

Alibaba Cloud

Bastion Host API Reference

Document Version: 20220711

Legal disclaimer

Alibaba Cloud reminds you to carefully read and fully understand the terms and conditions of this legal disclaimer before you read or use this document. If you have read or used this document, it shall be deemed as your total acceptance of this legal disclaimer.

1. You shall download and obtain this document from the Alibaba Cloud website or other Alibaba Cloud-authorized channels, and use this document for your own legal business activities only. The content of this document is considered confidential information of Alibaba Cloud. You shall strictly abide by the confidentiality obligations. No part of this document shall be disclosed or provided to any third party for use without the prior written consent of Alibaba Cloud.
2. No part of this document shall be excerpted, translated, reproduced, transmitted, or disseminated by any organization, company or individual in any form or by any means without the prior written consent of Alibaba Cloud.
3. The content of this document may be changed because of product version upgrade, adjustment, or other reasons. Alibaba Cloud reserves the right to modify the content of this document without notice and an updated version of this document will be released through Alibaba Cloud-authorized channels from time to time. You should pay attention to the version changes of this document as they occur and download and obtain the most up-to-date version of this document from Alibaba Cloud-authorized channels.
4. This document serves only as a reference guide for your use of Alibaba Cloud products and services. Alibaba Cloud provides this document based on the "status quo", "being defective", and "existing functions" of its products and services. Alibaba Cloud makes every effort to provide relevant operational guidance based on existing technologies. However, Alibaba Cloud hereby makes a clear statement that it in no way guarantees the accuracy, integrity, applicability, and reliability of the content of this document, either explicitly or implicitly. Alibaba Cloud shall not take legal responsibility for any errors or lost profits incurred by any organization, company, or individual arising from download, use, or trust in this document. Alibaba Cloud shall not, under any circumstances, take responsibility for any indirect, consequential, punitive, contingent, special, or punitive damages, including lost profits arising from the use or trust in this document (even if Alibaba Cloud has been notified of the possibility of such a loss).
5. By law, all the contents in Alibaba Cloud documents, including but not limited to pictures, architecture design, page layout, and text description, are intellectual property of Alibaba Cloud and/or its affiliates. This intellectual property includes, but is not limited to, trademark rights, patent rights, copyrights, and trade secrets. No part of this document shall be used, modified, reproduced, publicly transmitted, changed, disseminated, distributed, or published without the prior written consent of Alibaba Cloud and/or its affiliates. The names owned by Alibaba Cloud shall not be used, published, or reproduced for marketing, advertising, promotion, or other purposes without the prior written consent of Alibaba Cloud. The names owned by Alibaba Cloud include, but are not limited to, "Alibaba Cloud", "Aliyun", "HiChina", and other brands of Alibaba Cloud and/or its affiliates, which appear separately or in combination, as well as the auxiliary signs and patterns of the preceding brands, or anything similar to the company names, trade names, trademarks, product or service names, domain names, patterns, logos, marks, signs, or special descriptions that third parties identify as Alibaba Cloud and/or its affiliates.
6. Please directly contact Alibaba Cloud for any errors of this document.

Document conventions

Style	Description	Example
 Danger	A danger notice indicates a situation that will cause major system changes, faults, physical injuries, and other adverse results.	 Danger: Resetting will result in the loss of user configuration data.
 Warning	A warning notice indicates a situation that may cause major system changes, faults, physical injuries, and other adverse results.	 Warning: Restarting will cause business interruption. About 10 minutes are required to restart an instance.
 Notice	A caution notice indicates warning information, supplementary instructions, and other content that the user must understand.	 Notice: If the weight is set to 0, the server no longer receives new requests.
 Note	A note indicates supplemental instructions, best practices, tips, and other content.	 Note: You can use Ctrl + A to select all files.
>	Closing angle brackets are used to indicate a multi-level menu cascade.	Click Settings > Network > Set network type .
Bold	Bold formatting is used for buttons, menus, page names, and other UI elements.	Click OK .
<code>Courier font</code>	Courier font is used for commands	Run the <code>cd /d C:/window</code> command to enter the Windows system folder.
<i>Italic</i>	Italic formatting is used for parameters and variables.	<code>bae log list --instanceid</code> <i>Instance_ID</i>
[] or [a b]	This format is used for an optional value, where only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	This format is used for a required value, where only one item can be selected.	<code>switch {active stand}</code>

Table of Contents

1. List of operations by function	08
2. Make API requests	13
3. Request signatures	14
4. Enable a bastion host	17
4.1. CreateInstance	17
4.2. ModifyInstance	21
4.3. RenewInstance	25
4.4. SetRenewal	27
5. Instances	30
5.1. DescribeInstanceAttribute	30
5.2. DescribeInstances	32
5.3. ConfigInstanceSecurityGroups	37
5.4. ConfigInstanceWhiteList	39
5.5. StartInstance	40
5.6. EnableInstancePublicAccess	42
5.7. DisableInstancePublicAccess	43
5.8. ModifyInstanceAttribute	45
5.9. MoveResourceGroup	46
6. Tags	48
6.1. UntagResources	48
6.2. ListTagKeys	49
6.3. ListTagResources	52
7. Region	55
7.1. DescribeRegions	55
8. Hosts	60
8.1. CreateHost	60

8.2. GetHost	62
8.3. ListHosts	66
8.4. DeleteHost	70
8.5. ModifyHostsPort	71
8.6. ModifyHostsActiveAddressType	74
8.7. ModifyHost	77
9.Host groups	80
9.1. CreateHostGroup	80
9.2. GetHostGroup	81
9.3. ListHostGroups	83
9.4. ModifyHostGroup	86
9.5. DeleteHostGroup	87
9.6. AddHostsToGroup	89
9.7. RemoveHostsFromGroup	92
10.Host accounts	96
10.1. CreateHostAccount	96
10.2. GetHostAccount	99
10.3. ModifyHostAccount	101
10.4. DeleteHostAccount	104
10.5. ResetHostAccountCredential	106
11.Users	109
11.1. CreateUser	109
11.2. GetUser	112
11.3. ListUsers	116
11.4. ModifyUser	121
11.5. DeleteUser	124
11.6. LockUsers	126
11.7. UnlockUsers	129

12. User group	133
12.1. CreateUserGroup	133
12.2. GetUserGroup	135
12.3. ListUserGroups	137
12.4. ModifyUserGroup	139
12.5. DeleteUserGroup	141
12.6. AddUsersToGroup	142
12.7. RemoveUsersFromGroup	146
13. Host authorization	150
13.1. AttachHostAccountsToUser	150
13.2. ListHostsForUser	154
13.3. ListHostAccountsForUser	157
13.4. DetachHostAccountsFromUser	161
13.5. AttachHostAccountsToUserGroup	165
13.6. ListHostsForUserGroup	169
13.7. ListHostAccountsForUserGroup	173
13.8. DetachHostAccountsFromUserGroup	176
13.9. AttachHostGroupAccountsToUser	180
13.10. ListHostGroupsForUser	184
13.11. ListHostGroupAccountNamesForUser	187
13.12. DetachHostGroupAccountsFromUser	189
13.13. AttachHostGroupAccountsToUserGroup	193
13.14. ListHostGroupsForUserGroup	198
13.15. ListHostGroupAccountNamesForUserGroup	201
13.16. DetachHostGroupAccountsFromUserGroup	203
14. Asset management	208
14.1. CreateHostShareKey	208
14.2. ListHostShareKeys	209

14.3. ModifyHostShareKey	211
14.4. ListHostAccountsForHostShareKey	213
14.5. GetHostShareKey	216
14.6. DeleteHostShareKey	217
14.7. AttachHostAccountsToHostShareKey	219
14.8. DetachHostAccountsFromHostShareKey	221
15. System settings	224
15.1. GetInstanceADAuthServer	224
15.2. GetInstanceTwoFactor	227
15.3. ModifyInstanceTwoFactor	229
15.4. GetInstanceLDAPAuthServer	231
15.5. ModifyInstanceADAuthServer	234
15.6. ModifyInstanceLDAPAuthServer	237

1. List of operations by function

The following tables list the API operations available for use in Bastionhost.

Bastionhost provides the following types of API operations:

- [Bastion hosts](#) (available only for bastion hosts that run V3.2.X)
- [Tags](#) (available only for bastion hosts that run V3.2.X)
- [Regions](#) (available only for bastion hosts that run V3.2.X)
- [Hosts](#) (available only for bastion hosts that run V3.2.17 and later versions)
- [Hosts](#) (available only for bastion hosts that run V3.2.17 and later versions)
- [Host accounts](#) (available only for bastion hosts that run V3.2.17 and later versions)
- [Users](#) (available only for bastion hosts that run V3.2.17 and later versions)
- [User groups](#) (available only for bastion hosts that run V3.2.17 and later versions)
- [Host authorization](#) (available only for bastion hosts that run V3.2.17 and later versions)
- [Asset management](#) (available only for bastion hosts that run V3.2.X)
- [System settings](#) (available only for bastion hosts that run V3.2.X)

Purchase of bastion hosts

Operation	Description
CreateInstance	Bastionhost does not provide an API operation to create a bastion host. To create a bastion host, you can call the CreateInstance operation of the transactions and bills management API to create a bastion host. This API is called BSS API for short.
ModifyInstance	Bastionhost does not provide an API operation to modify the specifications of a bastion host. To modify the specifications of a bastion host, you can call the ModifyInstance operation of the BSS API.
RenewInstance	Bastionhost does not provide an API operation to renew a bastion host. To renew a bastion host, you can call the RenewInstance operation of the BSS API.
SetRenewal	Bastionhost does not provide an API operation to configure auto-renewal for a bastion host. To configure auto-renewal for a bastion host, you can call the SetRenewal operation of the BSS API.

Bastion hosts (available only for bastion hosts that run V3.2.X)

Operation	Description
DescribeInstanceAttribute	Queries the details of a specified bastion host.
DescribeInstances	Queries bastion hosts.
ConfigInstanceSecurityGroups	Configures security groups for a specified bastion host.
ConfigInstanceWhiteList	Configures a whitelist of public IP addresses for a specified bastion host.
StartInstance	Starts a specified bastion host.
EnableInstancePublicAccess	Enables Internet access to a specified bastion host.

Operation	Description
DisableInstancePublicAccess	Disables Internet access to a specified bastion host.
ModifyInstanceAttribute	Modifies the information about a specified bastion host.
MoveResourceGroup	Moves a specified bastion host from one resource group to another resource group.

Tags (available only for bastion hosts that run V3.2.X)

Operation	Description
ListTagKeys	Queries the tags that are added to bastion hosts.
ListTagResources	Queries the tags that are added to one or more bastion hosts.
UntagResources	Removes the tags from specified bastion hosts and deletes the tags at a time.
TagResources	Creates and adds tags to specified bastion hosts.

Regions (available only for bastion hosts that run V3.2.X)

Operation	Description
DescribeRegions	Queries the regions in which you can create bastion hosts.

Hosts (available only for bastion hosts that run V3.2.17 and later versions)

Operation	Description
CreateHost	Creates a host for O&M in a specified bastion host.
GetHost	Queries the details of a specified host.
ListHosts	Queries the hosts in a specified bastion host.
DeleteHost	Deletes a specified host.
ModifyHostsPort	Changes the service port of one or more hosts.
ModifyHostsActiveAddressType	Changes the endpoint type of one or more hosts for O&M.
ModifyHost	Modifies the basic information about a specified host.

Hosts (available only for bastion hosts that run V3.2.17 and later versions)

Operation	Description
CreateHostGroup	Creates a host group.
GetHostGroup	Queries the details of a specified host group.
ListHostGroups	Queries the host groups in a specified bastion host.

Operation	Description
ModifyHostGroup	Modifies the name or description of a specified host group.
DeleteHostGroup	Deletes a specified host group.
AddHostsToGroup	Adds one or more hosts to a specified host group.
RemoveHostsFromGroup	Removes one or more hosts from a specified host group.

Host accounts (available only for bastion hosts that run V3.2.17 and later versions)

Operation	Description
CreateHostAccount	Creates an account for a specified host.
GetHostAccount	Queries the details of a specified host account.
ListHostAccounts	Queries the host accounts.
ModifyHostAccount	Modifies the information about a specified host account, such as the name, password, and private key.
DeleteHostAccount	Deletes a specified host account.
ResetHostAccountCredential	Deletes the logon credential of a specified host account. The logon credential can be the password or Secure Shell (SSH) private key.

Users (available only for bastion hosts that run V3.2.17 and later versions)

Operation	Description
CreateUser	Creates a user for a specified bastion host.
GetUser	Queries the details of a user of a specified bastion host.
ListUsers	Queries the users of a specified bastion host.
ModifyUser	Modifies the information about a specified user of a specified bastion host.
DeleteUser	Deletes a specified user from a specified bastion host.
LockUsers	Locks one or more users of a specified bastion host.
UnlockUsers	Unlocks one or more users of a specified bastion host.

User groups (available only for bastion hosts that run V3.2.17 and later versions)

Operation	Description
CreateUserGroup	Creates a user group in a specified bastion host.
GetUserGroup	Queries the details of a specified user group in a specified bastion host.

Operation	Description
ListUserGroups	Queries the user groups in a specified bastion host.
ModifyUserGroup	Modifies the information about a specified user group.
DeleteUserGroup	Deletes a specified user group from a specified bastion host.
AddUsersToGroup	Adds one or more users to a specified user group.
RemoveUsersFromGroup	Removes one or more users from a specified user group.

Host authorization (available only for bastion hosts that run V3.2.17 and later versions)

Operation	Description
AttachHostAccountsToUser	Authorizes a specified user to manage one or more hosts and host accounts.
ListHostsForUser	Queries the hosts that a specified user is authorized or not authorized to manage.
ListHostAccountsForUser	Queries the host accounts that a specified user is authorized to manage on a specified host.
DetachHostAccountsFromUser	Revokes the permissions on one or more hosts and host accounts from a specified user.
AttachHostAccountsToUserGroup	Authorizes a specified user group to manage one or more hosts and host accounts.
ListHostsForUserGroup	Queries the hosts that a specified user group is authorized or not authorized to manage.
ListHostAccountsForUserGroup	Queries the host accounts that a specified user group is authorized to manage on a specified host.
DetachHostAccountsFromUserGroup	Revokes the permissions on one or more hosts and host accounts from a specified user group.
AttachHostGroupAccountsToUser	Authorizes a specified user to manage one or more host groups and host accounts.
ListHostGroupsForUser	Queries the host groups that a specified user is authorized or not authorized to manage.
ListHostGroupAccountNamesForUser	Queries the names of the host accounts that a specified user is authorized to manage in a specified host group.
DetachHostGroupAccountsFromUser	Revokes permissions on one or more host groups and host accounts from a specified user.
AttachHostGroupAccountsToUserGroup	Authorizes a specified user group to manage one or more host groups and host accounts.
ListHostGroupsForUserGroup	Queries the host groups that a specified user group is authorized or not authorized to manage.

Operation	Description
ListHostGroupAccountNamesForUserGroup	Queries the names of the host accounts that a specified user group is authorized to manage in a single host group.
DetachHostGroupAccountsFromUserGroup	Revokes permissions on one or more host groups and host accounts from a specified user group.

Asset management (available only for bastion hosts that run V3.2.X)

Operation	Description
CreateHostShareKey	Creates a shared key.
ListHostShareKeys	Queries the shared keys that are associated with a host.
ModifyHostShareKey	Modifies the information about a shared key.
ListHostAccountsForHostShareKey	Queries the host accounts that are associated with a shared key.
GetHostShareKey	Queries the details of a shared key.
DeleteHostShareKey	Deletes a shared key.
AttachHostAccountsToHostShareKey	Binds host accounts to a shared key.
DetachHostAccountsFromHostShareKey	Unbinds host accounts from a shared key.

System settings (available only for bastion hosts that run V3.2.X)

Operation	Description
GetInstanceADAuthServer	Queries the settings of Active Directory (AD) authentication on a bastion host.
GetInstanceTwoFactor	Queries the settings of two-factor authentication on a bastion host.
ModifyInstanceTwoFactor	Modifies the settings of two-factor authentication on a bastion host.
GetInstanceLDAPAuthServer	Queries the settings of Lightweight Directory Access Protocol (LDAP) authentication on a bastion host.
ModifyInstanceADAuthServer	Modifies the settings of Active Directory (AD) authentication on a bastion host.
ModifyInstanceLDAPAuthServer	Modifies the settings of Lightweight Directory Access Protocol (LDAP) authentication on a bastion host.

2. Make API requests

To send a Bastionhost API request, you must send an HTTP GET request to the Bastionhost endpoint. You must also add the request parameters that correspond to the API operation being called. After you call the API operation, the system returns a response. The request and response are encoded in UTF-8.

Request structure

Bastionhost API operations use the RPC protocol. You can call Bastionhost API operations by sending HTTP GET requests.

The request uses the following syntax:

```
http://Endpoint/?Action=xx&Parameters
```

where:

- **Endpoint:** The endpoint of the Bastionhost API is *yundun-bastionhost.aliyuncs.com*.

 **Note** The endpoint of the Bastionhost API in a region is the value of the RegionEndpoint parameter of the region returned by the DescribeRegions operation.

- **Action:** the name of the operation being performed. For example, to query created bastion hosts, you must set the Action parameter to DescribeInstances.
- **Version:** the version number of the API to be used. Set the value to *2019-12-09*.
- **Parameters:** the request parameters for the operation. Separate multiple parameters with ampersands (`&`).

Request parameters include both common parameters and operation-specific parameters. Common parameters include information such as the API version number and verification information. For more information, see [Common parameters](#).

The following example demonstrates how to call the DescribeInstances operation to query created bastion hosts:

 **Note** The sample requests are formatted to improve readability.

```
https://yundun-bastionhost.aliyuncs.com/?Action=DescribeInstances
&Format=JSON
&RegionId=cn-hangzhou
&SecureTransport=true
&SignatureMethod=HMAC-SHA1
&SignatureNonce=a5b43544e806d8aab613c2056ee6****
&SignatureVersion=1.0
&SourceIp=42.120.XX.XX
&Timestamp=2020-05-29T03%3A17%3A03Z
&Version=2019-12-09
&Signature=nYUmXEzEmxY52u6Sg8X8%2FkMVDt****
...
```

3. Request signatures

You must sign all API requests to ensure security. Alibaba Cloud uses the request signature to verify the identity of the API caller. Each API request must contain the signature, regardless of whether the request is sent over HTTP or HTTPS.

Overview

To call a remote procedure call (RPC) API operation, you must add the signature to the Bastionhost API request in the following format:

```
https://Endpoint/?SignatureVersion=1.0&SignatureMethod=HMAC-SHA1&Signature=CT9X0VtwR86fNWSnsc6v8YGOj  
uE%3D&SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf
```

where:

- **SignatureMethod**: the encryption method of the signature string. Set the value to HMAC-SHA1.
- **SignatureVersion**: the version of the signature encryption algorithm. Set the value to 1.0.
- **SignatureNonce**: a unique, random number used to prevent replay attacks. You must use different numbers for different requests. We recommend that you use universally unique identifiers (UUIDs).
- **Signature**: the signature generated after the request is symmetrically encrypted by using the AccessKey secret.

Procedure

The HMAC-SHA1 algorithm specified in RFC 2104 is used for encryption. The AccessKey secret is used to calculate the hash-based message authentication code (HMAC) value of an encoded and formatted query string. The HMAC value is then used as the signature. Request signatures include operation-specific parameters. Therefore, the signature of a request varies depending on the request parameters.

```
Signature = Base64( HMAC-SHA1( AccessSecret, UTF-8-Encoding-Of(  
StringToSign)) )
```

To calculate a signature, perform the following steps:

1. Compose and encode a string-to-sign.
 - i. Use the request parameters to construct a canonicalized query string.
 - a. Create a canonicalized query string by arranging the request parameters (including all common and operation-specific parameters except Signature) in alphabetical order.

If you use the GET method to submit the request, these parameters are the part located after the question mark (?) and connected by the ampersands (&) in the request URI.

- b. Encode the canonicalized query string in UTF-8. The following table describes the encoding rules.

Character	Encoding rule
Uppercase letters, lowercase letters, digits, and some special characters such as hyphens (-), underscores (_), periods (.), and tildes (~)	These characters do not need to be encoded.
Other characters	These characters must be percent encoded in the <code>%XY</code> format. <code>XY</code> represents the ASCII code of the characters in hexadecimal notation. For example, double quotation marks (") are encoded as <code>%22</code> .
Extended UTF-8 characters	These characters must be percent encoded in the <code>%XY%ZA...</code> format.
Spaces	Spaces must be encoded as <code>%20</code>. Do not encode spaces as plus signs (+). This encoding rule is different from the rule that is used to encode data in the common Multi-purpose Internet Mail Extensions (MIME) format <code>application/x-www-form-urlencoded</code>. For example, <code>java.net.URLEncoder</code> in the standard Java library is in this MIME format. However, you can apply the MIME encoding algorithm and then replace the plus sign (+) in the encoded string with <code>%20</code>, the asterisk (*) with <code>%2A</code>, and <code>%7E</code> with the tilde (~). To do this, you can use the following <code>percentEncode</code> method: <pre>private static final String ENCODING = "UTF-8"; private static String percentEncode(String value) throws UnsupportedEncodingException { return value != null ? URLEncoder.encode(value, ENCODING).replace("+", "%20").replace("*", "%2A").replace("%7E", "~") : null; }</pre>

- c. Connect the encoded parameter names and values by using equal signs (=).
- d. Sort the parameter name and value pairs in the order specified in Step 1.1. Then, concatenate the pairs with ampersands (&) to obtain the canonicalized query string.

- ii. Create a string-to-sign from the encoded canonicalized query string.

```
StringToSign=
    HTTPMethod + "&" +
    percentEncode("/") + "&" +
    percentEncode(CanonicalizedQueryString)
```

where:

- HTTPMethod: specifies the HTTP method used to make the request, such as GET.
- percentEncode("/") : encodes forward slashes (/) as %2F based on the URL encoding rule described in Step 1.1.
- percentEncode(CanonicalizedQueryString): encodes the canonicalized query string based on the URL encoding rule described in Step 1.2.

2. Obtain the signature.

- i. Calculate the HMAC value of the string-to-sign as defined in RFC 2104.

 **Note** Use the SHA1 algorithm to calculate the HMAC value of the string-to-sign. The combination of your AccessKey secret and an ampersand (&) (ASCII code 38) is used as the key for the HMAC calculation.

- ii. Encode the HMAC value in Base64 to obtain the signature string.
 - iii. Add the signature string to the request as the Signature parameter.

 **Note** If the obtained signature string is submitted as the final value of a request parameter, the value must be URL-encoded based on the rules defined in [RFC 3986](#). Other parameters are also encoded based on the same rules.

Signature example

Take the DescribeRegions operation as an example. Assume that `AccessKeyId` is `testid` and `AccessKeySecret` is `testsecret`. The following URL needs to be signed:

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

The following signature string calculated by using `testsecret&` is returned:

```
OLeaidS1JvxuMvnyHOwuJ+uX5qY=
```

Add the signature string to the request as the Signature parameter. The following signed URL is obtained:

```
http://ecs.aliyuncs.com/?SignatureVersion=1.0&Action=DescribeRegions&Format=XML&SignatureNonce=3ee8c1b8-83d3-44af-a94f-4e0ad82fd6cf&Version=2014-05-26&AccessKeyId=testid&Signature=OLeaidS1JvxuMvnyHOwuJ+uX5qY=&SignatureMethod=HMAC-SHA1&Timestamp=2016-02-23T12:46:24Z
```

4.Enable a bastion host

4.1. CreateInstance

Bastionhost does not provide an API operation to create a bastion host. However, you can call the CreateInstance operation supported by the transactions and bills management API to create a bastion host. This API is also called BSS API for short.

Background information

The BSS API is a set of common operations used to manage Alibaba Cloud resources. For example, you can call the operations to query service prices, manage instances, or obtain bills. For more information about the operations of the BSS API, see [API Overview](#).

You can call the [CreateInstance](#) operation of the BSS API to create a bastion host. For more information about how to call the operation, see [Request Structure](#).

This topic describes how to call the CreateInstance operation to create a bastion host and provides examples.

Debugging

[OpenAPI Explorer](#) automatically calculates the signature value. For your convenience, we recommend that you call this operation in [OpenAPI Explorer](#). [OpenAPI Explorer](#) dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateInstance	The operation that you want to perform. Set the value to CreateInstance.
Parameter.1.Code	String	Yes	RegionId	The code of the first attribute for the bastion host. Set the value to RegionId , which indicates the region in which the bastion host is deployed.
Parameter.1.Value	String	Yes	cn-shanghai	The value of the first attribute for the bastion host. Set the value to the ID of the region in which the bastion host is deployed. You can call the DescribeRegions operation to query the region IDs supported by Bastionhost.
Parameter.2.Code	String	Yes	NetworkType	The code of the second attribute for the bastion host. Set the value to NetworkType , which indicates the network type of the bastion host.
Parameter.2.Value	String	Yes	vpc	The value of the second attribute for the bastion host. Set the value to vpc , which indicates that the bastion host is deployed in a virtual private cloud (VPC).
Parameter.3.Code	String	Yes	PlanCode	The code of the third attribute for the bastion host. Set the value to PlanCode , which indicates the edition of the bastion host.

