Server Load Balancer

Developer Guide

Developer Guide

API overview

This document lists available APIs provided by Server Load Balancer (SLB).

SLB instances

API	Description
CreateLoadBalancer	Create an SLB instance.
DeleteLoadBalancer	Delete an SLB instance.
SetLoadBalancerStatus	Set the status of an SLB instance.
SetLoadBalancerName	Configure a name for an SLB instance.
ModifyLoadBalancerInstanceSpec	Modify the performance specification for a guaranteed-performance SLB instance.
DescribeLoadBalancers	Query created SLB instances.
DescribeLoadBalancerAttribute	Query the detailed information of an SLB instance.
DescribeRegions	Query available regions.
DescribeZones	Query available active/standby zones in the specified region.

SLB listeners

API	Description
CreateLoadBalancerHTTPListener	Create an HTTP protocol listener.
CreateLoadBalancerHTTPSListener	Create an HTTPS listener.
CreateLoadBalancerTCPListener	Create a TCP listener.
CreateLoadBalancerUDPListener	Create a UDP protocol listener.
DeleteLoadBalancerListener	Delete a listener.

StartLoadBalancerListener	Start a listener.
StopLoadBalancerListener	Stop a listener.
SetListenerAccessControlStatus	Enable or disable the access control function for the specified listener.
AddListenerWhiteListItem	Configure an access whitelist for a listener.
RemoveListenerWhiteListItem	Deletes an IP or IP address range from the access whitelist of the specified listener.
SetLoadBalancerHTTPListenerAttribute	Modify an HTTP protocol listener.
SetLoadBalancerHTTPSListenerAttribute	Modify an HTTPS listener.
SetLoadBalancerTCPListenerAttribute	Modify a TCP listener.
SetLoadBalancerUDPListenerAttribute	Modify a UDP listener.
DescribeLoadBalancerHTTPListenerAttribute	Query the configurations of a specified HTTP listener.
DescribeLoadBalancerHTTPSListenerAttribute	Query the configurations of a specified HTTPS listener.
DescribeLoadBalancerTCPListenerAttribute	Query the configurations of a specified TCP listener.
DescribeLoadBalancerUDPListenerAttribute	Query the configurations of a specified UDP listener.
DescribeListenerAccessControlAttribute	Query the access control of a specified listener.

Certificates

API	Description
UploadServerCertificate	Upload a server certificate.
DeleteServerCertificate	Delete a server certificate.
DescribeServerCertificates	Query the server certificates in a specified region.
SetServerCertificateName	Configure a name for a server certificate.
UploadCACertificate	Upload a CA certificate.
DeleteCACertificate	Delete a CA certificate.
DescribeCACertificates	Query the CA certificates in a specified region.
SetCACertificateName	Configure a name for a CA certificate.

Backend servers

API	Description

AddBackendServers	Add backend servers to an SLB instance.
RemoveBackendServers	Remove one or more ECS instances from the backend server pool.
SetBackendServers	Modify the weight of the backend servers.
DescribeHealthStatus	Query the health status of the backend servers.

Master-slave servers

API	Description
CreateMasterSlaveServerGroup	Create a master-slave server group.
DeleteMasterSlaveServerGroup	Delete a specified master-slave server group.
DescribeMasterSlaveServerGroupAttribute	Query detailed information of the master-slave server group.
DescribeMasterSlaveServerGroups	Query all master-slave server groups under the specified Server Load Balancer instance.

VServer groups

API	Description
CreateVServerGroup	Create a VServer group.
SetVServerGroupAttribute	Modify the name of a VServer group or the weight of a backend server.
AddVServerGroupBackendServers	Add backend servers to the specified VServer group.
RemoveVServerGroupBackendServers	Remove backend servers from the specified VServer group.
ModifyVServerGroupBackendServers	Replace backend servers in a VServer group.
DeleteVServerGroup	Delete a VServer group.
DescribeVServerGroups	Query the list of VServer groups.
DescribeVServerGroupAttribute	Query detailed information of a VServer group.

Forwarding rules

API	Description
CreateRules	Add forwarding rules to the specified listener.

DeleteRules	Delete forwarding rules.
SetRule	Change the target VServer group of a forwarding rule.
DescribeRuleAttribute	Query the detailed configurations of the specified forwarding rule.
DescribeRules	Query the detailed configurations of forwarding rules associated with the specified listener.

Tags

API	Description
AddTags	Add tags to an SLB instance.
DescribeTags	Query tags.
RemoveTags	Unbind tags from an SLB instance.

Call SLB APIs

Request structure

SLB APIs belong to the RPC type. You can call SLB APIs by sending HTTP requests.

The request structure is as follows:

http://endpoint/?Action=xx&Parameters

where:

Endpoint is the entry of the Alibaba Cloud service to call. The generic endpoint of SLB is slb.aliyuncs.com. For more information, see SLB endpoints.

Action is the action to perform. For example, use the DescribeLoadBalancers action to query created SLB instances.

Parameters are request parameters separated by ampersands (&).

Request parameters consist of common parameters and API specific parameters. Common

parameters include VPI version, credentials and so on.

The API version of SLB is 2014-05-15.

The following is an example using the DescribeLoadBalancers API to query the created SLB instances:

http://slb.aliyuncs.com/?Action=DescribeLoadBalancers&AccessKeyId=key-test&Format=JSON&SecureTransport=true&SignatureMethod=HMAC-SHA1&SignatureNonce=15215528852396&SignatureVersion=1.0&SourceIp=1xxxx6&Timestamp=2018-03-02Txxxxxxx&Version=2017-09-12&Signature=xxxx%xxxx%3D

To make it easy to read, the API request is displayed in the following format in the document:

```
https://slb.aliyuncs.com/?Action=DescribeLoadBalancers
&Format=xml
&Version=2014-05-15
&Signature=xxxx%xxxx%3D
&SignatureMethod=HMAC-SHA1
&SignatureNonce=15215528852396
&SignatureVersion=1.0
&AccessKeyId=key-test
&Timestamp=2012-06-01T12:00:00Z
...
```

SLB endpoints

The following table lists the SLB endpoints in each region.

Note: If a region is not listed, use the generic SLB endpoint.

Region	Endpoint
Other regions	slb.aliyuncs.com
China (Zhangjiakou)	slb.cn-zhangjiakou.aliyuncs.com
China (Hohhot)	slb.cn-huhehaote.aliyuncs.com
Japan (Tokyo)	slb.ap-northeast-1.aliyuncs.com
Australia (Sydney)	slb.ap-southeast-2.aliyuncs.com
Malaysia (Kuala Lumpur)	slb.ap-southeast-3.aliyuncs.com
Indonesia (Jakarta)	slb.ap-southeast-5.aliyuncs.com
India (Mumbai)	slb.ap-south-1.aliyuncs.com
UAE (Dubai)	slb.me-east-1.aliyuncs.com
Germany (Frankfurt)	slb.eu-central-1.aliyuncs.com

API authorization

For the security of your account, we recommend that you use a RAM user to call APIs. Before using a RAM user to call an API, you must grant the RAM user the corresponding permission to call the API by creating an authorization policy and attaching the policy to the RAM user.

For more information, see RAM authentication.

API signature

To ensure the security of your API, you must sign the API request. Alibaba Cloud uses the signature in the request to verify the identity of the person who calls the API.

Each time you manually call an API, you must use the AccessKey secret to calculate the HMAC value of the encoded and sorted request string as defined RFC 2104. The calculated HMAC value is the value of the signature parameter in the request.

Note: Alibaba Cloud provides multiple SDKs and third-party SDKs to make the manual signature process more efficient.

Add the signature to the API request in the following format:

https://slb.aliyuncs.com/?Action=XXX&SignatureVersion=1.0&SignatureMethod=HMAC-SHA1&Signature=CT9X0VtwR86fNWSnsc6v8YGOjuE%3D&SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf

Take the DescribeLoadBalancers as an example. If the AccessKey ID is testid, and the AccessKey Secret is testsecret, and the original request URL is as follows:

http://slb.aliyuncs.com/?Timestamp=2016-02-23T12:46:24Z&Format=XML&AccessKeyId=testid&Action=DescribeLoadBalancers&SignatureMethod=HMAC-SHA1&SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf&Version=2014-05-26&SignatureVersion=1.0

Follow these steps to calculate the signature:

1. Use the request parameters to create a canonicalized query string to sign.

   The constructed string to sign is as follows:

   ```
   GET&%2F&AccessKeyId%3Dtestid&Action%3DDescribeLoadBalancers&Format%3DXML&SignatureMethod%3DHMAC-SHA1&SignatureNonce%3D3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf&SignatureVersion%3D1.0&Timestamp%3D2016-02-23T12%253A46%253A24Z&Version%3D2014-05-26
   ```

2. Calculate the HMAC value of the string to sign.

Append an ampersand to the AccessKey secret as the key to calculate the HMAC value. In this example, the key is testsecret&.

The calculated signature in this example is as follows:

CT9X0VtwR86fNWSnsc6v8YGOjuE=

Add the signature to the request URL.

The final request URL is as follows:

http://slb.aliyuncs.com/?Action=DescribeLoadBalancers &SignatureVersion=1.0 SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf &Version=2014-05-15 &AccessKeyId=testid &Signature=CT9X0VtwR86fNWSnsc6v8YGOjuE%3D &SignatureMethod=HMAC-SHA1&Timestamp=2016-02-23T12%3A46%3A24Z &Format=XML&

Common parameters

The following common request parameters must be added each time calling an API, and a request ID will be returned no matter the request is successful or not.

Common request parameters

Parameter	Data Type	Required	Description
Version	String	Yes	The version of the API in the format of YYYY-MM-DD. Valid value: 2014-05-15
AccessKeyId	String	Yes	The AccessKey ID of the user who calls the API.
Signature	String	Yes	The request signature. For more information, see Sign RPC APIs
SignatureMethod	String	Yes	The algorithm used to create the request signature. Valid value: HMAC-SHA1

Timestamp	String	Yes	The time at which the quest is signed in the format of YYYY-MM-DDThh:mm:ssZ. Example: 2014-05-26T12:00:00Z
SignatureVersion	String	Yes	The signature version to use. Valid value: 1.0
SignatureNonce	String	Yes	A random number for the signature to prevent from network attacks. Different random numbers must be used for different requests.
ResourceOwnerAccount	String	No	The account owner of the resource that this request calls.
Format	String	No	The format of the response. Valid values: JSON | XML (default value)

```
http://slb.aliyuncs.com/?Action=DescribeLoadBalancers
&Timestamp=2014-05-19T10%3A33%3A56Z
&Format=xml
&AccessKeyId=testid
&SignatureMethod=Hmac-SHA1
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&SignatureNonce=NwDAxvLU6tFE0DVb
&Version=2014-05-15
&SignatureVersion=1.0
&Signature=FZnIrdNSLax4lnWf6NkKDc7mp54%3D
```

Common response parameters

A RequestId is returned no matter the request is successful or not.

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<!--The root node of the result-->
<Action+Response>
<RequestId>4C467B38-3910-447D-87BC-AC049166F216</RequestId>
```

```
<!--The returned result -->
</Action+Response>
```

JSON format

```
{
"RequestId": "4C467B38-3910-447D-87BC-AC049166F216",
/* The returned response */
}
```

RAM authentication

Before calling SLB APIs using a RAM user, the primary account must grant the RAM user the corresponding permission by creating an authentication policy. In the authentication policy, an Alibaba Cloud Resource Name (ARN) is used as the unique identifier of the resource to authorize.

This document introduces the SLB resources and APIs that can be authorized and the corresponding ARN format.

SLB resources

The following table lists the SLB resources that can be authorized and the ARN format.

Resource	ARN format
LoadBalancer	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
	acs:slb:$regionid:$accountid:loadbalancer/*
	acs:slb:*:$accountid:loadbalancer/*
	acs:slb:*:*:loadbalancer/*
Certificate	acs:slb:$regionid:$accountid:certificate/$servercertificateId
	acs:slb:$regionid:$accountid:certificate/*

SLB APIs

The following table lists the SLB resources that can be authorized and the ARN format.

SLB instance APIs

API	ARN format
CreateLoadBalancer	acs:slb:$regionid:$accountid:loadbalancer/*
ModifyLoadBalancerInternetSpec	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DeleteLoadBalancer	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
SetLoadBalancerStatus	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
SetLoadBalancerName	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DescribeLoadBalancers	acs:slb:$regionid:$accountid:loadbalancer/*
DescribeLoadBalancerAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DescribeRegions	acs:slb:*:$accountid:*
UploadServerCertificate	acs:slb:%s:%s:certificate/*
DeleteServerCertificate	acs:slb:%s:%s:certificate/%
DescribeServerCertificate	acs:slb:%s:%s:certificate/%
SetServerCertificateName	acs:slb:%s:%s:certificate/%
DescribeServerCertificates	acs:slb:%s:%s:certificate/*
CreateLoadBalancerHTTPListener	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
CreateLoadBalancerHTTPSListener	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
	acs:slb:%s:%s:certificate/%
CreateLoadBalancerTCPListener	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
CreateLoadBalancerUDPListener	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DeleteLoadBalancerListener	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
StartLoadBalancerListener	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
StopLoadBalancerListener	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
SetLoadBalancerHTTPListenerAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
SetLoadBalancerHTTPSListenerAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid

	acs:slb:%s:%s:certificate/%
SetLoadBalancerTCPListenerAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
SetLoadBalancerUDPListenerAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DescribeLoadBalancerHTTPListenerAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DescribeLoadBalancerHTTPSListenerAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DescribeLoadBalancerTCPListenerAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DescribeLoadBalancerUDPListenerAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
AddBackendServers	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
	acs:ecs:$regionid:$accountid:instance/$instanceid
RemoveBackendServers	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
	acs:ecs:$regionid:$accountid:instance/$instanceid
SetBackendServers	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
	acs:ecs:$regionid:$accountid:instance/$instanceid
DescribeHealthStatus	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid

VServerGroup APIs

API	ARN format
CreateVServerGroup	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid acs:ecs:$regionid:$accountid:instance/$instanceid
SetVServerGroupAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DeleteVServerGroup	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DescribeVServerGroups	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DescribeVServerGroupAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid

AddVServerGroupBackendServers	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid acs:ecs:$regionid:$accountid:instance/$instanceid
RemoveVServerGroupBackendServers	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid acs:ecs:$regionid:$accountid:instance/$instanceid
ModifyVServerGroupBackendServers	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid acs:ecs:$regionid:$accountid:instance/$instanceid

Master-slave server group APIs

API	ARN format
CreateMasterSlaveServerGroup	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid acs:ecs:$regionid:$accountid:instance/$instanceid
DescribeMasterSlaveServerGroupAttribute	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DescribeMasterSlaveServerGroups	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid
DeleteMasterSlaveServerGroup	acs:slb:$regionid:$accountid:loadbalancer/$loadbalancerid

SLB Instances

CreateLoadBalancer

Description

Create a Server Load Balancer instance.

Request parameter

Name	Type	Required	Description

Action	String	Yes	The action to perform. Valid value: CreateLoadBalancer
RegionId	String	Yes	The ID of the region where the Server Load Balancer instance is located. For example: cn-hangzhou Call the DescribeRegions API to get the list of available regions.
LoadBalancerSpec	String	No	The specification of the Server Load Balancer instance. Valid values: slb.s1.small | slb.s2.small| slb.s2.medium | slb.s3.small | | slb.s3.medium | slb.s3.large The performance varies depending on the instance specification. For more information, see Guaranteed-performance instances. Note: If no value is provided, a shared-performance instance will be created.
MasterZoneId	String	No	The ID of the active zone. By default, the SLB cluster in the active zone is used to distribute traffic. Call the DescribeZone API to get the available zones to use.
SlaveZoneId	String	No	The ID of the standby zone. The standby zone takes over the traffic distribution only when the SLB cluster in the master zone fails. Call the DescribeZone API to get the available zones to use.

LoadBalancerName	String	No	The name of the SLB instance.
AddressType	String	No	The network type of the SLB instance. Valid values: - internet (Default value): An Internet SLB instance can forward traffic only from the Internet. - intranet: An intranet SLB instance can forward traffic only from the intranet.**Note**: If intranet is selected, the **VSwitchId** parameter must be provided.
VSwitchId	String	No	The ID of the VSwitch where the SLB instance is created.
InternetChargeType	String	No	The billing method used for the Internet SLB instance. Valid value: paybytraffic
ClientToken	String	No	The client token to ensure the idempotence of a request. It is a unique, case-sensitive string of up to 64 ASCII characters. For more information, see Ensure idempotence.
ResourceGroupId	String	No	Enterprise resources group ID.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
LoadBalancerId	String	The ID of the SLB instance.
Address	String	The IP address of the SLB instance.
VpcId	String	The ID of a VPC instance.
VSwitchId	String	The ID of a VSwitch in a VPC instance.
MasterZoneId	String	The active zone of the SLB instance.
SlaveZoneId	String	The standby zone of the SLB instance.
LoadBalancerName	String	The name of the SLB instance.
LoadBalancerSpec	String	The specification of the SLB instance. If no value is returned, then the instance is a shared-performance instance.

Example

Request example

