



Video Analysis Service

API Reference

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1 Before You Start

1.1 Overview

VAS uses AI technologies to perform intelligent analysis of video content. VAS includes a wide array of functions, such as video preprocessing, content moderation, content analysis, editing, search, and video fingerprinting. It delivers the detection, tracking, attribute identification, behavior identification, content moderation, video abstraction, and can tag the objects in videos. VAS efficiently and effectively analyzes your video content.

You can use VAS APIs to analyze and process video data, including content analysis, video editing, and video fingerprinting. For details about all supported APIs, see [API Overview](#).

Before calling APIs of VAS, it is a good idea to get to learn the basic concepts from the [VAS Service Overview](#).

1.2 Endpoints

An endpoint is the **request address** for calling an API. The endpoints of different services depend on the region. For the endpoints of all services, see [Regions and Endpoints](#).

For your reference, the following graph [Table 1-1](#) shows the terminal nodes used for VAS.

Table 1-1 VAS endpoints

Region Name	Region	Endpoint	Protocol
CN North-Beijing1	cn-north-1	iva.cn-north-1.myhuaweicloud.com	HTTPS
CN North-Beijing4	cn-north-4	iva.cn-north-4.myhuaweicloud.com	HTTPS

Region Name	Region	Endpoint	Protocol
AP-Bangkok	ap-southeast-2	iva.ap-southeast-2.myhuaweicloud.com	HTTPS
CN East-Shanghai2	cn-east-2	iva.cn-east-2.myhuaweicloud.com	HTTPS
CN East-Shanghai1	cn-east-3	iva.cn-east-3.myhuaweicloud.com	HTTPS
CN South-Guangzhou	cn-south-1	iva.cn-south-1.myhuaweicloud.com	HTTPS
AP-Hong Kong	ap-southeast-1	iva.ap-southeast-1.myhuaweicloud.com	HTTPS
AP-Singapore	ap-southeast-3	iva.ap-southeast-3.myhuaweicloud.com	HTTPS

1.3 Constraints and Limitations on Using VAS

VAS has certain restrictions, some cost-based and some technological. The system-wide restrictions affect all subservices, as well. In addition to system-wide restrictions, some subservices have additional, independent restrictions.

System-Grade Restrictions

- Supported video formats: AVI, WMV, MPG, MPEG, MP4, MOV, M4V, MKV
- Videos cannot be stored in OBS buckets encrypted by KMS.
- The size of a single video cannot exceed 4 GB.
- Supported frame rates (fps): 23.97, 24, 25, 29.97, 30, 50, and 60.
- Supported GPU decoding video formats: H.264, H.265, MPEG2, MPEG4, VC1, VP8, VP9

Encoding Format	Maximum Resolution
MPEG2	1920 x 1080
MPEG4	1920 x 1080
VC1	2048 x 1024
H.264	1920 x 1080
H.265	1920 x 1080
VP8	1920 x 1080
VP9	1920 x 1080

Video OCR

- When data is read from a specified URL, the video size cannot exceed 1 GB.
- Numbers, English subtitles, and simplified and traditional Chinese characters can all be identified.
- Horizontal and vertical text can be recognized, as well as many unclear or artistic fonts, but text arranged into a circle or viewed from a severe angle are typically not handled well.
- The video resolution must be at least 300 x 300 pixels.
- The video frame rate must be greater than 1 fps.
- Supported regions: CN North-Beijing1 and CN North-Beijing4.

Video Celebrity Analysis

- When data is read from a specified URL, the video size cannot exceed 1 GB.
- The facial image must be at least 40 x 40 pixels.
- Faces can be recognized with up to $\pm 15^\circ$ pitch and $\pm 30^\circ$ yaw.
- A maximum of 20 faces can be identified at the same time.
- Supported regions: CN North-Beijing1 and CN North-Beijing4.

Video Topics Segmentation

- When data is read from a specified URL, the video size cannot exceed 1 GB.
- This subservice only applies to standard news videos with news anchors identified.
- A face can only be identified if the facial image includes at least 60 pixels.
- Faces of news anchors must be in the valid area (excluding the 10% edge area).
- A news anchor can be identified only when the front face of the news anchor appears for at least three times and retain on the image consistently for at least 2 seconds each time.
- A maximum of 3 news anchors can be identified simultaneously.
- Supported regions: CN North-Beijing1 and CN North-Beijing4.

Video Cover Selection

- Video files in TS format are supported.
- When data is read from a specified URL, the video size cannot exceed 1 GB.
- GPU accelerated decoding supported for videos in H.264, H.265, MPEG4, VP8, and VP9 formats. The maximum resolution is 1920 x 1080 pixels.
- Common frame rates are supported, such as 23.97, 24, 25, 29.97, 30, 50, and 60 fps.
- Supported regions: CN North-Beijing1 and CN North-Beijing4.

Video Fingerprinting

- Video files in TS format are supported.
- When data is read from a specified URL, the video size cannot exceed 1 GB.
- GPU accelerated decoding supported for videos in H.264, H.265, MPEG4, VP8, and VP9 formats. The maximum resolution is 1920 x 1080 pixels.
- Common frame rates are supported, such as 23.97, 24, 25, 29.97, 30, 50, and 60 fps.
- Supported regions: CN North-Beijing1 and CN North-Beijing4.

Video Content Moderation

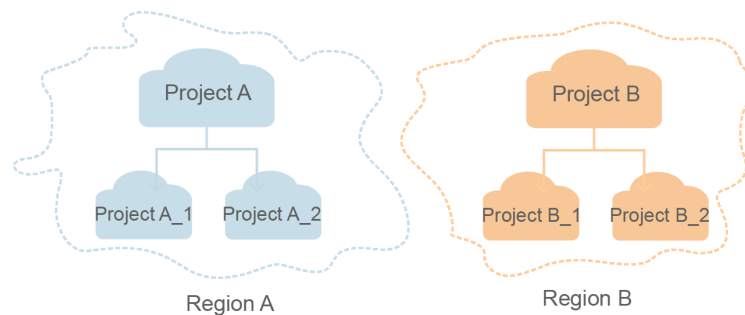
- The size of a single video cannot exceed 2 GB.
- The video frame rate must be greater than or equal to 1 fps.
- Currently, API calling concurrency cannot be ensured.
- Supported regions: CN North-Beijing1, CN North-Beijing4, and CN East-Shanghai1.

1.4 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 and should not be used directly to perform routine management. For security purposes, create IAM users and grant them permissions for routine management.
- User
An IAM user is created using an account to use cloud services. Each IAM user has its own identity credentials (password and access keys).
An IAM user 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 shared within the same region. Regions are classified into universal regions and dedicated regions. A universal region provides universal cloud services for common tenants. A dedicated region provides specific services for specific tenants.
For details, see [Region and AZ](#).
- Availability Zone (AZ)
An AZ contains one or more physical data centers. Each AZ has independent cooling, fire extinguishing, moisture-proof, 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 isolating model



To view a project ID, go to the [My Credentials](#) page.

2 API Overview

VAS provides RESTful APIs that you can call over HTTPS. [Table 2-1](#) describes how to call APIs.

Table 2-1 VAS APIs

Service	Function	API	Description
Video Content Recognition (VCR)	Video OCR	Creating a Video OCR Job	Create a video quality analysis job to filter clear and high-quality videos by recognizing video image quality and classifying videos by image quality.
		Querying the Job List	Query and display the list of video quality analysis jobs.
		Querying a Single Job	Query and display details about a single job based on the job ID.
		Deleting a Job	Delete a specified job based on the job ID.
	Video Celebrity Analysis	Creating a Video Celebrity Analysis Job	Create a video celebrity analysis job to recognize and analyze political figures and celebrities in videos and warn you of sensitive content in the videos. This helps you quickly locate and handle sensitive content in videos and reduce any non-compliance risks in your business.
		Querying the Job List	Query and display the list of video celebrity analysis jobs.

Service	Function	API	Description
		Querying a Single Job	Query and display details about a single job based on the job ID.
		Deleting a Job	Delete a specified job based on the job ID.
Video Content Processing (VCP)	Video Topics Segmentation	Creating a Video Topics Segmentation Job	Create a video topics segmentation job to improve the efficiency of video recognition, editing, and retrieval by quickly and accurately segmenting a long video into segments of different topics.
		Querying the Job List	Query and display the video topic segmentation job list.
		Querying a Single Job	Query and display details about a single job based on the job ID.
		Deleting a Job	Delete a specified job based on the job ID.
Video Content Moderation (VCM)	Video Content Moderation	Creating a Job	This API is used to create a video content moderation job.
		Querying the Job List	This API is used to query and display the video content moderation job list.
		Querying a Single Job	This API is used to query and display the details of a single job.
		Deleting a Job	This API is used to delete a specified job.

3 Calling APIs

3.1 Enabling VAS Functions

In accordance with the release phase of the service functions, the service provisioning modes are as follows:

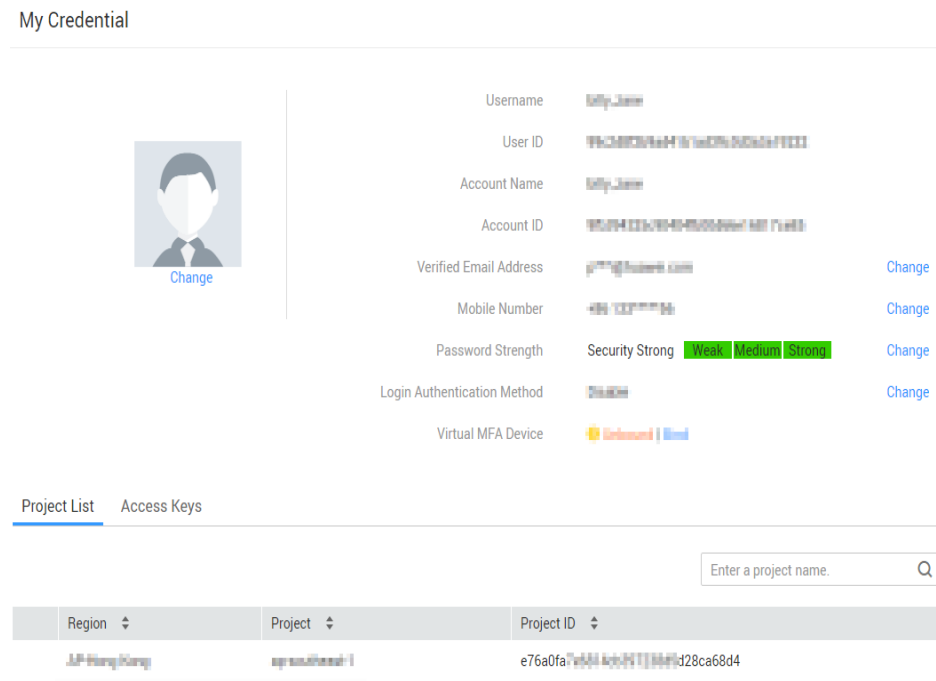
- Closed beta test/Commercial use: At present, you must provide account details to the contact personnel for the corresponding function for technical support. Then, you can use the algorithm functions of the service. For details, see [Enabling the Functions in Closed Beta Test or in Commercial Use](#).
- Open Beta Test (OBT): In the OBT phase, you can enable services on the console. For details, see [Enabling OBT Functions](#).

For details about the release phase of each function, see [Function Release Phase](#).

Enabling the Functions in Closed Beta Test or in Commercial Use

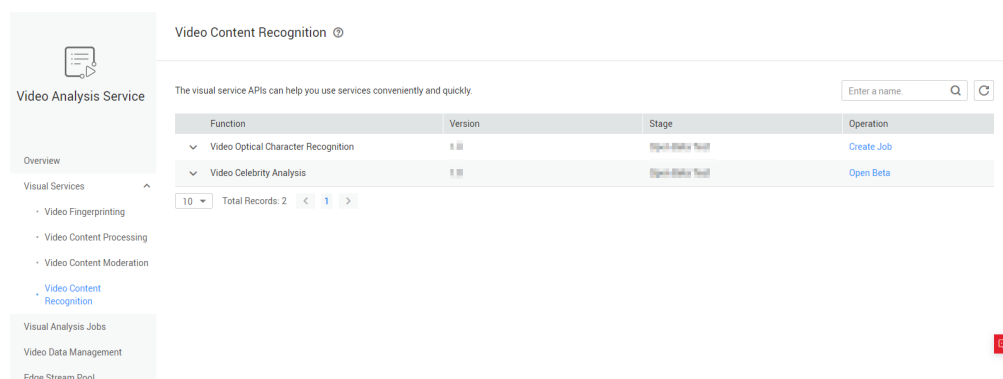
1. Log in to the [My Credentials](#) page on the console, as shown in [Figure 3-1](#).

Figure 3-1 The **My Credentials** page



- Obtain the user account details. The information required for the closed beta test is different from that of the commercial use.
 - Closed beta test: The username and user ID are required.
 - Commercial use: The account name and project ID are required.
- Provide the account details to the contact personnel of the corresponding function for technical support.
- After technical support is provided, you can log in to the **Video Analysis Service management console** and view the specified service functions. If you see **Create Job** for a specific function in the **Operation** column, that function is enabled, as shown in **Figure 3-2**.

Figure 3-2 Service function display



Enabling OBTF Functions

- Log in to the HUAWEI CLOUD Video Analysis Service management console.
- Select **Visual Services** to see the list of functions.

