

Alibaba Cloud

Resource Management SDK Reference

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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 . |
| Courier font | 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> |

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1.Resource management SDK

1.1. Overview

This topic describes how to use Resource Management SDKs for different programming languages. Before you use Resource Management SDKs, we recommend that you read the topics of Resource Management API operations.

Resource Management supports SDKs for Java, Python, and Go. The following table lists the download links and references of the supported SDKs.

| Alibaba Cloud SDK | Resource Management SDK | Reference |
|----------------------------------------------|------------------------------------------------------------------|--------------------------------|
| Alibaba Cloud SDK for Java | Alibaba Cloud Resource Management SDK for Java | SDK for Java |
| Alibaba Cloud SDK for Python | Alibaba Cloud Resource Management SDK for Python | SDK for Python |
| Alibaba Cloud SDK for Go | Alibaba Cloud Resource Management SDK for Go | SDK for Go |

1.2. SDK for Java

This topic describes how to install SDK for Java and provides an example of how to use SDK for Java.

Background information

To use SDK for Java, you must install the core library of Alibaba Cloud SDK for Java and Resource Management SDK for Java.

- The name of the core library is `aliyun-java-sdk-core`. You can use [OpenAPI Explorer](#) to generate sample code and perform debugging.
- The name of Resource Management SDK for Java is `aliyun-java-sdk-resourcemanager`. For more information about Resource Management API operations, see [API Reference](#).

Install SDK for Java

Add dependencies by using Maven. Alternatively, download the JAR packages of SDK for Java and add them to your project.

- (Recommended) Add dependencies by using Maven
 - i. Use Maven to create a project.

```
mvn archetype:generate -DgroupId=com.aliyun.resourcemanager.sample \  
-DartifactId=resourcemanager-sdk-sample \  
-Dpackage=com.aliyun.resourcemanager.sample \  
-Dversion=1.0-SNAPSHOT
```

- ii. Add dependencies to the `pom.xml` file of the project.

The following code is an example of the dependencies on the `aliyun-java-sdk` packages. In this example, the SDK version is 2.0.7.

```
<dependency>
  <groupId>com.aliyun</groupId>
  <artifactId>aliyun-java-sdk-resourcemanager</artifactId>
  <version>1.0.0</version>
</dependency>
<dependency>
  <groupId>com.aliyun</groupId>
  <artifactId>aliyun-java-sdk-core</artifactId>
  <version>4.4.6</version>
</dependency>
```

Note

Note the following information of the packages:

- `aliyun-java-sdk` packages have been added to the [Maven repository](#). You do not need to edit the `settings.xml` file.
- You can visit the [Maven repository](#) to obtain the latest version of the `aliyun-java-sdk-core` package.

- Download the JAR packages of SDK for Java and add them to your project

You can download the JAR packages from the following links:

- [Alibaba Cloud SDK for Java](#)
- [Alibaba Cloud Resource Management SDK for Java](#)

Use SDK for Java

The following example demonstrates how to use SDK for Java to create a resource account:

```
import com.aliyuncs.DefaultAcsClient;
import com.aliyuncs.IAcsClient;
import com.aliyuncs.exceptions.ClientException;
import com.aliyuncs.exceptions.ServerException;
import com.aliyuncs.profile.DefaultProfile;
import com.google.gson.Gson;
import java.util.*;
import com.aliyuncs.resourcemanager.model.v20200331.*;
public class CreateResourceAccount {
    public static void main(String[] args) {
        // Construct an Alibaba Cloud client to send requests.
        // When you construct the client, specify the AccessKey ID and AccessKey secret.
        // Resource Management is a global service. However, the endpoint of the Resource Management
        // API is located in the China (Shanghai) region. Therefore, set the region to cn-shanghai.
        DefaultProfile profile = DefaultProfile.getProfile("cn-shanghai", "<accessKeyId>", "<accessSecret>");
        IAcsClient client = new DefaultAcsClient(profile);
        // Construct the request object.
        CreateResourceAccountRequest request = new CreateResourceAccountRequest();
        // Specify the required parameters.
        request.setRegionId("cn-shanghai");
        request.setDisplayName("test");
        // Issue the request and obtain a response.
        try {
            CreateResourceAccountResponse response = client.getAcsResponse(request);
            System.out.println(new Gson().toJson(response));
        } catch (ServerException e) {
            e.printStackTrace();
        } catch (ClientException e) {
            System.out.println("ErrCode:" + e.getErrCode());
            System.out.println("ErrMsg:" + e.getErrMsg());
            System.out.println("RequestId:" + e.getRequestId());
        }
    }
}
```

1.3. SDK for Python

This topic describes how to install SDK for Python and provides an example of how to use SDK for Python.

Install SDK for Python

Run the pip command. Alternatively, download the SDK packages and manually add them to your project.

- Run the `pip install aliyun-python-sdk-resource-manager` command.
- Download the SDK packages from the following links and manually add them to your project:
 - [Alibaba Cloud SDK for Python](#)
 - [Alibaba Cloud Resource Management SDK for Python](#)

Example of using SDK for Python

The following example uses SDK for Python to describe how to create a resource account:

```
#!/usr/bin/env python
#coding = utf - 8
from aliyunsdkcore.client import AcsClient
from aliyunsdkcore.acs_exception.exceptions import ClientException
from aliyunsdkcore.acs_exception.exceptions import ServerException
from aliyunsdkresourcemanager.request.v20200331.CreateResourceAccountRequest import CreateResourceAccountRequest

# Construct an Alibaba Cloud client to send requests.
# When you construct the client, configure the AccessKey ID and AccessKey secret.
# Resource Management is a global service. However, the Resource Management API endpoint is located in the China (Shanghai) region. Therefore, set the region to cn-shanghai.
client = AcsClient('<accessKeyId>', '<accessSecret>', 'cn-shanghai')

# Construct the request object.
request = CreateResourceAccountRequest()

# Specify the required parameters.
request.set_accept_format('json')
request.set_DisplayName("test")

# Issue the request and obtain a response.
response = client.do_action_with_exception(request)

#python2: print(response)
print(str(response, encoding = 'utf-8'))
```

1.4. SDK for Go

This topic describes how to install SDK for Go and provides an example of how to use SDK for Go.

Install SDK for Go

SDK for Go supports Go 1.7 and later. You can install SDK for Go by using one of the following methods:

- (Recommended) Use glide.

Run the following command:

```
glide get github.com/aliyun/alibaba-cloud-sdk-go
```

- Use govendor.

Run the following command:

```
go get -u github.com/aliyun/alibaba-cloud-sdk-go/sdk
```

Example of using SDK for Go

The following example uses SDK for Go to describe how to create a resource account:

```
package main

import (
    "fmt"
    "github.com/aliyun/alibaba-cloud-sdk-go/services/resourcemanager"
)

func main() {
    // Construct an Alibaba Cloud client to send requests.
    // When you construct the client, configure the AccessKey ID and AccessKey secret.
    // Resource Management is a global service. However, the Resource Management API endpoint is lo
    cated in the China (Shanghai) region. Therefore, set the region to cn-shanghai.
    client, err := resourcemanager.NewClientWithAccessKey("cn-shanghai", "<accessKeyId>", "<accessS
    ecret>")

    // Construct the request object.
    request := resourcemanager.CreateCreateResourceAccountRequest()
    request.Scheme = "https"

    // Specify the required parameters.
    request.DisplayName = "test"

    // Issue the request and obtain a response.
    response, err := client.CreateResourceAccount(request)
    if err != nil {
        fmt.Print(err.Error())
    }
    fmt.Printf("response is %#v\n", response)
}
```

2.Tag SDK

2.1. Overview

This topic describes how to use Tag SDKs for different programming languages. Before you use Tag SDKs, we recommend that you read the topics of Tag API operations.

Tag SDKs support Java and Python. The following table lists the download links and references of the supported SDKs.

| Alibaba Cloud SDK | Tag SDK | Reference |
|----------------------------------------------|------------------------------------------------------------------|--------------------------------|
| Alibaba Cloud SDK for Java | Alibaba Cloud Resource Management SDK for Java | SDK for Java |
| Alibaba Cloud SDK for Python | Alibaba Cloud Resource Management SDK for Python | SDK for Python |

2.2. SDK for Java

This topic describes how to install SDK for Java and provides examples of how to use SDK for Java.