```
 https://slb.example.com/?Action=CreateLoadBalancer
&RegionId=cn-east-hangzhou-01
&LoadBalancerName=abc
&AddressType=internet
&InternetChargeType=paybytraffic
&<CommonReuqestParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<CreateLoadBalancerResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<LoadBalancerId>139a00604ad-cn-east-hangzhou-01</LoadBalancerId>
<Address>42.250.6.36</Address>
```

```
<NetworkType>classic<NetworkType>
<MasterZoneId>cn-hangzhou-b<MasterZoneId>
<SlaveZoneId>cn-hangzhou-d<SlaveZoneId>
<LoadBalancerName>abc</LoadBalancerName>
</CreateLoadBalancerResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"LoadBalancerId":"139a00604ad-cn-east-hangzhou-01",
"Address":"42.250.6.36",
"NetworkType":"classic",
"MasterZoneId":"cn-hangzhou-b",
"SlaveZoneId":"cn-hangzhou-d",
"LoadBalancerName":"abc"
}
```

DeleteLoadBalancer

Description

Delete an SLB instance.

The configurations such as listeners or tags will also be deleted after the instance is deleted.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DeleteLoadBalancer
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The unique ID of a Server Load Balancer instance.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DeleteLoadBalancer
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&<Common request parameter>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DeleteLoadBalancerResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</DeleteLoadBalancerResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

SetLoadBalancerStatus

Description

Set the status of an SLB instance.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetLoadBalancerStatus
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.
LoadBalancerStatus	String	Yes	The status of the SLB instance. Valid values: - activeBy default, the SLB instance status is active. You can set the status to active when you want an active SLB instance to restart distributing traffic. - inactiveIf you set the status of an SLB instance to inactive, the listeners in the instance cannot distribute traffic any more. - **Note**: The instance status changes to inactive if all the listeners of

			the instance are deleted.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=SetLoadBalancerStatus
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&LoadBalancerStatus=active
&<common request parameter>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetLoadBalancerStatusResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</SetLoadBalancerStatusResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

SetLoadBalancerName

Description

Configure a name for an SLB instance.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetLoadBalancerName
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.
LoadBalancerName	String	Yes	The name of the SLB instance. The name must start with Chinese or English letters, and be 1-80 characters in length including underscores (_), periods (.), and en dashes (–).

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=SetLoadBalancerName
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&LoadBalancerName=abc
&<common request parameter>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetLoadBalancerStatusResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</SetLoadBalancerStatusResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

DescribeLoadBalancers

Description

Query all LoadBalancer lists.

Parameters such as LoadBalancerId, AddressType, InternetChargeType and ServerId can be used as query criteria. If none of the preceding query criteria is used as a filter, all LoadBalancers owned by the user will be returned.

Request parameter

Name	Type	Required	Description
Action	String	Yes	Name of the operating interface, which is specified in the system. Value: DescribeLoadBalancers.
RegionId	String	Yes	ID of the Region where the Server Load Balancer instance is located.
LoadBalancerId	String	No	The Server Load Balancer instance ID is

			used as a filter, and multivalued query is supported. Value:Multiple parameters can be input and separated by ”,” . Default:None. When parameter is not set, it means that the parameter is not used as the filtration criteria.
LoadBalancerName	String	No	The Server Load Balancer instance Name is used as a filter, and multivalued query is supported. Value:Multiple parameters can be input and separated by ”,” . Default:None. When parameter is not set, it means that the parameter is not used as the filtration criteria.
AddressType	String	No	The Address type is used as a filter. Value: internet / intranet. Default: None. When the parameter is not set, it means that the parameter is not used as the filtration criteria.
NetworkType	String	No	The charging mode of the public network instance is used as filter.
VpcId	String	No	The VPC ID of the Server Load Balancer instance. Value: wrr/wlc Default: wrr.
VswitchId	String	No	Vswitchid of the Server Load Balancer instance.
Address	String	No	Service address of the Server Load Balancer instance.
InternetChargeType	String	No	The charging mode of the public network instance is used as filter. Value: paybybandwidth / paybytrafficDefault: None. When the

			parameter is not set, it means that the parameter is not used as the filtration criteria.
ServerId	String	No	The backend server ID (ECS instance ID) is used as a filter. If the criterion is adopted, only the Server Load Balancer instance attached with this server will be returned. Value: ID of an ECS instance. Default: None. When the parameter is not set, it means that the parameter is not used as the filtration criteria.
MasterZoneId	String	No	The master zone ID of the instance. Use DescribeZone to see master/slave zones in a region. Multi-zone is not supported for FinCloud.
SlaveZoneId	String	No	The slave zone ID of the instance. Use DescribeZone to see master/slave zones in a region. Multi-zone is not supported for FinCloud.
Tags	String	No	The Tag list to be added. Value: a Json string, the structure is a JsonList. In a request, the maximum number of elements in a List is 10. The structure of List element are as follows.

Return parameter

Name	Type	Description
Common Parameter		For more information, see Common parameters.
LoadBalancers	List	The Server Load Balancer instance list is returned in the array format. See the following table.

The Server Load Balancer instance list (LoadBalancers)

Name	Type	Description
LoadBalancerId	String	The unique ID of a Server Load Balancer instance.
LoadBalancerName	String	Alias of an Server Load Balancer instance
LoadBalancerStatus	String	The status of the Server Load Balancer instance, inactive, active or locked. The locked status indicates the instance is subject to arrearage or locked by Alibaba Cloud, so renew it or contact Alibaba Cloud to unlock it.
Address	String	The service address of the SLB instance.
RegionId	String	The ID of the region.
RegionIdAlias	String	The alias of the region, which is the same with the return parameter of DescribeRegions.
AddressType	String	Address type of the SLB instance.
VSwitchId	String	The VSwitch ID of the SLB instance.
VpcId	String	The VPC ID of the SLB instance.
NetworkType	String	The network type of the SLB instance. VPC or classic.
Bandwidth	String	The peak bandwidth to be set when the public network instance is charged by fixed bandwidth.
CreateTime	String	The create time of the SLB instance.
MasterZoneId	String	The master zone ID of the instance.
SlaveZoneId	String	The slave zone ID of the instance.

Example

Request example

```
https://slb.aliyuncs.com/
&Action=DescribeLoadBalancers
&RegionId=cn-east-hangzhou-01
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01, 282b00102ac-cn-east-hangzhou-01&<common request
```

```
parameter>
```

Return example

XML format

```
    <?xml version="1.0" encoding="UTF-8"?>
<DescribeLoadBalancersResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<LoadBalancers>
<LoadBalancer>
<LoadBalancerId>139a00604ad-cn-east-hangzhou-01</LoadBalancerId>
<LoadBalancerName>abc</LoadBalancerName>
<Address>100.98.28.56</Address>
<AddressType>intranet</AddressType>
<RegionId>cn-east-hangzhou-01</RegionId>
<VSwitchId>vsw-255ecrwq4</VSwitchId>
<VpcId>vpc-25dvzy9f9</VpcId>
<NetworkType>vpc</NetworkType>
<LoadBalancerStatus>active</LoadBalancerStatus>
</LoadBalancer>
<LoadBalancer>
<LoadBalancerId>282b00102ac-cn-east-hangzhou-01</LoadBalancerId>
<LoadBalancerName>def</LoadBalancerName>
<Address>100.98.28.55</Address>
<AddressType>intranet</AddressType>
<RegionId>cn-east-hangzhou-01</RegionId>
<VSwitchId>vsw-255ecrwq5</VSwitchId>
<VpcId>vpc-25dvzy9f8</VpcId>
<NetworkType>vpc</NetworkType>
<LoadBalancerStatus>active</LoadBalancerStatus>
</LoadBalancer>
</LoadBalancers>
</DescribeLoadBalancersResponse>
```

JSON format

```
 {
"RequestId": "365F4154-92F6-4AE4-92F8-7FF34B540710",
"LoadBalancers": {
"LoadBalancer": [
{
"LoadBalancerId": "139a00604ad-cn-east-hangzhou-01",
"LoadBalancerName": "abc",
"Address": "100.98.28.56",
"AddressType": "intranet",
"RegionId": "cn-east-hangzhou-01",
"VSwitchId": "vsw-255ecrwq4",
"VpcId": "vpc-25dvzy9f9",
"NetworkType": "vpc",
"LoadBalancerStatus ": "active"
```

```
},
{
"LoadBalancerId": "282b00102ac-cn-east-hangzhou-01",
"LoadBalancerName": "def",
"Address": "100.98.28.55",
"AddressType": "intranet",
"RegionId": "cn-east-hangzhou-01",
"VSwitchId": "vsw-255ecrwq5",
"VpcId": "vpc-25dvzy9f8",
"NetworkType": "vpc",
"LoadBalancerStatus ": "active"
}
]
}
}
```


DescribeLoadBalancerAttribute

Description

Query the detailed information of an SLB instance according to instance ID.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeLoadBalancerAttribute
RegionId	String	Yes	The ID of the region where the Server Load Balancer instance is located. For example: cn-hangzhou Call the DescribeRegions API to get the list of available regions.
MasterZoneId	String	No	The ID of the active zone. By default, the SLB cluster in the active zone is used to

			distribute traffic. Call the DescribeZone API to get the available zones to use.
SlaveZoneId	String	No	The ID of the standby zone. The standby zone takes over the traffic distribution only when the SLB cluster in the master zone fails. Call the DescribeZone API to get the available zones to use.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
LoadBalancerId	String	The ID of SLB instance.
RegionId	String	The ID of the region where the SLB instance is located.
RegionIdAlias	String	The name of the region where the SLB instance is located.
LoadBalancerName	String	The name of the SLB instance.
LoadBalancerStatus	String	The status of the SLB instance. - activeWhen the SLB instance in the active status, the listeners in the instance can distribute traffic. - inactiveWhen the SLB instance in the inactive status, the listeners in the instance cannot distribute traffic any more.
Address	String	The IP address of the SLB instance
AddressType	String	The type of the SLB instance address. Valid values: internet | intranet

NetworkType	String	The network type of the SLB instance. Valid values: classic | vpc
VpcId	String	The ID of the VPC where the SLB instance is created. **Note**: This parameter is returned only when a VPC network SLB instance is created.
VswitchId	String	The ID of the VSwitch where the SLB instance is created. **Note**: This parameter is returned only when a VPC network SLB instance is created.
CreateTime	String	The time at which the SLB instance is created.
ListenerPorts	List	The list of front-end ports configured in the SLB instance. - ListenerPort: The used front-end port.
ListenerPortsAndProtocol	List	The list of the front-end ports and protocols configured in the SLB instance. - ListenerPort: The used front-end port. - ListenerProtocol: The used front-end protocol.
BackendServers	List	The list of the backend servers added to the SLB instance. - ServerId: The ID of the backend server (ECS instance). - Weight: The weight of the backend server.
MasterZoneId	String	The ID of the active zone of the SLB instance.
SlaveZoneId	String	The ID of the standby zone of the SLB instance.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeLoadBalancerAttribute
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&<Common Parameter>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeLoadBalancerAttributeResponse>
<RequestId>3205F12B-DF50-4615-9F5E-7D40D52CD74F</RequestId>
<CreateTimeStamp>1518143733000</CreateTimeStamp>
<RegionIdAlias>cn-hangzhou</RegionIdAlias>
<BackendServers>
<BackendServer>
<ServerId>i-bp17pmfcz39l7qf3hex4</ServerId>
<Weight>100</Weight>
</BackendServer>
</BackendServers>
<ListenerPorts>
<ListenerPort>443</ListenerPort>
<ListenerPort>80</ListenerPort>
</ListenerPorts>
<InternetChargeType>paybytraffic</InternetChargeType>
<VSwitchId></VSwitchId>
<VpcId></VpcId>
<SlaveZoneId>cn-hangzhou-d</SlaveZoneId>
<NetworkType>classic</NetworkType>
<ListenerPortsAndProtocol>
<ListenerPortAndProtocol>
<ListenerProtocol>tcp</ListenerProtocol>
<ListenerPort>443</ListenerPort>
</ListenerPortAndProtocol>
<ListenerPortAndProtocol>
<ListenerProtocol>tcp</ListenerProtocol>
<ListenerPort>80</ListenerPort>
</ListenerPortAndProtocol>
</ListenerPortsAndProtocol>
<PayType>PayOnDemand</PayType>
<Bandwidth>5120</Bandwidth>
<LoadBalancerName>a8b30bdf00d4111e8a60900163e10659</LoadBalancerName>
<ResourceGroupId>rg-acfntierof5q2nq</ResourceGroupId>
<LoadBalancerId>lb-1ud4syvk9wlwd0gav09uy</LoadBalancerId>
<EndTimeStamp>32493801600000</EndTimeStamp>
<MasterZoneId>cn-hangzhou-b</MasterZoneId>
<ListenerPortsAndProtocal>
```

```
<ListenerPortAndProtocal>
<ListenerProtocal>tcp</ListenerProtocal>
<ListenerPort>443</ListenerPort>
</ListenerPortAndProtocal>
<ListenerPortAndProtocal>
<ListenerProtocal>tcp</ListenerProtocal>
<ListenerPort>80</ListenerPort>
</ListenerPortAndProtocal>
</ListenerPortsAndProtocal>
<CreateTime>2018-02-09T02:35:33Z</CreateTime>
<RegionId>cn-hangzhou-dg-a01</RegionId>
<Address>101.37.225.8</Address>
<AddressType>internet</AddressType>
<EndTime>2999-09-08T16:00:00Z</EndTime>
<LoadBalancerStatus>active</LoadBalancerStatus>
</DescribeLoadBalancerAttributeResponse>
```

JSON format

```
 {
"CreateTimeStamp": 1518143733000,
"RegionIdAlias": "cn-hangzhou",
"BackendServers": {
"BackendServer": [
{
"ServerId": "i-bp17pmfcz39l7qf3hex4",
"Weight": 100
}
]
},
"ListenerPorts": {
"ListenerPort": [
443,
80
]
},
"InternetChargeType": "paybytraffic",
"VSwitchId": "",
"VpcId": "",
"SlaveZoneId": "cn-hangzhou-d",
"NetworkType": "classic",
"ListenerPortsAndProtocol": {
"ListenerPortAndProtocol": [
{
"ListenerProtocol": "tcp",
"ListenerPort": 443
},
{
"ListenerProtocol": "tcp",
"ListenerPort": 80
}
]
},
"PayType": "PayOnDemand",
"Bandwidth": 5120,
```

```
"LoadBalancerName": "a8b30bdf00d4111e8a60900163e10659",
"ResourceGroupId": "rg-acfntierof5q2nq",
"LoadBalancerId": "lb-1ud4syvk9wlwd0gav09uy",
"EndTimeStamp": 32493801600000,
"MasterZoneId": "cn-hangzhou-b",
"ListenerPortsAndProtocal": {
"ListenerPortAndProtocal": [
{
"ListenerProtocal": "tcp",
"ListenerPort": 443
},
{
"ListenerProtocal": "tcp",
"ListenerPort": 80
}
]
},
"CreateTime": "2018-02-09T02:35:33Z",
"RequestId": "3205F12B-DF50-4615-9F5E-7D40D52CD74F",
"RegionId": "cn-hangzhou-dg-a01",
"Address": "101.37.225.8",
"AddressType": "internet",
"EndTime": "2999-09-08T16:00:00Z",
"LoadBalancerStatus": "active"
}
```


DescribeRegions

Description

Query available regions.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeRegions

Response parameter

Name	Type	Description

RequestId	string	The ID of the request.
Regions	List	The list of the available regions, including the region ID and region name.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeRegions
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeRegionsResponse>
<RequestId>1651FBB6-4FBF-49FF-A9F5-DF5D696C7EC6</RequestId>
<Regions>
<Region>
<RegionId>cn-east-hangzhou-01</RegionId>
<LocalName>hangzhou</LocalName>
</Region>
<Region>
<RegionId>cn-beijing</RegionId>
<LocalName>beijing</LocalName>
</Region>
</Regions>
</DescribeRegionsResponse>
```

JSON format

```
{
"RequestId": "10F39989-5FB8-41D3-8B4B-176F8344F4F4",
"Regions": {
"Region": [
{
"RegionId": "cn-east-hangzhou-01",
"LocalName": "hangzhou"
},
{
"RegionId": "cn-beijing",
"LocalName": "beijing"
}
]
```

```
}
}
```

DescribeZones

Description

Query available active/standby zones in the specified region.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeZones
RegionId	String	Yes	The ID of the region to query.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
Zones	List	The list of available zones.
Zones objects		
ZoneId	String	The ID of the active zone.
LocalName	String	The name of the active zone.
SlaveZones	List	The list of the standby zones.
SlaveZones objects		
ZoneId	String	The ID of the standby zone.
LocalName	String	The name of the standby zone.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeZones
&RegionId=cn-beijing
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8" ?>
<RequestId>42FBCFB4-D6EF-4A69-A306-46EC5B156AE4</RequestId>
<Zones>
<Zone>
<SlaveZones>
<SlaveZone>
<ZoneId>cn-hangzhou-d</ZoneId>
<LocalName>China North 1 Hangzhou Zone D</LocalName>
</SlaveZone>
</SlaveZones>
<ZoneId>cn-hangzhou-b</ZoneId>
<LocalName>China North 1 Zone B</LocalName>
</Zone>
<Zone>
<SlaveZones>
<SlaveZone>
<ZoneId>cn-hangzhou-e</ZoneId>
<LocalName>China North 1 Zone E</LocalName>
</SlaveZone>
</SlaveZones>
<ZoneId>cn-hangzhou-f</ZoneId>
<LocalName>China North 1 Zone F</LocalName>
</Zone>
</Zones>
```

JSON format

```
{
"RequestId": "42FBCFB4-D6EF-4A69-A306-46EC5B156AE4",
"Zones": {
"Zone": [
{
"SlaveZones": {
"SlaveZone": [
{
```

```
"ZoneId": "cn-hangzhou-d",
"LocalName": "China North 1 Zone D"
}
]
},
"ZoneId": "cn-hangzhou-b",
"LocalName": "China North 1 Zone B"
},
{
"SlaveZones": {
"SlaveZone": [
{
"ZoneId": "cn-hangzhou-e",
"LocalName": "China North 1 Zone E"
}
]
},
"ZoneId": "cn-hangzhou-f",
"LocalName": "China North 1 Zone F"
}
]
}
}
```


ModifyLoadBalancerInstanceSpec

Description

Modify the performance specification for a guaranteed-performance SLB instance.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: ModifyLoadBalancerInstanceSpec
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.

LoadBalancerSpec	String	Yes	The specification for the SLB instance. Valid values: - slb.s1.small - slb.s2.small - slb.s2.medium - slb.s3.small - slb.s3.medium - slb.s3.large The available specification varies by regions. For more information, see Guaranteed-performance instances. **Note**: When you change a shared-performance instance to a guaranteed-performance instance, a brief disconnection of service may occur for 10 to 30 seconds. We recommend that you perform this operation when the service is not busy or after the service migrates to another SLB instance.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action= ModifyLoadBalancerInstanceSpec
&RegionId=us-east-01
&LoadBalancerId=139a00604ad-us-east-01
&LoadBalancerSpec=slb.s2.small
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<ModifyLoadBalancerInstanceSpecResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
</ModifyLoadBalancerInstanceSpecResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
}
```

Listener

CreateLoadBalancerHTTPListener

Description

Create an HTTP protocol listener.

Note: After the listener is created, the listener status is stopped. Call the StartLoadBalancerListener API to start the listener to distribute traffic.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: CreateLoadBalancerHTTPListener

RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	Integer	Yes	The ID of the SLB instance for which the HTTP listener is created.
Bandwidth	Integer	Yes	The peak bandwidth of the listener. Valid value: [1,1000] Mbps **Note**: Set it to -1 if the Internet SLB instance is charged by traffic.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
BackendServerPort	Integer	No	The port opened on the backend server to receive requests. Valid value: [1, 65535] **Note**: If the **VServerGroupId** parameter is not specified, this parameter is required.
VServerGroupId	String	No	The ID of the VServer group to add to the listener.
Scheduler	String	No	The algorithm used to distribute traffic. Valid values: - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher

			weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
XForwardedFor	String	No	Whether to use the XForwardedFor header to obtain the actual IP address of the client. Valid value: on (Default) | off
XForwardedFor_SLBIP	String	No	Whether to use the XForwardedFor_SLBIP header to obtain the public IP address of the SLB instance. Valid value: on | off(Default)
XForwardedFor_SLBID	String	No	Whether to use the XForwardedFor header to obtain the ID of the SLB instance. Valid value: on | off(Default)
XForwardedFor_proto	String	No	Whether to use the XForwardedFor_proto

			header to obtain the protocol used by the listener. Valid value: on | off(Default)
StickySession	String	Yes	Whether to enable session persistence. If enabled, all session requests from the same client are sent to the same backend server. Valid value: on | off
StickySessionType	String	No	The method used to handle the cookie. Valid values: - insertServer Load Balancer adds a session cookie to the first response from the backend server and identifies the server which has sent the response. The next request will contain the cookie and the listener will distribute the request to the same backend server. - serverYou can set the cookie name in the response. Server Load Balancer will overwrite the original cookie

			when it discovers that a new cookie is set. The next time the client carries the new cookie to access the Server Load Balancer, the listener will distribute the request to the previously recorded backend server. **Note**: This parameter is required when the value of the **StickySession** parameter is on.
CookieTimeout	Integer	No	The cookie timeout in seconds. Valid value: [1,86400] **Note**: This parameter is required when the value of the **StickySessionType** parameter is insert.
Cookie	String	No	The cookie configured on the backend server. **Note**: This parameter is required when the value of the **StickySessionType** parameter is server.
Gzip	String	No	Whether to enable the Gzip compression. Valid value: on (Default) | off
AclStatus	String	No	Specify whether to enable the access control function.

			Valid value: on | off (Default)
AclType	String	No	Select an access control method after enabling the access control function: - **whitelist**: Only requests from IP addresses or CIDR blocks in the selected access control lists are forwarded. It applies to scenarios where the application only allows access from some specific IP addresses.Enabling whitelist poses some business risks. If you enable the whitelist without adding any IP entry in the corresponding access control list, no requests are forwarded. - **blacklist**: Requests from IP addresses or CIDR blocks in the selected access control lists are not

			forwarded. It applies to scenarios where the application only denies access from some specific IP addresses.If you enable a blacklist without adding any IP entry in the corresponding access control list, all requests are forwarded. This parameter is required if the value of the **AclStatus** parameter is on.
AclId	String	No	Select an access control list as the whitelist or the blacklist. For more information, see Configure an access control list. This parameter is required if the value of the **AclStatus** parameter is on.
IdleTimeout	String	No	Specify the idle connection timeout in seconds. Valid value: 1-60 If no request is received during the specified timeout period, Server Load Balancer will temporarily terminate the connection and restart the connection when the next request comes.

RequestTimeout	String	No	Specify the request timeout in seconds. Valid value: 1-180 If no response is received from the backend server during the specified timeout period, Server Load Balancer will stop waiting and send an HTTP 504 error to the client.
HealthCheck	String	Yes	Whether to enable health check. Valid value: on | off
HealthCheckDomain	String	No	The domain name used for health check. By default, Server Load Balancer sends an HTTP head request to the default homepage configured on the application server through the intranet IP address of the backend ECS instance to do the health check. If your backend server verifies the host field in the request, you must configure a domain name to make sure the health check works. You can specify the IP address of host to do the health check in the form of $_ip.
HealthCheckURI	String	No	The URI used for health check.
HealthyThreshold	Integer	No	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success). Valid value: [2,10]

UnhealthyThreshold	Integer	No	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). When HealthCheck is on, the parameter is required; and when HealthCheck is off, the parameter will be ignored. Valid value: [2,10]
HealthCheckConnectPort	Integer	No	The port used for health check. Valid value: [1, 65535]
HealthCheckTimeout	Integer	No	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails. Valid value: [1,300] **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.
HealthCheckInterval	Integer	No	The time interval between two consecutive health checks. Valid value: [1,50]
HealthCheckHttpCode	String	No	The HTTP status code indicating that the health check is normal. Separate multiple HTTP status codes by commas (,). Valid values: http_2xx

			(Default) | http_3xx | http_4xx | http_5xx

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=CreateLoadBalancerHTTPListener
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&BackendServerPort=80
&Bandwidth=-1
&HealthCheck=on
&HealthCheckDomain=$_ip
&HealthCheckURI=/test/index.html
&HealthCheckConnectPort=8080
&HealthyThreshold=4
&UnhealthyThreshold=4
&HealthCheckTimeout=3
&HealthCheckInterval=5
&VServerGroupId=rsp-cige6j5e7p
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<CreateLoadBalancerHTTPListenerResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</CreateLoadBalancerHTTPListenerResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

CreateLoadBalancerHTTPSListener

Description

Create an HTTPS listener.

Note: After the listener is created, the listener status is stopped. Call the StartLoadBalancerListener API to start the listener to distribute traffic.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: CreateLoadBalancerHTTPSListener
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	Integer	Yes	The ID of the SLB instance for which the HTTPS listener is created.
Bandwidth	Integer	Yes	The peak bandwidth of the listener. Valid value: [1,1000] Mbps **Note**: Set it to -1 if the Internet SLB instance is charged by traffic.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
BackendServerPort	Integer	No	The port opened on the backend server to

			receive requests. Valid value: [1, 65535] **Note**: If the **VServerGroupId** parameter is not specified, this parameter is required.
VServerGroupId	String	No	The ID of the VServer group to add to the listener.
Scheduler	String	No	The algorithm used to distribute traffic. Valid values: - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to

			the backend servers.
StickySession	String	Yes	Whether to enable session persistence. If enabled, all session requests from the same client are sent to the same backend server. Valid value: on | off
StickySessionType	String	No	The method used to handle the cookie. Valid values: - insertServer Load Balancer adds a session cookie to the first response from the backend server and identifies the server which has sent the response. The next request will contain the cookie and the listener will distribute the request to the same backend server. - serverYou can set the cookie name in the response. Server Load Balancer will overwrite the original cookie when it discovers that a

			new cookie is set. The next time the client carries the new cookie to access the Server Load Balancer, the listener will distribute the request to the previously recorded backend server. **Note**: This parameter is required when the value of the **StickySession** parameter is on.
CookieTimeout	Integer	No	The cookie timeout in seconds. Valid value: [1,86400] **Note**: This parameter is required when the value of the **StickySessionType** parameter is insert.
Cookie	String	No	The cookie configured on the backend server. **Note**: This parameter is required when the value of the **StickySessionType** parameter is server.
ServerCertificateId	String	Yes	The ID of the server certificate.
CACertificateId	String	No	The ID of the CA certificate. **Note**: This parameter is required only when two-way authentication is used.
Gzip	String	No	Whether to enable the Gzip compression.

			Valid value: on (Default) | off
XForwardedFor	String	No	Whether to use the XForwardedFor header to obtain the actual IP address of the client. Valid value: on (Default) | off
XForwardedFor_SLBIP	String	No	Whether to use the XForwardedFor_SLBIP header to obtain the public IP address of the SLB instance. Valid value: on | off(Default)
XForwardedFor_SLBID	String	No	Whether to use the XForwardedFor header to obtain the ID of the SLB instance. Valid value: on | off(Default)
AclStatus	String	No	Specify whether to enable the access control function. Valid value: on | off (Default)
AclType	String	No	Select an access control method after enabling the access control function: - **whitelist**: Only requests from IP addresses or CIDR blocks in the selected access control lists are forwarded. It applies to scenarios where the application only allows

			access from some specific IP addresses.Enabling whitelist poses some business risks. If you enable the whitelist without adding any IP entry in the corresponding access control list, no requests are forwarded. - **blacklist**: Requests from IP addresses or CIDR blocks in the selected access control lists are not forwarded. It applies to scenarios where the application only denies access from some specific IP addresses.If you enable a blacklist without adding any IP entry in the corresponding access control list, all requests are forwarded.

			This parameter is required if the value of the **AclStatus** parameter is on.
AclId	String	No	Select an access control list as the whitelist or the blacklist. For more information, see Configure an access control list. This parameter is required if the value of the **AclStatus** parameter is on.
IdleTimeout	String	No	Specify the idle connection timeout in seconds. Valid value: 1-60 If no request is received during the specified timeout period, Server Load Balancer will temporarily terminate the connection and restart the connection when the next request comes.
RequestTimeout	String	No	Specify the request timeout in seconds. Valid value: 1-180 If no response is received from the backend server during the specified timeout period, Server Load Balancer will stop waiting and send an HTTP 504 error to the client.
HealthCheck	String	Yes	Whether to enable health check. Valid value: on | off
HealthCheckDomain	String	No	The domain name used for health check. By default, Server Load Balancer sends an HTTPS head request to the default homepage

			configured on the application server through the intranet IP address of the backend ECS instance to do the health check. If your backend server verifies the host field in the request, you must configure a domain name to make sure the health check works. You can specify the IP address of host to do the health check in the form of $_ip.
HealthCheckURI	String	No	The URI used for health check.
HealthyThreshold	Integer	No	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success). Valid value: [2,10]
UnhealthyThreshold	Integer	No	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). When HealthCheck is on, the parameter is required; and when HealthCheck is off, the parameter will be ignored. Valid value: [2,10]
HealthCheckConnectPort	Integer	No	The port used for health check. Valid value: [1, 65535]
HealthCheckTimeout	Integer	No	The amount of time in seconds to wait for the response from a health check. If an ECS

			instance sends no response within the specified timeout period, the health check fails. Valid value: [1,300] **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.
HealthCheckInterval	Integer	No	The time interval between two consecutive health checks. Valid value: [1,50]
HealthCheckHttpCode	String	No	The HTTPS status code indicating that the health check is normal. Separate multiple HTTPS status codes by commas (,). Valid values: http_2xx (Default) | http_3xx | http_4xx | http_5xx

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=CreateLoadBalancerHTTPSListener
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&BackendServerPort=80
&Bandwidth=-1
```

```
&HealthCheck=on
&HealthCheckDomain=$_ip
&HealthCheckURI=/test/index.html
&HealthCheckConnectPort=8080
&HealthyThreshold=4
&UnhealthyThreshold=4
&HealthCheckTimeout=3
&HealthCheckInterval=5
&VServerGroupId=rsp-cige6j5e7p
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<CreateLoadBalancerHTTPSListenerResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</CreateLoadBalancerHTTPSListenerResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

CreateLoadBalancerTCPListener

Description

Create a TCP listener.

Note: After the listener is created, the listener status is stopped. Call the StartLoadBalancerListener API to start the listener to distribute traffic.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform.

			Valid value: CreateLoadBalancerTCPListener
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
BackendServerPort	Integer	No	The port opened on the backend server to receive requests. Valid value: [1, 65535] **Note**: If the **VServerGroupId** parameter is not specified, this parameter is required.
Bandwidth	Integer	Yes	The peak bandwidth of the listener. Valid value: [1,1000] Mbps **Note**: Set it to -1 if the Internet SLB instance is charged by traffic.
Scheduler	String	No	The algorithm used to distribute traffic. Valid value: - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server

			with a higher weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
VServerGroupId	String	No	The ID of a VServer group. The **VServerGroupId** parameter and the MasterSlaveServerGroupId parameter cannot be used at the same time.
MasterSlaveServerGroupId	String	No	The ID of a master-slave server group. The **VServerGroupId** parameter and the MasterSlaveServerGroupId parameter cannot be used at the same time.
EstablishedTimeout	Integer	No	The connection timeout in seconds for the Layer-4 TCP listener. Valid value: [10, 900]. The default value is 900.

PersistenceTimeout	Integer	No	The timeout value of the TCP connection in seconds. Valid value: [10,900] **Note**: By default, this value is set to zero, the session persistence function is disabled.
AclStatus	String	No	Specify whether to enable the access control function. Valid value: on | off (Default)
AclType	String	No	Select an access control method after enabling the access control function: - **whitelist**: Only requests from IP addresses or CIDR blocks in the selected access control lists are forwarded. It applies to scenarios where the application only allows access from some specific IP addresses.Enabling whitelist poses some business risks. If you enable the whitelist without adding any IP entry in the corresponding access control

			list, no requests are forwarded. - **blacklist**: Requests from IP addresses or CIDR blocks in the selected access control lists are not forwarded. It applies to scenarios where the application only denies access from some specific IP addresses.If you enable a blacklist without adding any IP entry in the corresponding access control list, all requests are forwarded. This parameter is required if the value of the **AclStatus** parameter is on.
AclId	String	No	Select an access control list as the whitelist or the blacklist. For more information, see Configure an access control list. This parameter is required if the value of the **AclStatus** parameter is on.
HealthCheckType	String	No	Select a health check

			method. Valid value: tcp (Default) | http
HealthCheckDomain	String	No	The domain name used for health check. By default, Server Load Balancer sends an HTTP head request to the default homepage configured on the application server through the intranet IP address of the backend ECS instance to do the health check. If your backend server verifies the host field in the request, you must configure a domain name to make sure the health check works. You can specify the IP address of host to do the health check in the form of $_ip. **Note**: This parameter is used only when the HTTP health check method is used.
HealthCheckURI	String	No	The URI used for health check. **Note**: This parameter is used only when the HTTP health check method is used.
HealthCheckConnectPort	Integer	No	The port used for health check. Valid value: [1, 65535]
HealthyThreshold	Integer	No	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success). Valid value: [2,10]

UnhealthyThreshold	Integer	No	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). Valid value: [2,10]
HealthCheckTimeout	Integer	No	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails. Valid value: [1,300] **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.
HealthCheckInterval	Integer	No	The time interval between two consecutive health checks. Valid value: [1,50]
HealthCheckHttpCode	String	No	The HTTP status code indicating that the health check is normal. Separate multiple HTTP status codes by commas (,). Valid values: http_2xx (Default) | http_3xx | http_4xx | http_5xx Default: http_2xx. **Note**: This parameter is used only when the HTTP health check method is used.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=CreateLoadBalancerTCPListener
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&BackendServerPort=80
&Bandwidth=-1
&VServerGroupId=rsp-cige6j5e7p
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<CreateLoadBalancerTCPListenerResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</CreateLoadBalancerTCPListenerResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

CreateLoadBalancerUDPListener

Description

Create a UDP protocol listener.

Note the following before using the API to create a UDP listener:

The health check function is enabled by default for UDP Listeners and cannot be disabled.

For Layer-4 Server Load Balancer, you can directly get the real IP of the client. However, the client's real IP cannot be obtained if the network type of the SLB instance is classic.

- After the listener is created, the listener status is stopped. Call the StartLoadBalancerListener API to start the listener to distribute traffic.

Request Parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: CreateLoadBalancerUDPListener
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
BackendServerPort	Integer	No	The port opened on the backend server to receive requests. Valid value: [1, 65535] **Note**: If the **VServerGroupId** parameter is not specified, this parameter is required.
Bandwidth	Integer	No	The peak bandwidth of the listener. Valid value: [1,1000] Mbps

			Note: Set it to -1 if the Internet SLB instance is charged by traffic.
Scheduler	String	No	The algorithm used to distribute traffic. Valid value: - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
VServerGroupId	String	No	The ID of a VServer group. The **VServerGroupId** parameter and the

			MasterSlaveServerGroupId parameter cannot be used at the same time.
MasterSlaveServerGroupId	String	No	The ID of a master-slave server group. The **VServerGroupId** parameter and the MasterSlaveServerGroupId parameter cannot be used at the same time.
AclStatus	String	No	Specify whether to enable the access control function. Valid value: on | off (Default)
AclType	String	No	Select an access control method after enabling the access control function: - **whitelist**: Only requests from IP addresses or CIDR blocks in the selected access control lists are forwarded. It applies to scenarios where the application only allows access from some specific IP addresses.Enabling whitelist poses some business risks. If you enable the whitelist without adding

			any IP entry in the corresponding access control list, no requests are forwarded. - **blacklist**: Requests from IP addresses or CIDR blocks in the selected access control lists are not forwarded. It applies to scenarios where the application only denies access from some specific IP addresses.If you enable a blacklist without adding any IP entry in the corresponding access control list, all requests are forwarded. This parameter is required if the value of the **AclStatus** parameter is on.
AclId	String	No	Select an access control list as the whitelist or the blacklist. For more information, see **Configure an access control list**. This parameter is

			required if the value of the **AclStatus** parameter is on.
HealthCheckConnectPort	Integer	No	The port used for health check. Valid value: [1, 65535]
HealthyThreshold	Integer	No	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success). Valid value: [2,10]
UnhealthyThreshold	Integer	No	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). Valid value: [2,10]
HealthCheckConnectTimeout	Integer	No	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails. Valid value: [1,300] **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.
HealthCheckInterval	Integer	No	The time interval between two consecutive health checks. Valid value: [1,50]

HealthCheckReq	String	No	Request string for UDP listener health check. Only English letters, digits are allowed. Up to 500 characters can be entered.
HealthCheckExp	String	No	Response string for UDP listener check. Only English letters, digits are allowed. Up to 500 characters can be entered.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=CreateLoadBalancerUDPListener
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=53
&BackendServerPort=53
&Bandwidth=-1
&VServerGroupId=rsp-cige6j5e7p
&<public request parameters>
```

Response Example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<CreateLoadBalancerUDPListenerResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</CreateLoadBalancerUDPListenerResponse>
```

JSON format

```
{
```

```
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

DeleteLoadBalancerListener

Description

Delete a listener.

Only the listener in the stopped or running status can be deleted.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DeleteLoadBalancerListener
LoadBalancerId	String	Yes	The ID of the SLB instance that the listener belongs to.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DeleteLoadBalancerListener
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DeleteLoadBalancerListenerResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</DeleteLoadBalancerListenerResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

StartLoadBalancerListener

Description

Start a listener. Note the following when calling the API:

The API can be called only when the instance status is stopped.

If the SLB instance status that the listener to start belongs to is locked, the API cannot be called.

Request parameter

Name	Type	Required	Description

Action	String	Yes	The action to perform. Valid value: StartLoadBalancerListener
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action= StartLoadBalancerListener
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&<CommonParameters>
```

Return example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetLoadBanancerListenerStatusResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</SetLoadBanancerListenerStatusResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

StopLoadBalancerListener

StopLoadBalancerListener

Description

Stop the specified Listener.

- After the interface is successfully called, the Listener will change to the stopping status.
- The interface can only be called when the Listener is in the running status.
- When the status of the LoadBalancer to which the Listener belongs is “locked”, it will fail to call the interface.
- See state transition diagram of the Server Load Balancer Listener for the state transition diagram of Listener.

Request parameter

Name	Type	Required	Description
Action	String	Yes	Name of the operating interface, which is specified in the system. Value: StopLoadBalancerListener.
RegionId	String	Yes	The ID of the region.
LoadBalancerId	String	Yes	The unique ID of a Server Load Balancer instance.
ListenerPort	Integer	Yes	Port used by the Server Load Balancer instance frontend. Value: 1-65535.

Return parameter

They are all common return parameters. For more information, see Public Parameters.

Example

Request example

```
    https://slb.aliyuncs.com/
&Action=StopLoadBalancerListener
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&<common request parameter>
```

Return example

- XML format

```
     <?xml version="1.0" encoding="UTF-8"?>
<SetLoadBanancerListenerStatusResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</SetLoadBanancerListenerStatusResponse>
```

- JSON format

```
     {"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

SetListenerAccessControlStatus

Description

Enable or disable the access control function for the specified listener.

Request parameter

Name	Type	Required	Description

Action	String	Yes	The action to perform. Valid value: SetListenerAccessControlStatus
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
AccessControlStatus	String	Yes	Whether to enable access control. Valid value: - open_whitelistEnable access control. If this value is entered, you must configure a whitelist of IP addresses to allow to access the listener using the AddListenerWhiteListItem API. Otherwise, no access is allowed. - closeDisable access control.

Response parameter

Name	Type	Description

RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=SetListenerAccessControlStatus
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&AccessControlStatus=open_whitelist
&<Public Request Parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetListenerAccessControlStatusResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</SetListenerAccessControlStatusResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

AddListenerWhiteListItem

Description

Configure an access whitelist for a listener.

This API supports incremental updates.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: AddListenerWhiteListItem
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
SourceItems	String	Yes	The access whitelist of the IP addresses or an IP address range to allow to access the listener. Separate multiple IP addresses or IP address ranges using commas (,). **Note**: The IP address 0.0.0.0 or the IP address range 0.0.0.0/0 are not allowed. If you do not want to control the access for the listener. Call the **SetListenerAccessControlStatus** API and set the value of the **AccessControlStatus** parameter to close.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=AddListenerWhiteListItem
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&SourceItems=1.1.1.1,1.1.1.0/21
&<Public Request Parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<AddListenerWhiteListItemResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</AddListenerWhiteListItemResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

RemoveListenerWhiteListItem

Description

Delete an IP or IP address range from the access whitelist of the specified listener.

This API supports incremental updates.

Request parameter

Name	Type	Required	Description

Action	String	Yes	The action to perform. Valid value: RemoveListenerWhiteListItem
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
SourceItems	String	Yes	The access whitelist of the IP addresses or an IP address range to allow to access the listener. Separate multiple IP addresses or IP address ranges using commas (,). **Note**: The IP address 0.0.0.0 or the IP address range 0.0.0.0/0 are not allowed. If you do not want to control the access for the listener. Call the **SetListenerAccessControlStatus** API and set the value of the **AccessControlStatus** parameter to close.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=RemoveListenerWhiteListItem
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&SourceItems=1.1.1.1,1.1.1.0/21
&<Public Request Parameters>
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<RemoveListenerWhiteListItemResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</RemoveListenerWhiteListItemResponse>
```

- JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

SetLoadBalancerHTTPListenerAttribute

Description

Modify an HTTP protocol listener.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetLoadBalancerHTTPListenerAttribute

RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	Integer	Yes	The ID of the SLB instance for which the HTTP listener is created.
Bandwidth	Integer	Yes	The peak bandwidth of the listener. Valid value: [1,1000] Mbps **Note**: Set it to -1 if the Internet SLB instance is charged by traffic.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
BackendServerPort	Integer	No	The port opened on the backend server to receive requests. Valid value: [1, 65535] **Note**: If the **VServerGroupId** parameter is not specified, this parameter is required.
VServerGroupId	String	No	The ID of the VServer group to add to the listener.
XForwardedFor	String	No	Whether to use the XForwardedFor header to obtain the actual IP address of the client. Valid value: on (Default) | off
XForwardedFor_SLBIP	String	No	Whether to use the XForwardedFor_SLBIP header to obtain the public IP address of the SLB instance. Valid value: on | off(Default)
XForwardedFor_SLB	String	No	Whether to use the

ID			XForwardedFor header to obtain the ID of the SLB instance. Valid value: on | off(Default)
XForwardedFor_proto	String	No	Whether to use the XForwardedFor_proto header to obtain the protocol used by the listener. Valid value: on | off(Default)
Scheduler	String	No	The algorithm used to distribute traffic. Valid values: - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and

			sequentially distributed to the backend servers.
StickySession	String	Yes	Whether to enable session persistence. If enabled, all session requests from the same client are sent to the same backend server. Valid value: on | off
StickySessionType	String	No	The method used to handle the cookie. Valid values: - insertServer Load Balancer adds a session cookie to the first response from the backend server and identifies the server which has sent the response. The next request will contain the cookie and the listener will distribute the request to the same backend server. - serverYou can set the cookie name in the response. Server Load Balancer will overwrite the original cookie

			when it discovers that a new cookie is set. The next time the client carries the new cookie to access the Server Load Balancer, the listener will distribute the request to the previously recorded backend server. **Note**: This parameter is required when the value of the **StickySession** parameter is on.
CookieTimeout	Integer	No	The cookie timeout in seconds. Valid value: [1,86400] **Note**: This parameter is required when the value of the **StickySessionType** parameter is insert.
Cookie	String	No	The cookie configured on the backend server. **Note**: This parameter is required when the value of the **StickySessionType** parameter is server.
Gzip	String	No	Whether to enable the Gzip compression. Valid value: on (Default) | off
HealthCheck	String	Yes	Whether to enable health check. Valid value: on | off

HealthCheckDomain	String	No	The domain name used for health check. By default, Server Load Balancer sends an HTTP head request to the default homepage configured on the application server through the intranet IP address of the backend ECS instance to do the health check. If your backend server verifies the host field in the request, you must configure a domain name to make sure the health check works. You can specify the IP address of host to do the health check in the form of $_ip.
HealthCheckURI	String	No	The URI used for health check.
HealthyThreshold	Integer	No	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success). Valid value: [2,10]
UnhealthyThreshold	Integer	No	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). When HealthCheck is on, the parameter is required; and when HealthCheck is off, the parameter will be ignored. Valid value: [2,10]
HealthCheckConnectPort	Integer	No	The port used for health check.

			Valid value: [1, 65535]
HealthCheckTimeout	Integer	No	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails. Valid value: [1,300] **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.
HealthCheckInterval	Integer	No	The time interval between two consecutive health checks. Valid value: [1,50]
HealthCheckHttpCode	String	No	The HTTP status code indicating that the health check is normal. Separate multiple HTTP status codes by commas (,). Valid values: http_2xx (Default) | http_3xx | http_4xx | http_5xx

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=SetLoadBalancerHTTPListenerAttribute
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=-520
&Bandwidth=-1
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetLoadBalancerHTTPListenerAttributeResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</SetLoadBalancerHTTPListenerAttributeResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

SetLoadBalancerHTTPSListenerAttribute

Description

Modify an HTTPS listener.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetLoadBalancerHTTPSListenerAttribute
RegionId	String	Yes	The ID of the region where the SLB instance is located.

LoadBalancerId	Integer	Yes	The ID of the SLB instance for which the HTTPS listener is created.
Bandwidth	Integer	Yes	The peak bandwidth of the listener. Valid value: [1,1000] Mbps **Note**: Set it to -1 if the Internet SLB instance is charged by traffic.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
BackendServerPort	Integer	No	The port opened on the backend server to receive requests. Valid value: [1, 65535] **Note**: If the **VServerGroupId** parameter is not specified, this parameter is required.
VServerGroupId	String	No	The ID of the VServer group to add to the listener.
Scheduler	String	No	The algorithm used to distribute traffic. Valid values: - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger

			percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
StickySession	String	Yes	Whether to enable session persistence. If enabled, all session requests from the same client are sent to the same backend server. Valid value: on | off
StickySessionType	String	No	The method used to handle the cookie. Valid values: - insertServer Load Balancer adds a session cookie to the first response from the backend server and identifies the server which has sent the response. The next request will

			contain the cookie and the listener will distribute the request to the same backend server. - serverYou can set the cookie name in the response. Server Load Balancer will overwrite the original cookie when it discovers that a new cookie is set. The next time the client carries the new cookie to access the Server Load Balancer, the listener will distribute the request to the previously recorded backend server. **Note**: This parameter is required when the value of the **StickySession** parameter is on.
CookieTimeout	Integer	No	The cookie timeout in seconds. Valid value: [1,86400] **Note**: This parameter is required when the value of the **StickySessionType** parameter is insert.

Cookie	String	No	The cookie configured on the backend server. **Note**: This parameter is required when the value of the **StickySessionType** parameter is server.
ServerCertificateId	String	Yes	The ID of the server certificate.
CACertificateId	String	No	The ID of the CA certificate. **Note**: This parameter is required only when two-way authentication is used.
Gzip	String	No	Whether to enable the Gzip compression. Valid value: on (Default) | off
XForwardedFor	String	No	Whether to use the XForwardedFor header to obtain the actual IP address of the client. Valid value: on (Default) | off
XForwardedFor_SLBIP	String	No	Whether to use the XForwardedFor_SLBIP header to obtain the public IP address of the SLB instance. Valid value: on | off(Default)
XForwardedFor_SLBID	String	No	Whether to use the XForwardedFor header to obtain the ID of the SLB instance. Valid value: on | off(Default)
HealthCheck	String	Yes	Whether to enable health check. Valid value: on | off
HealthCheckDomain	String	No	The domain name used for health check.

			By default, Server Load Balancer sends an HTTPS head request to the default homepage configured on the application server through the intranet IP address of the backend ECS instance to do the health check. If your backend server verifies the host field in the request, you must configure a domain name to make sure the health check works. You can specify the IP address of host to do the health check in the form of $_ip.
HealthCheckURI	String	No	The URI used for health check.
HealthyThreshold	Integer	No	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success). Valid value: [2,10]
UnhealthyThreshold	Integer	No	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). When HealthCheck is on, the parameter is required; and when HealthCheck is off, the parameter will be ignored. Valid value: [2,10]
HealthCheckConnectPort	Integer	No	The port used for health check. Valid value: [1, 65535]

HealthCheckTimeout	Integer	No	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails. Valid value: [1,300] **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.
HealthCheckInterval	Integer	No	The time interval between two consecutive health checks. Valid value: [1,50]
HealthCheckHttpCode	String	No	The HTTPS status code indicating that the health check is normal. Separate multiple HTTPS status codes by commas (,). Valid values: http_2xx (Default) | http_3xx | http_4xx | http_5xx

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=SetLoadBalancerHTTPSListenerAttribute
```

```
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=-520
&Bandwidth=-1
&ServerCertificateId=idkp-123-cn-test-01
&<Public Request Parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetLoadBalancerHTTPSListenerAttributeResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</SetLoadBalancerHTTPSListenerAttributeResponse>
```

- JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

SetLoadBalancerTCPListenerAttribute

Description

Modify a TCP listener.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetLoadBalancerTCPListenerAttribute
RegionId	String	Yes	The ID of the region where the SLB instance is located.

LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
BackendServerPort	Integer	No	The port opened on the backend server to receive requests. Valid value: [1, 65535] **Note**: If the **VServerGroupId** parameter is not specified, this parameter is required.
Bandwidth	Integer	Yes	The peak bandwidth of the listener. Valid value: [1,1000] Mbps **Note**: Set it to -1 if the Internet SLB instance is charged by traffic.
Scheduler	String	No	The algorithm used to distribute traffic. Valid value: - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger percentage of live connections at

			any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
VServerGroupId	String	No	The ID of a VServer group. The **VServerGroupId** parameter and the MasterSlaveServerGroupId parameter cannot be used at the same time.
MasterSlaveServerGroupId	String	No	The ID of a master-slave server group. The **VServerGroupId** parameter and the MasterSlaveServerGroupId parameter cannot be used at the same time.
EstablishedTimeout	Integer	No	The connection timeout in seconds for the Layer-4 TCP listener. Valid value: [10, 900]. The default value is 900.
PersistenceTimeout	Integer	No	The timeout value of the TCP connection in seconds. Valid value: [10,900] **Note**: By default, this value is set to zero, the session persistence

			function is disabled.
HealthCheckType	String	No	Select a health check method. Valid value: tcp (Default) | http
HealthCheckDomain	String	No	The domain name used for health check. By default, Server Load Balancer sends an HTTP head request to the default homepage configured on the application server through the intranet IP address of the backend ECS instance to do the health check. If your backend server verifies the host field in the request, you must configure a domain name to make sure the health check works. You can specify the IP address of host to do the health check in the form of $_ip. **Note**: This parameter is used only when the HTTP health check method is used.
HealthCheckURI	String	No	The URI used for health check. **Note**: This parameter is used only when the HTTP health check method is used.
HealthCheckConnectPort	Integer	No	The port used for health check. Valid value: [1, 65535]
HealthyThreshold	Integer	No	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success).

			Valid value: [2,10]
UnhealthyThreshold	Integer	No	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). When HealthCheck is on, the parameter is required; and when HealthCheck is off, the parameter will be ignored. Valid value: [2,10]
HealthCheckTimeout	Integer	No	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails. Valid value: [1,300] **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.
HealthCheckInterval	Integer	No	The time interval between two consecutive health checks. Valid value: [1,50]
HealthCheckHttpCode	String	No	The HTTP status code indicating that the health check is normal. Separate multiple HTTP status codes by commas (,). Valid values: http_2xx (Default) | http_3xx | http_4xx | http_5xx

			Default: http_2xx. **Note**: This parameter is used only when the HTTP health check method is used.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=SetLoadBalancerTCPListenerAttribute
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=443
&VServerGroup=on
&VServerGroupId=rsp-cige6j5e7p
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetLoadBalancerTCPListenerAttributeResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</SetLoadBalancerTCPListenerAttributeResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

SetLoadBalancerUDPListenerAttribute

Description

Modify a UDP protocol listener.

Request Parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetLoadBalancerUDPListenerAttribute
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
BackendServerPort	Integer	No	The port opened on the backend server to receive requests. Valid value: [1, 65535] **Note**: If the **VServerGroupId** parameter is not specified, this parameter is required.
Bandwidth	Integer	No	The peak bandwidth of the listener. Valid value: [1,1000] Mbps **Note**: Set it to -1 if the Internet SLB instance is charged by traffic.

Scheduler	String	No	The algorithm used to distribute traffic. Valid value: - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
VServerGroupId	String	No	The ID of a VServer group. The **VServerGroupId** parameter and the MasterSlaveServerGroupId parameter cannot be used at the same time.

MasterSlaveServerGroupId	String	No	The ID of a master-slave server group. The **VServerGroupId** parameter and the MasterSlaveServerGroupId parameter cannot be used at the same time.
HealthCheckConnectPort	Integer	No	The port used for health check. Valid value: [1, 65535]
HealthyThreshold	Integer	No	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success). Valid value: [2,10]
UnhealthyThreshold	Integer	No	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). Valid value: [2,10]
HealthCheckConnectTimeout	Integer	No	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails. Valid value: [1,300] **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.

HealthCheckInterval	Integer	No	The time interval between two consecutive health checks. Valid value: [1,50]
HealthCheckReq	String	No	Request string for UDP listener health check. Only English letters, digits are allowed. Up to 500 characters can be entered.
HealthCheckExp	String	No	Response string for UDP listener check. Only English letters, digits are allowed. Up to 500 characters can be entered.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=CreateLoadBalancerUDPListener
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=53
&BackendServerPort=53
&Bandwidth=-1
&VServerGroupId=rsp-cige6j5e7p
&<CommonRequestParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetLoadBalancerUDPListenerAttributeResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</SetLoadBalancerUDPListenerAttributeResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

DescribeLoadBalancerHTTPListenerAttribute

Description

Query the configurations of a specified HTTP listener.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeLoadBalancerHTTPListenerAttribute
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]

Response parameter

Name	Type	Description

RequestId	String	The ID of the request.
ListenerPort	Integer	Port used by the Server Load Balancer instance frontend.
Status	String	The status of the listener.
Bandwidth	Integer	The peak bandwidth of the listener. **Note**: If the value is set to -1, the listener is not limited by bandwidth.
ListenerPort	Integer	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers.
BackendServerPort	Integer	The port opened on the backend server to receive requests.
VServerGroupId	String	The ID of the VServer group to add to the listener.
Scheduler	String	The algorithm used to distribute traffic. - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
XForwardedFor	String	Whether to use the XForwardedFor header to obtain the actual IP address of the client.
XForwardedFor_SLBIP	String	Whether to use the

		XForwardedFor_SLBIP header to obtain the public IP address of the SLB instance.
XForwardedFor_SLBID	String	Whether to use the XForwardedFor header to obtain the ID of the SLB instance.
XForwardedFor_proto	String	Whether to use the XForwardedFor_proto header to obtain the protocol used by the listener.
StickySession	String	Whether to enable session persistence. If enabled, all session requests from the same client are sent to the same backend server.
StickySessionType	String	The method used to handle the cookie. - insertServer Load Balancer adds a session cookie to the first response from the backend server and identifies the server which has sent the response. The next request will contain the cookie and the listener will distribute the request to the same backend server. - serverYou can set the cookie name in the response. Server Load Balancer will overwrite the original cookie when it discovers that a new cookie is set. The next time the client carries the new cookie to access the Server Load Balancer, the listener will distribute the request to the previously recorded backend server. **Note**: This parameter is returned when the value of the

		StickySession parameter is on.
CookieTimeout	Integer	The cookie timeout in seconds. **Note**: This parameter is returned when the value of the **StickySessionType** parameter is insert.
Cookie	String	The cookie configured on the backend server. **Note**: This parameter is returned when the value of the **StickySessionType** parameter is server.
Gzip	String	Whether to enable the Gzip compression.
HealthCheck	String	Whether to enable health check.
HealthCheckDomain	String	The domain name used for health check. By default, Server Load Balancer sends an HTTP head request to the default homepage configured on the application server through the intranet IP address of the backend ECS instance to do the health check.
HealthCheckURI	String	The URI used for health check.
HealthyThreshold	Integer	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success).
UnhealthyThreshold	Integer	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). When HealthCheck is on, the parameter is required; and when HealthCheck is off, the parameter will be ignored.
HealthCheckConnectPort	Integer	The port used for health check.
HealthCheckTimeout	Integer	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check

		fails.
HealthCheckInterval	Integer	The time interval between two consecutive health checks.
HealthCheckHttpCode	String	The HTTP status code indicating that the health check is normal.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeLoadBalancerHTTPListenerAttribute
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeLoadBalancerHTTPListenerAttributeResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<ListenerPort>80</ListenerPort>
<BackendServerPort>80</BackendServerPort>
<Bandwidth>-1</Bandwidth>
<Status>stopped</Status>
<Schedule>wrr</Schedule>
<XForwardedFor>on</XForwardedFor>
</DescribeLoadBalancerHTTPListenerAttributeResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"ListenerPort":80,
"BackendServerPort":80,
"Bandwidth":-1,
"Status":"stopped",
"Schedule":"wrr",
"XForwardedFor":"on"
}
```

DescribeLoadBalancerHTTPSListenerAttribute

Description

Query the configurations of a specified HTTPS listener.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeLoadBalancerHTTPSListenerAttribute
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
ListenerPort	Integer	Port used by the Server Load Balancer instance frontend.
Status	String	The status of the listener.
Bandwidth	Integer	The peak bandwidth of the listener.

		Note: If the value is set to -1, the listener is not limited by bandwidth.
ListenerPort	Integer	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers.
BackendServerPort	Integer	The port opened on the backend server to receive requests.
VServerGroupId	String	The ID of the VServer group to add to the listener.
Scheduler	String	The algorithm used to distribute traffic. - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
ServerCertificateId	Integer	The ID of the server certificate.
CACertificateId	Integer	The ID of the CA certificate.
XForwardedFor	String	Whether to use the XForwardedFor header to obtain the actual IP address of the client.
XForwardedFor_SLBIP	String	Whether to use the XForwardedFor_SLBIP header to obtain the public IP address of the SLB instance.
XForwardedFor_SLBID	String	Whether to use the XForwardedFor

		header to obtain the ID of the SLB instance.
XForwardedFor_proto	String	Whether to use the XForwardedFor_proto header to obtain the protocol used by the listener.
StickySession	String	Whether to enable session persistence. If enabled, all session requests from the same client are sent to the same backend server.
StickySessionType	String	The method used to handle the cookie. - insertServer Load Balancer adds a session cookie to the first response from the backend server and identifies the server which has sent the response. The next request will contain the cookie and the listener will distribute the request to the same backend server. - serverYou can set the cookie name in the response. Server Load Balancer will overwrite the original cookie when it discovers that a new cookie is set. The next time the client carries the new cookie to access the Server Load Balancer, the listener will distribute the request to the previously recorded backend server. **Note**: This parameter is returned when the value of the **StickySession** parameter is on.
CookieTimeout	Integer	The cookie timeout in seconds. **Note**: This parameter is returned when the value of the

		StickySessionType parameter is insert.
Cookie	String	The cookie configured on the backend server. **Note**: This parameter is returned when the value of the **StickySessionType** parameter is server.
Gzip	String	Whether to enable the Gzip compression.
HealthCheck	String	Whether to enable health check.
HealthCheckDomain	String	The domain name used for health check. By default, Server Load Balancer sends an HTTP head request to the default homepage configured on the application server through the intranet IP address of the backend ECS instance to do the health check.
HealthCheckURI	String	The URI used for health check.
HealthyThreshold	Integer	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success).
UnhealthyThreshold	Integer	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure). When HealthCheck is on, the parameter is required; and when HealthCheck is off, the parameter will be ignored.
HealthCheckConnectPort	Integer	The port used for health check.
HealthCheckTimeout	Integer	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails.
HealthCheckInterval	Integer	The time interval between two consecutive health checks.
HealthCheckHttpCode	String	The HTTP status code indicating

		that the health check is normal.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeLoadBalancerHTTPSListenerAttribute
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80443
&<Public Request Parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeLoadBalancerHTTPSListenerAttributeResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<ListenerPort>80</ListenerPort>
<BackendServerPort>80</BackendServerPort>
<Bandwidth>-1</Bandwidth>
<Status>stopped</Status>
<Schedule>wrr</Schedule>
<XForwardedFor>on</XForwardedFor>
<ServerCertificateId>idkp-123-cn-test-01</ServerCertificateId>
</DescribeLoadBalancerHTTPSListenerAttributeResponse>
```

JSON format

```
 {
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"ListenerPort":80,
"BackendServerPort":80,
"Bandwidth":-1,
"Status":"stopped",
"Schedule":"wrr",
"XForwardedFor":"on",
"ServerCertificateId":"idkp-123-cn-test-01"
}
```

DescribeLoadBalancerTCPListenerAttribute

Description

Query the configurations of a specified TCP listener.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeLoadBalancerTCPListenerAttribute
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]

Response parameter

>

Name	Type	Description
RequestId	String	The ID of the request.
ListenerPort	Integer	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]
Status	String	The status of the listener.

BackendServerPort	Integer	The port opened on the backend server to receive requests.
Bandwidth	Integer	The peak bandwidth of the listener. Valid value: [1,1000] Mbps **Note**: If the value is set to -1, the listener is not limited by bandwidth.
Scheduler	String	The algorithm used to distribute traffic. - wrr (Default)Backend servers with higher weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
VServerGroupId	String	The ID of a VServer group. The **VServerGroupId** parameter and the MasterSlaveServerGroupId parameter cannot be used at the same time.
MasterSlaveServerGroupId	String	The ID of a master-slave server group. The **VServerGroupId** parameter and the MasterSlaveServerGroupId parameter cannot be used at the same time.
EstablishedTimeout	Integer	The connection timeout in seconds for the Layer-4 TCP listener.
PersistenceTimeout	Integer	The timeout value of the TCP

		connection in seconds. **Note**: If the value is set to zero, the session persistence function is disabled.
HealthCheckType	String	The health check method.
HealthCheckDomain	String	The domain name used for health check. By default, Server Load Balancer sends an HTTP head request to the default homepage configured on the application server through the intranet IP address of the backend ECS instance to do the health check.
HealthCheckURI	String	The URI used for health check.
HealthCheckConnectPort	Integer	The port used for health check.
HealthyThreshold	Integer	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success).
UnhealthyThreshold	Integer	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure).
HealthCheckTimeout	Integer	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails. **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.
HealthCheckInterval	Integer	The time interval between two consecutive health checks.
HealthCheckHttpCode	String	The HTTP status code indicating that the health check is normal.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeLoadBalancerTCPListenerAttribute
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeLoadBalancerTCPListenerAttributeResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<ListenerPort>443</ListenerPort>
<BackendServerPort>443</BackendServerPort>
<Bandwidth>-1</Bandwidth>
<Status>stopped</Status>
<Schedule>wrr</Schedule>
<StickySession>on</StickySession>
<PersistenceTimeout>0</PersistenceTimeout>
</DescribeLoadBalancerTCPListenerAttributeResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"ListenerPort":443,
"BackendServerPort":443,
"Bandwidth":-1,
"Status":"stopped",
"Schedule":"wrr",
"StickySession":"on",
"PersistenceTimeout":0
}
```

DescribeLoadBalancerUDPListenerAttribute

Description

Query the configurations of a specified UDP listener.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeLoadBalancerUDPListenerAttribute
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance for which the TCP listener is created.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
ListenerPort	Integer	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers.
Status	String	The status of the listener.
BackendServerPort	Integer	The port opened on the backend server to receive requests.
Bandwidth	Integer	The peak bandwidth of the listener. Valid value: [1,1000] Mbps **Note**: If the value is set to -1, the Internet SLB instance is not limited by the bandwidth.
Scheduler	String	The algorithm used to distribute traffic. Valid value: - wrr (Default)Backend servers with higher

		weights receive more requests than those with smaller weights. - wlcA server with a higher weight will receive a larger percentage of live connections at any one time. If the weights are the same, the system directs network connections to the server with the fewest established connections. - rrRequests are evenly and sequentially distributed to the backend servers.
VServerGroupId	String	The ID of a VServer group.
MasterSlaveServerGroupId	String	The ID of a master-slave server group.
HealthCheckConnectPort	Integer	The port used for health check.
HealthyThreshold	Integer	The number of consecutive successes of health check performed by the same LVS mode server on the same ECS instance (from failure to success).
UnhealthyThreshold	Integer	The number of consecutive failures of health check performed by the same LVS node server on the same ECS instance (from success to failure).
HealthCheckConnectTimeout	Integer	The amount of time in seconds to wait for the response from a health check. If an ECS instance sends no response within the specified timeout period, the health check fails. **Note**: If the value of the **HealthCheckInterval** is greater than the value of the **HealthCHeckTimeout** parameter, the timeout is set to the value of the **HealthCheckInterval** parameter.
HealthCheckInterval	Integer	The time interval between two

		consecutive health checks.
HealthCheckReq	String	Request string for UDP listener health check. Only English letters, digits are allowed. Up to 500 characters can be entered.
HealthCheckExp	String	Response string for UDP listener check. Only English letters, digits are allowed. Up to 500 characters can be entered.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeLoadBalancerUDPListenerAttribute
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=53
&<Public Request Parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeLoadBalancerUDPListenerAttributeResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<ListenerPort>53</ListenerPort>
<BackendServerPort>53</BackendServerPort>
<Bandwidth>-1</Bandwidth>
<Status>stopped</Status>
<Schedule>wrr</Schedule>
</DescribeLoadBalancerUDPListenerAttributeResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"ListenerPort":53,
"BackendServerPort":53,
"Bandwidth":-1,
"Status":"stopped",
"Schedule":"wrr",
}
```

DescribeListenerAccessControlAttribute

Description

Query the access control of a specified listener.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeListenerAccessControlAttribute
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.
ListenerPort	Integer	Yes	The front-end port of the listener that is used to receive incoming traffic and distribute the traffic to the backend servers. Valid value: [1, 65535]

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
AccessControlStatus	String	Whether the whitelist access control function is enabled. open_whitelist indicates the whitelist access control function is enabled. close indicates the whitelist access control function is disabled.

SourceItems	String	The IP addresses or IP address ranges added to the whitelist.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeListenerAccessControlAttribute
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&<Public Request Parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeListenerAccessControlAttributeResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<AccessControlStatus>open_whitelist</AccessControlStatus>
<SourceItems>1.1.1.1,1.1.1.0/21</SourceItems>
</DescribeListenerAccessControlAttributeResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"AccessControlStatus":"open_whitelist",
"SourceItems":"1.1.1.1,1.1.1.0/21"
}
```

Forwarding rules

CreateRules

Description

Add forwarding rules to the specified listener.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: CreateRules
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
LoadBalancerId	String	Yes	The ID of the Server Load Balancer instance.
ListenerPort	String	Yes	The front-end listening port of the Server Load Balancer instance. Valid value: 1-65535
RuleList	String	Yes	The rules to be added. **Note**: You can add up to 10 forwarding rules in one request.
RuleList objects			
RuleName	String	Yes	The name of the forwarding rule. It can contain 1 to 80 characters and can only contain letters, numbers, dashes, slashes, dots, and sublines. **Note**: The names of different rules in a listener must be unique.
Domain	String	No	The domain name in the request. It can only contain letters, numbers, dashes, or dots.

Url	String	No	The URL. It can contain 1 to 80 characters, and can contain only letters, numbers, dashes, slashes, dots, percent signs, question marks, number signs, or ampersands. **Note**: You must specify a domain name or a URL, or both of them. The combination of the domain name and the URL must be unique in a listener. For more information, see Configure domain name or URL based forwarding rules.
VServerGroupId	String	Yes	The ID of the VServer group associated with the forwarding rule.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
Rules	JSON String	The list of forwarding rules.
RuleList objects		
RuleId	String	The ID of the forwarding rule.
RuleName	String	The name of the forwarding rule.

Examples

Request example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=CreateRules
&RegionId=cn-east-hangzhou-01
&LoadBalancerId=152a602e315-cn-beijing-btc-a01
&ListenerPort=80
&RuleList=[
{"RuleName":"Rule1","Domain":"abcdefg.com","Url":"/image","VServerGroupId":"Group1"},
```

```
{"RuleName":"Rule2","Domain":"abcdefg.com","Url":"/cache","VServerGroupId":"Group2"},
]
```

Response example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<CreateRules>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<Rules>
<Rule>
<RuleId>rule-3ejhktkaeu<RuleId>
<RuleName>Rule1<RuleName>
</Rule>
<Rule>
<RuleId>rule-tybqi6qkp8<RuleId>
<RuleName>Rule2<RuleName>
</Rule>
</Rules>
</CreateRules>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"Rules":{
"Rule":[
{'RuleId':'rule-3ejhktkaeu','RuleName':'Rule1'},
{'RuleId':'rule-tybqi6qkp8','RuleName':'Rule2'}
]
}
}
```

DeleteRules

Description

Delete forwarding rules.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DeleteRules
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
RuleIds	String	Yes	The forwarding rules to delete.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.

Examples

Request Example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=DeleteRules
&RegionId=cn-east-hangzhou-01
&RuleIds=[rule-tybqi6qkp8,rule-3ejhktkaeu]
```

Response Example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<DeleteRules>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
</DeleteRules>
```

JSON format

```
{
```

```
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C"
}
```

SetRule

Description

Change the target VServer group of a forwarding rule.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetRule
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
RuleId	String	Yes	The ID of the forwarding rule.
VServerGroupId	String	Yes	The ID of the target VServer group of the forwarding rule.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.

Examples

Request Example

```
https://slb.aliyuncs.com/?<Common parameters>
```

```
&Action=SetRule
&RegionId=cn-east-hangzhou-01
&RuleId=rule-3ejhktkaeu
&VServerGroupId=rsp-cige6j5e7p
```

Response Example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<SetRule>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
</SetRule>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C"
}
```

DescribeRuleAttribute

Description

Query the detailed configurations of the specified forwarding rule.

Request parameters

Name	Type	Required	Description
Action	String	Yes	System required parameter. Valid value: DescribeRuleAttribute
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
RuleId	String	Yes	The ID of the

			forwarding rule.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
RuleName	String	The name of the forwarding rule.
LoadBalancerId	String	The ID of the Server Load Balancer instance.
ListenerPort	Integer	The front-end listening port used by the Server Load Balancer instance.
Domain	String	The domain name in the forwarding rule.
Url	String	The URL in the forwarding rule.
VServerGroupId	String	The ID of the VServer group associated with the forwarding rule.

Examples

Request Example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=DescribeRuleAttribute
&RegionId=cn-east-hangzhou-01
&RuleId=rule-3ejhktkaeu
```

Response Example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<DescribeRuleAttribute>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<RuleName>Rule1</RuleName>
<LoadBalancerId>152a602e315-cn-beijing-btc-a01</LoadBalancerId>
<ListenerPort>80</ListenerPort>
<Domain>abc.com</Domain>
<Url>/cache</Url>
<VServerGroupId>rsp-cige6j5e7p</VServerGroupId>
```

```
</DescribeRuleAttribute>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"RuleName":"Rule1",
"LoadBalancerId":"152a602e315-cn-beijing-btc-a01",
"ListenerPort":"80",
"Domain":"abc.com",
"Url":"/cache",
"VServerGroupId":"rsp-cige6j5e7p"
}
```

DescribeRules

Description

Query the detailed configurations of forwarding rules associated with the specified listener.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeRules
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
LoadBalancerId	String	Yes	The ID of the Server Load Balancer instance.
ListenerPort	String	Yes	The front-end listening port used by the Server Load Balancer instance. Valid value: 1-65535

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
RuleList	String	The list of rules.
RuleList objects		
RuleId	String	The ID of the forwarding rule.
RuleName	String	The name of the forwarding rule.
Domain	String	The domain name.
Url	String	The URL.
VServerGroupId	String	The ID of the target VServer group of the forwarding rule.

Examples

Request Example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=DescribeRules
&RegionId=cn-east-hangzhou-01
&LoadBalancerId=152a602e315-cn-beijing-btc-a01
&ListenerPort=80
```

Response Example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<DescribeRules>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<RuleList>
<Rule>
<RuleId>rule-3ejhktkaeu</RuleId>
<RuleName>Rule1</RuleName>
<Domain>abc.com</Domain>
<Url>/image</Url>
<VServerGroupId>rsp-cige6j5e7p</VServerGroupId>
</Rule>
<Rule>
<RuleId>rule-tybqi6qkp8</RuleId>
<RuleName>Rule2</RuleName>
```

```
<Domain>abc.com</Domain>
<Url>/cache</Url>
<VServerGroupId>rsp-6cejjzlld7</VServerGroupId>
</Rule>
</RuleList>
</DescribeRules>
```

JSON format

```
{
"RequestId": "9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"RuleList": {
"Rule": [
{
"RuleId": "rule-3ejhktkaeu",
"RuleName": "Rule1",
"Domain": "abc.com",
"Url": "/image",
"VServerGroupId": "rsp-cige6j5e7p"
},
{
"RuleId": "rule-tybqi6qkp8",
"RuleName": "Rule2",
"Domain": "abc.com",
"Url": "/cache",
"VServerGroupId": "rsp-6cejjzlld7"
}
]
}
}
```

Backend server

AddBackendServers

Description

Add the backend servers to a Server Load Balancer instance.

Note: If the ECS instances has already been added, the ECS instances are ignored.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to peform. Valid value: AddBackendServers
LoadBalancerId	String	Yes	The ID of the Server Load Balancer instance.
BackendServers	JSON String	Yes	A list of backend servers to be added. Up to 20 backend servers can be added at one time. The backend servers must be added in the following format: [{"ServerId":"XXX","Weight":"XXX"},{"ServerId":"XXX","Weight":"XXX"}] - ServerId is the ID of the ECS instance to be added. - Weight is the weight of the ECS instance in the range of 1-100, the default value is 100. The ECS instance with higher weight receives more requests.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
LoadBalancerId	String	The ID of the Server Load Balancer instance.

BackendServers	JSON String	The list of the backend servers of the SLB instance, containing the following: - ServerId is the ID of the ECS instance. - Weight is the weight of the ECS instance in the range of 1-100, the default value is 100. The ECS instance with higher weight receives more requests.

Example

Request example

```
https://slb.aliyuncs.com/?Action=AddBackendServers
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&BackendServers=[
{"ServerId":" vm-233","Weight":"100"},
{"ServerId":" vm-234","Weight":"100"}]
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<AddBackendServersResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<LoadBalancerId>139a00604ad-cn-east-hangzhou-01</LoadBalancerId>
<BackendServers>
<BackendServer>
<ServerId>vm-233</ServerId>
<Weight>100</Weight>
</BackendServer>
<BackendServer>
<ServerId>vm-234</ServerId>
<Weight>100</Weight>
</BackendServer>
</BackendServers>
</AddBackendServersResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"LoadBalancerId":"139a00604ad-cn-east-hangzhou-01",
"BackendServers":{
"BackendServer": [
{"ServerId":"vm-233",
"Weight":100},
{"ServerId":"vm-234",
"Weight":100
}
]
}
}
```

RemoveBackendServers

Description

Remove one or more ECS instances from the backend server pool.

Note: No error will be returned if an ECS instance to be removed does not exist in the backend server pool.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: RemoveBackendServers
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.
BackendServers	JSON String	Yes	A list of backend servers. Up to 20 backend servers can be

			contained in one request. The backend servers must be added in the following format: [{"ServerId":"XXX","Weight":"XXX"},{"ServerId":"XXX","Weight":"XXX"}] - ServerId is the ID of the ECS instance. - Weight is the weight of the ECS instance in the range of 1-100, the default value is 100. The ECS instance with higher weight receives more requests.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
LoadBalancerId	String	The ID of the SLB instance.
BackendServers	JSON String	The list of the backend servers of the SLB instance, containing the following: - ServerId is the ID of the ECS instance. - Weight is the weight of the ECS instance in the range of 1-100, the default value is 100. The ECS instance with higher weight receives more requests.

Example

Request example

```
https://slb.aliyuncs.com/?Action=RemoveBackendServers
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&BackendServers=[" vm-233"," vm-234"]
&<CommonParameter>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<RemoveBackendServersResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<LoadBalancerId>139a00604ad-cn-east-hangzhou-01</LoadBalancerId>
<BackendServers>
<BackendServer>
<ServerId>vm-231</ServerId>
<Weight>100</Weight>
</BackendServer>
<BackendServer>
<ServerId>vm-232</ServerId>
<Weight>100</Weight>
</BackendServer>
</BackendServers>
</RemoveBackendServersResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"LoadBalancerId":"139a00604ad-cn-east-hangzhou-01",
"BackendServers":{
"BackendServer": [
{"ServerId":"vm-231",
"Weight":100},
{"ServerId":"vm-232",
"Weight":100}
]
}
}
```

SetBackendServers

Description

Modify the weight of the backend servers.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetBackendServers
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.
BackendServers	JSON String	Yes	The list of backend servers of the SLB instance. Up to 20 backend servers can be added at one time. The backend servers must be added in the following format: [{"ServerId":"XXX","Weight":"XXX"},{"ServerId":"XXX","Weight":"XXX"}] - ServerId is the ID of the ECS instance to be added. - Weight is the weight of the ECS instance in the range of 0-100, the default value is 100. The ECS instance with

			higher weight receives more requests.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
LoadBalancerId	String	The ID of the Server Load Balancer instance.
BackendServers	List	The list of the backend servers.

Example

Request example

```
https://slb.aliyuncs.com/?Action=SetBackendServers
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&BackendServers=[{"ServerId":"vm-233","Weight":"0"},{"ServerId":"vm-234","Weight":"0"}]
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetBackendServers>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<LoadBalancerId>139a00604ad-cn-east-hangzhou-01</LoadBalancerId>
<BackendServers>
<BackendServer>
<ServerId>vm-233</ServerId>
<Weight>0</Weight>
</BackendServer>
<BackendServer>
<ServerId>vm-234</ServerId>
<Weight>0</Weight>
</BackendServer>
</BackendServers>
</SetBackendServers>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"LoadBalancerId":"139a00604ad-cn-east-hangzhou-01",
"BackendServers":{
  “BackendServer”  : [
{"ServerId":"vm-233","Weight":0},
{"ServerId":"vm-234","Weight":0}
]
}
}
```

DescribeHealthStatus

Description

Query the health status of the backend servers.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeHealthStatus
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.
ListenerPort	Integer	No	The front-end port of the listener. Valid value: [1,65535] **Note**: If no port is specified, the health check of all the listeners are returned.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
LoadBalancerId	String	The ID of the Server Load Balancer instance.
BackendServers	JSON String	The list of the backend servers containing the following: - ServerId: The ID of the ECS instance. - ServerHealthStatus: The status of the backend server:normal: The status of the backend server is healthy.abnormal: The status of the backend server is unhealthy.unavailable: The status of the backend server cannot be obtained now. Maybe the health check has not be finished or the listener does not configure the health check.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeHealthStatus
&LoadBalancerId=139a00604ad-cn-east-hangzhou-01
&ListenerPort=80
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeHealthStatusResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<BackendServers>
<BackendServer>
<ServerId>vm-233</ServerId>
<ServerHealthStatus>normal</ServerHealthStatus>
</BackendServer>
<BackendServer>
<ServerId>vm-234</ServerId>
<ServerHealthStatus>abnormal</ServerHealthStatus>
</BackendServer>
</BackendServers>
</DescribeHealthStatusResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"LoadBalancerId":"139a00604ad-cn-east-hangzhou-01",
"BackendServers":{
"BackendServer": [
{"ServerId": "vm-233", "ServerHealthStatus:"normal"},
{"ServerId": "vm-234", "ServerHealthStatus:"abnormal"}
]
}
}
```

VServer group

CreateVServerGroup

Description

Create a VServer group.

Request parameters

Name	Type	Required	Description

Action	String	Yes	The action to perform. Valid value: CreateVServerGroup
RegionId	String	No	The region ID of the Server Load Balancer instance.
LoadBalancerId	String	Yes	The ID of the Server Load Balancer instance.
VServerGroupName	String	No	The name of the VServer group.
BackendServers	JSON String	No	The list of backend servers added to the VServer group. A VServer group can contain up to 20 backend servers. If this parameter is not specified, an empty VServer group is created.
BackendServers objects			
ServerId	String	Yes	The ID of the ECS instance.
Port	Integer	Yes	The port used by the backend server. Valid value: 1-65535
Weight	Integer	Yes	The weight of the backend server. Valid value: [0,100]. Default value: 100

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
VServerGroupId	String	The ID of the VServer group.
BackendServers	JSON String	The list of backend servers.

Examples

Request example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=CreateVServerGroup
&RegionId=cn-east-hangzhou-01
&LoadBalancerId=152a602e315-cn-beijing-btc-a01
&VServerGroupName=Group1
&BackendServers=[
{'ServerId':'vm-233','Port':'80','Weight':'100'},
{'ServerId':'vm-232','Port':'90','Weight':'100'},
{'ServerId':'vm-231','Port':'70','Weight':'100'}
]
```

Response example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<CreateVServerGroup>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<VServerGroupId>rsp-cige6j5e7p</VServerGroupId>
<BackendServers>
<BackendServer>
<ServerId>vm-233</ServerId>
<Port>80</Port>
<Weight>100</Weight>
</BackendServer>
<BackendServer>
<ServerId>vm-232</ServerId>
<Port>90</Port>
<Weight>100</Weight>
</BackendServer>
<BackendServer>
<ServerId>vm-231</ServerId>
<Port>70</Port>
<Weight>100</Weight>
</BackendServer>
</BackendServers>
</CreateVServerGroup>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"VServerGroupId":"rsp-cige6j5e7p",
```

```
"BackendServers":{
"BackendServer":[
{'ServerId':'vm-233','Port':'80','Weight':'100'},
{'ServerId':'vm-232','Port':'90','Weight':'100'},
{'ServerId':'vm-231','Port':'70','Weight':'100'}
]
}
}
```

SetVServerGroupAttribute

Description

Modify the name of a VServer group or the weight of a backend server.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetVServerGroupAttribute
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
VServerGroupId	String	Yes	The ID of the VServer group.
VServerGroupName	String	Yes	The name of the VServer group.
BackendServers	JSON String	Yes	The list of backend servers added to the VServer group. A VServer group can contain up to 20 backend servers.
BackendServers objects			
ServerId	String	Yes	The ID of the ECS instance.

Port	Integer	Yes	The port used by the backend server. Valid value: 1-65535
Weight	Integer	Yes	The weight of the backend server. Valid value: [0,100]. Default value: 100

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
VServerGroupId	String	The ID of the VServer group.
VServerGroupName	String	The name of the VServer group.
BackendServers	JSON String	The list of backend servers.

Examples

Request example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=SetVServerGroupAttribute
&RegionId=cn-east-hangzhou-01
&VServerGroupId=rsp-cige6j5e7p
&VServerGroupName=Group1
&BackendServers=[
{'ServerId':'vm-233','Port':'80','Weight':'100'},
{'ServerId':'vm-232','Port':'90','Weight':'100'},
{'ServerId':'vm-231','Port':'70','Weight':'100'}
]
```

Response example

- XML format
- JSON format

AddVServerGroupBackendServers

Description

Add backend servers to the specified VServer group.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: AddVServerGroupBackendServers
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
VServerGroupId	String	Yes	The ID of the VServer group.
BackendServers	String	Yes	The list of backend servers to add. A VServer group can contain up to 20 backend servers.
BackendServers objects			
ServerId	String	Yes	The ID of the ECS instance.
Port	Integer	Yes	The port used by the backend server. Valid value: 1-65535
Weight	Integer	Yes	The weight of the backend server. Valid value: [0,100]. Default value: 100

Response parameters

Name	Type	Description

RequestId	String	The ID of the request.
VServerGroupId	String	The ID of the VServer group.
BackendServers	List	The list of backend servers.

Examples

Request example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=AddVServerGroupBackendServers
&RegionId=cn-east-hangzhou-01
&VServerGroupId=rsp-cige6j5e7p
&BackendServers=[
{'ServerId':'vm-233','Port':'80','Weight':'100'},
{'ServerId':'vm-232','Port':'90','Weight':'100'},
{'ServerId':'vm-231','Port':'70','Weight':'100'}
]
```

Response example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<AddVServerGroupBackendServers>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<VServerGroupId>rsp-cige6j5e7p</VServerGroupId>
<BackendServers>
<BackendServer>
<ServerId>vm-233</ServerId>
<Port>80</Port>
<Weight>100</Weight>
</BackendServer>
<BackendServer>
<ServerId>vm-232</ServerId>
<Port>90</Port>
<Weight>100</Weight>
</BackendServer>
<BackendServer>
<ServerId>vm-231</ServerId>
<Port>70</Port>
<Weight>100</Weight>
</BackendServer>
</BackendServers>
</AddVServerGroupBackendServers>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"VServerGroupId":"rsp-cige6j5e7p",
"BackendServers":{
"BackendServer":[
{'ServerId':'vm-233','Port':'80','Weight':'100'},
{'ServerId':'vm-232','Port':'90','Weight':'100'},
{'ServerId':'vm-231','Port':'70','Weight':'100'}
]
}
}
```


RemoveVServerGroupBackendServers

Description

Remove backend servers from the specified VServer group.

Note: If a backend server to remove is not in the specified VServer group, it is ignored and no error is reported.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: RemoveVServerGroupBackendServers
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
VServerGroupId	String	Yes	The ID of the VServer group.
BackendServers	JSON String	Yes	The list of backend servers to remove, which consists of IDs and ports.
BackendServers objects			
ServerId	String	Yes	The ID of the ECS instance.

Port	Integer	Yes	The port used by the backend server. Valid value: 1-65535

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
VServerGroupId	String	The ID of the VServer group.
BackendServers	JSON String	The list of backend servers.
BackendServers objects		
ServerId	String	The ID of the ECS instance.
Port	Integer	The port used by the backend server.
Weight	Integer	The weight of the backend server.

Examples

Request example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=RemoveVServerGroupBackendServers
&RegionId=cn-east-hangzhou-01
&VServerGroupId=rsp-cige6j5e7p
&BackendServers=[
{'ServerId':'vm-233','Port':'80'},
{'ServerId':'vm-232','Port':'90'}
]
```

Response example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<RemoveVServerGroupBackendServers>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<VServerGroupId>rsp-cige6j5e7p</VServerGroupId>
<BackendServers>
<BackendServer>
<ServerId>vm-231</ServerId>
```

```
<Port>80</Port>
</BackendServer>
<BackendServer>
<ServerId>vm-230</ServerId>
<Port>80</Port>
</BackendServer>
</BackendServers>
</AddVServerGroupBackendServers>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"VServerGroupId":"rsp-cige6j5e7p",
"BackendServers":{
"BackendServer":[
{'ServerId':'vm-231','Port':'80'},
{'ServerId':'vm-230','Port':'80'}
]
}
}
```

ModifyVServerGroupBackendServers

Description

Replace backend servers in a VServer group.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: ModifyVServerGroupBackendServers
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
VServerGroupId	String	Yes	The ID of the VServer group.
OldBackendServers	JSON String	No	The list of backend

			servers to be removed.
NewBackendServers	JSON String	No	The list of backend servers to be added. When the OldBackendServers parameter is specified, the OldBackendServers list and the NewBackendServers list must include the same number of ECS instances.
BackendServers objects			
ServerId	String	Yes	The ID of the ECS instance.
Port	Integer	Yes	The port used by the backend server. Valid value: 1-65535
Weight	Integer	Yes	The weight of the backend server. Valid value: [0,100]. Default value: 100

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
VServerGroupId	String	The ID of the VServer group.
BackendServers	JSON String	The list of backend servers.

Examples

Request Example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=ModifyVServerGroupBackendServers
&RegionId=cn-east-hangzhou-01
&VServerGroupId=rsp-cige6j5e7p
&OldBackendServers=[
{'ServerId':'vm-233','Port':'80'},
{'ServerId':'vm-232','Port':'90'}
```

```
]
&NewBackendServers=[
{'ServerId':'vm-235','Port':'8080','Weight':'100'},
{'ServerId':'vm-236','Port':'70','Weight':'100'}
]
```

Response Example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<ModifyVServerGroupBackendServers>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<VServerGroupId>rsp-cige6j5e7p</VServerGroupId>
<BackendServers>
<BackendServer>
<ServerId>vm-235</ServerId>
<Port>8080</Port>
<Weight>100<Weight>
</BackendServer>
<BackendServer>
<ServerId>vm-236</ServerId>
<Port>70</Port>
<Weight>100<Weight>
</BackendServer>
</BackendServers>
</ModifyVServerGroupBackendServers>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"VServerGroupId":"rsp-cige6j5e7p",
"BackendServers":{
"BackendServer":[
{'ServerId':'vm-235','Port':'8080','Weight':'100'},
{'ServerId':'vm-236','Port':'70','Weight':'100'}
]
}
}
```

DeleteVServerGroup

Description

Delete a VServer group.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DeleteVServerGroup
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
VServerGroupId	String	Yes	The ID of the VServer group. **Note**: An occupied VServer group cannot be deleted.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.

Examples

Request Example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=DeleteVServerGroup
&RegionId=cn-east-hangzhou-01
&VServerGroupId=rsp-cige6j5e7p
```

Response Example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<DeleteVServerGroup>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<DeleteVServerGroup>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C"
}
```

DescribeVServerGroups

Description

Query the list of VServer groups.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeVServerGroups
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
LoadBalancerId	String	Yes	The ID of the Server Load Balancer instance.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
VServerGroups	JSON String	The list of VServer groups.
VServerGroupId	String	The ID of the VServer group.

VServerGroupName	String	The name of the VServer group.

Examples

Request Example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=DescribeVServerGroups
&RegionId=cn-east-hangzhou-01
&LoadBalancerId=152a602e315-cn-beijing-btc-a01
```

Response Example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<DescribeVServerGroups>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<VServerGroups>
<VServerGroupId>rsp-cige6j5e7p<VServerGroupId>
<VServerGroupName>Group1<VServerGroupName>
<VServerGroupId>rsp-6cejjzlld7<VServerGroupId>
<VServerGroupName>Group2<VServerGroupName>
<VServerGroupId>rsp-0bfucwuotx<VServerGroupId>
<VServerGroupName>Group3<VServerGroupName>
</VServerGroups>
</DescribeVServerGroups>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"VServerGroups":{
[
{'VServerGroupId':'rsp-cige6j5e7p','VServerGroupName':'Group1'},
{'VServerGroupId':'rsp-6cejjzlld7','VServerGroupName':'Group2'},
{'VServerGroupId':'rsp-0bfucwuotx','VServerGroupName':'Group3'}
]
}
}
```

DescribeVServerGroupAttribute

Description

Query detailed information of a VServer group.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeVServerGroupAttribute
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
VServerGroupId	String	Yes	The ID of the VServer group.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
VServerGroupId	String	The ID of the VServer group.
VServerGroupName	String	The name of the VServer group.
BackendServers	String	The list of backend servers.
BackendServers objects		
ServerId	String	The ID of the ECS instance.
Port	Integer	The port used by the backend server.
Weight	Integer	The weight of the backend server.

Examples

Request Example

```
https://slb.aliyuncs.com/?<Common parameters>
&Action=DescribeVServerGroupAttribute
&RegionId=cn-east-hangzhou-01
&VServerGroupId=rsp-cige6j5e7p
```

Response Example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<DescribeVServerGroupAttribute>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<VServerGroupId>rsp-cige6j5e7p</VServerGroupId>
<VServerGroupName>Group1</VServerGroupName>
<BackendServers>
<BackendServer>
<ServerId>vm-232</ServerId>
<Port>80</Port>
<Weight>100</Weight>
</BackendServer>
<BackendServer>
<ServerId>vm-233</ServerId>
<Port>90</Port>
<Weight>100</Weight>
</BackendServer>
</BackendServers>
</DescribeVServerGroupAttribute>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"VServerGroupId":"rsp-cige6j5e7p",
"VServerGroupName":"Group1",
"BackendServers":{
"BackendServer":[
{'ServerId':'vm-232','Port':'80','Weight':'100'},
{'ServerId':'vm-233','Port':'90','Weight':'100'},
]
}
}
```

Master-slave server group

CreateMasterSlaveServerGroup

Description

Create a master-slave server group.

A master-slave only contains two ECS instances, one is the primary backend server and the other one is standby backend server that will take over when the primary backend server fails to handle the forwarded requests.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: CreateMasterSlaveServerGroup
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.
MasterSlaveServerGroupName	String	Yes	The name of the master-slave server group.
MasterSlaveBackendServers	JSON String	Yes	The list of the master-slave server group to be added. Only two ECS instances can be added in each group in the following format: {'ServerId':'vm-233','Port':'80','Weight':'100','ServerType':'Master'}

			where: - ServerId is the ID of the ECS instance. - Port is the port number of the ECS instance. Valid value: [1,65535] - Weight is the weight of the ECS instance. Valid value: [0-100]. The default value is 100. - ServerType is the role of the backed server. Valid value: Master (Default) | Slave

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
MasterSlaveServerGroupId	String	The ID of the master-slave server group.
MasterSlaveBackendServers	JSON String	The list of the master-slave server groups. Each master-slave server group contains two ECS instances with the following information: - ServerId is the ID of the ECS instance. - Port is the port number of the ECS instance. - Weight is the weight of the ECS instance. - ServerType is the role of

		the backed server.

Example

Request example

```
https://slb.aliyuncs.com/?Action=CreateMasterSlaveServerGroup
&RegionId=cn-east-hangzhou-01
&LoadBalancerId=152a602e315-cn-hangzhou-a01
&MasterSlaveServerGroupName=Group1
&MasterSlaveBackendServers=[
{'ServerId':'vm-233','Port':'80','Weight':'100','ServerType':'Master'},
{'ServerId':'vm-232','Port':'90','Weight':'100''ServerType':'Slave'}]
&<CommonParameters>
```

Response example

XML format

```
 <?xml version="1.0" encoding="utf-8"?>
<CreateMasterSlaveServerGroup>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<MasterSlaveServerGroupId>rsp-cige6j5e7p</MasterSlaveServerGroupId>
<MasterSlaveBackendServers>
<MasterSlaveBackendServers>
<ServerId>vm-233</ServerId>
<Port>80</Port>
<Weight>100</Weight>
<ServerType>Master</ServerType>
</MasterSlaveBackendServers>
<MasterSlaveBackendServers>
<ServerId>vm-232</ServerId>
<Port>90</Port>
<Weight>100</Weight>
<ServerType>Slave</ServerType>
</MasterSlaveBackendServers>
</MasterSlaveBackendServers>
</CreateMasterSlaveServerGroup>
```

JSON format

```
 {
"RequestId": "9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"MasterSlaveServerGroupId": "rsp-cige6j5e7p",
"MasterSlaveBackendServers": {
```

```
"MasterSlaveBackendServers": [
{
"ServerId": "vm-233",
"Port": "80",
"Weight": "100",
"ServerType": "Master"
},
{
"ServerId": "vm-232",
"Port": "90",
"Weight": "100",
"ServerType": "Slave"
}
]
}
}
```


DeleteMasterSlaveServerGroup

Description

Delete a specified master-slave server group.

Note: Cannot delete a master-slave server group that is in use.

Request parameter

Name	Name	Required	Description
Action	String	Yes	The action to perform. Valid value: DeleteMasterSlaveServerGroup
RegionId	String	Yes	The ID of the region where the SLB instance is located.
MasterSlaveServerGroupId	String	Yes	The ID of the master-slave server group to be deleted. **Note:** Cannot delete a master-slave server group that is in use.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DeleteMasterSlaveServerGroup
&RegionId=cn-east-hangzhou-01
&MasterSlaveServerGroupId=rsp-cige6j5e7p
<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<DeleteMasterSlaveServerGroupResponse>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
</DeleteMasterSlaveServerGroupResponse>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C"
}
```

DescribeMasterSlaveServerGroupAttribute

Description

Query the detailed information of a master-slave server group.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeMasterSlaveServerGroupAttribute
RegionId	String	Yes	The ID of the region where the SLB instance is located.
MasterSlaveServerGroupId	String	Yes	The ID of the master-slave server group.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
MasterSlaveServerGroupId	String	The ID of the master-slave server group.
MasterSlaveServerGroupName	String	The name of the master-slave server group.
MasterSlaveBackendServers	JSON String	The list of the master-slave server group.
MasterSlaveBackendServers **objects**		
ServerId	String	The ID of the backed server.
Port	Integer	The port number of the backed server.
ServerType	String	The role of the backed server.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DescribeMasterSlaveServerGroupAttribute
&RegionId=cn-east-hangzhou-01
&MasterSlaveServerGroupId=rsp-cige6j5e7p
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<DescribeMasterSlaveServerGroupAttribute>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<MasterSlaveServerGroupId>rsp-cige6j5e7p</MasterSlaveServerGroupId>
<MasterSlaveServerGroupName>Group1</MasterSlaveServerGroupName>
<MasterSlaveBackendServers>
<MasterSlaveBackendServers>
<ServerId>vm-232</ServerId>
<Port>80</Port>
<Weight>100</Weight>
<ServerType>Master</ServerType>
</MasterSlaveBackendServers>
<MasterSlaveBackendServers>
<ServerId>vm-233</ServerId>
<Port>90</Port>
<Weight>100</Weight>
<ServerType>Slave</ServerType>
</MasterSlaveBackendServers>
</MasterSlaveBackendServers>
</DescribeMasterSlaveServerGroupAttribute>
```

JSON format

```
{
"RequestId": "9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"MasterSlaveServerGroupId": "rsp-cige6j5e7p",
"MasterSlaveServerGroupName": "Group1",
"MasterSlaveBackendServers": {
"MasterSlaveBackendServers": [
{
"ServerId": "vm-232",
"Port": "80",
"Weight": "100",
"ServerType": "Master"
},
{
"ServerId": "vm-233",
"Port": "90",
"Weight": "100",
"ServerType": "Slave"
}
]
}
}
```

DescribeMasterSlaveServerGroups

Description

Query created master-slave server groups.

Request parameter

Name	Type	Mandatory or not	Description
Action	String	Yes	The action to perform. Value: DescribeMasterSlaveServerGroups
RegionId	String	Yes	The ID of the region where the SLB instance is located.
LoadBalancerId	String	Yes	The ID of the SLB instance.

Response parameter

Name	Type	Description
RequestId	String	See [The ID of the request.
MasterSlaveBackendServers	JSON String	A list of the backend servers in the master-slave server group.

Example

Request example

```
https://slb.aliyuncs.com/?&Action=DescribeMasterSlaveServerGroups
&RegionId=cn-east-hangzhou-01
&LoadBalancerId=152a602e315-cn-beijing-btc-a01
```

Return example

XML format

```
<?xml version="1.0" encoding="utf-8"?>
<DescribeMasterSlaveServerGroupsResponse>
<RequestId>9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C</RequestId>
<MasterSlaveServerGroups>
<MasterSlaveServerGroupId>rsp-cige6j5e7p<MasterSlaveServerGroupId>
<MasterSlaveServerGroupName>Group1<MasterSlaveServerGroupName>
<MasterSlaveServerGroupId>rsp-6cejjzlld7<MasterSlaveServerGroupId>
<MasterSlaveServerGroupName>Group2<MasterSlaveServerGroupName>
<MasterSlaveServerGroupId>rsp-0bfucwuotx<MasterSlaveServerGroupId>
<MasterSlaveServerGroupName>Group3<MasterSlaveServerGroupName>
</MasterSlaveServerGroups>
</DescribeMasterSlaveServerGroupsResponse>
```

JSON format

```
{
"RequestId":"9DEC9C28-AB05-4DDF-9A78-6B08EC9CE18C",
"MasterSlaveServerGroups":{
[
{'MasterSlaveServerGroupId':'rsp-cige6j5e7p','MasterSlaveServerGroupName':'Group1'},
{'MasterSlaveServerGroupId':'rsp-6cejjzlld7','MasterSlaveServerGroupName':'Group2'},
{'MasterSlaveServerGroupId':'rsp-0bfucwuotx','MasterSlaveServerGroupName':'Group3'}
]}
}
```

Server Certificate

UploadServerCertificate

Description

Upload a server certificate. Only one server certificate with the corresponding private key can be uploaded each time.

This API is transactional, that is, the server certificate and the private key are either uploaded successfully or not. After the certificate and private key are successfully added, the fingerprints of all the server certificates under your account are returned.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: UploadServerCertificate
RegionId	String	Yes	The ID of the region where an SLB instance is located.
ServerCertificate	String	Yes	The server certificate to be uploaded.
ServerCertificateName	String	No	The name of the server certificate.
PrivateKey	String	Yes	The private key of the server certificate.
AliCloudCertificateId	String	No	Certificate ID of Alibaba Cloud.
AliCloudCertificateName	String	No	Certificate Name of Alibaba Cloud.
ResourceGroupId	String	No	The ID of enterprise resource group.

Response parameter

Name	Type	Description
RequestId	string	The ID of the request.
ServerCertificateId	String	The ID of the server certificate.
ServerCertificateName	String	The name of the server certificate.
Fingerprint	String	The fingerprint of the server certificate.

Example

Request example

```
https://slb.aliyuncs.com/?Action=UploadServerCertificate
&RegionId=cn-east-hangzhou-01
&ServerCertificate=test
&ServerCertificateName=mycert01
&PrivateKey=wmsad!q23
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<UploadServerCertificateResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<ServerCertificateId>idkp-123-cn-test-01</ServerCertificateId>
<ServerCertificateName>mycert01</ServerCertificateName
<Fingerprint>01:DF:AB:CD</Fingerprint>
</UploadServerCertificateResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"ServerCertificateId":"idkp-123-cn-test-01",
"ServerCertificateName":"mycert01",
"Fingerprint":"01:DF:AB:CD"
}
```

DeleteServerCertificate

Description

Delete a server certificate.

Note: Cannot delete a server certificate that is in use.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform.

			Valid value: DeleteServerCertificate
RegionId	String	No	The ID of the region where the server certificate is uploaded.
ServerCertificateId	String	Yes	The ID of the server certificate.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=DeleteServerCertificate
&RegionId=cn-east-hangzhou-01
&ServerCertificateId=idkp-123-cn-test-01
&<Public Request Parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DeleteServerCertificateResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</DeleteServerCertificateResponse>
```

- JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

DescribeServerCertificates

Description

Query the server certificates in a specified region.

Note: For security, only the name and the fingerprint are returned instead of the actual certificate contents and the private key.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. DescribeServerCertificates
RegionId	String	Yes	The ID of the region to query.
ServerCertificateId	String	No	The ID of the server certificate.
ResourceGroupId	String	No	The ID of enterprise resource group.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
ServerCertificates	List	A list of the server certificates, including the following items: - ServerCertificateIdThe ID of the server certificate. - ServerCertificateNameThe name of the server certificate. - FingerprintThe fingerprint of the server certificate.

Example

Request example

```
https://slb.aliyuncs.com//?Action=DescribeServerCertificates
&RegionId=cn-east-hangzhou-01
&<Public Request Parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeServerCertificatesResponse>
<RequestId>6E8FAFB0-7262-492A-B7C2-B421FD4ADBFC</RequestId>
<ServerCertificates>
<ServerCertificate>
<CreateTimeStamp>1502155382000</CreateTimeStamp>
<ServerCertificateId>1231579085529123_15dbf701d56_-417255761_616629763</ServerCertificateId>
<RegionIdAlias>cn-hangzhou</RegionIdAlias>
<AliCloudCertificateId></AliCloudCertificateId>
<CreateTime>2017-08-08T01:23:02Z</CreateTime>
<ResourceGroupId>rg-acfmxazb4ph6aiy</ResourceGroupId>
<RegionId>cn-hangzhou</RegionId>
<ServerCertificateName>cert-1502087065310</ServerCertificateName>
<IsAliCloudCertificate>0</IsAliCloudCertificate>
<AliCloudCertificateName></AliCloudCertificateName>
<Fingerprint>7c:32:e8:0c:9e:a9:f8:c9:4c:9b:af:cf:bb:57:ef:60:80:2a:97:ae</Fingerprint>
</ServerCertificate>
<ServerCertificate>
<CreateTimeStamp>1481623069000</CreateTimeStamp>
<ServerCertificateId>1231579085529123_158f79de306</ServerCertificateId>
<RegionIdAlias>cn-hangzhou</RegionIdAlias>
<AliCloudCertificateId>0</AliCloudCertificateId>
<CreateTime>2016-12-13T09:57:49Z</CreateTime>
<ResourceGroupId>rg-acfmxazb4ph6aiy</ResourceGroupId>
<RegionId>cn-hangzhou</RegionId>
<ServerCertificateName>test_certificate</ServerCertificateName>
<IsAliCloudCertificate>0</IsAliCloudCertificate>
<AliCloudCertificateName></AliCloudCertificateName>
<Fingerprint>cd:90:1b:7b:49:4d:1d:90:f6:01:de:9a:81:7d:31:a7:38:1d:84:8d</Fingerprint>
</ServerCertificate>
</ServerCertificates>
</DescribeServerCertificatesResponse>
```

JSON format

```
{
"RequestId": "6E8FAFB0-7262-492A-B7C2-B421FD4ADBFC",
"ServerCertificates": {
"ServerCertificate": [
{
"CreateTimeStamp": 1502155382000,
"ServerCertificateId": "1231579085529123_15dbf701d56_-417255761_616629763",
"RegionIdAlias": "cn-hangzhou",
"AliCloudCertificateId": "",
"CreateTime": "2017-08-08T01:23:02Z",
"ResourceGroupId": "rg-acfmxazb4ph6aiy",
"RegionId": "cn-hangzhou",
"ServerCertificateName": "cert-1502087065310",
"IsAliCloudCertificate": 0,
"AliCloudCertificateName": "",
"Fingerprint": "7c:32:e8:0c:9e:a9:f8:c9:4c:9b:af:cf:bb:57:ef:60:80:2a:97:ae"
},
{
"CreateTimeStamp": 1481623069000,
"ServerCertificateId": "1231579085529123_158f79de306",
"RegionIdAlias": "cn-hangzhou",
"AliCloudCertificateId": "0",
"CreateTime": "2016-12-13T09:57:49Z",
"ResourceGroupId": "rg-acfmxazb4ph6aiy",
"RegionId": "cn-hangzhou",
"ServerCertificateName": "test_certificate",
"IsAliCloudCertificate": 0,
"AliCloudCertificateName": "",
"Fingerprint": "cd:90:1b:7b:49:4d:1d:90:f6:01:de:9a:81:7d:31:a7:38:1d:84:8d"
}
]
}
}
```


SetServerCertificateName

Description

Configure a name for a server certificate.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value:

			SetServerCertificateName
ServerCertificateId	String	Yes	The ID of the server certificate.
ServerCertificateName	String	Yes	The name of the server certificate. The name must start with Chinese or English letters, and be 1-80 characters in length including underscores (_), periods (.), and en dashes (–).

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.

Example

Request example

```
https://slb.aliyuncs.com/?Action=SetServerCertificateName
&ServerCertificateId=139a00604ad-cn-east-hangzhou-01
&ServerCertificateName=abc
&<CommonParameters>
```

Response example

- XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetCertificateNameResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FE7BA984</RequestId>
</SetCertificateNameResponse>
```

- JSON format

```
{
```

"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FE7BA984"
}

UploadCACertificate

Description

Upload a CA certificate. You can only upload one certificate each time.

After a certificate is successfully uploaded, the certificate ID and fingerprint are returned.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: UploadCACertificate
RegionId	String	Yes	The ID of the region where the CA certificate is uploaded.
CACertificate	String	Yes	The contents of the CA certificate to upload.
CACertificateName	String	No	The name of the CA certificate.
ResourceGroupId	String	No	The ID of the enterprise resource group.

Response parameter

Name	Type	Description
RequestId	String	The ID of the request.
CACertificateId	String	The ID of the CA certificate.
CACertificateName	String	The name of the CA certificate.
Fingerprint	String	The fingerprint of the CA certificate.

CreateTime	String	The time at which the CA certificate is uploaded.
TimeStamp	Long	The time at which the CA certificate is uploaded.

Examples

Request example

```
https://slb.aliyuncs.com/?Action=UploadCACertificate
&RegionId=cn-east-hangzhou-01
&CACertificate=test
&CACertificateName=mycacert01
&<Common parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<UploadCACertificateResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<CACertificateId>idkp-234-cn-test-02</CACertificateId>
<CACertificateName>mycacert01</CACertificateName>
<Fingerprint>02:DF:AB:ED</Fingerprint>
</UploadCACertificateResponse>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"CACertificateId":"idkp-234-cn-test-02",
"CACertificateName":"mycacert01",
"Fingerprint":"02:DF:AB:ED"
}
```

DeleteCACertificate

Description

Delete a CA certificate.

Note: Cannot delete a CA certificate that is in sue.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DeleteCACertificate
RegionId	String	Yes	The ID of the region where the CA certificate is located.
CACertificateId	String	Yes	The ID of the CA certificate.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.

Examples

Request example

```
https://slb.aliyuncs.com/?Action=DeleteCACertificate
&RegionId=cn-east-hangzhou-01
&CACertificateId=idkp-234-cn-test-02
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DeleteCACertificateResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FF7BA984</RequestId>
</DeleteCACertificateResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FF7BA984"
}
```

DescribeCACertificates

Description

Query the CA certificates in a specified region.

Note: For security, only the fingerprints and names of the CA certificates are returned. The contents of the certificates are not returned.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeCACertificates
RegionId	String	Yes	The ID of the region where the CA certificate is located.
CACertificateId	String	No	The ID of the CA certificate.
ResourceGroupId	String	No	The ID of enterprise resource group.

Response parameter

Name	Type	Description

RequestId	String	The ID of the request.
CACertificates	List	The list of CA certificates, including the following items: - CACertificateIdThe ID of the CA certificate. - CACertificateNameThe name of the CA certificate. - RegionIdThe ID of region where the CA certificate is located. - FingerprintThe fingerprint of the CA certificate.

Examples

Request example

```
https://slb.aliyuncs.com/?Action=DescribeCACertificates
&RegionId=cn-east-hangzhou-01
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeCACertificatesResponse>
<RequestId>27E45AAA-1AAA-40B4-A039-526CC196A7F0</RequestId>
<CACertificates>
<CACertificate>
<CreateTimeStamp>1496592118000</CreateTimeStamp>
<CACertificateName>CA1</CACertificateName>
<CreateTime>2017-06-04T16:01:58Z</CreateTime>
<ResourceGroupId>rg-acfmxazb4ph6aiy</ResourceGroupId>
<RegionId>cn-hangzhou</RegionId>
<CACertificateId>1231579085529123_15c73d77203_-986300114_-2110544408</CACertificateId>
<Fingerprint>0d:f6:9e:ed:c2:6d:df:06:ac:af:82:fb:17:1b:5b:08:39:b3:d9:d0</Fingerprint>
</CACertificate>
</CACertificates>
</DescribeCACertificatesResponse>
```

JSON format


```
{
"RequestId":"27E45AAA-1AAA-40B4-A039-526CC196A7F0",
"CACertificates":{
"CACertificate":[
{
"CreateTimeStamp":1496592118000,
"CACertificateName":"CA1",
"CreateTime":"2017-06-04T16:01:58Z",
"ResourceGroupId":"rg-acfmxazb4ph6aiy",
"RegionId":"cn-hangzhou",
"CACertificateId":"1231579085529123_15c73d77203_-986300114_-2110544408",
"Fingerprint":"0d:f6:9e:ed:c2:6d:df:06:ac:af:82:fb:17:1b:5b:08:39:b3:d9:d0"
}
]
}
}
```


SetCACertificateName

Description

Configure a name for a CA certificate.

Request parameter

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: SetCACertificateName
RegionId	String	Yes	The ID of the region where the CA certificate is located.
CACertificateId	String	Yes	The ID of the CA certificate.
CACertificateName	String	Yes	The name of the CA certificate. The name must start with Chinese or English

			letters, and be 1-80 characters in length including underscores (_), periods (.), and en dashes (–).

Response parameters

Response parameter	Data type	Description
RequestId	String	The ID of the request.

Examples

Request example

```
https://slb.aliyuncs.com/?Action=SetCACertificateName
&CACertificateId=139a00604
&RegionId=cn-east-hangzhou-01
&CACertificateName=mycacert02
&<CommonParameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<SetCACertificateNameResponse>
<RequestId>CEF72CEB-54B6-4AE8-B225-F876FE7BA984</RequestId>
</SetCACertificateNameResponse>
```

JSON format

```
{
"RequestId":" CEF72CEB-54B6-4AE8-B225-F876FE7BA984"
}
```

Tags

AddTags

Description

Add tags for the specified Server Load Balancer instance.

Note:

You can bind up to 10 tags to a Server Load Balancer instance.

You can bind up to five pairs of tags once.

All the tag keys added to a Server Load Balancer instance cannot be the same.

If you add a tag of which the key is the same as that of an existing tag but the value is different, the new tag overwrites the existing one.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: AddTags
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
LoadBalancerID	String	Yes	The ID of the Server Load Balancer instance.
Tags	JSON String	Yes	The tags to add. A maximum of five tags can be contained.
Tags objects			

TagKey	String	Yes	The key of the tag. It can contain up to 64 characters, and cannot start with aliyun or be empty.
TagValue	String	No	The value of the tag. It can contain up to 128 characters and cannot start with aliyun.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.

Examples

Request example

```
https://slb.aliyuncs.com/
&Action=AddTags
&RegionId=cn-east-hangzhou-01
&LoadBalancerID=139a00604ad-cn-east-hangzhou-01
&Tags=[
{"TagKey":"Key1","TagValue":"Value1"}
{"TagKey":"Key2","TagValue":"Value2"}]
&<Common parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<AddTagsResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
</AddTagsResponse>
```

JSON format

```
{
```

```
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
}
```

DescribeTags

Description

Query tags.

Note:

You can query the tags by instance ID, tag key, and tag value.

The specified conditions are of “and” relation, and only tag sets meeting all specified conditions are returned.

If you specify the tag key but not the tag value, all tags associated with the tag key are queried.

You cannot specify only the tag value but not the tag key.

If you specify a tag key/tag value pair, the corresponding tag is exactly matched.

Request parameters

Name	Type	Required	Description
Action	String	Yes	The action to perform. Valid value: DescribeTags
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
LoadBalancerID	String	No	The ID of the Server Load Balancer instance.
Tags	JSON String	No	The tags to query.

PageSize	Integer	No	The default value is 50 and the maximum value is 100.
PageNumber	Integer	No	The page number of the instance list. The start value is 1 and the default value is 1.
Tags objects			
TagKey	String	Yes	The key of the tag. It can contain up to 64 characters, and cannot start with aliyun or be empty.
TagValue	String	No	The value of the tag. It can contain up to 128 characters, and cannot start with aliyun.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.
TagSets	List	The list of tags.
PageSize	Integer	The default value is 50 and the maximum value is 100.
PageNumber	Integer	The page number of the instance list. The start value is 1 and the default value is 1.
TotalCount	Integer	The total number of instances obtained according to the filtration conditions.
TagSet objects		
TagKey	String	The key of the tag.
TagValue	String	The value of the tag.
InstanceCount	Integer	The total number of instances bound to the tag.

Examples

Request example

```
https://slb.aliyuncs.com/
&Action=DescribeTags
&RegionId=cn-east-hangzhou-01
&LoadBalancerID=139a00604ad-cn-east-hangzhou-01
&<Common parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<DescribeTagsResponse>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
<TagSets>
<TagSet>
<TagKey>test</TagKey>
<TagValue>api</TagValue>
</TagSet>
</TagSets>
<PageSize>50</PageSize>
<PageNumber>1</PageNumber>
<TotalCount>1</TotalCount>
</DescribeTagsResponse>
```

JSON format

```
 {
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
"TagSets": {
"TagSet": [
{
"TagKey": "test",
"TagValue": "api"
}
"PageNumber": 1,
"PageSize": 50,
"TotalCount": 1
}
```

RemoveTags

Description

Unbind tags from the specified Server Load Balancer instance. All unbinding conditions are of the “and” relation.

Request parameters

Name	Type	Required	Description
Action	String	Yes	System required parameter. Valid value: RemoveTags
RegionId	String	Yes	The region ID of the Server Load Balancer instance.
LoadBalancerID	String	Yes	The ID of the Server Load Balancer instance.
Tags	JSON String	No	The tags to unbind.
Tags objects			
TagKey	String	Yes	The key of the tag. It can contain up to 64 characters, and cannot start with aliyun or be empty.
TagValue	String	No	The value of the tag. It can contain up to 128 characters and cannot start withaliyun.

Response parameters

Name	Type	Description
RequestId	String	The ID of the request.

Examples

Request example

```
https://slb.aliyuncs.com/
&Action=RemoveTags
&RegionId=cn-east-hangzhou-01
&LoadBalancerID=139a00604ad-cn-east-hangzhou-01
&Tags=[
{"TagKey":"Key1","TagValue":"Value1"}
{"TagKey":"Key2","TagValue":"Value2"}]
&<Common parameters>
```

Response example

XML format

```
<?xml version="1.0" encoding="UTF-8"?>
<RemoveTags>
<RequestId>365F4154-92F6-4AE4-92F8-7FF34B540710</RequestId>
</RemoveTags>
```

JSON format

```
{
"RequestId":"365F4154-92F6-4AE4-92F8-7FF34B540710",
}
```