

Alibaba Cloud Network Attached Storage

API reference

Issue: 20181212

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Generic conventions

Table -1: Style conventions

Style	Description	Example
	This warning information 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.
	This warning information 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 restore business.
	This indicates warning information, supplementary instructions, and other content that the user must understand.	 Note: Take the necessary precautions to save exported data containing sensitive information.
	This indicates supplemental instructions, best practices, tips, and other content that is good to know for the user.	 Note: You can use Ctrl + A to select all files.
>	Multi-level menu cascade.	Settings > Network > Set network type
Bold	It is used for buttons, menus, page names, and other UI elements.	Click OK .
Courier font	It is used for commands.	Run the <code>cd /d C:/windows</code> command to enter the Windows system folder.
<i>Italics</i>	It is used for parameters and variables.	<code>bae log list --instanceid Instance_ID</code>
[] or [a b]	It indicates that it is a optional value, and only one item can be selected.	<code>ipconfig [-all -t]</code>
{ } or {a b}	It indicates that it is a required value, and only one item can be selected.	<code>swich {stand slave}</code>

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1 API overview

NAS provides the following APIs.

Serial No.	Category	API	Description
1	Region	DescribeRegions	Return all Region IDs.
2	File system	CreateFileSystem	Create a new file system.
3	File system	DeleteFileSystem	Delete existing file systems.
4	File system	DescribeFileSystems	Return file system description.
5	File system	ModifyFileSystem	Modify file system information.
6	Mount point	CreateMountTarget	Create a mount point.
7	Mount point	DeleteMountTarget	Delete existing mount points.
8	Mount point	DescribeFileSystems	Return mount point description.
9	Mount point	ModifyMountTarget	Modify mount point information.
10	Permission group	CreateAccessGroup	Create a permission group.
11	Permission group	DeleteAccessGroup	Delete existing permission groups.
12	Permission group	DescribeAccessGroups	Return permission group description.
13	Permission group	ModifyAccessGroup	Modify a permission group.
14	Permission group	CreateAccessRule	Create a permission rule.
15	Permission group	DeleteAccessRule	Delete existing permission rules.
16	Permission group	DescribeAccessRules	Return permission rule description.

Serial No.	Category	API	Description
17	Permission group	ModifyAccessRule	Modify permission rules.

- [API Resources](#)
- [API Explorer](#)
- [API Error Center](#)

2 Request method

2.1 Public parameter

Public request parameters indicate the request parameters that every interface uses.

Parameter name	Type	Required	Description
Format	String	No	Type of the value returned. JSON and XML formats are supported. The default format is JSON.
Version	String	Yes	API version number format is in the form of date: YYYY-MM-DD . For this version, it is 2017-06-26.
AccessKeyId	String	Yes	The key ID that Alibaba Cloud issues to a user to access services.
Signature	String	Yes	The signature result string.
SignatureMethod	String	Yes	The signature method. HMAC-SHA1 is currently supported.
Timestamp	String	Yes	The time stamp of the request. The date format follows the ISO8601 standard and uses UTC time: YYYY-MM-DDThh:mm:ssZ. For example, 2017-05-26T12:00:00Z.
SignatureVersion	String	Yes	Signature algorithm version. The current version is 1.0.
SecurityToken	String	No	This value is required to be passed in when

Parameter name	Type	Required	Description
			you use an STS credential type.
SignatureNonce	String	No	The unique random number, used to prevent network replay attacks. You must use different random numbers for different requests.

Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=<Action>
&Format=xml
&Version=2017-06-26
&AccessKeyId=key-test
&Signature=Pc5WB8gokVn0xfeu%2FZV%2BiNM1dgI%3D
&SignatureMethod=HMAC-SHA1
&SignatureNonce=15215528852396
&SignatureVersion=1.0
&Timestamp=2012-06-01T12:00:00Z
...
```

Public response parameters

The system returns a unique identification code `RequestId` each time you send a request to call an API whether the call succeeds or does not succeed.

Parameter name	Type	Description
RequestId	Integer	The unique identification code that the system returns.

Response example

- XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<Interface Name + Response>
  <!-- Return Request Tag -->
  <RequestId> 6D9F62C5-BF52-447C-AA34-C77F7AFCCC12</RequestId>
  <!-- Return Result Data -->
</Interface Name + Response>
```

- JSON example

```
{
  "RequestId": "4C467B38-3910-447D-87BC-AC049166F216",
  /* Returned result data */
}
```

```
}
```

2.2 Request structure

NAS API requests are in a unified structure.