When you visit the **Visual Services** page for the first time, apply for OBT entry, and wait 1 to 2 business days for approval.

3. Select a function (for example, Video OCR) to be enabled based on your requirements, and click **Open Beta** in the **Operation** column to apply for an open beta test.

You will become an OBT user of the function right away.

4. Then you will see **Create a Job** in the **Operation** column, indicating that you have successfully enabled the OBT function.

You only need to apply for the service once.

Function Release Phase

Table 3-1 Release phase

Service	Function	Release Phase
Video Content Recognition (VCR)	Violent Sorting Identification	Commercial use
	Video OCR	Open beta test (OBT)
	Video Celebrity Analysis	Open beta test (OBT)
	Video Quality Analysis	Closed beta test
	Multi-modal Feature Recognition	Closed beta test
	Video Face Detection (Cloud)	Open beta test (OBT)
	Video Face Detection (Edge)	Open beta test (OBT)
	People Flow Counting (Cloud)	Open beta test (OBT)
	People Flow Counting (Edge)	Open beta test (OBT)
	Vehicle Detection (Cloud)	Open beta test (OBT)
	Vehicle Detection (Edge)	Open beta test (OBT)
	Intrusion Detection (Cloud)	Open beta test (OBT)
	Intrusion Detection (Edge)	Open beta test (OBT)
Video Content Processing	Video Topics Segmentation	Commercial use
	Video Cover Selection	Closed beta test
Video Fingerprinting	Video Fingerprinting	Closed beta test

Service	Function	Release Phase
Video Content Moderation	Video Content Moderation	Open beta test (OBT)

3.2 Making an API Request

This section describes the structure of a REST API request, and uses the IAM API for **obtaining a user token** as an example to demonstrate how to call an API. The obtained token can then be used to authenticate the calling of other APIs.

You can also learn how to construct a request to call an API through the video tutorial.

Request URI

A request URI is in the following format:

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

Table 3-2 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 Endpoints . For example, the endpoint of IAM in the CN North-Beijing4 region is iam.cn-north-4.myhuaweicloud.com .
resource-path	Access path of an API for performing a specified operation. Obtain the path from the URI of an API. For example, the resource-path of the API used to obtain a user token is /v3/auth/tokens .
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, ? limit=10 indicates that a maximum of 10 data records will be displayed.

For example, to obtain an IAM token in **CN North-Beijing4**, obtain the endpoint of IAM (iam.cn-north-4.myhuaweicloud.com) for this region and the **resource-path** (**/v3/auth/tokens**) in the URI of the API used to **obtain a user token**. Then, construct the URI as follows:

```
https://iam.cn-north-4.myhuaweicloud.com/v3/auth/tokens
```

 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 Method

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

Table 3-3 HTTP methods

Method	Description
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 API used to **obtain a user token**, the request method is **POST**. The request is as follows:

```
POST https://iam.cn-north-4.myhuaweicloud.com/v3/auth/tokens
```

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.

Table 3-4 describes common request header fields.

Table 3-4 Common request header fields

Parameter	Description	Mandatory	Example Value
Content-type	Request body type or format. Its default value is application/json .	Yes	application/json

Parameter	Description	Mandatory	Example Value
Content-Length	Length of the request body. The unit is byte.	This parameter is mandatory for POST and PUT requests, but must be left blank for GET requests.	3495
X-Project-Id	Project ID. This parameter is used to obtain the token for each project.	No	e9993fc787d94b6c886cbaa340f9c0f4
X-Auth-Token	User token, a response to the API used to obtain a user token . This API is the only one that does not require authentication.	No This parameter is mandatory for token authentication.	N/A
X-Sdk-Date	Time when the request is sent. The time is in YYYYMMDD'T'HHMMS'Z' format. The value is the current Greenwich Mean Time (GMT) of the system.	No If AK and SK are used for API authentication, this parameter must be configured. If PKI token is used, you do not need to configure this parameter.	20190307T101459Z
Authorization	Signature authentication information. The value is obtained from the request signature result and is required when the AK and SK are used to encrypt the signature. Type: string Default value: none	No This parameter is mandatory for AK/SK authentication.	SDK-HMAC-SHA256 Credential=ZIRRKMT WPTQFQ1WKNKB/ 20150907//ec2/ sdk_request, SignedHeaders=content-type;host;x-sdk-date, Signature=55741b610f3c9fa3ae40b5a8021ebf7ebc2a28a603fc62d25cb3bfe6608e1994

Parameter	Description	Mandatory	Example Value
Host	Information about the requested server. The value can be obtained from the URL of the service API. The value is <i>hostname[:port]</i> . If the port number is not specified, the default port is used. The default port number for https is 443 .	No This parameter is mandatory for AK/SK authentication.	code.test.com or code.test.com:443

NOTE

In addition to supporting token-based authentication, public cloud APIs also support authentication using access key ID/secret access key (AK/SK). During AK/SK-based authentication, an SDK is used to sign the request, and the **Authorization** (signature information) and **X-Sdk-Date** (time when the request is sent) header fields are automatically added to the request. For more details, see [API Request Signing Guide](#).

For example, the API used to [obtain a user token](#) does not require authentication. Therefore, only the **Content-Type** field needs to be added to requests for calling the API. An example of such requests is as follows:

```
POST https://iam.cn-north-4.myhuaweicloud.com/v3/auth/tokens
Content-Type: application/json
```

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 API used to [obtain a user token](#), the request parameters and parameter description can be obtained from the API request. The following provides an example request with a body included. Replace **username**, **domainname**, and ********* (login password) with the actual values. **cn-north-4** indicates the project name. To learn how to obtain your username, account name, and project ID, see [Obtaining the Username, Account Name, and Project Name](#).

 NOTE

- The **scope** parameter specifies where a token takes effect. Its value can be **project** or **domain**. In the preceding example, the value of **scope** is **project**, indicating that the obtained token can access only resources of the specified project. If the value of **scope** is **domainname**, the obtained token can access all resources of the specified account. For details, see [Obtaining a User Token](#).
- **project name**: On the **My Credentials** page, the value in the **Project** column is the project name. For details about how to obtain the project name, see [Obtaining the Username, Account Name, and Project Name](#).

```
POST https://iam.cn-north-4.myhuaweicloud.com/v3/auth/tokens
Content-Type:application/json
{
  "auth": {
    "identity": {
      "methods": ["password"],
      "password": {
        "user": {
          "name": "username",
          "password": "*****",
          "domain": {
            "name": "domainname"
          }
        }
      }
    },
    "scope": {
      "project": {
        "name": "cn-north-4"
      }
    }
  }
}
```

If all data required for the API request is available, you can send the request to call the API through curl, Postman, or coding. In the response to the API used to [obtain a user token](#), **x-subject-token** is the desired user token. This token can then be used to authenticate the calling of other APIs.

3.3 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.

When calling the API to **obtain a user token**, you must set **auth.scope** in the request body to **project**.

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

After a token is obtained, the **X-Auth-Token** header field must be added to requests to specify the token for calling other APIs. For example, if the token is **ABCDEFJ....**, **X-Auth-Token: ABCDEFJ....** can be added to a request as follows:

```
GET https://iam.cn-north-4.myhuaweicloud.com/v3/auth/projects
Content-Type: application/json
X-Auth-Token: ABCDEFJ....
```

You can also learn how to use token authentication in this video tutorial.

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 signing 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.

3.4 Response

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

Status Code

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](#).

For example, if status code **201** is returned for the calling of the API used to [obtain a user token](#), the request is successful.

Response Header

Similar to a request, a response also has a header, for example, **Content-Type**.

Table 3-5 Common response headers

Parameter	Description	Mandatory
Content-Type	Media type of the message body sent to a receiver Type: string Default value: application/json; charset=UTF-8	Yes
X-request-id	This field carries the request ID for task tracing. Type: string. request_id-timestamp-hostname (The request_id is the UUID generated on the server. timestamp indicates the current timestamp, and hostname is the name of the server that processes the current API.) Default value: none	No
X-ratelimit	This field carries the total number of flow control requests. Type: integer Default value: none	No
X-ratelimit-used	This field carries the number of remaining requests. Type: integer Default value: none	No

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

```
{
  "error_message": "The format of message is error",
  "error_code": "AS.0001"
}
```

In the response body, `error_code` is an error code, and `error_message` provides information about the error. For details, see [Error Codes](#).

4 Video Analysis Service APIs

4.1 Creating a Job

Function

Create a job for the selected video analysis service.

URI

- URI format:
POST /v2/{project_id}/services/{service_name}/tasks
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID corresponding to the region where the service is located. For details about how to obtain the project ID, see Obtaining the Project ID .
service_name	Yes	String	Name of the selected video analysis service.

Request Parameters

- Example request
POST /v2/6204a5bd270343b5885144cf9c8c158d/services/video-analyze/tasks
{
 "name": "task-est",
 "description": "description",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4"
 }
]
 }
}

```

    }
  ]
},
"output": {
  "obs": {
    "bucket": "obs-iva",
    "path": "output/"
  }
},
"service_version": "1.0"
}

```

- Request parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Job name, which consists of 1 to 100 characters, including letters (A to Z and a to z), digits (0 to 9), hyphens (-), and underscores (_).
description	No	String	Job description, which consists of a maximum of 500 characters.
input	Yes	Object	List of input video data. For details, see task.input .
service_version	Yes	String	Version.
output	Yes	Object	List of output result data. For details, see task.output .

Response Parameters

- Example response

```

[
  { "id": "f18320e61e4c4dc685aa2dfc22a28dc5" }
]

```

- Job ID description

Parameter	Type	Description
id	String	Job ID

Status Codes

- Normal
201
- Abnormal

Status Code	Description
400 Bad Request	Request error. For details about the returned error code, see Error Codes .
401 Unauthorized	Authentication failed.
403 Forbidden	No operation permission.
404 Not Found	The requested resource was not found.
500 Internal Server Error	Internal service error.
503 Service Unavailable	Service unavailable.

4.2 Obtaining the Job List

Function

Query the job list of the selected video analysis service.

URI

- URI format:
GET /v2/{project_id}/services/{service_name}/tasks
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
service_name	Yes	String	Name of the selected video analysis service

Request Parameters

- Example request
GET /v2/6204a5bd270343b5885144cf9c8c158d/services/video-analyze/tasks
- For details, see [queryOption](#).

Response Parameters

- Example response

```
{
  "count": 1,
  "tasks": [
    {
      "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
      "name": "task01",
      "description": "sss",
      "input": {
        "type": "obs",
        "data": [
          {

```

```

        "bucket": "obs-iva",
        "path": "input/demo.mp4"
      }
    ]
  },
  "output": {
    "obs": {
      "bucket": "obs-iva",
      "path": "output/"
    }
  },
  "service_version": "1.0",
  "state": "RUNNING",
  "created_at": "2018-06-12T13:00:01Z",
  "updated_at": "2018-06-13T13:00:01Z"
}
]
}

```

- Response parameters

Parameter	Type	Description
tasks	Array of taskDetail	Job details. For details, see task.detail .
count	Integer	Total number of records that meet the search criteria

Status Codes

- Normal
200
- Abnormal

Status Code	Description
400 Bad Request	Request error. For details about the returned error code, see Error Codes .
401 Unauthorized	Authentication failed.
403 Forbidden	No operation permission.
404 Not Found	The requested resource was not found.
500 Internal Server Error	Internal service error.
503 Service Unavailable	Service unavailable.

4.3 Obtaining Job Details

Function

Query and display details about a single job of the selected video analysis service.

URI

- URI format:
GET /v2/{project_id}/services/{service_name}/tasks/{task_id}
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
service_name	Yes	String	Name of the selected video analysis service
task_id	Yes	String	Job ID

Request Parameters

Example request

```
GET /v2/6204a5bd270343b5885144cf9c8c158d/services/video-analyze/tasks/
f18320e61e4c4dc685aa2dfc22a28dc5
```

Response Parameters

- Example response

```
{
  "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
  "name": "task",
  "description": "sss",
  "input": {
    "type": "obs",
    "data": [
      {
        "bucket": "obs-iva",
        "path": "input/demo.mp4"
      }
    ]
  },
  "output": {
    "obs": {
      "bucket": "obs-iva",
      "path": "output/"
    }
  },
  "service_version": "1.0",
  "state": "ABNORMAL",
  "created_at": "2018-06-12T13:00:01Z",
  "updated_at": "2018-06-13T13:00:01Z"
}
```

- Response parameters

Parameter	Type	Description
taskDetail	Object	Job details. For details, see task.detail .

Status Codes

- Normal

200

- Abnormal

Status Code	Description
400 Bad Request	Request error. For details about the returned error code, see Error Codes .
401 Unauthorized	Authentication failed.
403 Forbidden	No operation permission.
404 Not Found	The requested resource was not found.
500 Internal Server Error	Internal service error.
503 Service Unavailable	Service unavailable.

4.4 Deleting a Job

Function

Delete a specified job of the selected video analysis service based on the job ID.

URI

- URI format:
DELETE /v2/{project_id}/services/{service_name}/tasks/{task_id}
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID
service_name	Yes	String	Name of the selected video analysis service
task_id	Yes	String	Job ID

Request Parameters

Example request
DELETE /v2/6204a5bd270343b5885144cf9c8c158d/services/video-analyze/tasks/
f18320e61e4c4dc685aa2dfc22a28dc5

Response Parameters

- Example response when the deletion fails

```
{
  "error_code": "IVA.0005",
  "error_msg": "The requested resource is NOT found. The taskId
f18320e61e4c4dc685aa2dfc22a28dc5 is not found."
}
```

- Response parameters

Parameter	Description
error_code	Error code
error_msg	Error message

Status Codes

- Normal

If the output type is **hosting**, status code **202** is returned. Otherwise, status code **200** is returned.

