

# Speech Interaction Service

## API Reference

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# 1 Before You Start

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## 1.1 Overview

Welcome to *Speech Interaction Service API Reference*.

Speech Interaction Service (SIS) allows you to obtain speech interaction results by calling application programming interfaces (APIs) in real time.

SIS (Short Sentence Recognition) provides developed APIs.

**Table 1-1** Short Sentence Recognition API

API	Description
Short Sentence Recognition	This API is used for real-time recognition of short sentences. The entire audio is uploaded at a time, and the recognition result is returned immediately.

## 1.2 API Calling

SIS supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details about API calling, see [Calling REST APIs](#).

To obtain required audio examples, go to [Audio Examples](#).

 **NOTE**

You can directly call the API without enabling any service.

## 1.3 Endpoints

An endpoint is the request address for calling an API. Endpoints vary depending on services and regions..

The following provides endpoints supported by Short Sentence Recognition.

**Table 1-2** Short Sentence Recognition and Recording File Recognition

Region	Endpoint Region	Endpoint	Protocol
AP-Singapore	ap-southeast-3	sis-ext.ap-southeast-3.myhuaweicloud.com sis-ext.ap-southeast-3.myhuaweicloud.cn	HTTPS

## 1.4 Basic Concepts

- Account**

An account is created upon successful registration with HUAWEI CLOUD. The account has full access permissions for all of its cloud services and resources. It can be used to reset user passwords and grant user permissions. The account is a payment entity. You should not directly use an account to perform routine management. For security purposes, create users and grant them permissions for routine management.
- User**

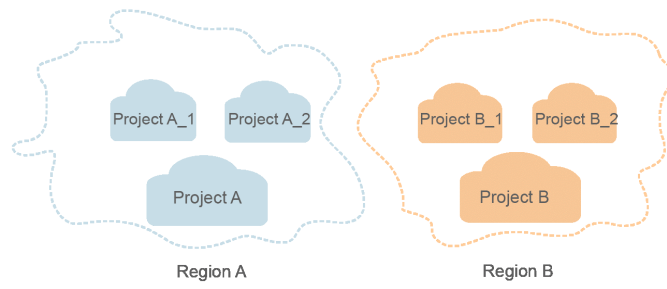
A user is created in IAM using an account, for access to cloud services. Each user has their own identity credentials (password and access keys). You can view the account ID and user ID on the [My Credentials](#) page of the console. The account name, username, and password will be required for API authentication.
- Region**

Regions are divided based on geographical location and network latency. Public services, such as Elastic Cloud Server (ECS), Elastic Volume Service (EVS), Object Storage Service (OBS), Virtual Private Cloud (VPC), Elastic IP (EIP), and Image Management Service (IMS), are accessible within the same region. Regions are classified as universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.
- Availability Zone (AZ)**

An availability zone (AZ) contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proofing, and electricity facilities. Within an AZ, computing, network, storage, and other resources are logically divided into multiple clusters. AZs within a region are interconnected using high-speed optical fibers to support cross-AZ high-availability systems.
- Project**

Projects group and isolate resources (including compute, storage, and network resources) across physical regions. A default project is provided for each HUAWEI CLOUD region, and subprojects can be created under each default project. Users can be granted permissions to access all resources in a specific project. For more refined access control, create subprojects under a project and purchase resources in the subprojects. Users can then be assigned permissions to access only specific resources in the subprojects.

**Figure 1-1** Project isolation model



# 2 API Overview

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SIS supports Representational State Transfer (REST) APIs, allowing you to call APIs using HTTPS. For details, see [Table 2-1](#).

**Table 2-1** RESTful API functions

API	Function	API URI
Short Sentence Recognition	<b>Short Sentence Recognition</b>	POST /v1/{project_id}/asr/short-audio

# 3 Applying for SIS

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The sentence transcription function of Speech Interaction Service (SIS) is not put into commercial use. For details about how to subscribe to the service and obtain pricing details, [Contact Sales](#).

Maximum QPS: 3



# 4 Calling REST APIs

## 4.1 Making an API Request

This section describes the structure of a REST API request, and uses Short Sentence Recognition as an example.

### Request URI

A request URI is in the following format:

**{URI-scheme}://{Endpoint} / {resource-path} ? {query-string}**

**Table 4-1** Request URI

Parameter	Description
URI-scheme	Protocol used to transmit requests. All APIs use HTTPS.
Endpoint	Domain name or IP address of the server bearing the REST service. The endpoint varies between services in different regions. It can be obtained from <a href="#">Endpoints</a> . For example, the endpoint of Sentence Transcription in the <b>AP-Singapore</b> region is <b>sis-ext.ap-southeast-3.myhuaweicloud.com</b> .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the <b>resource-path</b> of the Sentence Transcription API is <b>/v1/{project_id}/asr/short-audio</b> . Replace <b>project_id</b> with the user's actual project ID. For details about how to obtain the project ID, see <a href="#">Obtaining a Project ID</a> .
query-string	Query parameter, which is optional. Ensure that a question mark (?) is included before each query parameter that is in the format of <i>"Parameter name=Parameter value"</i> .