Endpoint

The endpoint of NAS APIs follows a format of `nas.aliyuncs.com` and `nas.[RegionId].aliyuncs.com`.

Specifically, `RegionId` refers to the service region. You can call the API of the designated region based on your own region. The service is available in the following regions.

Region	RegionId	Endpoint
Beijing	cn-beijing	nas.cn-beijing.aliyuncs.com
Shanghai	cn-shanghai	nas.cn-shanghai.aliyuncs.com
Hangzhou	cn-hangzhou	nas.cn-hangzhou.aliyuncs.com
Shenzhen	cn-shenzhen	nas.cn-shenzhen.aliyuncs.com

Communication protocol

HTTP and HTTPS protocols are supported for request communications. We recommend that you use an HTTPS channel which provides higher security.

Request methods

NAS API supports sending HTTP GET requests. Using this method, you are required to include request parameters in the request URL.

Request parameters

Each request must specify the operation to be executed, namely the `Action` parameter (such as `DescribeRegions`). Each operation must contain the common request parameters and the specific request parameters of the specified operation.

Character encoding

Requests and responses are both encoded using the UTF-8 character set.

Use SDK

JAVA, PHP, and, Python SDKs are currently supported.

We recommend that you use SDKs which can simplify the process for HTTP message encapsulation and signature operations.

You can download the SDK from the following links:

- Java: [NAS Java SDK](#)
- Python: [NAS Python SDK](#)
- PHP: [NAS PHP SDK](#)
- .Net: [NAS .Net SDK](#)

3 Region

3.1 DescribeRegions

DescribeRegions is used to return all region IDs.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: DescribeRegions
AcceptLanguage	String	FALSE	Default value: none. Chinese: zh-CN, English: en-US, Japanese: ja
PageSize	Integer	FALSE	The number of regions contained on each page. The default value is 10.
PageNumber	Integer	FALSE	The page number of the list (beginning from 1).

Response parameters

Parameter name	Type	Description
RequestId	String	Request ID
TotalCount	Integer	The total number of returned region information items
PageSize	Integer	The number of regions contained on each page
PageNumber	Integer	The page number of the list
Regions	RegionType	Region description

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=DescribeRegions
&PageSize=2
&PageNumber=1
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<DescribeRegionsResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>4</TotalCount>
  <PageSize>2</PageSize>
  <RequestId>A70BEE5D-76D3-49FB-B58F-1F398211A5C3</RequestId>
  <Regions>
    <Region>
      <RegionId>cn-hangzhou</RegionId>
      <RegionEndpoint>nas.cn-hangzhou.aliyuncs.com</RegionEndpoint>
    >
    <LocalName>China East 1</LocalName>
  </Region>
  <Region>
    <RegionId>cn-shanghai</RegionId>
    <RegionEndpoint>nas.cn-shanghai.aliyuncs.com</RegionEndpoint>
    <LocalName>China East 2</LocalName>
  </Region>
</Regions>
</DescribeRegionsResponse>
```

— JSON example

```
{
  "TotalCount": 4,
  "PageSize": 2,
  "RequestId": "A70BEE5D-76D3-49FB-B58F-1F398211A5C3",
  "PageNumber": 1,
  "Regions": {
    "Region": [
      {
        "RegionId": "cn-hangzhou",
        "RegionEndpoint": "nas.cn-hangzhou.aliyuncs.com",
        "LocalName": "China East 1"
      },
      {
        "RegionId": "cn-shanghai",
        "RegionEndpoint": "nas.cn-shanghai.aliyuncs.com",
        "LocalName": "China East 2"
      }
    ]
  }
}
```

4 File system

4.1 CreateFileSystem

CreateFileSystem is used to create a new file system.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: CreateFile System
StorageType	String	TRUE	The file system type. Currently includes the Performance type and the Capacity type
ProtocolType	String	TRUE	Type of protocol used. Currently includes the NFS type and the SMB type
Description	String	FALSE	File system description (space characters are not allowed)

Response parameters

Parameter name	Type	Description
FileSystemId	String	ID of the file system created

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=CreateFileSystem
&StorageType=Performance
&ProtocolType=NFS
&Description=balabala
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<CreateFileSystemResponse>
  <FileSystemId>1ca404a666</FileSystemId>
  <RequestId>98696EF0-1607-4E9D-B01D-F20930B68845</RequestId>
</CreateFileSystemResponse>
```