- Abnormal

Status Code	Description
400 Bad Request	Request error. For details about the returned error code, see Error Codes .
401 Unauthorized	Authentication failed.
403 Forbidden	No operation permission.
404 Not Found	The requested resource was not found.
500 Internal Server Error	Internal service error.
503 Service Unavailable	Service unavailable.

5 Video Content Recognition APIs

5.1 Video OCR

5.1.1 Creating a Video OCR Job

Function

Create a video OCR job to recognize and extract key details or illegal content by analyzing the text content in a video.

NOTE

- Supported video formats: AVI, WMV, MPG, MPEG, MP4, MOV, M4V, MKV
- Videos cannot be stored in OBS buckets encrypted by KMS.
- The size of a single video cannot exceed 4 GB.
- When data is read from a specified URL, the video size cannot exceed 1 GB.
- Numbers, English subtitles, and simplified and traditional Chinese characters can all be identified.
- Horizontal and vertical text can be recognized, as well as many unclear or artistic fonts, but text arranged into a circle or viewed from a severe angle are typically not handled well.
- The video resolution must be at least 300 x 300 pixels.
- The video frame rate must be greater than 1 fps.
- Supported regions: CN North-Beijing1 and CN North-Beijing4.

URI

- URI format:
POST /v2/{project_id}/services/video-ocr/tasks
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID corresponding to the region where the service is located. For details about how to obtain the project ID, see Obtaining the Project ID .

Request

- Example request

POST /v2/6204a5bd270343b5885144cf9c8c158d/services/video-ocr/tasks

```
{
  "name": "task-est",
  "description": "description",
  "input": {
    "type": "obs",
    "data": [
      {
        "bucket": "obs-iva",
        "path": "input/demo.mp4"
      }
    ]
  },
  "output": {
    "obs": {
      "bucket": "obs-iva",
      "path": "output/"
    }
  },
  "service_config": {
    "common": {
      "area": "0,0,0.5,0.5;"
      "threshold": 0.5
    }
  },
  "service_version": "1.0"
}
```

- Parameters

Parameter	Mandatory	Type	Description
name	Yes	String	Job name, which consists of 1 to 100 characters, including letters (A to Z and a to z), digits (0 to 9), hyphens (-), and underscores (_).
description	No	String	Job description, which consists of a maximum of 500 characters.

Parameter	Mandatory	Type	Description
input	Yes	Object	<p>List of input video data. Currently, only the following input types are supported:</p> <ul style="list-style-type: none"> • obs: Read video data from OBS on HUAWEI CLOUD. The video size cannot exceed 4 GB. Videos encrypted by KMS cannot be stored in OBS buckets. • url: Read video data from a specified URL. The video size cannot exceed 1 GB. Currently, only the URL of OBS is supported. You need to grant the anonymous users the permission to read the URL. For details, see Bucket ACL Overview. <p>For details, see task.input.</p>
output	Yes	Object	<p>List of output result data. Currently, only the following output types are supported:</p> <ul style="list-style-type: none"> • obs: Export the results to the OBS bucket you specified. • hosting: Host the results on OBS at the service side. The OBS path is specified by the service. You can obtain the path by using the API that queries a single task. For details, see Querying a Single Job. <p>For details, see task.output.</p>
service_config	No	Object	<p>Service algorithm configuration. The field structure is related to the service. For details about the parameter definition, see serviceConfig field structure description.</p>
service_version	Yes	String	<p>Version, which is set to 1.0.</p>

- **service_config** field structure description

Parameter	Mandatory	Type	Description
area	No	String	Selected area for text recognition. Use semicolons (;) to divide different areas. The first two values of each area represent the percentage coordinates of (x, y) in the upper left corner of the area. The last two digits indicate the percentage of the width and height of the selected area. This value ranges from 0 to 1. There is no default value.
threshold	No	Float	A confidence threshold for the text that is outputted. A higher threshold means a more accurate output and a lower extraction rate. The value ranges from 0 to 1.00, with a default value of 0.50.

Response Parameters

- Example response

```
[
  { "id": "f18320e61e4c4dc685aa2dfc22a28dc5" }
]
```

- Job ID description

Parameter	Type	Description
id	String	Job ID

Recognition Results

The video analysis results are saved in JSON format in the output path you specified.

- Example result file

```
{
  "name": "obs-wxh/demo.mp4",
  "fps": 15,
  "contents": [
    {
      "time_start": "00:00:00",
      "time_end": "00:00:01",
      "content": [
        "Cloud Boosting Business Innovation"
      ]
    }
  ]
}
```

```

"Digital Painting Future"
"2018 World Artificial Intelligence Conference"
  ]
},
{
  "time_start": "00:00:01",
  "time_end": "00:00:02",
  "content": [
"Cloud Boosting Business Innovation"
"Digital Painting Future"
"Changes Brought by AI Have Just Begun"
  ]
},
{
  "time_start": "00:00:03",
  "time_end": "00:00:04",
  "content": [
"Phase 1"
"Technical Productivity for General Purpose"
"Application Development Curve"
  ]
}
]
}

```

- Fields in the result file

Field	Description
name	Video name
fps	Frame rate
time_start	Content start time
time_end	Content end time
content	Text identified

Status Codes

- Normal
201
- Abnormal

Status Code	Description
400 Bad Request	Request error. For details about the returned error code, see Error Codes .
401 Unauthorized	Authentication failed.
403 Forbidden	No operation permission.
404 Not Found	The requested resource was not found.
500 Internal Server Error	Internal service error.
503 Service Unavailable	Service unavailable.

5.1.2 Querying the Job List

Function

Query and display the video OCR job list.

URI

- URI format:
GET /v2/{project_id}/services/video-ocr/tasks
- Parameters

Parameter	Mandatory	Type	Description
project_id	Yes	String	Project ID. For details about how to obtain the project ID, see Obtaining a Project ID .

Request Parameters

- Example request
GET /v2/6204a5bd270343b5885144cf9c8c158d/services/video-ocr/tasks
- For details about the request parameters, see [queryOption](#).

Response Parameters

- Example response
- ```
{
 "count": 1,
 "tasks": [
 {
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
 "name": "ocr-task",
 "description": "sss",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4"
 }
]
 },
 "output": {
 "obs": {
 "bucket": "obs-iva",
 "path": "output/"
 }
 },
 "service_config": {
 "common": {
 "area": "0,0,0.5,0.5",
 "threshold": 0.5
 }
 }
 }
],
 "service_version": "1.0",
}
```

```
"state": "RUNNING",
"created_at": "2018-06-12T13:00:01Z",
"updated_at": "2018-06-13T13:00:01Z"
}
]
}
```

- Response parameters

| Parameter | Type                | Description                                                 |
|-----------|---------------------|-------------------------------------------------------------|
| tasks     | Array of taskDetail | Job details. For details, see <a href="#">task.detail</a> . |
| count     | Integer             | Total number of records that meet the search criteria       |

## Status Codes

- Normal  
200
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 5.1.3 Querying a Single Job

### Function

Query and display the details of a single job.

### URI

- URI format:  
GET /v2/{project\_id}/services/video-ocr/tasks/{task\_id}
- 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> . |
| task_id    | Yes       | String | Job ID                                                                                                   |

## Request Parameters

### Example request

```
GET /v2/6204a5bd270343b5885144cf9c8c158d/services/video-ocr/tasks/
f18320e61e4c4dc685aa2dfc22a28dc5
```

## Response Parameters

- Example response

```
{
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
 "name": "ocr-task",
 "description": "sss",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4"
 }
]
 },
 "output": {
 "obs": {
 "bucket": "obs-iva",
 "path": "output/"
 }
 },
 "service_config": {
 "common": {
 "gpu_device_ID": "0"
 }
 },
 "service_version": "1.0",
 "state": "ABNORMAL",
 "created_at": "2018-06-12T13:00:01Z",
 "updated_at": "2018-06-13T13:00:01Z"
}
```

- Response parameters

| Parameter  | Type   | Description                                                 |
|------------|--------|-------------------------------------------------------------|
| taskDetail | Object | Job details. For details, see <a href="#">task.detail</a> . |

## Status Codes

- Normal  
200

- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 5.1.4 Deleting a Job

### Function

Delete a specified job.

### URI

- URI format:  
DELETE /v2/{project\_id}/services/video-ocr/tasks/{task\_id}
- Parameters

| Parameter  | Mandatory | Type   | Description |
|------------|-----------|--------|-------------|
| project_id | Yes       | String | Project ID  |
| task_id    | Yes       | String | Job ID      |

### Request Parameters

Example request

```
DELETE /v2/6204a5bd270343b5885144cf9c8c158d/services/video-ocr/tasks/
f18320e61e4c4dc685aa2dfc22a28dc5
```

### Response Parameters

- Example response when the deletion fails

```
{
 "error_code": "IVA.0005",
 "error_msg": "The requested resource is NOT found. The taskid
f18320e61e4c4dc685aa2dfc22a28dc5 is not found."
}
```
- Response parameters

| Parameter  | Description                                                |
|------------|------------------------------------------------------------|
| error_code | Error code. For details, see <a href="#">Error Codes</a> . |

| Parameter | Description   |
|-----------|---------------|
| error_msg | Error message |

## Status Codes

- Normal  
If the output type is **hosting**, status code **202** is returned. Otherwise, status code **200** is returned.
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 5.2 Video Celebrity Analysis

### 5.2.1 Creating a Video Celebrity Analysis Job

#### Function

Create a video celebrity analysis job to recognize and analyze political figures and celebrities in videos and warn you of sensitive content in the videos. This helps you quickly locate and handle sensitive content in videos and reduce any non-compliance risks in your business.

#### NOTE

- Supported video formats: AVI, WMV, MPG, MPEG, MP4, MOV, M4V, MKV
- Videos cannot be stored in OBS buckets encrypted by KMS.
- The size of a single video cannot exceed 4 GB.
- When data is read from a specified URL, the video size cannot exceed 1 GB.
- The facial image must be at least 40 x 40 pixels.
- Faces can be recognized with up to  $\pm 15^\circ$  pitch and  $\pm 30^\circ$  yaw.
- A maximum of 20 faces can be identified at the same time.
- Supported regions: CN North-Beijing1 and CN North-Beijing4.

## URI

- URI format:  
POST /v2/{project\_id}/services/video-celebrity-recognition/tasks
- Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                         |
|------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID corresponding to the region where the service is located. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> . |

## Request Parameters

- Example request  
POST /v2/6204a5bd270343b5885144cf9c8c158d/services/video-celebrity-recognition/tasks  

```
{
 "name": "task-est",
 "description": "description",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4"
 }
]
 },
 "output": {
 "obs": {
 "bucket": "obs-iva",
 "path": "output/"
 }
 },
 "service_version": "1.0"
}
```
- Parameters

| Name        | Mandatory | Type   | Description                                                                                                                               |
|-------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------|
| name        | Yes       | String | The task name. It can be up to 100 characters long and can include Chinese characters, letters, digits, underscores (_), and hyphens (-). |
| description | No        | String | A task description. It can be up to 500 characters long.                                                                                  |

| Name            | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| input           | Yes       | Object | List of input video data. Currently, the following input types are supported: <ul style="list-style-type: none"><li>• <b>obs</b>: Read video data from OBS on HUAWEI CLOUD. The video size cannot exceed 4 GB. Videos encrypted by KMS cannot be stored in OBS buckets.</li><li>• <b>url</b>: Read video data from a specified URL. The video size cannot exceed 1 GB. Currently, only the URL of OBS is supported. You need to grant the anonymous users the permission to read the URL. For details, see <a href="#">Bucket ACL Overview</a>.</li></ul> For details, see <a href="#">task.input</a> . |
| service_version | Yes       | String | Function version: <b>1.0</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| output          | Yes       | Object | List of output result data. Currently, only the following output types are supported: <ul style="list-style-type: none"><li>• <b>obs</b>: Export the results to the OBS bucket you specified.</li><li>• <b>hosting</b>: Host the results on OBS at the service side. The OBS path is specified by the service. You can obtain the path by using the API that queries a single task. For details, see <a href="#">Querying a Single Job</a>.</li></ul> For details, see <a href="#">task.output</a> .                                                                                                    |

## Response Message

- Example response

```
[
 {
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5"
 }
]
```

- Parameters

| Name | Type   | Description |
|------|--------|-------------|
| id   | String | Task ID.    |

## Video Analysis Results

- The video analysis results are saved, in **JSON** format, to a location you have specified. Typical file content is as follows:

```

"frames": [
 {
 "url": "obs-dushubao/wxh_hjx/videopolitics/est/shijiuda30min.mp4.capture/3018.jpg",
 "offset": "00:02:00",
 "result": [
 {
 "Label": "Xi Jinping",
 "confidence": 0.6001852750778198,
 "face_detail": {
 "h": 71,
 "w": 50,
 "x": 302,
 "y": 167
 }
 },
 {
 "Label": "Jiang Zemin",
 "confidence": 0.7005537152290344,
 "face_detail": {
 "h": 61,
 "w": 48,
 "x": 420,
 "y": 247
 }
 }
]
 }
]

```

- Fields in the results file

| Field       | Description                                                                                                                                                                                                                                                                            |
|-------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| frames      | Video frame identification results                                                                                                                                                                                                                                                     |
| url         | Video frame storage location                                                                                                                                                                                                                                                           |
| offset      | Time when the identification was performed                                                                                                                                                                                                                                             |
| result      | Information about the detected celebrity                                                                                                                                                                                                                                               |
| label       | The name of the detected celebrity                                                                                                                                                                                                                                                     |
| confidence  | Results confidence                                                                                                                                                                                                                                                                     |
| face_detail | Facial details (in pixels) <ul style="list-style-type: none"> <li>• <b>h</b>: Area height.</li> <li>• <b>w</b>: Area width.</li> <li>• <b>x</b>: X-coordinate of the upper left corner of the area.</li> <li>• <b>y</b>: Y-coordinate of the upper left corner of the area.</li> </ul> |

## Status Codes

- Normal  
201
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 5.2.2 Querying the Job List

### Function

Query and display the list of video celebrity analysis jobs.