For example, to call the **Short Sentence Recognition** API in the **AP-Singapore** region, use the endpoint (`sis-ext.ap-southeast-3.myhuaweicloud.com`). The combination is as follows:

```
https://sis-ext.ap-southeast-3.myhuaweicloud.com/v1/{project_id}/asr/short-audio
```

**Figure 4-1** Example URI



#### NOTE

To simplify the URI display in this document, each API is provided only with a **resource-path** and a request method. The **URI-scheme** of all APIs is **HTTPS**, and the endpoints of all APIs in the same region are identical.

## Request Methods

The HTTP protocol defines the following request methods that can be used to send a request to the server:

- **GET:** requests the server to return specified resources.
- **PUT:** requests the server to update specified resources.
- **POST:** requests the server to add resources or perform special operations.
- **DELETE:** requests the server to delete specified resources, for example, an object.
- **HEAD:** same as GET except that the server must return only the response header.
- **PATCH:** requests the server to update partial content of a specified resource. If the resource does not exist, a new resource will be created.

For example, in the case of the **Short Sentence Recognition** API, the request method is **POST**. The request is as follows:

```
POST https://sis-ext.ap-southeast-3.myhuaweicloud.com/v1/{project_id}/asr/short-audio
```

## Request Header

You can also add additional header fields to a request, such as the fields required by a specified URI or HTTP method. For example, to request for the authentication information, add **Content-Type**, which specifies the request body type.

Common request headers are as follows:

- **Content-Type:** specifies the request body type or format. This field is mandatory and its default value is **application/json**.
- **X-Auth-Token:** specifies a user token only for token-based API authentication. For details about user tokens, see **Token-based Authentication** in [Authentication](#).

The following provides an example request with a header included.

```
POST https://sis-ext.ap-southeast-3.myhuaweicloud.com/v1/{project_id}/asr/short-audio
Content-Type: application/json
X-Auth-Token: MIINRwYJKoZlhvcNAQcCoIINOD...
```

## Request Body

The body of a request is often sent in a structured format as specified in the **Content-Type** header field. The request body transfers content except the request header. If the request body contains Chinese characters, these characters must be coded in UTF-8.

The request body varies between APIs. Some APIs do not require the request body, such as the APIs requested using the GET and DELETE methods.

In the case of the **Short Sentence Recognition** API, the request parameters and parameter descriptions can be obtained from the API request. The following is an example request with the body added. The **data** parameter indicates the Base64-encoded character string converted from the audio.

```
POST https://sis-ext.ap-southeast-3.myhuaweicloud.com/v1/{project_id}/asr/short-audio
Content-Type: application/json
X-Auth-Token: MIINRwYJKoZlhvcNAQcCoIINOD...
```

```
{
  "data": "encode audio by Base64",
  "config": {
    "audio_format": "wav",

    "property": "english_8k_common"
  }
}
```

If all data required for the API request is available, you can send the request to call the API through **curl**, **Postman**, or coding. For the **Short Sentence Recognition** API, you can obtain the request parameters and parameter descriptions from the response message.

## 4.2 Authentication

Requests for calling an API can be authenticated using either of the following methods:

- Token-based authentication: Requests are authenticated using a token.
- AK/SK-based authentication: Requests are authenticated by encrypting the request body using an AK/SK pair.

### Token-based Authentication

#### NOTE

The validity period of a token is 24 hours. When using a token for authentication, cache it to prevent frequently calling the IAM API used to obtain a user token.

A token specifies temporary permissions in a computer system. During API authentication using a token, the token is added to requests to get permissions for calling the API.

Replace *username*, *domainname*, and *project name* with the actual values. You can log in to the console and choose **My Credential** to obtain the values. *password* indicates the user password.

- Pseudo-code

```
POST https://iam.ap-southeast-3.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

```
{
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "projectname"
      }
    }
  }
}
```

- Python

```
import requests
import json

url = "https://iam.ap-southeast-3.myhuaweicloud.com/v3/auth/tokens"

payload = json.dumps({
  "auth": {
    "identity": {
      "methods": [
        "password"
      ],
      "password": {
        "user": {
          "name": "username",
          "password": "*****",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "projectname"
      }
    }
  }
})

headers = {
  'Content-Type': 'application/json'
}

response = requests.request("POST", url, headers=headers, data=payload)

print(response.headers["X-Subject-Token"])
```

The **X-Auth-Token** header field must be included to carry the token when calling other APIs. For example, if the token is **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** can be added to a request as follows:

```
Content-Type: application/json  
X-Auth-Token: ABCDEFJ....
```

## AK/SK-based Authentication

### NOTE

AK/SK-based authentication supports API requests with a body not larger than 12 MB. For API requests with a larger body, token-based authentication is recommended.

In AK/SK-based authentication, AK/SK is used to sign requests and the signature is then added to the requests for authentication.

- **AK:** access key ID, which is a unique identifier used in conjunction with a secret access key to sign requests cryptographically.
- **SK:** secret access key used in conjunction with an AK to sign requests cryptographically. It identifies a request sender and prevents the request from being modified.

In AK/SK-based authentication, you can use an AK/SK to sign requests based on the signature algorithm or use the signing SDK to sign requests. For details about how to sign requests and use the signature SDK, see [API Request Signing Guide](#).

---

### NOTICE

The signing SDK is only used for signing requests and is different from the SDKs provided by services.

For details about how to obtain the AK/SK, see [Obtaining an AK/SK Pair](#).

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## 4.3 Response

### Status Code

After sending a request, you will receive a response, including a status code, response header, and response body.

A status code is a group of digits, ranging from 1xx to 5xx. It indicates the status of a request. For more information, see [Status Codes](#).

If status code **200** is returned for the calling of SIS APIs, the request is successful.

### Response Header

Similar to a request, a response also has a header, for example, **Content-type**. The response headers of SIS can be used for fault locating.

## Response Body

The body of a response is often returned in structured format as specified in the **Content-Type** header field. The response body transfers content except the response header.

The following shows part of the response body for the [Short Sentence Recognition](#) API. For details about the format, see the [Short Sentence Recognition](#) responses.

```
{
  "trace_id": "567e8537-a89c-13c3-a882-826321939651",
  "result": {
    "text": "Welcome to the voice cloud service.",
    "score": 0.9
  }
}
```

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.

```
{
  "error_msg": "***",
  "error_code": "SIS.0001"
}
```

In the response body, **error\_code** is an error code, and **error\_msg** provides information about the error.

# 5 Short Sentence Recognition

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## 5.1 HTTP Interface

### Functions

This API is used for real-time recognition of short sentences. The audio duration cannot exceed 30s.

### URI

POST /v1/{project\_id}/asr/short-audio

**Table 5-1** Path parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see <a href="#">Obtaining a Project ID</a> .

## Request Message

**Table 5-2** Request header parameters

Parameter	Mandatory	Type	Description
X-Auth-Token	Yes	String	User token. It is used to obtain the permission to call APIs. For details about how to obtain a user token, see <a href="#">Authentication</a> . The token is the value of <b>X-Subject-Token</b> in the response header.

**Table 5-3** Request body parameters

Parameter	Mandatory	Type	Description
config	Yes	<a href="#">Config</a> object	Configuration information.
data	Yes	String	Audio data (encoded by Base64). The size of the encoded audio data cannot exceed 2 MB. The audio duration cannot exceed 30 seconds. For example, <b>/+MgxAAUeHpMAUkQAAN-huRAC.....</b> If the prefix <b>data:audio/mp3;base64</b> , is carried, an error is reported.

**Table 5-4** Config

Parameter	Mandatory	Type	Description
audio_format	Yes	String	Audio format. For details about the supported audio formats, see <a href="#">Table 5-5</a> .
property	Yes	String	Model feature string in use, which is generally in the <i>Language_Sampling rate_Domain</i> format. The sampling rate must be the same as the audio sampling rate. For details about the value range, see <a href="#">Table 5-6</a> .



Parameter	Mandatory	Type	Description
add_punc	No	String	Whether to add punctuation marks to the recognition result. The value can be <b>yes</b> or <b>no</b> . The default value is <b>no</b> .
digit_norm	No	String	Whether to convert digits in the speech into Arabic numerals. The value can be <b>yes</b> or <b>no</b> . The default value is <b>yes</b> . Currently, the international website does not support this parameter.
vocabulary_id	No	String	Hot word table ID. If no hot word table is used, this field can be left blank. Currently, the international website does not support this parameter.
need_word_info	No	String	Whether to output the word segmentation result in the recognition result. The value can be <b>yes</b> or <b>no</b> . The default value is <b>no</b> . Currently, this parameter is not supported on HUAWEI CLOUD (International).

**Table 5-5** Value range of **audio\_format**

Value	Description
pcm16k16bit	16 kHz, 16-bit mono-channel audio recording data
pcm8k16bit	8 kHz, 16-bit mono-channel audio recording data
wav	Format with the WAV encapsulation header. The format is automatically determined by the encapsulation header. Currently, only the 8 kHz/16 kHz sampling rate, mono channel, and pcm encoding format are supported.

**Table 5-6** Value range of **property**

Value	Description
english_8k_common	English speech recognition with a sampling rate of 8 kHz
english_16k_common	English speech recognition with a sampling rate of 16 kHz

## Response parameters

Status code: 200

**Table 5-7** Response body parameters

Parameter	Mandatory	Type	Description
trace_id	Yes	String	Internal token used to trace a specific process in logs. This parameter is not included when the API fails to be called. In some error cases, this field may not exist.
result	Yes	<b>Result</b> object	If the calling is successful, this parameter indicates the recognition result. Otherwise, this parameter is invalid.

**Table 5-8** Result

Parameter	Mandatory	Type	Description
text	Yes	String	Recognition result of a successful call
score	Yes	Float	Confidence of a successful call. The value ranges from 0 to 1.
word_info	No	Array of <b>WordInfo</b> objects	Word segmentation information list Currently, this parameter is not supported on HUAWEI CLOUD (International).

**Table 5-9** WordInfo

Parameter	Mandatory	Type	Description
start_time	No	Integer	Start time
end_time	No	Integer	End time
word	No	String	Word segmentation

Status code: 400

**Table 5-10** Response body parameters

Parameter	Type	Description
error_code	String	Error code returned when the API fails to be called. This parameter is not included when the API is successfully called.
error_msg	String	Error message when the API call fails. This parameter is not included when the API is successfully called.

## Example Requests

### NOTE

The endpoint is the request URL for calling an API. Endpoints vary according to services and regions. For details, see [Endpoints](#).

- Upload a short audio and quickly obtain the recognition result.

POST `https://{endpoint}/v1/{project_id}/asr/short-audio`

Request Header:

Content-Type: application/json

X-Auth-Token:

MIINRwYJKoZlhvcNAQcCoIINODCCDTQCAQExDTALBglghkgBZQMEAgEwgguVBgkqhkiG...

Request body:

```
{
  "config":
  {
    "audio_format": "wav",
    "property": "english_8k_common",
    "add_punc": "yes",
  },
  "data": "/+MgxAAUeHpMAUKQAANhuRAC..."
}
```

## Example Responses

### Status code: 200

Example response (successful request)

```
{
  "trace_id": "567e8537-a89c-13c3-a882-826321939651",
  "result": {
    "text": "Nice to meet you",
    "score": 0.9,
  }
}
```

### Status code: 400

Failure response example

```
{
  "error_code": "SIS.0001",
  "error_msg": "****"
}
```

## Status Codes

For details about status codes, see [Status Codes](#).

## Error Codes

For details about error codes, see [Error Codes](#).

# 6 Appendix

## 6.1 Audio Examples

**Table 6-1** lists the test audio recordings. The title of each audio recording file contains the sampling rate and bit width. For example, **8k16bit.pcm** indicates that the audio sampling rate is 8 kHz and the bit width is 16 bits.

**Table 6-1** Audio examples

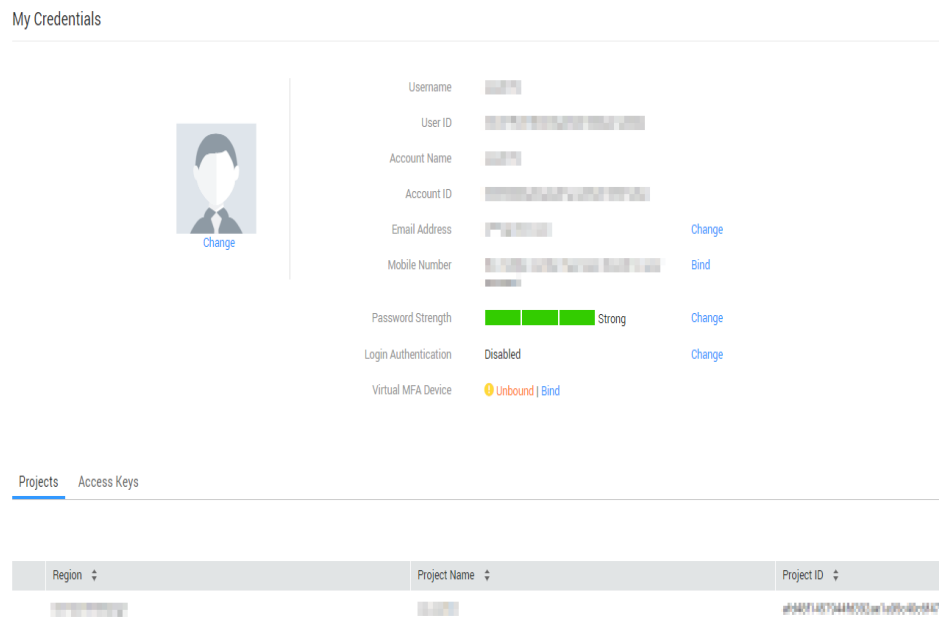
Audio Format	Download Link
8k pcm	<a href="https://sis-open-data.obs.ap-southeast-3.myhuaweicloud.com/audio/8k.pcm">https://sis-open-data.obs.ap-southeast-3.myhuaweicloud.com/audio/8k.pcm</a>
8k wav	<a href="https://sis-open-data.obs.ap-southeast-3.myhuaweicloud.com/audio/8k.wav">https://sis-open-data.obs.ap-southeast-3.myhuaweicloud.com/audio/8k.wav</a>
16k pcm	<a href="https://sis-open-data.obs.ap-southeast-3.myhuaweicloud.com/audio/16k.pcm">https://sis-open-data.obs.ap-southeast-3.myhuaweicloud.com/audio/16k.pcm</a>
16k wav	<a href="https://sis-open-data.obs.ap-southeast-3.myhuaweicloud.com/audio/16k.wav">https://sis-open-data.obs.ap-southeast-3.myhuaweicloud.com/audio/16k.wav</a>

## 6.2 Obtaining a Project ID

### Obtaining a Project ID from the Console

1. Log in to the [management console](#).
2. Move the cursor over your username in the upper right corner and click **My Credentials** from the drop-down list.
3. On the **My Credentials** page, view the username and account name and view projects in the project list.

**Figure 6-1** Viewing the project ID



If there are multiple projects, unfold the target region and obtain the project ID from the **Project ID** column.

## Obtaining a Project ID by Calling an API

The API for obtaining a project ID is **GET https://{Endpoint}/v3/projects**. **{Endpoint}** indicates the endpoint of IAM. For details about API authentication, see [Authentication](#).

The following is an example response. If SIS is deployed in the **ap-southeast-1** region, the value of **name** in the request body is **southeast-1**, and the value of **id** in **projects** is the project ID.

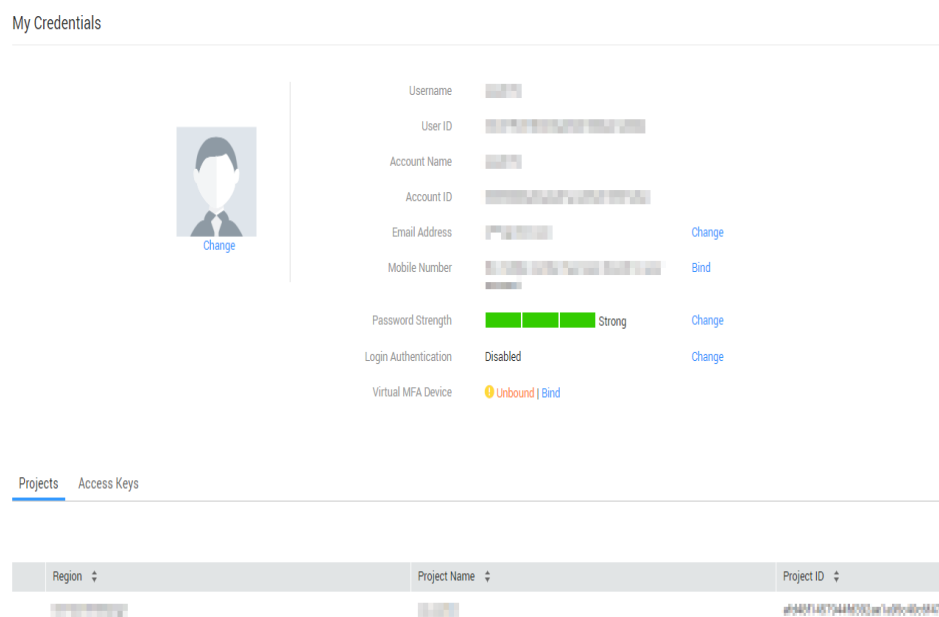
```
{
  "projects": [
    {
      "domain_id": "65382450e8f64ac0870cd180d14e684b",
      "is_domain": false,
      "parent_id": "65382450e8f64ac0870cd180d14e684b",
      "name": "project_name",
      "description": "",
      "links": {
        "next": null,
        "previous": null,
        "self": "https://www.example.com/v3/projects/a4a5d4098fb4474fa22"
      },
      "id": "a4a5d4098fb4474fa22cd05f897d6b99",
      "enabled": true
    }
  ],
  "links": {
    "next": null,
    "previous": null,
    "self": "https://www.example.com/v3/projects"
  }
}
```

## 6.3 Obtaining an Account ID

An account ID (**domain-id**) is required for some URLs when an API is called. To obtain an account, perform the following operations:

1. Log in to the management console after registration.
2. Move the cursor over your username in the upper right corner and click **My Credentials** from the drop-down list.
3. On the **My Credentials** page, view **Account ID**.

**Figure 6-2** Viewing the account ID



## 6.4 Obtaining an AK/SK Pair

If an AK/SK has already been generated, skip this step. Find the downloaded AK/SK file, which is usually named **credentials.csv**.

As shown in the following figure, the file contains the username, AK, and SK

**Figure 6-3** Content of the **credential.csv** file

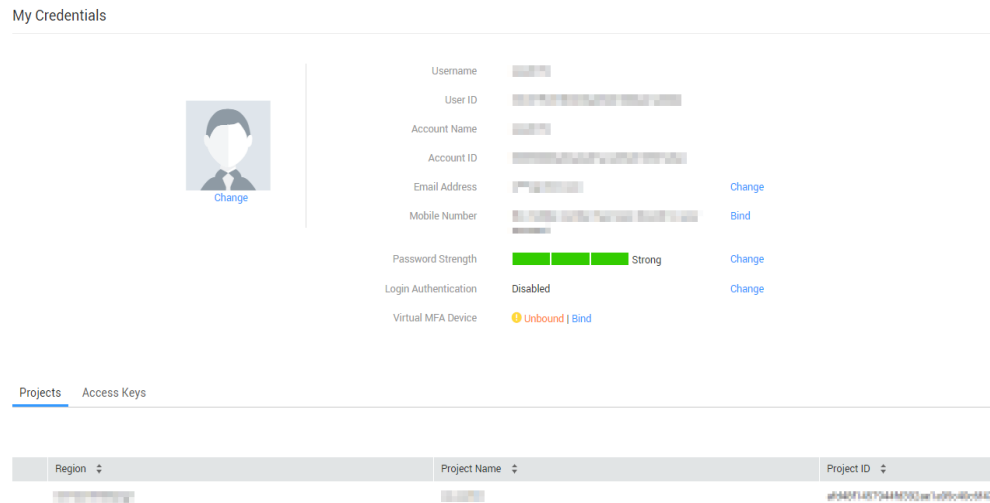
	A	B	C
1	User Name	Access Key Id	Secret Access Key
2	hu...dg	QTWA...UT2QVKYUC	MFyfvK41ba2...npdUKGpownRZImVmHc

Perform the following operations to generate an AK/SK pair:

1. Log in to the console.
2. Click the username and choose **My Credentials** from the drop-down list.
3. On the **My Credentials** page, click the **Access Keys** tab.

4. On the page that is displayed, click **Add Access Key**.
5. Obtain and download the key as prompted. Keep the key secure.

**Figure 6-4** Obtaining an AK/SK



## 6.5 Common Request Parameters

**Table 6-2** describes the request parameters.

**Table 6-2** Common request parameters

Parameter	Mandatory	Description	Example
Content-type	Yes	MIME type of the response body	application/json
Content-Length	This parameter is mandatory for POST and PUT requests, but must be left blank for GET requests.	Length of the request body. The unit is byte.	3495
X-Auth-Token	Yes	User token	MIINRwYJKoZlhvc-NAQcColINODCCDTQCAQExDTALBgIghkgBZQMEAgEwggUvBgkqhkiG...
X-Language	No	Request language type. The default value is <b>zh-cn</b> .	en-us



 NOTE

- For details about other parameters in the message header, see the HTTPS protocol documentation.
- When calling a service API, add the message body of **Content-Type** to the request message header.

## 6.6 Common Response Parameters

[Table 6-3](#) describes the request parameters.

**Table 6-3** Common response parameters

Parameter	Description
Content-Length	Length of the response message body. The unit is byte.
Date	Time when a response is returned
Content-type	MIME type of the response body

## 6.7 Status Codes

**Table 6-4** Status codes

Status Code	Description
100	Continue
101	Switching Protocols
200	OK
201	Created
202	Accepted
203	Non-Authoritative Information
204	NO Content
205	Reset Content
206	Partial Content
300	Multiple Choices
301	Moved Permanently
302	Found

Status Code	Description
303	See Other
304	Not Modified
305	Use Proxy
306	Unused
400	Bad Request
401	Unauthorized
402	Payment Required
403	Forbidden
404	Not Found
405	Method Not Allowed
406	Not Acceptable
407	Proxy Authentication Required
408	Request Timeout
409	Conflict
410	Gone
411	Length Required
412	Precondition Failed
413	Request Entity Too Large
414	Request URI Too Long
415	Unsupported Media Type
416	Requested Range Not Satisfiable
417	Expectation Failed
422	Unprocessable Entity
429	Too Many Requests
500	Internal Server Error
501	Not Implemented
502	Bad Gateway
503	Service Unavailable
504	Gateway Timeout
505	HTTP Version Not Supported

## 6.8 Error Codes

If an error occurs during API calling, no result is returned. You can locate the cause of an error using the error codes of each API. When an API call fails, HTTPS status code 4xx or 5xx is returned. The returned message body contains a specific error code and error message. If you fail to locate the cause of the error, contact the Huawei Cloudcustomer service and provide the error code for troubleshooting.

### Format of an Error Response Body

If an error occurs during API calling, an error code and a message will be displayed. The following shows an error response body.


```
{
  "error_code": "SIS.0032",
  "error_msg": "'audio_format' is invalid"
}
```

In the response body, **error\_code** is an error code, and **error\_msg** provides information about the error.

### Error Code Description

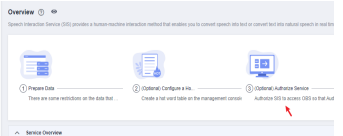
If an error code starting with APIGW is returned after you call an API, rectify the fault by referring to the instructions provided in [API Gateway Error Codes](#).

Error Code	Description	Solution
SIS.0001	Connection error. For example, the connection to OBS or Redis is incorrect.	Contact technical support engineers.
SIS.0003	The token does not contain user information, the agency has been created, or an internal error occurs.	Contact technical support engineers.
SIS.0100	Internal service error.	Contact technical support engineers.

Error Code	Description	Solution
SIS.0101	The authentication token is abnormal.	<ul style="list-style-type: none"> <li>• Check whether the value of X-Auth-Token in the request header is correct.</li> <li>• Check whether the token request parameters are correct.</li> <li>• Check whether the value of <b>projectId</b> in the URL is correct.</li> <li>• When obtaining a token, add the scope parameter to the request to obtain a project-level token. Do not use a global token when calling SIS.</li> </ul>  <pre> "auth": {   "identity": {     "password": {       "users": {         "name": "{{user_name}}",         "password": "{{password}}",         "domain": {           "name": "{{domain_name}}"         }       },       "methods": [         "password"       ]     },     "scope": {       "project": {         "name": "{{region}}"       }     }   } } </pre>
SIS.0102	Authentication information is missing.	Check whether the <b>X-Auth-Token</b> field in the request header exists.
SIS.0103	Real-name authentication is missing.	Perform real-name authentication. No authentication is required for HUAWEI CLOUD (International).
SIS.0012	Fields required in the request body are missing.	Check whether mandatory fields of request parameters are missing.
SIS.0031	The request parameter is not supported.	Check whether the request parameters are correct.

Error Code	Description	Solution
SIS.0032	The JSON format of the request body is incorrect.	<p>Check whether the JSON format of the request body is correct.</p> <ul style="list-style-type: none"> <li>Ensure that the value of <b>audio_format</b> is valid and is same as the format of the audio to be identified. If you are not sure about the value of <b>audio_format</b> when calling the Long Audio Transcription API, set the value to auto for debugging.</li> <li>If the error message <b>data base64 encode invalid</b> is displayed, check whether the character string is correct after Base64 encoding, for example, whether there are extra spaces or incorrect characters.</li> </ul>
SIS.0022	The product cannot be subscribed to.	The product cannot be purchased. Contact the technical support.
SIS.0023	Failed to subscribe to the product.	Failed to purchase the product. Contact the technical support.
SIS.0024	Updating restrictions is not allowed.	The restrictions cannot be updated. Contact the technical support.
SIS.0033	The engine response timed out.	Contact technical support engineers.
SIS.0201	Failed to find the hot word table.	Check whether the request parameters are correct or contact technical support.
SIS.0203	Some hot words are too long or invalid.	Correct the invalid hot words based on the error information.
SIS.0204	The hot word table name already exists.	Modify the hot word table name.
SIS.0205	The language is not supported.	Modify the hot word table.
SIS.0206	Failed to save the hot word.	Contact technical support engineers.
SIS.0207	The hot word content is damaged.	Contact technical support engineers.

Error Code	Description	Solution
SIS.0208	There are too many hot word tables.	Delete unnecessary hot word tables. If you need to configure more hot word tables, contact the customer service personnel.
SIS.0301	The input <b>audio_format</b> parameter does not match the model.	Check whether the request parameters are correct.
SIS.0302	The internal service is abnormal.	Contact technical support engineers.
SIS.0303	Failed to connect to the engine.	Try again. If the problem occurs multiple times, contact professional engineers.
SIS.0304	Audio waiting timed out.	This error is reported if the client does not send a voice message for a long time and the server does not receive the voice message within 20 seconds. <ul style="list-style-type: none"> <li>Reduce the data sending interval.</li> <li>Check the code to view whether there is too much idle time after an audio segment is sent.</li> <li>Check whether an ending request is sent and the client is closed.</li> </ul>
SIS.0305	An exception occurred during speech recognition.	Try again or contact technical support engineers.
SIS.0306	An exception occurred during speech recognition.	Try again or contact technical support engineers.
SIS.0307	An exception occurred during speech recognition.	Try again or contact technical support engineers.
SIS.0309	The real-time speech recognition audio duration exceeds the upper limit.	Check whether the audio duration is supported. In the short-stream mode, the audio duration cannot exceed 60 seconds. In the continue-stream or sentence-stream mode, the audio duration cannot exceed 5 hours.
SIS.0401	An exception occurred during audio synthesis.	Try again or contact technical support engineers.

Error Code	Description	Solution
SIS.0402	The input <b>sample_rate</b> parameter for TTS is invalid.	Check whether the input <b>sample_rate</b> for TTS matches the sampling ratio supported by the value range of <b>property</b> .
SIS.0410	The input <b>audio_format</b> parameter for TTS is invalid.	Check whether the request parameters are correct.
SIS.0411	The input <b>property</b> parameter for TTS is invalid.	Check whether the request parameters are correct.
SIS.0412	Connection to the TTS engine timed out.	Try again or contact technical support engineers.
SIS.0413	Internal TTS error occurred.	Try again or contact technical support engineers.
SIS.0414	TTS waiting timed out.	Try again or contact technical support engineers.
SIS.0415	The TTS request body is incorrect.	Check whether the request body is correct.
SIS.0416	Waiting for the user to send the text timed out.	Resend the text you want to convert to speech.
SIS.0417	TTS engine error.	Try again or contact technical support engineers.
SIS.0418	TA TTS task is being processed.	Do not repeatedly send the command for starting a TTS task.
SIS.0419	Invalid ssml.	The input text contains invalid characters.
SIS.0506	Failed to find a proxy.	<ul style="list-style-type: none"> <li>● Check whether the network has a proxy.</li> <li>● Check whether OBS access is authorized.</li> </ul> 
SIS.0533	The request parameters of Long Audio Transcription are incorrect.	Check whether the request parameters are correct.

Error Code	Description	Solution
SIS.0534	The request body of Long Audio Transcription is incorrect.	<p>Check whether the request body is correct.</p> <ul style="list-style-type: none"> <li>• If <b>data syntax error!</b> is displayed, check whether the data format or encoding format meets the requirements.</li> <li>• If <b>asr data url param is invalid</b> is displayed, use the path of the audio file in an OBS bucket and ensure that the region of the OBS service is the same as that of the requested service.</li> </ul>
SIS.0535	The requested file type of Long Audio Transcription is not supported.	<ul style="list-style-type: none"> <li>• Ensure that the value of <b>audio_format</b> is valid.</li> <li>• Ensure that the format of the audio to be identified is the same as the value of <b>audio_format</b>.</li> </ul>
SIS.0536	The number of submitted jobs of Long Audio Transcription reached the upper limit.	Try again later.
SIS.0537	The size of an audio recording is too large.	Reduce the file size. For example, divide it into multiple files.
SIS.0538	The Long Audio Transcription job timed out.	Try again later.
SIS.0601	The input parameter of ASR or TTS is invalid.	Check whether the request parameters are correct and complete.
SIS.0602	The speech format for ASR is not supported.	Check whether the encoding format of the submitted speech is supported.
SIS.0604	The size of the ASR file does not meet the requirements or the number of words to be synthesized in TTS exceeds the upper limit.	Reduce the size of the speech file or the number of words to be synthesized. Note that when the OBS link is used for submission, the file size increases after Base64 encoding.
SIS.0605	An ASR or TTS internal error occurred.	Try again or contact technical support engineers.



Error Code	Description	Solution
SIS.0608	Invalid URL.	Check the URL and ensure that the OBS link of the corresponding region is used.
SIS.0609	Failed to download the audio file from the specified URL.	Check whether the OBS is in the public-read status or whether OBS authentication is enabled.
SIS.0701	The size of the input audio, video, or exam paper exceeds the upper limit.	Refer to the error information and API document to reduce the size of the audio, video, or exam paper.
SIS.0702	The input parameter is invalid. For example, the assessment language or mode is not supported. The audio or video format is not supported. The exam paper is invalid.	Refer to the error information and API document to enter correct parameters.
SIS.30003	Failed to download the audio from OBS.	Check whether the audio on OBS can be accessed.
SIS.30004	Failed to download the hot word file.	Check whether the hot word file exists.
SIS.30006	Failed to decode the audio.	Check whether the format of the audio file is correct and whether the audio file is empty.
SIS.30007	The transcription engine failed to load hot words.	Check whether the hot word file exists.
SIS.30008	The transcription engine failed to transcribe the audio.	Check whether the parameters are correct or contact the technical support.
SIS.0541	The property and format parameters of Audio Transcription do not match.	Check whether the formats of Property and format are correct. <ul style="list-style-type: none"><li>Property and format do not match!</li></ul>

# 7 Change History

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Release Date	Description
2020-03-13	This issue is the first official release.