Background information

- To use SDK for Java, you must install the core library of Alibaba Cloud SDK for Java (`aliyun-java-sdk-core`) and Tag SDK for Java (`aliyun-java-sdk-tag`).
- The JDK version must be 1.6 or later.
- Alibaba Cloud provides [OpenAPI Explorer](#) to simplify API usage. You can use OpenAPI Explorer to debug API operations and dynamically generate SDK sample code.
- For information about Tag API operations, see [Tag management](#).

Install SDK for Java


Add dependencies by using Maven. Alternatively, download the JAR packages of SDK for Java and add them to your project.

- (Recommended) Add dependencies by using Maven
 - i. Use Maven to create a project.

```
mvn archetype:generate -DgroupId=com.aliyun.tag.sample \  
-DartifactId=tag-sdk-sample \  
-Dpackage=com.aliyun.tag.sample \  
-Dversion=1.0-SNAPSHOT
```

- ii. Add the following dependencies to the `pom.xml` file of the project:

```
<dependency>
  <groupId>com.aliyun</groupId>
  <artifactId>aliyun-java-sdk-core</artifactId>
  <version>4.3.0</version>
</dependency>
<dependency>
  <groupId>com.aliyun</groupId>
  <artifactId>aliyun-java-sdk-tag</artifactId>
  <version>1.0.1</version>
</dependency>
```

 **Note** Visit the [Maven repository](#) to obtain the latest version of the `aliyun-java-sdk-core` package.

- Download the JAR packages of SDK for Java and add them to your project

If you are using Eclipse or IntelliJ as the IDE, you can use this method to install SDK for Java. You can download the JAR packages of SDK for Java from the following links:

- [Alibaba Cloud SDK for Java](#)
- [Alibaba Cloud Tag SDK for Java](#)

Use SDK for Java

The following examples provide the sample code of only some API operations. For information about the sample code of other API operations, visit [OpenAPI Explorer](#). Then, find the target API operation, debug the operation, and obtain sample code.

- Create and bind a tag

```
import com.aliyuncs.DefaultAcsClient;
import com.aliyuncs.IAcsClient;
import com.aliyuncs.exceptions.ClientException;
import com.aliyuncs.exceptions.ServerException;
import com.aliyuncs.profile.DefaultProfile;
import com.google.gson.Gson;
import java.util.*;
import com.aliyuncs.tag.model.v20180828.*;

public class TagResources {

    public static void main(String[] args) {
        // Construct an Alibaba Cloud client to send requests.
        // When you construct the client, specify the region ID, AccessKey ID, and AccessKey secret.
        DefaultProfile profile = DefaultProfile.getProfile("cn-qingdao", "<accessKeyId>", "<accessSecret
```

```
> );  
  
IAcsClient client = new DefaultAcsClient(profile);  
  
// Construct the request object.  
TagResourcesRequest request = new TagResourcesRequest();  
  
// Specify the required parameters.  
request.setRegionId("cn-qingdao");  
request.setTags("{<tagKey>:<tagValue>}");  
List<String> resourceARNList = new ArrayList<String>();  
resourceARNList.add("<resourceARN>");  
request.setResourceARNs(resourceARNList);  
  
// Issue the request and obtain a response.  
try {  
    TagResourcesResponse response = client.getAcsResponse(request);  
    System.out.println(new Gson().toJson(response));  
} catch (ServerException e) {  
    e.printStackTrace();  
} catch (ClientException e) {  
    System.out.println("ErrCode:" + e.getErrCode());  
    System.out.println("ErrMsg:" + e.getErrMsg());  
    System.out.println("RequestId:" + e.getRequestId());  
}  
  
}  
  
}
```

- Query tags

```
import com.aliyuncs.DefaultAcsClient;  
import com.aliyuncs.IAcsClient;  
import com.aliyuncs.exceptions.ClientException;  
import com.aliyuncs.exceptions.ServerException;  
import com.aliyuncs.profile.DefaultProfile;  
import com.google.gson.Gson;  
import java.util.*;  
import com.aliyuncs.tag.model.v20180828.*;  
  
public class ListTagResources {  
  
    public static void main(String[] args) {
```

```
// Construct an Alibaba Cloud client to send requests.
// When you construct the client, specify the region ID, AccessKey ID, and AccessKey secret.
DefaultProfile profile = DefaultProfile.getProfile("cn-qingdao", "<accessKeyId>", "<accessSecret
>");
IAcsClient client = new DefaultAcsClient(profile);

// Construct the request object.
ListTagResourcesRequest request = new ListTagResourcesRequest();

// Specify the required parameters. You can specify the Alibaba Cloud Resource Names (ARNs)
of different types of resources.
request.setRegionId("cn-qingdao");
List<String> resourceARNList = new ArrayList<String>();
resourceARNList.add("arn:acs:ecs:cn-qingdao:<AccountId>:instance/<ResourceId>");
resourceARNList.add("arn:acs:vpc:cn-qingdao:<AccountId>:vpc/<ResourceId>");
request.setResourceARNs(resourceARNList);

// Issue the request and obtain a response.
try {
    ListTagResourcesResponse response = client.getAcsResponse(request);
    System.out.println(new Gson().toJson(response));
} catch (ServerException e) {
    e.printStackTrace();
} catch (ClientException e) {
    System.out.println("ErrCode:" + e.getErrCode());
    System.out.println("ErrMsg:" + e.getErrMsg());
    System.out.println("RequestId:" + e.getRequestId());
}
}
```

2.3. SDK for Python

This topic describes how to install SDK for Python and provides examples of how to use SDK for Python.

Background information

- To use SDK for Python, you must install the core library of Alibaba Cloud SDK for Python (`aliyun-python-sdk-core`) and Tag SDK for Java (`aliyun-python-sdk-tag`).

- Alibaba Cloud provides [OpenAPI Explorer](#) to simplify API usage. You can use OpenAPI Explorer to debug API operations and dynamically generate SDK sample code.
- For information about Tag API operations, see [Tag management](#).

Install SDK for Python

Use the pip command. Alternatively, download SDK packages and add them to your project.

- (Recommended) Use pip
 - i. Run the following command to install the core library of Alibaba Cloud SDK for Python:

```
pip install aliyun-python-sdk-core
```

- ii. Run the following command to install Tag SDK for Python:

```
pip install aliyun-python-sdk-tag
```

- Download SDK packages and add them to your project
You can download the SDK packages from the following links:
 - [Alibaba Cloud SDK for Python](#)
 - [Alibaba Cloud Tag SDK for Python](#)

Use SDK for Python

The following examples provide the sample code of only some API operations. For information about the sample code of other API operations, visit [OpenAPI Explorer](#). Then, find the target API operation, debug the operation, and obtain sample code.

- Create and bind a tag

```
#!/usr/bin/env python
#coding=utf-8

from aliyunsdkcore.client import AcsClient
from aliyunsdkcore.acs_exception.exceptions import ClientException
from aliyunsdkcore.acs_exception.exceptions import ServerException
from aliyunsdktag.request.v20180828.TagResourcesRequest import TagResourcesRequest
# Construct an Alibaba Cloud client to send requests.
# When you construct the client, specify the region ID, AccessKey ID, and AccessKey secret.
client = AcsClient('<accessKeyId>', '<accessSecret>', 'cn-qingdao')

# Construct the request object.
request = TagResourcesRequest()

# Specify the required parameters.
request.set_accept_format('json')
request.set_Tags("{<tagKey>:<tagValue>}")
request.set_ResourceARNs(["<resourceARN>"])

# Issue the request and obtain a response.
response = client.do_action_with_exception(request)
# python2: print(response)
print(str(response, encoding='utf-8'))
```

- Query tags

```
#!/usr/bin/env python
#coding=utf-8

from aliyunsdkcore.client import AcsClient
from aliyunsdkcore.acs_exception.exceptions import ClientException
from aliyunsdkcore.acs_exception.exceptions import ServerException
from aliyunsdktag.request.v20180828.ListTagResourcesRequest import ListTagResourcesRequest
# Construct an Alibaba Cloud client to send requests.
# When you construct the client, specify the region ID, AccessKey ID, and AccessKey secret.
client = AcsClient('<accessKeyId>', '<accessSecret>', 'cn-qingdao')

# Construct the request object.
request = ListTagResourcesRequest()

# Specify the required parameters. You can specify the Alibaba Cloud Resource Names (ARNs) of different types of resources.
request.set_accept_format('json')
request.set_ResourceARNs(["arn:acs:ecs:cn-qingdao:<AccountId>:instance/<ResourceId>", "arn:acs:vpc:cn-qingdao:<AccountId>:vpc/<ResourceId>"])

# Issue the request and obtain a response.
response = client.do_action_with_exception(request)
# python2: print(response)
print(str(response, encoding='utf-8'))
```