### URI

- URI format:  
GET /v2/{project\_id}/services/video-celebrity-recognition/tasks
- 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 Parameters

- Example request  
GET /v2/6204a5bd270343b5885144cf9c8c158d/services/video-celebrity-recognition/tasks
- For details about the request parameters, see [queryOption](#).

### Response Parameters

- Example response

```

{
 "count": 1,
 "tasks": [
 {
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
 "name": "task",
 "description": "sss",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4"
 }
]
 }
 }
]
}

```

```

]
 },
 "output": {
 "obs": {
 "bucket": "obs-iva",
 "path": "output/"
 }
 },
 "service_version": "1.0",
 "state": "RUNNING",
 "created_at": "2018-06-12T13:00:01Z",
 "updated_at": "2018-06-13T13:00:01Z"
}
]
}

```

- Response parameters

| Parameter | Type                | Description                                                 |
|-----------|---------------------|-------------------------------------------------------------|
| tasks     | Array of taskDetail | Job details. For details, see <a href="#">task.detail</a> . |
| count     | Integer             | Total number of records that meet the search criteria       |

## Status Codes

- Normal  
200
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 5.2.3 Querying a Single Job

### Function

Query and display the details of a single job.

### URI

- URI format:  
GET /v2/{project\_id}/services/video-celebrity-recognition/tasks/{task\_id}

- 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> . |
| task_id    | Yes       | String | Job ID                                                                                                   |

## Request Parameters

Example request

```
GET /v2/6204a5bd270343b5885144cf9c8c158d/services/video-celebrity-recognition/tasks/f18320e61e4c4dc685aa2dfc22a28dc5
```

## Response Parameters

- Example response

```
{
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
 "name": "task",
 "description": "sss",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4"
 }
]
 },
 "output": {
 "obs": {
 "bucket": "obs-iva",
 "path": "output/"
 }
 },
 "service_version": "1.0",
 "state": "ABNORMAL",
 "created_at": "2018-06-12T13:00:01Z",
 "updated_at": "2018-06-13T13:00:01Z"
}
```

- Response parameters

| Parameter  | Type   | Description                                                 |
|------------|--------|-------------------------------------------------------------|
| taskDetail | Object | Job details. For details, see <a href="#">task.detail</a> . |

## Status Codes

- Normal  
200
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 5.2.4 Deleting a Job

### Function

Delete a specified job.

### URI

- URI format:  
DELETE /v2/{project\_id}/services/video-celebrity-recognition/tasks/{task\_id}
- 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> . |
| task_id    | Yes       | String | Job ID                                                                                                   |

### Request Parameters

Example request

```
DELETE /v2/6204a5bd270343b5885144cf9c8c158d/services/video-celebrity-recognition/tasks/f18320e61e4c4dc685aa2dfc22a28dc5
```

### Response Parameters

- Example response when the deletion fails
 

```
{
 "error_code": "IVA.0005",
 "error_msg": "The requested resource is NOT found. The taskId f18320e61e4c4dc685aa2dfc22a28dc5 is not found."
}
```
- Response parameters

| Parameter  | Description                                                |
|------------|------------------------------------------------------------|
| error_code | Error code. For details, see <a href="#">Error Codes</a> . |
| error_msg  | Error message                                              |

## Status Codes

- Normal  
If the output type is **hosting**, status code **202** is returned. Otherwise, status code **200** is returned.
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

# 6 Video Content Processing APIs

---

## 6.1 Video Topics Segmentation

### 6.1.1 Creating a Video Topics Segmentation Job

#### Function

Create a video topics segmentation job to improve the efficiency of video recognition, editing, and retrieval by quickly and accurately segmenting a long video into segments of different topics.

#### NOTE

- Supported video formats: AVI, WMV, MPG, MPEG, MP4, MOV, M4V, MKV
- Videos cannot be stored in OBS buckets encrypted by KMS.
- The size of a single video cannot exceed 4 GB.
- When data is read from a specified URL, the video size cannot exceed 1 GB.
- This subservice only applies to standard news videos with news anchors identified.
- A face can only be identified if the facial image includes at least 60 pixels.
- Faces of news anchors must be in the valid area (excluding the 10% edge area).
- A news anchor can be identified only when the front face of the news anchor appears for at least three times and retain on the image consistently for at least 2 seconds each time.
- A maximum of 3 news anchors can be identified simultaneously.
- Supported regions: CN North-Beijing1 and CN North-Beijing4.

#### URI

- URI format:  
POST /v2/{project\_id}/services/video-topic-segmentation-svc/tasks
- Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                         |
|------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID corresponding to the region where the service is located. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> . |

## Request Parameters

- Example request 1 (input type: **url**; output type: **obs**)

```
POST /v2/{project_id}/services/video-topic-segmentation-svc/task
{
 "name": "url-obs",
 "input": {
 "type": "url",
 "data": [{
 "url": "https://obs-vcn.obs.cn-north-1.myhwclouds.com/videos/est_h264.mp4"
 }]
 },
 "output": {
 "obs": {
 "bucket": "obs-zuubo",
 "path": "out_put/"
 }
 },
 "service_version": "1.0"
}
```

- Example request 2 (input type: **url**; output type: **hosting**)

```
POST /v2/{project_id}/services/video-topic-segmentation-svc/tasks
{
 "name": "url-hosting",
 "input": {
 "type": "url",
 "data": [{
 "url": "https://obs-vcn.obs.cn-north-1.myhwclouds.com/videos/est_h264.mp4"
 }]
 },
 "output": {
 "hosting": {}
 },
 "service_version": "1.0"
}
```

- Example request 3 (input type: **obs**; output type: **obs**)

```
POST /v2/{project_id}/services/video-topic-segmentation-svc/tasks
{
 "name": "obs-obs",
 "description": "description",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4"
 }
]
 },
 "output": {
 "obs": {
 "bucket": "obs-iva",
 "path": "output/"
 }
 }
}
```

```
},
"service_version": "1.0"
}
```

- Example request 4 (input type: **obs**; output type: **hosting**)

POST /v2/{project\_id}/services/video-topic-segmentation-svc/tasks

```
{
 "name": "obs-hosting",
 "input": {
 "type": "obs",
 "data": [{
 "bucket": "obs-henayou",
 "path": "inputs/201807271900.mp4"
 }]
 },
 "output": {
 "hosting": {}
 },
 "service_version": "1.0"
}
```

- Parameters

| Parameter       | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name            | Yes       | String | Job name, which consists of 1 to 100 characters, including letters (A to Z and a to z), digits (0 to 9), hyphens (-), and underscores (_).                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| description     | No        | String | Job description, which consists of a maximum of 500 characters.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| input           | Yes       | Object | List of input video data. Currently, only the following input types are supported: <ul style="list-style-type: none"> <li>• <b>obs</b>: Read video data from OBS on HUAWEI CLOUD. The video size cannot exceed 4 GB. Videos encrypted by KMS cannot be stored in OBS buckets.</li> <li>• <b>url</b>: Read video data from a specified URL. The video size cannot exceed 1 GB. Currently, only the URL of OBS is supported. You need to grant the anonymous users the permission to read the URL. For details, see <a href="#">Bucket ACL Overview</a>.</li> </ul> For details, see <a href="#">task.input</a> . |
| service_version | Yes       | String | Version, which is set to <b>1.0</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| output    | Yes       | Object | <p>List of output result data. Currently, only the following output types are supported:</p> <ul style="list-style-type: none"> <li>• <b>obs</b>: Export the results to the OBS bucket you specified.</li> <li>• <b>hosting</b>: Host the results on OBS at the service side. The OBS path is specified by the service. You can obtain the path by using the API that queries a single task. For details, see <a href="#">Querying a Single Job</a>.</li> </ul> <p>For details, see <a href="#">task.output</a>.</p> |

## Response Parameters

- Example response

```
[
 {
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5"
 }
]
```

- Job ID description

| Parameter | Type   | Description |
|-----------|--------|-------------|
| id        | String | Job ID      |

## Video Topics Segmentation Results

The video topics segmentation results are saved in JSON format in the output path you specified.

- Example result file

```
{
 "fps":25,
 "results":[
 {
 "frame":467,
 "time":"00:00:18:17"
 },
 {
 "frame":1374,
 "time":"00:00:54:24"
 }
]
}
```

- Field description

| Field   | Description                       |
|---------|-----------------------------------|
| fps     | Video frame rate                  |
| results | Array of the segmentation results |
| frame   | Frame number of the split point   |
| time    | Time of the split point           |

## Status Codes

- Normal  
201
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 6.1.2 Querying the Job List

### Function

Query and display the video topic segmentation job list.

### URI

- URI format:  
GET /v2/{project\_id}/services/video-topic-segmentation-svc/tasks
- 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 Parameters

- Example request  
GET /v2/{project\_id}/services/video-topic-segmentation-svc/tasks
- For parameters in the request URL, see [queryOption](#).

## Response Parameters

- Example response 1 (output type: **obs**)

```
{
 "count": 1,
 "tasks": [
 {
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
 "name": "ocr-task",
 "description": "sss",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4"
 }
]
 }
 }
],
 "service_version": "1.0",
 "state": "RUNNING",
 "created_at": "2018-06-12T13:00:01Z",
 "updated_at": "2018-06-13T13:00:01Z"
}
```

- Example response 2 (output type: **hosting**)

```
{
 "count": 1,
 "tasks": [
 {
 "service_version": "1.0",
 "output": {
 "hosting": {
 "obs": [
 {
 "bucket": "obs-vas-hosting",
 "path": "video_topics_segmentation/f18320e61e4c4dc685aa2dfc22a28dc5/inputs/20180718CCTV2caijing_part.mp4.json"
 },
 {
 "bucket": "obs-vas-hosting",
 "path": "video_topics_segmentation/f18320e61e4c4dc685aa2dfc22a28dc5/inputs/zhongguoxinwei.mp4.json"
 },
 {
 "bucket": "obs-vas-hosting",
 "path": "video_topics_segmentation/f18320e61e4c4dc685aa2dfc22a28dc5/inputs/201807271900.mp4.json"
 },
 {
 "bucket": "obs-vas-hosting",
 "path": "video_topics_segmentation/f18320e61e4c4dc685aa2dfc22a28dc5/result.json"
 }
],
 "result_json_overdue_at": "2018-11-29T04:37:49Z"
 }
 },
 "input": {
 "type": "obs",
 "data": [

```

```

 {
 "bucket": "obs-henyou",
 "path": "inputs/20180718CCTV2caijing_part.mp4",
 "index": 0
 },
 {
 "bucket": "obs-henyou",
 "path": "inputs/zhongguoxinwei.mp4",
 "index": 1
 },
 {
 "bucket": "obs-hendayou",
 "path": "inputs/201807271900.mp4",
 "index": 2
 }
]
},
"created_at": "2018-11-27T04:34:11Z",
"name": "est-hosting",
"id": "f18320e61e4c4dc685aa2dfc22a28dc5",
"state": "SUCCEEDED",
"hosting_result": {
 "overdueDate": "2018-11-29T04:37:49Z",
 "data": "[\n{\n \"name\": \"obs-henyou/inputs/20180718CCTV2caijing_part.mp4\", \"fps\": 25, \"result\": [\n {\n \"frame\": 1127, \"time\": \"00:00:45:02\", \"frame\": 3587, \"time\": \"00:02:23:12\", \"frame\": 5121, \"time\": \"00:03:24:21\", \"frame\": 8020, \"time\": \"00:05:20:20\", \"frame\": 9978, \"time\": \"00:06:39:03\", \"frame\": 12393, \"time\": \"00:08:15:18\" }\n],\n \"name\": \"obs-hendayou/inputs/zhongguoxinwei.mp4\", \"fps\": 25, \"result\": [\n {\n \"frame\": 509, \"time\": \"00:00:20:09\", \"frame\": 3834, \"time\": \"00:02:33:09\", \"frame\": 4831, \"time\": \"00:03:13:06\", \"frame\": 5579, \"time\": \"00:03:43:04\", \"frame\": 8900, \"time\": \"00:05:56:00\", \"frame\": 10090, \"time\": \"00:06:43:15\", \"frame\": 11764, \"time\": \"00:07:50:14\", \"frame\": 14595, \"time\": \"00:09:43:20\" }\n],\n \"name\": \"obs-hendayou/inputs/201807271900.mp4\", \"fps\": 25, \"result\": [\n {\n \"frame\": 445, \"time\": \"00:00:17:20\", \"frame\": 23264, \"time\": \"00:15:30:14\", \"frame\": 24033, \"time\": \"00:16:01:08\", \"frame\": 36675, \"time\": \"00:24:27:00\", \"frame\": 40639, \"time\": \"00:27:05:14\", \"frame\": 44387, \"time\": \"00:29:35:12\" }\n]\n],\n \"fileSize\": \"966 bytes\",
 \"status\": \"AVAILABLE\"
}\n]
",
"updated_at": "2018-11-27T04:37:52Z"
}
]
}

```

- Response parameters

| Parameter | Type                | Description                                                 |
|-----------|---------------------|-------------------------------------------------------------|
| tasks     | Array of taskDetail | Job details. For details, see <a href="#">task.detail</a> . |
| count     | Integer             | Total number of records that meet the search criteria       |

## Status Codes

- Normal  
200
- Abnormal

| Status Code     | Description                                                                                 |
|-----------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |

| Status Code               | Description                           |
|---------------------------|---------------------------------------|
| 401 Unauthorized          | Authentication failed.                |
| 403 Forbidden             | No operation permission.              |
| 404 Not Found             | The requested resource was not found. |
| 500 Internal Server Error | Internal service error.               |
| 503 Service Unavailable   | Service unavailable.                  |

## 6.1.3 Querying a Single Job

### Function

Query and display the details of a single job.