— JSON example

```
{
  "RequestId": "98696EF0-1607-4E9D-B01D-F20930B68845",
  "FileSystemId": "1ca404a666"
}
```

4.2 DeleteFileSystem

DeleteFileSystem is used to delete existing file systems.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: DeleteFile System
FileSystemId	String	TRUE	ID of the file system to be deleted

Response parameters

None

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=DeleteFileSystem
&FileSystemId=1ca404a348
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<DeleteFileSystemResponse>
  <RequestId>9E15E394-38A6-457A-A62A-D9797C9A0262</RequestId>
</DeleteFileSystemResponse>
```

— JSON example

```
{
  "RequestId": "9E15E394-38A6-457A-A62A-D9797C9A0262"
}
```

4.3 DescribeFileSystems

DescribeFileSystems is used to return the description of a file system.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: DescribeFileSystems
FileSystemId	String	FALSE	File system ID
PageSize	Integer	FALSE	The number of file systems contained on each page. The default value is 10.
PageNumber	Integer	FALSE	The page number of the list (beginning from 1)

Response parameters

Parameter name	Type	Description
TotalCount	Integer	Total number of file systems
PageSize	Integer	The number of file systems contained on each page
PageNumber	Integer	The page number of the list
FileSystems	FileSystemType	File system description

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=DescribeFileSystems
&FileSystemId=109c042666
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<DescribeFileSystemsResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>1</PageSize>
  <RequestId>035B3A3A-E514-4B41-B906-5D906CFBD65F</RequestId>
  <FileSystems>
    <FileSystem>
      <FileSystemId>109c042666</FileSystemId>
      <ProtocolType>NFS</ProtocolType>
      <RegionId>cn-hangzhou</RegionId>
      <CreateTime>2017-05-27T15:43:06CST</CreateTime>
      <Destription/>
      <MountTargets>
        <MountTarget>
          <MountTargetDomain>109c042666-wjb85.cn-hangzhou.nas.
aliyuncs.com</MountTargetDomain>
        </MountTarget>
      </MountTargets>
      <StorageType>Performance</StorageType>
      <MeteredSize>1611661312</MeteredSize>
    </FileSystem>
  </FileSystems>
</DescribeFileSystemsResponse>
```

— JSON example

```
{
  "FileSystems": {
    "FileSystem": [
      {
        "StorageType": "Performance",
        "ProtocolType": "NFS",
        "CreateTime": "2017-05-27T15:43:06CST",
        "Destription": "",
        "MountTargets": {
          "MountTarget": [
            {
              "MountTargetDomain": "109c042666-wjb85.cn-hangzhou.
nas.aliyuncs.com"
            }
          ]
        },
        "FileSystemId": "109c042666",
        "RegionId": "cn-hangzhou",
        "MeteredSize": 1611661312
      }
    ]
  }
}
```

```
]
},
"TotalCount": 1,
"PageSize": 1,
"RequestId": "035B3A3A-E514-4B41-B906-5D906CFBD65F",
"PageNumber": 1
}
```

4.4 ModifyFileSystem

ModifyFileSystem is used to modify the file system information.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: ModifyFile System
FileSystemId	String	TRUE	File system ID
Description	String	FALSE	Description (space characters are not allowed).

Response parameters

None

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=ModifyFileSystem
&FileSystemId=1ca404a666
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<ModifyFileSystemResponse>
  <RequestId>5BC5CB97-9F28-42FE-84A4-0CD0DF4211C8</RequestId>
</ModifyFileSystemResponse>
```

— JSON example

```
{
```

```
"RequestId": "5BC5CB97-9F28-42FE-84A4-0CD0DF4211C8"  
}
```

5 Mount point

5.1 CreateMountTarget

CreateMountTarget is used to create a mount point.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: CreateMountTarget
FileSystemId	String	TRUE	File system ID
AccessGroupName	String	TRUE	Permission group name
NetworkType	String	TRUE	Network type, including Vpc and Classic networks.
VpcId	String	FALSE	VPC network ID
VSwitchId	String	FALSE	VSwitch ID.

Response parameters

Parameter name	Type	Description
MountTargetDomain	String	Mount point domain name

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=CreateMountTarget
&FileSystemId=174494b666
&AccessGroupName=classic-test
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<CreateMountTargetResponse>
```

```
<RequestId>70EACC9C-D07A-4A34-ADA4-77506C42B023</RequestId>
<MountTargetDomain>174494b666-xog95.cn-hangzhou.nas.aliyuncs.com
</MountTargetDomain>
</CreateMountTargetResponse>
```

— JSON example

```
{
  "RequestId": "70EACC9C-D07A-4A34-ADA4-77506C42B023",
  "MountTargetDomain": "174494b666-xog95.cn-hangzhou.nas.aliyuncs.com"
}
```

5.2 DeleteMountTarget

DeleteMountTarget is used to delete existing mount points.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: DeleteMountTarget
FileSystemId	String	TRUE	File system ID
MountTargetDomain	String	TRUE	Mount point domain name

Response parameters

None

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=DeleteMountTarget
&FileSystemId=174494b666
&MountTargetDomain=174494b666-xog95.cn-hangzhou.nas.aliyuncs.com
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<DeleteMountTargetResponse>
  <RequestId>5BC5CB97-9F28-42FE-84A4-0CD0DF4211C8</RequestId>
```

```
</DeleteMountTargetResponse>
```

— JSON example

```
{  
  "RequestId": "5BC5CB97-9F28-42FE-84A4-0CD0DF4211C8"  
}
```

5.3 DescribeMountTargets

DescribeMountTargets is used to return the mount point description.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: DescribeMountTargets
FileSystemId	String	TRUE	File system ID
MountTargetDomain	String	FALSE	Mount point domain name
PageSize	Integer	FALSE	The number of mount points contained on each page. The default value is 10.
PageNumber	Integer	FALSE	The page number of the list (beginning from 1)

Response parameters

Parameter name	Type	Description
TotalCount	Integer	Total number of mount points
PageSize	Integer	The number of mount points contained on each page
PageNumber	Integer	The page number of the list
MountTargets	MountTargetType	Mount point description

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=DescribeMountTargets
&FileSystemId=1ca404a666
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<? xml version="1.0" encoding="UTF-8"? >
<DescribeMountTargetsResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>1</PageSize>
  <RequestId>3BAB90FD-B4A0-48DA-9F09-2B963510A0EF</RequestId>
  <MountTargets>
    <MountTarget>
      <Status>Active</Status>
      <NetworkType>Vpc</NetworkType>
      <VswId>vsw-2zevmkwkwyztjuoffgdiwl</VswId>
      <VpcId>vpc-2zesj9afh3y518k9oe86q</VpcId>
      <MountTargetDomain>1ca404a666-wxa89.cn-hangzhou.nas.aliyuncs.com</MountTargetDomain>
      <AccessGroup>DEFAULT_VPC_GROUP_NAME</AccessGroup>
    </MountTarget>
  </MountTargets>
</DescribeMountTargetsResponse>
```

— JSON example

```
{
  "TotalCount": 1,
  "PageSize": 1,
  "RequestId": "3BAB90FD-B4A0-48DA-9F09-2B963510A0EF",
  "PageNumber": 1,
  "MountTargets": {
    "MountTarget": [
      {
        "Status": "Active",
        "VswId": "vsw-2zevmkwkwyztjuoffgdiwl",
        "VpcId": "vpc-2zesj9afh3y518k9oe86q",
        "MountTargetDomain": "1ca404a666-wxa89.cn-hangzhou.nas.aliyuncs.com",
        "NetworkType": "Vpc",
        "AccessGroup": "DEFAULT_VPC_GROUP_NAME"
      }
    ]
  }
}
```



```
}
```

5.4 ModifyMountTarget

ModifyMountTarget is used to modify the mount point information.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: ModifyMountTarget
FileSystemId	String	TRUE	File system ID
MountTargetDomain	String	TRUE	Mount point domain name
AccessGroupName	String	FALSE	Permission group name
Status	String	FALSE	Status, including Active and Inactive