Parameter	Type	Required	Example	Description
Parameter.3.Value	String	Yes	cloudbastion	The value of the third attribute for the bastion host. Set the value to the edition that you want to use. Valid values: • cloudbastion: Basic Edition • cloudbastion_ha: HA Edition
Parameter.4.Code	String	Yes	LicenseCode	The code of the fourth attribute for the bastion host. Set the value to LicenseCode , which indicates the plan of the bastion host. The plan determines the number of the assets that can be managed by the bastion host.
Parameter.4.Value	String	Yes	bhah_ult_5000_asset	The value of the fourth attribute for the bastion host. Set the value to the plan that you want to use. Valid values: • bhah_ent_50_asset: A total of 50 assets can be managed by a bastion host of the Basic Edition or HA Edition. • bhah_ent_100_asset: A total of 100 assets can be managed by a bastion host of the Basic Edition or HA Edition. • bhah_ent_200_asset: A total of 200 assets can be managed by a bastion host of the Basic Edition or HA Edition. • bhah_ult_500_asset: A total of 500 assets can be managed by a bastion host of the Basic Edition or HA Edition. • bhah_ult_1000_asset: A total of 1,000 assets can be managed by a bastion host of the HA Edition. • bhah_ult_2000_asset: A total of 2,000 assets can be managed by a bastion host of the HA Edition. • bhah_ult_5000_asset: A total of 5,000 assets can be managed by a bastion host of the HA Edition. • bhah_ult_10000_asset: A total of 10,000 assets can be managed by a bastion host of the HA Edition.
Parameter.5.Code	String	Yes	Storage	The code of the fifth attribute for the bastion host. Set the value to Storage , which indicates the storage capacity of the bastion host.
Parameter.5.Value	String	Yes	5	The value of the fifth attribute for the bastion host. Set the value to the storage capacity that you want to use. Valid values: 0 to 500. Unit: TB.

Parameter	Type	Required	Example	Description
Parameter.6.Code	String	Yes	Bandwidth	The code of the sixth attribute for the bastion host. Set the value to Bandwidth , which indicates the bandwidth of the bastion host.
Parameter.6.Value	String	Yes	5	The value of the sixth attribute for the bastion host. Set the value to the bandwidth that you want to use. Valid values: 0 to 500. Unit: Mbit/s.
ProductCode	String	Yes	bastionhost	The service code of the bastion host. Set the value to bastionhost , which indicates Bastionhost.
SubscriptionType	String	Yes	Subscription	The billing method of the bastion host. Set the value to Subscription .
ProductType	String	No	bastionhost	The service type of the bastion host. Set the value to bastionhost , which indicates Bastionhost.
RenewPeriod	Integer	No	12	The auto-renewal period. Unit: months. Note If you set the RenewalStatus parameter to AutoRenewal , this parameter is required.
Period	Integer	Yes	12	The subscription period. Unit: months. The value must be a multiple of 12. Note If you want to create a subscription bastion host, this parameter is required.
RenewalStatus	String	No	ManualRenewal	The method that is used to renew the bastion host. Valid values: AutoRenewal ManualRenewal Default value: ManualRenewal .
ClientToken	String	No	JASIOFKVNV****	The client token that is used to ensure the idempotence of the request. The server checks whether a request with the same client token has been received. If so, the server returns the query result of the last request.

Response parameters

Parameter	Type	Example	Description
Code	String	Success	The status code.
Data	Struct		The returned information.
↳ InstanceId	String	bastionhost-cn-****	The ID of the bastion host.
↳ OrderId	String	20240****	The ID of the order.
Message	String	Successful!	The message returned for Code .
RequestId	String	6000EE23-274B-4E07-A697-FF2E999520A4	The ID of the request.
Success	Boolean	true	Indicates whether the request is successful. Valid values: • true: The request is successful. • false: The request failed.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=CreateInstance
&Parameter.1.Code=RegionId
&Parameter.1.Value=cn-shanghai
&Parameter.2.Code=NetworkType
&Parameter.2.Value=vpc
&Parameter.3.Code=PlanCode
&Parameter.3.Value=cloudbastion
&Parameter.4.Code=LicenseCode
&Parameter.4.Value=bhah_ult_5000_asset
&Parameter.5.Code=Storage
&Parameter.5.Value=5
&Parameter.6.Code=Bandwidth
&Parameter.6.Value=5
&ProductCode=bastionhost
&SubscriptionType=Subscription
&Period=12
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateInstanceResponse>
  <Message>Successful!</Message>
  <RequestId>6000EE23-274B-4E07-A697-FF2E999520A4</RequestId>
  <Success>true</Success>
  <Code>Success</Code>
  <Data>
    <InstanceId>bastionhost-cn-****</InstanceId>
    <OrderId>20240****</OrderId>
  </Data>
</CreateInstanceResponse>
```

JSON format

```
{
  "Message": "Successful!",
  "RequestId": "6000EE23-274B-4E07-A697-FF2E999520A4",
  "Success": true,
  "Code": "Success",
  "Data": {
    "InstanceId": "bastionhost-cn-****",
    "OrderId": "20240****"
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

4.2. ModifyInstance

Bastionhost does not provide an API operation to modify the specifications of a bastion host. However, you can call the ModifyInstance operation supported by the transactions and bills management API to modify the specifications of a bastion host. This API is also called BSS API for short.

Background information

The BSS API is a set of common operations used to manage Alibaba Cloud resources. For example, you can call the operations to query service prices, manage instances, or obtain bills. For more information about the operations of the BSS API, see [API Overview](#).

You can call the [ModifyInstance](#) operation to modify the specifications of a bastion host. For more information about how to call the operation, see [Request Structure](#).

This topic describes how to call the ModifyInstance operation to modify the specifications of a bastion host and provides examples.

Debugging

[OpenAPI Explorer](#) automatically calculates the signature value. For your convenience, we recommend that you call this operation in [OpenAPI Explorer](#). [OpenAPI Explorer](#) dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyInstance	The operation that you want to perform. Set the value to ModifyInstance.
ModifyType	String	Yes	Upgrade	The type of modification that you want to perform on the bastion host. Set the value to Upgrade , which indicates an upgrade of the bastion host.
Parameter.1.Code	String	Yes	RegionId	The code of the first attribute for the bastion host. Set the value to RegionId , which indicates the region in which the bastion host is deployed.

Parameter	Type	Required	Example	Description
Parameter.1.Value	String	Yes	cn-shanghai	The value of the first attribute for the bastion host. Set the value to the ID of the region in which the bastion host is deployed. You can call the DescribeRegions operation to query the region IDs supported by Bastionhost.
Parameter.2.Code	Yes	String	NetworkType	The code of the second attribute for the bastion host. Set the value to NetworkType , which indicates the network type of the bastion host.
Parameter.2.Value	String	Yes	vpc	The value of the second attribute for the bastion host. Set the value to vpc , which indicates that the bastion host is deployed in a virtual private cloud (VPC).
Parameter.3.Code	String	Yes	PlanCode	The code of the third attribute for the bastion host. Set the value to PlanCode , which indicates the edition of the bastion host.
Parameter.3.Value	String	Yes	cloudbastion	The value of the third attribute for the bastion host. Set the value to the edition that you want to use. Valid values: • cloudbastion: Basic Edition • cloudbastion_ha: HA Edition
Parameter.4.Code	String	Yes	LicenseCode	The code of the fourth attribute for the bastion host. Set the value to LicenseCode , which indicates the plan of the bastion host. The plan determines the number of the assets that can be managed by the bastion host.

Parameter	Type	Required	Example	Description
Parameter.4.Value	String	Yes	bhah_ult_5000_asset	The value of the fourth attribute for the bastion host. Set the value to the plan that you want to use. Valid values: • bhah_ent_50_asset: A total of 50 assets can be managed by a bastion host of the Basic Edition or HA Edition. • bhah_ent_100_asset: A total of 100 assets can be managed by a bastion host of the Basic Edition or HA Edition. • bhah_ent_200_asset: A total of 200 assets can be managed by a bastion host of the Basic Edition or HA Edition. • bhah_ult_500_asset: A total of 500 assets can be managed by a bastion host of the Basic Edition or HA Edition. • bhah_ult_1000_asset: A total of 1,000 assets can be managed by a bastion host of the HA Edition. • bhah_ult_2000_asset: A total of 2,000 assets can be managed by a bastion host of the HA Edition. • bhah_ult_5000_asset: A total of 5,000 assets can be managed by a bastion host of the HA Edition. • bhah_ult_10000_asset: A total of 10,000 assets can be managed by a bastion host of the HA Edition.
Parameter.5.Code	String	Yes	Storage	The code of the fifth attribute for the bastion host. Set the value to Storage , which indicates the storage capacity of the bastion host.
Parameter.5.Value	String	Yes	5	The value of the fifth attribute for the bastion host. Set the value to the storage capacity that you want to use. Valid values: 0 to 500. Unit: TB.
Parameter.6.Code	String	Yes	Bandwidth	The value of the sixth attribute for the bastion host. Set the value to the bandwidth that you want to use. Valid values: 0 to 500. Unit: Mbit/s.
Parameter.6.Value	String	Yes	5	The value of the sixth attribute for the bastion host. Set the value to the bandwidth that you want to use. Valid values: 0 to 500. Unit: Mbit/s.
ProductCode	String	Yes	bastionhost	The service code of the bastion host. Set the value to bastionhost , which indicates Bastionhost.
SubscriptionType	String	Yes	Subscription	The billing method of the bastion host. Set the value to Subscription .

Parameter	Type	Required	Example	Description
ProductType	String	No	bastionhost	The service type of the bastion host. Set the value to bastionhost , which indicates Bastionhost.
InstanceId	String	Yes	bastionhost-cn-****	The ID of the bastion host.
ClientToken	String	No	JASIOFKVNV****	The client token that is used to ensure the idempotence of the request. The server checks whether a request with the same client token has been received. If so, the server returns the query result of the last request.

Response parameters

Parameter	Type	Example	Description
Code	String	Success	The status code.
Data	Struct		The returned information.
└─InstanceId	String	bastionhost-cn-****	The ID of the bastion host.
└─OrderId	String	2026532523****	The ID of the order.
Message	String	Successful!	The message returned for Code.
RequestId	String	6000EE23-274B-4E07-A697-FF2E999520A4	The ID of the request.
Success	Boolean	true	Indicates whether the request is successful.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyInstance
&Parameter.1.Code=RegionId
&Parameter.1.Value=cn-shanghai
&Parameter.2.Code=NetworkType
&Parameter.2.Value=vpc
&Parameter.3.Code=PlanCode
&Parameter.3.Value=cloudbastion
&Parameter.4.Code=LicenseCode
&Parameter.4.Value=bhah_ult_5000_asset
&Parameter.5.Code=Storage
&Parameter.5.Value=5
&Parameter.6.Code=Bandwidth
&Parameter.6.Value=5
&ProductCode=bastionhost
&SubscriptionType=Subscription
&Period=12
&<Common request parameters>
```

Sample success responses

XML format

```
<ModifyInstanceResponse>
  <Message>Successful!</Message>
  <RequestId>6000EE23-274B-4E07-A697-FF2E999520A4</RequestId>
  <Success>true</Success>
  <Code>Success</Code>
  <Data>
    <OrderId>2026532523****</OrderId>
  </Data>
</ModifyInstanceResponse>
```

JSON format

```
{
  "Message": "Successful!",
  "RequestId": "6000EE23-274B-4E07-A697-FF2E999520A4",
  "Success": true,
  "Code": "Success",
  "Data": {
    "OrderId": "2026532523****"
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

4.3. RenewInstance

Bastionhost does not provide an API operation to renew a bastion host. However, you can call the `RenewInstance` operation supported by the transactions and bills management API to renew a bastion host. This API is also called BSS API for short.

Background information

The BSS API is a set of common operations used to manage Alibaba Cloud resources. For example, you can call the operations to query service prices, manage instances, or obtain bills. For more information about the operations of the BSS API, see [API Overview](#).

You can call the `RenewInstance` operation to renew a bastion host. For more information about how to call the operation, see [Request Structure](#).

This topic describes how to call the `RenewInstance` operation to renew a bastion host and provides examples.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	RenewInstance	The operation that you want to perform. Set the value to RenewInstance .

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-****	The ID of the bastion host.
ProductCode	String	Yes	bastionhost	The service code of the bastion host. Set the value to bastionhost , which indicates Bastionhost.
RenewPeriod	Integer	Yes	6	The renewal period of the subscription bastion host. Unit: months. Valid values: • 1~9 • 12 • 24 • 36
ProductType	String	No	bastionhost	The service type of the bastion host. Set the value to bastionhost , which indicates Bastionhost.
ClientToken	String	No	JASIOFKVNV****	The client token that is used to ensure the idempotence of the request. The server checks whether a request with the same client token has been received. If so, the server returns the query result of the last request.

Response parameters

Parameter	Type	Example	Description
Code	String	Success	The status code.
Data	Struct		The returned information.
↳ OrderId	String	2026532523****	The ID of the order.
Message	String	Successful!	The message returned for Code .
RequestId	String	6000EE23-274B-4E07-A697-FF2E999520A4	The ID of the request.
Success	Boolean	true	Indicates whether the request is successful.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=RenewInstance
&InstanceId=bastionhost-cn-****
&ProductCode=bastionhost
&RenewPeriod=6
&<Common request parameters>
```

Sample success responses

XML format

```
<RenewInstanceResponse>
  <Message>Successful!</Message>
  <RequestId>6000EE23-274B-4E07-A697-FF2E999520A4</RequestId>
  <Success>true</Success>
  <Code>Success</Code>
  <Data>
    <OrderId>2026532523****</OrderId>
  </Data>
</RenewInstanceResponse>
```

JSON format

```
{
  "Message": "Successful!",
  "RequestId": "6000EE23-274B-4E07-A697-FF2E999520A4",
  "Success": true,
  "Code": "Success",
  "Data": {
    "OrderId": "2026532523****"
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

4.4. SetRenewal

Bastionhost does not provide an API operation to enable auto-renewal for a bastion host. However, you can call the SetRenewal operation supported by the transactions and bills management API to enable auto-renewal for a bastion host. This API is also called BSS API for short.

Background information

The BSS API is a set of common operations used to manage Alibaba Cloud resources. For example, you can call the operations to query service prices, manage instances, or obtain bills. For more information about the operations of the BSS API, see [API Overview](#).

You can call the [SetRenewal](#) operation to enable auto-renewal for a bastion host. For more information about how to call the operation, see [Request Structure](#).

This topic describes how to call the SetRenewal operation to enable auto-renewal for a bastion host and provides examples.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	SetRenewal	The operation that you want to perform. Set the value to SetRenewal .

Parameter	Type	Required	Example	Description
InstanceIds	String	Yes	bastionhost-cn-****	The ID of the bastion host. If you enter multiple IDs, separate them with commas (.). You can enable auto-renewal only for subscription bastion hosts. You can enter a maximum of 100 IDs.
RenewalStatus	String	Yes	AutoRenewal	The method that is used to renew the bastion host. Valid values: • AutoRenewal • ManualRenewal • NotRenewal
RenewalPeriod	Integer	No	1	The auto-renewal period. Valid values: • 1 • 2 • 3 • 6  Note You can specify this parameter only when you set RenewalPeriodUnit to M.  Note If you set RenewalStatus to AutoRenewal, this parameter is required.
RenewalPeriodUnit	String	No	M	The unit of the auto-renewal period. Valid values: • M: months • Y: years  Note If you set RenewalStatus to AutoRenewal, this parameter is required.
ProductCode	String	No	bastionhost	The service code of the bastion host. Set the value to bastionhost , which indicates Bastionhost.
ProductType	String	No	bastionhost	The service type of the bastion host. Set the value to bastionhost , which indicates Bastionhost.
SubscriptionType	String	No	Subscription	The billing method of the bastion host. Set the value to Subscription .

Response parameters

Parameter	Type	Example	Description
Code	String	Success	The status code.
Message	String	Successful!	The message returned for Code .
RequestId	String	6000EE23-274B-4E07-A697-FF2E999520A4	The ID of the request.
Success	Boolean	true	Indicates whether the request is successful.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=SetRenewal
&InstanceIDs=bastionhost-cn-****
&RenewalStatus=AutoRenewal
&RenewalPeriod=1
&RenewalPeriodUnit=M
&<Common request parameters>
```

Sample success responses

XML format

```
<SetRenewalResponse>
  <Message>Successful!</Message>
  <RequestId>6000EE23-274B-4E07-A697-FF2E999520A4</RequestId>
  <Success>true</Success>
  <Code>Success</Code>
</SetRenewalResponse>
```

JSON format

```
{
  "Message": "Successful!",
  "RequestId": "6000EE23-274B-4E07-A697-FF2E999520A4",
  "Success": true,
  "Code": "Success"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

5.Instances

5.1. DescribeInstanceAttribute

Queries the details about an instance, such as instance ID and description.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DescribeInstanceAttribute	The operation that you want to perform. Set the value to DescribeInstanceAttribute.
InstanceId	String	Yes	bastionhost-cn-78v1ghxxxx	The ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The ID of the region.

Response parameters

Parameter	Type	Example	Description
RequestId	String	082FAB35-6AB9-4FD5-8750-D36673548E76	The ID of the request.
InstanceAttribute	Struct		The attribute information of the instance.
InstanceId	String	bastionhost-cn-78v1ghxxxx	The ID of the instance.
InstanceStatus	String	RUNNING	The status of the instance. Valid values: - PENDING: The instance is not initialized. - CREATING: The instance is being created. - RUNNING: The instance is running. - EXPIRED: The instance expired. - CREATE_FAILED: The instance fails to be created. - UPGRADING: The configurations of the instance are being changed. - UPGRADE_FAILED: The configurations of the instance fail to be changed.
VpcId	String	vpc-bp1c85tzgqu1bf5bxxxx	The ID of the VPC to which the instance belongs.

Parameter	Type	Example	Description
VSwitchId	String	vsw-bp1xfwzzfti0kjbfxxxx	The ID of the vSwitch to which the instance belongs.
IntranetEndpoint	String	drawvxalwb.bastionhost.aliyuncs.com	The private endpoint.
InternetEndpoint	String	drawvxalwb-public.bastionhost.aliyuncs.com	The public endpoint.
PublicNetworkAccess	Boolean	true	Indicates whether the Bastionhost instance can be accessed over the Internet.
EniInstanceId	String	eni-bp1455jrzw7moaxxxx	The ID of the Elastic Network Interface (ENI).
StartTime	Long	1577681345000	The time when the instance started.
ExpireTime	Long	1578326400000	The time when the instance expires.
Description	String	Test API operation	The description of the instance.
LicenseCode	String	bhah_ent_50_asset	The license code.
PublicWhiteList	List	[10.162.168.xx/32]	The public IP addresses that are allowed to access the instance.
PrivateWhiteList	List	[]	The private IP addresses that are allowed to access the instance.
SecurityGroupIds	List	[]	The IDs of the security groups to which the instance belongs.
AuthorizedSecurityGroups	List	[sg-bp14u00sh39jvw5xxxx]	The IDs of authorized security groups.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DescribeInstanceAttribute
&InstanceId=bastionhost-cn-78v1ghxxxxx
&<Common request parameters>
```

Sample success responses

XML format

```
<DescribeInstanceAttributeResponse>
  <RequestId>082FAB35-6AB9-4FD5-8750-D36673548E76</RequestId>
  <InstanceAttribute>
    <LicenseCode>bhah_ent_50_asset</LicenseCode>
    <Description>Test API operation</Description>
    <InstanceId>bastionhost-cn-78vlghxxxxx</InstanceId>
    <StartTime>1577681345000</StartTime>
    <VSwitchId>vsw-bplxfwzzfti0kjbfxxxxx</VSwitchId>
    <PublicWhiteList>10.162.168.xx/32</PublicWhiteList>
    <VpcId>vpc-bplc85tzgqulbf5bxxxxx</VpcId>
    <PublicNetworkAccess>true</PublicNetworkAccess>
    <AuthorizedSecurityGroups>sg-bp14u00sh39jvw5xxxxx</AuthorizedSecurityGroups>
    <InstanceStatus>RUNNING</InstanceStatus>
    <EniInstanceId>eni-bp1455jrzw7moaxxxxx</EniInstanceId>
    <InternetEndpoint>drawvwalwb-public.bastionhost.aliyuncs.com</InternetEndpoint>
    <ExpireTime>1578326400000</ExpireTime>
    <IntranetEndpoint>drawvwalwb.bastionhost.aliyuncs.com</IntranetEndpoint>
  </InstanceAttribute>
</DescribeInstanceAttributeResponse>
```

JSON format

```
{
  "RequestId": "082FAB35-6AB9-4FD5-8750-D36673548E76",
  "InstanceAttribute": {
    "LicenseCode": "bhah_ent_50_asset",
    "Description": "Test API operation",
    "InstanceId": "bastionhost-cn-78vlghxxxxx",
    "PrivateWhiteList": [],
    "StartTime": 1577681345000,
    "SecurityGroupIds": [],
    "VSwitchId": "vsw-bplxfwzzfti0kjbfxxxxx",
    "PublicWhiteList": [
      "10.162.168.xx/32"
    ],
    "VpcId": "vpc-bplc85tzgqulbf5bxxxxx",
    "PublicNetworkAccess": true,
    "AuthorizedSecurityGroups": [
      "sg-bp14u00sh39jvw5xxxxx"
    ],
    "InstanceStatus": "RUNNING",
    "EniInstanceId": "eni-bp1455jrzw7moaxxxxx",
    "InternetEndpoint": "drawvwalwb-public.bastionhost.aliyuncs.com",
    "ExpireTime": 1578326400000,
    "IntranetEndpoint": "drawvwalwb.bastionhost.aliyuncs.com"
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

5.2. DescribeInstances

Queries instances.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DescribeInstances	The operation that you want to perform. Set the value to DescribeInstances.
PageNumber	Integer	No	1	The number of the page to return.
PageSize	Integer	No	10	The number of entries to return on each page.
RegionId	String	No	cn-hangzhou	The ID of the region.
InstanceStatus	String	No	RUNNING	The status of the instance. Valid values: - PENDING: The instance is not initialized. - CREATING: The instance is being created. - RUNNING: The instance is running. - EXPIRED: The instance expired. - CREATE_FAILED: The instance fails to be created. - UPGRADING: The configurations of the instance are being changed. - UPGRADE_FAILED: The configurations of the instance fail to be changed.
ResourceGroupId	String	No	rg-acfm26ougixxxx	The ID of the enterprise resource group to which the instance belongs.
InstanceId.N	RepeatList	No	bastionhost-cn-78v1ghxxxx	The ID of instance N. Valid values of N: 1 to 20.
Tag.N.Key	String	No	test	The key of tag N of the instance. Valid values of N: 1 to 20.
Tag.N.Value	String	No	testapi	The value of tag N of the instance. Valid values of N: 1 to 20.

Response parameters

Parameter	Type	Example	Description
RequestId	String	61D36C55-AAFC-4678-8FAD-34FEF9E7182E	The ID of the request.
TotalCount	Long	4	The total number of instances.
Instances	Array		The information of instances.
RegionId	String	cn-hangzhou	The ID of the region.
InstanceId	String	bastionhost-cn-78v1ghxxxx	The ID of the instance.
InstanceStatus	String	RUNNING	The status of the instance.
Legacy	Boolean	false	Indicates whether the instance is of an earlier version. Valid values: • true: indicates an instance whose version is earlier than V3.2. • false: indicates an instance whose version is V3.2 or later.
VpcId	String	vpc-bp1c85tzgqu1bf5bxxxx	The ID of the VPC to which the instance belongs.
VswitchId	String	vsw-bp1xfwzzfti0kjbfxxxxx	The ID of the vSwitch to which the instance belongs.
IntranetEndpoint	String	drawvwalwb.bastionhost.aliyuncs.com	The private endpoint.
InternetEndpoint	String	drawvwalwb-public.bastionhost.aliyuncs.com	The public endpoint.
StartTime	Long	1577681345000	The time when the instance started.
ExpireTime	Long	1578326400000	The time when the instance expires.
Description	String	Test API operation	The description of the instance.
LicenseCode	String	bhah_ent_50_asset	The license code.
PublicNetworkAccess	Boolean	true	Indicates whether the Bastionhost instance can be accessed over the Internet.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DescribeInstances
&<Common request parameters>
```

Sample success responses

XML format

```
<DescribeInstancesResponse>
  <Instances>
    <LicenseCode>bhah_ent_50_asset</LicenseCode>
    <Description>Test API operation</Description>
    <VpcId>vpc-bp1c85tzgqulbf5bxxxxx</VpcId>
    <InstanceId>bastionhost-cn-78v1ghxxxxx</InstanceId>
    <InstanceStatus>RUNNING</InstanceStatus>
    <Legacy>false</Legacy>
    <PublicNetworkAccess>true</PublicNetworkAccess>
    <InternetEndpoint>drawvخالwb-public.bastionhost.aliyuncs.com</InternetEndpoint>
    <StartTime>1577681345000</StartTime>
    <RegionId>cn-hangzhou</RegionId>
    <ExpireTime>1578326400000</ExpireTime>
    <VswitchId>vsw-bp1xfwzzfti0kjbxxxxx</VswitchId>
    <IntranetEndpoint>drawvخالwb.bastionhost.aliyuncs.com</IntranetEndpoint>
  </Instances>
  <Instances>
    <LicenseCode>bhah_ent_50_asset</LicenseCode>
    <Description>Bastionhost purchase</Description>
    <InstanceId>bastionhost-cn-mp91g9xxxxx</InstanceId>
    <Legacy>false</Legacy>
    <StartTime>1577267277000</StartTime>
    <VswitchId>vsw-bp15stcuwjlr5djxxxxx</VswitchId>
    <VpcId>vpc-bp1vejrlbuxl12olxxxxx</VpcId>
    <InstanceStatus>RUNNING</InstanceStatus>
    <PublicNetworkAccess>true</PublicNetworkAccess>
    <InternetEndpoint>lwsnjjujmg-public.bastionhost.aliyuncs.com</InternetEndpoint>
    <RegionId>cn-hangzhou</RegionId>
    <ExpireTime>1580572800000</ExpireTime>
    <IntranetEndpoint>lwsnjjujmg.bastionhost.aliyuncs.com</IntranetEndpoint>
  </Instances>
  <Instances>
    <LicenseCode>bhah_ent_50_asset</LicenseCode>
    <VpcId>vpc-bp1c85tzgqulbf5bxxxxx</VpcId>
    <InstanceId>bastionhost-cn-78v1g8xxxxx</InstanceId>
    <InstanceStatus>RUNNING</InstanceStatus>
    <Legacy>false</Legacy>
    <PublicNetworkAccess>true</PublicNetworkAccess>
    <InternetEndpoint>lfj1hrxyap-public.bastionhost.aliyuncs.com</InternetEndpoint>
    <StartTime>1577242757000</StartTime>
    <RegionId>cn-hangzhou</RegionId>
    <ExpireTime>1577894400000</ExpireTime>
    <VswitchId>vsw-bp1xfwzzfti0kjbxxxxx</VswitchId>
    <IntranetEndpoint>lfj1hrxyap.bastionhost.aliyuncs.com</IntranetEndpoint>
  </Instances>
  <Instances>
    <EcsStatus>Running</EcsStatus>
    <LicenseCode>idle_license_20_asset</LicenseCode>
```

```

    <Description>Technical support</Description>
    <Renewable>true</Renewable>
    <InstanceId>bastionhost-cn-v6413dixxxxx</InstanceId>
    <Legacy>true</Legacy>
    <StartTime>1555643020000</StartTime>
    <PlanUpgradeStatus>0</PlanUpgradeStatus>
    <Upgradeable>false</Upgradeable>
    <IntranetIp>192.168.0.xx</IntranetIp>
    <VswitchId>vsw-bp1xfwzzfti0kjbfxxxxx</VswitchId>
    <UpgradeStatus>0</UpgradeStatus>
    <InternetIp>47.98.43.1xx</InternetIp>
    <VpcId>vpc-bp1c85tzggulbf5xxxxx</VpcId>
    <Operatable>false</Operatable>
    <InstanceStatus>RUNNING</InstanceStatus>
    <NetworkType>vpc</NetworkType>
    <PlanUpgradeable>true</PlanUpgradeable>
    <RegionId>cn-hangzhou</RegionId>
    <ExpireTime>1587312000000</ExpireTime>
    <ImageVersionName>V2.1.7</ImageVersionName>
  </Instances>
  <TotalCount>4</TotalCount>
  <RequestId>61D36C55-AAFC-4678-8FAD-34FEF9E7182E</RequestId>
</DescribeInstancesResponse>

```

JSON **format**

```

{
  "Instances": [
    {
      "LicenseCode": "bhah_ent_50_asset",
      "Description": "Test API operation",
      "VpcId": "vpc-bp1c85tzggulbf5bxxxxx",
      "InstanceId": "bastionhost-cn-78v1ghxxxxx",
      "InstanceStatus": "RUNNING",
      "Legacy": false,
      "PublicNetworkAccess": true,
      "InternetEndpoint": "drawvxalwb-public.bastionhost.aliyuncs.com",
      "StartTime": 1577681345000,
      "RegionId": "cn-hangzhou",
      "ExpireTime": 1578326400000,
      "VswitchId": "vsw-bp1xfwzzfti0kjbfxxxxx",
      "IntranetEndpoint": "drawvxalwb.bastionhost.aliyuncs.com"
    },
    {
      "LicenseCode": "bhah_ent_50_asset",
      "Description": "Bastionhost purchase",
      "InstanceId": "bastionhost-cn-mp91g9xxxxx",
      "Legacy": false,
      "StartTime": 1577267277000,
      "VswitchId": "vsw-bp15stcuwjlr5djxxxxx",
      "VpcId": "vpc-bp1vejr1buxl12olxxxxx",
      "InstanceStatus": "RUNNING",
      "PublicNetworkAccess": true,
      "InternetEndpoint": "lwsnjuuimg-public.bastionhost.aliyuncs.com",
      "RegionId": "cn-hangzhou",
      "ExpireTime": 1580572800000,
      "IntranetEndpoint": "lwsnjuuimg.bastionhost.aliyuncs.com"
    }
  ]
}

```

```

        "LicenseCode": "bhah_ent_50_asset",
        "VpcId": "vpc-bplc85tzgqulbf5bxxxxx",
        "InstanceId": "bastionhost-cn-78vlg8xxxxx",
        "InstanceStatus": "RUNNING",
        "Legacy": false,
        "PublicNetworkAccess": true,
        "InternetEndpoint": "lfj1hrxyap-public.bastionhost.aliyuncs.com",
        "StartTime": 1577242757000,
        "RegionId": "cn-hangzhou",
        "ExpireTime": 1577894400000,
        "VswitchId": "vsw-bplxfwzzfti0kjbfxxxxx",
        "IntranetEndpoint": "lfj1hrxyap.bastionhost.aliyuncs.com"
    },
    {
        "EcsStatus": "Running",
        "LicenseCode": "idle_license_20_asset",
        "Description": "Technical support",
        "Renewable": true,
        "InstanceId": "bastionhost-cn-v6413dixxxxx",
        "Legacy": true,
        "StartTime": 1555643020000,
        "PlanUpgradeStatus": 0,
        "Upgradeable": false,
        "IntranetIp": "192.168.0.xx",
        "VswitchId": "vsw-bplxfwzzfti0kjbfxxxxx",
        "UpgradeStatus": 0,
        "InternetIp": "47.98.43.1xx",
        "VpcId": "vpc-bplc85tzgqulbf5bxxxxx",
        "Operatable": false,
        "InstanceStatus": "RUNNING",
        "NetworkType": "vpc",
        "PlanUpgradeable": true,
        "RegionId": "cn-hangzhou",
        "ExpireTime": 1587312000000,
        "ImageVersionName": "V2.1.7"
    }
],
"TotalCount": 4,
"RequestId": "61D36C55-AAFC-4678-8FAD-34FEF9E7182E"
}

```

Error codes

For a list of error codes, visit the [API Error Center](#).

5.3. ConfigInstanceSecurityGroups

Configures security groups for a bastion host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ConfigInstanceSecurityGroups	The operation that you want to perform. Set the value to ConfigInstanceSecurityGroups .
Lang	String	No	zh	The language of the content within the request and response. Default value: zh . Valid values: • zh: Chinese • en: English
InstanceId	String	Yes	bastionhost-cn-78v1gh****	The ID of the bastion host.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host.
AuthorizedSecurityGroups.N	String	Yes	2	The ID of authorized security group N. Valid values of N: 1 to 100.

Response parameters

Parameter	Type	Example	Description
InstanceId	String	bastionhost-cn-78v1gh****	The ID of the bastion host for which security groups were configured.
RequestId	String	0ECCC399-4D35-48A7-8379-5C6180E66235	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ConfigInstanceSecurityGroups
&Lang=zh
&InstanceId=bastionhost-cn-78v1gh****
&RegionId=cn-hangzhou
&AuthorizedSecurityGroups=["2"]
&Common request parameters
```

Sample success responses

XML [format](#)

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ConfigInstanceSecurityGroupsResponse>
  <InstanceId>bastionhost-cn-78v1gh****</InstanceId>
  <RequestId>0ECCC399-4D35-48A7-8379-5C6180E66235</RequestId>
</ConfigInstanceSecurityGroupsResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "InstanceId" : "bastionhost-cn-78v1gh****",
  "RequestId" : "0ECCC399-4D35-48A7-8379-5C6180E66235"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

5.4. ConfigInstanceWhiteList

Configures a whitelist of public IP addresses for a bastion host.

Usage notes

You can call this operation to configure a whitelist of public IP addresses for a bastion host. By default, a bastion host is accessible from all public IP addresses. If you want to allow the requests from specific public IP addresses, you can call this operation to add trusted IP addresses to the whitelist of the bastion host.

Limits

You can call this operation up to 30 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ConfigInstanceWhiteList	The operation that you want to perform. Set the value to ConfigInstanceWhiteList .
InstanceId	String	Yes	bastionhost-cn-78v1gh****	The ID of the bastion host for which you want to configure a whitelist of public IP addresses.

Parameter	Type	Required	Example	Description
WhiteList.N	RepeatList	No	10.162.XX.XX	The public IP addresses that you want to add to the whitelist. You can add up to 30 IP addresses. If you want to add multiple IP addresses to the whitelist, separate the IP addresses with commas (,).
RegionId	String	No	cn-hangzhou	The region ID of the bastion host.

Response parameters

Parameter	Type	Example	Description
InstanceId	String	bastionhost-cn-78v1gh****	The ID of the bastion host for which a whitelist of public IP addresses is configured.
RequestId	String	47820E32-5968-45CF-982F-09CB80DC180B	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ConfigInstanceWhiteList
&InstanceId=bastionhost-cn-78v1gh****
&<Common request parameters>
```

Sample success responses

XML format

```
<ConfigInstanceWhiteListResponse>
  <RequestId>47820E32-5968-45CF-982F-09CB80DC180B</RequestId>
  <InstanceId>bastionhost-cn-78v1gh****</InstanceId>
</ConfigInstanceWhiteListResponse>
```

JSON format

```
{
  "RequestId": "47820E32-5968-45CF-982F-09CB80DC180B",
  "InstanceId": "bastionhost-cn-78v1gh****"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

5.5. StartInstance

Enables a bastion host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Name	Type	Required	Example	Description
Action	String	Yes	StartInstance	The operation that you want to perform. Set the value to StartInstance .
InstanceId	String	Yes	bastionhost-cn-78v1gh****	The ID of the bastion host that you want to enable.  Note You can call the DescribeInstances operation to obtain the ID of the bastion host.
VswitchId	String	No	vsw-bp1xfwzzfti0kjb****	The ID of the vSwitch to which the bastion host belongs.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host.
SecurityGroupIds.N	String	Yes	sg-bp1aiupc4yjqgmm****	The ID of security group N to which the bastion host is added.

Response parameters

Name	Type	Example	Description
InstanceId	String	bastionhost-cn-78v1gh****	The ID of the bastion host that you enable.
RequestId	String	0F85AE0A-6A87-48F3-A0C7-90B998788A36	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=StartInstance
&InstanceId=bastionhost-cn-78v1gh****
&VswitchId=vsw-bp1xfwzzfti0kjb****
&RegionId=cn-hangzhou
&SecurityGroupIds=["sg-bp1aiupc4yjqgmm****"]
&Common request parameters
```

Sample success responses

`XML` format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<StartInstanceResponse>
  <InstanceId>bastionhost-cn-78v1gh****</InstanceId>
  <RequestId>0F85AE0A-6A87-48F3-A0C7-90B998788A36</RequestId>
</StartInstanceResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "InstanceId" : "bastionhost-cn-78v1gh****",
  "RequestId" : "0F85AE0A-6A87-48F3-A0C7-90B998788A36"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

5.6. EnableInstancePublicAccess

Enables Internet access for a bastion host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	EnableInstancePublicAccess	The operation that you want to perform. Set the value to EnableInstancePublicAccess .
InstanceId	String	Yes	bastionhost-cn-78v1gh****	The ID of the bastion host.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host.

Response parameters

Parameter	Type	Example	Description
InstanceId	String	bastionhost-cn-78v1gh****	The ID of the bastion host whose Internet access is enabled.

Parameter	Type	Example	Description
RequestId	String	D47B5043-FDD6-4FBE-976E-5FC67A23578F	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=EnableInstancePublicAccess
&InstanceId=bastionhost-cn-78v1gh****
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<EnableInstancePublicAccessResponse>
  <InstanceId>bastionhost-cn-78v1gh****</InstanceId>
  <RequestId>D47B5043-FDD6-4FBE-976E-5FC67A23578F</RequestId>
</EnableInstancePublicAccessResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "InstanceId" : "bastionhost-cn-78v1gh****",
  "RequestId" : "D47B5043-FDD6-4FBE-976E-5FC67A23578F"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

5.7. DisableInstancePublicAccess

Disables Internet access of a bastion host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Name	Type	Required	Example	Description
Action	String	Yes	DisableInstancePublicAccess	The operation that you want to perform. Set the value to <code>DisableInstancePublicAccess</code> .

Name	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-78v1gh****	The ID of the bastion host whose Internet access you want to disable.  Note You can call the DescribeInstances operation to obtain the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host.

Response parameters

Name	Type	Example	Description
InstanceId	String	bastionhost-cn-78v1gh****	The ID of the bastion host whose Internet access is disabled.
RequestId	String	76FAAF15-D3A3-4099-9941-FC408D9FDB4C	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DisableInstancePublicAccess
&InstanceId=bastionhost-cn-78v1gh****
&RegionId=cn-hangzhou
&Common request parameters
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DisableInstancePublicAccessResponse>
  <InstanceId>bastionhost-cn-78v1gh****</InstanceId>
  <RequestId>76FAAF15-D3A3-4099-9941-FC408D9FDB4C</RequestId>
</DisableInstancePublicAccessResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "InstanceId" : "bastionhost-cn-78v1gh****",
  "RequestId" : "76FAAF15-D3A3-4099-9941-FC408D9FDB4C"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

5.8. ModifyInstanceAttribute

Sets the attribute for a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyInstanceAttribute	The operation that you want to perform. Set the value to ModifyInstanceAttribute .
InstanceId	String	Yes	bastionhost-cn-78v1gh****	The ID of the Bastionhost instance.  Note You can call the DescribeInstances operation to obtain the ID of the Bastionhost instance.
Description	String	No	Bastionhost demo	The description of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance.

Response parameters

Parameter	Type	Example	Description
RequestId	String	E07158EA-D1A3-4BAA-84DA-2FE230D03884	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyInstanceAttribute
&InstanceId=bastionhost-cn-78v1gh****
&<Common request parameters>
```

Sample success responses

XML format

```
<ModifyInstanceAttributeResponse>
  <RequestId>E07158EA-D1A3-4BAA-84DA-2FE230D03884</RequestId>
</ModifyInstanceAttributeResponse>
```

JSON format

```
{
  "RequestId": "E07158EA-D1A3-4BAA-84DA-2FE230D03884"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

5.9. MoveResourceGroup

Moves a Bastionhost instance to a specified resource group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	MoveResourceGroup	The operation that you want to perform. Set the value to MoveResourceGroup .
RegionId	String	Yes	cn-hangzhou	The region ID of the Bastionhost instance.
ResourceGroupId	String	Yes	rg-aekznp3oyo****	The ID of the resource group to which the Bastionhost instance is moved.
ResourceId	String	Yes	bastionhost-cn-78v1gh****	The ID of the Bastionhost instance for which you want to change the resource group.  Note You can call the DescribeInstances operation to obtain the ID of the Bastionhost instance.
ResourceType	String	Yes	INSTANCE	The type of the resource. Set the value to INSTANCE, which indicates that the resource is a Bastionhost instance.

Response parameters

Parameter	Type	Example	Description
RequestId	String	1DEEC28D-27B1-4358-B6DC-E1285AE655C5	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=MoveResourceGroup
&RegionId=cn-hangzhou
&ResourceGroupId=rg-aekznp3oyo****
&ResourceId=bastionhost-cn-78v1gh****
&ResourceType=INSTANCE
&<Common request parameters>
```

Sample success responses

XML **format**

```
<MoveResourceGroupResponse>
  <RequestId>1DEEC28D-27B1-4358-B6DC-E1285AE655C5</RequestId>
</MoveResourceGroupResponse>
```

JSON **format**

```
{
  "RequestId": "1DEEC28D-27B1-4358-B6DC-E1285AE655C5"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

6.Tags

6.1. UntagResources

Removes tags from a bastion host and deletes the tags at a time.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	UntagResources	The operation that you want to perform. Set the value to UntagResources .
RegionId	String	Yes	cn-hangzhou	The region ID of the bastion host.
ResourceType	String	Yes	INSTANCE	The type of the resource. Set the value to INSTANCE, which indicates that the resource is a bastion host.
ResourceId.N	RepeatList	Yes	bastionhost-cn-78v1gc****	The ID of bastion host N. Valid values of N: 1 to 20.  Note You can call the DescribeInstances operation to obtain the ID of the bastion host.
TagKey.N	RepeatList	No	test	The key of tag N. Valid values of N: 1 to 20.
All	Boolean	No	false	Specifies whether to delete all tags that are added to the bastion host. - If you specify TagKey.N, the value of this parameter can only be false, which indicates that only the specified tag is deleted. - If you do not specify TagKey.N and the value of this parameter is true, all tags are deleted. If you do not specify TagKey.N and the value of this parameter is false, no tags are deleted.

Response parameters

Parameter	Type	Example	Description
RequestId	String	A8A665B9-8550-4942-9DEE-73198051856B	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=UntagResources
&RegionId=cn-hangzhou
&ResourceType=INSTANCE
&ResourceId.1=bastionhost-cn-78vlgc****
&<Common request parameters>
```

Sample success responses

XML format

```
<UntagResourcesResponse>
  <RequestId>A8A665B9-8550-4942-9DEE-73198051856B</RequestId>
</UntagResourcesResponse>
```

JSON format

```
{
  "RequestId": "A8A665B9-8550-4942-9DEE-73198051856B"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

6.2. ListTagKeys

Queries the keys of the tags bound to Bastionhost instances.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListTagKeys	The operation that you want to perform. Set the value to ListTagKeys .
RegionId	String	Yes	cn-hangzhou	The region ID of the Bastionhost instance.

Parameter	Type	Required	Example	Description
ResourceType	String	Yes	INSTANCE	The type of the resource. Set the value to INSTANCE, which indicates that the resource is a Bastionhost instance.
PageSize	Integer	No	10	The number of entries to return on each page.
PageNumber	Integer	No	1	The number of the page to return.

Response parameters

Parameter	Type	Example	Description
PageNumber	Integer	1	The number of the returned page.
PageSize	Integer	10	The number of entries returned per page.
RequestId	String	50177258-E817-4D2F-A5C6-3FD7BC4806E3	The ID of the request.
TagKeys	Array		The information of tags.
TagCount	Integer	2	The number of times the tag key was used.
TagKey	String	key2	The name of the tag key.
TotalCount	Integer	5	The total number of tags returned.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListTagKeys
&RegionId=cn-hangzhou
&ResourceType=INSTANCE
&<Common request parameters>
```

Sample success responses

`XML` format

```

<ListTagKeysResponse>
  <TotalCount>5</TotalCount>
  <PageSize>10</PageSize>
  <RequestId>50177258-E817-4D2F-A5C6-3FD7BC4806E3</RequestId>
  <PageNumber>1</PageNumber>
  <TagKeys>
    <TagCount>2</TagCount>
    <TagKey>1</TagKey>
  </TagKeys>
  <TagKeys>
    <TagCount>2</TagCount>
    <TagKey>1234567890</TagKey>
  </TagKeys>
  <TagKeys>
    <TagCount>1</TagCount>
    <TagKey>das</TagKey>
  </TagKeys>
  <TagKeys>
    <TagCount>3</TagCount>
    <TagKey>key1</TagKey>
  </TagKeys>
  <TagKeys>
    <TagCount>2</TagCount>
    <TagKey>key2</TagKey>
  </TagKeys>
</ListTagKeysResponse>

```

JSON **format**

```

{
  "TotalCount":5,
  "PageSize":10,
  "RequestId":"50177258-E817-4D2F-A5C6-3FD7BC4806E3",
  "PageNumber":1,
  "TagKeys":[
    {
      "TagCount":2,
      "TagKey":"1"
    },
    {
      "TagCount":2,
      "TagKey":"1234567890"
    },
    {
      "TagCount":1,
      "TagKey":"das"
    },
    {
      "TagCount":3,
      "TagKey":"key1"
    },
    {
      "TagCount":2,
      "TagKey":"key2"
    }
  ]
}

```

Error codes

For a list of error codes, visit the [API Error Center](#).

6.3. ListTagResources

Queries the tags bound to one or more Bastionhost instances.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListTagResources	The operation that you want to perform. Set the value to ListTagResources .
RegionId	String	Yes	cn-hangzhou	The region ID of the Bastionhost instance.
ResourceType	String	Yes	INSTANCE	The type of the resource. Set the value to INSTANCE, which indicates that the resource is a Bastionhost instance.
ResourceId.N	RepeatList	No	bastionhost-cn-78v1gcxxxx	The ID of instance N. Valid values of N: 1 to 20.  Note You can call the DescribeInstances operation to obtain the ID of the Bastionhost instance.
Tag.N.Key	String	No	test	The key of tag N. Valid values of N: 1 to 20.
Tag.N.Value	String	No	testapi	The value of tag N. Valid values of N: 1 to 20.
NextToken	String	No	6EwFJmScBXFFC3nf.9Rq7HzA7APx7GWLbkZbjHrR6Pq39w	The token for starting the next query.

Response parameters

Parameter	Type	Example	Description
-----------	------	---------	-------------

Parameter	Type	Example	Description
NextToken	String	4ieSWJCwxvW3dk3wF. BqkrZmP72nWu5zJ5N WydMqyEs****	The token for starting the next query.
RequestId	String	134D6018-EB68-4B7C- BABF-4DB09023E014	The ID of the request.
TagResources	Array		The information about Bastionhost instances and the tags bound to Bastionhost instances. The following information is included: instance ID, resource type, tag key, and tag value.
ResourceId	String	bastionhost-cn- 78v1gc****	The ID of the instance.
ResourceType	String	INSTANCE	The type of the resource. The returned value is INSTANCE, which indicates that the resource is a Bastionhost instance.
TagKey	String	test	The key of the tag.
TagValue	String	testapi	The value of the tag.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListTagResources
&RegionId=cn-hangzhou
&ResourceType=INSTANCE
&<Common request parameters>
```

Sample success responses

XML format

```
<ListTagResourcesResponse>
  <NextToken>6EwFJmScBXFC3nf.9Rq7HzA7APx7GWLbkZbjHrR6P****</NextToken>
  <RequestId>134D6018-EB68-4B7C-BABF-4DB09023E014</RequestId>
  <TagResources>
    <ResourceId>bastionhost-cn-78v1gc****</ResourceId>
    <TagKey>test</TagKey>
    <ResourceType>INSTANCE</ResourceType>
    <TagValue>testapi</TagValue>
  </TagResources>
</ListTagResourcesResponse>
```

JSON format

```
{
  "NextToken": "6EwFJmScBXFC3nf.9Rq7HzA7APx7GWLbkZbjHrR6P****",
  "RequestId": "134D6018-EB68-4B7C-BABF-4DB09023E014",
  "TagResources": [
    {
      "ResourceId": "bastionhost-cn-78vlgc****",
      "TagKey": "test",
      "ResourceType": "INSTANCE",
      "TagValue": "testapi"
    }
  ]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

7.Region

7.1. DescribeRegions

Queries available regions where you can create Bastionhost instances.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DescribeRegions	The operation that you want to perform. Set the value to DescribeRegions .
AcceptLanguage	String	No	zh-CN	The natural language in which responses are returned. Valid values: • zh-CN: Chinese. This is the default value. • en-US: English. • ja: Japanese.

Response parameters

Parameter	Type	Example	Description
Regions	Array		The information of regions where you can create Bastionhost instances.
LocalName	String	China (Hangzhou)	The name of the region.
RegionEndpoint	String	yundun-bastionhost.aliyuncs.com	The endpoint of the region.
RegionId	String	cn-hangzhou	The ID of the region.
RequestId	String	B7281856-F27D-4ECE-B4F1-50511E550xxx	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DescribeRegions
&<Common request parameters>
```

Sample success responses

XML format

```
<DescribeRegionsResponse>
  <RequestId>B7281856-F27D-4ECE-B4F1-50511E550xxx</RequestId>
  <Regions>
    <RegionId>cn-hangzhou</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Hangzhou)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-shanghai</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Shanghai)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-qingdao</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Qingdao)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-beijing</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Beijing)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-zhangjiakou</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Zhangjiakou)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-huhehaote</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Hohhot)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-shenzhen</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Shenzhen)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-chengdu</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Chengdu)</LocalName>
  </Regions>
  <Regions>
    <RegionId>cn-hongkong</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>China (Hong Kong)</LocalName>
  </Regions>
  <Regions>
    <RegionId>ap-southeast-1</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>Singapore</LocalName>
  </Regions>
  <Regions>
    <RegionId>ap-southeast-2</RegionId>
    <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
    <LocalName>Australia (Svdnev)</LocalName>
```

```

</Regions>
<Regions>
  <RegionId>ap-southeast-3</RegionId>
  <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
  <LocalName>Malaysia (Kuala Lumpur)</LocalName>
</Regions>
<Regions>
  <RegionId>ap-southeast-5</RegionId>
  <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
  <LocalName>Indonesia (Jakarta)</LocalName>
</Regions>
<Regions>
  <RegionId>ap-northeast-1</RegionId>
  <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
  <LocalName>Japan (Tokyo)</LocalName>
</Regions>
<Regions>
  <RegionId>ap-south-1</RegionId>
  <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
  <LocalName>India (Mumbai)</LocalName>
</Regions>
<Regions>
  <RegionId>eu-central-1</RegionId>
  <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
  <LocalName>Germany (Frankfurt)</LocalName>
</Regions>
<Regions>
  <RegionId>eu-west-1</RegionId>
  <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
  <LocalName>UK (London)</LocalName>
</Regions>
<Regions>
  <RegionId>us-west-1</RegionId>
  <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
  <LocalName>US (Silicon Valley)</LocalName>
</Regions>
<Regions>
  <RegionId>us-east-1</RegionId>
  <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
  <LocalName>US (Virginia)</LocalName>
</Regions>
<Regions>
  <RegionId>me-east-1</RegionId>
  <RegionEndpoint>yundun-bastionhost.aliyuncs.com</RegionEndpoint>
  <LocalName>UAE (Dubai)</LocalName>
</Regions>
</DescribeRegionsResponse>

```

JSON format

```

{
  "RequestId": "B7281856-F27D-4ECE-B4F1-50511E550xxx",
  "Regions": [
    {
      "RegionId": "cn-hangzhou",
      "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
      "LocalName": "China (Hangzhou)"
    },
    .
  ],
  .
}

```

```
{
  "RegionId": "cn-shanghai",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "China (Shanghai)"
},
{
  "RegionId": "cn-qingdao",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "China (Qingdao)"
},
{
  "RegionId": "cn-beijing",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "China (Beijing)"
},
{
  "RegionId": "cn-zhangjiakou",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "China (Zhangjiakou)"
},
{
  "RegionId": "cn-huhehaote",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "China (Hohhot)"
},
{
  "RegionId": "cn-shenzhen",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "China (Shenzhen)"
},
{
  "RegionId": "cn-chengdu",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "China (Chengdu)"
},
{
  "RegionId": "cn-hongkong",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "China (Hong Kong)"
},
{
  "RegionId": "ap-southeast-1",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "Singapore"
},
{
  "RegionId": "ap-southeast-2",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "Australia (Sydney)"
},
{
  "RegionId": "ap-southeast-3",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "Malaysia (Kuala Lumpur)"
},
{
  "RegionId": "ap-southeast-5",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "Indonesia (Jakarta)"
},
}
```

```
,
{
  "RegionId": "ap-northeast-1",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "Japan (Tokyo) "
},
{
  "RegionId": "ap-south-1",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "India (Mumbai) "
},
{
  "RegionId": "eu-central-1",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "Germany (Frankfurt) "
},
{
  "RegionId": "eu-west-1",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "UK (London) "
},
{
  "RegionId": "us-west-1",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "US (Silicon Valley) "
},
{
  "RegionId": "us-east-1",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "US (Virginia) "
},
{
  "RegionId": "me-east-1",
  "RegionEndpoint": "yundun-bastionhost.aliyuncs.com",
  "LocalName": "UAE (Dubai) "
}
]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8. Hosts

8.1. CreateHost

Creates a host for operations and maintenance (O&M) in a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateHost	The operation that you want to perform. Set the value to CreateHost .
ActiveAddressType	String	Yes	Public	The endpoint type of the host that you want to create. Valid values: • Public: a public endpoint • Private: an internal endpoint
HostName	String	Yes	host01	The name of the host that you want to create. The name can be up to 128 characters in length.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to create the host.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
OSType	String	Yes	Linux	The operating system of the host that you want to create. Valid values: • Linux • Windows
Source	String	Yes	Local	The source of the host that you want to create. Valid values: • Local: an on-premises host • Ecs: an Elastic Compute Service (ECS) instance • Rds: a host in a dedicated cluster

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to create the host.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
HostPublicAddress	String	No	172.16.XX.XX	The public endpoint of the host that you want to create. You can set this parameter to a domain name or an IP address.  Note This parameter is required if the <code>ActiveAddressType</code> parameter is set to <code>Public</code>.
HostPrivateAddress	String	No	192.168.XX.XX	The internal endpoint of the host that you want to create. You can set this parameter to a domain name or an IP address.  Note This parameter is required if the <code>ActiveAddressType</code> parameter is set to <code>Private</code>.
Comment	String	No	Local Host	The description of the host that you want to create. The value can be up to 500 characters.
SourceInstanceId	String	No	i-dfabfda	The ID of the ECS instance or dedicated cluster host that you want to create.  Note This parameter is required if the <code>Source</code> parameter is set to <code>Ecs</code> or <code>Rds</code>.
InstanceRegionId	String	No	cn-hangzhou	The ID of the region where the ECS instance or dedicated cluster host that you want to create resides.  Note This parameter is required if the <code>Source</code> parameter is set to <code>Ecs</code> or <code>Rds</code>.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostId	String	1	The ID of the host that was created.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=CreateHost
&ActiveAddressType=Public
&HostName=host01
&InstanceId=bastionhost-cn-st220aw****
&OSType=Linux
&Source=Local
&HostPublicAddress=172.16.XX.XX
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateHostResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostId>1</HostId>
</CreateHostResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostId": "1"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.2. GetHost

Queries the details of a specified host, such as the name, source, endpoint, protocol, and service port of the host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetHost	The operation that you want to perform. Set the value to GetHost .
HostId	String	Yes	1	The ID of the host that you want to query. You can specify only one host ID. Note You can call the ListHosts operation to query the ID of the host.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the host. Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the host. Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see **Common parameters**.

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
Host	Struct		The information of the host that was queried.
ActiveAddressType	String	Public	The endpoint type of the host. Valid values: Public: a public endpoint Private: an internal endpoint
Comment	String	host	The description of the host.
HostId	String	1	The ID of the host.
HostName	String	host	The name of the host.

Parameter	Type	Example	Description
HostPrivateAddress	String	192.168.XX.XX	The internal endpoint of the host. You can set this parameter to a domain name or an IP address.
HostPublicAddress	String	1.1.XX.XX	The public endpoint of the host. You can set this parameter to a domain name or an IP address.
OSType	String	Linux	The operating system of the host. Valid values: - Linux - Windows
Protocols	Array of Item		The protocol information of the host.
HostFingerPrint	String	ssh-ed25519 3e:46:5a:e1:1f:0d:39:7e:61:35:d5:fa:7b:2b:**:**	The fingerprint of the host. This parameter uniquely identifies a host.
Port	Integer	22	The service port of the host.
ProtocolName	String	SSH	The protocol that is used to connect to the host. Valid values: - SSH - RDP
Source	String	Local	The source of the host. Valid values: - Local: an on-premises host - Ecs: an Elastic Compute Service (ECS) instance - Rds: a host in a dedicated cluster
SourceInstanceid	String	i-bp19ienyt0yax748****	The ID of the ECS instance or dedicated cluster host that was queried.  Note No value is returned for this parameter if the Source parameter is set to Local.
SourceInstanceState	String	Normal	The status of the host. Valid values: - Normal: The host is normal. - Release: The host is released.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=GetHost
&HostId=1
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<GetHostResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Host>
    <Comment>host</Comment>
    <Protocols>
      <ProtocolName>SSH</ProtocolName>
      <HostFingerPrint></HostFingerPrint>
      <Port>22</Port>
    </Protocols>
    <ActiveAddressType>Public</ActiveAddressType>
    <HostPrivateAddress>192.168.XX.XX</HostPrivateAddress>
    <HostPublicAddress>1.1.XX.XX</HostPublicAddress>
    <OSType>Linux</OSType>
    <HostId>1</HostId>
    <SourceInstanceId>i-bp19ienyt0yax748****</SourceInstanceId>
    <HostName>host</HostName>
    <SourceInstanceState>Normal</SourceInstanceState>
    <Source>Local</Source>
  </Host>
</GetHostResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Host": {
    "Comment": "host",
    "Protocols": [{
      "ProtocolName": "SSH",
      "HostFingerPrint": "",
      "Port": "22"
    }],
    "ActiveAddressType": "Public",
    "HostPrivateAddress": "192.168.XX.XX",
    "HostPublicAddress": "1.1.XX.XX",
    "OSType": "Linux",
    "HostId": "1",
    "SourceInstanceId": "i-bp19ienyt0yax748****",
    "HostName": "host",
    "SourceInstanceState": "Normal",
    "Source": "Local"
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.3. ListHosts

Queries the hosts in a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHosts	The operation that you want to perform. Set the value to ListHosts .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query hosts.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query hosts.  Note For more information about the mapping between region IDs and region names, see Regions and zones .
PageNumber	String	No	1	The number of the page to return. Default value: 1.
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. Default value: 20. If you leave the PageSize parameter empty, 20 entries are returned on each page by default.  Note We recommend that you do not leave the PageSize parameter empty.

Parameter	Type	Required	Example	Description
OSType	String	No	Linux	The operating system of the host that you want to query. Valid values: • Linux • Windows
HostName	String	No	host	The name of the host that you want to query. Only exact match is supported.
HostAddress	String	No	1.1.XX.XX	The endpoint of the host that you want to query. You can set this parameter to a domain name or an IP address. Only exact match is supported.
Source	String	No	Local	The source of the host that you want to query. Valid values: • Local: an on-premises host • Ecs: an Elastic Compute Service (ECS) instance • Rds: a host in a dedicated cluster
SourceInstanceId	String	No	i-bp19ienyt0yax748**	The ID of the ECS instance or dedicated cluster host that you want to query. Only exact match is supported.
SourceInstanceState	String	No	Normal	The status of the host that you want to query. Valid values: • Normal: The host is normal. • Release: The host is released.
HostGroupId	String	No	1	The ID of the host group to which the host that you want to query belongs.  Note You can call the ListHostGroups operation to query the ID of the host group.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
Hosts	Array of Item		The hosts that were queried.
ActiveAddressType	String	Public	The endpoint type of the host. Valid values: • Public: a public endpoint • Private: an internal endpoint
Comment	String	host	The description of the host.
HostAccountCount	Integer	1	The number of host accounts of the host.
HostId	String	1	The ID of the host.
HostName	String	name	The name of the host.
HostPrivateAddress	String	192.168.XX.XX	The internal endpoint of the host. You can set this parameter to a domain name or an IP address.
HostPublicAddresses	String	1.1.XX.XX	The public endpoint of the host. You can set this parameter to a domain name or an IP address.
OSType	String	Linux	The operating system of the host. Valid values: • Linux • Windows
Source	String	Local	The source of the host. Valid values: • Local: an on-premises host • Ecs: an Elastic Compute Service (ECS) instance • Rds: a host in a dedicated cluster
SourceInstanceId	String	i-bp19ienyt0yax748****	The ID of the ECS instance or dedicated cluster host that was queried.  Note No value is returned for this parameter if the Source parameter is set to Local.
SourceInstanceState	String	Normal	The status of the host. Valid values: • Normal: The host is normal. • Release: The host is released.

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	1	The total number of hosts that were queried.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHosts
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<ListHostsResponse>
  <Hosts>
    <Comment>host</Comment>
    <ActiveAddressType>Public</ActiveAddressType>
    <HostPrivateAddress>192.168.XX.XX</HostPrivateAddress>
    <HostPublicAddress>1.1.XX.XX</HostPublicAddress>
    <OSType>Linux</OSType>
    <HostId>1</HostId>
    <HostAccountCount>1</HostAccountCount>
    <SourceInstanceId>i-bp19ienyt0yax748****</SourceInstanceId>
    <SourceInstanceState>Normal</SourceInstanceState>
    <HostName>name</HostName>
    <Source>Local</Source>
  </Hosts>
  <TotalCount>1</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</ListHostsResponse>
```

JSON format

```
{
  "Hosts": [{
    "Comment": "host",
    "ActiveAddressType": "Public",
    "HostPrivateAddress": "192.168.XX.XX",
    "HostPublicAddress": "1.1.XX.XX",
    "OSType": "Linux",
    "HostId": "1",
    "HostAccountCount": "1",
    "SourceInstanceId": "i-bp19ienyt0yax748****",
    "SourceInstanceState": "Normal",
    "HostName": "name",
    "Source": "Local"
  }],
  "TotalCount": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.4. DeleteHost

Deletes a specified host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteHost	The operation that you want to perform. Set the value to DeleteHost .
HostId	String	Yes	1	The ID of the host that you want to delete. Note You can call the ListHosts operation to query the ID of the host.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to delete the host. Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to delete the host. Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DeleteHost
&HostId=1
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<DeleteHostResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</DeleteHostResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.5. ModifyHostsPort

Changes the port for the O&M protocol on one or more hosts.

Usage notes

You can call this operation to change the port for the O&M protocol on one or more hosts. If the standard port for the O&M protocol on your host is vulnerable to attacks, you can call this operation to specify a custom port. For example, the standard port for SSH is port 22.

 **Note** Ports 0 to 1024 are reserved for Bastionhost. Do not change the port for the O&M protocol to a reserved port.

QPS limit

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
-----------	------	----------	---------	-------------

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyHostsPort	The operation that you want to perform. Set the value to ModifyHostsPort .
HostIds	String	Yes	["1","2","3"]	The ID of the host for which you want to change the port. The value is a JSON string. You can add up to 100 host IDs. If you specify multiple IDs, separate the IDs with commas (,).  Note You can call the ListHosts operation to query the IDs of hosts.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to change the port of the host.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
Port	String	Yes	22	The new port of the host. The port number must be an integer. Valid values: 22 to 65535.
ProtocolName	String	Yes	SSH	The protocol that is used to connect to the host. Valid values: • SSH • RDP
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to change the port of the host.  Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.

Parameter	Type	Example	Description
Results	Array of Item		The result of the call.
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid.  Note Make sure that the request parameters are valid and call the operation again. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist.  Note Check whether the specified ID of the bastion host exists, whether the specified hosts exist, and whether the specified host IDs are valid. Then, call the operation again. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostId	String	1	The ID of the host.
Message	String	None	This parameter is deprecated.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyHostsPort
&HostIds=["1","2","3"]
&InstanceId=bastionhost-cn-st220aw****
&Port=22
&ProtocolName=SSH
&<Common request parameters>
```

Sample success responses

XML format

```
<ModifyHostsPortResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message>None</Message>
    <HostId>1</HostId>
    <Code>OK</Code>
  </Results>
</ModifyHostsPortResponse>
```

JSON format

```
{
  "ModifyHostsPortResponse": {
    "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
    "Results": {
      "Message": "None",
      "HostId": 1,
      "Code": "OK"
    }
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

For a list of error codes, visit the [API Error Center](#).

8.6. ModifyHostsActiveAddressType

Changes the portal type of one or more hosts for O&M.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyHostsActiveAddressType	The operation that you want to perform. Set the value to ModifyHostsActiveAddressType .

Parameter	Type	Required	Example	Description
ActiveAddressType	String	Yes	Private	The new portal type of the host. Valid values: Public: public portal Private: internal portal
HostIds	String	Yes	["1","2"]	The ID of the host for which you want to change the portal type. The value is a JSON string. You can add up to 100 host IDs.  Note You can call the ListHosts operation to query the ID of the host.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to change the portal type of the host.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to change the portal type of the host.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
Results	Array of Item		The result of the call.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostId	String	1	The ID of the host.
Message	String	N/A	This parameter is deprecated.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyHostsActiveAddressType
&ActiveAddressType=Private
&HostIds= ["1","2"]
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<ModifyHostsActiveAddressTypeResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <HostId>1</HostId>
    <Code>OK</Code>
  </Results>
</ModifyHostsActiveAddressTypeResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "Message": "",
    "HostId": "1",
    "Code": "OK"
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

8.7. ModifyHost

Modifies the basic information of a specified host, such as the endpoint, name, operating system, and description of the host.

You can call this operation to modify the basic information of an on-premises host, an Elastic Compute Service (ECS) instance, or a host in a dedicated cluster.

Note The basic information of ECS instances and hosts in dedicated clusters within your Alibaba Cloud account is synchronized to Bastionhost on a regular basis. After you modify the basic information of an ECS instance or a host in a dedicated cluster, the modification result may be overwritten by the synchronized information.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyHost	The operation that you want to perform. Set the value to ModifyHost .
HostId	String	Yes	1	The ID of the host. Note You can call the ListHosts operation to query the ID of the host.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to modify the information of the host. Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to modify the information of the host.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
HostPrivateAddress	String	No	193.168.XX.XX	The new internal endpoint of the host. You can set this parameter to a domain name or an IP address.
HostPublicAddress	String	No	200.1.XX.XX	The new public endpoint of the host. You can set this parameter to a domain name or an IP address.
OSType	String	No	Linux	The new operating system of the host. Valid values: - Linux - Windows
HostName	String	No	TestHost	The new name of the host. The name can be up to 128 characters.
Comment	String	No	Host for test.	The new description of the host. The value can be up to 500 characters in length.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyHost
&HostId=1
&InstanceId=bastionhost-cn-st220aw****
&HostPublicAddress=200.1.XX.XX
&<Common request parameters>
```

Sample success responses

XML format

```
<ModifyHostResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</ModifyHostResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

9. Host groups

9.1. CreateHostGroup

Creates a host group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateHostGroup	The operation that you want to perform. Set the value to CreateHostGroup .
HostGroupName	String	Yes	HostGroup01	The name of the host group. The name can be up to 128 characters in length.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to create the host group.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to create the host group.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
Comment	String	No	Local host group.	The description of the host group. The value can be up to 500 characters in length.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
-----------	------	---------	-------------

Parameter	Type	Example	Description
HostGroupId	String	1	The ID of the host group.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=CreateHostGroup
&HostGroupName=HostGroup01
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateHostGroupResponse>
  <HostGroupId>1</HostGroupId>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</CreateHostGroupResponse>
```

JSON format

```
{
  "HostGroupId": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

9.2. GetHostGroup

Queries the details of a specified host group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetHostGroup	The operation that you want to perform. Set the value to GetHostGroup .

Parameter	Type	Required	Example	Description
HostGroupId	String	Yes	1	The ID of the host group that you want to query. Note You can call the ListHostGroups operation to query the ID of the host group.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the host group. Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the host group. Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostGroup	Struct		The details of the host group returned.
Comment	String	Description	The description of the host group.
HostGroupId	String	1	The ID of the host group.
HostGroupName	String	Host group 1	The name of the host group.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=GetHostGroup
&HostGroupId=1
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<GetHostGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostGroup>
    <Comment>Description</Comment>
    <HostGroupId>1</HostGroupId>
    <HostGroupName>Host group 1</HostGroupName>
  </HostGroup>
</GetHostGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostGroup": {
    "Comment": "Description",
    "HostGroupId": "1",
    "HostGroupName": "Host group 1"
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

9.3. ListHostGroups

Queries the host groups in a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostGroups	The operation that you want to perform. Set the value to ListHostGroups .

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query host groups.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query host groups.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
PageNumber	String	No	1	The number of the page to return. Default value: 1.
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. Default value: 20. If you leave the PageSize parameter empty, 20 entries are returned on each page by default.  Note We recommend that you do not leave the PageSize parameter empty.
HostGroupName	String	No	Host group 1	The name of the host group that you want to query. Only exact match is supported.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostGroups	Array of Item		The host groups returned.

Parameter	Type	Example	Description
Comment	String	Description	The description of the host group.
HostGroupId	String	1	The ID of the host group.
HostGroupName	String	Host group 1	The name of the host group.
MemberCount	Integer	1	The number of hosts in the host group.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	1	The total number of host groups returned.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostGroups
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<ListHostGroupsResponse>
  <TotalCount>1</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostGroups>
    <Comment>Description</Comment>
    <MemberCount>1</MemberCount>
    <HostGroupId>1</HostGroupId>
    <HostGroupName>Host group 1</HostGroupName>
  </HostGroups>
</ListHostGroupsResponse>
```

JSON format

```
{
  "TotalCount": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostGroups": [{
    "Comment": "Description",
    "HostGroupId": "1",
    "MemberCount": "1",
    "HostGroupName": "Host group 1"
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

9.4. ModifyHostGroup

Modifies the name or description of a specified host group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyHostGroup	The operation that you want to perform. Set the value to ModifyHostGroup .
HostGroupId	String	Yes	1	The ID of the host group that you want to modify. Note You can call the ListHostGroups operation to query the ID of the host group.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to modify the information of the host group. Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to modify the information of the host group. Note For more information about the mapping between region IDs and region names, see Regions and zones .
HostGroupName	String	No	Group01	The new name of the host group. The name can be up to 128 characters in length.
Comment	String	No	comment	The new description of the host group. The value can be up to 500 characters in length.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyHostGroup
&HostGroupId=1
&InstanceId=bastionhost-cn-st220aw****
&HostGroupName=Group01
&<Common request parameters>
```

Sample success responses

XML format

```
<ModifyHostGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</ModifyHostGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

9.5. DeleteHostGroup

Deletes a host group.

Usage notes

You can call this operation to delete a single host group. If you no longer need to perform O&M operations on all hosts in a host group, you can call this operation to delete the host group.

Limits

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteHostGroup	The operation that you want to perform. Set the value to DeleteHostGroup .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host from which you want to delete the host group. Note You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host from which you want to delete the host group. Note For more information about the mapping between region IDs and region names, see Regions and zones .
HostGroupId	String	Yes	1	The ID of the host group that you want to delete. Note You can call the ListHostGroups operation to query the ID of the host group.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DeleteHostGroup
&SourceIp=42.120.XX.XX
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&HostGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteHostGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</DeleteHostGroupResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
404	HostGroupNotFound	The host group is not found.	The error message returned because the specified host group does not exist.

For a list of error codes, visit the [API Error Center](#).

9.6. AddHostsToGroup

Adds one or more hosts to a host group.

Usage notes

You can call this operation to add one or more hosts to a host group. You can add multiple hosts to a host group to manage and grant permissions on the hosts in a centralized manner.