### URI

- URI format:  
GET /v2/{project\_id}/services/video-topic-segmentation-svc/tasks/{task\_id}
- 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> . |
| task_id    | Yes       | String | Job ID                                                                                                   |

### Request Parameters

Example request

```
GET /v2/{project_id}/services/video-topic-segmentation-svc/tasks/f18320e61e4c4dc685aa2dfc22a28dc5
```

### Response Parameters

- Example response 1 (output type: **obs**)

```
{
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
 "name": "ocr-task",
 "description": "sss",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4"
 }
]
 },
 "service_version": "1.0",
 "state": "ABNORMAL",
}
```

```
"created_at": "2018-06-12T13:00:01Z",
"updated_at": "2018-06-13T13:00:01Z"
}
```

- Example response 2 (output type: **hosting**)

```
{
 "service_version": "1.0",
 "output": {
 "hosting": {
 "obs": [
 {
 "bucket": "obs-vas-hosting",
 "path": "video_topics_segmentation/f18320e61e4c4dc685aa2dfc22a28dc5/inputs/20180718CCTV2caijing_part.mp4.json"
 },
 {
 "bucket": "obs-vas-hosting",
 "path": "video_topics_segmentation/f18320e61e4c4dc685aa2dfc22a28dc5/inputs/zhongguoxinwei.mp4.json"
 },
 {
 "bucket": "obs-vas-hosting",
 "path": "video_topics_segmentation/f18320e61e4c4dc685aa2dfc22a28dc5/inputs/201807271900.mp4.json"
 },
 {
 "bucket": "obs-vas-hosting",
 "path": "video_topics_segmentation/f18320e61e4c4dc685aa2dfc22a28dc5/result.json"
 }
],
 "result_json_overdue_at": "2018-11-29T04:37:49Z"
 }
 },
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-henyou",
 "path": "inputs/20180718CCTV2caijing_part.mp4",
 "index": 0
 },
 {
 "bucket": "obs-henyou",
 "path": "inputs/zhongguoxinwei.mp4",
 "index": 1
 },
 {
 "bucket": "obs-henyou",
 "path": "inputs/201807271900.mp4",
 "index": 2
 }
]
 },
 "created_at": "2018-11-27T04:34:11Z",
 "name": "est-hosting",
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
 "state": "SUCCEEDED",
 "hosting_result": {
 "overdueDate": "2018-11-29T04:37:49Z",
 "data": "[\n{\n \"name\": \"obs-henyou/inputs/20180718CCTV2caijing_part.mp4\", \"fps\": 25, \"results\": [\n {\n \"frame\": 1127, \"time\": \"00:00:45:02\", \"frame\": 3587, \"time\": \"00:02:23:12\", \"frame\": 5121, \"time\": \"00:03:24:21\", \"frame\": 8020, \"time\": \"00:05:20:20\", \"frame\": 9978, \"time\": \"00:06:39:03\", \"frame\": 12393, \"time\": \"00:08:15:18\"}],\n{\n \"name\": \"obs-hendayou/inputs/zhongguoxinwei.mp4\", \"fps\": 25, \"results\": [\n {\n \"frame\": 509, \"time\": \"00:00:20:09\", \"frame\": 3834, \"time\": \"00:02:33:09\", \"frame\": 4831, \"time\": \"00:03:13:06\", \"frame\": 5579, \"time\": \"00:03:43:04\", \"frame\": 8900, \"time\": \"00:05:56:00\", \"frame\": 10090, \"time\": \"00:06:43:15\", \"frame\": 11764, \"time\": \"00:07:50:14\", \"frame\": 14595, \"time\": \"00:09:43:20\"}],\n{\n \"name\": \"obs-hendayou/inputs/201807271900.mp4\", \"fps\": 25, \"results\": [\n {\n \"frame\": 445, \"time\": \"00:00:17:20\", \"frame\": 23264, \"time\": \"00:15:30:14\", \"frame\": 24033, \"time\": \"00:16:01:08\", \"frame\": 36675, \"time\": \"00:24:27:00\", \"frame\": 40639, \"time\": \"00:27:05:14\", \"frame\":
```

```
44387,\"time\": \"00:29:35:12\"}}\n],
 \"fileSize\": \"966 bytes\",
 \"status\": \"AVAILABLE\"
},
\"updated_at\": \"2018-11-27T04:37:52Z\"
}
```

- Response parameters

| Parameter  | Type   | Description                                                 |
|------------|--------|-------------------------------------------------------------|
| taskDetail | Object | Job details. For details, see <a href="#">task.detail</a> . |

## Status Codes

- Normal  
200
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 6.1.4 Deleting a Job

### Function

Delete a specified job.

### URI

- URI format:  
DELETE /v2/{project\_id}/services/video-topic-segmentation-svc/tasks/{task\_id}
- 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> . |
| task_id    | Yes       | String | Job ID                                                                                                   |

## Request Parameters

Example request

```
DELETE /v2/{project_id}/services/video-topic-segmentation-svc/tasks/f18320e61e4c4dc685aa2dfc22a28dc5
```

## Response Parameters

- Example response when the deletion fails

```
{
 "error_code": "IVA.0005",
 "error_msg": "The requested resource is NOT found. The taskId
f18320e61e4c4dc685aa2dfc22a28dc5 is not found."
}
```

- Response parameters

| Parameter  | Description                                                |
|------------|------------------------------------------------------------|
| error_code | Error code. For details, see <a href="#">Error Codes</a> . |
| error_msg  | Error message                                              |

## Status Codes

- Normal  
If the output type is **hosting**, status code **202** is returned. Otherwise, status code **200** is returned.
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

# 7 Video Content Moderation

## 7.1 Creating a Job

### Function

Create a video content moderation job.

### URI

- URI format:

```
POST /v2/{project_id}/services/video-moderation/tasks
```

- Parameters

| Parameter  | Mandatory | Type   | Description                                                                                                                                                         |
|------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project_id | Yes       | String | Project ID corresponding to the region where the service is located. For details about how to obtain the project ID, see <a href="#">Obtaining the Project ID</a> . |

### Request Parameters

- Example request

```
POST /v2/6204a5bd270343b5885144cf9c8c158d/services/video-moderation/tasks
{
 "name": "task-test",
 "description": "description",
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "index": 0,
 "path": "input/demo.mp4"
 }
]
 }
},
```

```

"output": {
 "obs": {
 "bucket": "obs-iva",
 "path": "output/"
 },
 "hosting": {}
},
"service_config": {
 "common": {
 "frame_interval": 5,
 "categories": "porn,terrorism,politics",
 "text_categories": "porn,politics",
 "upload": "false",
 "use_ocr": "true",
 "use_sis": "true"
 }
},
"service_version": "1.2"
}

```

- Parameters

| Parameter   | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                     |
|-------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| name        | Yes       | String | Job name, which consists of 1 to 100 characters, including letters (A to Z and a to z), digits (0 to 9), hyphens (-), and underscores (_).                                                                                                                                                                                                      |
| description | No        | String | Job description, which consists of a maximum of 500 characters.                                                                                                                                                                                                                                                                                 |
| input       | Yes       | Object | Video data input list. Currently, only the following input types are supported. Only one input channel is supported at a time. <ul style="list-style-type: none"> <li><b>obs</b>: Read video data from OBS on HUAWEI CLOUD.</li> <li><b>url</b>: Read video data from a specified URL.</li> </ul> For details, see <a href="#">task.input</a> . |

| Parameter       | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| output          | Yes       | Object | <p>List of output result data. Currently, only the following output types are supported:</p> <ul style="list-style-type: none"> <li>• <b>obs</b>: Export the results to the OBS bucket you specified.</li> <li>• <b>hosting</b>: Host the results on OBS at the service side. The OBS path is specified by the service. You can obtain the path by using the API that queries a single task. For details, see <a href="#">Querying a Single Job</a>.</li> </ul> <p>For details, see <a href="#">task.output</a>.</p> |
| service_config  | No        | Object | <p>Service algorithm configuration. The field structure is related to the service. Currently, the configuration item is <b>common</b>. For details about the parameter definition, see <a href="#">serviceConfig.common field structure</a>.</p>                                                                                                                                                                                                                                                                     |
| service_version | Yes       | String | Version, which is set to <b>1.2</b> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

- service\_config.common field structure

| Parameter      | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| frame_interval | Yes       | Integer | Frame capture interval, in seconds per frame                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| categories     | Yes       | String  | <p>Video moderation scenarios.</p> <ul style="list-style-type: none"> <li>• <b>politics</b>: Detect political figures in the video.</li> <li>• <b>terrorism</b>: Detect terrorism-related element in the video.</li> <li>• <b>porn</b>: Detect pornography content in the video.</li> </ul> <p>You can set the parameter to the preceding values to check the corresponding elements.</p> <p><b>NOTE</b><br/>To configure multiple moderation scenarios, use a comma (,) to separate every two scenario names, for example, <b>categories: politics,terrorism,porn</b>.</p> |

| Parameter       | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|-----------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| text_categories | No        | String | <p>For audio or text content moderation, the following scenarios are supported:</p> <ul style="list-style-type: none"> <li>● <b>politics</b>: Detect the names of political figures appeared in audios or texts.</li> <li>● <b>porn</b>: Detect pornography content appeared in audios or texts.</li> <li>● <b>ad</b>: Detect advertisements appeared in audios or texts.</li> <li>● <b>abuse</b>: Detect abusive content appeared in audios or texts.</li> <li>● <b>contraband</b>: Detect contraband content appeared in audios or texts.</li> <li>● <b>flood</b>: Detect spam content appeared in audios or texts.</li> </ul> <p>Set this parameter to your desired scenario before using an audio or text moderation service.</p> <p><b>NOTE</b><br/>To configure multiple moderation scenarios, use a comma (,) to separate every two scenario names, for example, <b>text_categories: politics,porn</b>.</p> |
| use_sis         | No        | String | <p>Indicates whether to enable the audio content moderation.</p> <ul style="list-style-type: none"> <li>● <b>true</b>: enable</li> <li>● <b>false</b>: disable</li> </ul> <p>If this parameter is not set or is left blank, the default value is <b>false</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| use_ocr         | No        | String | <p>Indicates whether to enable the text content moderation.</p> <ul style="list-style-type: none"> <li>● <b>true</b>: enable</li> <li>● <b>false</b>: disable</li> </ul> <p>If this parameter is not set or is left blank, the default value is <b>false</b>.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| upload    | No        | String | <p>Indicates whether to upload the detected problematic images to the cloud.</p> <ul style="list-style-type: none"> <li>• <b>true</b>: enable</li> <li>• <b>false</b>: disable</li> </ul> <p>If this parameter is not set or is left blank, the default value is <b>false</b>.</p> <p>If you set <b>true</b> to this parameter, please set an OBS output directory beforehand. Otherwise, image upload would fail. Once rightfully configured, a folder named after the <i>task id</i> would be automatically created under the configured output path and the detected problematic images uploaded to that directory.</p> |

## Response Parameters

- Example response

```
[
 {
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5"
 }
]
```

- Job ID description

| Parameter | Type   | Description |
|-----------|--------|-------------|
| id        | String | Job ID      |

## Status Codes

- Normal  
201
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 7.2 Querying the Job List

### Function

Query and display the video content moderation job list.

### URI

- URI format:  
GET /v2/{project\_id}/services/video-moderation/tasks
- 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 Parameters

- Example request  
GET /v2/6204a5bd270343b5885144cf9c8c158d/services/video-moderation/tasks
- For details about the request parameters, see [queryOption](#).