Response parameters

None

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=ModifyMountTarget
&FileSystemId=1ca404a666
&MountTargetDomain=1ca404a666
&Status=Inactive
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<ModifyMountTargetResponse>
  <RequestId>FF387D95-34C4-4879-B65A-99D1FA1B65CD</RequestId>
```

```
</ModifyMountTargetResponse>
```

— JSON example

```
{  
  "RequestId": "FF387D95-34C4-4879-B65A-99D1FA1B65CD"  
}
```

6 Permission group

6.1 CreateAccessGroup

CreateAccessGroup is used to create a permission group.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: CreateAccessGroup
AccessGroupName	String	TRUE	Permission group name
AccessGroupType	String	TRUE	Permission group type, including the VPC and Classic types
Description	String	FALSE	Permission group description. It is the same as the permission group name by default.

Response parameters

Parameter name	Type	Description
AccessGroupName	String	Permission group name

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=CreatAccessGroup
&AccessGroupName=classic-test
&AccessGroupType=Classic
&Description=classic test access group
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<CreateAccessGroupResponse>
  <RequestId>55C5FFD6-BF99-41BD-9C66-FFF39189F4F8</RequestId>
  <AccessGroupName>classic-test</AccessGroupName>
</CreateAccessGroupResponse>
```

— JSON example

```
{
  "RequestId": "55C5FFD6-BF99-41BD-9C66-FFF39189F4F8",
  "AccessGroupName ": "classic-test"
}
```

6.2 CreateAccessRule

CreateAccessRule is used to create a permission rule.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: CreateAccessRule
AccessGroupName	String	TRUE	Permission group name
SourceCidrIp	String	TRUE	Address or address segment
RWAccessType	String	FALSE	Read-write permission type: RDWR (default), RDONLY
UserAccessType	String	FALSE	User permission type: no_squash (default), root_squash, all_squash
Priority	Integer	FALSE	Priority level. Range: 1-100. Default value: 1

Response parameters

Parameter name	Type	Description
AccessRuleId	String	Rule serial number

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=CreatAccessRule
&AccessGroupName=classic-test
&SourceCidrIp=10.0.0.1/32
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<CreateAccessRuleResponse>
  <AccessRuleId>1</AccessRuleId>
  <RequestId>A323836B-5BC6-45A6-8048-60675C23EE2A</RequestId>
</CreateAccessRuleResponse>
```

— JSON example

```
{
  "RequestId": "A323836B-5BC6-45A6-8048-60675C23EE2A",
  "AccessRuleId": "1"
}
```

6.3 DeleteAccessGroup

DeleteAccessGroup is used to delete existing permission groups.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: DeleteAccessGroup
AccessGroupName	String	TRUE	Permission group name

Response parameters

None

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=DeleteAccessGroup
&AccessGroupName=classic-test
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<DeleteAccessGroupResponse>
  <RequestId>5BC5CB97-9F28-42FE-84A4-0CD0DF4211C8</RequestId>
</DeleteAccessGroupResponse>
```

— JSON example

```
{
  "RequestId": "9E15E394-38A6-457A-A62A-D9797C9A0262"
}
```

6.4 DeleteAccessRule

DeleteAccessRule is used to delete existing permission rules.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: DeleteAccessRule
AccessGroupName	String	TRUE	Permission group name
AccessRuleId	String	TRUE	Rule serial number

Response parameters

None

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=CreatAccessRule
&AccessGroupName=classic-test
&AccessRuleId=1
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<DeleteAccessRuleResponse>
  <RequestId>5B4511A7-C99E-4071-AA8C-32E2529DA963</RequestId>
</DeleteAccessRuleResponse>
```

— JSON example

