

## Content Moderation

# Getting Started

**Issue** 01  
**Date** 2021-07-08



**Copyright © Huawei Technologies Co., Ltd. 2021. All rights reserved.**

No part of this document may be reproduced or transmitted in any form or by any means without prior written consent of Huawei Technologies Co., Ltd.

## **Trademarks and Permissions**



HUAWEI and other Huawei trademarks are trademarks of Huawei Technologies Co., Ltd.

All other trademarks and trade names mentioned in this document are the property of their respective holders.

## **Notice**

The purchased products, services and features are stipulated by the contract made between Huawei and the customer. All or part of the products, services and features described in this document may not be within the purchase scope or the usage scope. Unless otherwise specified in the contract, all statements, information, and recommendations in this document are provided "AS IS" without warranties, guarantees or representations of any kind, either express or implied.

The information in this document is subject to change without notice. Every effort has been made in the preparation of this document to ensure accuracy of the contents, but all statements, information, and recommendations in this document do not constitute a warranty of any kind, express or implied.

## **Huawei Technologies Co., Ltd.**

Address: Huawei Industrial Base  
Bantian, Longgang  
Shenzhen 518129  
People's Republic of China

Website: <https://www.huawei.com>

Email: [support@huawei.com](mailto:support@huawei.com)

---

# Contents

---

<b>1 Content Moderation Overview.....</b>	<b>1</b>
<b>2 Using Postman to Call Content Moderation.....</b>	<b>2</b>
2.1 Moderation (Text).....	2
2.2 Moderation (Image).....	9
<b>3 Using an SDK to Call Content Moderation.....</b>	<b>16</b>
3.1 Moderation (Text).....	16
3.2 Moderation (Image).....	21

# 1 Content Moderation Overview

---

Content Moderation adopts image, text, and audio and video detection technologies that detect pornography, materials related to politics or terrorism, sensitive political figures, and images and text violating related laws or regulations. This reduces potential business risks.

Content Moderation provides services through open application programming interfaces (APIs). You can obtain the inference result by calling APIs. It helps you build an intelligent service system and improves service efficiency. Currently, Content Moderation includes Moderation (Image) and Moderation (Text).

The following methods are available to call Content Moderation APIs:

- A software tool such as curl and Postman  
These are good options if you are more comfortable writing code, HTTP requests, and API calls. For details, see [Using Postman to Call Content Moderation](#).

# 2 Using Postman to Call Content Moderation

---

## 2.1 Moderation (Text)

This section provides an example of how to use Postman to call Moderation (Text), helping you quickly get familiar with the service. The procedure is as follows:

**Step 1: Subscribing to a Service.** In the left navigation pane, choose **Service List** or **Service Management**, and subscribe to Text Moderation.

**Step 2: Configuring a Custom Dictionary.** Configure allowlist and blocklist dictionaries.

**Step 3: Configuring the Environment.** Import the prepared configuration file into the development environment.

**Step 4: Using a Token for Authentication.** When you call an API, a token is required for authentication.

**Step 5: Calling a Service API.** Call the service API. You can view the status code and error code at any time during the usage.

**(Optional) Step 6: Viewing the Number of API Calls.** View call statistics and call details.

### Step 1: Subscribing to a Service

To subscribe to a service, perform the following steps:

- Step 1** Log in to **HUAWEI CLOUD**, apply for a HUAWEI CLOUD account, and complete real-name authentication.
- Step 2** On the top of the **HUAWEI CLOUD** page, choose **Enterprise Intelligence > Moderation (Text)**.
- Step 3** On the product page, click **Try Now** and enter the username and password to access the **Content Moderation** management console.

**Step 4** Subscribe to your desired service on the **Service List** or **Service Management** page.

For example, to subscribe to Text Moderation on the **Service Management** page, select **Text Moderation** in **Commercial Services** and click **Subscribe**.

 **NOTE**

You only need to subscribe to the service once.

**Step 5** After a commercial service is successfully subscribed, the service is displayed in **My Services** on the **Service Management** page. In this case, you can call the API to use Moderation (Text).

----End

## Step 2: Configuring a Custom Dictionary

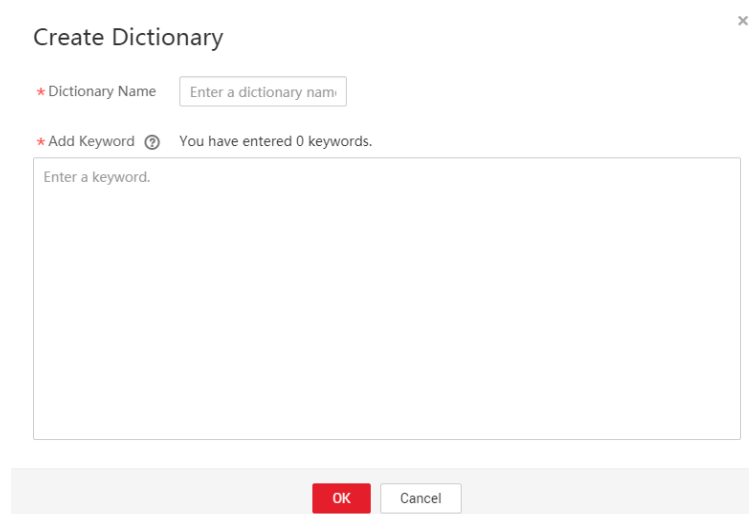
You can configure allowlist and blocklist dictionaries for text moderation.

- If an allowlist dictionary is customized, the words in the allowlist dictionary will not be detected when you use text moderation.

The procedure is as follows:

- a. Log in to the HUAWEI CLOUD and click **Console** in the upper right corner. The **Console** page is displayed.
- b. Click **Service List**, and choose **AI Enterprise Intelligence > Content Moderation**. The **Content Moderation** management console is displayed.
- c. In the left navigation pane, choose **Service List > Text Moderation**. Click **Configuration** next to **Custom Allowlist Dictionary**. The **Create Dictionary** dialog box is displayed.

**Figure 2-1** Create Dictionary



- d. Enter a dictionary name and the keywords in the allowlist dictionary. Click **OK**.

- **Dictionary Name:** A dictionary name contains a maximum of 40 characters. Only letters, digits, hyphens (-), and underscores (\_) are allowed.
- **Add Keyword:** A dictionary contains a maximum of 5000 keywords. Each keyword consists of a maximum of 40 characters and ends with a carriage return.
- If a blacklist dictionary is customized, the words in the blacklist dictionary will be detected when you use text moderation.

The procedure is as follows:

- a. Log in to the HUAWEI CLOUD and click **Console** in the upper right corner. The **Console** page is displayed.
- b. Click **Service List**, and choose **EI Enterprise Intelligence > Content Moderation**. The **Content Moderation** management console is displayed.
- c. In the left navigation pane, choose **Service List > Text Moderation**. Click **Configuration** next to **Custom Blocklist Dictionary**. The **Custom Dictionary** page is displayed.
- d. Click **Create Dictionary** in the upper left corner. The **Create Dictionary** dialog box is displayed. Enter a dictionary name and the keywords in the blacklist dictionary.
  - i. **Dictionary Name:** A dictionary name contains a maximum of 40 characters. Only letters, digits, hyphens (-), and underscores (\_) are allowed.
  - ii. **Add Keyword:** A dictionary contains a maximum of 5000 keywords. Each keyword consists of a maximum of 40 characters and ends with a carriage return.
- e. Click **OK**.

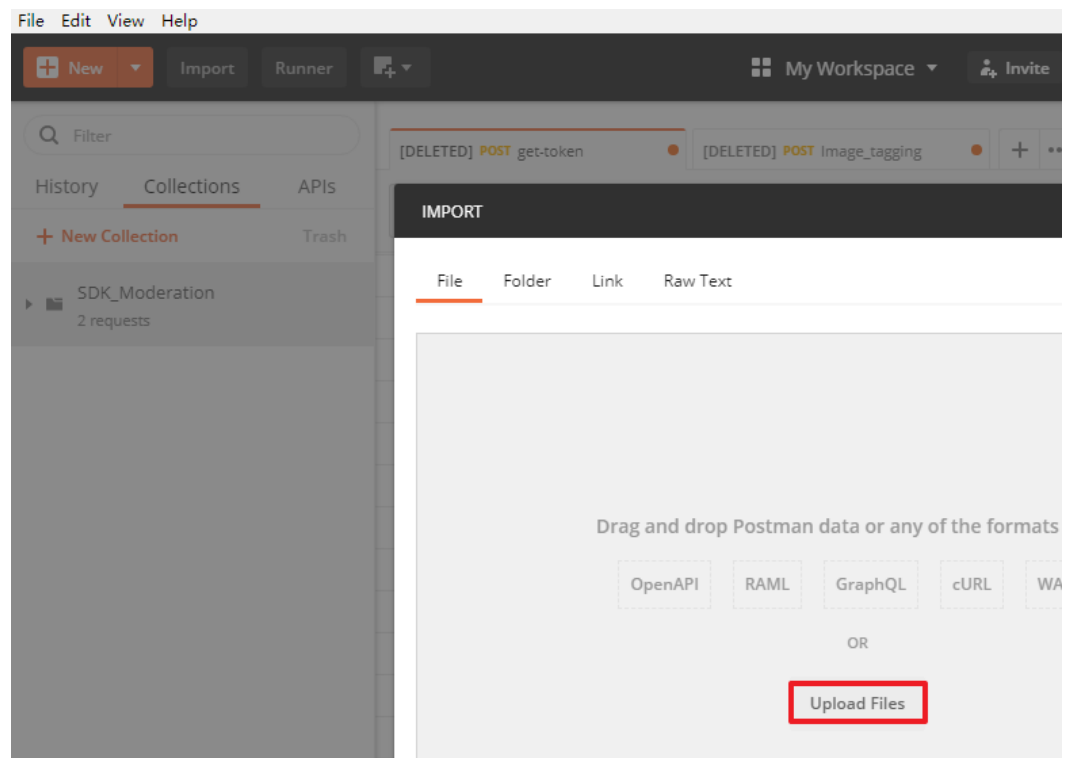
 **NOTE**

- The dictionary name cannot be modified.

### Step 3: Configuring the Environment

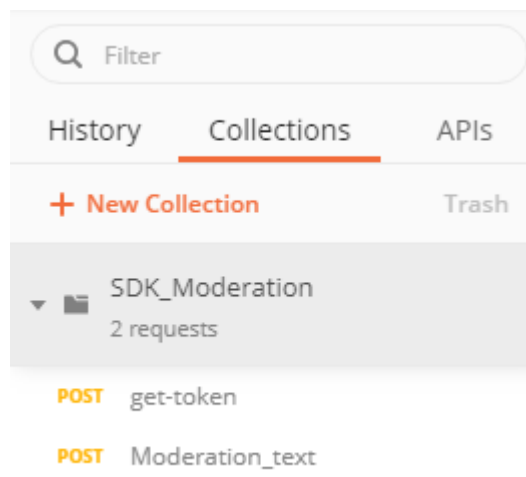
1. Download and install Postman.  
Postman 7.24.0 is recommended.
2. Download the Postman **configuration file** for Content Moderation.
3. Import the configuration file.
  - a. Open and log in to Postman.
  - b. Choose **File > Import** in the upper left corner. In the displayed dialog, click **Upload Files** to import the configuration file.

**Figure 2-2** Importing the configuration file



4. After the configuration file is imported, it is displayed in the **Collections** directory in the left navigation pane.

**Figure 2-3** Configuration Files



## Step 4: Using a Token for Authentication

A token is a user's access credential, which includes user identities and permissions. When you call an API to access a cloud service, a token is required for identity authentication.

1. In the **Collections** directory in the navigation pane of Postman, click the **get-token** configuration file.

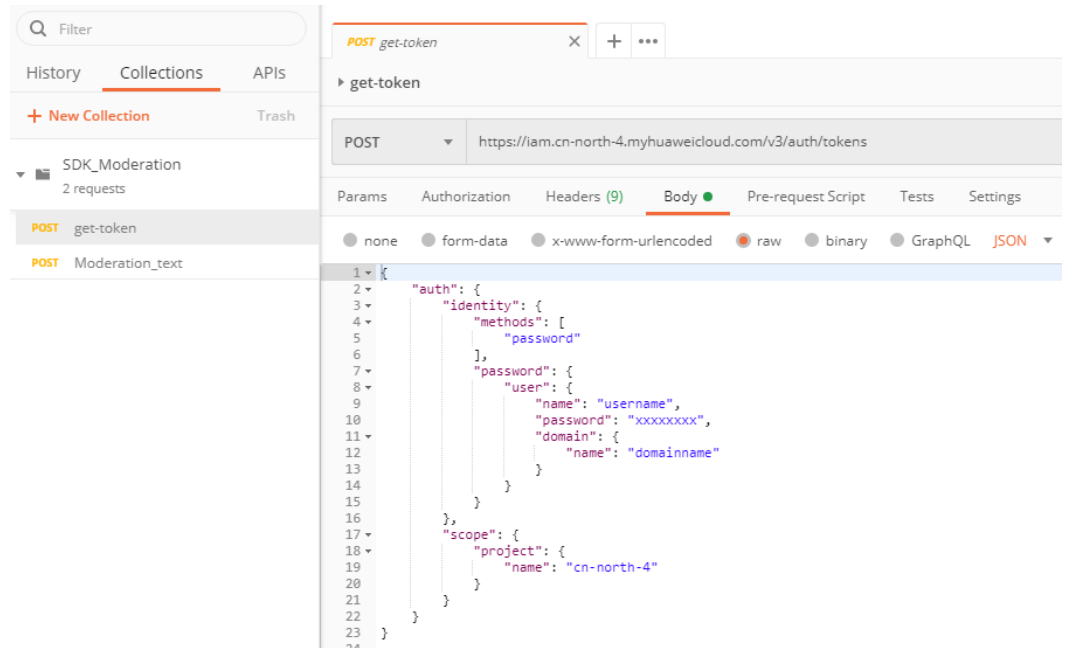
2. Click **Body**. Enter the username, password, and domain name.

**NOTE**

To obtain the username, password, and domain name, perform the following steps:

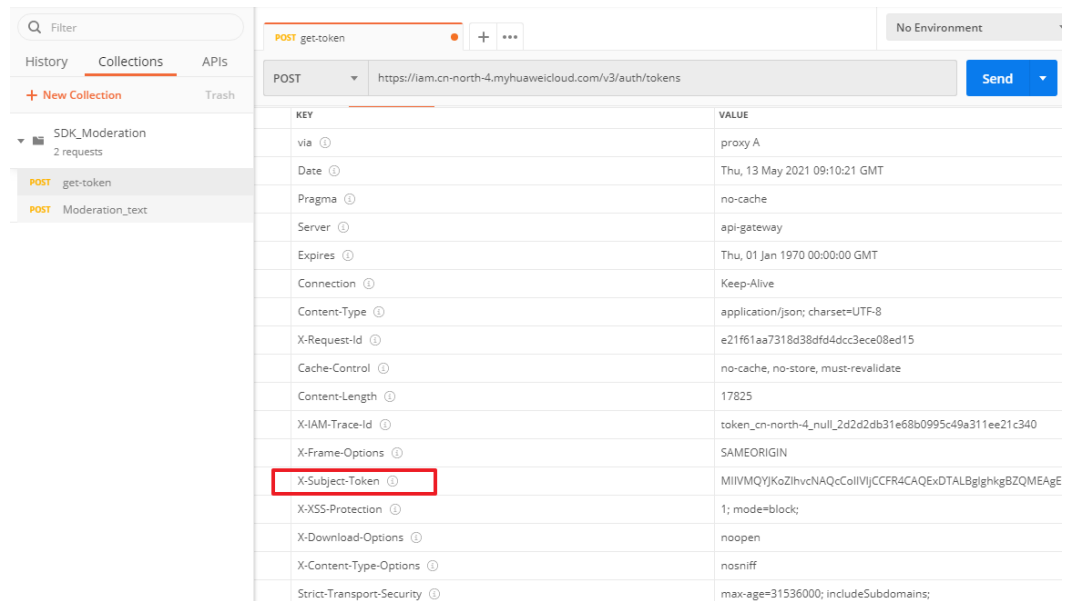
1. Log in to the management console.
2. Hover the cursor on the username and choose **My Credentials** from the drop-down list. Copy the IAM username and account name to **username** and **domainname**, and enter the IAM user password.

**Figure 2-4** Token-based authentication



3. Click **Send** to send a request, and obtain and copy the token.  
In **Headers**, obtain the value of **X-Subject-Token**, which is the token. The token is valid for 24 hours.

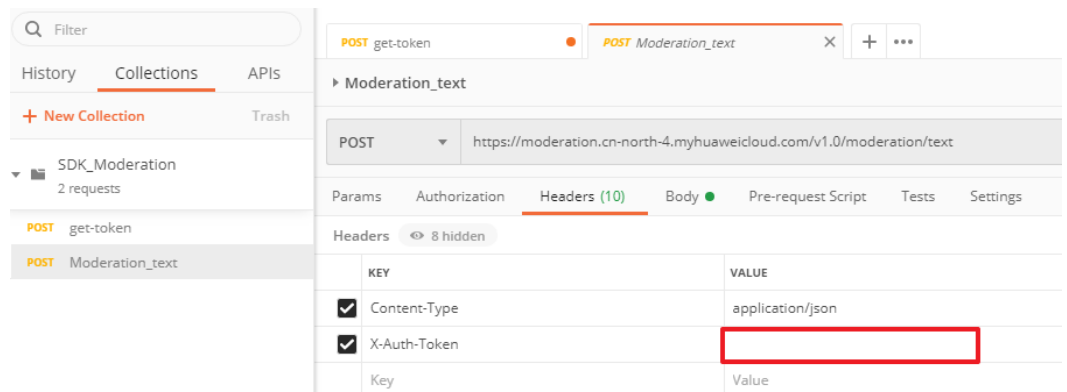
Figure 2-5 Obtaining a token



### Step 5: Calling a Service API

1. In the **Collections** directory in the navigation pane of Postman, click the **Moderation\_image** configuration file.
2. Click **Headers** and copy the token value to **X-Auth-Token**.

Figure 2-6 Entering the token



3. Click **Body** and enter the text to be checked for the **text** parameter.
  - For details about other parameters in the body, see the [Text Moderation API](#).

**Figure 2-7** Modifying the parameters



4. Click **Send** to send the request and obtain the API call results.

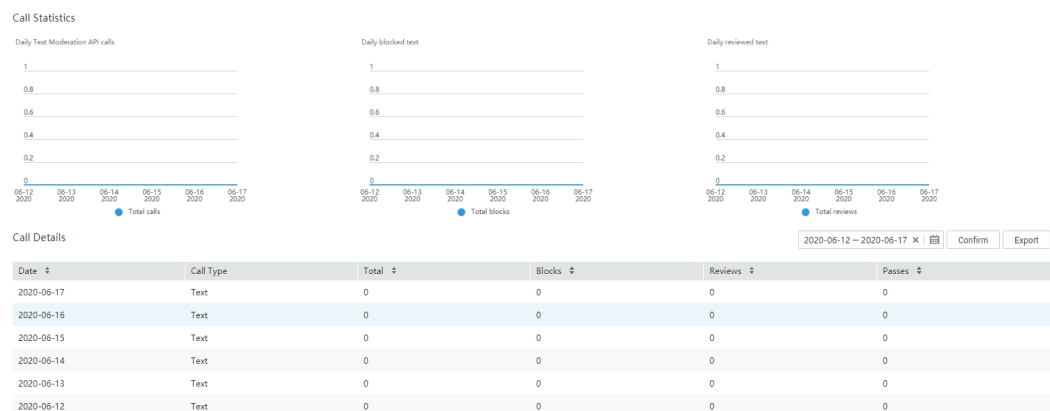
```

{
  "result": {
    "detail": {},
    "suggestion": "pass"
  }
}
    
```

### (Optional) Step 6: Viewing the Number of API Calls

- Step 1** View the number of API calls. Choose **Service List > Text Moderation**, and view call statistics and call details. See [Figure 2-8](#).

**Figure 2-8** Call statistics



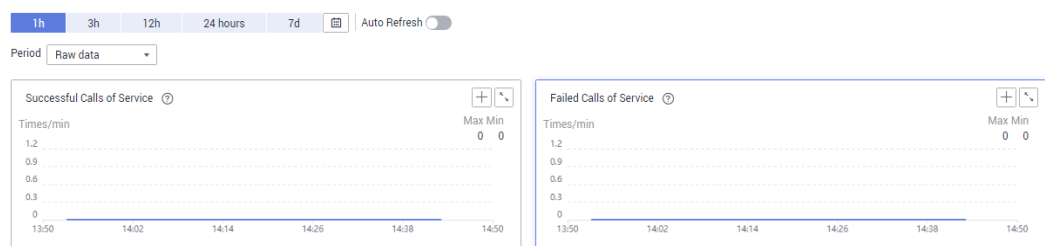
- The **Call Statistics** section provides three statistical charts, displaying daily calls, daily blocked text, and daily reviewed text. You can set a time range to view the change of the number of API calls within the time range.
- The **Call Details** section lists the total number of calls, blocks, reviews, and passes every day. This helps you better understand service calls and their statuses.

**NOTE**

- **block** indicates that sensitive information is contained and the information is blocked.
- **pass** indicates that sensitive information is not contained and the information is approved.
- **review** indicates that manual review is required.

**Step 2** View monitoring metrics. You can click **View Metric** to view historical data such as successful and failed calls on the Cloud Eye console. See **Figure 2-9**.

**Figure 2-9** Viewing metrics



----End

## 2.2 Moderation (Image)

This section provides an example of how to use Postman to call Moderation (Image), helping you quickly get familiar with the service. The procedure is as follows:

**Step 1: Subscribing to a Service.** In the left navigation pane, choose **Service List** or **Service Management**, and subscribe to Image Moderation.

**(Optional) Step 2: Enabling Object Storage Service (OBS) Authorization.** If you want to use the data stored on OBS, enable OBS authorization.

**Step 3: (Optional) Configuring a Moderation Rule.** Detect violent, pornographic, and politically sensitive content in different scenarios.

**Step 4: Configuring the Environment.** Import the prepared configuration file into the development environment.

**Step 5: Using a Token for Authentication.** When you call an API, a token is required for authentication.

**Step 6: Calling a Service API.** Call the service API. You can view the status code and error code at any time during the usage.

**(Optional) Step 7: Viewing the Number of API Calls.** View call statistics and call details.

### Step 1: Subscribing to a Service

To subscribe to Moderation (Image), perform the following steps:

**Step 1** Log in to **HUAWEI CLOUD**, apply for a HUAWEI CLOUD account, and complete real-name authentication.

**Step 2** On the top of the [HUAWEI CLOUD](#) page, choose **Enterprise Intelligence > Moderation (Image)**.

**Step 3** On the product page, click **Try Now** and enter the username and password to access the **Content Moderation** management console.

**Step 4** Subscribe to your desired service on the **Service List** or **Service Management** page.

For example, to subscribe to Image Moderation on the **Service Management** page, select **Image Moderation** or **Image Anti-Porn Moderation** in **Commercial Services** and click **Subscribe**.

 **NOTE**

- You only need to subscribe to the service once.

**Step 5** After a commercial service is successfully subscribed, the service is displayed in **My Services** on the **Service Management** page. In this case, you can call the API to use Moderation (Image).

----End

## (Optional) Step 2: Enabling Object Storage Service (OBS) Authorization

If you want to use the data stored on OBS, enable OBS authorization. The procedure is as follows:

 **NOTE**

1. The region of OBS must be consistent with that of Content Moderation.
2. OBS authorization must be performed by an account, not by an IAM user.

**Step 1** Log in to the management console and choose **Service List > Content Moderation**. In the navigation pane, choose **Service Management**.

**Step 2** Enable **OBS Authorization**.

----End

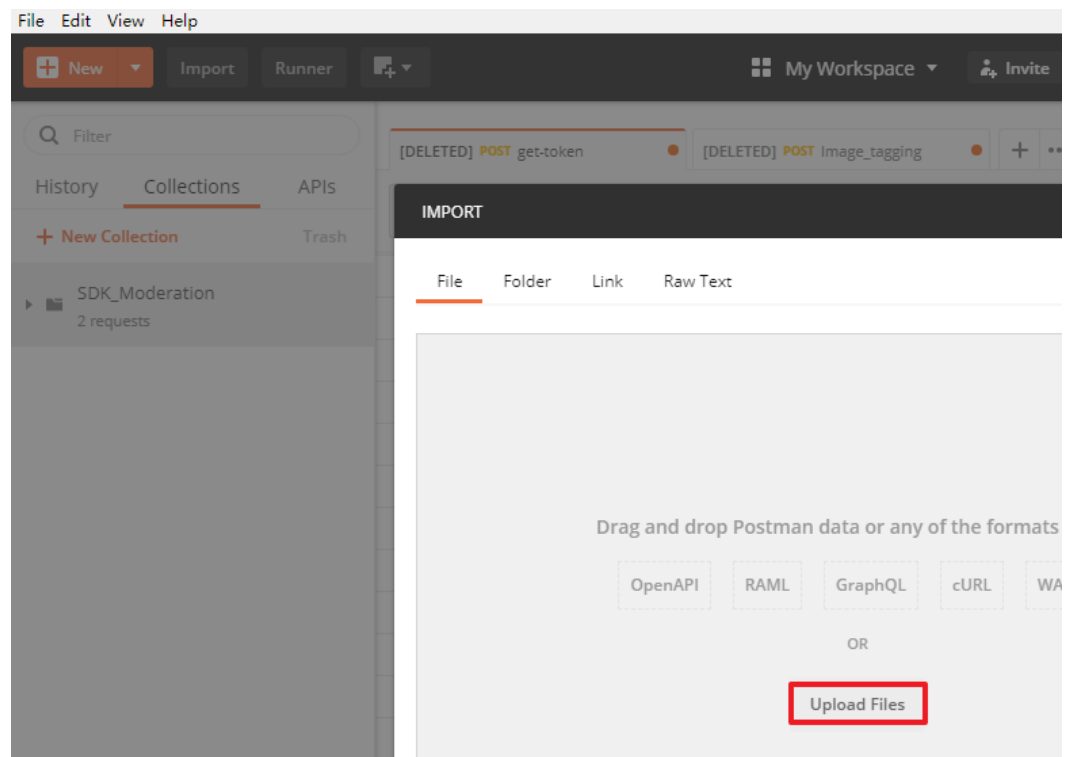
## Step 3: (Optional) Configuring a Moderation Rule

You can configure review rules to detect violent, pornographic, and politically sensitive content in different scenarios. For details, see [Configuring Moderation Rules](#).

## Step 4: Configuring the Environment

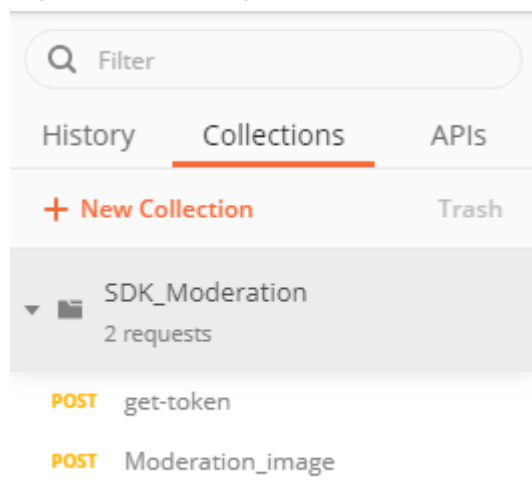
1. Download and install Postman.  
Postman 7.24.0 is recommended.
2. Download the Postman [configuration file](#) for Content Moderation.
3. Import the configuration file.
  - a. Open and log in to Postman.
  - b. Choose **File > Import** in the upper left corner. In the displayed dialog, click **Upload Files** to import the configuration file.

**Figure 2-10** Importing the configuration file



4. After the configuration file is imported, it is displayed in the **Collections** directory in the left navigation pane.

**Figure 2-11** Configuration Files



## Step 5: Using a Token for Authentication

A token is a user's access credential, which includes user identities and permissions. When you call an API to access a cloud service, a token is required for identity authentication.

1. In the **Collections** directory in the navigation pane of Postman, click the **get-token** configuration file.

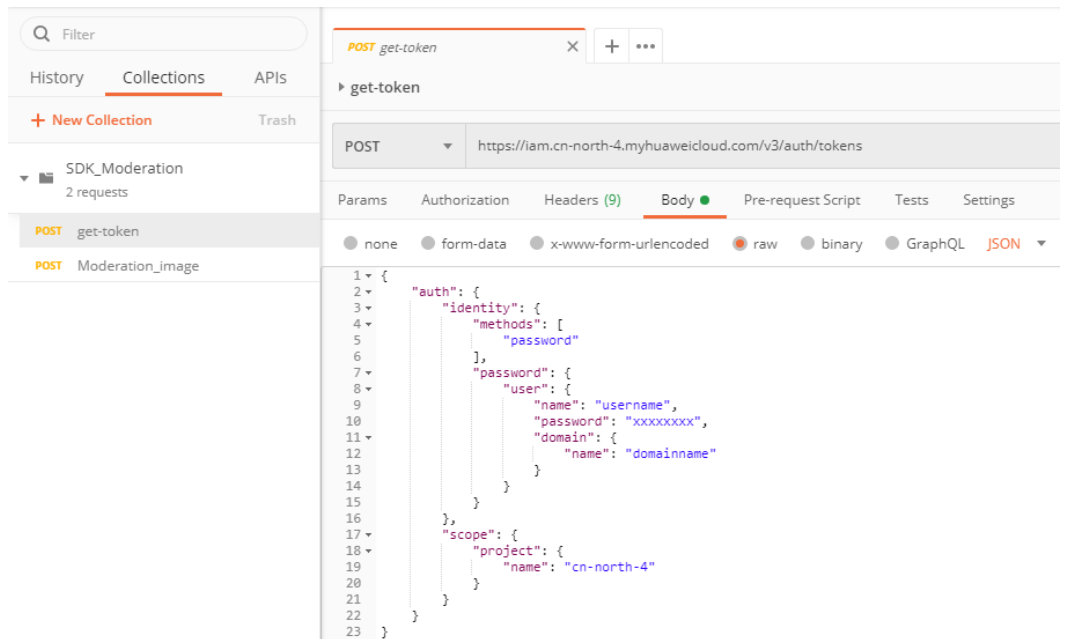
- Click **Body**. Enter the username, password, and domain name.

**NOTE**

To obtain the username, password, and domain name, perform the following steps:

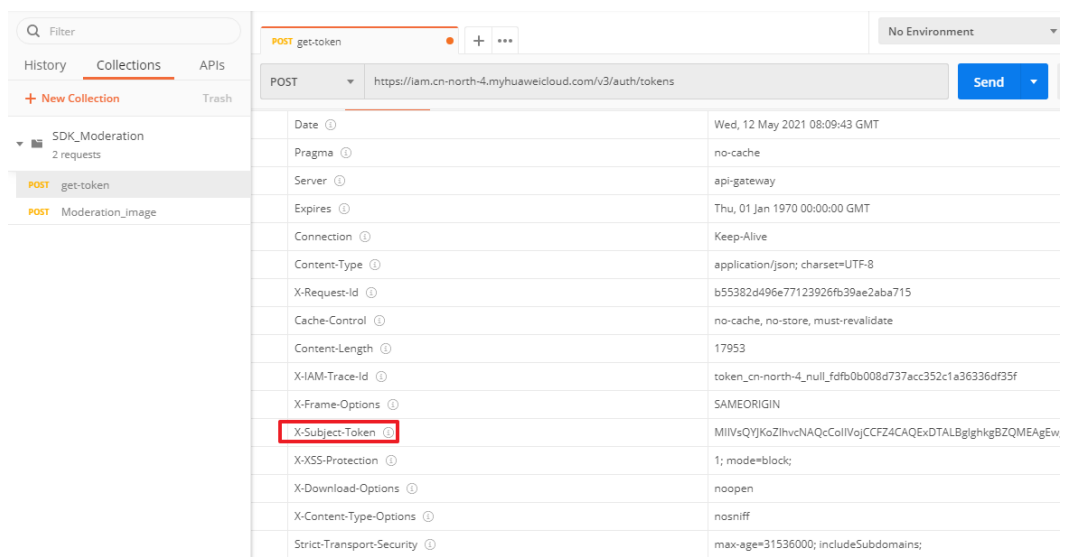
- Log in to the management console.
- Hover the cursor on the username and choose **My Credentials** from the drop-down list. Copy the IAM username and account name to **username** and **domainname**, and enter the IAM user password.

**Figure 2-12** Token-based authentication



- Click **Send** to send a request, and obtain and copy the token. In **Headers**, obtain the value of **X-Subject-Token**, which is the token. The token is valid for 24 hours.

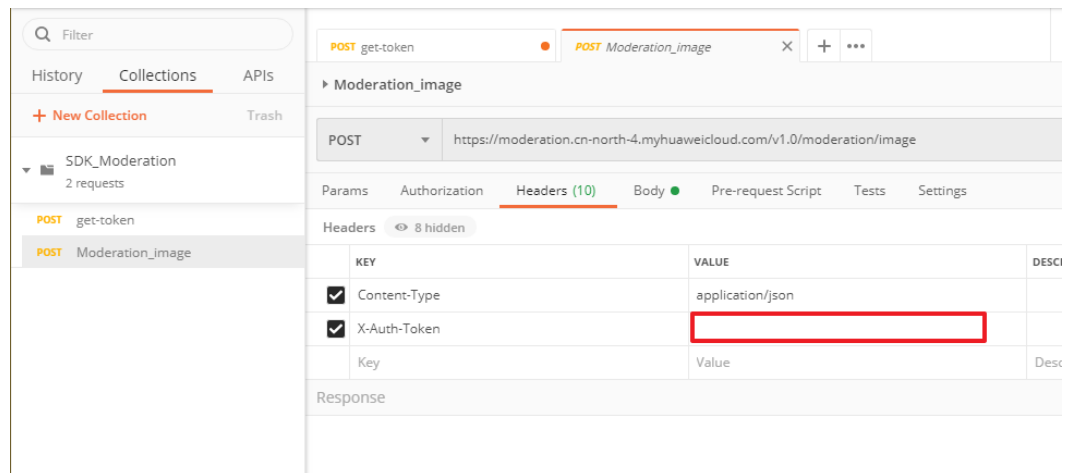
**Figure 2-13** Obtaining a token



## Step 6: Calling a Service API

1. In the **Collections** directory in the navigation pane of Postman, click the **Moderation\_image** configuration file.
2. Click **Headers** and copy the token value to **X-Auth-Token**.

Figure 2-14 Entering the token



3. Click **Body** and enter the Base64 code of the image to **image**.
  - For details about other parameters in the body, see the [Image Moderation API](#).
  - For details about how to obtain the Base64 code of an image, see [How Do I Obtain the Base64 Code of an Image?](#).

Figure 2-15 Modifying the parameters



4. Click **Send** to send the request and obtain the API call results.

```

{
  "result": {
    "suggestion": "pass",
    "category_suggestions": {
      "politics": "pass",
      "terrorism": "pass",
      "porn": "pass"
    },
    "detail": {
      "politics": [],
      "terrorism": [
        {
          "confidence": 0.9989,
          "label": "normal"
        }
      ]
    }
  }
}
    
```



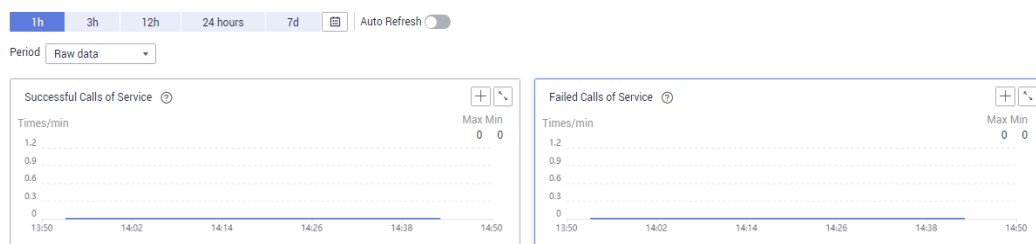
- Images are stored in OBS buckets. Therefore, the images that are determined as **block** or **review** images cannot be exported.

 **NOTE**

- **block** indicates that sensitive information is contained and the information is blocked.
- **pass** indicates that sensitive information is not contained and the information is approved.
- **review** indicates that manual review is required.

**Step 3** View monitoring metrics. You can click **View Metric** to view historical data such as successful and failed calls on the Cloud Eye console. See [Figure 2-17](#).

**Figure 2-17** Viewing metrics



----End

# 3 Using an SDK to Call Content Moderation

---

## 3.1 Moderation (Text)

This section provides an example of how to use a Java SDK to call Moderation (Text). You can directly call APIs to use SDK functions. The procedure is as follows:

**Step 1: Subscribing to a Service.** In the left navigation pane, choose **Service List** or **Service Management**, and subscribe to Text Moderation.

**Step 2: Configuring a Custom Dictionary.** Configure allowlist and blocklist dictionaries.

**Step 3: Configuring the Environment.** Obtain the SDK and sample project and import them to the development environment.

**Step 4: Modifying the Configuration.** Use AK/SK-based authentication.

**Step 5: Calling a Service API.** Call the service API. You can view the status code and error code at any time during the usage.

### Step 1: Subscribing to a Service

To subscribe to a service, perform the following steps:

- Step 1** Log in to **HUAWEI CLOUD**, apply for a HUAWEI CLOUD account, and complete real-name authentication.
- Step 2** On the top of the **HUAWEI CLOUD** page, choose **Enterprise Intelligence > Moderation (Text)**.
- Step 3** On the product page, click **Try Now** and enter the username and password to access the **Content Moderation** management console.
- Step 4** Subscribe to your desired service on the **Service List** or **Service Management** page.

For example, to subscribe to Text Moderation on the **Service Management** page, select **Text Moderation** in **Commercial Services** and click **Subscribe**.

 NOTE

You only need to subscribe to the service once.

**Step 5** After a commercial service is successfully subscribed, the service is displayed in **My Services** on the **Service Management** page. In this case, you can call the API to use Moderation (Text).

----End

## Step 2: Configuring a Custom Dictionary

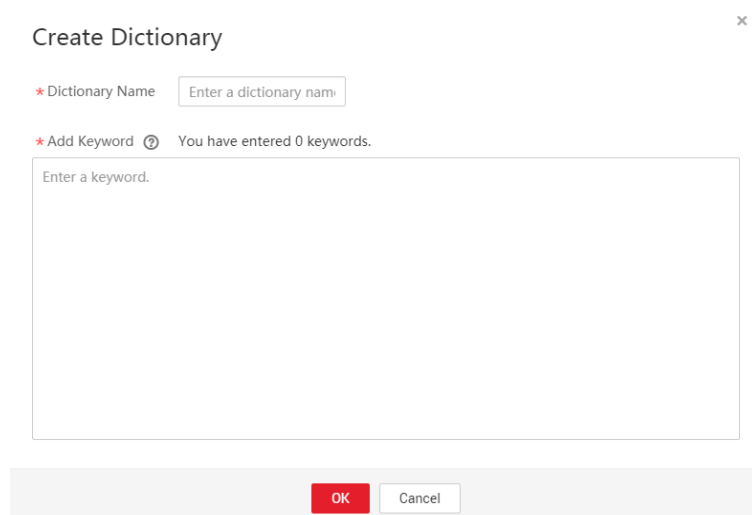
You can configure allowlist and blacklist dictionaries for text moderation.

1. If an allowlist dictionary is customized, the words in the allowlist dictionary will not be detected when you use text moderation.

The procedure is as follows:

- Step 1** Log in to the HUAWEI CLOUD and click **Console** in the upper right corner. The **Console** page is displayed.
- Step 2** Click **Service List**, and choose **EI Enterprise Intelligence > Content Moderation**. The **Content Moderation** management console is displayed.
- Step 3** In the left navigation pane, choose **Service List > Text Moderation**. Click **Configuration** next to **Custom Allowlist Dictionary**. The **Create Dictionary** dialog box is displayed.

**Figure 3-1** Create Dictionary



Create Dictionary x

\* Dictionary Name

\* Add Keyword ⓘ You have entered 0 keywords.

- Step 4** Enter a dictionary name and the keywords in the allowlist dictionary. Click **OK**.
- **Dictionary Name:** A dictionary name contains a maximum of 40 characters. Only letters, digits, hyphens (-), and underscores (\_) are allowed.
  - **Add Keyword:** A dictionary contains a maximum of 5000 keywords. Each keyword consists of a maximum of 40 characters and ends with a carriage return.

----End

2. If a blacklist dictionary is customized, the words in the blacklist dictionary will be detected when you use Text Moderation.

The procedure is as follows:

- Step 1** Log in to the HUAWEI CLOUD and click **Console** in the upper right corner. The **Console** page is displayed.
- Step 2** Click **Service List**, and choose **EI Enterprise Intelligence > Content Moderation**. The **Content Moderation** management console is displayed.
- Step 3** In the left navigation pane, choose **Service List > Text Moderation**. Click **Configuration** next to **Custom Blocklist Dictionary**. The **Custom Dictionary** page is displayed.
- Step 4** Click **Create Dictionary** in the upper left corner. The **Create Dictionary** dialog box is displayed. Enter a dictionary name and the keywords in the blacklist dictionary.
- **Dictionary Name:** A dictionary name contains a maximum of 40 characters. Only letters, digits, hyphens (-), and underscores (\_) are allowed.
  - **Add Keyword:** A dictionary contains a maximum of 5000 keywords. Each keyword consists of a maximum of 40 characters and ends with a carriage return.
- Step 5** Click **OK**.

 **NOTE**

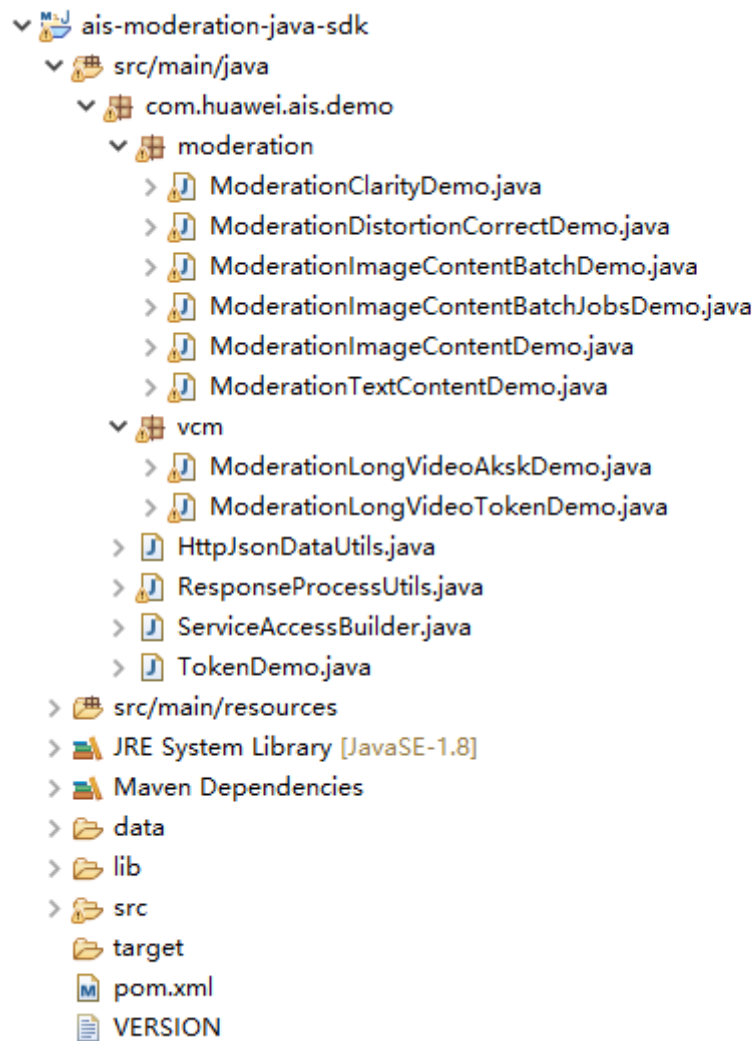
- The dictionary name cannot be modified.

----End

### Step 3: Configuring the Environment

You can compile code to call the API of Moderation (Text) based on the SDK. You need to configure the environment when using the SDK and calling APIs. The procedure is as follows:

- Step 1** To obtain the SDK and related document of Content Moderation, click [here](#).
- Step 2** For details about how to configure the environment, see [Preparing a Java Development Environment](#).
- Step 3** Import an SDK project on Eclipse.
1. Open Eclipse and configure the correct JRE path in **Windows > Preferences > Java > Installed JREs**.
  2. In the navigation pane on the left, choose **General > Workspace**. In the **Text file encoding** area, select **Other**, set the parameter value to **UTF-8**, click **Apply**, and click **OK**.
  3. On the Eclipse menu bar, choose **File > Import**. In the dialog box that is displayed, choose **Maven > Existing Maven Projects**, click **Next**, click **Browse**, and select the local path where **ais-moderation-java-sdk** resides.
  4. Click **Finish** to import the SDK. After the SDK is imported, open the project. [Figure 3-2](#) shows the project directory.

**Figure 3-2** Project directory

----End

## Step 4: Modifying the Configuration

Content Moderation supports token-based and AK/SK-based authentication. This section uses AK/SK-based authentication as an example.

### Step 1 Obtain an AK/SK.

The AK/SK is the access key. To obtain the AK/SK, log in to the [My Credentials](#) page, choose **Access Keys** in the left navigation pane, and click **Create Access Key** in the right pane.

### Step 2 For AK/SK-based authentication, configure the AK/SK in the Java SDK.

Change the values of **AK** and **SK** of the function in the **ModerationTextContentDemo.java** file of the project to the obtained AK/SK. The sample code is as follows:

```
// 1. Configure the basic information for accessing Text Moderation and generate a client connection object.  
AisAccess service = ServiceAccessBuilder.builder()
```

```
.ak("#####") // your ak
.sk("#####") // your sk
.region("cn-north-4") // Content Moderation in CN North-Beijing4 (cn-north-4) and CN East-
Shanghai1 (cn-east-3)
.connectionTimeout(5000) // Timeout limit for connecting to the target URL
.connectionRequestTimeout(1000) // Timeout limit for obtaining available connections from the
connection pool
.socketTimeout(20000) // Timeout limit for obtaining server response data
.build();
```

**Step 3** Enter the text that you want to check in the **ModerationTextContentDemo.java** file, for example, **6666666666**.

```
//
// 2. Construct the parameters required for accessing Text Moderation.
//
String uri = "/v1.0/moderation/text";

JSONObject json = new JSONObject();
json.put("categories", new String[] {"porn", "politics", "flood"}) //Text for moderation

JSONObject text = new JSONObject();
text.put("text", "6666666666");
text.put("type", "content");

JSONArray items = new JSONArray();
items.add(text);
json.put("items", items);

StringEntity stringEntity = new StringEntity(json.toJSONString(), "utf-8");

// 3. Input the URI and required parameters of Text Moderation.
// Input the parameters in JSON objects and call the service using POST.
HttpResponse response = service.post(uri, stringEntity);

// 4. Check whether the API call is successful. If 200 is returned, the API call succeeds. Otherwise, it fails.
ResponseProcessUtils.processResponseStatus(response);
```

----End

## Step 5: Calling a Service API

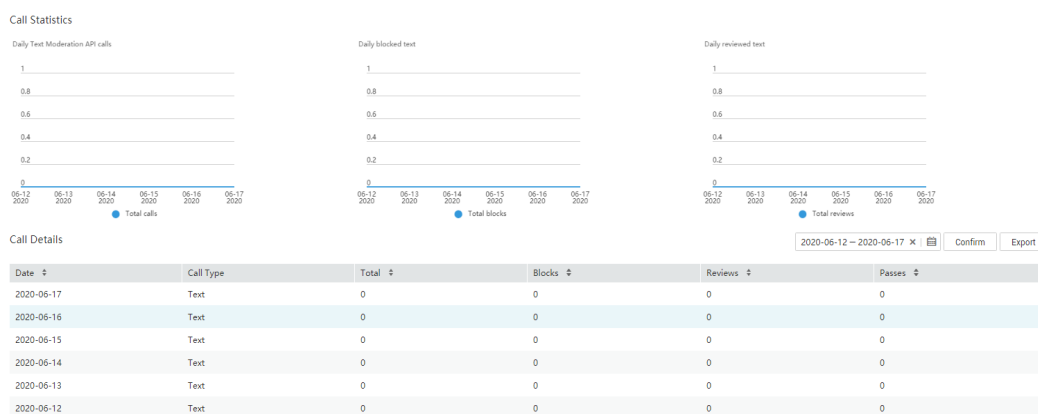
**Step 1** Execute the **ModerationTextContentDemo.java** file. If **200** is displayed on the console, the program is successfully executed. The **text moderation result** is displayed on the console. See [Figure 3-3](#).

**Figure 3-3** Execution result

```
200
{
  "result": {
    "detail": {
      "flood": "6666666666"
    },
    "suggestion": "block"
  }
}
```

**Step 2** View the number of API calls. Choose **Service List > Text Moderation**, and view call statistics and call details. See [Figure 3-4](#).

**Figure 3-4** Call statistics



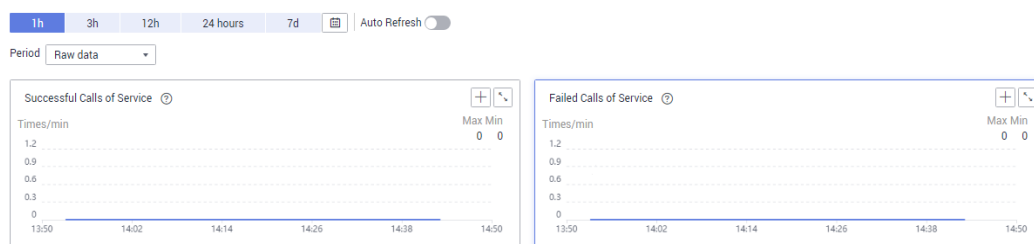
- The **Call Statistics** section provides three statistical charts, displaying daily calls, daily blocked text, and daily reviewed text. You can set a time range to view the change of the number of API calls within the time range.
- The **Call Details** section lists the total number of calls, blocks, reviews, and passes every day. This helps you better understand service calls and their statuses.

**NOTE**

- **block** indicates that sensitive information is contained and the information is blocked.
- **pass** indicates that sensitive information is not contained and the information is approved.
- **review** indicates that manual review is required.

**Step 3** View monitoring metrics. You can click **View Metric** to view historical data such as successful and failed calls on the Cloud Eye console. See [Figure 3-5](#).

**Figure 3-5** Viewing metrics



----End

## 3.2 Moderation (Image)

This section provides an example of how to use a Java SDK to call Moderation (Image). You can directly call APIs to use SDK functions. The procedure is as follows:

**Step 1: Subscribing to a Service.** In the left navigation pane, choose **Service List** or **Service Management**, and subscribe to Image Moderation.

**(Optional) Step 2: Enabling Object Storage Service (OBS) Authorization.** If you want to use the data stored on OBS, enable OBS authorization.

**Step 3: (Optional) Configuring a Moderation Rule.** Detect violent, pornographic, and politically sensitive content in different scenarios.

**Step 4: Configuring the Environment.** Obtain the SDK and sample project and import them to the development environment.

**Step 5: Modifying the Configuration.** Use AK/SK-based authentication.

**Step 5: Calling a Service API.** Call the service API. You can view the status code and error code at any time during the usage.

## Step 1: Subscribing to a Service

To subscribe to Moderation (Image), perform the following steps:

- Step 1** Log in to **HUAWEI CLOUD**, apply for a HUAWEI CLOUD account, and complete real-name authentication.
- Step 2** On the top of the **HUAWEI CLOUD** page, choose **Enterprise Intelligence > Moderation (Image)**.
- Step 3** On the product page, click **Try Now** and enter the username and password to access the **Content Moderation** management console.
- Step 4** Subscribe to your desired service on the **Service List** or **Service Management** page.

For example, to subscribe to Image Moderation on the **Service Management** page, select **Image Moderation** or **Image Anti-Porn Moderation** in **Commercial Services** and click **Subscribe**.

### NOTE

- You only need to subscribe to the service once.

- Step 5** After a commercial service is successfully subscribed, the service is displayed in **My Services** on the **Service Management** page. In this case, you can call the API to use Moderation (Image).

----End

## (Optional) Step 2: Enabling Object Storage Service (OBS) Authorization

If you want to use the data stored on OBS, enable OBS authorization. The procedure is as follows:

### NOTE

1. The region of OBS must be consistent with that of Content Moderation.
2. OBS authorization must be performed by an account, not by an IAM user.

- Step 1** Log in to the management console and choose **Service List > Content Moderation**. In the navigation pane, choose **Service Management**.
- Step 2** Enable **OBS Authorization**.

----End

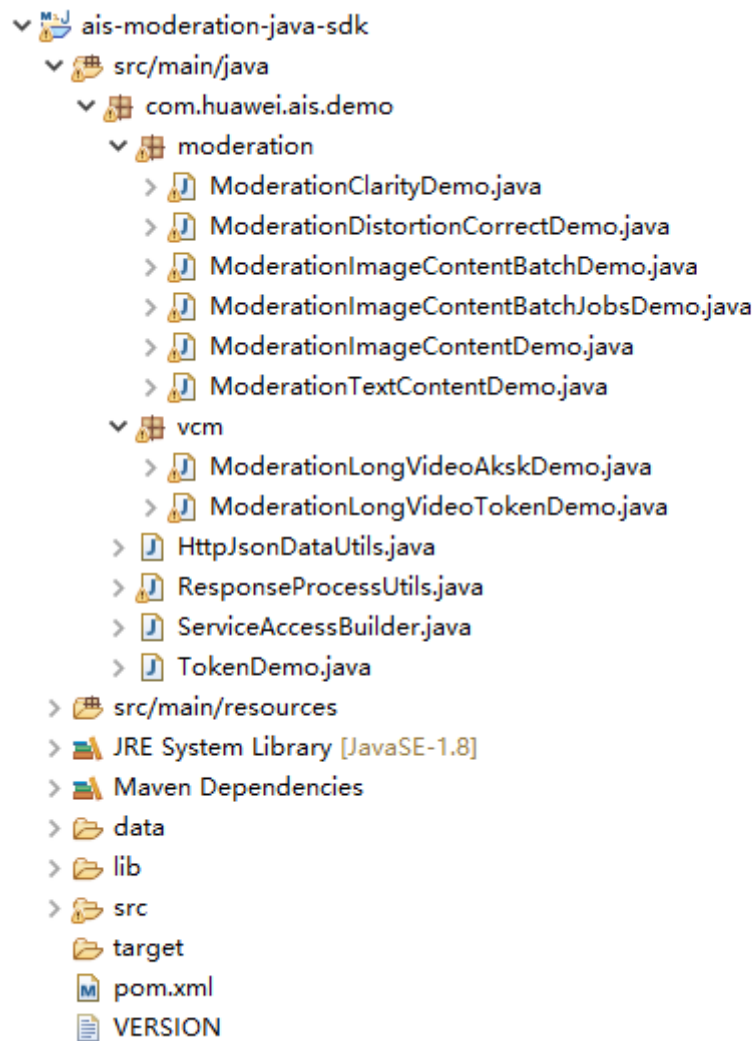
### Step 3: (Optional) Configuring a Moderation Rule

You can configure review rules to detect violent, pornographic, and politically sensitive content in different scenarios. For details, see [Configuring Moderation Rules](#).

### Step 4: Configuring the Environment

You can compile code to call the API of Moderation (Text) based on the SDK. You need to configure the environment when using the SDK and calling APIs. The procedure is as follows:

- Step 1** To obtain the SDK and related document of Content Moderation, click [here](#).
- Step 2** For details about how to configure the environment, see [Preparing a Java Development Environment](#).
- Step 3** Import an SDK project on Eclipse.
  1. Open Eclipse and configure the correct JRE path in **Windows > Preferences > Java > Installed JREs**.
  2. In the navigation pane on the left, choose **General > Workspace**. In the **Text file encoding** area, select **Other**, set the parameter value to **UTF-8**, click **Apply**, and click **OK**.
  3. On the Eclipse menu bar, choose **File > Import**. In the dialog box that is displayed, choose **Maven > Existing Maven Projects**, click **Next**, click **Browse**, and select the local path where **ais-moderation-java-sdk** resides.
  4. Click **Finish** to import the SDK. After the SDK is imported, open the project. [Figure 3-6](#) shows the project directory.

**Figure 3-6** Project directory

----End

## Step 5: Modifying the Configuration

Content Moderation supports token-based and AK/SK-based authentication. This section uses AK/SK-based authentication as an example.

### Step 1 Obtain an AK/SK.

The AK/SK is the access key. To obtain the AK/SK, log in to the [My Credentials](#) page, choose **Access Keys** in the left navigation pane, and click **Create Access Key** in the right pane.

### Step 2 For AK/SK-based authentication, configure the AK/SK in the Java SDK.

Change the values of **AK** and **SK** of the function in the **ModerationImageContentDemo.java** file of the project to the obtained AK/SK. The sample code is as follows:

```
// 1. Configure the basic information for accessing Image Moderation and generate a client connection object.
```

```
AisAccess service = ServiceAccessBuilder.builder()
    .ak("#####") // your ak
    .sk("#####") // your sk
    .region("cn-north-4") // Content Moderation in CN North-Beijing4 (cn-north-4) and CN East-Shanghai1 (cn-east-3)
    .connectionTimeout(5000) // Timeout limit for connecting to the target URL
    .connectionRequestTimeout(1000) // Timeout limit for obtaining available connections from the connection pool
    .socketTimeout(20000) // Timeout limit for obtaining server response data
    .build();
```

**Step 3** Select a local image or use the default image of the sample project, and modify the image file path (**data/moderation-demo-1.jpg**) in the **ModerationImageContentDemo.java** file.

```
public static void main(String[] args) throws IOException {
    ModerationImageContentDemo tool = new ModerationImageContentDemo();
    tool.imageContentCheck("https://sdk-obs-source-save.obs.cn-north-4.myhuaweicloud.com/terrorism.jpg");
    byte[] imageBytes = FileUtils.readFileToByteArray(new File("data/moderation-demo-1.jpg"));
    tool.imageContentCheck(imageBytes);
}
```

----End

## Step 5: Calling a Service API

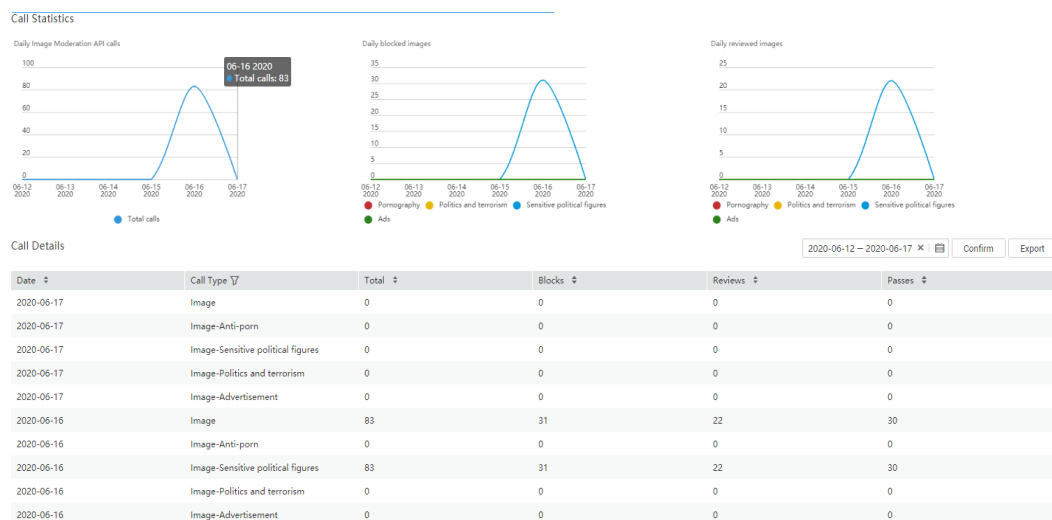
**Step 1** Execute the **ModerationImageContentDemo.java** file. If **200** is displayed on the console, the program is successfully executed. The **image moderation result** is displayed on the console. See **Figure 3-7**.

**Figure 3-7** Execution result

```
200
{"result":{"detail":{"politics":[],"terrorism":[{"confidence":0.0,"label":"bloody"}, {"confidence":0.0,"label":"fire"}, {"confidence":0.0,"label":"gun"}, {"confidence":0.0,"label":"knife"}, {"confidence":0.0,"label":"flag"}, {"confidence":0.0,"label":"symbol"}, {"confidence":0.0,"label":"dress"}, {"confidence":0.0,"label":"war"}, {"confidence":0.0,"label":"tiananmen"}], {"confidence":1.0,"label":"normal"}]}, "suggestion":"pass"}}
```

**Step 2** View the number of API calls. Choose **Service List > Image Moderation**, and view call statistics and call details. See **Figure 3-8**.

**Figure 3-8** Call statistics



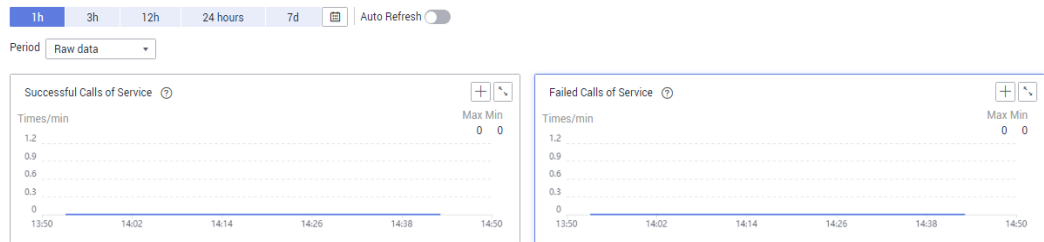
- The **Call Statistics** section provides three statistical charts, displaying daily calls, daily blocked text, and daily reviewed text. You can set a time range to view the change of the number of API calls within the time range.
- The **Call Details** section lists the total number of calls, blocks, reviews, and passes every day. You can click **Export** to download and view the total number of API calls, helping you better understand the service calling and review status.
- Images are stored in OBS buckets. Therefore, the images that are determined as **block** or **review** images cannot be exported.

 **NOTE**

- **block** indicates that sensitive information is contained and the information is blocked.
- **pass** indicates that sensitive information is not contained and the information is approved.
- **review** indicates that manual review is required.

**Step 3** View monitoring metrics. You can click **View Metric** to view historical data such as successful and failed calls on the Cloud Eye console. See [Figure 3-9](#).

**Figure 3-9** Viewing metrics



----End