### Response Parameters

- Example response
 

```
{
 "count": 1,
 "tasks": [
 {
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
 "name": "moderation-task",
 "description": "description",
 "input": {
 "data": [
 {
 "bucket": "obs-iva",
 "index": 0,
 "path": "input/demo.mp4"
 }
]
 },
 "type": "obs"
 }
],
 "output": {
 "obs": {
 "bucket": "obs-iva",
 "path": "output/"
 }
 },
 "service_config": {
 "common": {
 "categories": "porn",
 "frame_interval": 5,

```

```

 "text_categories": "porn,politics",
 "upload": "false",
 "use_ocr": "true",
 "use_sis": "true"
 }
 },
 "service_version": "1.2",
 "state": "RUNNING",
 "created_at": "2018-06-12T13:00:00Z",
 "updated_at": "2018-06-13T13:00:01Z"
 }
]
}

```

- Response parameters

| Parameter | Type                | Description                                                 |
|-----------|---------------------|-------------------------------------------------------------|
| tasks     | Array of taskDetail | Job details. For details, see <a href="#">task.detail</a> . |
| count     | Integer             | Total number of records that meet the search criteria       |

## Status Codes

- Normal  
200
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 7.3 Querying a Single Job

### Function

Query and display the details of a single job.

### URI

- URI format:  
GET /v2/{project\_id}/services/video-moderation/tasks/{task\_id}

- 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> . |
| task_id    | Yes       | String | Job ID                                                                                                   |

## Request Parameters

Example request

```
GET /v2/6204a5bd270343b5885144cf9c8c158d/services/video-moderation/tasks/f18320e61e4c4dc685aa2dfc22a28dc5
```

## Response Parameters

- Example response

```
{
 "description": "description",
 "service_version": "1.2",
 "output": {
 "obs": {
 "bucket": "obs-iva",
 "path": "output/"
 },
 "hosting": {
 "obs": [
 {
 "bucket": "obs-iva",
 "path": "hosting/f18320e61e4c4dc685aa2dfc22a28dc5/result.json"
 }
]
 },
 "result_json_overdue_at": "2019-03-01T10:32:32Z"
 },
 "input": {
 "type": "obs",
 "data": [
 {
 "bucket": "obs-iva",
 "path": "input/demo.mp4",
 "index": 0
 }
]
 },
 "created_at": "2019-03-01T10:32:12Z",
 "service_config": {
 "common": {
 "frame_interval": 1,
 "categories": "ad",
 "text_categories": "ad",
 "upload": "false",
 "use_ocr": "true",
 "use_sis": "true"
 }
 },
 "name": "video-moderation-2",
 "id": "f18320e61e4c4dc685aa2dfc22a28dc5",
 "state": "SUCCEEDED",
 "hosting_result": {
 "overdueDate": "2019-03-28T10:32:32Z",
```

```
"data": "{ \"result\": { \"frames\": [{ \"detail\": { \"ad\": [{ \"confidence\": 0, \"label\": \"ad\" }, { \"confidence\": 1, \"label\": \"normal\" }], \"ocr_ad\": [{ \"text\": \"Chinese text\" }], \"frame_begin\": 92.0, \"frame_end\": 93.0, \"frame_img_path\": \"taskrd16xsvl/92_ad.jpg\", \"frame_suggestion\": \"block\", \"suspect_categories\": [\"ocr_ad\"] }, \"suggestion\": \"block\", \"voices\": [{ \"content\": \"replace the words here to the Chinese text you need\", \"detail\": { \"ad\": [\"Chinese text\"] }, \"voice_begin\": 92.24, \"voice_end\": 117.62, \"voice_suggestion\": \"block\" }] }, \"video_path\": \"input/demo.mp4\", \"fileSize\": \"329 bytes\", \"status\": \"AVAILABLE\" }, { \"updated_at\": \"2019-03-02T10:32:34Z\" } }
```

- Response parameters

| Parameter  | Type   | Description                                                 |
|------------|--------|-------------------------------------------------------------|
| taskDetail | Object | Job details. For details, see <a href="#">task.detail</a> . |

## Result Descriptions

The video content moderation results are saved in JSON format in the output path you specified.

- Example result file

```
{
 "video_path": "demo.mp4",
 "result": {
 "frames": [
 {
 "detail": {
 "ad": [
 {
 "confidence": 0,
 "label": "ad"
 },
 {
 "confidence": 1,
 "label": "normal"
 }
],
 "ocr_ad": [
 {
 "text": "Text"
 }
]
 },
 "frame_begin": 92.0,
 "frame_end": 93.0,
 "frame_img_path": "taskrd16xsvl/92_ad.jpg",
 "frame_suggestion": "block",
 "suspect_categories": [
 "ocr_ad"
]
 }
],
 "voices": [
 {
 "content": "Query result",
 "detail": {
 "ad": [
 "Text"
]
 },
 "voice_begin": 92.24,
 "voice_end": 117.62,
 }
]
 }
}
```

```

 "voice_suggestion": "block"
 }
],
 "suggestion": "block"
 }
}

```

- Fields in the result file

| Parameter  | Description             |
|------------|-------------------------|
| video_path | Path of the video       |
| result     | Video processing result |

- **result** field description

| Parameter  | Description                                                                                                                                                                                                                                                 |
|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| suggestion | Video processing suggestions <ul style="list-style-type: none"> <li>• <b>review</b>: Manual review is recommended.</li> <li>• <b>block</b>: It is recommended that the video segment be blocked.</li> <li>• <b>pass</b>: The video is approved.</li> </ul>  |
| voices     | JSON arrays, indicating the detected problem details of the audio segments. For details about the parameter definition, see the <a href="#">Problematic audio segment field description</a> .<br>When there is no problem audio frame, this array is empty. |
| frames     | JSON arrays, indicating the detected problem details of the video frame. For details about the parameter definition, see the <a href="#">Problematic video frame field description</a> .<br>When there is no problem video frame, this array is empty.      |

- Problematic audio segment field description

| Parameter   | Description                        |
|-------------|------------------------------------|
| voice_begin | Time when the audio segment begins |
| voice_end   | Time when the audio segment ends   |
| content     | Text content of the audio segment  |

| Parameter        | Description                                                                                                                                                                                                                                                                                                                 |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| detail           | The value indicates the check result of the audio segment. The keyword <b>politics</b> specifies the political related elements and <b>porn</b> specifies the pornographic content in the audio segment. For details about the fields, see <a href="#">Text Moderation</a> in the <i>Content Moderation API Reference</i> . |
| voice_suggestion | Processing suggestions for the audio segment <ul style="list-style-type: none"> <li>● <b>review</b>: Manual review is recommended.</li> <li>● <b>block</b>: It is recommended that the audio segment be blocked.</li> </ul>                                                                                                 |

- Problematic video frame field description

| Parameter          | Description                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| frame_begin        | Start frame of the video segment<br>Unit: second                                                                                                                                                                                                                                                                                                                                                         |
| frame_end          | End frame of the video segment<br>Unit: second                                                                                                                                                                                                                                                                                                                                                           |
| suspect_categories | Suspicious scenario in this frame. The content prefixed with <b>ocr</b> is the check result after the image is converted to text.                                                                                                                                                                                                                                                                        |
| frame_img_path     | When <b>frame_suggestion</b> of the frame is set to <b>review</b> or <b>block</b> , and the <b>upload</b> parameter is set to <b>true</b> during video task creation, the current frame is saved as an image to OBS. The parameter indicates the OBS storage path of the image.                                                                                                                          |
| detail             | Check result details of the frame. <b>politics</b> specifies the political elements detected, <b>terrorism</b> specifies the terrorism or violence related content detected, and <b>porn</b> specifies the pornographic related contents detected. For details about the fields, see the image moderation and the preceding <a href="#">Text Moderation</a> in <i>Content Moderation API Reference</i> . |
| frame_suggestion   | Frame processing suggestions <ul style="list-style-type: none"> <li>● <b>review</b>: Manual review is recommended.</li> <li>● <b>block</b>: It is recommended that the audio segment be blocked.</li> </ul>                                                                                                                                                                                              |

## Status Codes

- Normal  
200

- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

## 7.4 Deleting a Job

### Function

Delete a specified job.

### URI

- URI format:  
DELETE /v2/{project\_id}/services/video-moderation/tasks/{task\_id}
- 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> . |
| task_id    | Yes       | String | Job ID                                                                                                   |

### Request Parameters

Example request

```
DELETE /v2/6204a5bd270343b5885144cf9c8c158d/services/video-moderation/tasks/
f18320e61e4c4dc685aa2dfc22a28dc5
```

### Response Parameters

- Example response when the deletion fails  

```
{
 "error_code": "IVA.0005",
 "error_msg": "The requested resource is NOT found. The taskID
f18320e61e4c4dc685aa2dfc22a28dc5 is not found."
}
```

- Response parameters

| Parameter  | Description                                                |
|------------|------------------------------------------------------------|
| error_code | Error code. For details, see <a href="#">Error Codes</a> . |
| error_msg  | Error message                                              |

## Status Codes

- Normal  
If the output type is **hosting**, status code **202** is returned. Otherwise, status code **200** is returned.
- Abnormal

| Status Code               | Description                                                                                 |
|---------------------------|---------------------------------------------------------------------------------------------|
| 400 Bad Request           | Request error. For details about the returned error code, see <a href="#">Error Codes</a> . |
| 401 Unauthorized          | Authentication failed.                                                                      |
| 403 Forbidden             | No operation permission.                                                                    |
| 404 Not Found             | The requested resource was not found.                                                       |
| 500 Internal Server Error | Internal service error.                                                                     |
| 503 Service Unavailable   | Service unavailable.                                                                        |

# 8 Common Parameters

## 8.1 Input and Output Parameters

### task.input

- Parameters in **task.input**

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| type      | Yes       | String | Type of input video data. The options are as follows: <ul style="list-style-type: none"><li><b>obs</b>: Read video data from OBS on HUAWEI CLOUD.</li><li><b>url</b>: Read video data from a specified URL.</li><li><b>edgecamera</b>: Read video data from a specified edge camera.</li><li><b>vis</b>: Read video data from VIS.</li><li><b>edgerestful</b>: Read video data from the customized streaming media server.</li><li><b>vcn</b>: Read data from VCN on HUAWEI CLOUD.</li></ul> |

| Parameter | Mandatory | Type                  | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------|-----------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data      | Yes       | Array of data objects | Content of input video data <ul style="list-style-type: none"> <li>For type <b>obs</b>, see <a href="#">Data structure of the obs.data field</a>.</li> <li>For type <b>url</b>, see <a href="#">Data structure of the url.data field</a>.</li> <li>For type <b>edgcamera</b>, see <a href="#">Data structure of the edge.data field</a>.</li> <li>For type <b>vis</b>, see <a href="#">Data structure of the vis.data field</a>.</li> <li>For type <b>edgerestful</b>, see <a href="#">Data structure of the Edge RESTful.data field</a>.</li> <li>For type <b>vcn</b>, see <a href="#">Data structure of the vcn.data field</a>.</li> </ul> |
| vcn       | No        | Object                | Information about <b>vcn</b> . This parameter is mandatory only when type is set to <b>vcn</b> . For details, see <a href="#">Data structure of the vcn field</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

- Data structure of the **data** field when **type** is set to **obs**

| Parameter | Mandatory | Type   | Description                                                   |
|-----------|-----------|--------|---------------------------------------------------------------|
| bucket    | Yes       | String | OBS bucket name                                               |
| path      | Yes       | String | Path within the OBS bucket, for example, <b>output/c1.mp4</b> |

- Data structure of the **data** field when **type** is set to **url**

| Parameter | Mandatory | Type   | Description                                                                                                                               |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------|
| url       | Yes       | String | URL of the video data. Currently, only the URL of OBS is supported. You need to grant the anonymous users the permission to read the URL. |

- Data structure of the **data** field when **type** is set to **edgcamera**

| Parameter | Mandatory | Type   | Description                                                                                                                               |
|-----------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------|
| url       | Yes       | String | URL of the video data. Currently, only the URL of OBS is supported. You need to grant the anonymous users the permission to read the URL. |

- Data structure of the **data** field when **type** is set to **vis**

| Parameter   | Mandatory | Type   | Description                   |
|-------------|-----------|--------|-------------------------------|
| stream_name | Yes       | String | Name of a video stream in VIS |

- Data structure of the **data** field when **type** is set to **edgerestful**

| Parameter             | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                              |
|-----------------------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| node_id               | Yes       | String  | ID of the edge node where the job is running. This parameter is left blank when a multi-task job is delivered to the edge node.                                                                                                                                                                          |
| url                   | Yes       | String  | REST request for the container to obtain the Edge RESTful stream<br>Format: <b>http(s):ip:port/xxx</b>                                                                                                                                                                                                   |
| certificate_check     | Yes       | Boolean | <b>true:</b> The algorithm needs to verify the certificate of the HTTPS request.<br><b>false:</b> The algorithm does not need to verify the certificate of the HTTPS request.<br>Default value: <b>false</b><br>The VAS platform only performs input verification, which does not involve service logic. |
| rtsp_path_in_response | Yes       | String  | Path of the <b>edgerestful</b> stream address in the response body. The path cannot begin with a slash (/). For example: <b>data/url</b> .                                                                                                                                                               |

- Data structure of the **data** field when **type** is set to **vcn**

| Parameter | Mandatory | Type   | Description                                                                                                                                                   |
|-----------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| node_id   | No        | String | ID of the edge node where the job is running. This parameter is left blank when a multi-task job is delivered to the edge node.                               |
| device_id | Yes       | String | Device ID, which complies with the regular expression <code>^([0-9]{20}#[1]{1}[a-zA-Z0-9]{32}) ([0-9]{20}#[1]{1}[0-9]{1,10}#[1]{1}[a-zA-Z0-9]{32})\$</code> . |