```
{
  "RequestId": "5B4511A7-C99E-4071-AA8C-32E2529DA963",
}
```

6.5 DescribeAccessGroups

DescribeAccessGroups is used to return the permission group description.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: DescribeAccessGroups
AccessGroupName	String	FALSE	Permission group name
PageSize	Integer	FALSE	The number of permission groups contained on each page. The default value is 10.
PageNumber	Integer	FALSE	The page number of the list (beginning from 1).

Response parameters

Parameter name	Type	Description
TotalCount	Integer	Total number of permission groups
PageSize	Integer	The number of permission groups contained on each page
PageNumber	Integer	The page number of the list
AccessGroups	String	Permission group description

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=DescribeAccessGroups
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<DescribeAccessGroupsResponse>
  <PageNumber>1</PageNumber>
  <TotalCount>2</TotalCount>
  <PageSize>2</PageSize>
  <RequestId>3E569F4A-F743-490B-AC01-A8088F5C17A1</RequestId>
  <AccessGroups>
    <AccessGroup>
      <Description>DEFAULT ACCESS GROUP NAME</Description>
      <RuleCount>1</RuleCount>
      <AccessGroupType>Vpc</AccessGroupType>
      <AccessGroupName>DEFAULT_VPC_GROUP_NAME</AccessGroupName>
      <MountTargetCount>8</MountTargetCount>
    </AccessGroup>
    <AccessGroup>
      <Description>This is a classic test access group~</
Description>
      <RuleCount>0</RuleCount>
      <AccessGroupType>Classic</AccessGroupType>
      <AccessGroupName>classic-test</AccessGroupName>
      <MountTargetCount>0</MountTargetCount>
    </AccessGroup>
  </AccessGroups>
</DescribeAccessGroupsResponse>
```

— JSON example

```
{
  "AccessGroups": {
```



```

"AccessGroup": [
  {
    "RuleCount": 1,
    "AccessGroupType": "Vpc",
    "Description": "DEFAULT ACCESS GROUP NAME",
    "AccessGroupName": "DEFAULT_VPC_GROUP_NAME",
    "MountTargetCount": 8
  },
  {
    "RuleCount": 0,
    "AccessGroupType": "Classic",
    "Description": "This is a classic test access group~",
    "AccessGroupName": "classic-test",
    "MountTargetCount": 0
  }
],
"TotalCount": 2,
"PageSize": 2,
"RequestId": "2514F97E-FFF0-4A1F-BF04-729CEAC64B6F",
"PageNumber": 1,
}

```

6.6 DescribeAccessRules

DescribeAccessRules is used to return the permission group rule description.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: DescribeAccessRules
AccessGroupName	String	TRUE	Permission group name
AccessRuleId	String	FALSE	Rule serial number
PageSize	Integer	FALSE	The number of permission rules contained on each page. The default value is 10.
PageNumber	Integer	FALSE	The page number of the list (beginning from 1).

Response parameters

Parameter name	Type	Description
TotalCount	Integer	Total number of permission rules
PageSize	Integer	The number of permission rules contained on each page
PageNumber	Integer	The page number of the list
AccessRules	AccessRules	Permission rule description

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=DescribeAccessRules
&AccessGroupName=classic-test
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<DescribeAccessRulesResponse>
  <AccessRules>
    <AccessRule>
      <SourceCidrIp>10.0.0.1/32</SourceCidrIp>
      <AccessRuleId>1</AccessRuleId>
      <RWAccess>RDWR</RWAccess>
      <UserAccess>no_squash</UserAccess>
      <Priority>1</Priority>
    </AccessRule>
  </AccessRules>
  <PageNumber>1</PageNumber>
  <TotalCount>1</TotalCount>
  <PageSize>1</PageSize>
  <RequestId>86D89E82-4297-4343-8E1E-A2495B35CC70</RequestId>
</DescribeAccessRulesResponse>
```

— JSON example

```
{
  "TotalCount": 1,
  "PageSize": 1,
  "RequestId": "86D89E82-4297-4343-8E1E-A2495B35CC70",
  "PageNumber": 1,
  "AccessRules": {
    "AccessRule": [
      {
        "RWAccess": "RDWR",
        "UserAccess": "no_squash",
        "Priority": 1,
```

```
        "SourceCidrIp": "10.0.0.1/32",  
        "AccessRuleId": "1"  
    }  
  ]  
}
```

6.7 ModifyAccessGroup

ModifyAccessGroup is used to modify the permission group.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: ModifyAccessGroup
AccessGroupName	String	TRUE	Permission group name
Description	String	FALSE	Permission group description

Response parameters

None

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=ModifyAccessGroup  
&AccessGroupName=classic-test  
&Description=classic-test  
&<Public Request Parameter>  
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >  
<ModifyAccessGroupResponse>  
  <RequestId>ED2AE737-9D50-4CA4-B0DA-31BD610C2363</RequestId>  
</ModifyAccessGroupResponse>
```

— JSON example

```
{  
  "RequestId": "ED2AE737-9D50-4CA4-B0DA-31BD610C2363"
```

```
}
```

6.8 ModifyAccessRule

ModifyAccessRule is used to modify permission rules.

Request parameters

Parameter name	Type	Required	Description
Action	String	TRUE	Operation interface name and system required parameter. Value: ModifyAccessRule
AccessGroupName	String	TRUE	Permission group name
AccessRuleId	String	TRUE	Rule serial number
SourceCidrIp	String	FALSE	Address or address segment
RWAccessType	String	FALSE	Read-write permission type
UserAccessType	String	FALSE	User permission type
Priority	Integer	FALSE	Priority level. Range: 1 -100. Default value: 1

Response parameters

None

Example

- Request example

```
GET https://nas.cn-hangzhou.aliyuncs.com/?Action=ModifyAccessRule
&AccessGroupName=classic-test
&AccessRuleId=1
&SourceCidrIp=192.168.0.1
&RWAccessType=RDWR
&UserAccessType=all_squash
&<Public Request Parameter>
...
```

- Response example

— XML example

```
<? xml version="1.0" encoding="UTF-8"? >
<ModifyAccessRuleResponse>
  <RequestId>6299428C-3861-435D-AE54-9B330A0007C8</RequestId>
</ModifyAccessRuleResponse>
```

— JSON example

```
{
  "RequestId": "6299428C-3861-435D-AE54-9B330A0007C8",
}
```

7 Error code list

Various error code messages are returned when API exceptions occur.

Error code

An error code is composed of four parts.

Component	Definition
HttpCode	HTTP response code that complies with HTTP syntax
Code	Error code
Message	Error message
Resolution	Recommended solution

Error code list

HttpCode	Code	Message	Resolution
500	InternalError	The request processing has failed due to some unknown error.	Please try again later.
503	ServiceUnavailable	The request has failed due to a temporary failure of the server.	Please try again later.
504	ServiceTimeout	The request processing has failed due to timeout.	Please try again later.
503	SecurityToken. CheckFailed	The security token check has failed due to some internal error.	Please try again later.
503	SecurityToken. DecodeFailed	The security token decode has failed due to some internal error.	Please try again later.
503	SubRam.CheckFailed	The sub user Ram check has failed due to some internal error.	Please try again later.

HttpCode	Code	Message	Resolution
503	VpcRam.CheckFailed	The Vpc ram check has failed due to some internal error.	Please try again later.
503	VpcSubRam.CheckFailed	The Vpc sub user ram check has failed due to some internal error.	Please try again later.
400	Missingparameter.calleruid	Parameter `callerUid` is mandatory for this action.	Add the callerUid request parameter.
400	MissingParameter.RegionId	Parameter `RegionId` in endpoint is mandatory for this action.	Add the <i>RegionId</i> field to the domain name.
400	MissingParameter.VSwitchId	Parameter `VSwitchId` is mandatory for this action.	Add the VSwitchId request parameter.
400	MissingParameter.VpcId	Parameter `VpcId` is mandatory for this action.	Add the VpcId request parameter.
400	InvalidParameter.StorageType	Parameter `StorageType` is mandatory for this action.	A valid StorageType request parameter must contain Performance and Capacity.
400	InvalidParameter.ProtocolType	Parameter ProtocolType is mandatory for this action.	A valid ProtocolType request parameter must contain NFS and SMB.
400	InvalidParameter.Description	Parameter Description is mandatory for this action.	A valid Description string must contain Chinese and English characters in addition to @, #, \$, _, +, and -.
404	InvalidFileSystem.NotFound	The specified FileSystem does not exist.	The specified file system does not exist or has been deleted.

HttpCode	Code	Message	Resolution
403	InvalidFileSystem. AlreadyExisted	The specified FileSystem has been already existed.	The specified file system already exists. You can call DescribeFileSystems and specify the file system ID to view its information.
404	InvalidMountTarget. NotFound	The specified MountTarget does not exist.	The specified mount point does not exist or has been deleted.
404	InvalidAccessGroup. NotFound	The specified Account does not exist.	The specified permission group does not exist or has been deleted.
403	InvalidAccessGroup. AlreadyExisted	The specified AccessGroup has been already existed.	The specified permission group already exists. You can call DescribeMountTargets and specify the permission group to view its information.
403	InvalidAccessGroup. AlreadyAttached	The specified AccessGroup is still attached by some MountTarget(s).	The specified permission group is bound with one or more mount points. Unbind the mount points first before deleting the permission group.
404	InvalidAccessRule. NotFound	The specified AccessRule does not exist.	The specified permission rule does not exist or has been deleted.
404	InvalidLocatin. NotFound	The specified Location is not found or is not supported.	The requested Location does not exist or is not currently providing services.

HttpCode	Code	Message	Resolution
404	InvalidRegionId.NotFound	The specified Region is not found.	The requested Region does not exist or is not currently providing services.
404	InvalidAZone.NotFound	The specified AZone is not found.	The requested AZone does not exist or is not currently providing services.
404	InvalidVpc.NotFound	The specified EcsId is not found.	The specified VPC does not exist. Create a VPC first.
404	InvalidVip.NotFound	The specified Vip is not found.	The specified VPC is not found. Make sure you use correct and valid VPC information.
404	InvalidLBid.NotFound	The specified LBid is not found.	The system failed to create LBid. Please try again later.
404	InvalidVpcTunnelId.NotFound	The specified vpc tunnelId is not found.	The specified VPC <i>tunnelId</i> does not exist. Check the VPC information first.
404	InvalidVpc.CreationFailed	The specified vpc instance creation failed.	Failed to create the specified VPC instance. Make sure you use correct and valid VPC information and there is available IP space for the instance, and then try again.
403	OperationDenied.DefaultAccessGroupCannotDelete	The default AccessGroup can not be deleted.	You can edit the operation-customized permission group.
403	OperationDenied.DefaultAcc	The default AccessGroup can not be modified.	You can edit the operation-customized permission group.

HttpCode	Code	Message	Resolution
	AccessGroupCannotModify		
403	OperationDenied.NetworkTypeNotMatched	The NetworkType of MountTarget is not matched with AccessGroup.	Make sure the NetworkType of the mount point and the AccessGroupType of the permission group are consistent.
403	OperationDenied.MountTargetNotEmpty	There are still MountTarget(s) on the specified FileSystem.	The specified file system has one or more mount points. Delete the existing mount points first.
403	OperationDenied.FileSystemCountsExceeded	The amount of FileSystem has reached its limits (maximum 10).	To increase the limit, open a ticket .
403	OperationDenied.MountTargetCountsExceeded	The amount of MountTarget has reached its limits (maximum 2 per FileSystem).	To increase the limit, open a ticket .
403	OperationDenied.AccessGroupCountsExceeded	The amount of AccessGroup has reached its limits.	To increase the limit, open a ticket .
403	OperationDenied.AccessRuleCountsExceeded	The amount of AccessRule has reached its limits.	To increase the limit, open a ticket .
403	User.Disabled	Your account does not open Nas Service yet or balance is insufficient.	If you have not activated the NAS service, activate the service first.
403	Forbidden.InvalidUserType	The operation is not permitted due to type of account.	Sorry, but NAS-Open API does not currently support your account type.
403	Forbidden.Ram	User not authorized to operate on the	Your account RAM permission verification failed.

HttpCode	Code	Message	Resolution
		specified resource, or this API doesn't support RAM.	on failed. Go to RAM to authorize required NAS permissions.
403	Forbidden. EcsTokenNotAuthorized	User not authorized to check ecs on creating MountTarget of classic network type.	Go to RAM to authorize NAS permissions to visit the ECS verification interface.
403	NotQualified	User has not been approved for the trail application.	Please initiate an application to try the related features. If your application fails to be approved, open a ticket .

Response example of error codes

- XML format

```
<? xml version="1.0" encoding="UTF-8"? >
<Error>
  <RequestId>B71B4C68-6C6B-4D4B-AD70-8951BD7D188E</RequestId>
  <HostId>nas.cn-hangzhou.aliyuncs.com</HostId>
  <Code>InvalidFileSystem.NotFound</Code>
  <Message>The specified file system does not exist</Message>
</Error>
```

- JSON format

```
{
  "RequestId": "B71B4C68-6C6B-4D4B-AD70-8951BD7D188E",
  "HostId": " nas.cn-hangzhou.aliyuncs.com ",
  "Code": "InvalidFileSystem.NotFound",
  "Message": "The specified file system does not exist"
}
```