QPS limit

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AddHostsToGroup	The operation that you want to perform. Set the value to AddHostsToGroup .
HostGroupId	String	Yes	1	The ID of the host group to which you want to add hosts. Note You can call the ListHostGroups operation to query the ID of the host group.
HostIds	String	Yes	["1","2","3"]	The ID of the host that you want to add to the host group. The value is a JSON string. You can add up to 100 host IDs. Note You can call the ListHosts operation to query the IDs of hosts.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to add hosts to the host group. Note You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to add hosts to the host group. Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	81500666-d7f5-4143-8329-0223cc738105	The ID of the request.
Results	Array of Item		The result of the call.
Code	String	OK	The return code that indicates whether the call was successful. Valid values: OK: The call was successful. UNEXPECTED: An unknown error occurred. INVALID_ARGUMENT: A request parameter is invalid.  Note Make sure that the request parameters are valid and call the operation again. OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist.  Note Check whether the specified ID of the bastion host exists, whether the specified hosts exist, and whether the specified host IDs are valid. Then, call the operation again. OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostGroupId	String	1	The ID of the host group.
HostId	String	1	The ID of the host.
Message	String	None	This parameter is deprecated.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=AddHostsToGroup
&HostGroupId=1
&HostIds=["1","2","3"]
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

 **format**

```
<AddHostsToGroupResponse>
  <RequestId>81500666-d7f5-4143-8329-0223cc738105</RequestId>
  <Results>
    <HostGroupId>1</HostGroupId>
    <HostId>1</HostId>
    <Code>OK</Code>
  </Results>
</AddHostsToGroupResponse>
```

JSON format

```
{
  "RequestId": "81500666-d7f5-4143-8329-0223cc738105",
  "Results": {
    "HostGroupId": "1",
    "Message": "",
    "HostId": "1",
    "Code": "OK"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

For a list of error codes, visit the [API Error Center](#).

9.7. RemoveHostsFromGroup

Removes one or more hosts from a host group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	RemoveHostsFromGroup	The operation that you want to perform. Set the value to RemoveHostsFromGroup .

Parameter	Type	Required	Example	Description
HostGroupId	String	Yes	1	The ID of the host group from which you want to remove hosts.  Note You can call the ListHostGroups operation to query the ID of the host group.
HostIds	String	Yes	["1","2","3"]	The ID of the host that you want to remove from the host group. The value is a JSON string. You can add up to 100 host IDs.  Note You can call the ListHosts operation to query the IDs of hosts.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to remove hosts from the host group.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to remove hosts from the host group.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
Results	Array of Item		The result of the call.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostGroupId	String	1	The ID of the host group.
HostId	String	1	The ID of the host.
Message	String	None	This parameter is deprecated.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=RemoveHostsFromGroup
&HostGroupId=1
&HostIds=["1","2","3"]
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<RemoveHostsFromGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <HostGroupId>1</HostGroupId>
    <Message></Message>
    <HostId>1</HostId>
    <Code>OK</Code>
  </Results>
</RemoveHostsFromGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": {
    "HostGroupId": 1,
    "Message": "",
    "HostId": 1,
    "Code": "OK"
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10.Host accounts

10.1. CreateHostAccount

Adds a host account to a specified host.

Usage notes

You can call this operation to add a host account to a specified host. You can also configure a password or a private key for the host account. You can add an existing host account in your host system to a host. Then, an O&M personnel can use the host account to log on to the host in Bastionhost.

 **Note** A host account that is added to a host in Bastionhost is not synchronized to your host system.

Limits

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateHostAccount	The operation that you want to perform. Set the value to CreateHostAccount .
HostAccountName	String	Yes	abc	The name of the host account that you want to add. The name can be up to 128 characters in length.
HostId	String	Yes	1	The ID of the host to which you want to add a host account.  Note You can call the ListHosts operation to query the ID of the host.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host in which you want to add a host account to the host.  Note You can call the DescribeInstances operation to query the ID of the bastion host.

Parameter	Type	Required	Example	Description
ProtocolName	String	Yes	SSH	The O&M protocol of the host to which you want to add a host account. Valid values: - SSH - RDP
RegionId	String	No	cn-hangzhou	The region ID of the bastion host in which you want to add a host account to the host.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
Password	String	No	****	The password of the host account.
PrivateKey	String	No	****	The private key of the host account. The value is a Base64-encoded string.  Note This parameter takes effect only when the ProtocolName parameter is set to SSH. If the ProtocolName parameter is set to RDP, you do not need to specify this parameter. You can configure a password and a private key for the host account at the same time. If both a password and a private key are configured for the host account, Bastionhost preferentially uses the private key to log on to the host.
PassPhrase	String	No	****	The passphrase of the private key for the host account.  Note You can specify this parameter when the ProtocolName parameter is set to SSH. If the ProtocolName parameter is set to RDP, you do not need to specify this parameter.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostAccountId	String	1	The ID of the host account.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=CreateHostAccount
&HostAccountName=abc
&HostId=1
&InstanceId=bastionhost-cn-st220aw****
&ProtocolName=SSH
&Password=****
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateHostAccountResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostAccountId>1</HostAccountId>
</CreateHostAccountResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostAccountId": "1"
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

HTTP status code	Error code	Error message	Description
400	HostAccountAlreadyExists	The host account already exists.	The error message returned because the host account that you want to add to the host already exists.

For a list of error codes, visit the [API Error Center](#).

10.2. GetHostAccount

Queries the details of a specified host account of a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetHostAccount	The operation that you want to perform. Set the value to GetHostAccount .
HostAccountId	String	Yes	1	The ID of the host account that you want to query. Note You can call the ListHostAccounts operation to query the ID of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the details of the host account. Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the details of the host account. Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section in this topic.

Response parameters

Parameter	Type	Example	Description
HostAccount	Struct		The details of the host account that were queried.
HasPassword	Boolean	true	Indicates whether a password is set for the host account. Valid values: true: indicates that a password is set for the host account. false: indicates that no password is set for the host account.
HostAccountId	String	1	The ID of the host account.
HostAccountName	String	abc	The name of the host account.
HostId	String	1	The ID of the host to which the host account belongs.
PrivateKeyFingerprint	String	fe:ca:37:42:30:00:9d:95:e6:73:e5:b0:32:0a:**:**	The fingerprint of the private key.
ProtocolName	String	SSH	The protocol used by the host account. Valid values: SSH RDP
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=GetHostAccount
&HostAccountId=1
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<GetHostAccountResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostAccount>
    <HostAccountName>abc</HostAccountName>
    <ProtocolName>SSH</ProtocolName>
    <PrivateKeyFingerprint>fe:ca:37:42:30:00:9d:95:e6:73:e5:b0:32:0a:**:**</PrivateKeyFinger
print>
    <HostId>1</HostId>
    <HasPassword>true</HasPassword>
    <HostAccountId>1</HostAccountId>
  </HostAccount>
</GetHostAccountResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostAccount": {
    "HostAccountName": "abc",
    "ProtocolName": "SSH",
    "PrivateKeyFingerprint": "fe:ca:37:42:30:00:9d:95:e6:73:e5:b0:32:0a:**:**",
    "HostId": "1",
    "HasPassword": "true",
    "HostAccountId": "1"
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10.3. ModifyHostAccount

Modifies the information of a specified host account of a specified Bastionhost instance, such as the name, password, and private key.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyHostAccount	The operation that you want to perform. Set the value to ModifyHostAccount .

Parameter	Type	Required	Example	Description
HostAccountId	String	Yes	1	The ID of the host account that you want to modify.  Note You can call the ListHostAccounts operation to query the ID of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to modify the details of the host account .  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to modify the host account.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
HostAccountName	String	No	abc	The new name of the host account. The name can be up to 128 characters in length.
Password	String	No	****	The new password of the host account.

Parameter	Type	Required	Example	Description
PrivateKey	String	No	****	The new private key of the host account. The value is a Base64-encoded string.  Note This parameter takes effect only when the ProtocolName parameter is set to SSH. If the ProtocolName parameter is set to RDP, this parameter is not required. You can call the GetHostAccount operation to query the protocol used by the host account. You can set a password and a private key for the host account at the same time. If both a password and a private key are set for the host account, Bastionhost preferentially uses the private key to log on to the host.
PassPhrase	String	No	****	The passphrase of the new private key for the host account.  Note This parameter takes effect only when the ProtocolName parameter is set to SSH. If the ProtocolName parameter is set to RDP, this parameter is not required.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section in this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyHostAccount
&HostAccountId=1
&InstanceId=bastionhost-cn-st220aw****
&HostAccountName=abc
&<Common request parameters>
```

Sample success responses

XML format

```
<ModifyHostAccountResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</ModifyHostAccountResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

10.4. DeleteHostAccount

Removes a host account.

Usage notes

You can call this operation to remove a single host account. If you no longer use a host account that is added to a host in Bastionhost, you can call this operation to remove the host account from the host.

 **Note** After you remove the host account, you must enter the username and password of the host when you log on to the host in Bastionhost.

Limits

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteHostAccount	The operation that you want to perform. Set the value to DeleteHostAccount .

Parameter	Type	Required	Example	Description
HostAccountId	String	Yes	1	The ID of the host account that you want to remove.  Note You can call the ListHostAccounts operation to query the ID of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host from which you want to remove the host account.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host from which you want to remove the host account.  Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DeleteHostAccount
&HostAccountId=1
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<DeleteHostAccountResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</DeleteHostAccountResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
404	HostAccountNotFound	The host account is not found.	The error message returned because the host account that you want to remove does not exist.

For a list of error codes, visit the [API Error Center](#).

10.5. ResetHostAccountCredential

Deletes the logon credential of a specified host account of a specified Bastionhost instance. The logon credential can be the password or SSH private key.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ResetHostAccountCredential	The operation that you want to perform. Set the value to ResetHostAccountCredential .

Parameter	Type	Required	Example	Description
CredentialType	String	Yes	Password	The type of the logon credential that you want to delete. Valid values: • Password: You want to delete the password. • PrivateKey: You want to delete the SSH private key.
HostAccountId	String	Yes	1	The ID of the host account for which the logon credential is to be deleted.  Note You can call the ListHostAccounts operation to query the ID of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to delete the logon credential for the host account.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to delete the logon credential for the host account.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section in this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ResetHostAccountCredential
&CredentialType=Password
&HostAccountId=1
&InstanceId=bastionhost-cn-xxx
&<Common request parameters>
```

Sample success responses

XML format

```
<ResetHostAccountCredentialResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</ResetHostAccountCredentialResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

11.Users

11.1. CreateUser

Adds a user to a bastion host.

Usage notes

You can call this operation to add a user to a bastion host. You can add local users and Resource Access Management (RAM) users. After a Bastionhost administrator adds a user to a bastion host, the O&M personnel can log on to the bastion host as the user to perform O&M operations on the host on which they have permissions.

Limits

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateUser	The operation that you want to perform. Set the value to CreateUser .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host to which you want to add a user.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
Source	String	Yes	Local	The source of the user that you want to add. Valid values: • Local: a local user • Ram: a RAM user
UserName	String	Yes	abc_def	The logon name of the user that you want to add. The logon name can contain only letters, digits, and underscores (_) and can be up to 128 characters in length.

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the bastion host to which you want to add a user.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
DisplayName	String	No	Bob	The display name of the user that you want to add. This display name can be up to 128 characters in length.
Password	String	No	****	The logon password of the user that you want to add. The logon password can be up to 128 characters in length.  Note This parameter is required if the Source parameter is set to Local.
Comment	String	No	comment	The remarks of the user that you want to add. The remarks can be up to 500 characters in length.
Email	String	No	123@qq.com	The email address of the user that you want to add.
Mobile	String	No	1359999****	The mobile phone number of the user that you want to add.
SourceUserId	String	No	122748924538****	The unique identifier of the user that you want to add.  Note This parameter uniquely identifies a RAM user of the bastion host. This parameter is required if the Source parameter is set to Ram. You can call the ListUsers operation to obtain the unique identifier of the user from the UserId response parameter.

Parameter	Type	Required	Example	Description
MobileCountryCode	String	No	CN	The country where the mobile number of the user is registered. Default value: CN. Valid values: • CN: the Chinese mainland, whose country calling code is +86 • HK: Hong Kong (China), whose country calling code is +852 • MO: Macau (China), whose country calling code is +853 • TW: Taiwan (China), whose country calling code is +886 • RU: Russia, whose country calling code is +7 • SG: Singapore, whose country calling code is +65 • MY: Malaysia, whose country calling code is +60 • ID: Indonesia, whose country calling code is +62 • DE: Germany, whose country calling code is +49 • AU: Australia, whose country calling code is +61 • US: US, whose country calling code is +1 • AE: United Arab Emirates, whose country calling code is +971 • JP: Japan, whose country calling code is +81 • GB: UK, whose country calling code is +44 • IN: India, whose country calling code is +91 • KR: Republic of Korea, whose country calling code is +82 • PH: Philippines, whose country calling code is +63 • CH: Switzerland, whose country calling code is +41 • SE: Sweden, whose country calling code is +46

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
-----------	------	---------	-------------

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
UserId	String	1	The ID of the user.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=CreateUser
&InstanceId=bastionhost-cn-st220aw****
&Source=Local
&UserName=abc_def
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateUserResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <UserId>1</UserId>
</CreateUserResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "UserId": "1"
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
400	UserAlreadyExists	The user already exists.	The error message returned because the user that you want to add already exists.

For a list of error codes, visit the [API Error Center](#).

11.2. GetUser

Queries the information of a specified user of a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetUser	The operation that you want to perform. Set the value to GetUser .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance to which the user to be queried belongs. Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserId	String	Yes	1	The ID of the user to be queried. Note You can call the ListUsers operation to query the ID of the user.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance to which the user to be queried belongs. Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
User	Struct		The information of the user that was queried.
Comment	String	commet	The description of the user.

Parameter	Type	Example	Description
DisplayName	String	Bob	The display name of the user.
Email	String	1099**@qq.com	The email address of the user.
Mobile	String	1359999****	The mobile number of the user.
MobileCountryCode	String	CN	The country where the mobile number of the user is registered. Valid values: • CN: mainland China, whose country calling code is +86 • HK: Hong Kong (China), whose country calling code is +852 • MO: Macau (China), whose country calling code is +853 • TW: Taiwan (China), whose country calling code is +886 • RU: Russia, whose country calling code is +7 • SG: Singapore, whose country calling code is +65 • MY: Malaysia, whose country calling code is +60 • ID: Indonesia, whose country calling code is +62 • DE: Germany, whose country calling code is +49 • AU: Australia, whose country calling code is +61 • US: United States, whose country calling code is +1 • AE: United Arab Emirates, whose country calling code is +971 • JP: Japan, whose country calling code is +81 • GB: United Kingdom, whose country calling code is +44 • IN: India, whose country calling code is +91 • KR: South Korea, whose country calling code is +82 • PH: Philippines, whose country calling code is +63 • CH: Switzerland, whose country calling code is +41 • SE: Sweden, whose country calling code is +46

Parameter	Type	Example	Description
Source	String	Local	The source of the user. Valid values: • Local: a local user • Ram: a RAM user
SourceUserId	String	122748924538****	The unique ID of the user.  Note This parameter uniquely identifies a RAM user of the Bastionhost instance. A value is returned for this parameter if the Source parameter is set to Ram. No value is returned for this parameter if the Source parameter is set to Local.
UserId	String	1	The ID of the user.
UserName	String	abccabc_def	The logon name of the user.
UserState	List	["Normal"]	The status of the user. Valid values: • Normal: The user can access the Bastionhost instance. • Frozen: The user is locked and cannot access the Bastionhost instance. • Expired: The user has expired and cannot access the Bastionhost instance.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=GetUser
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

`XML` format

```
<GetUserResponse>
  <User>
    <Comment>commet</Comment>
    <Email>1099**@qq.com</Email>
    <UserName>abcabc_def</UserName>
    <UserId>1</UserId>
    <SourceUserId>122748924538****</SourceUserId>
    <DisplayName>Bob</DisplayName>
    <MobileCountryCode>CN</MobileCountryCode>
    <Mobile>1359999****</Mobile>
    <Source>Local</Source>
    <UserState>Normal</UserState>
  </User>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</GetUserResponse>
```

JSON format

```
{
  "User": {
    "Comment": "commet",
    "Email": "1099**@qq.com",
    "UserName": "abcabc_def",
    "UserId": "1",
    "SourceUserId": "122748924538****",
    "DisplayName": "Bob",
    "MobileCountryCode": "CN",
    "Mobile": "1359999****",
    "Source": "Local",
    "UserState": ["Normal"]
  },
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

11.3. ListUsers

Queries the users of a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListUsers	The operation that you want to perform. Set the value to ListUsers .

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance to which the users to be queried belong.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance to which the users to be queried belong.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
PageNumber	String	No	1	The number of the page to return. Default value: 1.
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. By default, the number of entries on each page is 20. If you do not set the PageSize parameter, 20 entries are returned per page by default.  Note We recommend that you do not leave this parameter empty.
UserName	String	No	abc	The logon name of the user to be queried. Only exact match is supported.
DisplayName	String	No	User	The display name of the user to be queried. Only exact match is supported.
Source	String	No	Local	The source of the user to be queried. Valid values: Local: a local user Ram: a RAM user
Mobile	String	No	1359999****	The mobile number of the user to be queried. Only exact match is supported.

Parameter	Type	Required	Example	Description
UserState	String	No	Normal	The status of the user to be queried. Valid values: • Normal: The user can access the Bastionhost instance. • Frozen: The user is locked and cannot access the Bastionhost instance. • Expired: The user has expired and cannot access the Bastionhost instance.
SourceUserId	String	No	122748924538****	The unique ID of the user to be queried. Only exact match is supported.  Note This parameter uniquely identifies a RAM user of the Bastionhost instance. This parameter takes effect only when the Source parameter is set to Ram. You can call the ListUsers operation to obtain the unique ID of the user from the UserId response parameter.
UserGroupId	String	No	1	The ID of the user group to be queried.  Note You can call the ListUserGroups operation to query the ID of the user group.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	1	The total number of users that were queried.
Users	Array of Item		The list of users that were queried.
Comment	String	comment	The description of the user.
DisplayName	String	Bob	The display name of the user.

Parameter	Type	Example	Description
Email	String	1099**@qq.com	The email address of the user.
Mobile	String	1359999****	The mobile number of the user.
MobileCountryCode	String	CN	The country where the mobile number of the user is registered. Valid values: • CN: mainland China, whose country calling code is +86 • HK: Hong Kong (China), whose country calling code is +852 • MO: Macau (China), whose country calling code is +853 • TW: Taiwan (China), whose country calling code is +886 • RU: Russia, whose country calling code is +7 • SG: Singapore, whose country calling code is +65 • MY: Malaysia, whose country calling code is +60 • ID: Indonesia, whose country calling code is +62 • DE: Germany, whose country calling code is +49 • AU: Australia, whose country calling code is +61 • US: United States, whose country calling code is +1 • AE: United Arab Emirates, whose country calling code is +971 • JP: Japan, whose country calling code is +81 • GB: United Kingdom, whose country calling code is +44 • IN: India, whose country calling code is +91 • KR: South Korea, whose country calling code is +82 • PH: Philippines, whose country calling code is +63 • CH: Switzerland, whose country calling code is +41 • SE: Sweden, whose country calling code is +46
Source	String	Local	The source of the user. Valid values: • Local: a local user • Ram: a RAM user

Parameter	Type	Example	Description
SourceUserId	String	122748924538****	The unique ID of the user.  Note This parameter uniquely identifies a RAM user of the Bastionhost instance. A value is returned for this parameter if the Source parameter is set to Ram. No value is returned for this parameter if the Source parameter is set to Local.
UserId	String	1	The ID of the user.
UserName	String	abc_def	The logon name of the user.
UserState	List	["Normal"]	The status of the user. Valid values: • Normal: The user can access the Bastionhost instance. • Frozen: The user is locked and cannot access the Bastionhost instance. • Expired: The user has expired and cannot access the Bastionhost instance.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListUsers
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<ListUsersResponse>
  <TotalCount>1</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Users>
    <Comment>comment</Comment>
    <UserName>abc_def</UserName>
    <Email>1099**@qq.com</Email>
    <UserId>1</UserId>
    <SourceUserId>122748924538****</SourceUserId>
    <MobileCountryCode>CN</MobileCountryCode>
    <DisplayName>Bob</DisplayName>
    <Mobile>1359999****</Mobile>
    <Source>Local</Source>
    <UserState>Normal</UserState>
  </Users>
</ListUsersResponse>
```

JSON format

```
{
  "TotalCount": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Users": [{
    "Comment": "comment",
    "UserName": "abc_def",
    "Email": "1099**@qq.com",
    "UserId": "1",
    "SourceUserId": "122748924538****",
    "MobileCountryCode": "CN",
    "DisplayName": "Bob",
    "Mobile": "1359999****",
    "Source": "Local",
    "UserState": ["Normal"]
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

11.4. ModifyUser

Modifies the information of a specified user of a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyUser	The operation that you want to perform. Set the value to ModifyUser .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to modify user information.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.

Parameter	Type	Required	Example	Description
UserId	String	Yes	1	The ID of the user whose information you want to modify.  Note You can call the ListUsers operation to query the ID of the user.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to modify user information.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
Password	String	No	****	The new password of the user. The value of this parameter can contain letters, digits, and underscores (_). It can be up to 128 characters in length.  Note This parameter takes effect only when the Source parameter is set to Local.
DisplayName	String	No	Bob	The new display name of the user. The value can be up to 128 characters in length.
Comment	String	No	comment	The new description of the user. The value can be up to 500 characters in length.
Email	String	No	123**@qq.com	The new email address of the user.
Mobile	String	No	1358888****	The new mobile number of the user.

Parameter	Type	Required	Example	Description
MobileCountryCode	String	No	CN	The country where the new mobile number of the user is registered. Valid values: • CN: mainland China, whose country calling code is +86 • HK: Hong Kong (China), whose country calling code is +852 • MO: Macau (China), whose country calling code is +853 • TW: Taiwan (China), whose country calling code is +886 • RU: Russia, whose country calling code is +7 • SG: Singapore, whose country calling code is +65 • MY: Malaysia, whose country calling code is +60 • ID: Indonesia, whose country calling code is +62 • DE: Germany, whose country calling code is +49 • AU: Australia, whose country calling code is +61 • US: United States, whose country calling code is +1 • AE: United Arab Emirates, whose country calling code is +971 • JP: Japan, whose country calling code is +81 • GB: United Kingdom, whose country calling code is +44 • IN: India, whose country calling code is +91 • KR: South Korea, whose country calling code is +82 • PH: Philippines, whose country calling code is +63 • CH: Switzerland, whose country calling code is +41 • SE: Sweden, whose country calling code is +46

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
-----------	------	---------	-------------

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyUser
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<ModifyUserResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</ModifyUserResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

11.5. DeleteUser

Deletes a specified user of a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteUser	The operation that you want to perform. Set the value to DeleteUser .

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance to which the user to be deleted belongs. Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserId	String	Yes	1	The ID of the user to be deleted. Note You can call the ListUsers operation to query the ID of the user.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance to which the user to be deleted belongs. Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DeleteUser
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<DeleteUserResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</DeleteUserResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

11.6. LockUsers

Locks one or more users of a bastion host.

Usage notes

You can call this operation to lock one or more users of a bastion host. If a user does not need to use a bastion host to perform O&M operations within a specific period of time, you can lock the user. The locked user can no longer log on to or perform O&M operations on the hosts on which the user is granted permissions. If you want to unlock the user later, you can call the [UnlockUsers](#) operation.

QPS limit

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	LockUsers	The operation that you want to perform. Set the value to LockUsers .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host to which the users to be locked belong.  Note You can call the DescribeInstances operation to query the ID of the bastion host.

Parameter	Type	Required	Example	Description
UserIds	String	Yes	["1","2","3"]	The ID of the user to be locked. The value is a JSON string. You can add up to 100 user IDs. If you specify multiple IDs, separate the IDs with commas (,).  Note You can call the ListUsers operation to query the IDs of users.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host to which the users to be locked belong.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
Results	Array of Item		The result of the call.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether the call was successful. Valid values: OK: The call was successful. UNEXPECTED: An unknown error occurred. INVALID_ARGUMENT: A request parameter is invalid.  Note Make sure that the request parameters are valid and call the operation again. OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist.  Note Check whether the specified ID of the bastion host exists, whether the specified hosts exist, and whether the specified host IDs are valid. Then, call the operation again. OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
Message	String	None	This parameter is deprecated.
UserId	String	1	The ID of the user.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=LockUsers
&InstanceId=bastionhost-cn-st220aw****
&UserIds= ["1","2","3"]
&<Common request parameters>
```

Sample success responses

XML format

```
<LockUsersResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <UserId>1</UserId>
    <Code>OK</Code>
  </Results>
</LockUsersResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "Message": "",
    "UserId": "1",
    "Code": "OK"
  }]
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

For a list of error codes, visit the [API Error Center](#).

11.7. UnlockUsers

Unlocks one or more users of a bastion host.

Usage notes

After you call the [LockUsers](#) operation to lock one or more users of a bastion host, you can call this operation to unlock the users. After the users are unlocked, the users can perform O&M operations by using the bastion host.

QPS limit

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	UnlockUsers	The operation that you want to perform. Set the value to UnlockUsers .

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host to which the users to be unlocked belong.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserIds	String	Yes	["1","2"]	The ID of the user that you want to unlock. The value is a JSON string. You can add up to 100 user IDs. If you specify multiple IDs, separate the IDs with commas (,).  Note You can call the ListUsers operation to query the IDs of users.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host to which the users to be unlocked belong.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
Results	Array of Item		The result of the call.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid.  Note Make sure that the request parameters are valid and call the operation again. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist.  Note Check whether the specified ID of the bastion host exists, whether the specified hosts exist, and whether the specified host IDs are valid. Then, call the operation again. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
Message	String	None	This parameter is deprecated.
UserId	String	1	The ID of the user.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=UnlockUsers
&InstanceId=bastionhost-cn-st220aw****
&UserIds=["1","2"]
&<Common request parameters>
```

Sample success responses

`XML` format

```
<UnlockUsersResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <UserId>1</UserId>
    <Code>OK</Code>
  </Results>
</UnlockUsersResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "Message": "",
    "UserId": "1",
    "Code": "OK"
  }]
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

For a list of error codes, visit the [API Error Center](#).

12. User group

12.1. CreateUserGroup

Creates a user group for a specified bastion host.

Usage notes

You can call this operation to create a user group for a bastion host as an administrator. Then, you can call the [AddUsersToGroup](#) operation to add users to the user group at a time. After you add the users to the user group, you can authorize and manage the users in a centralized manner.

Limits

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateUserGroup	The operation that you want to perform. Set the value to CreateUserGroup .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to create a user group.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserGroupName	String	Yes	group	The name of the user group that you want to create. This name can be a up to 128 characters in length.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to create a user group.  Note For more information about the mapping between region IDs and region names, see Regions and zones .

Parameter	Type	Required	Example	Description
Comment	String	No	comment	The remarks of the user group. The remarks can be up to 500 characters in length.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
UserGroupId	String	1	The ID of the user group.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=CreateUserGroup
&InstanceId=bastionhost-cn-st220aw****
&UserGroupName=group
&<Common request parameters>
```

Sample success responses

XML format

```
<CreateUserGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <UserGroupId>1</UserGroupId>
</CreateUserGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "UserGroupId": "1"
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
400	UserGroupAlreadyExists	The user group already exists.	The error message returned because the user group that you want to create already exists.

For a list of error codes, visit the [API Error Center](#).

12.2. GetUserGroup

Queries the details of a specified user group in a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetUserGroup	The operation that you want to perform. Set the value to GetUserGroup .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the details of the user group.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserGroupId	String	Yes	1	The ID of the user group to be queried.  Note You can call the ListUserGroups operation to query the ID of the user group.

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the details of the user group.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
UserGroup	Struct		The details of the user group returned.
Comment	String	comment	The description of the user group.
UserGroupId	String	1	The ID of the user group.
UserGroupName	String	UserGroup01	The name of the user group.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=GetUserGroup
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<GetUserGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <UserGroup>
    <Comment>comment</Comment>
    <UserGroupName>UserGroup01</UserGroupName>
    <UserGroupId>1</UserGroupId>
  </UserGroup>
</GetUserGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "UserGroup": {
    "Comment": "comment",
    "UserGroupName": "UserGroup01",
    "UserGroupId": "1"
  }
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

12.3. ListUserGroups

Queries the user groups in a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListUserGroups	The operation that you want to perform. Set the value to ListUserGroups .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query user groups.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query user groups.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
PageNumber	String	No	1	The number of the page to return. Default value: 1.

Parameter	Type	Required	Example	Description
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. Default value: 20. If you leave the PageSize parameter empty, 20 entries are returned on each page.  Note We recommend that you do not leave the PageSize parameter empty.
UserGroupName	String	No	TestGroup01	The name of the user group that you want to query. Only exact match is supported.

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	1	The total number of user groups returned.
UserGroups	Array of Item		The user groups returned.
Comment	String	comment	The description of the user group.
MemberCount	Integer	5	The number of users in the user group.
UserGroupId	String	1	The ID of the user group.
UserGroupName	String	TestGroup01	The name of the user group.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListUserGroups
&InstanceId=bastionhost-cn-st220aw****
&<Common request parameters>
```

Sample success responses

XML format

```
<ListUserGroupsResponse>
  <TotalCount>1</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <UserGroups>
    <Comment>comment</Comment>
    <UserGroupName>TestGroup01</UserGroupName>
    <UserGroupId>1</UserGroupId>
    <MemberCount>5</MemberCount>
  </UserGroups>
</ListUserGroupsResponse>
```

JSON format

```
{
  "TotalCount": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "UserGroups": [{
    "Comment": "comment",
    "UserGroupName": "TestGroup01",
    "UserGroupId": "1",
    "MemberCount": "5"
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

12.4. ModifyUserGroup

Modifies the name or description of a specified user group in a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyUserGroup	The operation that you want to perform. Set the value to ModifyUserGroup .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to modify the information of the user group.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.

Parameter	Type	Required	Example	Description
UserGroupId	String	Yes	1	The ID of the user group that you want to modify.  Note You can call the ListUserGroups operation to query the ID of the user group.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to modify the information of the user group.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
UserGroupName	String	No	TestUserGroup	The new name of the user group. The value can be up to 128 characters in length.
Comment	String	No	comment	The new description of the user group. The value can be up to 500 characters in length.

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyUserGroup
&InstanceId=bastionhost-cn-xxx
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<ModifyUserGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</ModifyUserGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

12.5. DeleteUserGroup

Deletes a specified user group from a specified Bastionhost instance.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteUserGroup	The operation that you want to perform. Set the value to DeleteUserGroup .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to delete the user group.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserGroupId	String	Yes	1	The ID of the user group that you want to delete.  Note You can call the ListUserGroups operation to query the ID of the user group.

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to delete the user group.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DeleteUserGroup
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<DeleteUserGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</DeleteUserGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

12.6. AddUsersToGroup

Adds one or more users to a user group.

Usage notes

You can call this operation to add one or more users to a user group. After you call the [CreateUserGroup](#) operation to create a user group, you can call the AddUsersToGroup operation to add multiple users to the user group. Then, you can manage and grant permissions to the users at a time.

QPS limit

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AddUsersToGroup	The operation that you want to perform. Set the value to AddUsersToGroup .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to add users to the user group.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserGroupId	String	Yes	1	The ID of the user group to which you want to add users.  Note You can call the ListUserGroups operation to query the ID of the user group.

Parameter	Type	Required	Example	Description
UserIds	String	Yes	["1","2","3"]	The ID of the user that you want to add to the user group. The value is a JSON string. You can add up to 100 user IDs. If you specify multiple IDs, separate the IDs with commas (,).  Note You can call the ListUsers operation to query the IDs of users.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to add users to the user group.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
Results	Array of Item		The result of the call.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid.  Note Make sure that the request parameters are valid and call the operation again. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist.  Note Check whether the specified ID of the bastion host exists, whether the specified hosts exist, and whether the specified host IDs are valid. Then, call the operation again. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
Message	String	None	This parameter is deprecated.
UserGroupId	String	1	The ID of the group.
UserId	String	1	The ID of the user.

Examples

Sample requests

```

http(s)://[Endpoint]/?Action=AddUsersToGroup
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&UserIds= ["1","2","3"]
&<Common request parameters>

```

Sample success responses

XML format

```
<AddUsersToGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <Code>OK</Code>
    <UserId>1</UserId>
    <UserGroupId>1</UserGroupId>
  </Results>
</AddUsersToGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "Message": "",
    "Code": "OK",
    "UserId": "1",
    "UserGroupId": "1"
  }]
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

For a list of error codes, visit the [API Error Center](#).

12.7. RemoveUsersFromGroup

Removes one or more users from a user group.

Usage notes

You can call this operation to remove one or more users from a user group. When users in a user group are transferred to a new position, resign, or are switched to another user group, you can call this operation to remove the users from the current user group at a time.

QPS limit

You can call this operation up to 10 times per second per account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	RemoveUsersFromGroup	The operation that you want to perform. Set the value to RemoveUsersFromGroup .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to remove users from the user group.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserGroupId	String	Yes	1	The ID of the user group from which you want to remove users.  Note You can call the ListUserGroups operation to query the ID of the user group.
UserIds	String	Yes	["1","2","3"]	The ID of the user who you want to remove. The value is a JSON string. You can add up to 100 user IDs. If you specify multiple IDs, separate the IDs with commas (,).  Note You can call the ListUsers operation to query the IDs of users.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to remove users from the user group.  Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
-----------	------	---------	-------------

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
Results	Array of Item		The result of the call.
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid.  Note Make sure that the request parameters are valid and call the operation again. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist.  Note Check whether the specified ID of the bastion host exists, whether the specified hosts exist, and whether the specified host IDs are valid. Then, call the operation again. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
Message	String	None	This parameter is deprecated.
UserGroupId	String	1	The ID of the group.
UserId	String	1	The ID of the user.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=RemoveUsersFromGroup
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&UserIds=["1","2","3"]
&<Common request parameters>
```

Sample success responses

XML format

```
<RemoveUsersFromGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <Code>OK</Code>
    <UserId>1</UserId>
    <UserGroupId>1</UserGroupId>
  </Results>
</RemoveUsersFromGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "Message": "",
    "Code": "OK",
    "UserId": "1",
    "UserGroupId": "1"
  }]
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

For a list of error codes, visit the [API Error Center](#).

13. Host authorization

13.1. AttachHostAccountsToUser

Authorizes a user to manage one or more hosts and host accounts.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AttachHostAccountsToUser	The operation that you want to perform. Set the value to AttachHostAccountsToUser .
Hosts	String	Yes	[{"HostId": "1"}, {"HostId": "2", "HostAccountIds": ["1", "2", "3"]}, {"HostId": "3", "HostAccountIds": ["4", "5", "6"]}, {"HostId": "4", "HostAccountIds": ["9", "8", "7"]}]	The IDs of the host and host account that you want to authorize the user to manage. You can specify up to 10 host IDs and up to 10 host account IDs for each host. You can specify only host IDs. In this case, the user is authorized to manage only the specified hosts. For more information about this parameter, see the "Description of the Hosts parameter" section of this topic. Note You can call the ListHosts operation to query the ID of the host and the ListHostAccounts operation to query the ID of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to authorize the user to manage the specified hosts and host accounts. Note You can call the DescribeInstances operation to query the ID of the bastion host.

Parameter	Type	Required	Example	Description
UserId	String	Yes	1	The ID of the user that you want to authorize to manage the specified hosts and host accounts.  Note You can call the ListUsers operation to query the ID of the user.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to authorize the user to manage the specified hosts and host accounts.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

Description of the Hosts parameter

Field	Type	Example	Description
HostId	string	1	The ID of the host.
HostAccountIds	array[string]	["9","8","7"]	The ID of the host account. The value is a JSON string. You can specify up to 10 host account IDs for each host.

The following code provides an example on the settings of the Hosts parameter:

```
[
  {"HostId": "1"},
  {"HostId": "2", "HostAccountIds": ["1", "2", "3", ...]},
  {"HostId": "3", "HostAccountIds": ["4", "5", "6", ...]},
  {"HostId": "4", "HostAccountIds": ["9", "8", "7", ...]}
]
```

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
-----------	------	---------	-------------

Parameter	Type	Example	Description
Results	Array of Item		The result of the call.
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid.  Note Make sure that the request parameters are valid and call the operation again. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist.  Note Check whether the specified ID of the bastion host exists, whether the specified hosts exist, and whether the specified host IDs are valid. Then, call the operation again. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccounts	Array of Item		The result of authorizing the specified user to manage the specified host accounts.
Code	String	OK	The return code that indicates whether the user was authorized to manage the specified host account. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountId	String	1	The ID of the host account.
Message	String	None	This parameter is deprecated.

Parameter	Type	Example	Description
HostId	String	1	The ID of the host.
Message	String	None	This parameter is deprecated.
UserId	String	1	The ID of the user.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=AttachHostAccountsToUser
&Hosts=[{"HostId":"1"}, {"HostId":"2","HostAccountIds":["1","2","3"]}, {"HostId":"3","HostAccountIds":["4","5","6"]}, {"HostId":"4","HostAccountIds":["9","8","7"]} ]
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<AttachHostAccountsToUserResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <HostId>1</HostId>
    <Code>OK</Code>
    <UserId>1</UserId>
  </Results>
  <Results>
    <HostAccounts>
      <Message></Message>
      <Code>OK</Code>
      <HostAccountId>1</HostAccountId>
    </HostAccounts>
  </Results>
</AttachHostAccountsToUserResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [
    {
      "Message": "",
      "HostId": 1,
      "Code": "OK",
      "UserId": 1
    },
    {
      "HostAccounts": {
        "Message": "",
        "Code": "OK",
        "HostAccountId": 1
      }
    }
  ]
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

For a list of error codes, visit the [API Error Center](#).

13.2. ListHostsForUser

Queries the hosts that a specified user is authorized or not authorized to manage.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostsForUser	The operation that you want to perform. Set the value to <code>ListHostsForUser</code> .

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the hosts that the user is authorized or not authorized to manage.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserId	String	Yes	1	The ID of the user.  Note You can call the ListUsers operation to query the ID of the user ID.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the hosts that the user is authorized or not authorized to manage.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
Mode	String	No	Authorized	The category of the host that you want to query. Valid values: Authorized: Query the hosts that the user is authorized to manage. This is the default value. Unauthorized: Query the hosts that the user is not authorized to manage.
PageNumber	String	No	1	The number of the page to return. Default value: 1.
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. Default value: 20. If you leave the PageSize parameter empty, 20 entries are returned on each page.  Note We recommend that you do not leave the PageSize parameter empty.

Parameter	Type	Required	Example	Description
HostAddress	String	No	192.168.XX.XX	The endpoint of the host that you want to query. You can set this parameter to a domain name or an IP address. Only exact match is supported.
HostName	String	No	abc	The name of the host that you want to query. Only exact match is supported.
OSType	String	No	Linux	The operating system of the host that you want to query. Valid values: • Linux • Windows

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
Hosts	Array of Item		The hosts returned.
ActiveAddressType	String	Public	The endpoint type of the host. Valid values: • Public: a public endpoint • Private: an internal endpoint
Comment	String	comment	The description of the host.
HostId	String	1	The ID of the host.
HostName	String	host01	The name of the host.
HostPrivateAddress	String	192.168.XX.XX	The internal endpoint of the host. The value is a domain name or an IP address.
HostPublicAddresses	String	10.158.XX.XX	The public endpoint of the host. The value is a domain name or an IP address.
OSType	String	Linux	The operating system of the host. Valid values: • Linux • Windows

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	1	The total number of hosts returned.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostsForUser
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<ListHostsForUserResponse>
  <Hosts>
    <Comment>comment</Comment>
    <ActiveAddressType>Public</ActiveAddressType>
    <HostPrivateAddress>192.168.XX.XX</HostPrivateAddress>
    <HostPublicAddress>10.158.XX.XX</HostPublicAddress>
    <OSType>Linux</OSType>
    <HostId>1</HostId>
    <HostName>host01</HostName>
  </Hosts>
  <TotalCount>1</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE </RequestId>
</ListHostsForUserResponse>
```

JSON format

```
{
  "Hosts": [{
    "Comment": "comment",
    "ActiveAddressType": "Public",
    "HostPrivateAddress": "192.168.XX.XX",
    "HostPublicAddress": "10.158.XX.XX",
    "OSType": "Linux",
    "HostId": "1",
    "HostName": "host01"
  }],
  "TotalCount": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE "
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.3. ListHostAccountsForUser

Queries the host accounts that a specified user is authorized to manage on a specified host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostAccountsForUser	The operation that you want to perform. Set the value to ListHostAccountsForUser .
HostId	String	Yes	1	The ID of the host for which you want to query the host accounts that the user is authorized to manage.  Note You can call the ListHosts operation to query the ID of the host.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the host accounts that the user is authorized to manage on the host.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserId	String	Yes	1	The ID of the user for which you want to query authorized host accounts.  Note You can call the ListUsers operation to query the ID of the user ID.

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the host accounts that the user is authorized to manage on the host.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
PageNumber	String	No	1	The number of the page to return. Default value: 1.
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. Default value: 20. If you leave the PageSize parameter empty, 20 entries are returned on each page.  Note We recommend that you do not leave the PageSize parameter empty.
HostAccountName	String	No	root	The name of the host account that you want to query. Exact match is supported.

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostAccounts	Array of Item		The host accounts returned.
HostAccountId	String	1	The ID of the host account.
HostAccountName	String	root	The name of the host account.
HostId	String	1	The ID of the host for which the host accounts were queried.

Parameter	Type	Example	Description
IsAuthorized	Boolean	true	Indicates whether the user is authorized to manage the host account. Valid values: true: The user is authorized to manage the host account. false: The user is not authorized to manage the host account.
ProtocolName	String	SSH	The protocol that is used by the host account. Valid values: SSH RDP
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	1	The total number of host accounts returned.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostAccountsForUser
&HostId=1
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<ListHostAccountsForUserResponse>
  <TotalCount>1</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE </RequestId>
  <HostAccounts>
    <HostAccountName>root</HostAccountName>
    <ProtocolName>SSH</ProtocolName>
    <HostId>1</HostId>
    <IsAuthorized>true</IsAuthorized>
    <HostAccountId>1</HostAccountId>
  </HostAccounts>
</ListHostAccountsForUserResponse>
```

JSON format

```
{
  "TotalCount": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE ",
  "HostAccounts": [{
    "HostAccountName": "root",
    "ProtocolName": "SSH",
    "IsAuthorized": "true",
    "HostId": "1",
    "HostAccountId": "1"
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.4. DetachHostAccountsFromUser

Revokes the permissions on one or more hosts and host accounts from a user.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DetachHostAccountsFromUser	The operation that you want to perform. Set the value to DetachHostAccountsFromUser .
Hosts	String	Yes	[{"HostId": "1"}, {"HostId": "2", "HostAccountIds": ["1", "2", "3"]}, {"HostId": "3", "HostAccountIds": ["4", "5", "6"]}, {"HostId": "4", "HostAccountIds": ["9", "8", "7"]}]	The IDs of the host and host account on which you want to revoke permissions from the user. You can specify up to 10 host IDs and up to 10 host account IDs for each host. You can specify only host IDs. In this case, the permissions on both the specified hosts and all host accounts of the hosts are revoked from the user. For more information about this parameter, see the "Description of the Hosts parameter" section of this topic.  Note You can call the ListHosts operation to query the ID of the host and the ListHostAccounts operation to query the ID of the host account.

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host in which you want to revoke permissions on the specified hosts and host accounts from the user.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserId	String	Yes	1	The ID of the user from which you want to revoke permissions on the specified hosts and host accounts.  Note You can call the ListUsers operation to query the ID of the user.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host in which you want to revoke permissions on the specified hosts and host accounts from the user.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

Description of the Hosts parameter

Field	Type	Example	Description
HostId	string	1	The ID of the host.
HostAccountIds	array[string]	["9", "8", "7"]	The ID of the host account. The value is a JSON string. You can specify up to 10 host account IDs for each host.

The following code provides an example on the settings of the Hosts parameter:

```
[
  {"HostId": "1"},
  {"HostId": "2", "HostAccountIds": ["1", "2", "3", ...]},
  {"HostId": "3", "HostAccountIds": ["4", "5", "6", ...]},
  {"HostId": "4", "HostAccountIds": ["9", "8", "7", ...]}
]
```

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
Results	Array of Item		The result of the call.
Code	String	OK	The return code that indicates whether the call was successful. Valid values: OK: The call was successful. UNEXPECTED: An unknown error occurred. INVALID_ARGUMENT: A request parameter is invalid. OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccounts	Array of Item		The result of revoking permissions on the specified host accounts from the user.
Code	String	OK	The return code that indicates whether permissions on the specified host account were revoked from the user. Valid values: OK: The call was successful. UNEXPECTED: An unknown error occurred. INVALID_ARGUMENT: A request parameter is invalid. OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountId	String	1	The ID of the host account.
Message	String	None	This parameter is deprecated.
HostId	String	1	The ID of the host.

Parameter	Type	Example	Description
Message	String	None	This parameter is deprecated.
UserId	String	1	The ID of the user.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DetachHostAccountsFromUser
&Hosts=[{"HostId":"1"}, {"HostId":"2","HostAccountIds":["1","2","3"]}, {"HostId":"3","HostAccountIds":["4","5","6"]}, {"HostId":"4","HostAccountIds":["9","8","7"]} ]
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<DetachHostAccountsFromUserResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <HostId>1</HostId>
    <Code>OK</Code>
    <UserId>1</UserId>
  </Results>
  <Results>
    <HostAccounts>
      <Message></Message>
      <Code>OK</Code>
      <HostAccountId>1</HostAccountId>
    </HostAccounts>
  </Results>
</DetachHostAccountsFromUserResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [
    {
      "Message": "",
      "HostId": 1,
      "Code": "OK",
      "UserId": 1
    },
    {
      "HostAccounts": {
        "Message": "",
        "Code": "OK",
        "HostAccountId": 1
      }
    }
  ]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.5. AttachHostAccountsToUserGroup

Authorizes a user group to manage one or more hosts and host accounts.

After you authorize a user group to manage specific hosts and host accounts, all the users in the user group have access to the authorized hosts and host accounts.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AttachHostAccountsToUserGroup	The operation that you want to perform. Set the value to AttachHostAccountsToUserGroup .

Parameter	Type	Required	Example	Description
Hosts	String	Yes	<pre>[{"HostId": "1"}, {"HostId": "2", "HostAccountIds": ["1", "2", "3", ...]}, {"HostId": "3", "HostAccountIds": ["4", "5", "6", ...]}, {"HostId": "4", "HostAccountIds": ["9", "8", "7", ...]} ...]</pre>	The IDs of the host and host account that you want to authorize the user group to manage. You can specify up to 10 host IDs and up to 10 host account IDs for each host. You can specify only host IDs. In this case, the user group is authorized to manage only the specified hosts. For more information about this parameter, see the "Description of the Hosts parameter" section of this topic.  Note You can call the ListHosts operation to query the ID of the host and the ListHostAccounts operation to query the ID of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host in which you want to authorize the user group to manage the specified hosts and host accounts.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserGroupId	String	Yes	1	The ID of the user group that you want to authorize to manage the specified hosts and host accounts.  Note You can call the ListUserGroups operation to query the ID of the user group.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host in which you want to authorize the user group to manage the specified hosts and host accounts.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

Description of the Hosts parameter

Field	Type	Example	Description
HostId	string	1	The ID of the host.
HostAccountIds	array[string]	["9","8","7"]	The ID of the host account. The value is a JSON string. You can specify up to 10 host account IDs for each host.

The following code provides an example on the settings of the Hosts parameter:

```
[
  {"HostId": "1"},
  {"HostId": "2", "HostAccountIds": ["1", "2", "3", ...]},
  {"HostId": "3", "HostAccountIds": ["4", "5", "6", ...]},
  {"HostId": "4", "HostAccountIds": ["9", "8", "7", ...]}
]
```

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
Results	Array of Item		The result of the call.
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccounts	Array of Item		The result of authorizing the specified user group to manage the specified host accounts.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether the user group was authorized to manage the specified host account. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountId	String	1	The ID of the host account.
Message	String	None	This parameter is deprecated.
HostId	String	1	The ID of the host.
Message	String	None	This parameter is deprecated.
UserGroupId	String	1	The ID of the group.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=AttachHostAccountsToUserGroup
&Hosts=[{"HostId":"1"}, {"HostId":"2","HostAccountIds":["1","2","3",...]}, {"HostId":"3","HostAccountIds":["4","5","6",...]}, {"HostId":"4","HostAccountIds":["9","8","7",...]} ... ]
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<AttachHostAccountsToUserGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <HostId>1</HostId>
    <Code>OK</Code>
    <UserGroupId>1</UserGroupId>
  </Results>
  <Results>
    <HostAccounts>
      <Message></Message>
      <Code>OK</Code>
      <HostAccountId>1</HostAccountId>
    </HostAccounts>
  </Results>
</AttachHostAccountsToUserGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "Message": "",
    "HostId": "1",
    "Code": "OK",
    "UserGroupId": "1"
  }, {
    "HostAccounts": [{
      "Message": "",
      "Code": "OK",
      "HostAccountId": "1"
    }]
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.6. ListHostsForUserGroup

Queries the hosts that a specified user group is authorized or not authorized to manage.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostsForUserGroup	The operation that you want to perform. Set the value to ListHostsForUserGroup .

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the hosts that the user group is authorized or not authorized to manage.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserGroupId	String	Yes	1	The ID of the user group for which you want to query hosts.  Note You can call the ListUserGroups operation to query the ID of the user group.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the hosts that the user group is authorized or not authorized to manage.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
Mode	String	No	Authorized	The category of the host that you want to query. Valid values: Authorized: Query the hosts that the user group is authorized to manage. This is the default value. Unauthorized: Query the hosts that the user group is not authorized to manage.
PageNumber	String	No	1	The number of the page to return. Default value: 1.

Parameter	Type	Required	Example	Description
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. Default value: 20. If you leave the PageSize parameter empty, 20 entries are returned on each page.  Note We recommend that you do not leave the PageSize parameter empty.
HostAddress	String	No	192.168.XX.XX	The endpoint of the host that you want to query. You can set this parameter to a domain name or an IP address. Only exact match is supported.
HostName	String	No	abc	The name of the host that you want to query. Only exact match is supported.
OSType	String	No	Linux	The operating system of the host that you want to query. Valid values: - Linux - Windows

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
Hosts	Array of Item		The hosts returned.
ActiveAddressType	String	Public	The endpoint type of the host. Valid values: Public: a public endpoint Private: an internal endpoint
Comment	String	comment	The description of the host.
HostId	String	1	The ID of the host.

Parameter	Type	Example	Description
HostName	String	host1	The name of the host.
HostPrivateAddresses	String	192.168.XX.XX	The internal endpoint of the host. The value is a domain name or an IP address.
HostPublicAddresses	String	10.158.XX.XX	The public endpoint of the host. The value is a domain name or an IP address.
OSType	String	Linux	The operating system of the host. Valid values: - Linux - Windows
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	10	The total number of hosts returned.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostsForUserGroup
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<ListHostsForUserGroupResponse>
  <Hosts>
    <Comment>comment</Comment>
    <ActiveAddressType>Public</ActiveAddressType>
    <HostPrivateAddress>192.168.XX.XX</HostPrivateAddress>
    <HostPublicAddress>10.158.XX.XX</HostPublicAddress>
    <OSType>Linux</OSType>
    <HostId>1</HostId>
    <HostName>host1</HostName>
  </Hosts>
  <TotalCount>10</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</ListHostsForUserGroupResponse>
```

JSON format

```
{
  "Hosts": [{
    "Comment": "comment",
    "ActiveAddressType": "Public",
    "HostPrivateAddress": "192.168.XX.XX",
    "HostPublicAddress": "10.158.XX.XX",
    "OSType": "Linux",
    "HostId": "1",
    "HostName": "host1"
  }],
  "TotalCount": "10",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.7. ListHostAccountsForUserGroup

Queries the host accounts that a specified user group is authorized to manage on a specified host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostAccountsForUserGroup	The operation that you want to perform. Set the value to ListHostAccountsForUserGroup .
HostId	String	Yes	1	The ID of the host for which you want to query the host accounts that the user group is authorized to manage.  Note You can call the ListHosts operation to query the ID of the host.

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the host accounts that the user group is authorized to manage on the host.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserGroupId	String	Yes	1	The ID of the user group for which you want to query authorized host accounts.  Note You can call the ListUserGroups operation to query the ID of the user group.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the host accounts that the user group is authorized to manage on the host.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
PageNumber	String	No	1	The number of the page to return. Default value: 1.
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. Default value: 20. If you leave the PageSize parameter empty, 20 entries are returned on each page.  Note We recommend that you do not leave the PageSize parameter empty.
HostAccountName	String	No	root	The name of the host account that you want to query. Exact match is supported.

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostAccounts	Array of Item		The host accounts returned.
HostAccountId	String	1	The ID of the host account.
HostAccountName	String	host1	The name of the host account.
HostId	String	1	The ID of the host for which the host accounts were queried.
IsAuthorized	Boolean	true	Indicates whether the user group is authorized to manage the host account. Valid values: • true: The user group is authorized to manage the host account. • false: The user group is not authorized to manage the host account.
ProtocolName	String	SSH	The protocol that is used by the host account. Valid values: • SSH • RDP
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	1	The total number of host accounts returned.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostAccountsForUserGroup
&HostId=1
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

`XML` format

```
<ListHostAccountsForUserGroupResponse>
  <TotalCount>1</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostAccounts>
    <HostAccountName>host1</HostAccountName>
    <ProtocolName>SSH</ProtocolName>
    <IsAuthorized>true</IsAuthorized>
    <HostId>1</HostId>
    <HostAccountId>1</HostAccountId>
  </HostAccounts>
</ListHostAccountsForUserGroupResponse>
```

JSON format

```
{
  "TotalCount": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostAccounts": [{
    "HostAccountName": "host1",
    "ProtocolName": "SSH",
    "IsAuthorized": "true",
    "HostId": "1",
    "HostAccountId": "1"
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.8. DetachHostAccountsFromUserGroup

Revokes the permissions on one or more hosts and host accounts from a user group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DetachHostAccountsFromUserGroup	The operation that you want to perform. Set the value to DetachHostAccountsFromUserGroup .

Parameter	Type	Required	Example	Description
Hosts	String	Yes	<pre>[{"HostId":"1"}, {"HostId":"2","HostAccountIds": ["1","2","3",...]}, {"HostId":"3","HostAccountIds": ["4","5","6"]}, {"HostId":"4","HostAccountIds": ["9","8","7"]}]</pre>	The IDs of the host and host account on which you want to revoke permissions from the user group. You can specify up to 10 host IDs and up to 10 host account IDs for each host. You can specify only host IDs. In this case, the permissions on both the specified hosts and all host accounts of the hosts are revoked from the user group. For more information about this parameter, see the "Description of the Hosts parameter" section of this topic.  Note You can call the ListHosts operation to query the ID of the host and the ListHostAccounts operation to query the ID of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host in which you want to revoke permissions on the specified hosts and host accounts from the user group.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserGroupId	String	Yes	1	The ID of the user group from which you want to revoke permissions on the specified hosts and host accounts.  Note You can call the ListUserGroups operation to query the ID of the user group.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host in which you want to revoke permissions on the specified hosts and host accounts from the user group.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

Description of the Hosts parameter

Field	Type	Example	Description
HostId	string	1	The ID of the host.
HostAccountIds	array[string]	["9", "8", "7"]	The ID of the host account. The value is a JSON string. You can specify up to 10 host account IDs for each host.

The following code provides an example on the settings of the Hosts parameter:

```
[
  {"HostId": "1"},
  {"HostId": "2", "HostAccountIds": ["1", "2", "3", ...]},
  {"HostId": "3", "HostAccountIds": ["4", "5", "6", ...]},
  {"HostId": "4", "HostAccountIds": ["9", "8", "7", ...]}
]
```

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
Results	Array of Item		The result of the call.
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccounts	Array of Item		The result of revoking permissions on the specified host accounts from the user group.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether permissions on the specified host account were revoked from the user group. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountId	String	1	The ID of the host account.
Message	String	None	This parameter is deprecated.
HostId	String	1	The ID of the host.
Message	String	None	This parameter is deprecated.
UserGroupId	String	1	The ID of the group.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DetachHostAccountsFromUserGroup
&Hosts=[{"HostId":"1"}, {"HostId":"2","HostAccountIds":["1","2","3",...]}, {"HostId":"3","HostAccountIds":["4","5","6"]}, {"HostId":"4","HostAccountIds":["9","8","7"]} ]
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<DetachHostAccountsFromUserGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <HostId>1</HostId>
    <Code>OK</Code>
    <UserGroupId>1</UserGroupId>
  </Results>
  <Results>
    <HostAccounts>
      <Message></Message>
      <Code>OK</Code>
      <HostAccountId>1</HostAccountId>
    </HostAccounts>
  </Results>
</DetachHostAccountsFromUserGroupResponse>
```

JSON **format**

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "Message": "",
    "HostId": "1",
    "Code": "OK",
    "UserGroupId": "1"
  }, {
    "HostAccounts": [{
      "Message": "",
      "Code": "OK",
      "HostAccountId": "1"
    }]
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.9. AttachHostGroupAccountsToUser

Authorizes a user to manage one or more host groups and host accounts.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
-----------	------	----------	---------	-------------

Parameter	Type	Required	Example	Description
Action	String	Yes	AttachHostGroupAccountsToUser	The operation that you want to perform. Set the value to AttachHostGroupAccountsToUser .
HostGroups	String	Yes	[{"HostGroupId": "1"} , {"HostGroupId": "2", "HostAccountNames": ["root", "111", "abc"] }, {"HostGroupId": "3", "HostAccountNames": ["root", "111", "abc"] }, {"HostGroupId": "4", "HostAccountNames": ["root", "111", "abc"] }]	The ID of the host group and the name of the host account that you want to authorize the user to manage. You can specify up to 10 host group IDs and up to 10 host account names for each host group. You can specify only host group IDs. In this case, the user is authorized to manage only the specified host groups. For more information about this parameter, see the "Description of the HostGroups parameter" section of this topic. Note You can call the ListHostGroups operation to query the ID of the host group and the ListHostAccounts operation to query the name of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to authorize the user to manage the specified host groups and host accounts. Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserId	String	Yes	1	The ID of the user that you want to authorize to manage the specified host groups and host accounts. Note You can call the ListUsers operation to query the ID of the user.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to authorize the user to manage the specified host groups and host accounts. Note For more information about the mapping between region IDs and region names, see Regions and zones .

Description of the HostGroups parameter

Field	Type	Example	Description
HostGroupId	string	1	The ID of the host group.
HostAccountNames	array[string]	["root","111","abc"]	The name of the host account. The value is a JSON string. You can specify up to 10 host account names for each host group.

The following code provides an example on the settings of the HostGroups parameter:

```
[
  { "HostGroupId": "1" },
  { "HostGroupId": "2", "HostAccountNames": ["root", "111", "abc"] },
  { "HostGroupId": "3", "HostAccountNames": ["root", "111", "abc"] },
  null
]
```

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
Results	Array of Item		The result of the call.
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountNames	Array of Item		The result of authorizing the user to manage the specified host accounts.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether the user was authorized to manage the specified host account. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountName	String	root	The name of the host account.
Message	String	None	This parameter is deprecated.
HostGroupId	String	1	The ID of the host group.
Message	String	None	This parameter is deprecated.
UserId	String	1	The ID of the user.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=AttachHostGroupAccountsToUser
&HostGroups=[ { "HostGroupId": "1" }, { "HostGroupId": "2", "HostAccountNames": ["root", "111", "abc"] }, { "HostGroupId": "3", "HostAccountNames": ["root", "111", "abc"] }, { "HostGroupId": "4", "HostAccountNames": ["root", "111", "abc"] } ]
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<AttachHostGroupAccountsToUserResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <HostGroupId>1</HostGroupId>
    <Message></Message>
    <Code>OK</Code>
    <UserId>1</UserId>
  </Results>
  <Results>
    <HostAccountNames>
      <HostAccountName>root</HostAccountName>
      <Message></Message>
      <Code>OK</Code>
    </HostAccountNames>
  </Results>
</AttachHostGroupAccountsToUserResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "HostGroupId": "1",
    "Message": "",
    "Code": "OK",
    "UserId": "1"
  }, {
    "HostAccountNames": [{
      "HostAccountName": "root",
      "Message": "",
      "Code": "OK"
    }]
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.10. ListHostGroupsForUser

Queries the host groups that a specified user is authorized or not authorized to manage.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostGroupsForUser	The operation that you want to perform. Set the value to ListHostGroupsForUser.

Parameter	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the host groups that the user is authorized or not authorized to manage.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserId	String	Yes	1	The ID of the user.  Note You can call the ListUsers operation to query the ID of the user.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the host groups that the user is authorized or not authorized to manage.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
Mode	String	No	Authorized	The category of the host group that you want to query. Valid values: • Authorized: Query the host groups that the user is authorized to manage. This is the default value. • Unauthorized: Query the host groups that the user is not authorized to manage.
PageNumber	String	No	1	The number of the page to return. Default value: 1.

Parameter	Type	Required	Example	Description
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. Default value: 20. If you leave the PageSize parameter empty, 20 entries are returned on each page.  Note We recommend that you do not leave the PageSize parameter empty.
HostGroupName	String	No	group	The name of the host group that you want to query. The name can be up to 128 characters in length. Only exact match is supported.

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostGroups	Array of Item		The host groups returned.
Comment	String	comment	The description of the host group.
HostGroupId	String	1	The ID of the host group.
HostGroupName	String	group	The name of the host group.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	1	The total number of host groups returned.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostGroupsForUser
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<ListHostGroupsForUserResponse>
  <TotalCount>1</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostGroups>
    <Comment>comment</Comment>
    <HostGroupId>1</HostGroupId>
    <HostGroupName>group</HostGroupName>
  </HostGroups>
</ListHostGroupsForUserResponse>
```

JSON format

```
{
  "TotalCount": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostGroups": [{
    "Comment": "comment",
    "HostGroupId": "1",
    "HostGroupName": "group"
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.11. ListHostGroupAccountNamesForUser

Queries the names of the host accounts that a specified user is authorized to manage in a specified host group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostGroupAccountNamesForUser	The operation that you want to perform. Set the value to ListHostGroupAccountNamesForUser .

Parameter	Type	Required	Example	Description
HostGroupId	String	Yes	1	The ID of the host group.  Note You can call the ListHostGroups operation to query the ID of the host group.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the host account names that the user is authorized to manage in a specified host group.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserId	String	Yes	1	The ID of the user.  Note You can call the ListUsers operation to query the ID of the user.
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the host account names that the user is authorized to manage in a specified host group.  Note For more information about the mapping between region IDs and region names, see Regions and zones .

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostAccountNames	List	["abc"]	The names of host accounts returned.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostGroupAccountNamesForUser
&HostGroupId=1
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<ListHostGroupAccountNamesForUserResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostAccountNames>abc</HostAccountNames>
</ListHostGroupAccountNamesForUserResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostAccountNames": ["abc"]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.12. DetachHostGroupAccountsFromUser

Revokes permissions on one or more host groups and host accounts from a user.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DetachHostGroupAccountsFromUser	The operation that you want to perform. Set the value to DetachHostGroupAccountsFromUser .

Parameter	Type	Required	Example	Description
HostGroups	String	Yes	<pre>[{"HostGroupId": "1"} , {"HostGroupId": "2", "HostAccountName": ["root", "111", "abc"]}]</pre>	The ID of the host group and the name of the host account on which you want to revoke permissions from the user. You can specify up to 10 host group IDs and up to 10 host account names for each host group. You can specify only host group IDs. In this case, the permissions on the specified host groups and all host accounts in the host groups are revoked from the user. For more information about this parameter, see the "Description of the HostGroups parameter" section of this topic.  Note You can call the ListHostGroups operation to query the ID of the host group and the ListHostAccounts operation to query the name of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to revoke permissions on the specified host groups and host accounts from the user.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserId	String	Yes	1	The ID of the user from which you want to revoke permissions on the specified host groups and host accounts.  Note You can call the ListUsers operation to query the ID of the user.

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to revoke permissions on the specified host groups and host accounts from the user.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

Description of the HostGroups parameter

Field	Type	Example	Description
HostGroupId	string	1	The ID of the host group.
HostAccountIds	array[string]	["root","111","abc"]	The name of the host account. The value is a JSON string. You can specify up to 10 host account names for each host group.

The following code provides an example on the settings of the HostGroups parameter:

```
[
  { "HostGroupId": "1" },
  { "HostGroupId": "2", "HostAccountNames": ["root", "111", "abc"] },
  { "HostGroupId": "3", "HostAccountNames": ["root", "111", "abc"] },
  null
]
```

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
Results	Array of Item		The result of the call.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountNames	Array of Item		The result of revoking permissions on the specified host accounts from the user.
Code	String	OK	The return code that indicates whether permissions on the specified host account were revoked from the user. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountName	String	root	The name of the host account.
Message	String	None	This parameter is deprecated.
HostGroupId	String	1	The ID of the host group.
Message	String	None	This parameter is deprecated.
UserId	String	1	The ID of the user.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DetachHostGroupAccountsFromUser
&HostGroups=[{"HostGroupId":"1"}, {"HostGroupId":"2","HostAccountNames":["root","111","abc"]}]]
&InstanceId=bastionhost-cn-st220aw****
&UserId=1
&<Common request parameters>
```

Sample success responses

XML **format**

```
<DetachHostGroupAccountsFromUserResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <HostGroupId>1</HostGroupId>
    <Message></Message>
    <Code>OK</Code>
    <UserId>1</UserId>
  </Results>
  <Results>
    <HostAccountNames>
      <HostAccountName>root</HostAccountName>
      <Message></Message>
      <Code>OK</Code>
    </HostAccountNames>
  </Results>
</DetachHostGroupAccountsFromUserResponse>
```

JSON **format**

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "HostGroupId": "1",
    "Message": "",
    "Code": "OK",
    "UserId": "1"
  }, {
    "HostAccountNames": [{
      "HostAccountName": "root",
      "Message": "",
      "Code": "OK"
    }]
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.13. AttachHostGroupAccountsToUserGroup

Authorizes a user group to manage one or more host groups and host accounts.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AttachHostGroupAccountsToUserGroup	The operation that you want to perform. Set the value to AttachHostGroupAccountsToUserGroup.
HostGroups	String	Yes	<pre>[{"HostGroupId": "1"}, {"HostGroupId": "2", "HostAccountNames": ["root", "111", "abc"] }, {"HostGroupId": "3", "HostAccountNames": ["root", "111", "abc"] }, {"HostGroupId": "4", "HostAccountNames": ["root", "111", "abc"] }]</pre>	The ID of the host group and the name of the host account that you want to authorize the user group to manage. You can specify up to 10 host group IDs and up to 10 host account names for each host group. You can specify only host group IDs. In this case, the user group is authorized to manage only the specified host groups. For more information about this parameter, see the "Description of the HostGroups parameter" section of this topic.  Note You can call the ListHostGroups operation to query the ID of the host group and the ListHostAccounts operation to query the name of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to authorize the user group to manage the specified host groups and host accounts.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
UserGroupId	String	Yes	1	The ID of the user group that you want to authorize to manage the specified host groups and host accounts.  Note You can call the ListUserGroups operation to query the ID of the user group.

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to authorize the user group to manage the specified host groups and host accounts.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

Description of the HostGroups parameter

Field	Type	Example	Description
HostGroupId	string	1	The ID of the host group.
HostAccountNames	array[string]	["root","111","abc"]	The name of the host account. The value is a JSON string. You can specify up to 10 host account names for each host group.

The following code provides an example on the settings of the HostGroups parameter:

```
[
  { "HostGroupId": "1" },
  { "HostGroupId": "2", "HostAccountNames": ["root", "111", "abc"] },
  { "HostGroupId": "3", "HostAccountNames": ["root", "111", "abc"] },
  null
]
```

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
Results	Array of Item		The result of the call.

Parameter	Type	Example	Description
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountNames	Array of Item		The result of authorizing the user group to manage the specified host accounts.
Code	String	OK	The return code that indicates whether the user group was authorized to manage the specified host account. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountName	String	abc	The name of the host account.
Message	String	None	This parameter is deprecated.
HostGroupId	String	1	The ID of the host group.
Message	String	None	This parameter is deprecated.
UserGroupId	String	1	The ID of the group.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=AttachHostGroupAccountsToUserGroup
&HostGroups=[ {"HostGroupId":"1"}, {"HostGroupId":"2","HostAccountNames":["root","111","abc"]}, {"HostGroup
Id":"3","HostAccountNames":["root","111","abc"]}, {"HostGroupId":"4","HostAccountNames":["root","111","abc"]}]]
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML **format**

```
<AttachHostGroupAccountsToUserGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <HostGroupId>1</HostGroupId>
    <Code>OK</Code>
    <UserGroupId>1</UserGroupId>
  </Results>
  <Results>
    <HostAccountNames>
      <HostAccountName>abc</HostAccountName>
      <Message></Message>
      <Code>OK</Code>
    </HostAccountNames>
  </Results>
</AttachHostGroupAccountsToUserGroupResponse>
```

JSON **format**

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "Message": "",
    "HostGroupId": "1",
    "Code": "OK",
    "UserGroupId": "1"
  }, {
    "HostAccountNames": [{
      "HostAccountName": "abc",
      "Message": "",
      "Code": "OK"
    }]
  }]
}
```

Error codes

HTTP status code	Error code	Error message	Description
500	InternalError	An unknown error occurred.	The error message returned because an unknown error occurred.

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

For a list of error codes, visit the [API Error Center](#).

13.14. ListHostGroupsForUserGroup

Queries the host groups that a specified user group is authorized or not authorized to manage.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostGroupsForUserGroup	The operation that you want to perform. Set the value to ListHostGroupsForUserGroup .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the host groups that the user group is authorized or not authorized to manage.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserGroupId	String	Yes	1	The ID of the user group.  Note You can call the ListUserGroups operation to query the ID of the user group.

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the host groups that the user group is authorized or not authorized to manage.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
Mode	String	No	Authorized	The category of the host group that you want to query. Valid values: • Authorized: Query the host groups that the user group is authorized to manage. This is the default value. • Unauthorized: Query the host groups that the user group is not authorized to manage.
PageNumber	String	No	1	The number of the page to return. Default value: 1.
PageSize	String	No	20	The number of entries to return on each page. The value of the PageSize parameter must not exceed 100. Default value: 20. If you leave the PageSize parameter empty, 20 entries are returned on each page.  Note We recommend that you do not leave the PageSize parameter empty.
HostGroupName	String	No	group	The name of the host group that you want to query. Only exact match is supported.

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostGroups	Array of Item		The host groups returned.

Parameter	Type	Example	Description
Comment	String	comment	The description of the host group.
HostGroupId	String	1	The ID of the host group.
HostGroupName	String	group	The name of the host group.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
TotalCount	Integer	1	The total number of host groups returned.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostGroupsForUserGroup
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<ListHostGroupsForUserGroupResponse>
  <TotalCount>1</TotalCount>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostGroups>
    <Comment>comment</Comment>
    <HostGroupId>1</HostGroupId>
    <HostGroupName>group</HostGroupName>
  </HostGroups>
</ListHostGroupsForUserGroupResponse>
```

JSON format

```
{
  "TotalCount": "1",
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostGroups": [{
    "Comment": "comment",
    "HostGroupId": "1",
    "HostGroupName": "group"
  }]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.15.

ListHostGroupAccountNamesForUserGroup

Queries the names of the host accounts that a specified user group is authorized to manage in a specified host group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostGroupAccountNamesForUserGroup	The operation that you want to perform. Set the value to ListHostGroupAccountNamesForUserGroup .
HostGroupId	String	Yes	1	The ID of the host group.  Note You can call the ListHostGroups operation to query the ID of the host group.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the Bastionhost instance where you want to query the host account names that the user group is authorized to manage in a specified host group.  Note You can call the DescribeInstances operation to query the ID of the Bastionhost instance.
UserGroupId	String	Yes	1	The ID of the user group.  Note You can call the ListUserGroups operation to query the ID of the user group.

Parameter	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the Bastionhost instance where you want to query the host account names that the user group is authorized to manage in a specified host group.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

All Bastionhost API requests must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
HostAccountNames	List	["root","abc"]	The names of host accounts returned.
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostGroupAccountNamesForUserGroup
&HostGroupId=1
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<ListHostGroupAccountNamesForUserGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostAccountNames>root</HostAccountNames>
  <HostAccountNames>abc</HostAccountNames>
</ListHostGroupAccountNamesForUserGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostAccountNames": ["root", "abc"]
}
```

Error codes

For a list of error codes, visit the [API Error Center](#).

13.16.

DetachHostGroupAccountsFromUserGroup

Revokes permissions on one or more host groups and host accounts from a user group.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DetachHostGroupAccountsFromUserGroup	The operation that you want to perform. Set the value to DetachHostGroupAccountsFromUserGroup .
HostGroups	String	Yes	[{"HostGroupId": "1"} , {"HostGroupId": "2", "HostAccountNames": ["root", "111", "abc"] }, {"HostGroupId": "3", "HostAccountNames": ["root", "111", "abc"] }, {"HostGroupId": "4", "HostAccountNames": ["root", "111", "abc"] }]	The ID of the host group and the name of host account on which you want to revoke permissions from the user group. You can specify up to 10 host group IDs and up to 10 host account names for each host group. You can specify only host group IDs. In this case, the permissions on the specified host groups and all host accounts in the host groups are revoked from the user group. For more information about this parameter, see the "Description of the HostGroups parameter" section of this topic. Note You can call the ListHostGroups operation to query the ID of the host group and the ListHostAccounts operation to query the name of the host account.
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host for which you want to revoke permissions on the specified host groups and host accounts from the user group. Note You can call the DescribeInstances operation to query the ID of the bastion host.

Parameter	Type	Required	Example	Description
UserGroupId	String	Yes	1	The ID of the user group from which you want to revoke permissions on the specified host groups and host accounts.  Note You can call the ListUserGroups operation to query the ID of the user group.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host for which you want to revoke permissions on the specified host groups and host accounts from the user group.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

Description of the HostGroups parameter

Field	Type	Example	Description
HostGroupId	string	1	The ID of the host group.
HostAccountNames	array[string]	["root","111","abc"]	The name of the host account. The value is a JSON string. You can specify up to 10 host account names for each host group.

The following code provides an example on the settings of the HostGroups parameter:

```
[
  {"HostGroupId": "1"},
  {"HostGroupId": "2", "HostAccountNames": ["root", "111", "abc"]},
  {"HostGroupId": "3", "HostAccountNames": ["root", "111", "abc"]},
  null
]
```

All Alibaba Cloud API operations must include common request parameters. For more information about common request parameters, see [Common parameters](#).

For more information about sample requests, see the "Examples" section of this topic.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request.
Results	Array of Item		The result of the call.
Code	String	OK	The return code that indicates whether the call was successful. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountNames	Array of Item		The result of revoking permissions on the specified host accounts from the user group.
Code	String	OK	The return code that indicates whether permissions on the specified host account were revoked from the specified user group. Valid values: • OK: The call was successful. • UNEXPECTED: An unknown error occurred. • INVALID_ARGUMENT: A request parameter is invalid. • OBJECT_NOT_FOUND: The specified object on which you want to perform the operation does not exist. • OBJECT_ALREADY_EXISTS: The specified object on which you want to perform the operation already exists.
HostAccountName	String	root	The name of the host account.
Message	String	None	This parameter is deprecated.
HostGroupId	String	1	The ID of the host group.
Message	String	None	This parameter is deprecated.
UserGroupId	String	1	The ID of the group.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DetachHostGroupAccountsFromUserGroup
&HostGroups=[{"HostGroupId":"1"}, {"HostGroupId":"2","HostAccountNames":["root","111","abc"]}, {"HostGroupId":"3","HostAccountNames":["root","111","abc"]}, {"HostGroupId":"4","HostAccountNames":["root","111","abc"]}]]
&InstanceId=bastionhost-cn-st220aw****
&UserGroupId=1
&<Common request parameters>
```

Sample success responses

XML format

```
<DetachHostGroupAccountsFromUserGroupResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Message></Message>
    <HostGroupId>1</HostGroupId>
    <Code>OK</Code>
    <UserGroupId>1</UserGroupId>
  </Results>
  <Results>
    <HostAccountNames>
      <HostAccountName>root</HostAccountName>
      <Message></Message>
      <Code>OK</Code>
    </HostAccountNames>
  </Results>
</DetachHostGroupAccountsFromUserGroupResponse>
```

JSON format

```
{
  "RequestId": "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results": [{
    "Message": "",
    "HostGroupId": "1",
    "Code": "OK",
    "UserGroupId": "1"
  }, {
    "HostAccountNames": [{
      "HostAccountName": "root",
      "Message": "",
      "Code": "OK"
    }]
  }]
}
```

Error codes

HTTP status code	Error code	Error message	Description
------------------	------------	---------------	-------------

HTTP status code	Error code	Error message	Description
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error has occurred.
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.

For a list of error codes, visit the [API Error Center](#).

14.Asset management

14.1. CreateHostShareKey

Creates a shared key.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	CreateHostShareKey	The operation that you want to perform. Set the value to CreateHostShareKey .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .
HostShareKeyName	String	Yes	name	The name of the shared key that you want to create. The name can be a maximum of 128 characters in length.
PrivateKey	String	Yes	****	The private key. The value is a Base64-encoded string.
PassPhrase	String	No	*****	The password of the private key. The value is a Base64-encoded string.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
HostShareKeyId	Long	10235	The ID of the shared key.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=CreateHostShareKey
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&HostShareKeyName=name
&PrivateKey=****
&PassPhrase=*****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<CreateHostShareKeyResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostShareKeyId>10235</HostShareKeyId>
</CreateHostShareKeyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostShareKeyId" : 10235
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

14.2. ListHostShareKeys

Queries the shared keys that are associated with a host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostShareKeys	The operation that you want to perform. Set the value to ListHostShareKeys .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .
PageNumber	String	No	1	The number of the page to return. Default value: 1.
PageSize	String	No	20	The number of entries to return on each page. Default value: 20.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
TotalCount	Long	10	The total number of the shared keys.
HostShareKeys	Array of Item		An array that consists of the shared keys.
HostAccountCount	Long	1	The number of the associated host accounts.
LastModifyKeyAt	Long	1644806406	The time when the shared key was last modified.
HostShareKeyName	String	name	The name of the shared key.
PrivateKeyFingerprint	String	****	The fingerprint of the private key.
HostShareKeyId	String	10247	The ID of the host account.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostShareKeys
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&PageNumber=1
&PageSize=20
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListHostShareKeysResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <TotalCount>10</TotalCount>
  <HostShareKeys>
    <HostAccountCount>1</HostAccountCount>
    <LastModifyKeyAt>1644806406</LastModifyKeyAt>
    <HostShareKeyName>name</HostShareKeyName>
    <PrivateKeyFingerPrint>****</PrivateKeyFingerPrint>
    <HostShareKeyId>10247</HostShareKeyId>
  </HostShareKeys>
</ListHostShareKeysResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "TotalCount" : 10,
  "HostShareKeys" : [ {
    "HostAccountCount" : 1,
    "LastModifyKeyAt" : 1644806406,
    "HostShareKeyName" : "name",
    "PrivateKeyFingerPrint" : "****",
    "HostShareKeyId" : "10247"
  } ]
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

14.3. ModifyHostShareKey

Modifies the information about a shared key.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	ModifyHostShareKey	The operation that you want to perform. Set the value to ModifyHostShareKey .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .
HostShareKeyId	String	Yes	10247	The ID of the shared key whose information you want to modify.
HostShareKeyName	String	No	name	The name of the shared key.
PrivateKey	String	No	****	The private key. The value is a Base64-encoded string.
PassPhrase	String	No	****	The password of the private key. The value is a Base64-encoded string.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyHostShareKey
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&HostShareKeyId=10247
&HostShareKeyName=name
&PrivateKey=****
&PassPhrase=****
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ModifyHostShareKeyResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</ModifyHostShareKeyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

14.4. ListHostAccountsForHostShareKey

Queries the host accounts that are associated with a shared key.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
-----------	------	----------	---------	-------------

Parameter	Type	Required	Example	Description
Action	String	Yes	ListHostAccountsForHostShareKey	The operation that you want to perform. Set the value to ListHostAccountsForHostShareKey .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .
HostShareKeyId	String	Yes	1124	The ID of the shared key.
PageNumber	String	No	1	The number of the page to return. Default value: 1.
PageSize	String	No	10	The number of entries to return on each page. Default value: 10.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
HostAccounts	Array of Item		An array that consists of the host accounts that are associated with the shared key.
HostAccountName	String	root1234	The name of the host account.
HostId	String	1113	The ID of the host.
HostsAccountId	String	1235	The ID of the host account.
ProtocolName	String	SSH	The O&M protocol.
TotalCount	Long	5	The total number of the host accounts that are associated with the shared key.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ListHostAccountsForHostShareKey
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&HostShareKeyId=1124
&PageNumber=1
&PageSize=10
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ListHostAccountsForHostShareKeyResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostAccounts>
    <HostAccountName>root1234</HostAccountName>
    <HostId>1113</HostId>
    <HostsAccountId>1235</HostsAccountId>
    <ProtocolName>SSH</ProtocolName>
  </HostAccounts>
  <TotalCount>5</TotalCount>
</ListHostAccountsForHostShareKeyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostAccounts" : [ {
    "HostAccountName" : "root1234",
    "HostId" : "1113",
    "HostsAccountId" : "1235",
    "ProtocolName" : "SSH"
  } ],
  "TotalCount" : 5
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

14.5. GetHostShareKey

Queries the details of a shared key.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	GetHostShareKey	The operation that you want to perform. Set the value to GetHostShareKey .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .
HostShareKeyId	String	Yes	10427	The ID of the shared key whose details you want to query.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
HostShareKey	Object		The details of the shared key.
HostShareKeyId	String	10427	The ID of the shared key.
HostShareKeyName	String	name	The name of the shared key.
LastModifyKeyAt	Long	1644287246	The time when the information about the shared key was last modified.
PrivateKeyFingerprint	String	***	The fingerprint of the private key.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=GetHostShareKey
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&HostShareKeyId=10427
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<GetHostShareKeyResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <HostShareKey>
    <HostShareKeyId>10427</HostShareKeyId>
    <HostShareKeyName>name</HostShareKeyName>
    <LastModifyKeyAt>1644287246</LastModifyKeyAt>
    <PrivateKeyFingerPrint>***</PrivateKeyFingerPrint>
  </HostShareKey>
</GetHostShareKeyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "HostShareKey" : {
    "HostShareKeyId" : "10427",
    "HostShareKeyName" : "name",
    "LastModifyKeyAt" : 1644287246,
    "PrivateKeyFingerPrint" : "***"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

14.6. DeleteHostShareKey

Deletes a shared key.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DeleteHostShareKey	The operation that you want to perform. Set the value to DeleteHostShareKey .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .
HostShareKeyId	String	No	11206	The ID of the shared key.  Note You must specify this parameter.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DeleteHostShareKey
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&HostShareKeyId=11206
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DeleteHostShareKeyResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
</DeleteHostShareKeyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

14.7. AttachHostAccountsToHostShareKey

Associates host accounts with a shared key.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	AttachHostAccountsToHostShareKey	The operation that you want to perform. Set the value to AttachHostAccountsToHostShareKey .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .

Parameter	Type	Required	Example	Description
HostShareKeyId	String	No	10267	The ID of the shared key.  Note You must specify this parameter.
HostAccountIds	String	No	["1","2","3"]	The IDs of the host accounts.  Note You must specify this parameter.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
Results	Array of Item		The result of the call.
Code	String	OK	The error code returned. If OK is returned, the association was successful. If another error code is returned, the association failed.
Message	String	The host account does not exist	The error message returned.
HostShareKeyId	String	10267	The ID of the shared key.
HostAccountId	String	1201	The ID of the host account.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=AttachHostAccountsToHostShareKey
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&HostShareKeyId=10267
&HostAccountIds=["1","2","3"]
&<Common request parameters>
```

Sample success responses

`XML` format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<AttachHostAccountsToHostShareKeyResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Code>OK</Code>
    <Message>The host account does not exist</Message>
    <HostShareKeyId>10267</HostShareKeyId>
    <HostAccountId>1201</HostAccountId>
  </Results>
</AttachHostAccountsToHostShareKeyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results" : [ {
    "Code" : "OK",
    "Message" : "The host account does not exist",
    "HostShareKeyId" : "10267",
    "HostAccountId" : "1201"
  } ]
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

14.8. DetachHostAccountsFromHostShareKey

Disassociates host accounts from a shared key.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Parameter	Type	Required	Example	Description
Action	String	Yes	DetachHostAccountsFromHostShareKey	The operation that you want to perform. Set the value to DetachHostAccountsFromHostShareKey .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .
HostShareKeyId	String	Yes	11	The ID of the shared key.
HostAccountIds	String	Yes	["1","2","3"]	The IDs of the host accounts.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.
Results	Array of Item		The result of the call.
Code	String	OK	The error code. If OK is returned, the disassociation was successful. If a different error code is returned, the disassociation failed.
Message	String	The host account does not exist	The error message.
HostShareKeyId	String	11	The ID of the shared key.
HostAccountId	String	12407	The ID of the host account.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=DetachHostAccountsFromHostShareKey
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&HostShareKeyId=11
&HostAccountIds=["1","2","3"]
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<DetachHostAccountsFromHostShareKeyResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Results>
    <Code>OK</Code>
    <Message>The host account does not exist</Message>
    <HostShareKeyId>11</HostShareKeyId>
    <HostAccountId>12407</HostAccountId>
  </Results>
</DetachHostAccountsFromHostShareKeyResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Results" : [ {
    "Code" : "OK",
    "Message" : "The host account does not exist",
    "HostShareKeyId" : "11",
    "HostAccountId" : "12407"
  } ]
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

15. System settings

15.1. GetInstanceADAuthServer

Queries the settings of Active Directory (AD) authentication on a bastion host.

Usage notes

You can call this operation to query the settings of AD authentication on a bastion host. After you configure AD authentication on a bastion host, you can import AD-authenticated users into the bastion host. After the AD-authenticated users are imported into the bastion host, the AD-authenticated users can log on to the bastion host to perform O&M operations on servers.

Limits

You can call this operation up to 10 times per second for each account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Name	Type	Required	Example	Description
Action	String	Yes	GetInstanceADAuthServer	The operation that you want to perform. Set the value to GetInstanceADAuthServer .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host to query. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host to query.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

Response parameters

Parameter	Type	Example	Description
RequestId	String	89398CFB-4EB6-4C7E-BB3C-EF213AC8FA50	The ID of the request, which is used to locate and troubleshoot issues.

Parameter	Type	Example	Description
AD	Object		The settings of AD authentication.
Account	String	cn=Manager,dc=test,dc=com	The distinguished name (DN) of the AD server account.
BaseDN	String	dc=test,dc=com	The Base DN of the AD server.
Domain	String	domain	The domain on the AD server.
EmailMapping	String	emailAttr	The field that is used to indicate the email address of a user on the AD server.
Filter	String	(&(objectClass=top))	The condition that is used to filter users.
IsSSL	Boolean	true	Indicates whether SSL is supported. Valid values: • true: supported • false: not supported
MobileMapping	String	mobileAttr	The field that is used to indicate the mobile phone number of a user on the AD server.
NameMapping	String	nameAttr	The field that is used to indicate the name of a user on the AD server.
HasPassword	Boolean	true	Indicates whether passwords are required. Valid values: • true: required • false: not required
Port	Long	389	The port that is used to access the AD server.
Server	String	192.168.XX.XX	The address of the AD server.
StandbyServer	String	192.168.XX.XX	The address of the secondary AD server.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=GetInstanceADAuthServer
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<GetInstanceADAuthServerResponse>
  <RequestId>89398CFB-4EB6-4C7E-BB3C-EF213AC8FA50</RequestId>
  <AD>
    <Account>cn=Manager,dc=test,dc=com</Account>
    <BaseDN>dc=test,dc=com</BaseDN>
    <Domain>domain</Domain>
    <EmailMapping>emailAttr</EmailMapping>
    <Filter>(& (objectClass=top))</Filter>
    <IsSSL>true</IsSSL>
    <MobileMapping>mobileAttr</MobileMapping>
    <NameMapping>nameAttr</NameMapping>
    <HasPassword>true</HasPassword>
    <Port>389</Port>
    <Server>192.168.XX.XX</Server>
    <StandbyServer>192.168.XX.XX</StandbyServer>
  </AD>
</GetInstanceADAuthServerResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "89398CFB-4EB6-4C7E-BB3C-EF213AC8FA50",
  "AD" : {
    "Account" : "cn=Manager,dc=test,dc=com",
    "BaseDN" : "dc=test,dc=com",
    "Domain" : "domain",
    "EmailMapping" : "emailAttr",
    "Filter" : "(& (objectClass=top))",
    "IsSSL" : true,
    "MobileMapping" : "mobileAttr",
    "NameMapping" : "nameAttr",
    "HasPassword" : true,
    "Port" : 389,
    "Server" : "192.168.XX.XX",
    "StandbyServer" : "192.168.XX.XX"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

15.2. GetInstanceTwoFactor

Queries the settings of two-factor authentication on a bastion host.

Usage notes

You can call this operation to query the settings of two-factor authentication on a bastion host. After you enable two-factor authentication, Bastionhost sends a verification code to a local user when the local user logs on to a bastion host. A local user can log on to the bastion host only when the local user enters the valid username and password and the verification code. This reduces the security risks caused by account information leaks.

Limits

You can call this operation up to 10 times per second for each account. If the number of the calls per second exceeds the limit, throttling is triggered. As a result, your business may be affected. We recommend that you take note of the limit when you call this operation.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Name	Type	Required	Example	Description
Action	String	Yes	GetInstanceTwoFactor	The operation that you want to perform. Set the value to GetInstanceTwoFactor .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host to query.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host to query.  Note For more information about the mapping between region IDs and region names, see Regions and zones.

Response parameters

Parameter	Type	Example	Description
RequestId	String	EC9BF0F4-8983-491A-BC8C-1B4DD94976DE	The ID of the request, which is used to locate and troubleshoot issues.

Parameter	Type	Example	Description
Config	Object		The settings of two-factor authentication.
EnableTwoFactor	Boolean	true	Indicates whether two-factor authentication is enabled. Valid values: • true: enabled • false: disabled
TwoFactorMethods	Array of String	sms	Indicates one or more methods that are used to send verification codes if two-factor authentication is enabled. Valid values: • sms: text message • email: email • dingtalk: Notice in DingTalk
SkipTwoFactorTime	Long	1	The duration within which two-factor authentication is not required after a local user passes two-factor authentication. Valid values: 0 to 168 . Unit: hours.  Note If 0 is returned, a local user must pass two-factor authentication every time the local user logs on to the bastion host.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=GetInstanceTwoFactor
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<GetInstanceTwoFactorResponse>
  <RequestId>EC9BF0F4-8983-491A-BC8C-1B4DD94976DE</RequestId>
  <Config>
    <EnableTwoFactor>true</EnableTwoFactor>
    <TwoFactorMethods>sms</TwoFactorMethods>
    <SkipTwoFactorTime>1</SkipTwoFactorTime>
    <MessageLanguage>zh-cn</MessageLanguage>
  </Config>
</GetInstanceTwoFactorResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "EC9BF0F4-8983-491A-BC8C-1B4DD94976DE",
  "Config" : {
    "EnableTwoFactor" : true,
    "TwoFactorMethods" : [ "sms" ],
    "SkipTwoFactorTime" : 1,
    "MessageLanguage" : "zh-cn"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

15.3. ModifyInstanceTwoFactor

Modifies the settings of two-factor authentication on a bastion host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Name	Type	Required	Example	Description
Action	String	Yes	ModifyInstanceTwoFactor	The operation that you want to perform. Set the value to ModifyInstanceTwoFactor .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host.  Note You can call the DescribeInstances operation to query the ID of the bastion host.

Name	Type	Required	Example	Description
RegionId	String	No	cn-hangzhou	The region ID of the bastion host.  Note For more information about the mapping between region IDs and region names, see Regions and zones.
EnableTwoFactor	String	No	true	Specifies whether to enable two-factor authentication. Valid values: • true: enables two-factor authentication. • false: disables two-factor authentication.
TwoFactorMethods	String	No	["sms"]	One or more methods that are used to send a verification code if two-factor authentication is enabled. If you set the EnableTwoFactor parameter to true, you must specify at least one method. Valid values: • sms: text message • email: email • dingtalk: Notice in DingTalk
SkipTwoFactorTime	String	No	1	The duration within which two-factor authentication is not required after a local user passes two-factor authentication. Valid values: 0 to 168. Unit: hours. If you set this parameter to 0, the local user must pass two-factor authentication every time the local user logs on to the bastion host.

Response parameters

Parameter	Type	Example	Description
RequestId	String	9CE1A352-15E9-5EB4-B589-87A8DEECB20D	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyInstanceTwoFactor
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&EnableTwoFactor=true
&TwoFactorMethods=["sms"]
&SkipTwoFactorTime=1
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ModifyInstanceTwoFactorResponse>
  <RequestId>9CE1A352-15E9-5EB4-B589-87A8DEECB20D</RequestId>
</ModifyInstanceTwoFactorResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "9CE1A352-15E9-5EB4-B589-87A8DEECB20D"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

15.4. GetInstanceLDAPAuthServer

Queries the settings of Lightweight Directory Access Protocol (LDAP) authentication on a bastion host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Name	Type	Required	Example	Description
------	------	----------	---------	-------------

Name	Type	Required	Example	Description
Action	String	Yes	GetInstanceLDAPAuthServer	The operation that you want to perform. Set the value to GetInstanceLDAPAuthServer .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host.  Note You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host.  Note For more information about the mapping between region IDs and region names, see Regions and zones .

Response parameters

Parameter	Type	Example	Description
RequestId	String	1C60E741-102D-5E8F-9710-B06D3F0183FE	The ID of the request, which is used to locate and troubleshoot issues.
LDAP	Object		The settings of LDAP authentication.
Account	String	cn=Manager,dc=test,dc=com	The account of the LDAP server.
BaseDN	String	dc=test,dc=com	The Base distinguished name (DN).
EmailMapping	String	emailAttr	The field that is used to indicate the email address of a user on the LDAP server.
Filter	String	(&(objectClass=top))	The condition that is used to filter users.
IsSSL	Boolean	true	Indicates whether SSL is supported. Valid values: true: supported false: not supported
LoginNameMapping	String	userNameAttr	The field that is used to indicate the logon name of a user on the LDAP server.

Parameter	Type	Example	Description
MobileMapping	String	mobileAttr	The field that is used to indicate the mobile phone number of a user on the LDAP server.
NameMapping	String	nameAttr	The field that is used to indicate the name of a user on the LDAP server.
HasPassword	String	true	Indicates whether passwords are required. Valid values: true: required false: not required
Port	Long	389	The port that is used to access the LDAP server.
Server	String	192.168.XX.XX	The address of the LDAP server.
StandbyServer	String	192.168.XX.XX	The address of the secondary LDAP server.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=GetInstanceLDAPAuthServer
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<GetInstanceLDAPAuthServerResponse>
  <RequestId>1C60E741-102D-5E8F-9710-B06D3F0183FE</RequestId>
  <LDAP>
    <Account>cn=Manager,dc=test,dc=com</Account>
    <BaseDN>dc=test,dc=com</BaseDN>
    <EmailMapping>emailAttr</EmailMapping>
    <Filter>(& (objectClass=top))</Filter>
    <IsSSL>true</IsSSL>
    <LoginNameMapping>userNameAttr</LoginNameMapping>
    <MobileMapping>mobileAttr</MobileMapping>
    <NameMapping>nameAttr</NameMapping>
    <HasPassword>true</HasPassword>
    <Port>389</Port>
    <Server>192.168.XX.XX</Server>
    <StandbyServer>192.168.XX.XX</StandbyServer>
  </LDAP>
</GetInstanceLDAPAuthServerResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "1C60E741-102D-5E8F-9710-B06D3F0183FE",
  "LDAP" : {
    "Account" : "cn=Manager,dc=test,dc=com",
    "BaseDN" : "dc=test,dc=com",
    "EmailMapping" : "emailAttr",
    "Filter" : "(&(objectClass=top))",
    "IsSSL" : true,
    "LoginNameMapping" : "userNameAttr",
    "MobileMapping" : "mobileAttr",
    "NameMapping" : "nameAttr",
    "HasPassword" : "true",
    "Port" : 389,
    "Server" : "192.168.XX.XX",
    "StandbyServer" : "192.168.XX.XX"
  }
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalServerError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

15.5. ModifyInstanceADAuthServer

Modifies the settings of Active Directory (AD) authentication on a bastion host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Name	Type	Required	Example	Description
Action	String	Yes	ModifyInstanceADAuthServer	The operation that you want to perform. Set the value to ModifyInstanceADAuthServer .

Name	Type	Required	Example	Description
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .
Server	String	Yes	192.168.XX.XX	The address of the AD server.
StandbyServer	String	No	192.168.XX.XX	The address of the secondary AD server.
Port	Integer	No	389	The port that is used to access the AD server.
IsSSL	Boolean	No	true	Specifies whether to support SSL. Valid values: true: supports SSL. false: does not support SSL.
BaseDN	String	Yes	dc=test,dc=com	The Base distinguished name (DN).
Domain	String	Yes	domain	The domain on the AD server.
Account	String	Yes	cn=Manager,dc=test,dc=com	The username of the account that is used for the AD server.
Password	String	No	*****	The password of the account that is used for the AD server.
Filter	String	No	(objectClass=top)	The condition that is used to filter users.
NameMapping	String	No	nameAttr	The field that is used to indicate the name of a user on the AD server.
EmailMapping	String	No	emailAttr	The field that is used to indicate the email address of a user on the AD server.

Name	Type	Required	Example	Description
MobileMapping	String	No	mobileAttr	The field that is used to indicate the mobile phone number of a user on the AD server.

Response parameters

Name	Type	Example	Description
RequestId	String	C9E97677-BD74-584B-AFCE-948C2A70BB82	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyInstanceADAuthServer
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&Server=192.168.XX.XX
&StandbyServer=192.168.XX.XX
&Port=389
&IsSSL=true
&BaseDN=dc=test,dc=com
&Domain=domain
&Account=cn=Manager,dc=test,dc=com
&Password=*****
&Filter=(objectClass=top)
&NameMapping=nameAttr
&EmailMapping=emailAttr
&MobileMapping=mobileAttr
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ModifyInstanceADAuthServerResponse>
  <RequestId>C9E97677-BD74-584B-AFCE-948C2A70BB82</RequestId>
</ModifyInstanceADAuthServerResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "C9E97677-BD74-584B-AFCE-948C2A70BB82"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).

15.6. ModifyInstanceLDAPAuthServer

Modifies the settings of Lightweight Directory Access Protocol (LDAP) authentication on a bastion host.

Debugging

OpenAPI Explorer automatically calculates the signature value. For your convenience, we recommend that you call this operation in OpenAPI Explorer. OpenAPI Explorer dynamically generates the sample code of the operation for different SDKs.

Request parameters

Name	Type	Required	Example	Description
Action	String	Yes	ModifyInstanceLDAPAuthServer	The operation that you want to perform. Set the value to ModifyInstanceLDAPAuthServer .
InstanceId	String	Yes	bastionhost-cn-st220aw****	The ID of the bastion host. You can call the DescribeInstances operation to query the ID of the bastion host.
RegionId	String	No	cn-hangzhou	The region ID of the bastion host. For more information about the mapping between region IDs and region names, see Regions and zones .
Server	String	No	192.168.XX.XX	The address of the LDAP server.
StandbyServer	String	No	192.168.XX.XX	The address of the secondary LDAP server.
Port	Integer	No	389	The port that is used to access the LDAP server.
IsSSL	Boolean	No	true	Specifies whether to support SSL. Valid values: true: supports SSL. false: does not support SSL.

Name	Type	Required	Example	Description
BaseDN	String	No	dc=test,dc=com	The Base distinguished name (DN).
Account	String	No	cn=Manager,dc=test,dc=com	The username of the account that is used for the LDAP server.
Password	String	No	*****	The password of the account that is used for the LDAP server.
Filter	String	No	(objectClass=top)	The condition that is used to filter users.
LoginNameMapping	String	No	userNameAttr	The field that is used to indicate the logon name of a user on the LDAP server.
NameMapping	String	No	nameAttr	The field that is used to indicate the name of a user on the LDAP server.
EmailMapping	String	No	emailAttr	The field that is used to indicate the email address of a user on the LDAP server.
MobileMapping	String	No	mobileAttr	The field that is used to indicate the mobile phone number of a user on the LDAP server.

Response parameters

Name	Type	Example	Description
RequestId	String	8F1085E3-F048-5F34-B650-F145216E4AA4	The ID of the request, which is used to locate and troubleshoot issues.

Examples

Sample requests

```
http(s)://[Endpoint]/?Action=ModifyInstanceLDAPAuthServer
&InstanceId=bastionhost-cn-st220aw****
&RegionId=cn-hangzhou
&Server=192.168.XX.XX
&StandbyServer=192.168.XX.XX
&Port=389
&IsSSL=true
&BaseDN=dc=test,dc=com
&Account=cn=Manager,dc=test,dc=com
&Password=*****
&Filter=(objectClass=top)
&LoginNameMapping=usernameAttr
&NameMapping=nameAttr
&EmailMapping=emailAttr
&MobileMapping=mobileAttr
&<Common request parameters>
```

Sample success responses

XML format

```
HTTP/1.1 200 OK
Content-Type:application/xml
<ModifyInstanceLDAPAuthServerResponse>
  <RequestId>8F1085E3-F048-5F34-B650-F145216E4AA4</RequestId>
</ModifyInstanceLDAPAuthServerResponse>
```

JSON format

```
HTTP/1.1 200 OK
Content-Type:application/json
{
  "RequestId" : "8F1085E3-F048-5F34-B650-F145216E4AA4"
}
```

Error codes

HTTP status code	Error code	Error message	Description
400	InvalidParameter	The argument is invalid.	The error message returned because one or more parameters are invalid.
500	InternalError	An unknown error occurred.	The error message returned because an unknown error occurred.

For a list of error codes, visit the [API Error Center](#).