- Data structure of the **vcn** field when **type** is set to **vcn**

| Parameter | Mandatory | Type   | Description                                              |
|-----------|-----------|--------|----------------------------------------------------------|
| ip        | Yes       | String | IP address of the vcn server                             |
| port      | Yes       | String | Port number of the vcn server                            |
| username  | Yes       | String | Account name of the vcn server                           |
| password  | Yes       | String | Password of the account for logging in to the vcn server |

## task.output

- Parameters in **task.output**

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| obs       | Yes       | Object | Output path of OBS. For details, see <a href="#">Data structure of the obs field</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| hosting   | No        | Object | When <b>type</b> is set to <b>hosting</b> , the job results are hosted by OBS on the service side. For details, see <a href="#">Data structure of the hosting field</a> .<br><b>NOTE</b> <ul style="list-style-type: none"> <li>You can query a single job API to obtain the content in the results file (<b>results.json</b>) as well as the file bucket and path.</li> <li>You can call the OBS SDK to download the results file through the file bucket and path. The file is saved for 48 hours by default.</li> </ul> |

| Parameter | Mandatory | Type   | Description                                                                                                                                                                                            |
|-----------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| dis       | No        | Object | DIS channel configuration. For details, see <a href="#">Data structure of the dis field</a> .                                                                                                          |
| webhook   | No        | Object | Webhook address configuration. For details, see <a href="#">Data structure of the webhook field</a> .<br>This output type is supported only by edge jobs.                                              |
| localpath | No        | Object | <b>localpath</b> output type. For details, see <a href="#">Data structure of the localpath field</a> .<br>This output type is supported only by edge jobs. Used to save task results on the edge node. |

- Data structure of the **obs** field

| Parameter | Mandatory | Type   | Description                                                            |
|-----------|-----------|--------|------------------------------------------------------------------------|
| bucket    | Yes       | String | Name of the OBS bucket where result files are stored                   |
| path      | Yes       | String | Path to the result file in the OBS bucket, for example, <b>output/</b> |

- Data structure of the **hosting** field

| Parameter              | Mandatory | Type   | Description                                                                                                                                                                                                   |
|------------------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| obs                    | No        | Object | OBS information of the results file, <b>results.json</b> . For details, see <a href="#">Data structure of the hosting.obs field</a> .<br>Available when <b>results.json</b> is generated and does not expire. |
| result_json_overdue_at | No        | String | The expiration date of the hosted file, <b>results.json</b> . By default, the file is saved for 48 hours.<br>Available when <b>results.json</b> is generated and does not expire.                             |

| Parameter                 | Mandatory | Type    | Description                                  |
|---------------------------|-----------|---------|----------------------------------------------|
| check_obs_after_end_state | No        | Boolean | If <b>true</b> is selected, OBS is verified. |

- Data structure of the **hosting.obs** field

| Parameter | Mandatory | Type   | Description                                                                |
|-----------|-----------|--------|----------------------------------------------------------------------------|
| bucket    | Yes       | String | Name of the OBS bucket hosting the <b>results.json</b> file                |
| path      | Yes       | String | Path to <b>results.json</b> in the OBS bucket, for example, <b>output/</b> |

- Data structure of the **dis** field

| Parameter     | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| stream_name   | Yes       | String | Name of the DIS channel                                                                                                                                                                                                                                                                                                                                                                                                   |
| data_category | No        | String | List of output job data types. The default value is []. The output contains data in the <b>dataCategory</b> list.<br>The value range is [FacelImage, OriginImage]. <ul style="list-style-type: none"><li>• <b>FacelImage</b>: Indicates that a face image is sent.</li><li>• <b>OriginImage</b>: Indicates that the original image is sent.</li></ul> <b>NOTE</b><br>This parameter is only supported for face detection. |

- Data structure of the **webhook** field

| Parameter | Mandatory | Type   | Description                                                              |
|-----------|-----------|--------|--------------------------------------------------------------------------|
| url       | Yes       | String | URL, for example, <b>https://apigw.huawei.com/api/msgs/message/sit</b> . |

| Parameter     | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| headers       | Yes       | Object | <b>headers</b> parameter setting. Specify your own key and value.                                                                                                                                                                                                                                                                                                                                                                               |
| data_category | No        | String | <p>List of output job data types. The default value is []. The output contains data in the <b>dataCategory</b> list.</p> <p>The value range is [FacelImage, OriginImage].</p> <ul style="list-style-type: none"> <li>• <b>FacelImage</b>: Indicates that a face image is sent.</li> <li>• <b>OriginImage</b>: Indicates that the original image is sent.</li> </ul> <p><b>NOTE</b><br/>This parameter is only supported for face detection.</p> |

- Data structure of the **localpath** field

| Parameter         | Mandatory | Type   | Description                                                                                                                                |
|-------------------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------|
| mount_source_path | Yes       | String | Mount source path for storing the task results. Must be a linux path with a maximum length of 255 characters, for example, / <b>home</b> . |

| Parameter     | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data_category | No        | String | <p>List of output job data types. The default value is []. The output contains data in the <b>data_category</b> list.</p> <p>The value range is [FacelImage, OriginImage].</p> <ul style="list-style-type: none"><li>• FacelImage: Indicates that a face image is sent.</li><li>• OriginImage: Indicates that the original image is sent.</li></ul> <p><b>NOTE</b><br/>This parameter is only supported for face detection.</p> |

## 8.2 Query and Detail Parameters

### queryOption

| Parameter       | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-----------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| order           | No        | String | <p>A sorting rule for the returned results. The format is <i>&lt;attribute name&gt;:&lt;[ASC DESC]&gt;</i>. <b>ASC</b> indicates sorting the results in ascending order, and <b>DESC</b> indicates descending. For example, <b>name:ASC</b>. Default to <b>DESC</b>.</p> <p>Available to the following fields.</p> <ul style="list-style-type: none"><li>• <b>name</b>: job name</li><li>• <b>created_at</b>: job creation time</li><li>• <b>updated_at</b>: job update time</li></ul> |
| service_version | No        | String | <p>Version, which consists of two numeric fields and a dot (.). The numeric fields are separated by the dot (.), for example, <b>1.0</b>. Each field contains up to three digits, that is, <i>xxx.xxx</i>.</p>                                                                                                                                                                                                                                                                         |

| Parameter | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------|-----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| state     | No        | String  | <p>Job status. Possible values are as follows:</p> <ul style="list-style-type: none"><li>● <b>PENDING</b>: The job is pending.</li><li>● <b>RECOVERING</b>: The job is recovering.</li><li>● <b>STARTING</b>: The job is starting.</li><li>● <b>UPGRADING</b>: The job is being upgraded.</li><li>● <b>CREATE_FAILED</b>: The job failed to be created.</li><li>● <b>START_FAILED</b>: The job failed to be started.</li><li>● <b>RUNNING</b>: The job is running.</li><li>● <b>STOPPING</b>: The job is being stopped.</li><li>● <b>STOPPED</b>: The job has been stopped.</li><li>● <b>ABNORMAL</b>: The job is running abnormally.</li><li>● <b>SUCCEEDED</b>: The job is executed successfully.</li><li>● <b>FAILED</b>: The job failed to be executed.</li><li>● <b>DELETING</b>: The job is being deleted.</li><li>● <b>FREEZING</b>: The job is being frozen.</li><li>● <b>FROZEN</b>: The job has been frozen.</li></ul> |
| offset    | No        | Integer | <p>Start position of the query. Used together with <b>limit</b>. The value is an integer ranging from 1 to 100000.</p> <ul style="list-style-type: none"><li>● This parameter is unavailable if <b>page</b> is set.</li><li>● If neither <b>offset</b> nor <b>limit</b> are specified, all results are returned.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| Parameter     | Mandatory | Type    | Description                                                                                                                                                                                                                                                                                                                             |
|---------------|-----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| limit         | No        | Integer | Maximum number of results returned. Must be used together with <b>offset</b> . The value is an integer ranging from 1 to 100. <ul style="list-style-type: none"><li>• If <b>page</b> is specified, this parameter has no effect.</li><li>• If neither <b>offset</b> nor <b>limit</b> are specified, all results are returned.</li></ul> |
| created_since | No        | String  | Timestamp when the query starts. The value is a millisecond-precise timestamp, for example, <b>1561607125000</b> .                                                                                                                                                                                                                      |
| created_until | No        | String  | Timestamp when the query ends. The value is a millisecond-precise timestamp, for example, <b>1561607125000</b> .                                                                                                                                                                                                                        |
| name_like     | No        | String  | Name of the resource to be queried, for example, <b>name</b> .                                                                                                                                                                                                                                                                          |
| id_like       | No        | String  | ID of a queried resource, for example, <b>f18320e61e4c4dc685aa2dfc22a28dc5</b> .                                                                                                                                                                                                                                                        |

## task.detail

- Parameters in **task.detail**

| Parameter   | Type   | Description                                               |
|-------------|--------|-----------------------------------------------------------|
| id          | String | Job ID                                                    |
| name        | String | Job name                                                  |
| description | String | Job description. This parameter is left blank by default. |

| Parameter      | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| state          | String | <p>Job status. Possible values are as follows:</p> <ul style="list-style-type: none"> <li>● <b>PENDING</b>: The job is pending.</li> <li>● <b>RECOVERING</b>: The job is recovering.</li> <li>● <b>STARTING</b>: The job is starting.</li> <li>● <b>UPGRADING</b>: The job is being upgraded.</li> <li>● <b>CREATE_FAILED</b>: The job failed to be created.</li> <li>● <b>START_FAILED</b>: The job failed to be started.</li> <li>● <b>RUNNING</b>: The job is running.</li> <li>● <b>STOPPING</b>: The job is being stopped.</li> <li>● <b>STOPPED</b>: The job has been stopped.</li> <li>● <b>ABNORMAL</b>: The job is running abnormally.</li> <li>● <b>SUCCEEDED</b>: The job is executed successfully.</li> <li>● <b>FAILED</b>: The job failed to be executed.</li> <li>● <b>DELETING</b>: The job is being deleted.</li> <li>● <b>FREEZING</b>: The job is being frozen.</li> <li>● <b>FROZEN</b>: The job has been frozen.</li> </ul> |
| created_at     | String | Job creation time, in ISO 8601 format, that is, <b>YYYY-MM-DDThh:mm:ssZ</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| updated_at     | String | Job update time, in ISO 8601 format, that is, <b>YYYY-MM-DDThh:mm:ssZ</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| input          | Object | Data input list. Default to []. For type definition, see <a href="#">task.input</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| service_config | Object | Service algorithm configuration. The field structure is related to the service.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| output         | Object | Data output list. Default to []. For type definition, see <a href="#">task.output</a> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

| Parameter       | Type   | Description                                                                                                                                                                                                            |
|-----------------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| hosting_result  | Object | Optional. This parameter is available only in the APIs for querying a single job when the output type is set to <b>hosting</b> . For type definition, see <a href="#">Data structure of the hosting_result field</a> . |
| service_version | String | Service version corresponding to a job.                                                                                                                                                                                |

- Data structure of the **hosting\_result** field

| Parameter                  | Mandatory | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| data                       | No        | String | Content of the result file <b>result.json</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| obs                        | No        | Object | OBS bucket where result files are stored and the path to result file <b>result.json</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| status                     | No        | String | Status of the <b>results.json</b> file. Possible values are as follows: <ul style="list-style-type: none"> <li>• <b>NOT_GENERATED</b>: The file is not generated.</li> <li>• <b>AVAILABLE</b>: The file is available.</li> <li>• <b>EXCEED_IN_SIZE</b>: The file size exceeds the upper limit.</li> <li>• <b>OVERDUE_DELETING</b>: The file is being deleted due to expiration.</li> <li>• <b>OVERDUE_DELETED</b>: The file has been deleted due to expiration.</li> <li>• <b>DELETED_MISTAKENLY</b>: The file is deleted accidentally.</li> </ul> |
| result_json_o<br>verdue_at | No        | String | Expiration date of the <b>result.json</b> file. By default, the file is saved for 48 hours.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

