetGroupAttribute
<Common request parameters>

{
  "TargetGroupId": "lbtg-815iz538",
  "TargetGroupName": "xxxxholic"
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "73d80971-512f-400e-9c73-c0c135c04871"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)

- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# ModifyTargetGroupInstancesWeight

최종 업데이트 날짜: : 2023-10-24 11:16:00

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to modify server weights of a target group in batches.

This is an async API. After it is returned successfully, you can call the `DescribeTaskStatus` API with the returned `RequestID` as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyTargetGroupInstancesWeight.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TargetGroupId	Yes	String	Target group ID
TargetGroupInstances.N	Yes	Array of <a href="#">TargetGroupInstance</a>	Array of servers for which to modify weights

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Modifying server weights of target groups in batches

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=ModifyTargetGroupInstancesWeight
&TargetGroupId=lbtg-815iz538
&TargetGroupInstances.0.BindIP=172.16.0.34
&TargetGroupInstances.0.Port=1234
&TargetGroupInstances.0.Weight=55
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "ed90470e-eade-423f-aae6-264d814d0d65"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)

- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.



# ModifyTargetGroupInstancesPort

최종 업데이트 날짜: : 2023-10-24 11:16:00

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to modify server ports of a target group in batches.

This is an async API. After it is returned successfully, you can call the `DescribeTaskStatus` API with the returned `RequestID` as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyTargetGroupInstancesPort.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TargetGroupId	Yes	String	Target group ID
TargetGroupInstances.N	Yes	Array of <a href="#">TargetGroupInstance</a>	Array of servers for which to modify ports

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Modifying server ports in batches

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=ModifyTargetGroupInstancesPort
&TargetGroupId=lbtg-815iz538
&TargetGroupInstances.0.BindIP=172.16.0.34
&TargetGroupInstances.0.Port=123
&TargetGroupInstances.0.NewPort=2233
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "15566c73-3881-4762-939f-bae9ecf25808"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)

- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	Quota exceeded.
UnauthorizedOperation	Unauthorized operation.

# DeleteTargetGroups

최종 업데이트 날짜: : 2023-10-24 11:16:01

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to delete a target group.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteTargetGroups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TargetGroupIds.N	Yes	Array of String	Target group ID array

## 3. Output Parameters

Parameter Name	Type	Description

RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.
-----------	--------	--

## 4. Example

### Example1 Deleting target groups

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeleteTargetGroups
&TargetGroupIds.0=lbtg-f1phe5j6
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "4e0ec156-655b-47e4-a483-a954b632a49a"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# RegisterTargetGroupInstances

최종 업데이트 날짜: : 2023-10-24 11:16:00

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to register servers to a target group.

This is an async API. After it is returned successfully, you can call the `DescribeTaskStatus` API with the returned `RequestID` as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RegisterTargetGroupInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TargetGroupId	Yes	String	Target group ID
TargetGroupInstances.N	Yes	Array of <a href="#">TargetGroupInstance</a>	Server instance array

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Adding server to target group

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=RegisterTargetGroupInstances
&TargetGroupId=lbtg-815iz538
&TargetGroupInstances.0.BindIP=172.16.0.34
&TargetGroupInstances.0.Port=443
&TargetGroupInstances.0.Weight=10
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "acf6c2b3-b18d-4d2e-91e4-4eacff16c07e"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)



- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	Quota exceeded.
UnauthorizedOperation	Unauthorized operation.

# AssociateTargetGroups

최종 업데이트 날짜: : 2023-10-24 11:16:02

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to bind target groups to CLB listeners (layer-4 protocol) or forwarding rules (layer-7 protocol).

This is an async API. After it is returned successfully, you can call the `DescribeTaskStatus` API with the returned `RequestID` as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: AssociateTargetGroups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Associations.N	Yes	Array of <a href="#">TargetGroupAssociation</a>	Association array

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Binding layer-7 forwarding rules to target groups

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=AssociateTargetGroups
&Associations.0.LoadBalancerId=lb-phbx2420
&Associations.0.ListenerId=lbl-m2q6sp9m
&Associations.0.LocationId=loc-jjqr0ric
&Associations.0.TargetGroupId=lbtg-5xunivs0
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "dd2f3116-421c-4eda-8401-b9ddefcc65d5"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)

- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	Quota exceeded.
UnauthorizedOperation	Unauthorized operation.

# DeregisterTargetGroupInstances

최종 업데이트 날짜: : 2023-10-24 11:16:01

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to unbind a server from a target group.

This is an async API. After it is returned successfully, you can call the API `DescribeTaskStatus` with the returned RequestId as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeregisterTargetGroupInstances.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TargetGroupId	Yes	String	Target group ID
TargetGroupInstances.N	Yes	Array of <a href="#">TargetGroupInstance</a>	Information of server to be unbound

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Unbinding a server from a target group

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeregisterTargetGroupInstances
&TargetGroupId=lbtg-815iz538
&TargetGroupInstances.0.BindIP=172.16.0.34
&TargetGroupInstances.0.Port=1234
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "4b4987ca-58d0-4bad-9ded-344fa4011bda"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)

- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# DisassociateTargetGroups

최종 업데이트 날짜: : 2023-10-24 11:16:00

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to unbind target groups from a rule.

This is an async API. After it is returned successfully, you can call the `DescribeTaskStatus` API with the returned `RequestID` as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DisassociateTargetGroups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Associations.N	Yes	Array of <a href="#">TargetGroupAssociation</a>	Array of rules to be unbound

## 3. Output Parameters



Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Unbinding rules from target groups

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DisassociateTargetGroups
&Associations.0.LoadBalancerId=lb-phbx2420
&Associations.0.ListenerId=lbl-m2q6sp9m
&Associations.0.LocationId=loc-jjqr0ric
&Associations.0.TargetGroupId=lbtg-xxqr0ric
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "bc953deb-02d7-4bd3-86a6-80421ec37776"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)

- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# Redirection APIs

## DescribeRewrite

최종 업데이트 날짜: : 2023-10-24 11:16:02

### 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (DescribeRewrite) is used to query the redirection relationship between the forwarding rules of a CLB instance by instance ID. If no listener ID or forwarding rule ID is specified, all redirection relationships in the instance will be returned.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeRewrite.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
SourceListenerIds.N	No	Array of String	Array of CLB listener IDs

SourceLocationIds.N	No	Array of String	Array of CLB forwarding rule IDs
---------------------	----	-----------------	----------------------------------

### 3. Output Parameters

Parameter Name	Type	Description
RewriteSet	Array of <a href="#">RuleOutput</a>	Array of redirection forwarding rules. If there are no redirection rules, an empty array will be returned.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the redirection relationship by a specified forwarding rule ID

This example shows you how to query redirection relationship by a specified forwarding rule ID.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeRewrite
&LoadBalancerId=lb-qc2iq5yc
&SourceListenerIds.0=lbl-j36caqde
&SourceLocationIds.0=loc-5t7526km
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RewriteSet": [
      {
        "TargetType": "Node",
        "DefaultServer": false,
        "Certificate": {
          "SSLMode": "UNIDIRECTIONAL",
          "CertCaId": "xx",
          "CertId": "xx",
          "ExtCertIds": [
            "xx"
          ]
        }
      }
    ]
  }
}
```

```
]
},
"TrpcCallee": "abc",
"ListenerId": "lbl-xxxxxxx",
"WafDomainId": "xx",
"HttpGzip": true,
"Scheduler": "WRR",
"TargetGroupList": [
{
"TargetGroupId": "lbtg-xxxxxxx",
"TargetGroupName": "testGroup"
}
],
"TargetGroup": {
"TargetGroupId": "lbtg-xxxxxxx",
"TargetGroupName": "testGroup"
},
"Url": "/",
"HealthCheck": {
"RecvContext": "test",
"HealthSwitch": 1,
"HttpCheckPath": "/check",
"HttpCheckMethod": "head",
"UnHealthNum": 3,
"IntervalTime": 5,
"HttpCode": 15,
"SourceIpType": 0,
"CheckPort": 0,
"ContextType": "HTTP",
"HttpCheckDomain": "test.xxx.com",
"ExtendedCode": "12",
"HealthNum": 3,
"TimeOut": 2,
"CheckType": "TCP ",
"SendContext": "abc",
"HttpVersion": "HTTP/1.0"
},
"TrpcFunc": "trpcfunc_xxx",
"Http2": false,
"Domains": [
"test.abc.com"
],
"BeAutoCreated": false,
"Domain": "test.abc.com",
"ForwardType": "HTTP",
"RewriteTarget": {
"TargetListenerId": "lbl-xxxxxxx",
```

```
"RewriteType": "Manual",
"RewriteCode": 0,
"TargetLocationId": "loc-xxxxxxxx",
"TakeUrl": true
},
"QuicStatus": "OFF",
"LocationId": "loc-xxxxxxxx",
"SessionExpireTime": 0,
"CreateTime": "2022-03-23 10:37:16"
}
],
"RequestId": "63bee47c-2bf9-4909-a8f7-67495dfe7b42"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description

FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
ResourceNotFound	Resources do not exist.
UnauthorizedOperation	Unauthorized operation.

# ManualRewrite

최종 업데이트 날짜: : 2023-10-24 11:16:02

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

After the original access address and the address to be redirected are configured manually, the system will automatically redirect requests made to the original access address to the target address of the corresponding path. Multiple paths can be configured as a redirection policy under one domain name to achieve automatic redirection between HTTP and HTTPS. A redirection policy should meet the following rules: if A has already been redirected to B, then it cannot be redirected to C (unless the original redirection relationship is deleted and a new one is created), and B cannot be redirected to any other addresses.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ManualRewrite.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
SourceListenerId	Yes	String	Source listener ID



TargetListenerId	Yes	String	Target listener ID
RewriteInfos.N	Yes	Array of <a href="#">RewriteLocationMap</a>	Redirection relationship between forwarding rules

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Manually adding a redirection relationship

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=ManualRewrite
&LoadBalancerId=lb-r6nx1iby
&SourceListenerId=lbl-cy6akv52
&TargetListenerId=lbl-cy6ak123
&RewriteInfos.0.SourceLocationId=loc-2jkimjn0
&RewriteInfos.0.TargetLocationId=loc-eu15yo84
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "RequestId": "fc0ed756-c311-41c8-a22d-64f88a346951"
  }
}
```

### 5. Developer Resources

#### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
FailedOperation.InvalidLBStatus	Exceptional CLB instance status
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.
InvalidParameter.LocationNotFound	Unable to find eligible forwarding rules.
InvalidParameter.ProtocolCheckFailed	Listener protocol checks failed because the protocol used is incompatible with the corresponding operation.
InvalidParameter.RewriteAlreadyExist	The forwarding rule has already been bound to a redirection relationship.

---

InvalidParameter.SomeRewriteNotFound	Some redirection rules do not exist.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# AutoRewrite

최종 업데이트 날짜: : 2023-10-24 11:16:03

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

An HTTPS:443 listener needs to be created first, along with a forwarding rule. When this API is called, an HTTP:80 listener will be created automatically if it did not exist and a forwarding rule corresponding to `Domains` (specified in the input parameter) under the HTTPS:443 listener will also be created. After successful creation, access requests to an HTTP:80 address will be redirected to an HTTPS:443 address automatically.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: AutoRewrite.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	Yes	String	<code>HTTPS:443</code> listener ID
Domains.N	No	Array of String	The domain name to be redirected under the listener <code>HTTPS:443</code> . If it is left empty, all domain names under the listener <code>HTTPS:443</code> will be configured with redirects.

RewriteCodes.N	No	Array of Integer	Redirection status code. Valid values: 301, 302, and 307.
TakeUrls.N	No	Array of Boolean	Whether the matched URL is carried in redirection.

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Automatically generating a redirection relationship

`lb1-lmeeyb1q` is an HTTPS:443 listener. `www.abc.com` is a domain name of a forwarding rule under this listener.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=AutoRewrite
&LoadBalancerId=lb-r6nx1iby
&ListenerId=lb1-lmeeyb1q
&Domains.0=www.abc.com
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "e351bfdb-147a-4648-b9fe-bbcacff68789"
  }
}
```

### 5. Developer Resources

## SDK

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- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
FailedOperation.InvalidLBStatus	Exceptional CLB instance status
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.
InvalidParameter.LocationNotFound	Unable to find eligible forwarding rules.
InvalidParameter.PortCheckFailed	Listener port checks failed due to port conflicts or other reasons.
InvalidParameter.ProtocolCheckFailed	Listener protocol checks failed because the protocol used is incompatible with the corresponding operation.

InvalidParameter.RewriteAlreadyExist	The forwarding rule has already been bound to a redirection relationship.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# DeleteRewrite

최종 업데이트 날짜: : 2023-10-24 11:16:02

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (DeleteRewrite) is used to delete the redirection relationship between the specified forwarding rules.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteRewrite.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
SourceListenerId	Yes	String	Source listener ID
TargetListenerId	Yes	String	Target listener ID
RewriteInfos.N	Yes	Array of <a href="#">RewriteLocationMap</a>	Redirection relationship between forwarding rules



## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Batch deleting redirection relationships

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeleteRewrite
&LoadBalancerId=lb-r6nx1iby
&SourceListenerId=lbl-cy6akv52
&TargetListenerId=lbl-g14o899k
&RewriteInfos.0.SourceLocationId=loc-2jkimjn0
&RewriteInfos.0.TargetLocationId=loc-bmsddozm
&RewriteInfos.1.SourceLocationId=loc-eu15yo84
&RewriteInfos.1.TargetLocationId=loc-bmsddozm
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "4fcf51ca-fde7-4064-beff-cc46dd151f73"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
FailedOperation.InvalidLBStatus	Exceptional CLB instance status
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.SomeRewriteNotFound	Some redirection rules do not exist.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

## Other APIs

# ModifyLoadBalancersProject

최종 업데이트 날짜: : 2023-10-24 11:16:03

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to modify the projects of CLB instances.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyLoadBalancersProject.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerIds.N	Yes	Array of String	IDs of CLB instances ID(s).
ProjectId	Yes	Integer	Project ID

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Modifying the CLB project

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=ModifyLoadBalancersProject
&LoadBalancerIds.0=lb-1234abcd
&LoadBalancerIds.1=lb-5678wwqq
&ProjectId=1122
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "83129908-a282-4f9f-8ab-131a3025ba11"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.

# InquiryPriceCreateLoadBalancer

최종 업데이트 날짜: : 2023-10-24 11:16:04

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the price of creating a CLB instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: InquiryPriceCreateLoadBalancer.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerType	Yes	String	Network type of the CLB to query. <code>OPEN</code> : Public network; <code>INTERNAL</code> : Private network is intranet type
LoadBalancerChargeType	Yes	String	The billing mode to query. <code>POSTPAID</code> :Pay as you go
LoadBalancerChargePrepaid	No	<a href="#">LBChargePrepaid</a>	Reserved field
InternetAccessible	No	<a href="#">InternetAccessible</a>	The network billing mode to query

GoodsNum	No	Integer	Number of CLB instances to query. Default value: 1.
Zoneld	No	String	Availability zone in the format of "ap-guangzhou-1"
SlaType	No	String	To query the price of monthly subscribed LCU-supported instances, specify the instance specification in this parameter, such as <code>clb.c3.small</code> . For PAYG instances, use <code>SLA</code> .
AddressIPVersion	No	String	IP version. Valid values: <code>IPV4</code> (default), <code>IPV6</code> (IPV6 NAT64 version) or <code>IPV6FullChain</code> (IPV6 version).
Viplsp	No	String	ISP of VIP. Values: <code>CMCC</code> (China Mobile), <code>CUCC</code> (China Unicom) and <code>CTCC</code> (China Telecom). You need to activate static single-line IPs. This feature is in beta and is only available in Guangzhou, Shanghai, Nanjing, Jinan, Hangzhou, Fuzhou, Beijing, Shijiazhuang, Wuhan, Changsha, Chengdu and Chongqing regions. To try it out, please contact your sales rep. If it's specified, the network billing mode must be <code>BANDWIDTH_PACKAGE</code> . If it's not specified, BGP is used by default. To query ISPs supported in a region, please use <a href="#">DescribeResources</a> .

### 3. Output Parameters

Parameter Name	Type	Description
Price	<a href="#">Price</a>	Price of the instance with the specified configurations.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the traffic-based network pricing of creating a PAYG CLB instance

This example shows you how to query the traffic-based network pricing of creating a PAYG CLB instance.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=InquiryPriceCreateLoadBalancer
&LoadBalancerType=OPEN
&LoadBalancerChargeType=POSTPAID
&InternetAccessible.InternetChargeType=TRAFFIC_POSTPAID_BY_HOUR
&InternetAccessible.InternetMaxBandwidthOut=1
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "Price": {
      "InstancePrice": {
        "UnitPrice": 0.02,
        "ChargeUnit": "HOURL",
        "OriginalPrice": null,
        "DiscountPrice": null
      },
      "BandwidthPrice": {
        "UnitPrice": 0.8,
        "ChargeUnit": "GB",
        "OriginalPrice": null,
        "DiscountPrice": null
      },
      "LcuPrice": null
    },
    "RequestId": "f4953b5c-990c-49fa-9937-7aebef241d42"
  }
}
```

### Example2 Querying the bandwidth-based network pricing of creating a PAYG CLB instance

This example shows you how to query the bandwidth-based network pricing of creating a PAYG CLB instance.

#### Input Example



```
https://clb.tencentcloudapi.com/?Action=InquiryPriceCreateLoadBalancer
&LoadBalancerType=OPEN
&LoadBalancerChargeType=POSTPAID
&InternetAccessible.InternetChargeType=BANDWIDTH_POSTPAID_BY_HOUR
&InternetAccessible.InternetMaxBandwidthOut=1
&<Common request parameters>
```

## Output Example

```
{
  "Response": {
    "Price": {
      "InstancePrice": {
        "UnitPrice": 0.02,
        "ChargeUnit": "HOURLY",
        "OriginalPrice": null,
        "DiscountPrice": null
      },
      "BandwidthPrice": {
        "UnitPrice": 0.04,
        "ChargeUnit": "HOURLY",
        "OriginalPrice": null,
        "DiscountPrice": null
      },
      "LcuPrice": null
    },
    "RequestId": "835f9cd8-6af1-4ac6-8fc3-2a9f900b7fff"
  }
}
```

## Example3 Querying the bandwidth package price of creating a PAYG CLB instance

This example shows you how to query the bandwidth package price of creating a PAYG CLB instance.

## Input Example

```
https://clb.tencentcloudapi.com/?Action=InquiryPriceCreateLoadBalancer
&LoadBalancerType=OPEN
&LoadBalancerChargeType=POSTPAID
&GoodsNum=1
&InternetAccessible.InternetChargeType=BANDWIDTH_PACKAGE
&InternetAccessible.BandwidthpkgSubType=SINGLEISP
&<Common request parameters>
```

## Output Example

```
{
  "Response": {
    "Price": {
      "InstancePrice": {
        "UnitPrice": 0.02,
        "ChargeUnit": "HOURLY",
        "OriginalPrice": null,
        "DiscountPrice": null
      },
      "BandwidthPrice": {
        "UnitPrice": 48,
        "ChargeUnit": "Mbps/MONTH",
        "OriginalPrice": null,
        "DiscountPrice": null
      },
      "LcuPrice": null
    },
    "RequestId": "19a2e45d-ed96-4f60-a954-99a4d41752f3"
  }
}
```

## Example4 Query the price to create a monthly-subscribed CLB instance

This example shows you how to query the price to create a monthly-subscribed CLB instance.

## Input Example

```
https://clb.tencentcloudapi.com/?Action=InquiryPriceCreateLoadBalancer
&LoadBalancerType=OPEN
&LoadBalancerChargeType=PREPAID
&GoodsNum=1
&InternetAccessible.InternetChargeType=BANDWIDTH_PREPAID
&InternetAccessible.InternetMaxBandwidthOut=1
&LoadBalancerChargePrepaid.Period=1
&<Common request parameters>
```

## Output Example

```
{
  "Response": {
    "Price": {
      "BandwidthPrice": null,
      "InstancePrice": {
```

```
"OriginalPrice": 37.4,
"DiscountPrice": 37.4,
"UnitPrice": null,
"ChargeUnit": null
},
"LcuPrice": null
},
"RequestId": "52f22ea7-3592-4ff0-9d63-a5cc14b79859"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.

---

InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# InquiryPriceModifyLoadBalancer

최종 업데이트 날짜: : 2023-10-24 11:16:04

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the price of adjusting the specification of a CLB instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: InquiryPriceModifyLoadBalancer.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
InternetAccessible	Yes	<a href="#">InternetAccessible</a>	New bandwidth bandwidth specification

## 3. Output Parameters

Parameter	Type	Description
-----------	------	-------------

Name		
Price	<a href="#">Price</a>	Pricing information
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the price of adjusting the bandwidth of a CLB instance

This example shows you how to query the price of adjusting the bandwidth of a CLB instance.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=InquiryPriceModifyLoadBalancer
&LoadBalancerId=lb-dr0mo6w4
&InternetAccessible.InternetChargeType=BANDWIDTH_PREPAID
&InternetAccessible.InternetMaxBandwidthOut=20
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "Price": {
      "BandwidthPrice": null,
      "InstancePrice": {
        "OriginalPrice": 4494.57,
        "DiscountPrice": 4494.57,
        "UnitPrice": null,
        "ChargeUnit": null
      }
    },
    "RequestId": "4c588312-edeb-4ea0-b8a4-b3024d9b8043"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# InquiryPriceRenewLoadBalancer

최종 업데이트 날짜: : 2023-10-24 11:16:04

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the price of renewing a CLB instance. It's only available to prepaid CLB instances.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: InquiryPriceRenewLoadBalancer.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
LoadBalancerChargePrepaid	Yes	<a href="#">LBChargePrepaid</a>	Renewal period

## 3. Output Parameters

Parameter	Type	Description
-----------	------	-------------



Name		
Price	Price	Price to renew
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the price of renewing a prepaid subscribed CLB instance

This example shows you how to query the price of renewing a prepaid subscribed CLB instance.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=InquiryPriceRenewLoadBalancer
&LoadBalancerId=lb-dr0mo6w4
&LoadBalancerChargePrepaid.Period=1
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "Price": {
      "BandwidthPrice": null,
      "InstancePrice": {
        "OriginalPrice": 37.4,
        "DiscountPrice": 37.4,
        "UnitPrice": null,
        "ChargeUnit": null
      }
    },
    "RequestId": "2eff0c82-61a2-48e5-ae17-2037901dd17c"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
UnauthorizedOperation	Unauthorized operation.

# DescribeLoadBalancerTraffic

최종 업데이트 날짜: : 2023-10-24 11:16:09

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query CLB instances with high traffic under the current account, and return the top 10 results. For queries using a sub-account, only the CLB instances authorized to the sub-account will be returned.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeLoadBalancerTraffic.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerRegion	No	String	CLB instance region. If this parameter is not passed in, CLB instances in all regions will be returned.

## 3. Output Parameters

Parameter Name	Type	Description
LoadBalancerTraffic	Array of	Information of CLB instances sorted by outbound bandwidth

	<a href="#">LoadBalancerTraffic</a>	from highest to lowest Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying CLB instances with high traffic under the current account.

This example shows you how to query CLB instances with high traffic under the current account.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeLoadBalancerTraffic
&LoadBalancerRegion=ap-guangzhou
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "LoadBalancerTraffic": [
      {
        "LoadBalancerId": "lb-xxxxxx",
        "LoadBalancerName": "lb-name1",
        "Region": "ap-guangzhou",
        "Vip": "1.1.1.1",
        "OutBandwidth": 177.083
      },
      {
        "LoadBalancerId": "lb-kxyz2",
        "LoadBalancerName": "lb-xyzname",
        "Region": "ap-guangzhou",
        "Vip": "2.2.2.2",
        "OutBandwidth": 77.449
      }
    ],
    "RequestId": "03b18184-caf1-40d7-b01a-100010030712"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	CAM signature/authentication error
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.

# DescribeTaskStatus

최종 업데이트 날짜: : 2023-10-24 11:16:06

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the execution status of an async task. After non-query APIs (used to create/delete CLB instances, listeners, or rules or to bind/unbind real servers) are called successfully, this API needs to be used to query whether the task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeTaskStatus.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TaskId	No	String	Request ID, i.e., the RequestId parameter returned by the API.
DealName	No	String	Order ID. Note: Either <code>TaskId</code> or <code>DealName</code> is required.

## 3. Output Parameters

Parameter Name	Type	Description
Status	Integer	Current status of a task. Value range: 0 (succeeded), 1 (failed), 2 (in progress).
LoadBalancerIds	Array of String	Array of unique CLB instance IDs. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the status of an async task

This example shows you how to query whether an async task is successfully executed if the call to the forwarding rule creating API is returned successfully and the returned `RequestId` is `55c85074-3e7f-4c6d-864f-673660d4f8de`. The `Status` value of 0 in the response indicates that the task succeeded.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeTaskStatus
<Common request parameters>

{
  "TaskId": "55c85074-3e7f-4c6d-864f-673660d4f8de"
}
```

#### Output Example

```
{
  "Response": {
    "Status": 0,
    "LoadBalancerIds": [
      "lb-6efswuxa"
    ],
    "RequestId": "917384bc-5b8d-4b68-a0bc-a58f815e8e3b"
  }
}
```

```
}  
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.RegionNotFound	Invalid region.



# DescribeClsLogSet

최종 업데이트 날짜: : 2023-10-24 11:16:09

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to get the CLB exclusive logset.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeClsLogSet.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
LogsetId	String	Logset ID
HealthLogsetId	String	Health check logset ID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required

for locating a problem.

## 4. Example

### Example1 Obtaining the CLB exclusive logset

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeDatabases
<common request parameters>

{}
```

#### Output Example

```
{
  "Response": {
    "LogsetId": "b046ae5f-00cf-4e90-880c-215e5ae72222",
    "HealthLogsetId": "b046ae5f-00cf-4e90-880c-215e5ae71111",
    "RequestId": "d8402eb9-37a1-469f-bd30-a5670998f2b1"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
UnauthorizedOperation	Unauthorized operation.

# CreateClsLogSet

최종 업데이트 날짜: : 2023-10-24 11:16:10

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to create a CLB exclusive logset for storing CLB logs.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateClsLogSet.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LogsetName	No	String	Logset name, which must be unique among all CLS logsets; default value: clb_logset
Period	No	Integer	Logset retention period (in days)
LogsetType	No	String	Logset type. Valid values: ACCESS (access logs; default value) and HEALTH (health check logs).

## 3. Output Parameters

Parameter Name	Type	Description
LogsetId	String	Logset ID.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Creating a logset

Create Logset

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=CreateClsLogSet
&LogsetName=clb_logset
&Period=7
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "LogsetId": "578dd0ad-2e7c-488b-b5fe-0b23da3537eb",
    "RequestId": "8b038842-70b2-411b-a1a2-c7fcde195d2c"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)

- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# CreateTopic

최종 업데이트 날짜: : 2023-10-24 11:16:10

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to create a topic with the full-text index and key-value index enabled by default. The creation will fail if there is no CLB exclusive logset.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateTopic.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
TopicName	Yes	String	Log topic name
PartitionCount	No	Integer	The number of topic partitions, which changes as partitions are split or merged. Each log topic can have up to 50 partitions. If this parameter is not passed in, 1 partition will be created by default and up to 10 partitions are allowed to be created.
TopicType	No	String	Log type. Valid values: ACCESS (access logs; default value) and HEALTH (health check logs).
Period	No	Integer	Logset retention period (in days). Default: 30 days.

StorageType	No	String	Log topic storage type. Valid values: <code>hot</code> (STANDARD storage); <code>cold</code> (IA storage). Default value: <code>hot</code> .
-------------	----	--------	--

### 3. Output Parameters

Parameter Name	Type	Description
TopicId	String	Log topic ID
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating a topic

This example shows you how to create a topic.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: CreateTopic
<common request parameters>

{
  "PartitionCount": "3",
  "TopicName": "clb-topic"
}
```

#### Output Example

```
{
  "Response": {
    "TopicId": "b046ae5f-00cf-4e90-880c-215e5ae7b6xy",
    "RequestId": "dccf2ce3-0277-465a-9c60-260cfb141d65"
  }
}
```



## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.InvalidFilter	Incorrect <code>Filter</code> parameter.
InvalidParameterValue.Length	Wrong parameter length.
InvalidParameterValue.Range	Wrong parameter value range.
LimitExceeded	Quota exceeded.

---

MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# CreateLoadBalancerSnatIps

최종 업데이트 날짜: : 2023-10-24 11:16:10

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to add an SNAT IP for an SnatPro CLB instance. If SnatPro is not enabled for CLB, it will be automatically enabled after the SNAT IP is added.

This is an async API. After it is returned successfully, you can check the task result by calling

`DescribeTaskStatus` with the returned `RequestID`.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: CreateLoadBalancerSnatIps.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	Unique ID of a CLB instance, e.g., lb-12345678.
SnatIps.N	Yes	Array of <a href="#">SnatIp</a>	Information of the SNAT IP to be added. You can specify a SNAT IP or use the one automatically assigned by a subnet.
Number	No	Integer	Number of SNAT IPs to be added. This parameter is used in

conjunction with `SnatIps` . Note that if `Ip` is specified in `SnapIps` , this parameter is not available. It defaults to `1` and the upper limit is `10` .

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Adding a SNAT IP

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=CreateLoadBalancerSnatIps
&LoadBalancerId=lb-cuxw****
&SnatIps.0.SubnetId=subnet-1234****
&Number=2
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "RequestId": "898b431c-2745-4b27-80f6-e6e8038a0683"
  }
}
```

#### Example2 Specifying a SNAT IP

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=CreateLoadBalancerSnatIps
&LoadBalancerId=lb-cuxw****
&SnatIps.0.SubnetId=subnet-1234****
```

```
&SnatIps.0.Ip=192.168.1.2
&<Common request parameters>
```

### Output Example

```
{
  "Response": {
    "RequestId": "898b431c-80f6-80f6-80f6-e6e8038a0683"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.

InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.RegionNotFound	Invalid region.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.

# DeleteLoadBalancerSnatIps

최종 업데이트 날짜: : 2023-10-24 11:16:09

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to delete the SNAT IP for an SnatPro CLB instance.

This is an async API. After it is returned successfully, you can check the task result by calling

`DescribeTaskStatus` with the returned `RequestID` .

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeleteLoadBalancerSnatIps.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	Unique ID of a CLB instance, e.g., lb-12345678.
Ips.N	Yes	Array of String	Array of the SNAT IP addresses to be deleted

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Deleting SNAT IPs

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeleteLoadBalancerSnatIps
&LoadBalancerId=lb-cuxw2rm0
&Ips.0=192.168.0.128
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "898b431c-2745-4b27-80f6-e6e8038a0683"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)



## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	Quota exceeded.

# SetLoadBalancerSecurityGroups

최종 업데이트 날짜: : 2023-10-24 11:16:03

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (SetLoadBalancerSecurityGroups) is used to bind/unbind security groups for a public network CLB instance. You can use the DescribeLoadBalancers API to query the security groups bound to a CLB instance. This API uses `set` semantics.

During a binding operation, the input parameters need to be all security groups to be bound to the CLB instance (including those already bound ones and new ones).

During an unbinding operation, the input parameters need to be all the security groups still bound to the CLB instance after the unbinding operation. To unbind all security groups, you can leave this parameter empty or pass in an empty array. Note: Private network CLB do not support binding security groups.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: SetLoadBalancerSecurityGroups.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
SecurityGroups.N	No	Array	Array of security group IDs. One CLB instance can be bound to up

	of String	to 50 security groups. If you want to unbind all security groups, you do not need to pass in this parameter, or you can pass in an empty array.
--	-----------	---

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Binding multiple security groups to a CLB instance

The CLB instance `lb-cuxw2r00` is not bound to any security group. This example shows you how to associate it with the security groups `sg-0936o7sd` and `sg-12345678`.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=SetLoadBalancerSecurityGroups
&LoadBalancerId=lb-cuxw2r00
&SecurityGroups.0=sg-0936o7sd
&SecurityGroups.1=sg-12345678
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "00ca7fca-90f1-47fe-a724-5d7e96d04633"
  }
}
```

#### Example2 Unbinding a security group from a CLB instance

The CLB instance `lb-cuxw2r00` is bound to two security groups: `sg-0936o7sd` and `sg-12345678`. This example shows you how to unbind the security group `sg-12345678` from this instance.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=SetLoadBalancerSecurityGroups
&LoadBalancerId=lb-cuxw2r00
&SecurityGroups.0=sg-0936o7sd
&<Common request parameters>
```

### Output Example

```
{
  "Response": {
    "RequestId": "00ca7fca-90f1-47fe-a724-5d7e96d04644"
  }
}
```

### Example3 Unbinding all security groups

The CLB instance `lb-cuxw2r00` is bound with multiple security groups. This example shows you how to unbind all security groups from this instance.

### Input Example

```
https://clb.tencentcloudapi.com/?Action=SetLoadBalancerSecurityGroups
&LoadBalancerId=lb-cuxw2r00
&<Common request parameters>
```

### Output Example

```
{
  "Response": {
    "RequestId": "00ca7fca-90f1-47fe-a724-5d7e96d04655"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
UnauthorizedOperation	Unauthorized operation.

# SetSecurityGroupForLoadbalancers

최종 업데이트 날짜: : 2023-10-24 11:16:03

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to bind or unbind a security group for multiple public network CLB instances. Note: Private network CLB do not support binding security groups.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: SetSecurityGroupForLoadbalancers.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
SecurityGroup	Yes	String	Security group ID, such as sg-12345678
OperationType	Yes	String	ADD: bind a security group; DEL: unbind a security group
LoadBalancerIds.N	Yes	Array of String	Array of CLB instance IDs

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Binding a security group to multiple CLB instances

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=SetSecurityGroupForLoadbalancers
&SecurityGroup=sg-12345678
&OperationType=ADD
&LoadBalancerIds.0=lb-0936o712
&LoadBalancerIds.1=lb-tttt5555
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "00ca7fca-90f1-47fe-a724-5d7e96d04633"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)

- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.



# ReplaceCertForLoadBalancers

최종 업데이트 날짜: : 2023-10-24 11:16:03

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (ReplaceCertForLoadBalancers) is used to replace the certificate associated with a CLB instance. A new certificates can be associated with a CLB only after the original certificate is disassociated from it.

This API supports replacing server certificates and client certificates.

The new certificate to be used can be specified by passing in the certificate ID. If no certificate ID is specified, relevant information such as certificate content must be passed in to create a new certificate and bind it to the CLB.

Note: This API can only be called in the Guangzhou region; for other regions, an error will occur due to domain name resolution problems.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ReplaceCertForLoadBalancers.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
OldCertificateId	Yes	String	ID of the certificate to be replaced, which can be a server certificate or a client certificate.

Certificate	Yes	<a href="#">CertificateInput</a>	Information such as the content of the new certificate
-------------	-----	----------------------------------	--

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Replacing the server certificate associated with a CLB instance

This example shows you how to replace a server certificate by specifying a new certificate ID.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=ReplaceCertForLoadBalancers
&OldCertificateId=cuxw0123
&Certificate.CertId=cuxw4567
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "00ca7fca-90f1-47fe-a724-5d7e96d04633"
  }
}
```

### 5. Developer Resources

#### SDK

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- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.

# DescribeLoadBalancerListByCertId

최종 업데이트 날짜: : 2023-10-24 11:16:09

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the list of CLB instances associated with a certificate in a region by certificate ID.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeLoadBalancerListByCertId.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
CertIds.N	Yes	Array of String	Server or client certificate ID

## 3. Output Parameters

Parameter Name	Type	Description

CertSet	Array of <a href="#">CertIdRelatedWithLoadBalancers</a>	Certificate ID and list of CLB instances associated with it
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying CLB instances associated with a specified certificate ID (no instances found)

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeLoadBalancerListByCertId
&CertIds.0=RwFAfr8Y
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "CertSet": [
      {
        "CertId": "RwFAfr8Y",
        "LoadBalancers": []
      }
    ],
    "RequestId": "fe6059b5-faa6-4f21-92a1-0c9ee5df5e54"
  }
}
```

### Example2 Querying CLB instances associated with a specified certificate ID (instances found)

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeLoadBalancerListByCertId
&CertIds.0=Rrsw4nIA
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "CertSet": [
      {
        "CertId": "Rrsw4nIA",
        "LoadBalancers": [
          {
            "LoadBalancerId": "lb-rbw529fz",
            "LoadBalancerName": "test_LB",
            "Forward": 1,
            "Domain": "",
            "LoadBalancerVips": [
              "129.226.78.67"
            ],
            "LoadBalancerType": "OPEN",
            "Status": 1,
            "CreateTime": "2019-07-02 18:12:52",
            "StatusTime": "2019-07-02 21:50:07",
            "ProjectId": 0,
            "OpenBgp": 0,
            "Snat": false,
            "Isolation": 0,
            "Log": "",
            "AnycastZone": "",
            "AddressIPVersion": "ipv4",
            "VpcId": "vpc-lt9uj4mo",
            "NumericalVpcId": 117008,
            "TargetRegionInfo": {
              "Region": "ap-hongkong",
              "VpcId": "vpc-lt9uj4mo"
            },
            "SubnetId": "",
            "SecureGroups": [],
            "Tags": [],
            "VipIsp": "BGP",
            "MasterZone": null,
            "BackupZoneSet": null,
            "IsolatedTime": null,
            "ExpireTime": null,
            "ChargeType": null,
            "NetworkAttributes": null,
            "PrepaidAttributes": null
          }
        ]
      }
    ]
  }
}
```

```
"RequestId": "7718d187-7684-4294-954b-1e13009d75f6"  
}  
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.

UnauthorizedOperation

Unauthorized operation.



# SetLoadBalancerClsLog

최종 업데이트 날짜: : 2023-10-24 11:16:03

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to add, delete, and update the CLS topic of a CLB instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: SetLoadBalancerClsLog.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
LogSetId	Yes	String	CLS logset ID <ul style="list-style-type: none"> <li>Enter the ID of logset you need to add or update. You can acquire the ID by invoking <a href="#">DescribeLogsets</a>.</li> <li>To delete the log set, set this parameter to <code>null</code>.</li> </ul>
LogTopicId	Yes	String	CLS log topic ID <ul style="list-style-type: none"> <li>Enter the ID of log topic you need to add or update. You can acquire the ID by invoking <a href="#">DescribeTopics</a>.</li> <li>To delete the log set, set this parameter to <code>null</code>.</li> </ul>

LogType	No	String	<p>Log type:</p> <ul style="list-style-type: none"> <li><code>ACCESS</code> : access logs</li> <li><code>HEALTH</code> : health check logs</li> </ul> <p>Default: <code>ACCESS</code></p>
---------	----	--------	---

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Setting CLS topic

This example shows you how to add or modify the CLS topic of a CLB instance.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=SetLoadBalancerClsLog
&LoadBalancerId=lb-cuxw2r00
&LogSetId=xxxx-xx-xx-xx-xxxxxxxxx
&LogTopicId=xxxx-xx-xx-xx-yyyyyyyyy
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "78a40898-8210-44c7-8bc6-f83e50878d12"
  }
}
```

#### Example2 Deleting CLS topic

This example shows you how to delete the CLS topic of a CLB instance.

## Input Example

```
https://clb.tencentcloudapi.com/?Action=SetLoadBalancerClsLog
&LoadBalancerId=lb-cuxw2r00
&LogSetId=
&LogTopicId=
&<Common request parameters>
```

## Output Example

```
{
  "Response": {
    "RequestId": "78a40898-8210-44c7-8bc6-f83e50878d12"
  }
}
```

# 5. Developer Resources

## SDK

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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

# 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

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Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.RegionNotFound	Invalid region.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
UnauthorizedOperation	Unauthorized operation.

# DescribeQuota

최종 업데이트 날짜: : 2023-10-24 11:16:09

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query various quotas in the current region.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeQuota.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
QuotaSet	Array of <a href="#">Quota</a>	Quota list
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying quotas

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeQuota
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "QuotaSet": [
      {
        "QuotaId": "TOTAL_OPEN_CLB_QUOTA",
        "QuotaLimit": 50,
        "QuotaCurrent": 2
      },
      {
        "QuotaId": "TOTAL_INTERNAL_CLB_QUOTA",
        "QuotaLimit": 100,
        "QuotaCurrent": 3
      },
      {
        "QuotaId": "TOTAL_LISTENER_QUOTA",
        "QuotaLimit": 50,
        "QuotaCurrent": null
      },
      {
        "QuotaId": "TOTAL_TARGET_BIND_QUOTA",
        "QuotaLimit": 50,
        "QuotaCurrent": null
      },
      {
        "QuotaId": "TOTAL_LISTENER_RULE_QUOTA",
        "QuotaLimit": 50,
        "QuotaCurrent": null
      }
    ],
    "RequestId": "92e23338-bccb-4950-8b0d-b3d50e05975b"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
InternalServerError	Internal error.
InvalidParameter.FormatError	Wrong parameter format.
UnsupportedOperation	Unsupported operation.

# DescribeResources

최종 업데이트 날짜: : 2023-10-24 11:16:07

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the list of AZs and resources supported for the user in the current region.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeResources.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Limit	No	Integer	Number of returned AZ resources. Default value: 20. Maximum value: 100.
Offset	No	Integer	Starting offset of the returned AZ resource list. Default value: 0.
Filters.N	No	Array of <a href="#">Filter</a>	Filter to query the list of AZ resources as detailed below: <ul style="list-style-type: none"> <li><code>zone</code> - String - Optional - Filter by AZ, such as "ap-guangzhou-1".</li> <li><code>isp</code> -- String - Optional - Filter by the ISP. Values: <code>BGP</code> , <code>CMCC</code> , <code>CUCC</code> and <code>CTCC</code> .</li> </ul>



### 3. Output Parameters

Parameter Name	Type	Description
ZoneResourceSet	Array of <a href="#">ZoneResource</a>	List of resources supported by the AZ
TotalCount	Integer	Number of entries in the AZ resource list.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the AZs and resources under the current account in the current region

This example shows you how to query the AZs and resources under the current account in the current region.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: DescribeInstances
<common request parameters>

{
  "Limit": "20",
  "Offset": "0"
}
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 3,
    "ZoneResourceSet": [
      {
        "LocalZone": false,
        "EdgeZone": false,
        "SlaveZone": null,
        "MasterZone": "ap-guangzhou-1",
        "IPVersion": "IPv4",

```

```
"ZoneRegion": "ap-guangzhou",
"ResourceSet": [
  {
    "Isp": "BGP",
    "Type": [
      "BGP"
    ]
  },
  {
    "Isp": "CMCC",
    "Type": [
      "CMCC"
    ]
  }
],
"ZoneResourceType": "SHARED"
}
],
"RequestId": "d09b91ba-a81e-4ca3-b423-c64e60127c64"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.InvalidFilter	Incorrect <code>Filter</code> parameter.
InvalidParameterValue.Length	Wrong parameter length.
InvalidParameterValue.Range	Wrong parameter value range.

# Classic CLB APIs

## DescribeClassicalLBListeners

최종 업데이트 날짜: : 2023-10-24 11:16:16

### 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (DescribeClassicalLBListeners) is used to get the listener information of a classic CLB.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeClassicalLBListeners.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerIds.N	No	Array of String	List of CLB listener IDs
Protocol	No	String	CLB listening protocol. Valid values: TCP, UDP, HTTP, and HTTPS.
ListenerPort	No	Integer	CLB listening port. Value range: 1 - 65535.

Status	No	Integer	Listener status. Valid values: 0 (creating) and 1 (running).
--------	----	---------	--

### 3. Output Parameters

Parameter Name	Type	Description
Listeners	Array of <a href="#">ClassicalListener</a>	Listener list Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Getting the listener information of a classic CLB instance

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeClassicalLBListeners
&LoadBalancerId=lb-a3u5l5zc
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "Listeners": [
      {
        "ListenerId": "lbl-3jur3gei",
        "ListenerPort": 111,
        "InstancePort": 1111,
        "ListenerName": "test",
        "Protocol": "tcp",
        "SessionExpire": 0,
        "HealthSwitch": 1,
        "TimeOut": 2,
        "IntervalTime": 5,
        "HealthNum": 3,
        "UnhealthNum": 3,

```

```
"HttpHash": "",
"HttpCode": 31,
"HttpCheckPath": "",
"SSLMode": "",
"CertId": "",
"CertCaId": "",
"Status": 1
}
],
"RequestId": "5da375f4-214d-42bb-8d50-e74bf556b38f"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.

InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.
UnsupportedOperation	Unsupported operation.

# DescribeClassicalLBTargets

최종 업데이트 날짜: : 2023-10-24 11:16:16

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to get the real servers bound to a classic CLB instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeClassicalLBTargets.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID

## 3. Output Parameters

Parameter Name	Type	Description
Targets	Array of	Real server list



	<a href="#">ClassicalTarget</a>	Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Getting the real server information of a classic CLB instance

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeClassicalLBTargets
&LoadBalancerId=lb-a3u5l5zc
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "Targets": [
      {
        "Type": "CVM",
        "InstanceId": "ins-odjhn6vc",
        "Weight": 30,
        "InstanceName": "vpc02",
        "PrivateIpAddresses": [
          "10.104.63.53"
        ],
        "PublicIpAddresses": [],
        "RunFlag": 2
      }
    ],
    "RequestId": "1e241bcf-4091-481e-9d81-8c0d01d3f82d"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# DescribeClassicalLBHealthStatus

최종 업데이트 날짜: : 2023-10-24 11:16:16

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API (DescribeClassicalLBHealthStatus) is used to get the real server health status of a classic CLB

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeClassicalLBHealthStatus.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
ListenerId	No	String	CLB listener ID

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

HealthList	Array of <a href="#">ClassicalHealth</a>	List of real server health statuses Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Getting the real server health status of a classic CLB instance

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeClassicalLBHealthStatus
&LoadBalancerId=lb-a3u5l5zc
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "HealthList": [
      {
        "IP": "10.142.9.250",
        "Port": 1111,
        "ListenerPort": 111,
        "Protocol": "TCP",
        "HealthStatus": 0
      },
      {
        "IP": "10.104.63.53",
        "Port": 1111,
        "ListenerPort": 111,
        "Protocol": "TCP",
        "HealthStatus": 0
      },
      {
        "IP": "10.104.126.68",
        "Port": 1111,
        "ListenerPort": 111,
        "Protocol": "TCP",
        "HealthStatus": 0
      },
      {

```

```
"IP": "10.142.9.250",
"Port": 12312,
"ListenerPort": 1213,
"Protocol": "UDP",
"HealthStatus": 1
},
{
"IP": "10.104.126.68",
"Port": 12312,
"ListenerPort": 1213,
"Protocol": "UDP",
"HealthStatus": 1
},
{
"IP": "10.104.63.53",
"Port": 12312,
"ListenerPort": 1213,
"Protocol": "UDP",
"HealthStatus": 1
}
],
"RequestId": "b18d94ba-94fa-4c59-b66c-840d11a6a0f3"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# RegisterTargetsWithClassicalLB

최종 업데이트 날짜: : 2023-10-24 11:16:15

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to bind a real server with a classic CLB instance. This is an async API. After it is returned successfully, you can call the API `DescribeTaskStatus` with the returned RequestId as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: RegisterTargetsWithClassicalLB.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
Targets.N	Yes	Array of <a href="#">ClassicalTargetInfo</a>	Real server information

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Binding a real server to a classic CLB instance

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=RegisterTargetsWithClassicalLB
&LoadBalancerId=lb-a3u5l5zc
&Targets.0.InstanceId=ins-lhhn9fhk
&Targets.0.Weight=20
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "bab5b8c4-7e9f-4032-90fb-c61ee6678c73"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)



- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# DeregisterTargetsFromClassicalLB

최종 업데이트 날짜: : 2023-10-24 11:16:17

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to unbind a CLB real server. This is an async API. After it is returned successfully, you can call the API `DescribeTaskStatus` with the returned RequestId as an input parameter to check whether this task is successful.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DeregisterTargetsFromClassicalLB.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID
InstanceIds.N	Yes	Array of String	List of real server IDs

## 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Unbinding the real server from a classic CLB instance

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DeregisterTargetsFromClassicalLB
&LoadBalancerId=lb-a3u5l5zc
&InstanceIds.0=ins-odjhn6vc
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "a8ae0a06-f935-4a1b-bc73-f5055f3e1954"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)
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## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# DescribeClassicalLBByInstanceId

최종 업데이트 날짜: : 2023-10-24 11:16:16

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to get the list of classic CLB instance IDs through a real server ID.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeClassicalLBByInstanceId.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
InstanceIds.N	Yes	Array of String	List of real server IDs

## 3. Output Parameters

Parameter Name	Type	Description
LoadBalancerInfoList	Array of	CLB information list

	ClassicalLoadBalancerInfo	
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Getting the information of a classic CLB instance through a real server ID

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeClassicalLBByInstanceId
&InstanceIds.0=ins-odjhn6vc
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "LoadBalancerInfoList": [
      {
        "InstanceId": "ins-odjhn6vc",
        "LoadBalancerIds": [
          "lb-2zkbmcy4",
          "lb-a3u5l5zc"
        ]
      }
    ],
    "RequestId": "e6dd52d7-d80d-49f1-85ef-24a4a8221370"
  }
}
```

## 5. Developer Resources

### SDK

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- [Tencent Cloud SDK 3.0 for Java](#)

- [Tencent Cloud SDK 3.0 for PHP](#)
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- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# MigrateClassicalLoadBalancers

최종 업데이트 날짜: : 2023-10-24 11:16:16

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to upgrade classic CLB instances to application CLB instances.

This is an async API. After it is returned successfully, you can check the action result by calling

`DescribeLoadBalancers` .

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: MigrateClassicalLoadBalancers.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerIds.N	Yes	Array of String	Array of classic CLB instance IDs
ExclusiveCluster	No	<a href="#">ExclusiveCluster</a>	Exclusive cluster information

## 3. Output Parameters



Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Upgrading classic CLB instances

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=MigrateClassicalLoadBalancers
&LoadBalancerIds.0=lb-isdw5mum
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "RequestId": "55afe8ae-9580-4582-92e6-c7e67f893c1f"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

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- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.

# Load Balancing APIs

## InquiryPriceRefundLoadBalancer

최종 업데이트 날짜: : 2023-10-24 11:16:11

### 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the refund amount of returning a CLB instance.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: InquiryPriceRefundLoadBalancer.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerId	Yes	String	CLB instance ID

### 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

Price	Price	Price of the instance with the specified configurations.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the refund amount

This example shows you how to query the refund amount you can get after returning a CLB instance.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=InquiryPriceRefundLoadBalancer
&LoadBalancerId=lb-56h15sy2
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "Price": {
      "BandwidthPrice": null,
      "InstancePrice": {
        "UnitPrice": null,
        "ChargeUnit": null,
        "OriginalPrice": 79.02,
        "DiscountPrice": null
      }
    },
    "RequestId": "06cdb8b7-1d26-4195-9d41-f3fc861d9530"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)

- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidParameter	Parameter error.
InvalidParameterValue	Incorrect parameter value.
ResourceInsufficient	Insufficient resources.

# SetCustomizedConfigForLoadBalancer

최종 업데이트 날짜: : 2023-10-24 11:16:10

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to create or manage a user-defined CLB configuration template.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: SetCustomizedConfigForLoadBalancer.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
OperationType	Yes	String	Operation type: <code>ADD</code> , <code>DELETE</code> , <code>UPDATE</code> , <code>BIND</code> , <code>UNBIND</code>
UconfigId	No	String	This field is required except for creating custom configurations, such as "pz-1234abcd".
ConfigContent	No	String	This field is required when creating or modifying custom configurations.
ConfigName	No	String	This field is required when creating or renaming custom configurations.

LoadBalancerIds.N	No	Array of String	This field is required when binding/unbinding resources.
-------------------	----	-----------------	--

### 3. Output Parameters

Parameter Name	Type	Description
ConfigId	String	Configuration ID, such as "pz-1234abcd"
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Creating custom configurations at the CLB instance level

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=SetCustomizedConfigForLoadBalancer
&OperationType=ADD
&ConfigContent=client_max_body_size 222M;
&ConfigName=config_test
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "ConfigId": "pz-1234abcd",
    "RequestId": "83129908-a282-4f9f-8ab-131a3025ba22"
  }
}
```

### 5. Developer Resources

#### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.



# DescribeCustomizedConfigList

최종 업데이트 날짜: : 2023-10-24 11:16:12

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to pull custom configuration lists to return the user configuration of `AppId` .

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeCustomizedConfigList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
ConfigType	Yes	String	Configuration type. Valid values: <code>CLB</code> (CLB-specific configs), <code>SERVER</code> (domain name-specific configs), and <code>LOCATION</code> (forwarding rule-specific configs).
Offset	No	Integer	Pagination offset. Default: 0.
Limit	No	Integer	Number of results per page. Default: 20.
ConfigName	No	String	Specifies the name of configs to query. Fuzzy match is supported.
UconfigIds.N	No	Array	Configuration ID.

		of String	
Filters.N	No	Array of <a href="#">Filter</a>	<p>The filters are:</p> <ul style="list-style-type: none"> <li>loadbalancer-id - String - Required: no - (filter) CLB instance ID, such as "lb-12345678".</li> <li>vip - String - Required: no - (filter) CLB instance VIP, such as "1.1.1.1" and "2204::22:3".</li> </ul>

### 3. Output Parameters

Parameter Name	Type	Description
ConfigList	Array of <a href="#">ConfigListItem</a>	Configuration list.
TotalCount	Integer	Number of configurations.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying configuration details

##### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeCustomizedConfigList
&ConfigType=CLB
&Offset=0
&Limit=3
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "ConfigList": [
      {
        "UconfigId": "pz-go2gs3d6",
```

```
"ConfigType": "CLB",
"ConfigContent": "client_max_body_size 1m;",
"ConfigName": "122222",
"CreateTimestamp": "2019-11-28 20:44:24",
"UpdateTimestamp": "2020-03-01 11:11:27"
}
],
"TotalCount": 1,
"RequestId": "d6f74bc7-2b26-4f5f-9dd8-6f0c8e8e2cc2"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.

InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.
InvalidParameter.LocationNotFound	Unable to find eligible forwarding rules.
InvalidParameter.PortCheckFailed	Listener port checks failed due to port conflicts or other reasons.
InvalidParameter.ProtocolCheckFailed	Listener protocol checks failed because the protocol used is incompatible with the corresponding operation.
InvalidParameter.RegionNotFound	Invalid region.
InvalidParameter.RewriteAlreadyExist	The forwarding rule has already been bound to a redirection relationship.
InvalidParameter.SomeRewriteNotFound	Some redirection rules do not exist.
InvalidParameterValue	Incorrect parameter value.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.InvalidFilter	Incorrect <code>Filter</code> parameter.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# DescribeCustomizedConfigAssociateList

최종 업데이트 날짜: : 2023-10-24 11:16:12

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query the configured location, bound server or bound CLB instance. If there are domain names, the result will be filtered by domain name.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeCustomizedConfigAssociateList.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
UconfigId	No	String	Configuration ID.
Offset	No	Integer	Start position of the binding list. Default: 0.
Limit	No	Integer	Number of binding lists to pull. Default: 20.
Domain	No	String	Searches for the domain name.

### 3. Output Parameters

Parameter Name	Type	Description
BindList	Array of <a href="#">BindDetailItem</a>	List of bound resources
TotalCount	Integer	Total number of bound resources
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Querying the bound server or configured location

This example shows you how to query the bound `server` or configured `location` .

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeCustomizedConfigAssociateList
&UconfigId=pz-fi018waq
&Offset=0
&Limit=3
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "BindList": [
      {
        "LoadBalancerId": "lb-az5a9oyo",
        "ListenerId": "lbl-nppnktey",
        "Domain": "www.aaa.com",
        "LocationId": "loc-nppnktey",
        "ListenerName": "test",
        "Protocol": "http",
        "Vport": 80,
        "Url": "",
        "UconfigId": "pz-n651fsue"
      }
    ]
  }
}
```

```
],
"TotalCount": 1,
"RequestId": "83129908-a282-4f9f-8ab-131a3025ba11"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameterValue	Incorrect parameter value.

---

InvalidParameterValue.Length	Wrong parameter length.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.



# DescribeLBListeners

최종 업데이트 날짜: : 2023-10-24 11:16:11

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to query CLB instances bound to the CVM or ENI.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeLBListeners.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Backends.N	Yes	Array of <a href="#">LbRsItem</a>	List of private network IPs to be queried.

## 3. Output Parameters

Parameter Name	Type	Description
----------------	------	-------------

LoadBalancers	Array of <a href="#">LBItem</a>	Listener rule associated with the real server.
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying CLB instances bound to the CVM

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeLBListeners
&Backends.0.VpcId=vpc-xxxxxx
&Backends.0.PrivateIp=1.1.1.1
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "LoadBalancers": [
      {
        "LoadBalancerId": "lb-xxxxxx",
        "Vip": "10.0.0.1",
        "Region": "ap-guangzhou",
        "Listeners": [
          {
            "ListenerId": "lbl-xxxxxx",
            "Protocol": "TCP",
            "Port": 81,
            "EndPort": 0,
            "Rules": null,
            "Targets": [
              {
                "Type": "eni",
                "PrivateIp": "10.0.0.2",
                "Port": 1201,
                "VpcId": 1111,
                "Weight": 10
              }
            ]
          }
        ]
      }
    ]
  }
}
```

```
]
}
],
"RequestId": "83129908-a282-4f9f-8ab-131a3025ba22"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.

---

InvalidParameter.ListenerIdNotFound	Wrong listener ID.
InvalidParameterValue.Length	Wrong parameter length.
LimitExceeded	Quota exceeded.
MissingParameter	Missing parameter.
UnauthorizedOperation	Unauthorized operation.

# ModifyLoadBalancerSla

최종 업데이트 날짜: : 2023-10-24 11:16:10

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

This API is used to upgrade a pay-as-you-go shared CLB instance to an LCU-supported CLB instance.

### Limits

- This API can only be used to upgrade pay-as-you-go shared instances. To upgrade monthly-subscribed shared instances, please go to the CLB console.
- An LCU-supported instance cannot be changed back to a shared instance.
- Classic CLB instances cannot be upgraded to LCU-supported instances.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

### [Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: ModifyLoadBalancerSla.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
LoadBalancerSla.N	Yes	Array of	CLB instance information.

		SlaUpdateParam	
--	--	----------------	--

### 3. Output Parameters

Parameter Name	Type	Description
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

### 4. Example

#### Example1 Upgrading a shared instance to an LCU-supported instance

This example shows you how to upgrade a pay-as-you-go shared instance to an LCU-supported instance.

#### Input Example

```
POST / HTTP/1.1
Host: clb.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: ModifyLoadBalancerSla
<Common request parameters>

{
  "LoadBalancerSla": [
    {
      "SlaType": "SLA",
      "LoadBalancerId": "lb-db2n****"
    }
  ]
}
```

#### Output Example

```
{
  "Response": {
    "RequestId": "c1157c81-f3dc-4f2a-9346-76f161d548eb"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.
ResourceInsufficient	Insufficient resources.
UnauthorizedOperation	Unauthorized operation.

# DescribeLoadBalancerOverview

최종 업데이트 날짜: : 2023-10-24 11:16:11

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

Queries the total number of CLB instances and the number of CLB instances in different status (running, isolated and about to expire).

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeLoadBalancerOverview.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.

## 3. Output Parameters

Parameter Name	Type	Description
TotalCount	Integer	Total number of CLB instances



RunningCount	Integer	Number of CLB instances that are running
IsolationCount	Integer	Number of CLB instances that are isolated
WillExpireCount	Integer	Number of CLB instances that are about to expire
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying the number of CLB instances by the status

This example shows you how to query the number of CLB instances by their status.

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeLoadBalancerOverview
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 0,
    "RunningCount": 0,
    "IsolationCount": 0,
    "WillExpireCount": 0,
    "RequestId": "03b18184-caf1-40d7-b01a-8a76565b94ad"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)

- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	CAM signature/authentication error
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.

# DescribeIdleLoadBalancers

최종 업데이트 날짜: : 2023-10-24 11:16:11

## 1. API Description

Domain name for API request: clb.tencentcloudapi.com.

Idle CLB instances are pay-as-you-go load balancers that, within seven days after the creation, do not have rules configured or the configured rules are not associated with any servers.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

Parameter Name	Required	Type	Description
Action	Yes	String	<a href="#">Common Params</a> . The value used for this API: DescribeIdleLoadBalancers.
Version	Yes	String	<a href="#">Common Params</a> . The value used for this API: 2018-03-17.
Region	No	String	<a href="#">Common Params</a> . This parameter is not required for this API.
Offset	No	Integer	Data offset. Default value: 0.
Limit	No	Integer	Number of returned CLB instances. Default value: 20. Maximum value: 100.
LoadBalancerRegion	No	String	CLB instance region

## 3. Output Parameters

Parameter Name	Type	Description
IdleLoadBalancers	Array of <a href="#">IdleLoadBalancer</a>	List of idle CLBs Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
TotalCount	Integer	Total number of idle CLB instances
RequestId	String	The unique request ID, which is returned for each request. RequestId is required for locating a problem.

## 4. Example

### Example1 Querying list of idle CLB instances

#### Input Example

```
https://clb.tencentcloudapi.com/?Action=DescribeIdleLoadBalancers
&<Common request parameters>
```

#### Output Example

```
{
  "Response": {
    "TotalCount": 46,
    "IdleLoadBalancers": [
      {
        "LoadBalancerId": "lb-111i6a3k",
        "LoadBalancerName": "lb-613054ce",
        "Region": "ap-guangzhou",
        "Vip": "172.16.32.29",
        "IdleReason": "NO_RULES",
        "Status": 1,
        "Forward": 1
      }
    ],
    "RequestId": "afa28690-f148-483f-9727-58c2f1da3794"
  }
}
```

## 5. Developer Resources

## SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

Error Code	Description
AuthFailure	CAM signature/authentication error
DryRunOperation	DryRun operation, which means the DryRun parameter is passed in yet the request will still be successful.
FailedOperation	Operation failed.
FailedOperation.InvalidLBStatus	Exceptional CLB instance status
InternalError	Internal error.
InvalidParameter	Parameter error.
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.InvalidFilter	Failed to query the parameter
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.

---

InvalidParameter.LocationNotFound	Unable to find eligible forwarding rules.
InvalidParameter.PortCheckFailed	Listener port checks failed due to port conflicts or other reasons.
InvalidParameterValue.Range	Wrong parameter value range.

# Data Types

최종 업데이트 날짜: : 2023-10-24 11:16:19

## AssociationItem

Rule associated with target group

Used by actions: DescribeTargetGroupList, DescribeTargetGroups.

Name	Type	Description
LoadBalancerId	String	ID of associated CLB instance
ListenerId	String	ID of associated listener
LocationId	String	ID of associated forwarding rule Note: this field may return null, indicating that no valid values can be obtained.
Protocol	String	Protocol type of associated listener, such as HTTP or TCP
Port	Integer	Port of associated listener
Domain	String	Domain name of associated forwarding rule Note: this field may return null, indicating that no valid values can be obtained.
Url	String	URL of associated forwarding rule Note: this field may return null, indicating that no valid values can be obtained.
LoadBalancerName	String	CLB instance name
ListenerName	String	Listener name

## Backend

Details of a real server bound to a listener

Used by actions: DescribeTargets.

Name	Type	Description
------	------	-------------

Type	String	Real server type. Valid values: CVM, ENI.
InstanceId	String	Unique ID of a real server, which can be obtained from the unInstanceId field in the return of the DescribeInstances API
Port	Integer	Listening port of a real server
Weight	Integer	Forwarding weight of a real server. Value range: [0, 100]. Default value: 10.
PublicIpAddresses	Array of String	Public IP of a real server Note: This field may return null, indicating that no valid values can be obtained.
PrivateIpAddresses	Array of String	Private IP of a real server Note: This field may return null, indicating that no valid values can be obtained.
InstanceName	String	Real server instance names Note: This field may return null, indicating that no valid values can be obtained.
RegisteredTime	String	Bound time of a real server Note: This field may return null, indicating that no valid values can be obtained.
EniId	String	Unique ENI ID Note: This field may return null, indicating that no valid values can be obtained.

## BasicTargetGroupInfo

Basic information of a target group bound to a forwarding rule or a listener

Used by actions: DescribeListeners, DescribeRewrite.

Name	Type	Description
TargetGroupId	String	Target group ID
TargetGroupName	String	Target group name

## BatchTarget



## Batch binding type

Used by actions: BatchDeregisterTargets, BatchRegisterTargets.

Name	Type	Required	Description
ListenerId	String	Yes	Listener ID.
Port	Integer	Yes	The port to Bind
InstanceId	String	No	CVM instance ID. The primary IP of the primary ENI will be bound.
EniIp	String	No	It is required for binding an IP. It supports an ENI IP or any other private IP. To bind an ENI IP, the ENI should be bound to a CVM instance before being bound to a CLB instance. Note: either <code>InstanceId</code> or <code>EniIp</code> must be passed in, which is required for binding a dual-stack IPv6 CVM instance.
Weight	Integer	No	Weight of the CVM instance. Value range: [0, 100]. If it is not specified for binding the instance, 10 will be used by default.
LocationId	String	No	Layer-7 rule ID.

## BindDetailItem

Binding details including listener name, protocol, url and vport

Used by actions: DescribeCustomizedConfigAssociateList.

Name	Type	Description
LoadBalancerId	String	Specifies the ID of CLB to be bound
ListenerId	String	Specifies the ID of listener to be bound Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Domain	String	Specifies the domain name to be bound Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
LocationId	String	Sets the bound rule. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ListenerName	String	Listener name.

		Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Protocol	String	Listener protocol. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Vport	Integer	Listener port. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Url	String	URL of the location. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
UconfigId	String	Configuration ID. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## BlockedIP

IP added to blacklist 12306

Used by actions: DescribeBlockIPList.

Name	Type	Description
IP	String	Blacklisted IP
CreateTime	String	Blacklisted time
ExpireTime	String	Expiration time

## CertIdRelatedWithLoadBalancers

Certificate ID and list of CLB instances associated with it

Used by actions: DescribeLoadBalancerListByCertId.

Name	Type	Description
CertId	String	Certificate ID

LoadBalancers	Array of <a href="#">LoadBalancer</a>	List of CLB instances associated with certificate Note: this field may return null, indicating that no valid values can be obtained.
---------------	---------------------------------------	---

## CertInfo

Certificate information

Used by actions: CreateListener, ModifyDomainAttributes, ModifyListener.

Name	Type	Required	Description
CertId	String	No	ID of the certificate. If it's not specified, <code>CertContent</code> and <code>CertKey</code> are required. For a server certificate, you also need to specify <code>CertName</code> .
CertName	String	No	Name of the uploaded certificate. It's required if <code>CertId</code> is not specified.
CertContent	String	No	Public key of the uploaded certificate. This is required if <code>CertId</code> is not specified.
CertKey	String	No	Private key of the uploaded server certificate. This is required if <code>CertId</code> is not specified.

## CertificateInput

Certificate information

Used by actions: CreateListener, CreateRule, ModifyDomainAttributes, ModifyListener, ReplaceCertForLoadBalancers.

Name	Type	Required	Description
SSLMode	String	No	Authentication type. Value range: UNIDIRECTIONAL (unidirectional authentication), MUTUAL (mutual authentication)
CertId	String	No	ID of a server certificate. If you leave this parameter empty, you must upload the certificate, including <code>CertContent</code> , <code>CertKey</code> , and <code>CertName</code> .
CertCald	String	No	ID of a client certificate. When the listener adopts mutual authentication (i.e., <code>SSLMode</code> = mutual), if you leave this parameter

			empty, you must upload the client certificate, including CertCaContent and CertCaName.
CertName	String	No	Name of the uploaded server certificate. If there is no CertId, this parameter is required.
CertKey	String	No	Key of the uploaded server certificate. If there is no CertId, this parameter is required.
CertContent	String	No	Content of the uploaded server certificate. If there is no CertId, this parameter is required.
CertCaName	String	No	Name of the uploaded client CA certificate. When SSLMode = mutual, if there is no CertCald, this parameter is required.
CertCaContent	String	No	Content of the uploaded client certificate. When SSLMode = mutual, if there is no CertCald, this parameter is required.

## CertificateOutput

Certificate information

Used by actions: DescribeListeners, DescribeRewrite.

Name	Type	Description
SSLMode	String	Authentication type. Value range: UNIDIRECTIONAL (unidirectional authentication), MUTUAL (mutual authentication)
CertId	String	Server certificate ID.
CertCald	String	Client certificate ID. Note: This field may return null, indicating that no valid values can be obtained.
ExtCertIds	Array of String	IDs of extra server certificates Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## ClassicalHealth

Real server health status of a classic CLB

Used by actions: DescribeClassicalLBHealthStatus.

Name	Type	Description
------	------	-------------

IP	String	Private IP of a real server
Port	Integer	Real server port
ListenerPort	Integer	CLB listener port
Protocol	String	Forwarding protocol
HealthStatus	Integer	Health check result. Value range: 1 (healthy), 0 (unhealthy)

## ClassicalListener

Classic CLB listener information

Used by actions: DescribeClassicalLBListeners.

Name	Type	Description
ListenerId	String	CLB listener ID
ListenerPort	Integer	CLB listener port
InstancePort	Integer	Backend forwarding port of a listener
ListenerName	String	Listener name
Protocol	String	Listener protocol type
SessionExpire	Integer	Session persistence time
HealthSwitch	Integer	Whether health check is enabled. 1: enabled; 0: disabled.
TimeOut	Integer	Response timeout period
IntervalTime	Integer	Check interval
HealthNum	Integer	Health threshold
UnhealthNum	Integer	Unhealthy threshold
HttpHash	String	A request balancing method for HTTP and HTTPS listeners of a public network classic CLB. wrr means weighted round robin, while ip_hash means consistent hashing based on source IPs of access requests.
HttpCode	Integer	Health check return code for HTTP and HTTPS listeners of a public network classic CLB. For more information, see the explanation of the field in the listener

		creating API.
HttpCheckPath	String	Health check path for HTTP and HTTPS listeners of a public network classic CLB
SSLMode	String	Authentication method for an HTTPS listener of a public network classic CLB
CertId	String	Server certificate ID for an HTTPS listener of a public network classic CLB
CertCald	String	Client certificate ID for an HTTPS listener of a public network classic CLB
Status	Integer	Listener status. Value range: 0 (creating), 1 (running)

## ClassicalLoadBalancerInfo

CLB information

Used by actions: DescribeClassicalLBByInstanceId.

Name	Type	Description
InstanceId	String	Real server ID
LoadBalancerIds	Array of String	List of CLB instance IDs Note: This field may return null, indicating that no valid values can be obtained.

## ClassicalTarget

Real server information of a classic CLB

Used by actions: DescribeClassicalLBTargets.

Name	Type	Description
Type	String	Real server type. Value range: CVM, ENI (coming soon)
InstanceId	String	Unique ID of a real server, which can be obtained from the unInstanceId field in the return of the DescribeInstances API
Weight	Integer	Forwarding weight of a real server. Value range: [0, 100]. Default value: 10.
PublicIpAddresses	Array of String	Public IP of a real server Note: This field may return null, indicating that no valid values can be obtained.

PrivateIpAddresses	Array of String	Private IP of a real server Note: This field may return null, indicating that no valid values can be obtained.
InstanceName	String	Real server instance names Note: This field may return null, indicating that no valid values can be obtained.
RunFlag	Integer	Real server status 1: failed; 2: running; 3: creating; 4: shut down; 5: returned; 6: returning; 7: restarting; 8: starting; 9: shutting down; 10: resetting password; 11: formatting; 12: making image; 13: setting bandwidth; 14: reinstalling system; 19: upgrading; 21: hot migrating Note: This field may return null, indicating that no valid values can be obtained.

## ClassicalTargetInfo

Backend information of a classic CLB

Used by actions: RegisterTargetsWithClassicalLB.

Name	Type	Required	Description
InstanceId	String	Yes	Real server ID
Weight	Integer	No	Weight. Value range: [0, 100]

## ClusterItem

Dedicated cluster information

Used by actions: CloneLoadBalancer, CreateLoadBalancer, MigrateClassicalLoadBalancers.

Name	Type	Required	Description
ClusterId	String	Yes	Unique cluster ID
ClusterName	String	No	Cluster name Note: this field may return null, indicating that no valid values can be obtained.
Zone	String	No	Cluster AZ, such as ap-guangzhou-1

Note: this field may return null, indicating that no valid values can be obtained.

## ConfigListItem

Configuration content

Used by actions: DescribeCustomizedConfigList.

Name	Type	Description
UconfigId	String	Configuration ID.
ConfigType	String	Configuration type.
ConfigName	String	Configuration name. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ConfigContent	String	Configuration content.
CreateTimestamp	String	Creates configuration time.
UpdateTimestamp	String	Modifies configuration time.

## CrossTargets

Information of CVMs and ENIs that use cross-region binding 2.0

Used by actions: DescribeCrossTargets.

Name	Type	Description
LocalVpcId	String	VPC ID of the CLB instance
VpcId	String	VPC ID of the CVM or ENI instance
IP	String	IP address of the CVM or ENI instance
VpcName	String	VPC name of the CVM or ENI instance
EniId	String	ENI ID of the CVM instance
InstanceId	String	ID of the CVM instance



		Note: This field may return <code>null</code> , indicating that no valid value was found.
InstanceName	String	Name of the CVM instance Note: This field may return <code>null</code> , indicating that no valid value was found.
Region	String	Region of the CVM or ENI instance

## ExclusiveCluster

Dedicated cluster

Used by actions: CloneLoadBalancer, CreateLoadBalancer, DescribeLoadBalancerListByCertId, DescribeLoadBalancers, MigrateClassicalLoadBalancers.

Name	Type	Required	Description
L4Clusters	Array of <a href="#">ClusterItem</a>	No	Layer-4 dedicated cluster list Note: this field may return null, indicating that no valid values can be obtained.
L7Clusters	Array of <a href="#">ClusterItem</a>	No	Layer-7 dedicated cluster list Note: this field may return null, indicating that no valid values can be obtained.
ClassicalCluster	<a href="#">ClusterItem</a>	No	vpcgw cluster Note: this field may return null, indicating that no valid values can be obtained.

## ExtraInfo

Reserved field which can be ignored generally.

Used by actions: DescribeLoadBalancerListByCertId, DescribeLoadBalancers, DescribeLoadBalancersDetail.

Name	Type	Description
ZhiTong	Boolean	Whether to enable VIP direct connection Note: This field may return null, indicating that no valid values can be obtained.
TgwGroupName	String	TgwGroup name Note: This field may return null, indicating that no valid values can be obtained.

## Filter

### Filter

Used by actions: DescribeCrossTargets, DescribeCustomizedConfigList, DescribeLoadBalancers, DescribeLoadBalancersDetail, DescribeResources, DescribeTargetGroupInstances, DescribeTargetGroupList, DescribeTargetGroups, DescribeTargets.

Name	Type	Required	Description
Name	String	Yes	Filter name
Values	Array of String	Yes	Filter value array

## FunctionInfo

### SCF related information

Used by actions: DeregisterFunctionTargets, ModifyFunctionTargets, RegisterFunctionTargets.

Name	Type	Required	Description
FunctionNamespace	String	Yes	Function namespace
FunctionName	String	Yes	Function name
FunctionQualifier	String	Yes	Function version name or alias
FunctionQualifierType	String	No	Function qualifier type. Values: <code>VERSION</code> , <code>ALIAS</code> . Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## FunctionTarget

Whether to use SCF (Serverless Cloud Function) as the backend service

Used by actions: DeregisterFunctionTargets, DescribeTargets, ModifyFunctionTargets, RegisterFunctionTargets.

Name	Type	Required	Description
Function	<a href="#">FunctionInfo</a>	Yes	SCF related information Note: This field may return <code>null</code> , indicating that no valid values

			can be obtained.
Weight	Integer	No	Weight

## HealthCheck

Health check information.

Note: Custom check parameters are currently supported only in certain beta test regions.

Used by actions: CreateListener, CreateRule, DescribeListeners, DescribeRewrite, ModifyListener, ModifyRule.

Name	Type	Required	Description
HealthSwitch	Integer	No	Whether to enable health check. 1: enable; 0: disable.
TimeOut	Integer	No	Health check response timeout period in seconds (applicable only to layer-4 listeners). Value range: 2-60. Default value: 2. This parameter should be less than the check interval. Note: This field may return null, indicating that no valid values can be obtained.
IntervalTime	Integer	No	Health check probing interval period. It defaults to <code>5</code> . For IPv4 CLB instances, the range is 2-300. For IPv6 CLB instances, the range is 5-300. Unit: second Note: For some IPv4 CLB instances created long ago, the range is 5-300. Note: This field may return null, indicating that no valid values can be obtained.
HealthNum	Integer	No	Health threshold. Default value: 3, indicating that if a forward is found healthy three consecutive times, it is considered to be normal. Value range: 2-10 Note: This field may return null, indicating that no valid values can be obtained.
UnHealthNum	Integer	No	Unhealthy threshold. Default value: 3, indicating that if a forward is found unhealthy three consecutive times, it is considered to be exceptional. Value range: 2-10 Note: This field may return null, indicating that no valid values can be obtained.
HttpCode	Integer	No	Health check status code (applicable only to HTTP/HTTPS forwarding rules and HTTP health checks of TCP listeners). Value range: 1-31. Default value: 31. <code>1</code> : Returns code 1xx for healthy status. <code>2</code> : Returns code 2xx

			<p>for healthy status. <code>4</code> : Returns code 3xx for healthy status. <code>8</code> : Returns code 4xx for healthy status. <code>16</code> : Returns code 5xx for healthy status. If you want multiple return codes to represent healthy, sum up the corresponding values.</p> <p>Note: This field may return <code>null</code> , indicating that no valid values can be obtained.</p>
HttpCheckPath	String	No	<p>Health check path (applicable only to HTTP/HTTPS forwarding rules and HTTP health checks of TCP listeners).</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
HttpCheckDomain	String	No	<p>Health check domain name. It's applicable only to HTTP/HTTPS forwarding rules and HTTP health checks of TCP listeners. It's required for HTTP health check of TCP listeners.</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
HttpCheckMethod	String	No	<p>Health check method (applicable only to HTTP/HTTPS forwarding rules and HTTP health checks of TCP listeners).</p> <p>Value range: HEAD, GET. Default value: HEAD.</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
CheckPort	Integer	No	<p>Health check port (a custom check parameter), which is the port of the real server by default. Unless you want to specify a port, it is recommended to leave it empty. (Applicable only to TCP/UDP listeners.)</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
ContextType	String	No	<p>Health check protocol (a custom check parameter), which is required if the value of CheckType is CUSTOM. This parameter represents the input format of the health check. Value range: HEX, TEXT. If the value is HEX, the characters of SendContext and RecvContext can only be selected from 0123456789ABCDEF and the length must be an even number. (Applicable only to TCP/UDP listeners.)</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
SendContext	String	No	<p>Health check protocol (a custom check parameter), which is required if the value of CheckType is CUSTOM. This parameter represents the content of the request sent by the health check. Only ASCII visible characters are allowed, and the maximum length is 500. (Applicable only to TCP/UDP listeners.)</p>

			Note: This field may return null, indicating that no valid values can be obtained.
RecvContext	String	No	Health check protocol (a custom check parameter), which is required if the value of CheckType is CUSTOM. This parameter represents the result returned by the health check. Only ASCII visible characters are allowed, and the maximum length is 500. (Applicable only to TCP/UDP listeners.) Note: This field may return null, indicating that no valid values can be obtained.
CheckType	String	No	Health check protocol. Values: <code>TCP</code> , <code>HTTP</code> , <code>HTTPS</code> , <code>GRPC</code> , <code>PING</code> , and <code>CUSTOM</code> . UDP listeners support <code>PING</code> / <code>CUSTOM</code> . TCP listener support <code>TCP</code> / <code>HTTP</code> / <code>CUSTOM</code> . TCP_SSL and QUIC listeners support <code>TCP</code> / <code>HTTP</code> . HTTP rules support <code>HTTP</code> / <code>GRPC</code> . HTTPS rules support <code>HTTP</code> / <code>HTTPS</code> / <code>GRPC</code> . Note: This field may return null, indicating that no valid values can be obtained.
HttpVersion	String	No	HTTP version. HTTP version of the backend service. Values: <code>HTTP/1.0</code> , <code>HTTP/1.1</code> . It is only applicable to TCP listeners, and is required when <code>CheckType = HTTP</code> . Note: This field may return null, indicating that no valid values can be obtained.
SourceIpType	Integer	No	Specifies the type of health check source IP. <code>0</code> (default): CLB VIP. <code>1</code> : 100.64 IP range. Note: This field may return null, indicating that no valid values can be obtained.
ExtendedCode	String	No	GRPC health check status code, which is only applicable to rules with GRPC as the backend forwarding protocol. It can be a single number (such as <code>20</code> ), multiple numbers (such as <code>20, 25</code> ) or a range (such as <code>0-99</code> ). The default value is <code>12</code> . Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## IdleLoadBalancer

ID of the idle CLB instance

Used by actions: DescribeIdleLoadBalancers.

Name	Type	Description
LoadBalancerId	String	CLB instance ID
LoadBalancerName	String	CLB instance name
Region	String	CLB instance region
Vip	String	CLB instance VIP
IdleReason	String	The reason why the load balancer is considered idle. <code>NO_RULES</code> : No rules configured. <code>NO_RS</code> : The rules are not associated with servers.
Status	Integer	CLB instance status, including: <code>0</code> : Creating; <code>1</code> : Running.
Forward	Integer	CLB type. Value range: <code>1</code> (CLB); <code>0</code> (classic CLB).
Domain	String	The load balancing hostname. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## InternetAccessible

Network billing mode based on maximum outbound bandwidth

Used by actions: CloneLoadBalancer, CreateLoadBalancer, DescribeLoadBalancerListByCertId, DescribeLoadBalancers, DescribeLoadBalancersDetail, InquiryPriceCreateLoadBalancer, InquiryPriceModifyLoadBalancer, ModifyLoadBalancerAttributes.

Name	Type	Required	Description
InternetChargeType	String	No	TRAFFIC_POSTPAID_BY_HOUR: hourly pay-as-you-go by traffic; BANDWIDTH_POSTPAID_BY_HOUR: hourly pay-as-you-go by bandwidth; BANDWIDTH_PACKAGE: billed by bandwidth package (currently, this method is supported only if the ISP is specified)
InternetMaxBandwidthOut	Integer	No	Maximum outgoing bandwidth in Mbps. It works on LCU-supported instances on private networks and all instances on public networks. - For shared and dedicated CLB instances on public

			<p>networks, the range is 1Mbps-2048Mbps.</p> <ul style="list-style-type: none"> <li>- For all LCU-supported CLB instances:</li> <li>- It defaults to General LCU-supported instance. SLA corresponds to Super Large 1, and the range of maximum outgoing bandwidth is 1 Mbps - 10240 Mbps.</li> <li>- If you have enabled Super Large specification, the range of maximum outgoing bandwidth is 1 Mbps - 61440 Mbps Super Large LCU-supported specification is in beta now. To join the beta, <a href="#">submit a ticket</a>.</li> </ul> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
BandwidthpkgSubType	String	No	<p>Bandwidth package type, such as SINGLEISP</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>

## ItemPrice

Pricing information of an item

Used by actions: InquiryPriceCreateLoadBalancer, InquiryPriceModifyLoadBalancer, InquiryPriceRefundLoadBalancer, InquiryPriceRenewLoadBalancer.

Name	Type	Description
UnitPrice	Float	<p>PAYG unit price, in USD.</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
ChargeUnit	String	<p>Subsequent billing unit. Value Range:</p> <p><code>HOURLY</code> : Calculate the cost by hour. It's available when "InternetChargeType=POSTPAID_BY_HOUR".</p> <p><code>GB</code> : Calculate the cost by traffic in GB. It's available when "InternetChargeType=TRAFFIC_POSTPAID_BY_HOUR".</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
OriginalPrice	Float	<p>Reserved field</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
DiscountPrice	Float	<p>Reserved field</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
UnitPriceDiscount	Float	<p>Discount unit price of a pay-as-you-go instance, in USD.</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
Discount	Float	<p>Discount. For example, 20.0 indicates 80% off.</p>

Note: This field may return null, indicating that no valid values can be obtained.

## LBChargePrepaid

Monthly subscription configuration of a CLB instance

Used by actions: DescribeLoadBalancerListByCertId, DescribeLoadBalancers, DescribeLoadBalancersDetail, InquiryPriceCreateLoadBalancer, InquiryPriceRenewLoadBalancer.

Name	Type	Required	Description
RenewFlag	String	No	Renewal type. AUTO_RENEW: automatic renewal; MANUAL_RENEW: manual renewal Note: This field may return null, indicating that no valid values can be obtained.
Period	Integer	No	Cycle, indicating the number of months (reserved field) Note: This field may return null, indicating that no valid values can be obtained.

## LBItem

Querying the binding relation of the CLB instance

Used by actions: DescribeLBListeners.

Name	Type	Description
LoadBalancerId	String	String ID of the CLB instance.
Vip	String	VIP of the CLB instance.
Listeners	Array of <a href="#">ListenerItem</a>	Listener rule.
Region	String	Region of the CLB instance

## LbRsItem

Querying the input data types

Used by actions: DescribeLBListeners.



Name	Type	Required	Description
VpcId	String	Yes	VPC ID
PrivateIp	String	Yes	Private network IP to be queried, which can be of the CVM or ENI.

## LbRsTargets

Querying the output data types

Used by actions: DescribeLbListeners.

Name	Type	Description
Type	String	Private network IP type, which can be <code>cvm</code> or <code>eni</code> .
PrivateIp	String	Private network IP of the real server.
Port	Integer	Port bound to the real server.
VpcId	Integer	VPC ID of the real server. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Weight	Integer	Weight of the real server. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## Listener

Listener information

Used by actions: DescribeListeners.

Name	Type	Description
ListenerId	String	CLB listener ID
Protocol	String	Listener protocol
Port	Integer	Listener port
Certificate	<a href="#">CertificateOutput</a>	Information of certificates bound to the listener Note: This field may return null, indicating that no valid values can be obtained.

HealthCheck	<a href="#">HealthCheck</a>	Health check information of the listener Note: This field may return null, indicating that no valid values can be obtained.
Scheduler	String	Request scheduling method Note: This field may return null, indicating that no valid values can be obtained.
SessionExpireTime	Integer	Session persistence time Note: This field may return null, indicating that no valid values can be obtained.
SniSwitch	Integer	Whether to enable SNI. <code>1</code> : Enable; <code>0</code> : Do not enable. This parameter is only meaningful for HTTPS listeners. Note: This field may return null, indicating that no valid values can be obtained.
Rules	Array of <a href="#">RuleOutput</a>	All forwarding rules under a listener (this parameter is meaningful only for HTTP/HTTPS listeners) Note: This field may return null, indicating that no valid values can be obtained.
ListenerName	String	Listener name Note: This field may return null, indicating that no valid values can be obtained.
CreateTime	String	Listener creation time Note: This field may return null, indicating that no valid values can be obtained.
EndPort	Integer	End port of a port range Note: This field may return null, indicating that no valid values can be obtained.
TargetType	String	Real server type Note: This field may return null, indicating that no valid values can be obtained.
TargetGroup	<a href="#">BasicTargetGroupInfo</a>	Basic information of a bound target group. This field will be returned when a target group is bound to a listener. Note: This field may return null, indicating that no valid values can be obtained.
SessionType	String	Session persistence type. Valid values: Normal: the default session persistence type; QUIC_CID: session persistence by QUIC connection ID.

		Note: this field may return null, indicating that no valid values can be obtained.
KeepaliveEnable	Integer	Whether a persistent connection is enabled (1: enabled; 0: disabled). This parameter can only be configured in HTTP/HTTPS listeners. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Toa	Boolean	Only the NAT64 CLB TCP listeners are supported. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
DeregisterTargetRst	Boolean	Whether to send the TCP RST packet to the client when unbinding a real server. This parameter is applicable to TCP listeners only. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
AttrFlags	Array of String	Attribute of listener Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
TargetGroupList	Array of <a href="#">BasicTargetGroupInfo</a>	List of bound target groups Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
MaxConn	Integer	Maximum number of concurrent listener connections. If it's set to <code>-1</code> , the listener speed is not limited. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
MaxCps	Integer	Maximum number of new listener connections. If it's set to <code>-1</code> , the listener speed is not limited. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
IdleConnectTimeout	Integer	Connection idle timeout period (in seconds). It's only available to TCP listeners. Value range: 300-900 for shared and dedicated instances; 300-2000 for LCU-supported CLB instances. It defaults to 900. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## ListenerBackend

Details of real servers bound to a listener

Used by actions: DescribeTargets.

Name	Type	Description
ListenerId	String	Listener ID
Protocol	String	Listener protocol
Port	Integer	Listener port
Rules	Array of <a href="#">RuleTargets</a>	Information of rules under a listener (applicable only to HTTP/HTTPS listeners) Note: This field may return null, indicating that no valid values can be obtained.
Targets	Array of <a href="#">Backend</a>	List of real servers bound to a listener (applicable only to TCP/UDP/TCP_SSL listeners) Note: This field may return null, indicating that no valid values can be obtained.
EndPort	Integer	Ending port in port range if port range is supported; 0 if port range is not supported Note: this field may return null, indicating that no valid values can be obtained.

## ListenerHealth

Health check information of the listener

Used by actions: DescribeTargetHealth.

Name	Type	Description
ListenerId	String	Listener ID
ListenerName	String	Listener name Note: This field may return null, indicating that no valid values can be obtained.
Protocol	String	Listener protocol

Port	Integer	Listener port
Rules	Array of <a href="#">RuleHealth</a>	List of forwarding rules of the listener Note: This field may return null, indicating that no valid values can be obtained.

## ListenerItem

Querying the listener type

Used by actions: DescribeLBListeners.

Name	Type	Description
ListenerId	String	Listener ID.
Protocol	String	Listener protocol.
Port	Integer	Listener port.
Rules	Array of <a href="#">RulesItems</a>	Bound rule. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Targets	Array of <a href="#">LbRsTargets</a>	Object bound to the layer-4 listener. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
EndPort	Integer	End port of the listener. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## LoadBalancer

CLB instance information

Used by actions: DescribeLoadBalancerListByCertId, DescribeLoadBalancers.

Name	Type	Required	Description
LoadBalancerId	String	No	CLB instance ID.
LoadBalancerName	String	No	CLB instance name.

LoadBalancerType	String	No	CLB instance network type: OPEN: public network; INTERNAL: private network.
Forward	Integer	No	CLB type identifier. Value range: 1 (CLB); 0 (classic CLB).
Domain	String	No	Domain name of the CLB instance. It is only available for public classic CLBs. This parameter will be discontinued soon. Please use <code>LoadBalancerDomain</code> instead. Note: This field may return null, indicating that no valid values can be obtained.
LoadBalancerVips	Array of String	No	List of VIPs of a CLB instance. Note: This field may return null, indicating that no valid values can be obtained.
Status	Integer	No	CLB instance status, including: 0: creating; 1: running. Note: This field may return null, indicating that no valid values can be obtained.
CreateTime	String	No	CLB instance creation time. Note: This field may return null, indicating that no valid values can be obtained.
StatusTime	String	No	Last status change time of a CLB instance. Note: This field may return null, indicating that no valid values can be obtained.
ProjectId	Integer	No	ID of the project to which a CLB instance belongs. 0: default project.
VpcId	String	No	VPC ID Note: This field may return null, indicating that no valid values can be obtained.
OpenBgp	Integer	No	Protective CLB identifier. Value range: 1 (protective), 0 (non-protective). Note: This field may return null, indicating that no valid values can be obtained.
Snat	Boolean	No	SNAT is enabled for all private network classic CLB created before December 2016.

			Note: This field may return null, indicating that no valid values can be obtained.
Isolation	Integer	No	0: not isolated; 1: isolated. Note: This field may return null, indicating that no valid values can be obtained.
Log	String	No	Log information. Only the public network CLB that have HTTP or HTTPS listeners can generate logs. Note: This field may return null, indicating that no valid values can be obtained.
SubnetId	String	No	Subnet where a CLB instance resides (meaningful only for private network VPC CLB) Note: This field may return null, indicating that no valid values can be obtained.
Tags	Array of <a href="#">TagInfo</a>	No	CLB instance tag information Note: This field may return null, indicating that no valid values can be obtained.
SecureGroups	Array of String	No	Security group of a CLB instance Note: This field may return null, indicating that no valid values can be obtained.
TargetRegionInfo	<a href="#">TargetRegionInfo</a>	No	Basic information of a backend server bound to a CLB instance Note: This field may return null, indicating that no valid values can be obtained.
AnycastZone	String	No	Anycast CLB publishing region. For non-anycast CLB, this field returns an empty string. Note: This field may return null, indicating that no valid values can be obtained.
AddressIPVersion	String	No	IP version. Valid values: ipv4, ipv6 Note: this field may return null, indicating that no valid values can be obtained.
NumericalVpcId	Integer	No	VPC ID in a numeric form Note: This field may return null, indicating that no valid values can be obtained.
VipIsp	String	No	ISP to which a CLB IP address belongs

			Note: This field may return null, indicating that no valid values can be obtained.
MasterZone	<a href="#">ZoneInfo</a>	No	Primary AZ Note: This field may return null, indicating that no valid values can be obtained.
BackupZoneSet	Array of <a href="#">ZoneInfo</a>	No	Secondary AZ Note: This field may return null, indicating that no valid values can be obtained.
IsolatedTime	String	No	CLB instance isolation time Note: This field may return null, indicating that no valid values can be obtained.
ExpireTime	String	No	CLB instance expiration time, which takes effect only for prepaid instances Note: This field may return null, indicating that no valid values can be obtained.
ChargeType	String	No	Billing mode of CLB instance. Valid values: PREPAID (monthly subscription), POSTPAID_BY_HOUR (pay as you go). Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
NetworkAttributes	<a href="#">InternetAccessible</a>	No	CLB instance network attributes Note: This field may return null, indicating that no valid values can be obtained.
PrepaidAttributes	<a href="#">LBChargePrepaid</a>	No	Prepaid billing attributes of a CLB instance Note: This field may return null, indicating that no valid values can be obtained.
LogSetId	String	No	Logset ID of CLB Log Service (CLS) Note: This field may return null, indicating that no valid values can be obtained.
LogTopicId	String	No	Log topic ID of CLB Log Service (CLS) Note: This field may return null, indicating that no valid values can be obtained.
AddressIPv6	String	No	IPv6 address of a CLB instance Note: This field may return null, indicating that no valid values can be obtained.



ExtraInfo	<a href="#">ExtraInfo</a>	No	Reserved field which can be ignored generally. Note: This field may return null, indicating that no valid values can be obtained.
IsDDos	Boolean	No	Whether an Anti-DDoS Pro instance can be bound Note: This field may return null, indicating that no valid values can be obtained.
ConfigId	String	No	Custom configuration ID at the CLB instance level Note: This field may return null, indicating that no valid values can be obtained.
LoadBalancerPassToTarget	Boolean	No	Whether a real server opens the traffic from a CLB instance to the internet Note: this field may return null, indicating that no valid values can be obtained.
ExclusiveCluster	<a href="#">ExclusiveCluster</a>	No	Private network dedicated cluster Note: this field may return null, indicating that no valid values can be obtained.
IPv6Mode	String	No	This field is meaningful only when the IP address version is <code>ipv6</code> . Valid values: IPv6Nat64, IPv6FullChain Note: this field may return null, indicating that no valid values can be obtained.
SnatPro	Boolean	No	Whether to enable SnatPro. Note: this field may return null, indicating that no valid values can be obtained.
SnatIps	Array of <a href="#">SnatIp</a>	No	<code>SnatIp</code> list after SnatPro load balancing is enabled. Note: this field may return null, indicating that no valid values can be obtained.
SlaType	String	No	Specification of the LCU-supported instance. Note: This field may return null, indicating that no valid values can be obtained.
IsBlock	Boolean	No	Whether VIP is blocked Note: this field may return null, indicating that no valid values can be obtained.

IsBlockTime	String	No	Time blocked or unblocked Note: this field may return null, indicating that no valid values can be obtained.
LocalBgp	Boolean	No	Whether the IP type is the local BGP
ClusterTag	String	No	Dedicated layer-7 tag. Note: this field may return null, indicating that no valid values can be obtained.
MixIpTarget	Boolean	No	If the layer-7 listener of an IPv6FullChain CLB instance is enabled, the CLB instance can be bound with an IPv4 and an IPv6 CVM instance simultaneously. Note: this field may return null, indicating that no valid values can be obtained.
Zones	Array of String	No	Availability zone of a VPC-based private network CLB instance Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
NfvInfo	String	No	Whether it is an NFV CLB instance. No returned information: no; l7nfv: yes. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
HealthLogSetId	String	No	Health check logset ID of CLB CLS Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
HealthLogTopicId	String	No	Health check log topic ID of CLB CLS Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
ClusterIds	Array of String	No	Cluster ID. Note: This field may return null, indicating that no valid values can be obtained.
AttributeFlags	Array of String	No	CLB attribute Note: this field may return <code>null</code> ,

			indicating that no valid values can be obtained.
LoadBalancerDomain	String	No	Domain name of the CLB instance. Note: This field may return null, indicating that no valid values can be obtained.
Egress	String	No	Network egress Note: This field may return null, indicating that no valid values can be obtained.

## LoadBalancerDetail

CLB instance details

Used by actions: DescribeLoadBalancersDetail.

Name	Type	Description
LoadBalancerId	String	CLB instance ID.
LoadBalancerName	String	CLB instance name.
LoadBalancerType	String	CLB instance network type: Public: public network; Private: private network. Note: this field may return null, indicating that no valid values can be obtained.
Status	Integer	CLB instance status, including: 0: creating; 1: running. Note: this field may return null, indicating that no valid values can be obtained.
Address	String	CLB instance VIP. Note: this field may return null, indicating that no valid values can be obtained.
AddressIPv6	String	IPv6 VIP address of the CLB instance. Note: this field may return null, indicating that no valid values can be obtained.
AddressIPVersion	String	IP version of the CLB instance. Valid values: IPv4, IPv6. Note: this field may return null, indicating that no valid values can be obtained.
IPv6Mode	String	IPv6 address type of the CLB instance. Valid values:

		IPv6Nat64, IPv6FullChain. Note: this field may return null, indicating that no valid values can be obtained.
Zone	String	Availability zone where the CLB instance resides. Note: this field may return null, indicating that no valid values can be obtained.
AddressIsp	String	ISP to which the CLB IP address belongs. Note: this field may return null, indicating that no valid values can be obtained.
VpcId	String	ID of the VPC instance to which the CLB instance belongs. Note: this field may return null, indicating that no valid values can be obtained.
ProjectId	Integer	ID of the project to which the CLB instance belongs. 0: default project. Note: this field may return null, indicating that no valid values can be obtained.
CreateTime	String	CLB instance creation time. Note: this field may return null, indicating that no valid values can be obtained.
ChargeType	String	CLB instance billing mode. Note: this field may return null, indicating that no valid values can be obtained.
NetworkAttributes	<a href="#">InternetAccessible</a>	CLB instance network attribute. Note: this field may return null, indicating that no valid values can be obtained.
PrepaidAttributes	<a href="#">LBChargePrepaid</a>	Pay-as-you-go attribute of the CLB instance. Note: this field may return null, indicating that no valid values can be obtained.
ExtraInfo	<a href="#">ExtraInfo</a>	Reserved field, which can be ignored generally. Note: this field may return null, indicating that no valid values can be obtained.
ConfigId	String	Custom configuration IDs of CLB instances. Multiple IDs must be separated by commas (.). Note: This field may return null, indicating that no valid values can be obtained.

Tags	Array of <a href="#">TagInfo</a>	CLB instance tag information. Note: this field may return null, indicating that no valid values can be obtained.
ListenerId	String	CLB listener ID. Note: this field may return null, indicating that no valid values can be obtained.
Protocol	String	Listener protocol. Note: this field may return null, indicating that no valid values can be obtained.
Port	Integer	Listener port. Note: this field may return null, indicating that no valid values can be obtained.
LocationId	String	Forwarding rule ID. Note: this field may return null, indicating that no valid values can be obtained.
Domain	String	Domain name of the forwarding rule. Note: this field may return null, indicating that no valid values can be obtained.
Url	String	Forwarding rule path. Note: this field may return null, indicating that no valid values can be obtained.
TargetId	String	ID of target real servers. Note: this field may return null, indicating that no valid values can be obtained.
TargetAddress	String	Address of target real servers. Note: this field may return null, indicating that no valid values can be obtained.
TargetPort	Integer	Listening port of target real servers. Note: this field may return null, indicating that no valid values can be obtained.
TargetWeight	Integer	Forwarding weight of target real servers. Note: this field may return null, indicating that no valid values can be obtained.
Isolation	Integer	0: not isolated; 1: isolated. Note: this field may return null, indicating that no valid values can be obtained.

SecurityGroup	Array of String	List of the security groups bound to the CLB instance. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
LoadBalancerPassToTarget	Integer	Whether the CLB instance is billed by IP. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TargetHealth	String	Health status of the target real server. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Domains	String	List o domain names associated with the forwarding rule Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
SlaveZone	Array of String	The secondary zone of multi-AZ CLB instance Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
Zones	Array of String	The AZ of private CLB instance. This is only available for beta users. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
SniSwitch	Integer	Whether to enable SNI. <code>1</code> : Enable; <code>0</code> : Do not enable. This parameter is only meaningful for HTTPS listeners. Note: This field may return-null, indicating that no valid values can be obtained.
LoadBalancerDomain	String	Domain name of the CLB instance. Note: This field may return null, indicating that no valid values can be obtained.
Egress	String	Network egress Note: This field may return-null, indicating that no valid values can be obtained.

## LoadBalancerHealth

CLB instance health check status

Used by actions: DescribeTargetHealth.

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Name	Type	Description
LoadBalancerId	String	CLB instance ID
LoadBalancerName	String	CLB instance name Note: This field may return null, indicating that no valid values can be obtained.
Listeners	Array of <a href="#">ListenerHealth</a>	List of listeners Note: This field may return null, indicating that no valid values can be obtained.

## LoadBalancerTraffic

CLB instance traffic data

Used by actions: DescribeLoadBalancerTraffic.

Name	Type	Description
LoadBalancerId	String	CLB instance ID
LoadBalancerName	String	CLB instance name
Region	String	CLB instance region
Vip	String	CLB instance VIP
OutBandwidth	Float	Maximum outbound bandwidth in Mbps
Domain	String	CLB domain name Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## MultiCertInfo

Information of multiple certificates bound with the load balancer listener or rule.

Used by actions: CreateListener, CreateRule, ModifyDomainAttributes, ModifyListener.

Name	Type	Required	Description
SSLMode	String	Yes	Authentication type. Values: <code>UNIDIRECTIONAL</code> (one-way authentication), <code>MUTUAL</code> (two-way authentication)

CertList	Array of <a href="#">CertInfo</a>	Yes	List of listener or rule certificates. One-way and two-way authentication are supported. Only one certificate can be specified for one algorithm. If <code>SSLMode</code> is <code>MUTUAL</code> (two-way authentication), at least one CA certificate is required.
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## Price

Price of CLB instances.

Used by actions: `InquiryPriceCreateLoadBalancer`, `InquiryPriceModifyLoadBalancer`, `InquiryPriceRefundLoadBalancer`, `InquiryPriceRenewLoadBalancer`.

Name	Type	Description
InstancePrice	<a href="#">ItemPrice</a>	Instance price. Note: This field may return-null, indicating that no valid values can be obtained.
BandwidthPrice	<a href="#">ItemPrice</a>	Network price. Note: This field may return-null, indicating that no valid values can be obtained.
LcuPrice	<a href="#">ItemPrice</a>	LCU price. Note: This field may return-null, indicating that no valid values can be obtained.

## Quota

Quota description. All quotas are in the current region.

Used by actions: `DescribeQuota`.

Name	Type	Description
QuotaId	String	Quota name. Valid values: <ul style="list-style-type: none"> <li><code>TOTAL_OPEN_CLB_QUOTA</code> : Quota of public network CLB instances in the current region</li> <li><code>TOTAL_INTERNAL_CLB_QUOTA</code> : Quota of private network CLB instances in the current region</li> <li><code>TOTAL_LISTENER_QUOTA</code> : Quota of listeners under one CLB instance</li> <li><code>TOTAL_LISTENER_RULE_QUOTA</code> : Quota of forwarding rules under one listener</li> <li><code>TOTAL_TARGET_BIND_QUOTA</code> : Quota of CVM instances can be bound under one forwarding rule</li> </ul>



		<ul style="list-style-type: none"> <li><code>TOTAL_SNAP_IP_QUOTA</code> : Quota of SNAT IPs for cross-region binding 2.0 under one CLB instance</li> <li><code>TOTAL_ISP_CLB_QUOTA</code> : Quota of triple-ISP (CMCC/CUCC/CTCC) CLB instances in the current region</li> </ul>
QuotaCurrent	Integer	Currently used quantity. If it is <code>null</code> , it is meaningless. Note: this field may return null, indicating that no valid values can be obtained.
QuotaLimit	Integer	Quota limit.

## Resource

Resource details

Used by actions: DescribeResources.

Name	Type	Description
Type	Array of String	Specific ISP resource information, Values: <code>CMCC</code> , <code>CUCC</code> , <code>CTCC</code> , <code>BGP</code> , and <code>INTERNAL</code> .
Isp	String	ISP information, such as <code>CMCC</code> , <code>CUCC</code> , <code>CTCC</code> , <code>BGP</code> , and <code>INTERNAL</code> .
AvailabilitySet	Array of <a href="#">ResourceAvailability</a>	Available resources Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
TypeSet	Array of <a href="#">TypeInfo</a>	ISP Type Note: This field may return null, indicating that no valid values can be obtained.

## ResourceAvailability

Resource availability

Used by actions: DescribeResources.

Name	Type	Description
Type	String	Specific ISP resource information. Values: <code>CMCC</code> , <code>CUCC</code> , <code>CTCC</code> , <code>BGP</code> .
Availability	String	Whether the resource is available. Values: <code>Available</code> , <code>Unavailable</code>

## RewriteLocationMap

Redirection relationship between forwarding rules

Used by actions: DeleteRewrite, ManualRewrite.

Name	Type	Required	Description
SourceLocationId	String	Yes	Source forwarding rule ID
TargetLocationId	String	Yes	ID of the forwarding rule of the destination
RewriteCode	Integer	No	Redirection status code. Valid values: 301, 302, and 307.
TakeUrl	Boolean	No	Whether the matched URL is carried in redirection. It is required when configuring <code>RewriteCode</code> .
SourceDomain	String	No	Original domain name of redirection, which must be the corresponding domain name of <code>SourceLocationId</code> . It is required when configuring <code>RewriteCode</code> .

## RewriteTarget

Redirect target information

Used by actions: DescribeListeners, DescribeRewrite.

Name	Type	Description
TargetListenerId	String	Listener ID of a redirect target Note: This field may return null, indicating that there is no redirection. Note: This field may return null, indicating that no valid values can be obtained.
TargetLocationId	String	Forwarding rule ID of a redirect target Note: This field may return null, indicating that there is no redirection. Note: This field may return null, indicating that no valid values can be obtained.
RewriteCode	Integer	Redirection status code Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
TakeUrl	Boolean	Whether the matched URL is carried in redirection. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

RewriteType	String	Redirection type. Manual: manual redirection; Auto: automatic redirection. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
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## RsWeightRule

Modifies the data type of a node weight

Used by actions: BatchModifyTargetWeight.

Name	Type	Required	Description
ListenerId	String	Yes	CLB listener ID.
Targets	Array of <a href="#">Target</a>	Yes	List of real servers whose weights to modify.
LocationId	String	No	Forwarding rule ID, which is required only for layer-7 rules.
Domain	String	No	Target rule domain name. This parameter does not take effect if LocationId is specified
Url	String	No	Target rule URL. This parameter does not take effect if LocationId is specified
Weight	Integer	No	The new forwarding weight of the real server. Value range: [0, 100]. This parameter takes lower precedence than <code>Weight</code> in <a href="#">Targets</a> , which means that this parameter only takes effect when the <code>Weight</code> in <code>RsWeightRule</code> is left empty.

## RuleHealth

Health check status of a forwarding rule

Used by actions: DescribeTargetHealth.

Name	Type	Description
LocationId	String	Forwarding rule ID
Domain	String	Domain name of the forwarding rule Note: This field may return null, indicating that no valid values can be

		obtained.
Url	String	Forwarding rule Url Note: This field may return null, indicating that no valid values can be obtained.
Targets	Array of <a href="#">TargetHealth</a>	Health status of the real server bound to this rule Note: this field may return <code>null</code> , indicating that no valid values can be obtained.

## RuleInput

HTTP/HTTPS forwarding rule (input)

Used by actions: CreateRule.

Name	Type	Required	Description
Url	String	Yes	Forwarding rule path. Length: 1-200.
Domain	String	No	The domain name associated with the forwarding rule. It can contain 1-80 characters. Only one domain name can be entered. If you need to enter multiple domain names, use <code>Domains</code> .
SessionExpireTime	Integer	No	Session persistence time in seconds. Value range: 30-3,600. Setting it to 0 indicates that session persistence is disabled.
HealthCheck	<a href="#">HealthCheck</a>	No	Health check information. For more information, please see <a href="#">Health Check</a>
Certificate	<a href="#">CertificateInput</a>	No	Certificate information. <code>Certificate</code> and <code>MultiCertInfo</code> cannot be specified at the same time.
Scheduler	String	No	Request forwarding method of the rule. Value range: WRR, LEAST_CONN, IP_HASH They represent weighted round robin, least connections, and IP hash, respectively. Default value: WRR.
ForwardType	String	No	Forwarding protocol between the CLB instance and backend service. Values: <code>HTTP</code> , <code>HTTPS</code> , <code>GRPC</code>

			and <code>TRPC</code> (only for internal usage). It defaults to <code>HTTP</code> .
DefaultServer	Boolean	No	Whether to set this domain name as the default domain name. Note: Only one default domain name can be set under one listener.
Http2	Boolean	No	Whether to enable HTTP/2. Note: HTTP/2 can be enabled only for HTTPS domain names.
TargetType	String	No	Target real server type. <code>NODE</code> : binding a general node; <code>TARGETGROUP</code> : binding a target group.
TrpcCallee	String	No	TRPC callee server route, which is required when <code>ForwardType</code> is "TRPC". This is now only for internal usage.
TrpcFunc	String	No	TRPC calling service API, which is required when <code>ForwardType</code> is "TRPC". This is now only for internal usage.
Quic	Boolean	No	Whether to enable QUIC. Note: QUIC can be enabled only for HTTPS domain names
Domains	Array of String	No	The domain name associated with the forwarding rule. Each contain 1-80 characters. If you only need to enter one domain name, use <code>Domain</code> instead.
MultiCertInfo	<a href="#">MultiCertInfo</a>	No	Certificate information. You can specify multiple server-side certificates with different algorithm types. <code>Certificate</code> and <code>MultiCertInfo</code> cannot be specified at the same time.

## RuleOutput

HTTP/HTTPS listener forwarding rule (output)

Used by actions: DescribeListeners, DescribeRewrite.

Name	Type	Description
LocationId	String	Forwarding rule ID
Domain	String	Domain name of the forwarding rule. Note: This field may return null, indicating that no valid values

		can be obtained.
Url	String	Forwarding rule path. Note: This field may return null, indicating that no valid values can be obtained.
SessionExpireTime	Integer	Session persistence time
HealthCheck	<a href="#">HealthCheck</a>	Health check information Note: This field may return null, indicating that no valid values can be obtained.
Certificate	<a href="#">CertificateOutput</a>	Certificate information Note: This field may return null, indicating that no valid values can be obtained.
Scheduler	String	Request forwarding method of the rule
ListenerId	String	ID of the listener to which the forwarding rule belongs
RewriteTarget	<a href="#">RewriteTarget</a>	Redirect target information of a forwarding rule Note: This field may return null, indicating that no valid values can be obtained.
HttpGzip	Boolean	Whether to enable gzip
BeAutoCreated	Boolean	Whether the forwarding rule is automatically created
DefaultServer	Boolean	Whether to use as the default domain name
Http2	Boolean	Whether to enable Http2
ForwardType	String	Forwarding protocol between CLB and real server
CreateTime	String	Forwarding rule creation time
TargetType	String	Real server type
TargetGroup	<a href="#">BasicTargetGroupInfo</a>	Basic information of a bound target group. This field will be returned if a target group is bound to a rule. Note: This field may return null, indicating that no valid values can be obtained.
WafDomainId	String	WAF instance ID Note: This field may return null, indicating that no valid values can be obtained.
TrpcCallee	String	TRPC callee server route, which is valid when

		<p><code>ForwardType</code> is <code>TRPC</code> . This is now only for internal usage.</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
TrpcFunc	String	<p>TRPC calling service API, which is valid when <code>ForwardType</code> is <code>TRPC</code> . This is now only for internal usage.</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
QuicStatus	String	<p>QUIC status</p> <p>Note: this field may return null, indicating that no valid values can be obtained.</p>
Domains	Array of String	<p>List of domain names associated with the forwarding rule</p> <p>Note: This field may return <code>null</code> , indicating that no valid values can be obtained.</p>
TargetGroupList	Array of <a href="#">BasicTargetGroupInfo</a>	<p>List of bound target groups</p> <p>Note: This field may return <code>null</code> , indicating that no valid values can be obtained.</p>

## RuleTargets

Information of the real server bound to a forwarding rule under an HTTP/HTTPS listener

Used by actions: DescribeTargets.

Name	Type	Description
LocationId	String	Forwarding rule ID
Domain	String	Domain name of the forwarding rule
Url	String	Forwarding rule path.
Targets	Array of <a href="#">Backend</a>	<p>Real server information</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>
FunctionTargets	Array of <a href="#">FunctionTarget</a>	<p>Information about backend SCF functions.</p> <p>Note: This field may return null, indicating that no valid values can be obtained.</p>

## RulesItems

Object bound to the layer-7 listener rule

Used by actions: DescribeLbListeners.

Name	Type	Description
LocationId	String	Rule ID.
Domain	String	Domain name.
Url	String	Uri
Targets	Array of <a href="#">LbRsTargets</a>	Object bound to the real server.

## SlaUpdateParam

Parameters for upgrading to an LCU-supported instance

Used by actions: ModifyLoadBalancerSla.

Name	Type	Required	Description
LoadBalancerId	String	Yes	ID of the CLB instance
SlaType	String	Yes	<p>LCU-supported instance specification. Value:</p> <ul style="list-style-type: none"> <li><code>SLA</code> : If you have activated Super Large LCU-supported instances, <code>SLA</code> indicates Super Large 4.</li> <li><code>clb.c2.medium</code> : Standard</li> <li><code>clb.c3.small</code> : Advanced 1</li> <li><code>clb.c3.medium</code> : Advanced 2</li> <li><code>clb.c4.small</code> : Super Large 1</li> <li><code>clb.c4.medium</code> : Super Large 2</li> <li><code>clb.c4.large</code> : Super Large 3</li> <li><code>clb.c4.xlarge</code> : Super Large 4</li> </ul> <p>For Super Large 2 and above specifications, please <a href="#">submit a ticket</a>. For more specifications, see <a href="#">Specifications Comparison</a></p>

## SnatIp

`SnatIp` information structure



Used by actions: CloneLoadBalancer, CreateLoadBalancer, CreateLoadBalancerSnatIps, DescribeLoadBalancerListByCertId, DescribeLoadBalancers.

Name	Type	Required	Description
SubnetId	String	Yes	Unique VPC subnet ID, such as <code>subnet-12345678</code> .
Ip	String	No	IP address, such as 192.168.0.1

## SpecAvailability

Specification availability

Used by actions: DescribeResources.

Name	Type	Description
SpecType	String	Specification type Note: This field may return null, indicating that no valid values can be obtained.
Availability	String	Specification availability Note: This field may return null, indicating that no valid values can be obtained.

## TagInfo

CLB tag information

Used by actions: CloneLoadBalancer, CreateLoadBalancer, DescribeLoadBalancerListByCertId, DescribeLoadBalancers, DescribeLoadBalancersDetail.

Name	Type	Required	Description
TagKey	String	Yes	Tag key
TagValue	String	Yes	Tag value

## Target

Redirect target, i.e., the real server bound to a CLB

Used by actions: BatchModifyTargetWeight, DeregisterTargets, ModifyTargetPort, ModifyTargetWeight, RegisterTargets.

Name	Type	Required	Description
Port	Integer	Yes	Listening port of a real server Note: this parameter is required when binding a CVM or ENI. Note: this field may return <code>null</code> , indicating that no valid values can be obtained.
Type	String	No	Real server type. Value range: CVM (Cloud Virtual Machine), ENI (Elastic Network Interface). This parameter does not take effect currently as an input parameter. Note: This field may return null, indicating that no valid values can be obtained.
InstanceId	String	No	Unique ID of a CVM instance, which is required when binding a CVM instance. It can be obtained from the <code>InstanceId</code> field in the response of the <code>DescribeInstances</code> API. It indicates binding the primary IP of the primary ENI. Note: Either <code>InstanceId</code> or <code>EniIp</code> can be passed in. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
Weight	Integer	No	The new forwarding weight of the real server. Value range: [0, 100]. Default: 10. This parameter takes priority over <code>Weight</code> in <code>RsWeightRule</code> . If it's left empty, the value of <code>Weight</code> in <code>RsWeightRule</code> will be used.
EniIp	String	No	It is required when binding an IP. ENI IPs and other private IPs are supported. To bind an ENI IP, the ENI should be bound to a CVM instance before being bound to a CLB instance. Note: Either <code>InstanceId</code> or <code>EniIp</code> can be passed in. <code>EniIp</code> is required in a cross-region binding or when the dual-stack IPV6 CVM is bound. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## TargetGroupAssociation

Association between rule and target group

Used by actions: AssociateTargetGroups, DisassociateTargetGroups.

--	--	--	--

Name	Type	Required	Description
LoadBalancerId	String	Yes	CLB instance ID
ListenerId	String	Yes	Listener ID
TargetGroupId	String	Yes	Target group ID
LocationId	String	No	Forwarding rule ID

## TargetGroupBackend

Real server bound to a target group

Used by actions: DescribeTargetGroupInstances.

Name	Type	Description
TargetGroupId	String	Target group ID
Type	String	Real server type. Valid values: CVM, ENI (coming soon)
InstanceId	String	Unique real server ID
Port	Integer	Listening port of real server
Weight	Integer	Forwarding weight of real server. Value range: [0, 100]. Default value: 10.
PublicIpAddresses	Array of String	Public IP of real server Note: this field may return null, indicating that no valid values can be obtained.
PrivateIpAddresses	Array of String	Private IP of real server Note: this field may return null, indicating that no valid values can be obtained.
InstanceName	String	Real server instance name Note: this field may return null, indicating that no valid values can be obtained.
RegisteredTime	Timestamp	Real server binding time Note: this field may return null, indicating that no valid values can be obtained.
EniId	String	Unique ENI ID

		Note: this field may return null, indicating that no valid values can be obtained.
Zoneld	Integer	AZ ID of the real server Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## TargetGroupInfo

Target group information

Used by actions: DescribeTargetGroupList, DescribeTargetGroups.

Name	Type	Description
TargetGroupId	String	Target group ID
VpcId	String	<code>vpcid</code> of target group
TargetGroupName	String	Target group name
Port	Integer	Default port of target group Note: this field may return null, indicating that no valid values can be obtained.
CreatedTime	Timestamp	Target group creation time
UpdatedTime	Timestamp	Target group modification time
AssociatedRule	Array of <a href="#">AssociationItem</a>	Array of associated rules Note: this field may return null, indicating that no valid values can be obtained.

## TargetGroupInstance

Target group instance

Used by actions: CreateTargetGroup, DeregisterTargetGroupInstances, ModifyTargetGroupInstancesPort, ModifyTargetGroupInstancesWeight, RegisterTargetGroupInstances.

Name	Type	Required	Description
BindIP	String	Yes	Private IP of target group instance

Port	Integer	Yes	Port of target group instance
Weight	Integer	No	Weight of target group instance
NewPort	Integer	No	New port of target group instance

## TargetHealth

Describes the health information of a target

Used by actions: DescribeTargetHealth.

Name	Type	Description
IP	String	Private IP of the target
Port	Integer	Port bound to the target
HealthStatus	Boolean	Current health status. true: healthy; false: unhealthy.
TargetId	String	Instance ID of the target, such as ins-12345678
HealthStatusDetail	String	Detailed information about the current health status. Alive: healthy; Dead: exceptional; Unknown: check not started/checking/unknown status.

## TargetRegionInfo

Information of the real server bound to a CLB instance, including region and network to which it belongs.

Used by actions: DescribeLoadBalancerListByCertId, DescribeLoadBalancers, ModifyLoadBalancerAttributes.

Name	Type	Required	Description
Region	String	Yes	Region of the target, such as ap-guangzhou
VpcId	String	Yes	Network of the target, which is in the format of vpc-abcd1234 for VPC or 0 for basic network

## TypeInfo

ISP Type

Used by actions: DescribeResources.

Name	Type	Description
Type	String	ISP Type Note: This field may return null, indicating that no valid values can be obtained.
SpecAvailabilitySet	Array of <a href="#">SpecAvailability</a>	Specification availability Note: This field may return null, indicating that no valid values can be obtained.

## ZoneInfo

AZ information

Used by actions: DescribeLoadBalancerListByCertId, DescribeLoadBalancers.

Name	Type	Description
Zoneld	Integer	Unique AZ ID in a numeric form, such as 100001 Note: This field may return null, indicating that no valid values can be obtained.
Zone	String	Unique AZ ID in a string form, such as ap-guangzhou-1 Note: This field may return null, indicating that no valid values can be obtained.
ZoneName	String	AZ name, such as Guangzhou Zone 1 Note: This field may return null, indicating that no valid values can be obtained.
ZoneRegion	String	AZ region, e.g., ap-guangzhou. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
LocalZone	Boolean	Whether the AZ is the <code>LocalZone</code> , e.g., false. Note: This field may return <code>null</code> , indicating that no valid values can be obtained.
EdgeZone	Boolean	Whether the AZ is an edge zone. Values: <code>true</code> , <code>false</code> . Note: This field may return <code>null</code> , indicating that no valid values can be obtained.

## ZoneResource

List of AZs

Used by actions: DescribeResources.

Name	Type	Description
MasterZone	String	Primary AZ, such as "ap-guangzhou-1".
ResourceSet	Array of <a href="#">Resource</a>	List of resources Note: This field may return null, indicating that no valid values can be obtained.
SlaveZone	String	Secondary AZ, such as "ap-guangzhou-2". Note: This field may return null, indicating that no valid values can be obtained.
IPVersion	String	IP version. Values: <code>IPv4</code> , <code>IPv6</code> , and <code>IPv6_Nat</code> .
ZoneRegion	String	Region of the AZ, such as <code>ap-guangzhou</code> .
LocalZone	Boolean	Whether the AZ is a <code>LocalZone</code> . Values: <code>true</code> , <code>false</code> .
ZoneResourceType	String	Type of resources in the zone. Values: <code>SHARED</code> , <code>EXCLUSIVE</code>
EdgeZone	Boolean	Whether the AZ is an edge zone. Values: <code>true</code> , <code>false</code> .
Egress	String	Network egress Note: This field may return-null, indicating that no valid values can be obtained.

# Error Codes

최종 업데이트 날짜: : 2022-10-11 11:24:07

## Feature Description

If there is an Error field in the response, it means that the API call failed. For example:

```
{
  "Response": {
    "Error": {
      "Code": "AuthFailure.SignatureFailure",
      "Message": "The provided credentials could not be validated. Please check your signature is correct."
    },
    "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
  }
}
```

Code in Error indicates the error code, and Message indicates the specific information of the error.

## Error Code List

### Common Error Codes

Error Code	Description
ActionOffline	This API has been deprecated.
AuthFailure.InvalidAuthorization	<code>Authorization</code> in the request header is invalid.
AuthFailure.InvalidSecretId	Invalid key (not a TencentCloud API key type).
AuthFailure.MFAFailure	MFA failed.
AuthFailure.SecretIdNotFound	Key does not exist. Check if the key has been deleted or disabled in the console, and if not, check if the key is correctly entered. Note that whitespaces should not exist before or after the key.
AuthFailure.SignatureExpire	Signature expired. Timestamp and server time cannot differ by more than five minutes. Please



	ensure your current local time matches the standard time.
AuthFailure.SignatureFailure	Invalid signature. Signature calculation error. Please ensure you've followed the signature calculation process described in the Signature API documentation.
AuthFailure.TokenFailure	Token error.
AuthFailure.UnauthorizedOperation	The request is not authorized. For more information, see the <a href="#">CAM</a> documentation.
DryRunOperation	DryRun Operation. It means that the request would have succeeded, but the DryRun parameter was used.
FailedOperation	Operation failed.
InternalServerError	Internal error.
InvalidAction	The API does not exist.
InvalidParameter	Incorrect parameter.
InvalidParameterValue	Invalid parameter value.
InvalidRequest	The multipart format of the request body is incorrect.
IpInBlacklist	Your IP is in uin IP blacklist.
IpNotInWhitelist	Your IP is not in uin IP whitelist.
LimitExceeded	Quota limit exceeded.
MissingParameter	A parameter is missing.
NoSuchProduct	The product does not exist.
NoSuchVersion	The API version does not exist.
RequestLimitExceeded	The number of requests exceeds the frequency limit.
RequestLimitExceeded.GlobalRegionUinLimitExceeded	Uin exceeds the frequency limit.
RequestLimitExceeded.IPLimitExceeded	The number of ip requests exceeds the frequency limit.
RequestLimitExceeded.UinLimitExceeded	The number of uin requests exceeds the frequency

	limit.
RequestSizeLimitExceeded	The request size exceeds the upper limit.
ResourceInUse	Resource is in use.
ResourceInsufficient	Insufficient resource.
ResourceNotFound	The resource does not exist.
ResourceUnavailable	Resource is unavailable.
ResponseSizeLimitExceeded	The response size exceeds the upper limit.
ServiceUnavailable	Service is unavailable now.
UnauthorizedOperation	Unauthorized operation.
UnknownParameter	Unknown parameter.
UnsupportedOperation	Unsupported operation.
UnsupportedProtocol	HTTP(S) request protocol error; only GET and POST requests are supported.
UnsupportedRegion	API does not support the requested region.

## Service Error Codes

Error Code	Description
AuthFailure	CAM signature/authentication error
FailedOperation.InvalidLBStatus	Exceptional CLB instance status
InvalidParameter.FormatError	Wrong parameter format.
InvalidParameter.InvalidFilter	Failed to query the parameter
InvalidParameter.LBIdNotFound	Wrong CLB instance ID.
InvalidParameter.ListenerIdNotFound	Wrong listener ID.
InvalidParameter.LocationNotFound	Unable to find eligible forwarding rules.
InvalidParameter.PortCheckFailed	Listener port checks failed due to port conflicts or other reasons.
InvalidParameter.ProtocolCheckFailed	Listener protocol checks failed because the protocol used is incompatible with the corresponding operation.

InvalidParameter.RegionNotFound	Invalid region.
InvalidParameter.RewriteAlreadyExist	The forwarding rule has already been bound to a redirection relationship.
InvalidParameter.SomeRewriteNotFound	Some redirection rules do not exist.
InvalidParameterValue.Duplicate	Duplicate parameter value.
InvalidParameterValue.InvalidFilter	Incorrect <code>Filter</code> parameter.
InvalidParameterValue.Length	Wrong parameter length.
InvalidParameterValue.Range	Wrong parameter value range.
OperationDenied	Operation denied.
ResourcesSoldOut	The resources have been sold out.

# CLB API 2017

## Introduction

최종 업데이트 날짜: : 2020-08-13 16:38:32

Welcome to Tencent Cloud Load Balancer. Cloud Load Balancer (CLB) sends the requests from client to multiple associated backend [CVMs](#) in the same region with the specified method by setting a virtual IP (VIP).

CLB virtualizes multiple CVMs into an available application service pool. It checks the health of the instances in the pool and automatically isolates the unhealthy ones, thus resolving single points of failure issues and improving the overall service capabilities of the applications. In addition, CLB provides a defense capability of more than 300 Gbit/sec against DDoS attacks.

CLB is a solution that serves multiple machines simultaneously, and it must be used together with CVM. **The APIs in this document help you operate on CLB instances. Before using these APIs, please ensure that you are familiar with [overview](#) and [use](#) of CLB.**

## Glossary

Term	Full Name	Description
CLB	Cloud Load Balancer	Cloud Load Balancer sends the requests from client to the associated CVMs in the same region with specified method by setting a virtual IP (VIP). It can automatically isolate unhealthy CVMs, thus resolving single points of failure and massive concurrent access requests issues.
Listener	Load Balancer Listener	CLB listener provides users with customized listening port, request forwarding policy, health check configuration, etc.
backend	Real Server	A CLB instance sends requests to real servers which will provide service in a real sense.
VIP	Virtual IP	A CLB instance provides the virtual IP of service.

## How to Use

Before using CLB through APIs, please make sure that a port is open on one or more CVMs, e.g. TCP port 80. Next, you need to perform the following steps:

1. Purchase a CLB instance.

You can create a CLB instance using the [CreateLoadBalancer](#) API, and obtain the unique ID of this instance.

2. Create a CLB listener.

After purchasing a CLB instance, you need to use the [CreateLoadBalancerListeners](#) API to create a listener that listens on a protocol and port. For example, you can create a TCP listener that listens on TCP port 80 and backend port 80.

3. Bind the real server to the CLB instance.

Finally, you need to bind the CVM on which the service is deployed to the CLB instance through the [RegisterInstancesWithLoadBalancer](#) API.

After performing these three steps, you can access the service deployed on your CVM by accessing the VIP and port of the CLB instance.

# API Category

최종 업데이트 날짜: : 2021-03-31 12:02:29

## General APIs

API Name	Action	Feature
<a href="#">DescribeLoadBalancersTaskResult</a>	DescribeLoadBalancersTaskResult	Queries the execution result of an async CLB API.
<a href="#">CreateLoadBalancer</a>	CreateLoadBalancer	Purchases a CLB instance.
<a href="#">InquiryLBPriceAll</a>	InquiryLBPriceAll	Queries the price of CLB instances.
<a href="#">DescribeLoadBalancers</a>	DescribeLoadBalancers	Queries the list of CLB instances.
<a href="#">DeleteLoadBalancers</a>	DeleteLoadBalancers	Deletes one or more CLB instance.
<a href="#">GetMonitorData</a>	GetMonitorData	Queries monitoring data of CLB instances.
<a href="#">ReplaceCert</a>	ReplaceCert	Changes the certificate of a CLB instance.
<a href="#">GetCertListWithLoadBalancer</a>	GetCertListWithLoadBalancer	Queries CLB instances associated with the specified certificate.
<a href="#">CloneLB</a>	CloneLB	Clones a CLB instance.

## Classic CLB APIs

### Instance APIs

API Name	Action	Feature
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API Name	Action	Feature
<a href="#">ModifyLoadBalancerAttributes</a>	ModifyLoadBalancerAttributes	Modifies the attributes of a specified CLB instance, including the CLB instance name.

## Listener APIs

API Name	Action	Feature
<a href="#">CreateLoadBalancerListeners</a>	CreateLoadBalancerListeners	Creates one or more CLB listeners for the specified CLB instance. A CLB listener provides request forwarding protocols, ports, and health check policies.
<a href="#">DescribeLoadBalancerListeners</a>	DescribeLoadBalancerListeners	Obtains the list of listeners for the specified CLB instance, including unique ID, name, port, and health check policy.
<a href="#">DeleteLoadBalancerListeners</a>	DeleteLoadBalancerListeners	Deletes listeners for the specified CLB instance.
<a href="#">ModifyLoadBalancerListener</a>	ModifyLoadBalancerListener	Modifies the attributes of a CLB listener, including the listener name and health check policy.

## Real server APIs

API Name	Action	Feature
<a href="#">RegisterInstancesWithLoadBalancer</a>	RegisterInstancesWithLoadBalancer	Binds the specified CVMs to a specified CLB instance.
<a href="#">DescribeLoadBalancerBackends</a>	DescribeLoadBalancerBackends	Obtains the list of CVMs bound to the CLB instance with the specified <i>LoadBalanceId</i> .

API Name	Action	Feature
<a href="#">ModifyLoadBalancerBackends</a>	ModifyLoadBalancerBackends	Modifies the weights of CVMs bound to a CLB instance.
<a href="#">DeregisterInstancesFromLoadBalancer</a>	DeregisterInstancesFromLoadBalancer	Unbinds CVMs from a CLB instance.

### Health check APIs

API Name	Action	Feature
<a href="#">DescribeLBHealthStatus</a>	DescribeLBHealthStatus	Queries the health status of a CLB instance.

## Cloud Load Balancer APIs

### Note :

The following CLB APIs have been updated to version 3.0. These legacy APIs may be deprecated and is currently not displayed on the left sidebar. We recommend using [CLB API 3.0](#), which is more standardized and has a significantly reduced access latency.

### CLB instance APIs

API Name	Action	Feature
ModifyForwardLBName	ModifyForwardLBName	Modifies the name of a CLB instance.

### Listener APIs

API Name	Action ID	Feature
DescribeForwardLBLEaders	DescribeForwardLBLEaders	Queries CLB listeners.
CreateForwardLBSeventhLayerListeners	CreateForwardLBSeventhLayerListeners	Creates one or more Layer-7 listeners.



API Name	Action ID	Feature
CreateForwardLBFourthLayerListeners	CreateForwardLBFourthLayerListeners	Creates one or more Layer-4 listener.
ModifyForwardLBFourthListener	ModifyForwardLBFourthListener	Modifies the attributes of a CLB Layer-4 listener.
ModifyForwardLBSeventhListener	ModifyForwardLBSeventhListener	Modifies the attributes of a CLB Layer-7 listener.
DeleteForwardLBListener	DeleteForwardLBListener	Deletes a CLB listener.

### Forwarding rule APIs

API Name	Action ID	Feature
CreateForwardLBListenerRules	CreateForwardLBListenerRules	Creates forwarding rules of a CLB Layer-7 listener.
ModifyForwardLBRulesDomain	ModifyForwardLBRulesDomain	Modifies the domain name under a CLB Layer-7 listener.
ModifyLoadBalancerRulesProbe	ModifyLoadBalancerRulesProbe	Modifies the health check and forwarding path for the forwarding rules of a CLB Layer-7 listener.
DeleteForwardLBListenerRules	DeleteForwardLBListenerRules	Deletes forwarding rules of a CLB Layer-7 listener.

### CVM APIs

API Name	Action ID	Feat
DescribeForwardLBBackends	DescribeForwardLBBackends	Obt: the l CVM bour CLB insta

API Name	Action ID	Feat
RegisterInstancesWithForwardLBFourthListener	RegisterInstancesWithForwardLBFourthListener	Binc CVM the forw rules CLB Laye liste
RegisterInstancesWithForwardLBSeventhListener	RegisterInstancesWithForwardLBSeventhListener	Binc CVM the forw rules CLB Laye liste
ModifyForwardFourthBackendsWeight	ModifyForwardFourthBackendsWeight	Mod the v of C bour Laye liste
ModifyForwardSeventhBackends	ModifyForwardSeventhBackends	Mod the v of C bour Laye liste
ModifyForwardFourthBackendsPort	ModifyForwardFourthBackendsPort	Mod port: CVM bour Laye liste

API Name	Action ID	Feature
ModifyForwardSeventhBackendsPort	ModifyForwardSeventhBackendsPort	Mod port: CVM bour Layer liste
DeregisterInstancesFromForwardLBFourthListener	DeregisterInstancesFromForwardLBFourthListener	Unb CVM from forw rules CLB Layer liste
DeregisterInstancesFromForwardLB	DeregisterInstancesFromForwardLB	Unb CVM from forw rules CLB Layer liste

### Health check APIs

API Name	Action ID	Feature
DescribeForwardLBHealthStatus	DescribeForwardLBHealthStatus	Queries the health check of a CLB instance.

### Redirection APIs

API Name	Action ID	Feature
<a href="#">DescribeRewrite</a>	DescribeRewrite	Queries the redirection relationship of a CLB instance.
<a href="#">DeleteRewrite</a>	DeleteRewrite	Deletes the redirection relationship of a CLB instance.

API Name	Action ID	Feature
<a href="#">ManualRewrite</a>	ManualRewrite	Adds the redirection relationship to a CLB instance manually.
<a href="#">AutoRewrite</a>	AutoRewrite	Generates the redirection relationship for a CLB instance automatically.

# Use Cases

최종 업데이트 날짜: : 2023-03-24 17:48:57

An example is given here to help you get started with CLB APIs. Before using the APIs, deploy TCP service on two CVMs and listen on port 80. If the service returns the “hello world” string, the deployment is successful. By creating a CLB instance, you can access CVM services through the CLB VIP.

## Purchasing a Public Network CLB Instance

To use CLB services, you need to purchase a public network CLB instance (with static IP). For more information on CLB instance purchase, use the [CreateLoadBalancer](#) API.

This example shows you how to create a public network CLB instance (with static IP). The `Action` field in the common request parameters of this API is `CreateLoadBalancer`. The list below contains the API request parameters.

Parameter	Description	Value
<code>loadBalancerType</code>	CLB instance type.	<b>2</b> : public network CLB instance, the service of which is accessed via a public network.

By combining common request parameters and API request parameters, you can get the final request as follows:

```
https://lb.api.qcloud.com/v2/index.php?Action=CreateLoadBalancer
&Region=ap-guangzhou
&Timestamp=1465750149
&Nonce=46364
&SecretId=AKID***ugEY
&Signature=5umi***pTTyk18V2g%2FYi56hqls%3D
&loadBalancerType=2
```

Response of the request is as follows:

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "requestId": 3901941,
  "dealIds": [
    "3901941"
  ],
}
```

```
"unLoadBalancerIds": {
  "3901941": [
    "lb-lb-cjcy****"
  ]
}
```

Where, `lb-cjcy****` is the unique ID of the CLB instance you just purchased. Next, use the [DescribeLoadBalancers](#) API to query whether the instance has been successfully created.

## Creating a CLB Listener

This example shows you how to create a CLB listener with the unique ID of the CLB instance. For more information on the CLB listener creation, use the [CreateLoadBalancerListeners](#) API.

In this example, the table below lists the API request parameters.

Parameter	Description	Value
<code>loadBalancerId</code>	Unique ID of the CLB instance	This example uses the unique ID of the instance you've just created, i.e. <code>lb-cjcy****</code>
<code>listeners.0.loadBalancerPort</code>	Listening port of the CLB listener.	80
<code>listeners.0.instancePort</code>	Listening port on real server of the CLB instance.	80
<code>listeners.0.protocol</code>	Protocol listened by the CLB listener. 1: HTTP; 2: TCP; 3: UDP; 4: HTTPS	This example uses <code>2: TCP</code>
<code>listeners.0.healthSwitch</code>	Whether to enable the health check for the CLB listener. 1: enable; 0: disable. The health check is enabled by default.	This example uses <code>1: enable</code>
<code>listeners.0.listenerName</code>	Name of the CLB listener. This field is optional. Default value will be used if it is left empty.	This example uses <code>listenerTest</code>

By combining common request parameters and API request parameters, you can get the final request as follows:

```
https://lb.api.qcloud.com/v2/index.php?Action=CreateLoadBalancerListeners
&Region=ap-guangzhou
&Timestamp=1465750149
```

```
&Nonce=46364
&SecretId=AKID****ugEY
&Signature=5umi****pTTyk18V2g%2FYi56hqls%3D
&loadBalancerId=lb-cjcy****
&listeners.0.loadBalancerPort=80
&listeners.0.instancePort=80
&listeners.0.protocol=2
&listeners.0.healthSwitch=1
&listeners.0.listenerName=listenerTest
```

Response of the request is as follows:

```
{
  "code" : 0,
  "message" : "",
  "codeDesc" : "Success",
  "requestId" : 12354
}
```

To query the execution result of the task with the request ID, use the asynchronous [DescribeLoadBalancersTaskResult](#) API.

## Binding Real Server to the CLB Instance

You need to bind CVM to the CLB instance after creating the listener. For more information on the binding method, use the [RegisterInstancesWithLoadBalancer](#) API.

This example shows you how to bind two CVMs (with the unique ID of `ins-5678test` and `ins-1234test` respectively) on the CLB instance. The `Action` field in the common request parameters of this API is `RegisterInstancesWithLoadBalancer`. The list below contains the API request parameters.

Parameter	Description	Value
<code>loadBalancerId</code>	Unique ID of the CLB instance.	This example uses the unique ID of the instance you've just created: <code>lb-abcdefgh</code>
<code>backends.0.instanceId</code>	Unique ID of the CVM bound to the CLB instance.	This example uses the unique ID of the first CVM: <code>ins-5678test</code>
<code>backends.0.weight</code>	Weight of the CVM bound to the CLB instance.	This example uses the default value <code>10</code>

Parameter	Description	Value
backends.1.instanceId	Unique ID of the CVM bound to the load balancer instance	This example uses the unique ID of the second CVM: <code>ins-1234test</code>
backends.1.weight	Weight of the CVM bound to the CLB instance.	This example uses the default value <code>10</code>

By combining common request parameters and API request parameters, you can get the final request as follows:

```
https://lb.api.qcloud.com/v2/index.php?Action=RegisterInstancesWithLoadBalancer
&Region=ap-guangzhou
&Timestamp=1465750149
&Nonce=46364
&SecretId=AKID****ugEY
&Signature=5umi****pTTYk18V2g%2FYi56hqls%3D
&loadBalancerId=lb-cjcy****
&backends.0.instanceId=ins-5678****
&backends.0.weight=10
&backends.1.instanceId=ins-1234****
&backends.1.weight=10
```

Response of the request is as follows:

```
{
  "code" : 0,
  "message" : "",
  "codeDesc": "Success",
  "requestId" : 1234
}
```

To query the execution result of the task with the request ID, use the asynchronous

[DescribeLoadBalancersTaskResult](#) API.

## Querying and Using the CLB Instance

This example shows you how to query the VIP or domain name of the CLB instance. For more information on the query method, use the [DescribeLoadBalancers](#) API.

The `Action` field in the common request parameters of the API is `DescribeLoadBalancers`. The list below contains the API request parameters.



Parameter	Description	Value
loadBalancerIds.0	Unique ID of the CLB instance.	This example uses the unique ID of the instance you've just created: <code>lb-cjcy****</code>

By combining common request parameters and API request parameters, you can get the final request as follows:

```
https://lb.api.qcloud.com/v2/index.php?Action=DescribeLoadBalancers
&Region=ap-guangzhou
&Timestamp=1465750149
&Nonce=46364
&SecretId=AKID****ugEY
&Signature=5umi****pTTYk18V2g%2FYi56hqls%3D
&loadBalancerIds.0=lb-cjcy****
```

## Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "loadBalancerSet": [{
    "loadBalancerId": "lb-cjcy****",
    "unLoadBalancerId": "lb-cjcy****",
    "loadBalancerName": "59b25ffb-0",
    "loadBalancerType": 2,
    "domain": "20de02-0.gz.1251000011.clb.myqcloud.com",
    "loadBalancerVips": [
      "119.28.168.196"
    ],
    "status": 1,
    "createTime": "2017-09-08 17:16:42",
    "statusTime": "2017-09-20 13:37:55",
    "vpcId": 0,
    "uniqVpcId": "",
    "subnetId": 0,
    "projectId": 1005621,
    "forward": 0,
    "snat": false,
    "openBgp": 0,
    "isolation": 0,
    "log": ""
  }],
  "totalCount": 1
}
```

As the query results suggest, you can use the VIP `119.28.168.XX` or domain name

`20****-0.gz.1251000011.clb.myqcloud.com` of the CLB instance to forward the request to the associated backend CVMs according to the rule of CLB listener, thereby balancing the load.

# Release History

최종 업데이트 날짜: : 2020-08-04 14:33:13

Date	Updates
<p>May 17, 2019</p>	<p>RegisterInstancesWithForwardLBSeventhListener;</p> <p>RegisterInstancesWithForwardLBFourthListener;</p> <p>DeregisterInstancesFromForwardLB;</p> <p>DeregisterInstancesFromForwardLBFourthListener;</p> <p>ModifyForwardSeventhBackends;</p> <p>ModifyForwardSeventhBackendsPort;</p> <p>ModifyForwardFourthBackendsWeight;</p> <p>ModifyForwardFourthBackendsPort;</p> <p>The preceding APIs added the <code>eniIp</code> input parameter, indicating the IP of a backend device bound, which consisted of</p> <ol style="list-style-type: none"> <li>1. Primary IP of the primary ENI;</li> <li>2. Secondary IP of the primary ENI;</li> <li>3. Primary IP of the secondary ENI;</li> <li>4. Secondary IP of the secondary ENI.</li> </ol> <p>The <code>eniIp</code> input parameter cannot be used together with <code>instanceId</code> for the same backend.</p> <p>The <code>DescribeForwardLBBackends</code> API added the output parameters including <code>uniqEniId</code> and <code>targetType</code>.</p> <p><code>uniqEniId</code>: unique ID of the ENI.</p> <p><code>targetType</code>: backend device type, such as CVM and ENI.</p>
<p>December 7, 2017</p>	<p>Optimized the structure by product types, including Classic CLB and CLB.</p>

Date	Updates
April 27, 2016	<p>The <code>CreateLoadBalancer</code> API added the <code>unLoadBalancerIds</code> response field.</p> <p>The <code>DescribeLoadBalancers</code> API supported <code>unLoadBalancerId</code> and added input parameters including <code>orderType</code>, <code>searchKey</code> and <code>projectId</code>.</p> <p>The <code>DescribeLoadBalancersByInstances</code> API added the <code>projectId</code> input parameter.</p> <p>The <code>DeleteLoadBalancers</code> supported <code>unLoadBalancerId</code> and added the <code>requestId</code> output parameter.</p> <p>The <code>CreateLoadBalancerListeners</code> API supported <code>unLoadBalancerId</code> and added input parameters including <code>listeners.n.listenerName</code>, <code>listeners.n.sessionExpire</code>, <code>listeners.n.healthSwitch</code>, <code>listeners.n.timeOut</code>, <code>listeners.n.intervalTime</code>, <code>listeners.n.healthNum</code>, <code>listeners.n.unhealthNum</code>, and <code>listeners.n.httpHash</code>.</p> <p>The <code>DescribeLoadBalancerListeners</code> API supported <code>unLoadBalancerId</code>, and added the <code>listenerIds.n</code> input parameter, and output parameters including <code>unListenerId</code>, <code>sessionExpire</code>, <code>healthSwitch</code>, <code>timeOut</code>, <code>intervalTime</code>, <code>healthNum</code>, <code>unhealthNum</code>, and <code>httpHash</code>.</p> <p>The <code>DeleteLoadBalancerListeners</code> API supported <code>unLoadBalancerId</code> and <code>unListenerId</code>.</p> <p>The <code>RegisterInstancesWithLoadBalancer</code> API supported <code>unLoadBalancerId</code>.</p> <p>The <code>DeregisterInstancesFromLoadBalancer</code> API supported <code>unLoadBalancerId</code>.</p> <p>The <code>DescribeLoadBalancerBackends</code> API supported <code>unLoadBalancerId</code>.</p> <p>The <code>ModifyLoadBalancerBackends</code> API supported <code>unLoadBalancerId</code>.</p> <p>The <code>DescribeLBHealth</code> API supported <code>unLoadBalancerId</code>.</p> <p>The <code>DescribeLBHealthStatus</code> API supported <code>unLoadBalancerId</code> and <code>unListenerId</code>.</p> <p>The <code>ModifyLBHealth</code> API supported <code>unLoadBalancerId</code>.</p> <p>Added the <code>ModifyLoadBalancerListener</code> API.</p>

# Making API Requests

## Request Structure

### Request Structure Overview

최종 업데이트 날짜: : 2021-03-24 17:39:37

#### Note :

This is a legacy API and may be deprecated in the future. It is currently not displayed on the left sidebar. We recommend using [CLB API 3.0](#), which is more standardized and has a significantly reduced access latency.

To call a TencentCloud API, you send a request containing parameters specified in the API description to the API server address. The structure of a TencentCloud API request consists of service address, communication protocol, request method, request parameters and character encoding, as detailed below:

## Service Address

The service access address of a TencentCloud API depends on the specific module. For more information, see the description of each API.

## Communication Protocol

Most TencentCloud APIs communicate over HTTPS, which provides highly secure communication channels.

## Request Method

Tencent Cloud APIs support both POST and GET request methods.

#### Note :

1. POST and GET requests cannot be used together. If GET is used, parameters are taken from the query string. If POST is used, parameters are taken from the request body, and parameters in the query string are ignored. The parameter format rules of the two request methods are identical. GET requests are generally used. If the parameter string is too long, we recommend using POST.

2. If the GET method is used, all request parameters need to be URL encoded. This is not required for the POST method.
3. The maximum length of GET requests varies by browser and server settings. For example, the limit is 2 KB in IE and 8 KB in Firefox. For long API requests with a lot of parameters, we recommend using the POST method to avoid request failure due to overlong string.
4. For POST requests, pass in parameters in the format of `x-www-form-urlencoded` , because the TencentCloud API acquires the request parameters from `$_POST`.

## Request Parameters

Each TencentCloud API request consists of two types of parameters: common request parameters and API request parameters. Common request parameters are required for every API (see [Common Request Parameters](#)), while API request parameters are specific to each API (see "Request Parameters" in each API document).

## Character Encoding

Both the request and response of TencentCloud APIs are encoded using the UTF-8 character set.

# Common Request Parameters

최종 업데이트 날짜: : 2023-03-21 16:25:32

Common parameters are required in every API for authenticating users and the APIs. Unless otherwise required, they will not be described in individual API documents.

Parameter	Type	Description	Required
Action	String	Command API name of a specific operation, such as DescribeInstances.	Yes
Region	String	Identifies the region where the instance you want to operate on resides. Valid values: gz: Guangzhou; sh: Shanghai; bj: Beijing; cd: Chengdu cq: Chongqing; hk: Hong Kong (China); sg: Singapore; th: Bangkok kr: Seoul; jp: Tokyo; de: Frankfurt in: Mumbai; ca: Toronto; usw: Silicon Vally; use: Virginia	Yes
Timestamp	UInt	Current Unix timestamp.	Yes
Nonce	UInt	A random positive integer, which is used in conjunction with `Timestamp` to prevent replay attacks.	Yes
SecretId	String	SecretId applied from Tencent Cloud which is used for identification. Each SecretId corresponds to a unique SecretKey, while SecretKey is used to generate request Signature. For more information, see <a href="#">Signature Method</a> .	Yes
Signature	String	Request signature, which is used to verify the validity of the current request. For more information, see <a href="#">Signature Method</a> .	Yes

The format of common request parameters in API request links is shown below. Take Tencent Cloud CVM as an example, suppose you need to query the list of CVM instances, the request link of "Action=DescribeInstances" should be:

```
https://domain/v2/index.php?Action=DescribeInstances
&SecretId=xxxxxxx
&Region=gz
&Timestamp=1402992826
&Nonce=345122
&Signature=mysignature
&instanceId=101
```

`instanceId` is a command parameter, and others are common parameters.



# API Request Parameters

최종 업데이트 날짜: : 2023-10-08 16:56:44

A complete TencentCloud API request consists of two types of parameters: common request parameters and API request parameters. This document describes API request parameters.

API request parameters vary by API. API request parameters should always begin with a lowercase letter so that they can be differentiated from common request parameters.

## Note :

This document illustrates parameters specific to Tencent Cloud CVMs. For other Tencent Cloud services, see their API documentation for specific parameters.

The list below uses the DescribeInstances API as an example and contains its request parameters:

Parameter	Description	Type	Required
instanceIds.n	Array of the IDs of CVM instances to query, with the array subscript starting from 0. You can use <code>instanceId</code> or <code>unInstanceId</code> , and we recommend using the uniform resource ID <code>unInstanceId</code> .	String	No
lanIps.n	Array of private IPs of CVM instances to query.	String	No
searchWord	User-defined CVM alias.	String	No
offset	The offset at which the entries start. The entry starts from 0.	Int	No
limit	The maximum number of instances that can be queried at a time. The default is 20 and the maximum is 100.	Int	No
status	Status of the CVM to query.	Int	No
projectId	Project ID. CVM instances of all projects will be queried if this parameter is not passed in. The value <code>0</code> indicates the default project. If you want to query a specified project, call the DescribeProjects API.	String	No
simplify	Non-real time data obtained if <code>simplify=1</code> is included in the input parameter	Int	No

Parameter	Description	Type	Required
zoneId	Availability zone ID. CVM instances in all availability zones will be queried if this parameter is not passed in. If you want to query a specified availability zone, call the <a href="#">DescribeZones</a> API.	Int	No

The above fields are described as follows:

**Parameter:** name of the request parameter supported by the API, which may be used in the API calling. A parameter name that ends with `.n` represents an array, for which you need to input the array parameters individually.

**Required:** indicates whether this parameter is required. "Yes" means the parameter is required for the API calling. "No" means the parameter can be left empty.

**Type:** data type of the API parameter.

**Description:** a brief description of the API request parameter.

## Example

The example shows you how to configure API request parameters for a TencentCloud API. For example, if you want to query the list of scaling groups for a Tencent Cloud CVM, use the following request link:

```
https://cvm.api.qcloud.com/v2/index.php?
&<Common request parameters>
&instanceIds.0=ins-0hm4gvho
&instanceIds.1=ins-8oby8q00
&offset=0
&limit=20
&status=2
&zoneId=100003
```

# Final Request Format

최종 업데이트 날짜: : 2020-08-04 14:33:15

## Concatenation rule

A TencentCloud API request URL is concatenated as follows:

```
https:// + request domain name + request path + ? + final request parameter string
```

The elements of each URL are described as follows:

- **Request domain name:** subject to the product or product module to which the API belongs. For example, the request domain name for the DescribeInstances API used to query the CVM instance list is `cvm.api.qcloud.com` . For the request domain name of a specific product, see the description of each API.
- **Request path:** a fixed path for requesting TencentCloud APIs. For example, the request path for Tencent Cloud CVM is always `/v2/index.php` .
- **Final request parameter string:** consisting of common request parameters and API request parameters.

## Example

The final request URL for a TencentCloud API is as follows:

Taking Tencent Cloud CVM's [DescribeInstances](#) API as an example, the first six parameters are common request parameters, while the last six ones are API request parameters.

```
https://cvm.api.qcloud.com/v2/index.php?  
Action=DescribeInstances  
&SecretId=xxxxxxx  
&Region=gz  
&Timestamp=1465055529  
&Nonce=59485  
&Signature=mysignature // Common request parameters  
&instanceIds.0=ins-0hm4gvho  
&instanceIds.1=ins-8oby8q00  
&offset=0  
&limit=20  
&status=2  
&zoneId=100003 // API request parameters
```

# Signature Algorithm

최종 업데이트 날짜: : 2023-03-24 18:10:12

TencentCloud API authenticates each access request, i.e., each request needs to include authentication information (Signature) in the common parameters to verify the identity of the requester. The Signature is generated by the security credentials which consist of SecretId and SecretKey. If you don't have the security credentials yet, go to the TencentCloud API Key page to apply for them; otherwise, you cannot call the TencentCloud API.

## Applying for Security Credentials

Before using TencentCloud API for the first time, go to the **Tencent Cloud Console** -> [API Key Management](#) page to apply for security credentials. Security credentials consist of a `SecretId` and a `SecretKey` .

- **SecretId** is used to identify the API requester.
- **SecretKey** is used to encrypt the strings to create a signature so that Tencent Cloud server can validate the identity of the requester.

Note :

API key is an important identity credential for making Tencent Cloud API request. With APIs, you can access and manage the resources under your Tencent Cloud account. For the security of your assets and services, store your keys safely, change them regularly, and delete old keys promptly when a new one is created.

### How to apply for security credentials

1. Log in to the Tencent Cloud Console and access the [API Key Management](#) page.
2. On the **API Key Management** page, click **Create Key** to create a SecretId/SecretKey pair.

Note :

- A developer account can have up to two SecretId/SecretKey pairs.
- A developer can add a QQ account as a sub-user and use it to apply for different security credentials on the console for various login user.
- A sub-user can only call certain specified TencentCloud APIs with their security credentials.

## Generating a Signature String

After obtaining the security credentials (SecretId and SecretKey), you can generate a signature as follows:



Assume that the SecretId and SecretKey are:

SecretId : AKID\*\*\*\*J5yKBZQpn74WFkmLPx3gnPhESA

SecretKey : Gu5t\*\*\*\*cd98joQYCN3Cozk1qA

Note :

This is just an example. You need to use your own SecretId and SecretKey in actual operations.

Take the [DescribeInstances](#) API to query the list of CVM instances as an example. When you call this API, the request parameters may be as follows:

Parameter Description	Value
Action	Action name
SecretId	Key ID
Timestamp	Current timestamp
Nonce	Random positive integer
Region	Region where the instance resides
SignatureMethod	Signature method
InstanceIds.0	ID of the instance to query

### 1. Sorting parameters

First, sort all request parameters by parameter name in ascending lexicographical order, just like sorting words in a dictionary in ascending alphabetical order or numerical order. That is, sort the parameters by their first letters, then by their second letters if their first letters are the same, and so on. You can do this with the aid of sorting functions in programming languages, such as the `ksort` function in PHP. The sorting results of the above sample parameters are as follows:

```
{
  "Action" : "DescribeInstances",
  "InstanceIds.0" : "ins-09dx****",
  "Nonce" : "11886",
  "Region" : "ap-guangzhou",
  "SecretId" : "AKID****J5yKBZQpn74WFkmLPx3gnPhESA",
  "SignatureMethod" : "HmacSHA256",
  "Timestamp" : "1465185768"
}
```

You can use any other programming languages as long as the sorted parameters are the same as these in this example.

## 2. Concatenating a request string

This step generates a request string.

Format the request parameters sorted in the previous step into the form of "parameter name"="parameter value". For example, if the value of `Action` is `"DescribeInstances"`, the parameter is formatted into

```
Action=DescribeInstances .
```

Note :

- "Parameter value" is the original value instead of the URL-encoded value.
- Replace the underscore (if any) in the `Key` of an input parameter with a `.`, while maintain the underscore in the `Value`. For example, `Placement_Zone=CN_GUANGZHOU` should be converted to `Placement.Zone=CN_GUANGZHOU`.

Then, concatenate the formatted parameters with `"&"`. The resulting request string is as follows (ignore the line breaks here):

```
Action=DescribeInstances
&InstanceIds.0=ins-09dx****
&Nonce=11886
&Region=ap-guangzhou
&SecretId=AKID****J5yKBZQpn74WFkmLPx3gnPhESA
```

```
&SignatureMethod=HmacSHA256
&Timestamp=1465185768
```

### 3. Concatenating the original signature string

This step generates an original signature string.

Construct a signature string in the format of

Note :

**request method + request CVM + request path + ? + request string**

Description of parameters:

**Request method:** both POST and GET methods are supported. This example uses the GET request method.

- **Request CVM:** the domain name of the request, which varies by the product or product module to which the API belongs. For example, the request domain name for the DescribeInstances API used to query the CVM instance list is: `cvm.api.qcloud.com` . For more information, see the instructions of the specific API.
- **Request path:** a fixed path for requesting TencentCloud APIs. For example, the request path for Tencent Cloud CVM is always `/v2/index.php` .
- **Request string:** the request string generated in the previous step.

The concatenation result of the example is as follows (ignore the line breaks here):

```
GETcvm.api.qcloud.com/v2/index.php?Action=DescribeInstances
&InstanceIds.0=ins-09dx****
&Nonce=11886
&Region=ap-guangzhou
&SecretId=AKID****J5yKBZQpn74WFkmLPx3gnPhESA
&SignatureMethod=HmacSHA256
&Timestamp=1465185768
```

### 4. Generating a signature string

This step generates a signature string.

Note :

There are two ways to calculate a signature: HmacSHA256 and HmacSHA1. The signature string will be generated based on the specified signature algorithm (i.e., the `SignatureMethod` parameter). The

HmacSHA256 algorithm will be used if you specify `SignatureMethod` to "HmacSHA256"; otherwise, HmacSHA1 will be used.

First, use the signature algorithm (HmacSHA256 or HmacSHA1) to sign the **original signature string** obtained in the previous step, and then encode the generated signature using Base64 to get the final signature.

In this example, the PHP programming language is used to calculate the signature string with **HmacSHA256**. You can use any other programming languages as long as the resulting signature is the same as the one in this example.

The sample code is shown as follows:

```
$secretKey = 'Gu5t9xGARNpq86cd98joQYCN3Coz****';

```

The final signature string is:

```
0EEem/HtGRr/VJXT****YMth1Bzm3lLHz5RCDv1GdM8s=
```

Similarly, if you use the **HmacSHA1** signature algorithm, the code to generate the signature string is as follows:

```
$secretKey = 'Gu5t9xGARNpq86cd98joQYCN3Coz****';

```

The final signature string is as follows:

```
****Y6nj****8ciqbP15Qe+Oru4=
```

## Encoding a Signature String

The generated signature string cannot be directly used as a request parameter and must be URL encoded.

For example, the signature string `0EEem/HtGRr/VJXT****YMth1Bzm3lLHz5RCDv1GdM8s=` generated in the previous step should be encoded to `0EEem%2FHtGRr%2FVJXT****YMth1Bzm3lLHz5RCDv1GdM8s%3D`.

Therefore, the resulting request parameter for the `Signature` is



0EEem%2FhtGRr%2FVJXT\*\*\*\*YMth1Bzm31LHz5RCDv1GdM8s%3D , which will be used to generate the final request URL.

Note :

If you are sending a GET request, all parameters in the request need to be URL-encoded. Please note that network libraries of some programming languages automatically URL encode all parameters, in which case there is no need to URL encode the signature string; otherwise, two rounds of URL encoding will cause the signature verification to fail.

## Authentication Failures

The following errors may occur when authentication fails:

Error Code	Error Type	Error Description
4100	Identity verification failed	Identity verification failed. Please make sure that the <code>Signature</code> parameter added to your request is calculated correctly (refer to the preceding steps) and URL encoded.
4101	Unauthorized operation	The sub-user is not authorized to call this API. Please contact the developer for authorization. For more information, see <a href="#">Authorization Policy</a> .
4102	Unauthorized operation	You are not authorized to access resources used by this API. Check the relevant resource IDs in the <code>message</code> field and contact the developer for authorization. For more information, see <a href="#">Authorization Policy</a> .
4103	Unsupported operation	The sub-user's SecretId cannot be used to call this API. Only the developer account has access to this API
4104	SecretId does not exist	The SecretId does not exist or the status of SecretKey is incorrect. Please make sure that the API key is valid and enabled
4110	Authentication failed	Permission verification failed. Please make sure that you have the permission to access the resources
4500	Replay attack error	The <code>Nonce</code> parameter must be unique, and the difference between <code>Timestamp</code> and Tencent server time should be within two hours.

# API Authentication

최종 업데이트 날짜: : 2023-03-24 17:34:32

TencentCloud API authenticates each access request using the signature algorithm (Signature), so each request is required to include `Signature` for user authentication.

Before using a TencentCloud API for the first time, you need to apply for security credentials in the Tencent Cloud Console. The security credential consists of SecretId and SecretKey. SecretId is used to identify the API requester, while SecretKey is used to encrypt the strings to create a signature so that Tencent Cloud server can validate the identity of the requester. Keep your SecretKey private and avoid disclosure. If you already have the security credential, skip to the “Generating a Signature String” section.

## Applying for Security Credentials

Before using a TencentCloud API for the first time, you need to apply for security credentials.

1. Log in to the [API Key Management](#) console.
2. Click **Create Key** to create one SecretId/SecretKey pair. Each account can have at most two keys.

## Generating a Signature String

Suppose that the SecretId and SecretKey obtained from the last step are:

- SecretId: AKID\*\*\*\*J5yKBZQpn74WFkmLPx3gnPhESA.
- SecretKey: Gu5t\*\*\*\*pq86cd98joQYCN3Cozk1qA.

To make a request for querying the list of CVM instances, the request parameters are:

Parameter	Parameter Format
Action	Action=DescribeInstances
SecretId	SecretId= AKID****J5yKBZQpn74WFkmLPx3gnPhESA
Current timestamp	Timestamp=1408704141
Random positive integer	Nonce=345122
Region	Region=gz

Parameter	Parameter Format
First CVM instance ID to query	instanceIds.0=qcvm12345
Second CVM instance to query	instanceIds.1=qcvm56789

To generate an API signature, do as follows:

## Sorting parameters

Sort the request parameters in an ascending lexicographical order by their names (such as using the `ksort` function in PHP), and the result is as follows:

```
{
  'Action' : 'DescribeInstances',
  'Nonce' : 345122,
  'Region' : 'gz',
  'SecretId' : 'AKID****J5yKBZQpn74WFkmLPx3gnPhESA',
  'Timestamp' : 1408704141
  'instanceIds.0' : 'qcvm12345',
  'instanceIds.1' : 'qcvm56789',
}
```

## Concatenating request strings

Format the above sorted request parameters as `k=v`, and then combine them with `"&"`. Please note that `v` is the original value, instead of the URL-encoded value.

```
Action=DescribeInstances&Nonce=345122&Region=gz&SecretId=AKID****J5yKBZQpn74WFkmLPx3gnPhESA&Timestamp=1408704141&instanceIds.0=qcvm12345&instanceIds.1=qcvm56789
```

## Concatenating original signature strings

The following parameters are required for constructing original signature strings:

- Request method: POST and GET methods are supported. The GET request method is used here.
- Request CVM: `cvm.api.qcloud.com`. Domain names vary depending on the module to which the API belongs. For more information, see the descriptions of each API.
- Request path: `/v2/index.php`.
- Request string: the string generated in the previous 2 steps.

Construct an original signature string in the format of:

Request method + request CVM + request path + ? + request string.

The resulting string in the example is:

```
GETcvm.api.qcloud.com/v2/index.php?Action=DescribeInstances&Nonce= 345122&Region=gz&SecretId=AKID****J5yKBZQpn74WFkmLPx3gnPhESA&Timestamp=1408704141
```

## Generating a signature string

1. Sign the **original signature string** obtained in the previous step using the HMAC-SHA1 algorithm.
2. Encode the generated signature using Base64 to obtain the final signature string.

The sample code in PHP is as follows:

```
$secretKey = 'Gu5t9xGARNpq86cd98joQYCN3Cozk1qA';  
$srcStr = 'GETcvm.api.qcloud.com/v2/index.php?Action=DescribeInstances&Nonce=345122&Region=gz&SecretId=AKID****J5yKBZQpn74WFkmLPx3gnPhESA&Timestamp=1408704141';  
$signStr = base64_encode(hash_hmac('sha1', $srcStr, $secretKey, true));  
echo $signStr;
```

The signature string obtained is as follows:

```
HgIY****51N6gz8JsCFBNAWp2oQ=
```

You can use any other programming languages as long as the resulting signature is the same as the one in this example.

## Adding a signature and sending requests

- Add the `Signature` parameter, which is the **signature string** generated in the previous step, to the request parameter, and convert the signature to a URL-encoded one. The `HgIY****51N6gz8JsCFBNAWp2oQ=` signature generated above is encoded to `HgIY****51N6gz8JsCFBNAWp2oQ%3D`.
- If you use the GET request method, all the request parameter values must be URL-encoded. If you use the POST request method, URL encoding is only needed for Signature parameter.
- Send HTTPS protocol request to obtain the returned value of API in JSON string format.

The final request URL in the example is as follows:

```
https://cvm.api.qcloud.com/v2/index.php?Action=DescribeInstances  
&Nonce=345122  
&Region=gz  
&SecretId=AKID****J5yKBZQpn74WFkmLPx3gnPhESA
```

```
&Signature=HgIY****51N6gz8JsCFBNAWp2oQ%3D  
&Timestamp=1408704141  
&instanceIds.0=qcv12345  
&instanceIds.1=qcv56789
```

# Returned Results

## Successful Response

최종 업데이트 날짜: : 2020-08-04 14:33:17

### Note :

This is a legacy API and may be deprecated in the future. It is currently not displayed on the left sidebar. We recommend using [CLB API 3.0](#), which is more standardized and has a significantly reduced access latency.

If an API call succeeds, the `code` field in the final returned result will be 0. The `message` field will be empty, and the returned result data will be displayed.

Below is a sample response:

```
{
  "code": "0",
  "message": ""
  <Response data>
}
```

# Error Response

최종 업데이트 날짜: : 2020-08-04 14:33:18

If an API call fails, the `code` field in the final response will not be 0, and the `message` field will show a detailed error message. You can use `code` and `message` fields to check the error information on the [Error Codes](#) page.

Error response sample:

```
{
  "code": "5100",
  "message": "(100004) incorrect projectId"
}
```

# Error Codes

최종 업데이트 날짜: : 2020-08-04 14:33:18

## Note :

This is a legacy API and may be deprecated in the future. We recommend using [CLB API 3.0](#). The updated version is more standardized with significantly reduced access latency.

## Features

The `code` (error code) in the response body indicates the result of the call to a TencentCloud API. It is a common error code applicable to all APIs. If `code` is 0, the call succeeded; otherwise, the call failed, and you can determine the cause of the error and take corresponding actions based on the list of common error codes.

Sample:

```
{
  "code": "5100"
}
```

## Common Error Codes

Error Code	Description	Action
4000	Invalid request parameter	A required parameter is missing or the parameter value is incorrectly formatted. For error message, see the `message` field in error description.
4100	Identity verification failed	Identity verification error. It's usually caused by errors in signature calculation.
4101	Unauthorized API calls	The sub-account is not authorized by the root account to use this API. Please contact the root account admin for the permission.
4102	Unauthorized access to resources	The sub-account is not authorized by the root account to access the specified resource. Please contact the root account admin for the permission.
4103	Unauthorized	The sub-account is not authorized by the root account to access the specified



	access to resources under the current API	resource operated on by this API. Please contact the root account admin for the permission.
4104	The key does not exist	The key used for the request does not exist. Please check and try again.
4105	Incorrect token	The token is incorrect.
4106	MFA authentication failed	MFA authentication failed.
4110	Other CAM authentication failed	Other CAM authentication failed./td>
4300	Access denied	The account is blocked or unauthorized to use the API.
4400	Quota exceeded	The number of requests exceeded the quota limit. Please <a href="#">submit a ticket</a> for assistance.
4500	Replay attack	The `Nonce` and `Timestamp` parameters ensure that each request will be executed only once on the server. The `Nonce` value must be unique, and the difference between `Timestamp` and the Tencent server time should not be greater than 5 minutes.
4600	Unsupported protocol	The protocol is not supported. The current API only supports HTTPS protocol and does not support HTTP protocol.
5000	The resource does not exist	The instance corresponding to the resource ID does not exist, or the instance has been returned, or resource accessed belongs to other users.
5100	Resource operation failed	The operation performed on the resource failed. For error message, see the `message` field in error description. Try again later or contact customer service.
5200	Resource purchase failed	Failed to purchase the resource. This may be caused by unsupported instance configuration or insufficient resources..
5300	Insufficient balance	Failed to purchase or upgrade the resource due to insufficient balance.
5400	Partially executed	The batch operation was successful on some resources. For more information, see the returned value of the function.
5500	User qualification	Failed to purchase the resource due to user qualification review failure.

	review failed	
6000	Internal server error	An internal error occurred with the server. Try again later or contact customer service.
6100	Unsupported version	The API version is not supported or is under maintenance. Note: when this error occurs, first check whether the domain name of the API is correct, as the domain name may vary by module.
6200	API temporarily inaccessible	The current API is under maintenance and not in service. Please try again later.

# Response Format for Asynchronous Task APIs

최종 업데이트 날짜: : 2020-08-04 14:33:19

Asynchronous task API is not defined in the updated API documents (available for certain services only, such as CVM). For specific usage, see the `Action` field in each document.

## Response Format for Common Asynchronous Task APIs

Sending one request to common asynchronous task APIs allows you to operate only one type of resource at a time. For example, you can create CLB instance or reset the server's operating system by making a call to the specified common asynchronous task API.

Name	Type	Description	Required
code	Int	Error code of the returned result. 0: success; other values: failure.	Yes
message	String	Error message of the returned result.	No
requestId	String	Task number.	Yes

## Response Format for Batch Asynchronous Task APIs

Sending one request to these asynchronous task APIs allows you to operate multiple resources. For example, you can change passwords, start or shut down servers.

Name	Type	Description	Required
code	Int	Error code of the returned result. 0: success; other values: failure.	Yes
message	String	Error message of the returned result.	No
detail	Array	The code, message, and requestId of the resource operation are returned with the resource ID as the key.	Yes

Sample

```
{
  "code": 0,
  "message": "success",
  "detail": {
    "qcvvm6a456b0d8f01d4b2b1f5073d3fb8ccc0": {
      "code": 0,
      "message": "",
      "requestId": "1231231231231"
    },
    "qcvvm6a456b0d8f01d4b2b1f5073d3fb8ccc1": {
      "code": 0,
      "message": "",
      "requestId": "1231231231232"
    }
  }
}
```

**Note :**

- If the operation succeeds for all resources, the outermost code is 0.
- If the operation fails for all resources, the outermost code is 5100.
- If the operation fails for some resources, the outermost code is 5400. In this case, the terminal can obtain information about the failed operations via the `detail` field.

# Response Structure

최종 업데이트 날짜: : 2020-08-04 14:33:20

Name	Type	Description
code	Int	Error code of the returned result. 0: success; other values: failure. For more information about the error code, see <a href="#">Error Codes</a> .
message	String	Request results.

Example:

Sample requests with common parameters:

```
https://domain/v2/index.php?Action=DescribeInstances&SecretId=xxxxxxx&Region=gz
&Timestamp=1402992826&Nonce=345122&Signature=mysignature&instanceId=101
```

Possible response:

```
{
  "code":0,
  "message": "success",
  "instanceSet":
  [{
    "instanceId":"qcvm1234",
    "cpu":1,
    "mem":2,
    "disk":20,
    "bandwidth":65535,
    "os":"centos_62_64",
    "lanIp":"10.207.248.186",
    "wanIp":null,
    "status":0
  }]
}
```

# Sample Codes

최종 업데이트 날짜 : 2020-08-04 14:33:20

## Downloading SDK Codes

[Sample Code in PHP](#)

[Sample Code in Java](#)

[Sample Code in Python](#)

[Sample Code in .NET](#)

Replace `YOUR_SECRET_ID` and `YOUR_SECRET_KEY` in the sample codes with your actual `SecretId` and `SecretKey` .

The sample code is for reference only. Use them as needed.

## Sample Code in PHP

```
<?php
```

```
/******When calling a API, change the following parameters depending on
the API.******/
/******Take the `DescribeInstances` API as an example to describe how to l
ocate the CVM with the specified `instanceId`.******/

/*The URL address for the `DescribeInstances` API is "cvm.api.qcloud.com", which
is provided in the "1. API Description" chapter.*/
$httpUrl="cvm.api.qcloud.com";

/*Unless otherwise specified, all APIs other than `MultipartUploadVodFile` suppor
t both GET and POST request methods. */
$httpMethod="GET";

/*Whether HTTPS protocol is used. Most APIs are based on HTTPS protocol, except s
uch APIs as `MultipartUploadVodFile`.*/
$isHttps =true;

/*Your key is required. You can obtain SecretId and $secretKey from https://conso
le.tencentcloud.com/capi.*/
$secretKey='XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX';
```

```
/*The following five parameters are common to all APIs. However, for some APIs
(e.g. `DescribeDeals`) that are not region-specific, the `Region` parameter is no
t required.*/
$COMMON_PARAMS = array(
'Nonce'=> rand(),
'Timestamp'=>time(NULL),
'Action'=>'DescribeInstances',
'SecretId'=> 'XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX',
'Region' =>'gz',
);

/*The following two parameters are specific to the `DescribeInstances` API, which
are used to query the specified CVM list.
$PRIVATE_PARAMS = array(
'instanceIds.0'=> 'qcvm00001',
'instanceIds.1'=> 'qcvm00002',
);

/*****
***/

CreateRequest($HttpRequest,$RequestMethod,$COMMON_PARAMS,$secretKey, $PRIVATE_PARAMS, $i
sHttps);

function CreateRequest($HttpRequest,$RequestMethod,$COMMON_PARAMS,$secretKey, $PRIVATE_P
ARAMS, $isHttps)
{
$FullHttpRequest = $HttpRequest."/v2/index.php";

/*****Sort the request parameters in ascending lexicographical order by
their names on a case-sensitive basis.*****/
$ReqParaArray = array_merge($COMMON_PARAMS, $PRIVATE_PARAMS);
ksort($ReqParaArray);

/*****Generate original signature string.*****/
*****
* Concatenate the request method, URL address and sorted request parameters into
the following format to generate the original signature string. In this example,
the original signature string is as follows:
* GETcvm.api.qcloud.com/v2/index.php?Action=DescribeInstances&Nonce=345122&Region
=gz
* &SecretId=AKIDz8krbsJ5yKBZQ .1pn74WFkmLPx3gnPhESA&Timestamp=1408704141
* &instanceIds.0=qcvm12345&instanceIds.1=qcvm56789
```

```
* *****/
$SigTxt = $HttpMethod.$FullHttpRequest."?";

$IsFirst = true;
foreach ($ReqParamArray as $key => $value)
{
    if (!$IsFirst)
    {
        $SigTxt = $SigTxt."&";
    }
    $IsFirst = false;

    /*During concatenating the original signature string, replace any "_" in a parameter name with "." */
    if(strpos($key, '_'))
    {
        $key = str_replace('_', '.', $key);
    }

    $SigTxt=$SigTxt.$key."=".$value;
}

/******Generate a Signature based on the original signature string $SigTxt.*****/
$Signature = base64_encode(hash_hmac('sha1', $SigTxt, $secretKey, true));

/******Concatenate the request strings. The request parameters and the signature string need to be encoded using urlencode.*****/
$req = "Signature=".urlencode($Signature);
foreach ($ReqParamArray as $key => $value)
{
    $req=$req."&".$key."=".$urlencode($value);
}

/******Send requests*****/
if($HttpMethod === 'GET')
{
    if($IsHttps === true)
    {
        $req="https://".$FullHttpRequest."?".$req;
    }
    else
    {
        $req="http://".$FullHttpRequest."?".$req;
    }
}
```



```
$Rsp = file_get_contents($Req);

}
else
{
if($isHttps === true)
{
$Rsp= SendPost("https://".$FullHttpRequest,$Req,$isHttps);
}
else
{
$Rsp= SendPost("http://".$FullHttpRequest,$Req,$isHttps);
}
}

var_export(json_decode($Rsp,true));
}

function SendPost($FullHttpRequest,$Req,$isHttps)
{

$ch = curl_init();
curl_setopt($ch, CURLOPT_POST, 1);
curl_setopt($ch, CURLOPT_POSTFIELDS, $Req);

curl_setopt($ch, CURLOPT_URL, $FullHttpRequest);
curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
if ($isHttps === true) {
curl_setopt($ch, CURLOPT_SSL_VERIFYPEER, false);
curl_setopt($ch, CURLOPT_SSL_VERIFYHOST, false);
}

$result = curl_exec($ch);

return $result;
}
```

# General APIs

## DescribeLoadBalancersTaskResult

최종 업데이트 날짜: : 2021-03-31 17:40:02

### API Description

This API is used to query the execution result of a task with request task ID as the input parameter for Cloud Load Balancer and classic CLB.

Domain name for API calls: `lb.api.qcloud.com`

### Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`DescribeLoadBalancersTaskResult` .

Parameter	Required	Type	Description
requestId	Yes	Int	Request task ID, which is obtained from the returned value of an asynchronous API.

### Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
data	Array	Returned array.

**Data structure:**

Parameter	Type	Description
status	Int	Current task status. 0: successful; 1: failed; 2: in progress.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=DescribeLoadBalancersTaskResult
&<Common request parameters>
&requestId=6356081
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "data": {
    "status": 0
  }
}
```

# CreateLoadBalancer

최종 업데이트 날짜: : 2023-10-08 17:02:13

## API Description

This API is used to create a CLB instance. To use the CLB service, you first need to purchase one or more instances. After this API call succeeds, a unique instance ID will be returned. There are two types of instances: public network and private network instances. For more information, see the “network types” in [CLB Attributes Selection](#).

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`CreateLoadBalancer`.

Parameter	Required	Type	Description
<code>loadBalancerType</code>	No	Int	Network type of the CLB instance. 2: public network; 3: private network.
<code>forward</code>	No	Int	CLB instance type. 1: CLB; 0: Cassic CLB. Default value: 0.
<code>loadBalancerName</code>	No	String	CLB instance name, which takes effect only when an instance is created. Rule: 1-50 letters, Chinese, digits, dashes (-), or underscores (_). Note: If this name is the same as that of an existing CLB instance, the system will automatically generate a name for this newly created instance.

Parameter	Required	Type	Description
domainPrefix	No	String	<p>Domain name prefix. The domain name of the CLB instance consists of the user-defined domain prefix and the domain suffix automatically generated by Tencent Cloud to ensure the uniqueness. This field is only applicable to Classic CLB instances.</p> <p>Rule: 1-20 lowercase letters, digits or dashes (-). This field is inapplicable to private network CLB.</p> <p>Note: if this domain name prefix is the same as that of an existing CLB instance, the system will automatically generate a domain name prefix for this newly created instance. For example, you only need to enter the prefix "xxxxx" for xxxxx.region.appld.clb.myqcloud.com.</p>
vpcId	No	String	Network ID of the CLB instance, which can be obtained via the DescribeVpcEx API. If no value or "0" is passed in, the network is <a href="#">Classic Network</a> .
subnetId	No	Int	A subnet ID specified when you purchase a private network CLB instance in a VPC. The VIP of this instance will be generated in the subnet. This parameter can be left empty in other cases.
projectId	No	Int	ID of the project to which a CLB instance belongs, which can be obtained via the DescribeProjects API. If this parameter is not passed in, the default project will be used.
number	No	Int	Number of CLB instances to be created. Default value: 1.

## Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
unLoadBalancerIds	Array	Array of unique CLB instance IDs.
requestId	Int	Task ID.

Parameter	Type	Description
dealIds	Array	Reserved field.

## Example

Purchasing three public network CLB instances with static IPs

```
https://lb.api.qcloud.com/v2/index.php?Action=CreateLoadBalancer
&<Common request parameters>
&loadBalancerType=2
&number=3
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "requestId": 3901942,
  "dealIds": [
    "3901942"
  ],
  "unLoadBalancerIds": {
    "3901942": [
      "lb-cjcymkw9",
      "lb-fpk0oxhp",
      "lb-ikpzv02x"
    ]
  }
}
```

Where, lb-cjcymkw9 is the unique ID of the CLB instance you just purchased. Next, use the [DescribeLoadBalancers](#) API to query whether the CLB instance has been successfully created.

# InquiryLBPriceAll

최종 업데이트 날짜: : 2020-08-04 14:36:47

## API Description

This API is used to query the price of CLB instances. For more information about the prices, see [Billing Description](#).

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`InquiryLBPriceAll` .

Parameter	Required	Type	Description
loadBalancerType	Yes	Int	CLB type. <ul style="list-style-type: none"> <li>2: public network CLB</li> <li>3: private network CLB</li> </ul>
lbChargeType	Yes	String	Billing mode of the CLB instance. <ul style="list-style-type: none"> <li>POSTPAID_BY_HOUR: pay-as-you-go on an hourly basis. Keep the default value.</li> </ul>
goodsNum	No	Int	Number of instances. Default value: 1
internetAccessible	No	Array	Network billing mode of the CLB instance, such as maximum bandwidth. This field is required for public network CLB.
loadBalancerId	No	String	This field is required only when you renew an instance or modify its configuration.

- `internetAccessible` type

Parameter	Required	Type	Description
internetChargeType	Yes	String	Network billing mode. <ul style="list-style-type: none"> <li>TRAFFIC_POSTPAID_BY_HOUR: bill-by-traffic on an hourly pay-as-you-go basis</li> </ul>

			<ul style="list-style-type: none"> <li>BANDWIDTH_POSTPAID_BY_HOUR: bill-by-bandwidth on an hourly pay-as-you-go basis</li> <li>BANDWIDTH_PACKAGE: bill by bandwidth package (only for specified ISPs currently)</li> </ul>
internetMaxBandwidthOut	Yes	Int	Maximum outbound bandwidth, in Mbps. Valid ranges: 0-2048 Mbps. This field is only effective for public network CLB instances.

## Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
price	Array	Prices of the CLB instances, in USD.

## Example

Querying the price of a public network CLB instance.

```
https://lb.api.qcloud.com/v2/index.php?Action=InquiryLBPriceAll
&<Common request parameters>
&loadBalancerType=2
&lbChargeType=PREPAID
&goodsNum=1
&inquiryType=2
&internetAccessible.internetChargeType=BANDWIDTH_PREPAID
&internetAccessible.internetMaxBandwidthOut=1
&lbChargePrepaid.period=1
```

Successful response:

```
{
  "code": 0,
  "message": ""
```



```
"codeDesc": "Success",  
"price": {  
  "lbIdPrice": {  
    "originalPrice": 37.4,  
    "discountPrice": 11.22  
  }  
}  
}
```

# DescribeLoadBalancers

최종 업데이트 날짜: : 2020-08-04 14:36:48

## API Description

This API is used to obtain the list of CLB instances and output satisfactory CLB instances based on the specified parameters.

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`DescribeLoadBalancers` .

Parameter	Required	Type	Description
loadBalancerIds.n	No	String	CLB instance ID.
loadBalancerType	No	Int	Network type of the CLB instance. 2: public network; 3: private network.
forward	No	Int	CLB instance type. 1: CLB; 0: classic CLB, -1: all.
loadBalancerName	No	String	CLB instance name.
domain	No	String	Domain name assigned to a public network classic CLB instance by Tencent Cloud. This field is inapplicable to other types of CLB instances.
loadBalancerVips.n	No	String	VIP address of the CLB instance. You can enter several VIP addresses.
backendWanIps.n	No	String	Public IP of the real server bound to a CLB instance.
backendLanIps.n	No	String	Private IP of the real server bound to a CLB instance.
offset	No	Int	Data offset. Default value: 0.
limit	No	Int	Number of returned CLB instances. Default value: 20.

Parameter	Required	Type	Description
orderBy	No	String	Sort by field. Valid values: loadBalancerName, createTime, domain, loadBalancerType.
orderTyp	No	Int	1: reverse; 0: sequential. The <code>createTime</code> in reverse chronological order will be used by default.
searchKey	No	String	Search field which fuzzy matches name, domain name, or VIP.
projectId	No	Int	ID of the project to which a CLB instance belongs, which can be obtained via the <a href="#">DescribeProject</a> API.
withRs	No	Int	Whether the CLB instance you want to query is bound to a real server. 0: no; 1: yes; 2: query all.

## Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
totalCount	Int	Total number of CLB instances that meet the filter criteria.
loadBalancerSet	Array	Array of returned CLB instances.

- `loadBalancerSet` structure

Parameter	Type	Description
loadBalancerId	String	CLB instance ID.
unLoadBalancerId	String	CLB instance ID.
loadBalancerName	String	CLB instance name.

Parameter	Type	Description
loadBalancerType	Int	Network type of the CLB instance. 2: public network; 3: private network.
forward	Int	CLB type identifier. 1: CLB; 0: classic CLB.
domain	String	Domain name assigned to a public network classic CLB instance by Tencent Cloud. This field is inapplicable to other types of CLB instances.
loadBalancerVips	Array	VIP list of the CLB instance.
status	Int	Status of the CLB instance. 0: creating; 1: running.
createTime	String	Creation time of the CLB instance.
statusTime	String	Last time when the status of the CLB instance changes.
projectId	Int	ID of the project to which the CLB instance belongs. 0: default project.
vpclId	Int	Numerical digits of the VPC ID. 0: classic network.
subnetId	Int	Numerical digits of the VPC subnet ID. 0: default subnet.
openBgp	Int	Identifier of a high defense LB. 1: high defense CLB; 0: non-high defense CLB.
snat	Bool	"snat" is enabled for all private network classic CLB instances created before December 2016.
isolation	Int	Isolation status of the CLB instance due to account arrears. 0: not isolated; 1: isolated.
log	String	Log information. Only the public network CLB instances that have HTTP or HTTPS listener can generate logs.

## Example

Querying the CLB instance list using default parameters

```
https://lb.api.qcloud.com/v2/index.php?Action=DescribeLoadBalancers
&<Common request parameters>
&forward=-1
```

Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "loadBalancerSet": [
    {
      "loadBalancerId": "lb-hc1vni0f",
      "unLoadBalancerId": "lb-hc1vni0f",
      "loadBalancerName": "cls-qbesvs66_ng1",
      "loadBalancerType": 2,
      "domain": "cls-qbesvs66-ng1.gz.1251707795.clb.myqcloud.com",
      "loadBalancerVips": [
        "111.230.83.36"
      ],
      "status": 1,
      "createTime": "2017-11-30 14:28:45",
      "statusTime": "2017-11-30 14:29:11",
      "vpcId": 2968,
      "uniqVpcId": "vpc-b2h3xykt",
      "subnetId": 1,
      "projectId": 0,
      "forward": 0,
      "snat": false,
      "openBgp": 0,
      "isolation": 0,
      "log": ""
    }
  ],
  "totalCount": 1
}
```

# DeleteLoadBalancers

최종 업데이트 날짜: : 2021-04-01 19:34:08

Unless otherwise specified, each request returns the following fields in its response:

## API Description

This API is used to delete the specified CLB instance(s).

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`DeleteLoadBalancers` .

Parameter	Required	Type	Description
loadBalancerIds.n	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.

## Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code.
requestId	Int	Request task ID. The API provides an asynchronous task. You can use this parameter to query the execution result via the <a href="#">DescribeLoadBalancersTaskResult</a> API.

## Example

## Request

```
https://lb.api.qcloud.com/v2/index.php?Action=DeleteLoadBalancers
&<Common request parameters>
&loadBalancerIds.0=lb-abcdefgh
```

## Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "requestId": 6356502
}
```

# GetMonitorData

최종 업데이트 날짜: : 2021-04-06 19:30:06

## API Description

This API is used to get the monitoring data of the CLB instance by passing in the namespace, object dimension description, and monitoring metric of the instance.

Domain name for API calls: `monitor.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`GetMonitorData`.

Parameter	Required	Type	Description
namespace	Yes	String	Namespace. Each Tencent Cloud service has a namespace. There are two namespaces for CLB: qce/lb_public for public network CLB and qce/lb_private for private network CLB.
metricName	Yes	String	Monitoring metric to be obtained, such as `connnum` for current connection, and `intraffic` for inbound bandwidth. For more information, see the table below.
dimensions.n.name	Yes	String	Dimension name. You can use a combination of dimensions to get the monitoring data. Each namespace has different dimension structures as shown in the table below. This parameter should be used with `dimensions.n.value`.
dimensions.n.value	Yes	String	Values of a specified dimension.
startTime	No	Datetime	Start time such as 2017-01-01 00:00:00. The default time is 00:00:00 on the current day.
endTime	No	Datetime	End time such as 2017-01-01 10:00:00. The current time is used by default. Note: it cannot be earlier than `startTime`, and we recommend configuring it on the same day as `startTime`.



period	No	Int	Statistical period for monitoring data. Valid values: 60s and 300s. If this parameter is not passed in, 300s will be used by default.
--------	----	-----	---

Currently, CLB supports displaying the following metrics (metricName)

Metric	Description	Unit
Connum	Current connections	-
new_conn	New connections	-
Intraffic	Inbound bandwidth	Mbps
outtraffic	Outbound bandwidth	Mbps
inpkg	Inbound packets	Packets/sec
outpkg	Outbound packets	Packets/sec

The namespaces of CLB instances and their respective monitoring dimensions are described as follows:

### Public network CLB instance namespace qce/lb\_public

The `qce/lb_public` namespace can be used to query all the monitoring data of the public network CLB instances.

`qce/lb_public` supports the following dimension groups:

- Public network CLB dimension

This dimension reflects the overall monitoring metric of a public network CLB instance. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters >
&namespace=qce/lb_public
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
```

- Public network CLB port dimension

This dimension reflects the monitoring metric of the port on a public network CLB instance. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
loadBalancerPort	Port	Int, such as 80
protocol	Protocol	String, such as TCP

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters >
&namespace=qce/lb_public
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
&dimensions.1.name=loadBalancerPort
&dimensions.1.value=80
&dimensions.2.name=protocol
&dimensions.2.value=tcp
```

- Public network CLB real server dimension

This dimension reflects the monitoring metric of the real server bound to a public network CLB instance. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
loadBalancerPort	CLB port	Int, such as 80
protocol	Protocol	String, such as TCP
vpclId	VPC ID of the CLB instance	Int, such as 1111
lanIp	IP address of the real server bound to the CLB instance	IP address, such as 111.111.111.11

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters >
&namespace=qce/lb_public
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
&dimensions.1.name=loadBalancerPort
&dimensions.1.value=80
&dimensions.2.name=protocol
&dimensions.2.value=tcp
&dimensions.3.name=vpcId
&dimensions.3.value=1111
&dimensions.4.name=lanIp
&dimensions.4.value=111.222.111.22
```

- Public network CLB real server port dimension

This dimension reflects the monitoring metric of a port on the real server bound to a public network CLB instance.

The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
loadBalancerPort	CLB port	Int, such as 80
protocol	Protocol	String, such as TCP
vpcId	VPC ID of the CLB instance	Int, such as 1111
lanIp	IP address of the real server bound to the CLB instance	IP address, such as 111.111.111.11
port	Port number of the real server bound to the CLB instance	Int, such as 80

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters >
&namespace=qce/lb_public
&metricName=connum
&dimensions.0.name=vip
```

```
&dimensions.0.value=111.111.111.11
&dimensions.1.name=loadBalancerPort
&dimensions.1.value=80
&dimensions.2.name=protocol
&dimensions.2.value=tcp
&dimensions.3.name=vpcId
&dimensions.3.value=1111
&dimensions.4.name=lanIp
&dimensions.4.value=111.222.111.22
&dimensions.5.name=port
&dimensions.5.value=80
```

## Private network CLB instance namespace qce/lb\_private

The `qce/lb_private` namespace can be used to query all monitoring data of the private network CLB instance.

- Private network CLB dimension

This dimension reflects the overall monitoring metric of a private network CLB instance. The dimension (dimensions.n.name) to be specified is as follows. Since the private VIP may be repeated, `vpcId` is also required to uniquely specify a CLB instance:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
vpcId	VPC ID of the CLB instance	Int, such as 1111

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/lb_private
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
&dimensions.1.name=vpcId
&dimensions.1.value=1111
```

- Private network CLB port dimension

This dimension reflects the monitoring metric of the port on a private network instance. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
-----------	-------------	--------

VIP	CLB VIP	IP address, such as 111.111.111.11
vpclId	VPC ID of the CLB instance	Int, such as 1111
loadBalancerPort	CLB port	Int, such as 80
protocol	Protocol	String, such as http

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/lb_private
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
&dimensions.1.name=vpclId
&dimensions.1.value=1111
&dimensions.2.name=loadBalancerPort
&dimensions.2.value=80
&dimensions.3.name=protocol
&dimensions.3.value=http
```

- Private network CLB real server dimension

This dimension reflects the monitoring metric of the real server bound to a private network CLB instance. The dimension (dimensions.n.name) to be specified is as follows. Since the private VIP may be repeated, `vpclId` is also required to uniquely specify a CLB instance:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
vpclId	VPC ID of the CLB instance	Int, such as 1111
loadBalancerPort	CLB port	Int, such as 80
protocol	Protocol	String, such as http
lanIp	IP address of the real server bound to the CLB instance	IP address, such as 111.111.111.11

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/lb_private
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
&dimensions.1.name=vpcId
&dimensions.1.value=1111
&dimensions.2.name=loadBalancerPort
&dimensions.2.value=80
&dimensions.3.name=protocol
&dimensions.3.value=http
&dimensions.4.name=lanIp
&dimensions.4.value=111.222.111.22
```

- Private network CLB real server port dimension

This dimension reflects the monitoring metric of a port on the real server bound to a private network CLB instance.

The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
vpcId	VPC ID of the CLB instance	Int, such as 1111
loadBalancerPort	CLB port	Int, such as 80
protocol	Protocol	String, such as http
lanIp	IP address of the real server bound to the CLB instance	IP address, such as 111.111.111.11
port	Port number of the real server bound to the CLB instance	Int, such as 80

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/lb_private
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
```

```

&dimensions.1.name=vpcId
&dimensions.1.value=1111
&dimensions.2.name=loadBalancerPort
&dimensions.2.value=80
&dimensions.3.name=protocol
&dimensions.3.value=http
&dimensions.4.name=lanIp
&dimensions.4.value=111.222.111.22
&dimensions.5.name=port
&dimensions.5.value=80

```

## CLB instance dimension namespace qce/loadbalance (updated)

The `qce/loadbalance` namespace can be used to query the monitoring data of the CLB instance at the application layer.

Currently, the CLB instance namespace supports displaying the metrics (metricName) as follows:

Metric	Description	Unit
connum	Current (active) connections	Connections/min
new_conn	New connections	Connections/min
intraffic	Inbound traffic	Mbps
outtraffic	Outbound traffic	Mbps
inpkg	Inbound packets	Packets/sec
outpkg	Outbound packets	Packets/sec
httpCode_2XX	2xx status codes	Codes/min
httpCode_3XX	3xx status codes	Codes/min
httpCode_4XX	4xx status codes	Codes/min
httpCode_5XX	5xx status codes	Codes/min
httpCode_404	404 status codes	Codes/min
httpCode_502	502 status codes	Codes/min
response_time_max	Maximum response time	ms
response_time_average	Average response time	ms

response_timeout_num	Timed-out responses	Responses/min
QPS	Requests per second	-

qce/loadbalance supports the following dimension groups:

- CLB VPI dimension

This dimension reflects the overall monitoring metric of a CLB instance. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/loadbalance
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
```

- CLB listener port dimension

This dimension reflects the monitoring metric of the port on a CLB instance. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
loadBalancerPort	Port	Int, such as 80
protocol	Protocol	String, such as http

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/loadbalance
&metricName=connum
&dimensions.0.name=vip
```



```
&dimensions.0.value=111.111.111.11
&dimensions.2.name=loadBalancerPort
&dimensions.2.value=80
&dimensions.3.name=protocol
&dimensions.3.value=http
```

- CLB forwarding domain name dimension

This dimension reflects the monitoring metric of the CLB forwarding domain name. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
loadBalancerPort	Port	Int, such as 80
protocol	Protocol	String, such as http
domain	Forwarding domain name	String, such as www.domain.com

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/loadbalance
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
&dimensions.1.name=domain
&dimensions.1.value=www.domian.com
&dimensions.2.name=loadBalancerPort
&dimensions.2.value=80
&dimensions.3.name=protocol
&dimensions.3.value=http
```

- CLB forwarding path dimension

This dimension reflects the monitoring metric of the CLB forwarding path. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
loadBalancerPort	Port	Int, such as 80

protocol	Portocol	String, such as http
domain	Forwarding domain name	String, such as www.domain.com
url	Forwarding path	String, such as /url

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/loadbalance
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
&dimensions.1.name=domain
&dimensions.1.value=www.domian.com
&dimensions.2.name=loadBalancerPort
&dimensions.2.value=80
&dimensions.3.name=protocol
&dimensions.3.value=http
&dimensions.3.name=url
&dimensions.3.value=/url
```

- CLB real server IP dimension

This dimension reflects the monitoring metric of the IP of the real server bound to a CLB instance. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
loadBalancerPort	Port	Int, such as 80
protocol	Portocol	String, such as http
domain	Forwarding domain name	String, such as www.domain.com
url	Forwarding path	String, such as /url
vpclId	VPC ID of the CLB instance	Int, such as 1111
lanIp	IP address of the real server bound to the CLB instance	IP address, such as 111.111.111.11

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/loadbalance
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
&dimensions.1.name=vpcId
&dimensions.1.value=1111
&dimensions.2.name=loadBalancerPort
&dimensions.2.value=80
&dimensions.3.name=protocol
&dimensions.3.value=http
&dimensions.4.name=lanIp
&dimensions.4.value=111.222.111.22
&dimensions.1.name=domain
&dimensions.1.value=www.domian.com
&dimensions.3.name=url
&dimensions.3.value=/url
```

- CLB real server port dimension

This dimension reflects the monitoring metric of the port on the real server bound to a CLB instance. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
VIP	CLB VIP	IP address, such as 111.111.111.11
loadBalancerPort	Port	Int, such as 80
protocol	Protocol	String, such as http
domain	Forwarding domain name	String, such as www.domain.com
url	Forwarding path	String, such as /url
vpcId	VPC ID of the CLB instance	Int, such as 1111
lanIp	IP address of the real server bound to the CLB instance	IP address, such as 111.111.111.11
port	Port number of the real server bound to the CLB instance	Int, such as 80

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/loadbalance
&metricName=connum
&dimensions.0.name=vip
&dimensions.0.value=111.111.111.11
&dimensions.1.name=vpcId
&dimensions.1.value=1111
&dimensions.2.name=loadBalancerPort
&dimensions.2.value=80
&dimensions.3.name=protocol
&dimensions.3.value=http
&dimensions.4.name=lanIp
&dimensions.4.value=111.222.111.22
&dimensions.5.name=port
&dimensions.5.value=80
&dimensions.1.name=domain
&dimensions.1.value=www.domian.com
&dimensions.3.name=url
&dimensions.3.value=/url
```

## Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
codeDesc	String	Error code.
message	String	Detailed error message.
startTime	Datetime	Start time.
endTime	Datetime	End time.
metricName	String	Metric name.
period	Int	Statistical period for monitoring data.
dataPoints	Object	Monitoring data list. Each element of the array stands for the data read at the monitoring time point.

## Example

### Request

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/lb_public
&metricName=connnum
&dimensions.0.name=protocol
&dimensions.0.value=HTTP
&dimensions.1.name=vip
&dimensions.1.value=111.111.111.111
&dimensions.2.name=loadBalancerPort
&dimensions.2.value=80
&startTime=2015-12-28 14:00:00
&endTime=2015-12-28 14:05:00
&period=300
```

### Response

```
{
  "code": 0,
  "message": "",
  "metricName": "connnum",
  "startTime": "2015-12-28 14:00:00",
  "endTime": "2015-12-28 14:05:00",
  "period": 300,
  "dataPoints": [
    0
  ]
}
```

- Forwarding domain name dimension

This dimension reflects the monitoring metric of the CLB instance(s) which configured the same forwarding domain name. The dimension (dimensions.n.name) to be specified is as follows:

Dimension	Description	Format
loadBalancerPort	Port	Int, such as 80
protocol	Protocol	String, such as http
domain	Forwarding domain name	String, such as www.domain.com

API calling sample using the dimension:

```
https://monitor.api.qcloud.com/v2/index.php?Action=GetMonitorData
&<Common request parameters>
&namespace=qce/loadbalance
&metricName=QPS
&dimensions.0.name=domain
&dimensions.0.value=www.domian.com
&dimensions.1.name=loadBalancerPort
&dimensions.1.value=80
&dimensions.2.name=protocol
&dimensions.2.value=http
```

# ReplaceCert

최종 업데이트 날짜: : 2021-04-08 19:46:52

## API Description

This API is used to replace the certificate used in a CLB instance.

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is `ReplaceCert`.

Parameter	Required	Type	Description
<code>oldCertId</code>	Yes	String	ID of the certificate to be replaced. This can be the ID of a server certificate, or a client certificate.
<code>newCertId</code>	No	String	ID of the new certificate. If this is left empty, the <code>newCertContent</code> and <code>newCertName</code> parameters are required. For a server certificate, the <code>newCertKey</code> parameter is also required.
<code>newCertContent</code>	No	String	Content of the new certificate. The <code>newCertId</code> parameter is required if this is left empty.
<code>newCertName</code>	No	String	Name of the new certificate. The <code>newCertId</code> parameter is required if this is left empty.
<code>newCertKey</code>	No	String	Private key of the new certificate. The <code>newCertId</code> parameter is required for a server certificate if this is left empty.

## Response Parameters

Parameter	Type	Description
<code>code</code>	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .

message	String	API-related module error message description.
codeDesc	String	Description of the task execution status.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=ReplaceCert
&<Common request parameters>
&oldCertId=4b9fc92b
&newCertId=e2b6d555
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success"
}
```



# GetCertListWithLoadBalancer

최종 업데이트 날짜: : 2020-08-04 14:36:51

## API Description

This API is used to query the information of the CLB instance associated with the certificate.

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`GetCertListWithLoadBalancer`.

Parameter	Required	Type	Description
<code>certIds.n</code>	Yes	String	ID of the certificate to be queried.

## Response Parameters

Parameter	Type	Description
<code>code</code>	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
<code>message</code>	String	API-related module error message description.
<code>codeDesc</code>	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
<code>certSet</code>	Array	<code>key</code> is the certificate, and <code>value</code> is the information of the CLB instance and listener associated with the certificate.

Data structure of the returned `certSet` array:

Parameter	Type	Description
-----------	------	-------------

Parameter	Type	Description
LBName	String	CLB instance name.
loadBalancerId	String	CLB instance ID.
Region	String	Region.
listener	Array	Listener information.

Data structure of the returned `listener` array:

Parameter	Type	Description
unListenerId	String	Listener ID.
listenerName	String	Listener name.
loadBalancerPort	Int	Listening port of the listener.
instancePort	Int	Service port of the listener's RS.
protocol	Int	Listener protocol.
sessionExpire	Int	Session persistence duration.
healthSwitch	Int	Whether the health check is enabled.
timeOut	Int	Response timeout.
intervalTime	Int	Interval between two health checks.
healthNum	Int	Healthy threshold.
unhealthNum	Int	Unhealthy threshold.
httpHash	No	String
scheduler	String	Forwarding method of the CLB layer-4 listener.
httpCode	Int	Return code for the health of HTTP and HTTPS listeners.
SSLMode	String	Verification mode of the HTTPS listener.
certId	String	New server certificate ID of the HTTPS listener.
certCald	String	New client certificate ID of the HTTPS listener.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=DescribeLoadBalancers
&<Common request parameters>
certIds.0=4b9fc92b
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "certSet": {
    "4b9fc92b": [
      {
        "LBName": "ad",
        "loadBalancerId": "lb-ltkip4do",
        "region": "gz",
        "listener": [
          {
            "unListenerId": "lbl-6hkiqc6c",
            "listenerName": "teaa",
            "loadBalancerPort": 80,
            "instancePort": 80,
            "protocol": 4,
            "SSLMode": "unidirectional",
            "certId": "4b9fc92b",
            "certCaId": "",
            "sessionExpire": 0,
            "healthSwitch": 1,
            "timeOut": 6,
            "intervalTime": 6,
            "healthNum": 3,
            "unhealthNum": 3,
            "httpHash": "ip_hash",
            "httpCode": 15
          }
        ]
      }
    ],
  },
  {
    "LBName": "ad",
    "loadBalancerId": "lb-ltkip4do",
    "region": "sh",
```

```
"listener": [  
  {  
    "unListenerId": "lbl-6hkiqc6c",  
    "listenerName": "teaa",  
    "loadBalancerPort": 80,  
    "instancePort": 80,  
    "protocol": 4,  
    "SSLMode": "unidirectional",  
    "certId": "4b9fc92b",  
    "certCaId": "",  
    "sessionExpire": 0,  
    "healthSwitch": 1,  
    "timeOut": 6,  
    "intervalTime": 6,  
    "healthNum": 3,  
    "unhealthNum": 3,  
    "httpHash": "ip_hash",  
    "httpCode": 15  
  }  
]  
}  
]  
}
```

# DescribeLoadBalancerLog

최종 업데이트 날짜: : 2021-04-09 19:58:17

## API Description

This API is used to query the CLB layer-7 log in COS. It is applicable to public network CLB instances with HTTP or HTTPS listener configured and COS log enabled.

Domain name for API calls: `lb.api.qcloud.com`

Note that this API only supports querying COS log, but not CLS log. To query the CLS log, call the [Searching for Log](#) API, which can be used to query the forwarding logs of a CLB instance over the last three days, including logs forwarded to the RS and those directly returned from the CLB due to RS exception. Interval between requests shall be within one day.

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see the [Common Request Parameters](#). The `Action` field for this API is

`DescribeLoadBalancerLog` .

Parameter	Required	Type	Description
loadBalancerId	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.
order	No	String	Log sequence by timestamp. Valid values: desc and asc. Default value: desc.
startTime	No	Int	Time when you start querying logs using Unix timestamp (accurate to seconds). The default is 5 minutes earlier than <code>endTime</code> .
endTime	No	Int	Time when you finish querying logs using Unix timestamp (accurate to seconds). The default is the current timestamp.
offset	No	Int	Log offset. Value range: [0,10000].
limit	No	Int	Number of logs. Value range: [0,500].
filter	No	Array	Filter condition of logs in key-value pairs. <b>See the valid values for the key of <code>filter</code> array below for supported fields.</b>

Valid values for the key of `filter` array:

Key	Required	Type	Description
<code>status</code>	No	Int	Logs with the status code matching <code>value</code> are returned to the client.
<code>status_not</code>	No	Int	Logs except those with the status code matching <code>value</code> are returned to the client.
<code>server_name</code>	No	String	Logs with the domain name in the CLB rules matching <code>value</code> are returned.
<code>server_name_not</code>	No	String	Logs except those with the domain name in the CLB rules matching <code>value</code> are returned.
<code>http_host</code>	No	String	Logs with the domain name of http request matching <code>value</code> are returned.
<code>http_host</code>	No	String	Logs except those with the domain name of http request matching <code>value</code> are returned.
<code>remote_addr</code>	No	String	Logs with the request client IP matching <code>value</code> are returned.
<code>remote_addr_not</code>	No	String	Logs except those with the request client IP matching <code>value</code> are returned.
<code>request_time_less_than</code>	No	String	Logs with the request processing time less than <code>value</code> are returned. This parameter must be passed in along with <code>request_time_greater_than</code> .
<code>request_time_greater_than</code>	No	String	Logs with the request processing time greater than <code>value</code> are returned. This parameter must be passed in along with <code>request_time_less_than</code> .

## Response Parameters

Parameter	Type	Description
<code>code</code>	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
<code>message</code>	String	API-related module error message description.

codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
logInfo	Json	Information of the log returned.

`logInfo` format:

Parameter	Type	Description
logList	Array	Log array.
total	Int	Total number of logs.

`logList` data format:

No.	Parameter	Type	Description
1	server_name	String	Domain name configured in the CLB layer-7 rules.
2	request	String	Request line.
3	remote_addr	String	Client IP.
4	upstream_addr	String	RS information.
5	upstream_header_time	String	The time it takes to receive an HTTP header from the RS.
6	connection_requests	Int	Number of connection requests.
7	ssl_handshake_time	String	The time that an SSL handshake takes.
8	ssl_cipher	String	SSL cipher suite.
9	ssl_protocol	String	SSL protocol version.
10	ssl_session_reused	String	SSL session reuse.
11	time_local	String	Request access time.
12	http_host	String	Request domain name.
13	server_addr	String	Request destination IP.
14	bytes_sent	Int	Number of bytes sent to the client.
15	upstream_status	String	RS status.

16	protocol_type	String	Protocol type (http/https/spdy/http2/ws/wss).
17	request_time	Int	Request processing time.
18	upstream_connect_time	Int	The time it takes to establish a TCP connection with an RS, in seconds.
19	request_length	Int	Number of bytes of the request received from the client.
20	tcpinfo_rtt	Int	TCP connection RTT, in milliseconds.
21	upstream_response_time	Int	The time it takes to receive a response from an RS, in seconds.
22	status	String	Status code returned by the request. Status code "200" will be returned if no RS exists.
23	http_user_agent	String	The user_agent used in the HTTP request header.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=DescribeLoadBalancerLog
&<Common request parameters>
&loadBalancerId=lb-7wdcqme9
&filter.0.key=status
&filter.0.value=200
&filter.1.key=server_name
&filter.1.value=www.qq.com
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "logInfo": {
    "logList": [
      {
        "server_name": "www.qq.com",
        "request": "GET / HTTP/1.1",
        "remote_addr": "119.28.138.187",
        "upstream_addr": "-",
        "upstream_header_time": "-",
        "connection_requests": 1,

```



```
"ssl_cipher": "-",
"remote_port": "40554",
"time_local": "02/Nov/2017:12:03:13 +0800",
"http_host": "115.159.132.241",
"server_addr": "115.159.132.241",
"bytes_sent": 239,
"upstream_status": "-",
"protocol_type": "http",
"ssl_handshake_time": "-",
"request_time": 0,
"upstream_connect_time": "-",
"request_length": 79,
"ssl_session_reused": "-",
"tcpinfo_rtt": 38000,
"upstream_response_time": "-",
"ssl_protocol": "-",
"status": "200"
}
],
"total": 3918
}
}
```

# CloneLB

최종 업데이트 날짜: : 2020-10-28 15:53:00

## API Description

This API is used to clone all configurations of a CLB instance, including its attribute, security group, listener and real server bound.

Domain name for API calls: `lb.api.qcloud.com`

### Note :

- If there are many CLB configurations, the API tends to time out. Please wait patiently.
- The API does not support concurrent calls.
- Currently, a classic CLB instance cannot be cloned.
- All the cloned CLB instances are pay-as-you-go. The cloned ones will be automatically deleted once the clone fails.
- All the cloned CLB instances are named after “cloneFrom-lb-xxx” (a clone from the `lb-xxx` CLB instance).

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is `CloneLB`.

Parameter	Required	Type	Description
loadBalancerId	Yes	String	CLB instance ID.
cloneType	Yes	String	Clone type. <ul style="list-style-type: none"> <li>• all: both the listener and the RS binding relationship will be cloned.</li> <li>• onlyListener: only the listener will be cloned, but the RS binding relationship will not.</li> </ul>
zone	No	String	Availability zone in which the CLB instance is cloned. It is the same as that specified in <a href="#">purchase parameters</a> .

## Response Parameters

Parameter	Type	Description
cloneLBId	String	ID of new CLB instances from the clone.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=CloneLB
&<Common request parameters>
&loadBalancerId=lb-xxx
&cloneType=all
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "cloneLBId": "lb-sss"
}
```

# Classic CLB APIs

## APIs for CLB Instances

### ModifyLoadBalancerAttributes

최종 업데이트 날짜: : 2021-04-12 14:58:37

## API Description

This API is used to modify basic configuration information of CLB instances based on your input parameters.

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`ModifyLoadBalancerAttributes`.

Parameter	Required	Type	Description
<code>loadBalancerId</code>	Yes	String	Unique ID of the CLB instance, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.
<code>loadBalancerName</code>	No	String	Name of the CLB instance, which can contain 1-50 characters, including letters, Chinese, numbers, hyphen (-) or underscore (_).
<code>domainPrefix</code>	No	String	Domain name prefix. The domain name of a CLB instance consists of the user-defined domain name prefix and the domain suffix in the configuration file to ensure the uniqueness. Rule: 1-20 characters including lowercase letters, numbers, or hyphen (-). This field cannot be specified for private network CLB instances.

## Response Parameters

Parameter	Type	Description
-----------	------	-------------

code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
requestId	Int	Request task ID. The API provides an asynchronous task. You can use this parameter to query the execution result of the task via the <a href="#">DescribeLoadBalancersTaskResult</a> API.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=ModifyLoadBalancerAttributes
&<Common request parameters>
&loadBalancerId=lb-abcdefgh
&loadBalancerName=my-lb-name
```

### Response

```
{
  "code" : 0,
  "message" : "",
  "codeDesc": "Success",
  "requestId" : 1234
}
```

# APIs for Listeners

## Create CLB Listeners

최종 업데이트 날짜: : 2021-04-13 16:40:52

### API Description

This API is used to create a CLB listener that provides the request forwarding rules, including parameters such as port, protocol, session persistence, and health check.

Domain name for API calls: `lb.api.qcloud.com`

The listener configuration rules are as follows:

- A CLB port can only have one protocol in the same CLB instance.
- Public network CLB listeners support HTTP, UDP, TCP, and HTTPS protocols, while private network CLB listeners only support UDP and TCP protocols.
- Batch creation is not supported when creating HTTPS listeners.

### Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`CreateLoadBalancerListeners` .

Parameter	Required	Type	Description
<code>loadBalancerId</code>	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.
<code>listeners.n.loadBalancerPort</code>	Yes	Int	Listening port of the CLB listener. Valid range: 1-65535. <code>listeners</code> is an array. You can create n listeners, and <code>n</code> is a subscript.
<code>listeners.n.instancePort</code>	Yes	Int	Listening port of CLB listener's real server. Value range: 1-65535.
<code>listeners.n.protocol</code>	Yes	Int	Protocol type of the CLB listener. 1: HTTP; 2: TCP; 3: UDP; 4: HTTPS. Public network CLB listeners support HTTP, UDP, TCP and HTTPS protocols;

			Private network CLB listeners only support TCP and UDP protocols.
listeners.n.listenerName	No	String	Name of the CLB listener.
listeners.n.sessionExpire	No	Int	Session persistence duration of the CLB listener. Value range: 0 or 30-3600. Default value: 0.
listeners.n.healthSwitch	No	Int	Whether to enable the health check for CLB listeners. 1: enable; 0: disable. Default value: 1.
listeners.n.timeOut	No	Int	Response timeout of health check for the CLB listener, in seconds. Valid range: 2-60, default value: 2. <b>This parameter should be less than the check interval.</b> This parameter is currently unavailable to public network CLB listeners with HTTP or HTTPS protocol.
listeners.n.intervalTime	No	Int	Health check interval for the CLB listener, in seconds. Value range: 5-300. Default value: 5.
listeners.n.healthNum	No	Int	Healthy threshold of the CLB listener. Value range: 2-10. Default value: 3, indicating that if a forward is found healthy three consecutive times, it is considered to be normal.
listeners.n.unhealthNum	No	Int	Unhealthy threshold of the CLB listener. Value range: 2-10. Default value: 3, indicating that if a forward is found unhealthy three consecutive times, it is considered to be abnormal.
listeners.n.httpHash	No	String	Forwarding method of the CLB listener. Only public CLB instances with HTTP or HTTPS listeners support this parameter. Valid values: wrr (weighted round robin), ip_hash (forwarding the hash of the source IP to the real server), least_conn (least connection). Default value: wrr.
listeners.n.scheduler	No	String	Forwarding method of the CLB listener. Only public CLB instances with TCP or UDP listeners support this field. Valid values: wrr (weighted round robin), least_conn (least connection). Default value: wrr.
listeners.n.httpCode	No	Int	Return code for health status of the HTTP or HTTPS listener of public network CLB instances. Valid range: 1-31. Default value: 31. 1 represents a return code of 1xx (healthy). 2 represents

			a return code of 2xx (healthy). 4 represents a return code of 3xx (healthy). 8 represents a return code of 4xx (healthy). 16 represents a return code of 5xx (healthy). If there are multiple codes that can show the healthy status, enter the accumulated value corresponding to such codes.
listeners.n.httpCheckPath	No	String	Health check path for the HTTP or HTTPS listener of public network CLB instances. Default value: <code>/</code> . It must be started with <code>/</code> .
listeners.n.SSLMode	No	String	SSL authentication type of the HTTPS listener of public network CLB instances. unidirectional: one-way authentication; mutual: mutual authentication. <b>This parameter is required to a HTTPS listener.</b>
listeners.n.certId	No	String	Server certificate ID. For HTTPS listeners, if this field is left empty, you must upload server certificate by specifying parameters including certContent, certKey, and certName.
listeners.n.certCaId	No	String	Client certificate ID. For HTTPS listeners, if <code>SSLMode=mutual</code> and this field is left empty, you must upload client certificate by specifying the certCaContent and certCaName parameters.
listeners.n.certCaContent	No	String	Content of the client certificate uploaded. For HTTPS listeners, if <code>SSLMode=mutual</code> and <code>certCaId</code> is left empty, this parameter must be passed in.
listeners.n.certCaName	No	String	Name of the client CA certificate uploaded. For HTTPS listeners, if <code>SSLMode=mutual</code> and <code>certCaId</code> is left empty, this parameter must be passed in.
listeners.n.certContent	No	String	Content of the server certificate uploaded. For HTTPS listeners, if <code>certId</code> is left empty, this parameter must be passed in.
listeners.n.certKey	No	String	Key of the server certificate uploaded. For HTTPS listeners, if <code>certId</code> is left empty, this parameter must be passed in.
listeners.n.certName	No	String	Name of the server certificate uploaded. For HTTPS listeners, if <code>certId</code> is left empty, this parameter must be passed in.



## Response Parameters

Parameter Name	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
requestId	Int	Request task ID. The operation status can be queried via the <a href="#">DescribeLoadBalancersTaskResult</a> API.
listenerIds	Array	Listener ID array.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=CreateLoadBalancerListeners
&<Common request parameters>
&loadBalancerId=lb-abcdefgh
&listeners.0.loadBalancerPort=443
&listeners.0.instancePort=443
&listeners.0.protocol=4
&listeners.0.SSLMode=mutual
&listeners.0.certName=myCertName
&listeners.0.certContent=-----BEGIN CERTIFICATE-----
    MIIE0DCCA7igAwIBAgIQEgaTYAJIpw1PQxjSr1F1TDANBgkqhkiG9w0BAQsFADBP
    MQswCQYDVQQGEwJDTjEaMBGGA1UEChMRV29TaWduIENBIEpwbW10ZWQxJDAiBgNV
    BAMMG0NBIOayg+mAmuWFjei0uVNTTOivgeS5piBHMjAeFw0xNjA1MTMwODIxMjVa
    Fw0xODA2MTMwODIxMjVaMBUxEzARBgNVBAMMCmcuZi14ai5jb20wggeiMA0GCSqG
    SIb3DQEBAQUAA4IBDwAwggEKAoIBAQC4/Ei7dxUJYXgY1V1PflCMwUrkG8Ack0vw
    +C/hCzivNBw5N0WA1Tch4REOIyDPiBq2wiblw4kSsHOF5CfB9DwDhaknZwzwyynZ
    Wr2NekKjoo6x0viqFydVyiVWGzW1qr6Dn9tiDcp75W/Os+nUzKHcc0Wd5aHvjGKD
    6xEPQKLvCZ0F4208rHWcoSnYiaFJPUAfeqd8JvK5a10BvSZoXICo6Taf5x4xHag1
    6ymINH1ClLcAIOPAITWddqV20xaXrvdU7J0BusmYkHc840X3cvBywjFurzN5oLg2
    vtVQhGm6qJ/Fjqdg8w40BZkTQb4P1EX8AJ27g+548giuVnLzf8CHAgMBAAGjggHg
    MIIB3DAOBgNVHQ8BAf8EBAMCBaAwHQYDVR01BBYwFAYIKwYBBQUHAWIGCCsGAQUF
    BwMBMAkGA1UdEwQCMAAwHQYDVR0OBBYEFBv1TUGHZ/GGU4qGT+T7r/Zbcg0pMB8G
    A1UdIwQYMBaAFDDadIbzKJBWntcxMcK9Wc2TEjkdMH8GCCsGAQUFBwEBBHMwTA1
```

```
BggrBgEFBQCwAYYpaHR0cDovL29jc3AyLndvc2lnbi5jbi9jYTJnMi9zZXJ2ZXIxL2ZyZWUwOAYIKwYBBQUHMAKGLGh0dHA6Ly9haWEyLndvc2lnbi5jbi9jYTJnMi5zZXJ2ZXIxLmZyZWUuY2VyMD4GA1UdHwQ3MDUwM6AxC+GLWh0dHA6Ly9jcmxzMi53b3NpZ24uY24vY2EyZzItc2VydMvYMS1mcmVlLmNybDBOBgNVHREERzBFggpnLmYteGouY29tghBzY2hvbGFyLmYteGouY29tggT5dC5mLXhqLmNvbYILZmIuZi14ai5jb22CC3R3LmYteGouY29tME8GA1UdIARIMEYwCAYGZ4EMAQIBMDoGCysGAQQBgptRAQECMCswKQYIKwYBBQUHAgeEWHWh0dHA6Ly93d3cud29zaWduLmNvbS9wb2xpY3kvMA0GCSqGSIb3DQEBCwUAA4IBAQCJSd/1xmwnT/TtKvvxTvDnkCpfsFYVmqiHB/ZrXiMdgobUOfF7C8kcBCTqSQAXZF3fjJ1KyhNulvKOfzGGYp+rMwoTAmfaNLUxD/X9gPLxZCiySDBQ1BLE16k4aKUHIOmqQNF1MD/8hOZBxjevctKaXc4Xqm2gxJLxDHROy3HKZcdB6t/x7YJU640wvaFqDqIgr6Pc74YjtLrNjkXcf/IQU7c2yJzt9NIGeSOTku5DmFasRf04tmE7naB+wkUZOWaQgK8CESNS11BYZjO/M4G/ALS8zCpShUy89HhYiYAG5jdNI4vyWwaU4428nG3YvKz1TOPCaowqgbyCcqmtAT
```

```
-----END CERTIFICATE-----
```

```
&listeners.0.certKey=-----BEGIN RSA PRIVATE KEY-----
```

```
your own key
```

```
-----END RSA PRIVATE KEY-----
```

```
&listeners.0.certCaContent=-----BEGIN CERTIFICATE-----
```

```
MIIEPDCCAYsGAWIBAgIJAjHd00fZNXoMA0GCSqGSIb3DQEBBQUAMHExCzAJBgNVBAYTAKNOMQswCQYDVQQLIEwJHUzELMAKGA1UEBxMCU1oxDTALBgNVBAoTBFBhYWFgxDjAMBgNVBAAsTBVhYWfhYMQ4wDAYDVQQDEwVBQUBQTEZMBcGCsGSIb3DQEJARYKd3d3QHFxLmNvbTAeFw0xNjA4MTEyMTUyNTZaFw0xNzA4MDIxMTUyNTZaMHExCzAJBgNVBAYTAKNOMQswCQYDVQQLIEwJHUzELMAKGA1UEBxMCU1oxDTALBgNVBAoTBFBhYWFgxDjAMBgNVBAAsTBVhYWfhYMQ4wDAYDVQQDEwVBQUBQTEZMBcGCsGSIb3DQEJARYKd3d3QHFxLmNvbTCCASIdQYJKoZIhvcNAQEBBQADggEPADCCAQoCggEBAM29SL0T1ZaqZb4jEjZ8mkwSeWGVhYaskYtDvzvZQSHZF2A1DtpGojsz+Z3KxgVo4edjY26lfxmFPwPhxoBRgCYDqEOLAOKWRxzXYyP2kr9FN4vs0hzizT4IVxJciOUwmIaQbjzzFQN5BeJ/UTekrs1/YwfJAakP7TvoKULfBvkKFzRlgdxnGk+/C7+cg1P9F9J4rjm/Rn+0Hh00QshsAo1IT4jZF356yvk/g0upLhZexo39jKf4ypmtcHTusYcAoRGhbCk26taM4aeQxMnB715ZkQhqB1+dyM6SWRFysYpteEK+jEH8wWPQriqIlcRjXncy/8B4RmHIJxXRG8Tb8TUCAwEAAaOB1jCB0zAdBgNVHQ4EFgQUup/qOq6q7ezAVxEhXtrSPMa4aiq4wgaMGA1UdIwSBmzCBmIAUp/qOq6q7ezAVxEhXtrSPMa4aiq6hdaRzMHExCzAJBgNVBAYTAKNOMQswCQYDVQQLIEwJHUzELMAKGA1UEBxMCU1oxDTALBgNVBAoTBFBhYWFgxDjAMBgNVBAAsTBVhYWfhYMQ4wDAYDVQQDEwVBQUBQTEZMBcGCsGSIb3DQEJARYKd3d3QHFxLmNvbYIJAjHd00fZNXoMAwGA1UdEwQFMAMBAf8wDQYJKoZIhvcNAQEFBQADggEBAJ2XTOKyR2nFgaWcTG5d92tSij3lIoZCBo4dwrleYFuWcYUYSi65QskJpuDhr5KttmI4+0tt9OQOB/oHIEbkCqgEAC7PREJAgapcf5+ItMHNrNh151CkTyok1Z09tw3OrX5GQVAHSpz0+BQTE+MPas5lyidwP1PqQFY9nZW4J3PGRABiiSnQ1eN5g0aKzIZpbEbP7Y7BGT9b+rLt+VUbmQ30h96zHchSsUsQ32dchwLmN0ZL1PyCivQ+A1snbqA3uHZnoXBd8/yq0QNg0o15edx+GfbY5FJbgXf3FER+NgMBwPeJ62izpROBQvXYNb3e72gM1xCA1gD+MBpNeG1x56g=
```

```
-----END CERTIFICATE-----
```

```
&listeners.0.certCaName=myCertCaName
```

## Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "requestId": 28557,
  "listenerIds": [
    "lbl-hox8i4q0"
  ]
}
```

# DescribeLoadBalancerListeners

최종 업데이트 날짜: : 2021-04-14 11:24:04

## 1. API Description

This API is used to get the list of listeners by CLB instance IDs, listener protocol, or port. If no filter is specified, the default number (20) of listeners for the instance will be returned.

Domain name for API access: lb.api.qcloud.com

## 2. Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`DescribeLoadBalancerListeners` .

Parameter	Required	Type	Description
loadBalancerId	Yes	String	Unique ID of the CLB instance, which can be queried via the <a href="#">DescribeLoadBalancers</a> API. You can use <code>loadBalancerId</code> or <code>unLoadBalancerId</code> , we recommend using <code>unLoadBalancerId</code> .
listenerIds.n	No	String	ID of the CLB listener.
protocol	No	Int	Protocol type of the listener. 1: HTTP; 2: TCP; 3: UDP; 4: HTTPS.
loadBalancerPort	No	Int	Port of the CLB listener.
status	No	Int	Status of the CLB listener. This field will be ignored when <code>listenerIds.n</code> is specified.

## 3. Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .

message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
totalCount	Int	Total number of CLB instances that meet the filter criteria.
listenerSet	Array	Returned array of listeners.

Data structure of the returned `listener` array:

Parameter	Type	Description
unListenerId	String	ID of the CLB listener.
loadBalancerPort	Int	Listening port of the CLB instance.
instancePort	Int	Forwarding port of the listener's backend.
listenerName	String	Listener name.
protocol	No	Int
sessionExpire	Int	Session persistence duration.
healthSwitch	Int	Whether to enable the health check. 1: enable; 0: disable.
timeOut	Int	Response timeout.
intervalTime	Int	Interval between health checks.
healthNum	Int	Healthy threshold.
unhealthNum	Int	Unhealthy threshold.
httpHash	String	Polling method of the public network HTTP or HTTPS listener with static IP. Valid values: wrr (weighted round robin) ip_hash (forwarding the hash of the source IP to the real server).
httpCode	Int	Health check return code of the public network HTTP or HTTPS listener with static IP.
httpCheckPath	String	Health check path of the public network HTTP or HTTPS listener with static IP.
SSLMode	String	Verification method of public network HTTPS listener with static IP.
certId	String	Server certificate ID of the public network HTTPS listener with static IP.

certCaId	String	Client certificate ID of the public network HTTPS listener with static IP.
status	Int	Listener status. 0: creating. 1: running.

## 4. Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=DescribeLoadBalancerListeners
&<Common request parameters>
&loadBalancerId=lb-abcdefgh
&listenerIds.0=lbl-6hkiqc6c
&listenerIds.1=lbl-6wv071ba
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "listenerSet": [
    {
      "loadBalancerPort": 80,
      "instancePort": 80,
      "protocol": 4,
      "status": 1,
      "listenerName": "teaa",
      "unListenerId": "lbl-6hkiqc6c",
      "sessionExpire": 1000,
      "healthSwitch": 1,
      "timeOut": 6,
      "intervalTime": 6,
      "healthNum": 3,
      "unhealthNum": 3,
      "httpCode": 15,
      "httpCheckPath": "/",
      "httpHash": "ip_hash",
      "SSLMode": "mutual",
      "certId": "4b9fc92b",
      "certCaId": "ee4c5590"
    },
    {
      "loadBalancerPort": 777,
      "instancePort": 798,
```

```
"protocol": 4,  
"status": 1,  
"listenerName": "",  
"unListenerId": "lbl-6wv071ba",  
"sessionExpire": 0,  
"healthSwitch": 1,  
"timeOut": 2,  
"intervalTime": 5,  
"healthNum": 3,  
"unhealthNum": 3,  
"httpCode": 31,  
"httpCheckPath": "/",  
"httpHash": "wrr",  
"SSLMode": "mutual",  
"certId": "e2b6d555",  
"certCaId": "dcda0a22"  
}  
],  
"totalCount": 2  
}
```

# DeleteLoadBalancerListeners

최종 업데이트 날짜: : 2021-04-15 11:23:05

## API Description

This API is used to delete listener(s) of a CLB instance.

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`DeleteLoadBalancerListeners` .

Parameter	Required	Type	Description
loadBalancerId	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.
listenerIds.n	Yes	String	ID of the CLB listener to delete, which can be queried via the <a href="#">DescribeLoadBalancerListeners</a> API.

## Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
requestId	Int	Request task ID. The API provides an asynchronous task. You can use this parameter to query the execution result via the <a href="#">DescribeLoadBalancersTaskResult</a> API.



## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=DeleteLoadBalancerListeners
&<Common request parameters>
&loadBalancerId=lb-abcdefgh
&listenerIds.0=lbl-rbuzrm5d
```

### Response

```
{
  "code" : 0,
  "message" : "",
  "codeDesc": "Success",
  "requestId" : 1234
}
```

# ModifyLoadBalancerListener

최종 업데이트 날짜: : 2021-04-16 16:19:55

## API Description

This API is used to modify the attributes of CLB listeners.

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`ModifyLoadBalancerListener`.

Parameter	Required	Type	Description
loadBalancerId	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.
loadBalancerId	Yes	String	CLB listener ID, which can be queried via the <a href="#">DescribeLoadBalancerListeners</a> API.
listenerName	No	String	Listener name.
sessionExpire	No	Int	Session persistence duration. 0: disable. Value range: 30-3600.
healthSwitch	No	Int	Whether to enable health check. 1: enable; 0: disable.
timeOut	No	Int	Response timeout. Value range: 2-60 seconds; This parameter cannot be specified for public network CLB listener with HTTP or HTTPS protocol.
intervalTime	No	Int	Interval between health checks. Value range: 5-300 seconds. Default value: 5.
healthNum	No	Int	Healthy threshold. Value range: 2-10.
unhealthNum	No	Int	Unhealthy threshold. Value range: 2-10.
scheduler	No	String	Forwarding method of the CLB listener. This field cannot be passed in together with <code>httpHash</code> . Only public network CLB listeners

			with TCP or UDP protocol support this field. Valid values: wrr (weighted round robin), least_conn (least connection).
httpHash	No	String	Forwarding method of the CLB listener. Only public network CLB listener with HTTP or HTTPS protocol support this field. Valid values: wrr (weighted round robin), ip_hash (forwarding the hash of the source IP to the real server), least_conn (least connection). Default value: wrr.
httpCode	No	Int	Return code for the health check of HTTP or HTTPS CLB listeners. Valid range: 1-31. Default value: 31. 1 represents a return code of 1xx (healthy). 2 represents a return code of 2xx (healthy). 4 represents a return code of 3xx (healthy). 8 represents a return code of 4xx (healthy). 16 represents a return code of 5xx (healthy). If there are multiple codes that can show the healthy status, enter the accumulated value corresponding to such codes.
httpCheckPath	No	String	Health check path for the public network CLB listener with HTTP or HTTPS protocol. Default is /. It must start with /.
SSLMode	No	String	Verification mode of the public network CLB listener with HTTPS protocol. unidirectional: unidirectional verification; mutual: mutual verification.
certId	No	String	New server certificate ID of the public network CLB listener with HTTPS protocol.
certCald	No	String	New client certificate ID of the public network CLB listener with HTTPS protocol.
certCaContent	No	String	New client certificate content of the public network CLB listener with HTTPS protocol.
certCaName	No	String	New client certificate name of the public network CLB listener with HTTPS protocol.
certContent	No	String	New server certificate content of the public network CLB listener with HTTPS protocol.
certKey	No	String	New server certificate key of the public network CLB listener with HTTPS protocol.
certName	No	String	New server certificate name of the public network CLB listener with HTTPS protocol.

## Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
requestId	Int	Request task ID. You can use this field to query the operation status via the <a href="#">DescribeLoadBalancersTaskResult</a> API.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=ModifyLoadBalancerListener
&<Common request parameters>
loadBalancerId=lb-ltkip4do
&listenerId=lb1-6hkiqc6c
&SSLMode=unidirectional
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "requestId": 18642
}
```

# DescribeLoadBalancerListeners

최종 업데이트 날짜: : 2021-04-19 11:14:02

## API Description

This API is used to query the list of listeners by CLB ID, listener protocol or port.

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see the [Common Request Parameters](#). The `Action` field for this API is `DescribeLoadBalancerListeners`.

Parameter	Required	Type	Description
<code>loadBalancerId</code>	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.
<code>listenerIds.n</code>	No	String	CLB listener ID.
<code>protocol</code>	No	Int	Protocol type of the listener. 1: HTTP; 2: TCP; 3: UDP; 4: HTTPS.
<code>loadBalancerPort</code>	No	Int	Port of the CLB listener.
<code>status</code>	No	Int	Status of the CLB listener. This field will be ignored when <code>listenerIds.n</code> is specified.

## Response Parameters

Parameter	Type	Description
<code>code</code>	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
<code>message</code>	String	API-related module error message description.

codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
totalCount	Int	Total number of CLB listeners that meet the filter condition.
listenerSet	Array	Listener array returned.

Structure of the `listenerSet` array returned

Parameter	Type	Description
listenerId	String	CLB listener ID.
unListenerId	String	CLB listener ID.
loadBalancerPort	Int	Listening port of the CLB listener.
instancePort	Int	Forwarding port of the listener.
listenerName	String	Listener name.
protocol	Int	Protocol type of the listener. 1: HTTP; 2: TCP; 3: UDP; 4: HTTPS.
sessionExpire	Int	Session persistence duration.
healthSwitch	Int	Whether to enable the health check. 1: enable; 0: disable.
timeOut	Int	Response timeout.
intervalTime	Int	Interval between health checks.
healthNum	Int	Healthy threshold.
unhealthNum	Int	Unhealthy threshold.
httpHash	String	Forwarding method of the HTTP or HTTPS listener of a public network classic CLB instance.
scheduler	String	Forwarding method of the UDP or TCP listener of a public network classic CLB instance.
httpCode	Int	Return code for health check of the HTTP or HTTPS listener of a public network classic CLB instance. For more information about this field, see its explanation in the <a href="#">CreateLoadBalancerListeners</a> API.
httpCheckPath	String	Health check path of the HTTP or HTTPS listener of a public network classic CLB instance.

SSLMode	String	Verification method of the HTTPS listener of a public network classic CLB instance.
certId	String	Server certificate ID of the HTTPS listener of a public network classic CLB instance.
certCald	String	Client certificate ID of the HTTPS listener of a public network classic CLB instance.
status	Int	Listener status. 0: creating; 1: running.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=DescribeLoadBalancerListeners
&<Common request parameters>
&loadBalancerId=lb-abcdefgh
&listenerIds.0=lbl-6hkiqc6c
&listenerIds.1=lbl-6wv071ba
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "listenerSet": [
    {
      "listenerId": "lbl-6hkiqc6c",
      "loadBalancerPort": 80,
      "instancePort": 80,
      "protocol": 4,
      "status": 1,
      "listenerName": "teaa",
      "unListenerId": "lbl-6hkiqc6c",
      "sessionExpire": 1000,
      "healthSwitch": 1,
      "timeOut": 6,
      "intervalTime": 6,
      "healthNum": 3,
      "unhealthNum": 3,
      "httpCode": 15,
      "httpCheckPath": "/",

```

```
"httpHash": "ip_hash",
"SSLMode": "mutual",
"certId": "4b9fc92b",
"certCaId": "ee4c5590"
},
{
"listenerId": "lbl-6hkiqc6c",
"loadBalancerPort": 777,
"instancePort": 798,
"protocol": 4,
"status": 1,
"listenerName": "",
"unListenerId": "lbl-6wv071ba",
"sessionExpire": 0,
"healthSwitch": 1,
"timeOut": 2,
"intervalTime": 5,
"healthNum": 3,
"unhealthNum": 3,
"httpCode": 31,
"httpCheckPath": "/",
"httpHash": "wrr",
"SSLMode": "mutual",
"certId": "e2b6d555",
"certCaId": "dcda0a22"
}
],
"totalCount": 2
}
```



# CLB Real Server APIs

## RegisterInstancesWithLoadBalancer

최종 업데이트 날짜: : 2021-04-20 11:18:55

### API Description

This API is used to bind one or more CVMs to a CLB instance.

Domain name for API calls: `lb.api.qcloud.com`

### Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`RegisterInstancesWithLoadBalancer` .

Parameter	Required	Type	Description
<code>loadBalancerId</code>	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.
<code>backends.n.instanceId</code>	Yes	String	Unique ID of the CVM, which can be obtained from the “unInstanceId” field in the response of the <a href="#">DescribeInstances</a> API. This API supports entering multiple CVM instance IDs at a time. For example, if you want to specify two CVMs, enter <code>backends.0.instanceId&amp;backends.1.instanceId</code> .
<code>backends.n.weight</code>	No	Int	Weight of the CVM. Value range: 0-100. Default value: 10.

### Response Parameters

Parameter	Type	Description
<code>code</code>	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
<code>message</code>	String	API-related module error message description.

codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
requestId	Int	Request task ID. The API provides an asynchronous task. You can use this parameter to query the operation result via the <a href="#">DescribeLoadBalancersTaskResult</a> API.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=RegisterInstancesWithLoadBalancer
&<Common request parameters>
&loadBalancerId=lb-abcdefgh
&backends.0.instanceId=ins-1234test
&backends.0.weight=10
&backends.1.instanceId=ins-5678test
&backends.1.weight=6
```

### Response

```
{
  "code" : 0,
  "message" : "",
  "codeDesc": "Success",
  "requestId" : 1234
}
```

# DescribeLoadBalancerBackends

최종 업데이트 날짜: : 2021-04-21 16:40:52

## API Description

This API is used to query the list of CVMs bound to the CLB instance by instance ID.

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`DescribeLoadBalancerBackends` .

Parameter	Required	Type	Description
loadBalancerId	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.

## Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
totalCount	Int	Total number of CVMs bound to this CLB instance.
backendSet	Array	Array of real servers returned.

Structure of the `backendSet` array:

--	--	--

Parameter	Type	Description
instanceId	String	CVM instance ID.
unInstanceId	String	CVM instance ID. This parameter supports all operations of `instanceId`. We recommend using it.
weight	Int	Weight of the CVM instance.
instanceName	String	Name of the CVM instance.
lanIp	String	Private IP of the CVM instance.
wanIpSet	Array	Public IP of the CVM instance.
instanceStatus	Int	Status of the CVM instance. 1: failed; 2: running; 3: creating; 4: shut down; 5: returned; 6: returning; 7: restarting; 8: starting; 9: shutting down; 10: resetting password; 11: formatting; 12: creating image; 13: setting bandwidth; 14: reinstalling system; 19: upgrading; 21: hot migrating

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=DescribeLoadBalancerBackends
&<Common request parameters>
&loadBalancerId=lb-byhpduqt
```

### Response

```
{
  "code": 0,
  "message": "",
  "codeDesc": "Success",
  "totalCount": 1,
```

```
"backendSet": [  
  {  
    "instanceId": "qcvmed9e93b0bb2784b043c983761e624639",  
    "unInstanceId": "ins-9o9ex9s0",  
    "instanceName": "test_k8s_1",  
    "lanIp": "10.104.222.152",  
    "wanIpSet": [  
      "193.112.93.144"  
    ],  
    "instanceStatus": 4,  
    "weight": 44  
  }  
]
```

# ModifyLoadBalancerBackends

최종 업데이트 날짜: : 2021-04-22 15:49:01

## API Description

This API is used to modify the weight of CVMs bound to a CLB instance, thereby adjusting the request forwarding rule.

Domain name for API calls: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`ModifyLoadBalancerBackends`.

Parameter	Required	Type	Description
loadBalancerId	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.
backends.n.instanceId	Yes	String	Unique ID of the CVM, which can be obtained from the `unInstanceId` field in the response of the <a href="#">DescribeInstances</a> API. This API supports entering multiple CVM instance IDs at a time. For example, if you want to specify two CVMs, enter <code>backends.0.instanceId&amp;backends.1.instanceId</code> .
backends.n.weight	Yes	Int	Weight of the bound CVMs. Value range: 0-100. Default value: 10.

## Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.

codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
requestId	Int	Request task ID. The API provides an asynchronous task. You can use this parameter to query the execution result of the task via the <a href="#">DescribeLoadBalancersTaskResult</a> API.

## Example

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=ModifyLoadBalancerBackends
&<Common request parameters>
&loadBalancerId=lb-abcdefgh
&backends.0.instanceId=ins-6789test
&backends.0.weight=10
&backends.1.instanceId=ins-1234test
&backends.1.weight=6
```

### Response

```
{
  "code" : 0,
  "message" : "",
  "codeDesc": "Success",
  "requestId" : 1234
}
```

# DeregisterInstancesFromLoadBalancer

최종 업데이트 날짜: 2023-06-25 11:37:28

## API Description

This API is used to unbind one or multiple CVM instances from a CLB instance.

API domain name: `lb.api.qcloud.com`

## Request Parameters

The list below contains only the API request parameters. Common request parameters need to be added when a call is made. For more information, please see [Common Request Parameters](#). The `Action` field of this API is

`DeregisterInstancesFromLoadBalancer`.

Parameter Name	Required	Type	Description
<code>loadBalancerId</code>	Yes	String	CLB instance ID, which can be queried through the <a href="#">DescribeLoadBalancers</a> API.
<code>backends.n.instanceId</code>	Yes	String	Unique ID of CVM instance, which can be obtained through the <code>unInstanceId` (recommended) or `instanceId` field returned by the DescribeInstances API. You can enter the IDs of multiple CVM instances (for example, for two CVM instances, enter <code>`backends.0.instanceId&amp;backends.1.instanceId`</code>).</code>

## Response Parameters

Parameter Name	Type	Description
<code>code</code>	Int	Common error code. 0: success; other values: failure. For more information, please see <a href="#">Common Error Codes</a> .
<code>message</code>	String	Module error message related to the API.
<code>codeDesc</code>	String	Error code. For a successful operation, "Success" will be returned. For a failed operation, a message describing the failure will be returned.



requestId	Int	Request task ID. This API is an async task. You can call the <a href="#">DescribeLoadBalancersTaskResult</a> API to query the task operation result based on this parameter.
-----------	-----	--

## Sample

### Request

```
https://lb.api.qcloud.com/v2/index.php?Action=DeregisterInstancesFromLoadBalancer
&<Common request parameters>
&loadBalancerId=lb-abcdefgh
&backends.0.instanceId=ins-1234test
&backends.1.instanceId=ins-6789test
```

### Return

```
{
  "code" : 0,
  "message" : "",
  "codeDesc": "Success",
  "requestId" : 1234
}
```

# APIs for Health Check

## DescribeLBHealthStatus

최종 업데이트 날짜: : 2021-04-25 10:53:26

### API Description

This API is used to query the health check parameters for CLB instances.

Domain name for API calls: `lb.api.qcloud.com`

### Request Parameters

The list below contains only the API request parameters. Common parameters should be added when you call the API. For more information, see [Common Request Parameters](#). The `Action` field for this API is

`DescribeLBHealthStatus` .

Parameter	Required	Type	Description
loadBalancerId	Yes	String	CLB instance ID, which can be queried via the <a href="#">DescribeLoadBalancers</a> API.
listenerId	No	String	CLB listener ID, which can be queried via the <a href="#">DescribeLoadBalancerListeners</a> API.

### Response Parameters

Parameter	Type	Description
code	Int	Common error code. 0: success; other values: failure. For more information, see <a href="#">Common Error Codes</a> .
message	String	API-related module error message description.
codeDesc	String	Error code. For a successful operation, "Success" is returned. For a failed operation, a message describing the failure is returned.
data	Array	Returned array.

Data structure of the `data` array:

Parameter	Type	Description
ip	String	Private IP of the CVM.
protocol	String	Protocol.
port	Int	Port of the CVM.
vport	Int	Listening port of the CLB instance.
healthStatus	Int	Health check result. 1: healthy; 0: unhealthy.

## Example

Sample request

```
https://lb.api.qcloud.com/v2/index.php?Action=DescribeLBHealthStatus
&<Common request parameters>
&loadBalancerId=lb-abcdefgh
```

Sample response

```
{
  "code":0,
  "message" : "",
  "codeDesc": "Success",
  "data": [
    {
      "ip":"10.2.3.0",
      "protocol":"TCP",
      "port":8001,
      "vport":8001,
      "healthStatus":0
    }
  ]
}
```