# 9 Appendix

## 9.1 Status Codes

| Status Code | Message                       | Description                                                                                                                                                                    |
|-------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 100         | Continue                      | The client continues sending the request. This provisional response informs the client that part of the request has been received and has not yet been rejected by the server. |
| 101         | Switching Protocols           | Switching protocols. The target protocol must be more advanced than the source protocol.<br>For example, the current HTTP protocol is switched to a later version.             |
| 201         | Created                       | The request for creating a resource has been fulfilled.                                                                                                                        |
| 202         | Accepted                      | The request has been accepted, but the processing has not been completed.                                                                                                      |
| 203         | Non-Authoritative Information | Non-authoritative information. The request is successful.                                                                                                                      |
| 204         | NoContent                     | The request has been fulfilled, but the HTTP response does not contain a response body.<br>The status code is returned in response to an HTTP OPTIONS request.                 |
| 205         | Reset Content                 | The server has fulfilled the request, but the requester is required to reset the content.                                                                                      |

| Status Code | Message           | Description                                                                                                                                                                                                                              |
|-------------|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 206         | Partial Content   | The server has successfully processed a part of the GET request.                                                                                                                                                                         |
| 300         | Multiple Choices  | There are multiple options for the location of the requested resource. The response contains a list of resource characteristics and addresses from which the user or user agent (such as a browser) can choose the most appropriate one. |
| 301         | Moved Permanently | The requested resource has been assigned a new permanent URI, and the new URI is contained in the response.                                                                                                                              |
| 302         | Found             | The requested resource resides temporarily under a different URI.                                                                                                                                                                        |
| 303         | See Other         | The response to the request can be found under a different URI, and should be retrieved using a GET or POST method.                                                                                                                      |
| 304         | Not Modified      | The requested resource has not been modified. When the server returns this status code, it does not return any resources.                                                                                                                |
| 305         | Use Proxy         | The requested resource must be accessed through a proxy.                                                                                                                                                                                 |
| 306         | Unused            | The HTTP status code is no longer used.                                                                                                                                                                                                  |
| 400         | BadRequest        | The request is invalid.<br>Do not retry the request before modification.                                                                                                                                                                 |
| 401         | Unauthorized      | The status code is returned after the client provides the authentication information, indicating that the authentication information is incorrect or invalid.                                                                            |
| 402         | Payment Required  | This status code is reserved for future use.                                                                                                                                                                                             |
| 403         | Forbidden         | The request has been rejected.<br>The server has received and understood the request; yet it refused to respond, because the request is set to deny access.<br>Do not retry the request before modification.                             |

| Status Code | Message                       | Description                                                                                                                                                                                                                                                            |
|-------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 404         | NotFound                      | The requested resource cannot be found.<br>Do not retry the request before modification.                                                                                                                                                                               |
| 405         | MethodNotAllowed              | The request contains one or more methods not supported for the resource.<br>Do not retry the request before modification.                                                                                                                                              |
| 406         | Not Acceptable                | The server cannot fulfill the request according to the content characteristics of the request.                                                                                                                                                                         |
| 407         | Proxy Authentication Required | This status code is similar to 401, but the client must first authenticate itself with the proxy.                                                                                                                                                                      |
| 408         | Request Time-out              | The request timed out.<br>The client may repeat the request without modifications at any time later.                                                                                                                                                                   |
| 409         | Conflict                      | The request could not be processed due to a conflict with the current state of the resource.<br>This status code indicates that the resource that the client attempts to create already exists, or the requested update failed due to a conflict.                      |
| 410         | Gone                          | The requested resource is no longer available.<br>The status code indicates that the requested resource has been deleted permanently.                                                                                                                                  |
| 411         | Length Required               | The server refuses to process the request without a defined <b>Content-Length</b> .                                                                                                                                                                                    |
| 412         | Precondition Failed           | The server does not meet one of the preconditions that the requester puts on the request.                                                                                                                                                                              |
| 413         | Request Entity Too Large      | The request is larger than that a server is able to process. The server may close the connection to prevent the client from continuing the request. If the server cannot process the request temporarily, the response will contain a <b>Retry-After</b> header field. |

| Status Code | Message                         | Description                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 414         | Request-URI Too Large           | The URI provided was too long for the server to process.                                                                                                                                                                                                                                                                                                                                      |
| 415         | Unsupported Media Type          | The server is unable to process the media format in the request.                                                                                                                                                                                                                                                                                                                              |
| 416         | Requested range not satisfiable | The requested range is invalid.                                                                                                                                                                                                                                                                                                                                                               |
| 417         | Expectation Failed              | The server fails to meet the requirements of the <b>Expect</b> request-header field.                                                                                                                                                                                                                                                                                                          |
| 422         | UnprocessableEntity             | The request is well-formed but is unable to be processed due to semantic errors.                                                                                                                                                                                                                                                                                                              |
| 429         | TooManyRequests                 | The client has sent excessive number of requests to the server within a given time (exceeding the limit on the access frequency of the client), or the server has received an excessive number of requests within a given time (beyond its processing capability). In this case, the client should repeat requests after the time specified in the <b>Retry-After</b> header of the response. |
| 500         | InternalServerError             | The server is able to receive but unable to understand the request.                                                                                                                                                                                                                                                                                                                           |
| 501         | Not Implemented                 | The server does not support the requested function.                                                                                                                                                                                                                                                                                                                                           |
| 502         | Bad Gateway                     | The server acting as a gateway or proxy has received an invalid request from a remote server.                                                                                                                                                                                                                                                                                                 |
| 503         | ServiceUnavailable              | The requested service is invalid.<br>Do not retry the request before modification.                                                                                                                                                                                                                                                                                                            |
| 504         | ServerTimeout                   | The request cannot be fulfilled within a given time. This status code is returned to the client only when the <b>Timeout</b> parameter is specified in the request.                                                                                                                                                                                                                           |
| 505         | HTTP Version not supported      | The server does not support the HTTP protocol version used in the request.                                                                                                                                                                                                                                                                                                                    |

## 9.2 Error Codes

No data is returned if an API call fails. You can find out the cause of an error using the error code list below. When the API call fails, HTTP status code 4xx or 5xx is returned. The returned message body contains specific error code and error message. If you did not find out the cause of an error, contact customer service and provide the error code. We will help you solve the problem as soon as possible.

- Example faulty response

```
{
 "error_code": "IVA.0003",
 "error_msg": "Request body is not a valid json object."
}
```

- Parameters

| Name       | Description   |
|------------|---------------|
| error_code | Error code    |
| error_msg  | Error message |

- Error Codes

| Error Code | Status Code | Error Message                                           |
|------------|-------------|---------------------------------------------------------|
| VAS.0001   | 400         | Request body is not a valid json object.                |
| VAS.0002   | 400         | The request URL is invalid.                             |
| VAS.0003   | 400         | The request URL Parameter [order] is not match pattern. |
| VAS.0004   | 400         | The request URL Parameter [offset] is not a number.     |
| VAS.0005   | 400         | The request URL Parameter [offset] is less than 1.      |
| VAS.0006   | 400         | The request URL Parameter [limit] is not a number.      |
| VAS.0007   | 400         | The request URL Parameter [limit] is less than 1.       |
| VAS.0008   | 400         | Missing page size parameter.                            |
| VAS.0009   | 400         | The request URL Parameter [page] is not a number.       |
| VAS.0010   | 400         | The request URL Parameter [page] is less than 1.        |

| Error Code | Status Code | Error Message                                               |
|------------|-------------|-------------------------------------------------------------|
| VAS.0011   | 400         | The request URL Parameter [pageSize] is not a number.       |
| VAS.0012   | 400         | The request URL Parameter [pageSize] is less than 1.        |
| VAS.0013   | 401         | The authentication Token is abnormal.                       |
| VAS.0014   | 400         | Parameter [projectId] does not match pattern.               |
| VAS.0015   | 500         | Request processing failed.                                  |
| VAS.0016   | 400         | Parameter [description] is too long.                        |
| VAS.0017   | 400         | Parameter [projectId] does not match pattern.               |
| VAS.0018   | 500         | Request processing failed.                                  |
| VAS.0019   | 400         | Parameter [description] is too long.                        |
| VAS.0020   | 400         | Parameter [limit] is null.                                  |
| VAS.0021   | 400         | Parameter [offset] is null.                                 |
| VAS.0022   | 400         | Parameter [page] is null.                                   |
| VAS.0023   | 400         | Parameter [pageSize] is null.                               |
| VAS.0024   | 400         | Order column name should be NAME, created_at or updated_at. |
| VAS.2001   | 400         | Parameter [name] is null.                                   |
| VAS.2002   | 400         | Parameter [name] does not match pattern.                    |
| VAS.2004   | 400         | Parameter [taskId] is invalid.                              |
| VAS.2006   | 403         | No permission to get task.                                  |
| VAS.2007   | 403         | No permission to update task.                               |
| VAS.2008   | 403         | No permission to delete task.                               |
| VAS.2009   | 400         | Parameter [input] is null.                                  |
| VAS.2010   | 400         | Parameter [input] is invalid.                               |
| VAS.2011   | 400         | Parameter [type] of input is null.                          |
| VAS.2012   | 400         | Parameter [type] of input is invalid.                       |
| VAS.2013   | 400         | Parameter [data] of input is null.                          |
| VAS.2014   | 400         | Input data cannot be empty.                                 |

| Error Code | Status Code | Error Message                                                                   |
|------------|-------------|---------------------------------------------------------------------------------|
| VAS.2015   | 400         | Parameter [data] of input is invalid.                                           |
| VAS.2016   | 400         | Parameter [output] is missing.                                                  |
| VAS.2017   | 400         | Parameter [output] is null.                                                     |
| VAS.2018   | 400         | Parameter [output] is invalid.                                                  |
| VAS.2019   | 400         | Type in output is null.                                                         |
| VAS.2020   | 400         | Type in output is invalid.                                                      |
| VAS.2021   | 400         | Data in output is null.                                                         |
| VAS.2022   | 400         | Data in output is invalid.                                                      |
| VAS.2023   | 400         | Parameter [serviceName] is null.                                                |
| VAS.2024   | 400         | Parameter [service_version] is null.                                            |
| VAS.2025   | 400         | Parameter [service_config] is invalid.                                          |
| VAS.2026   | 404         | Service in name [serviceName] and version [visionservice_version] is not found. |
| VAS.2027   | 400         | Service is not released.                                                        |
| VAS.2028   | 400         | Parameter [input] exceed the number of 50.                                      |
| VAS.2029   | 404         | Task is not found.                                                              |
| VAS.2030   | 400         | No service in name under owner.                                                 |
| VAS.2031   | 400         | Parameter [state] should be one of states in list                               |
| VAS.2032   | 400         | Service is offline.                                                             |
| VAS.2033   | 400         | Parameter [namePattern] should not be longer than 100.                          |
| VAS.2034   | 400         | The obs path in output should be a folder and be ended with "/".                |
| VAS.2035   | 400         | Unfinished tasks of service [serviceName] exceed the number of 100.             |
| VAS.2036   | 400         | The number of tasks exceeds 5000.                                               |
| VAS.2037   | 400         | Parameter [service_version] should match pattern.                               |
| VAS.2038   | 400         | Task is not under service.                                                      |

## 9.3 Obtaining the Project ID, Account Name, and AK/SK

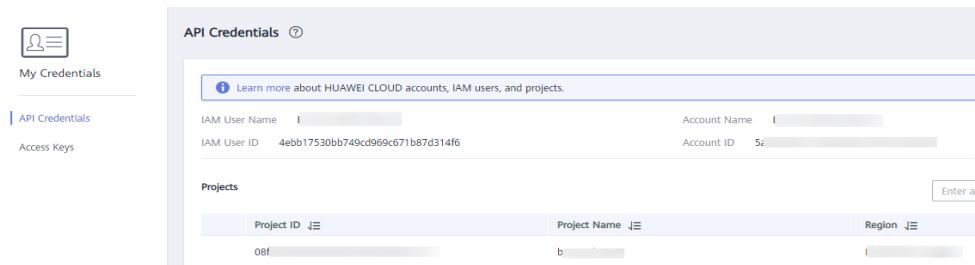
- In **Authentication**, you need to enter the account name, username, or AK/SK.
- A project ID is required for some URLs when an API is called.

To obtain a project ID (example), perform the following operations:

### Obtaining a Project ID from the Console

1. Log in to the **Video Analysis Service Management Console**.
2. View the project ID in the **Projects** area displayed on the **My Credentials** page by default, as shown in **Figure 9-1**.

**Figure 9-1** My Credentials



3. Click **Access Keys** to view the added AK.
  - If no AK/SK pair is available, click **Create Access Key** to add one.
  - If you have generated the AK/SK, find the AK/SK file you downloaded. Generally, the file name is **credentials.csv**.

### Obtaining a Project ID by Calling an API

You can also obtain the project ID by calling the API used to **query project information based on the specified criteria**.

The API for obtaining a project ID is **GET https://{Endpoint}/v3/projects**. **{Endpoint}** indicates the endpoint of IAM, which can be obtained from **Regions and Endpoints**. For details about API authentication, see **Authentication**.

The following is an example response. The value of **id** 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/a4a5d4098fb4474fa22cd05f897d6b99"
 },
 "id": "a4a5d4098fb4474fa22cd05f897d6b99",
 "enabled": true
 }
],
}
```

```
"links": {
 "next": null,
 "previous": null,
 "self": "https://www.example.com/v3/projects"
}
```

# A Change History

| Release Date | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2021-01-30   | This issue is the fifth official release.<br>Added the following VAS APIs: <ul style="list-style-type: none"><li>• <a href="#">Creating a Job</a></li><li>• <a href="#">Obtaining the Job List</a></li><li>• <a href="#">Obtaining Job Details</a></li><li>• <a href="#">Deleting a Job</a></li></ul>                                                                                                                                                                                                                                                                                                                                                      |
| 2020-09-07   | This issue is the fourth official release.<br>Deleted APIs related to video face detection, people flow counting, vehicle detection, and intrusion detection.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2019-11-28   | This issue is the third official release. <ul style="list-style-type: none"><li>• Added <a href="#">Video Content Moderation</a>.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2019-05-31   | This issue is the second official release. <ul style="list-style-type: none"><li>• Adjusted the document content structure.</li><li>• Facial Detection, People Flow Counting, Vehicle Detection, and Intrusion Detection are released for open beta test (OBT). The following APIs are added:<ul style="list-style-type: none"><li>- Video Face Detection (Cloud)</li><li>- Video Face Detection (Edge)</li><li>- People Flow Counting (Cloud)</li><li>- People Flow Counting (Edge)</li><li>- Vehicle Detection (Cloud)</li><li>- Vehicle Detection (Edge)</li><li>- Intrusion Detection (Cloud)</li><li>- Intrusion Detection (Edge)</li></ul></li></ul> |
| 2019-01-31   | This issue is the first official release.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |