Optical Character Recognition

Quick Start

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Quick Start
One-Minute Server API Connection

Last updated：2025-02-06 16:07:15

Overview

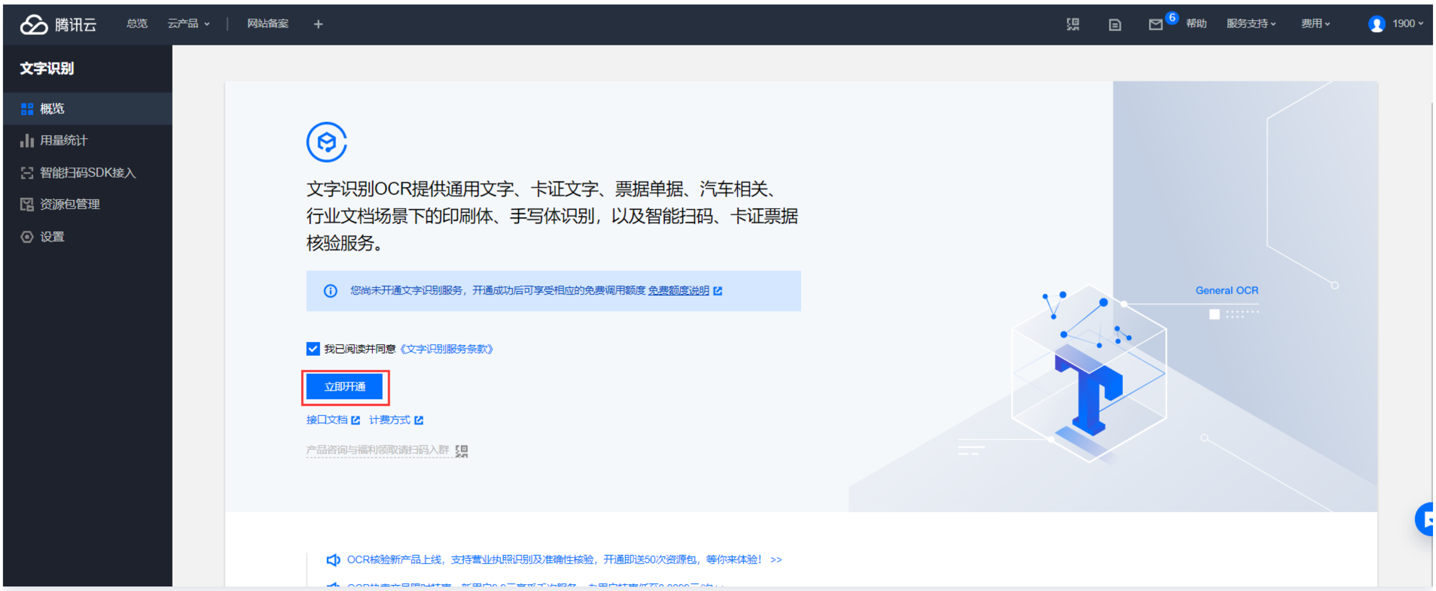
This document describes how to use API 3.0 Explorer to debug OCR APIs online and quickly integrate the Tencent Cloud SDK corresponding to the APIs into your local project.

Operation Steps

Complete the Tencent Cloud OCR API call in just three steps.

Step 1. Activate the OCR Service

Before using OCR-related APIs, you need to enter the OCR console, read the "OCR Terms of Service", agree by checking the box, and click **Activate Now** to instantly activate services such as **General Text, Card and Certificate Text, Bills and Invoices, etc..**



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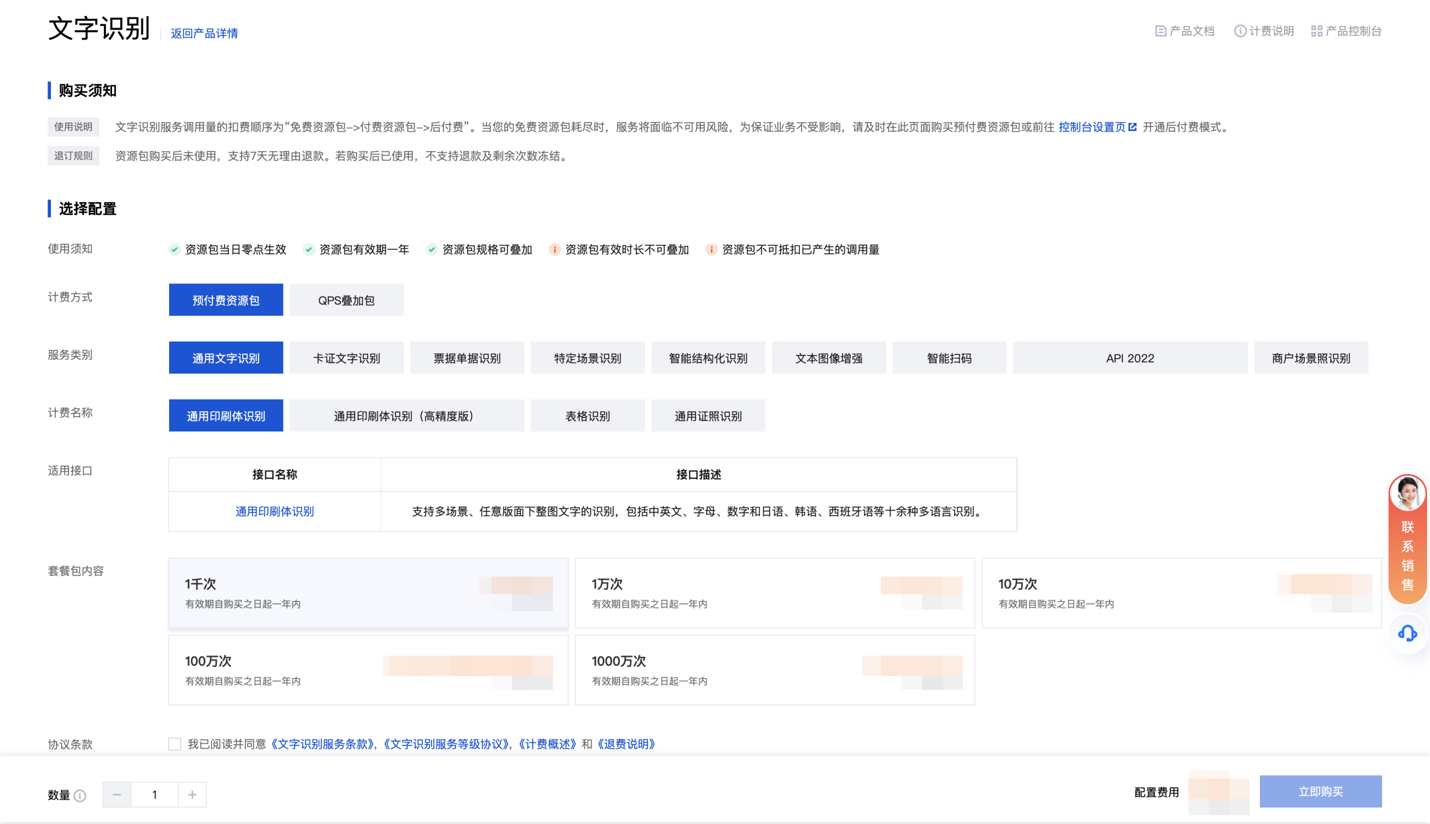
After the service is successfully activated, you will get the free tiers of calls for each service, which can be viewed on the Resource Pack Management page. In addition, you can also purchase resource packages for OCR services on the OCR purchase page. After the free tiers and number of resource package calls are used up, API calls will be billed in the pay-as-you-go mode and settled monthly. For billing details, see the OCR Purchase Guide.



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适用接口

接口名称	接口描述
通用印刷体识别	支持多场景、任意版面下整图文字的识别，包括中英文、字母、数字和日语、韩语、西班牙语等十余种多语言识别。

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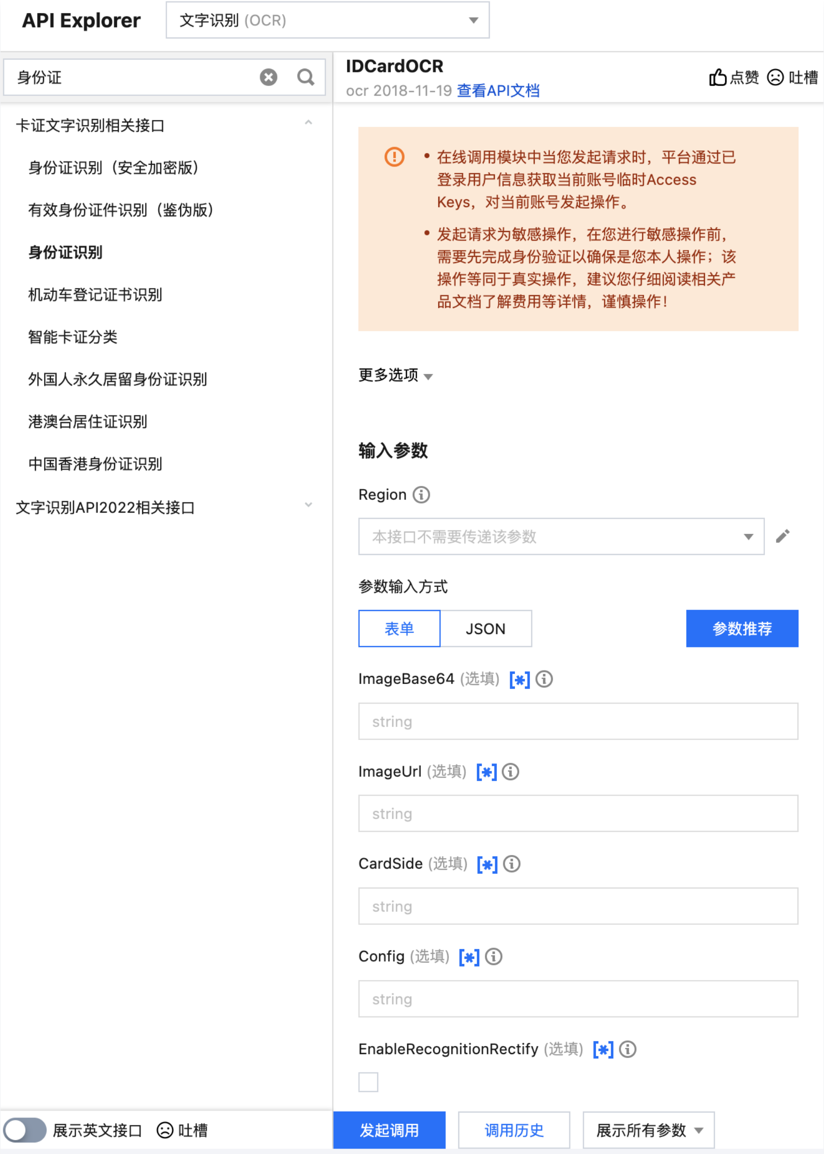
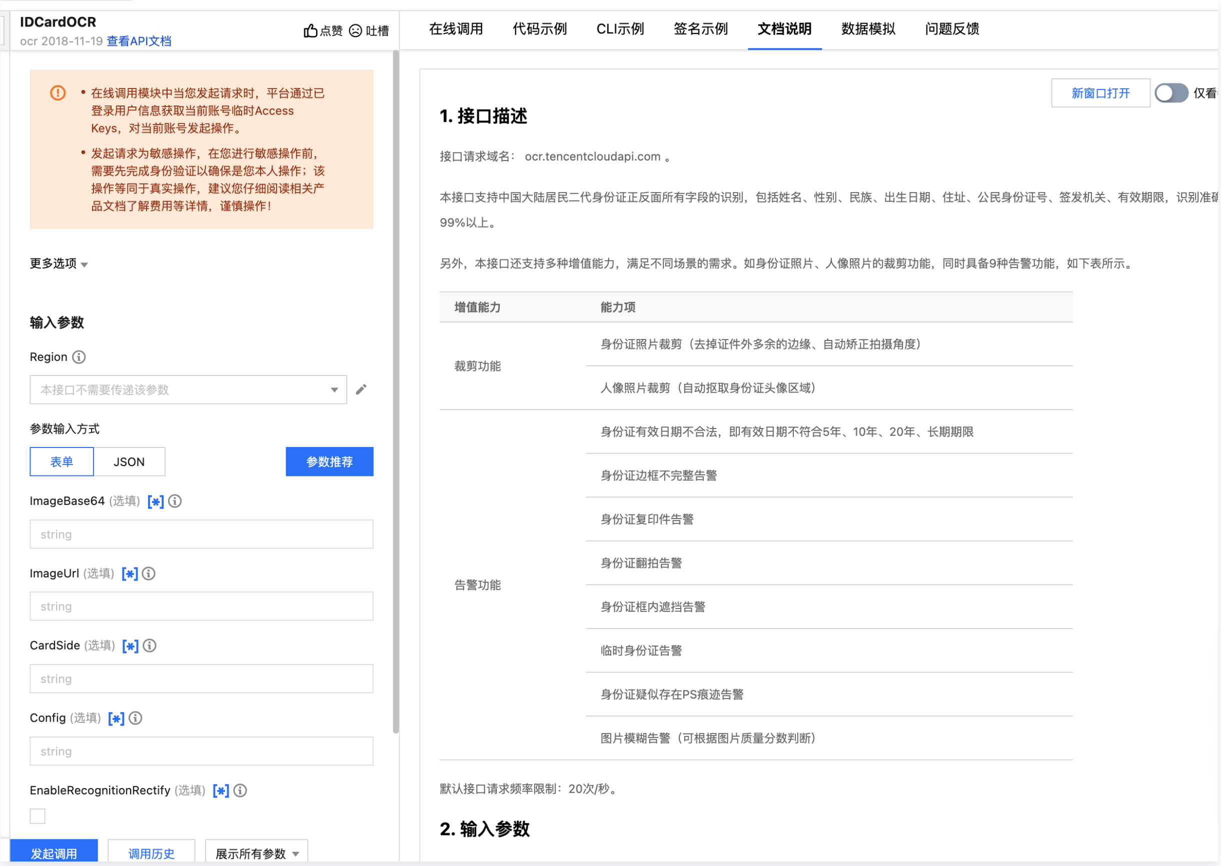
Step 2. Debug the OCR API

After the OCR service is successfully activated, go to the OCR API 3.0 Explorer online debugging page, select the API you need to call, and fill in the **Input Parameters**.



- 在线调用模块中当您发起请求时，平台通过已登录用户信息获取当前账号临时Access Keys，对当前账号发起操作。
- 发起请求为敏感操作，在您进行敏感操作前，需要先完成身份验证以确保是您本人操作；该操作等同于真实操作，建议您仔细阅读相关产品文档了解费用等详情，谨慎操作！

You can view the specific meanings of the input parameters for the corresponding API in the [parameter description] tab of the API 3.0 Explorer interface.



IDCardOCR
ocr 2018-11-19 查看API文档

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更多选项

输入参数

Region: 本接口不需要传递该参数

参数输入方式: 表单 JSON

ImageBase64 (选填) [*]: string

ImageUrl (选填) [*]: string

CardSide (选填) [*]: string

Config (选填) [*]: string

EnableRecognitionRectify (选填) [*]: □

1. 接口描述

接口请求域名： ocr.tencentcloudapi.com 。

本接口支持中国大陆居民二代身份证正反面所有字段的识别，包括姓名、性别、民族、出生日期、住址、公民身份证号、签发机关、有效期限，识别准
99%以上。

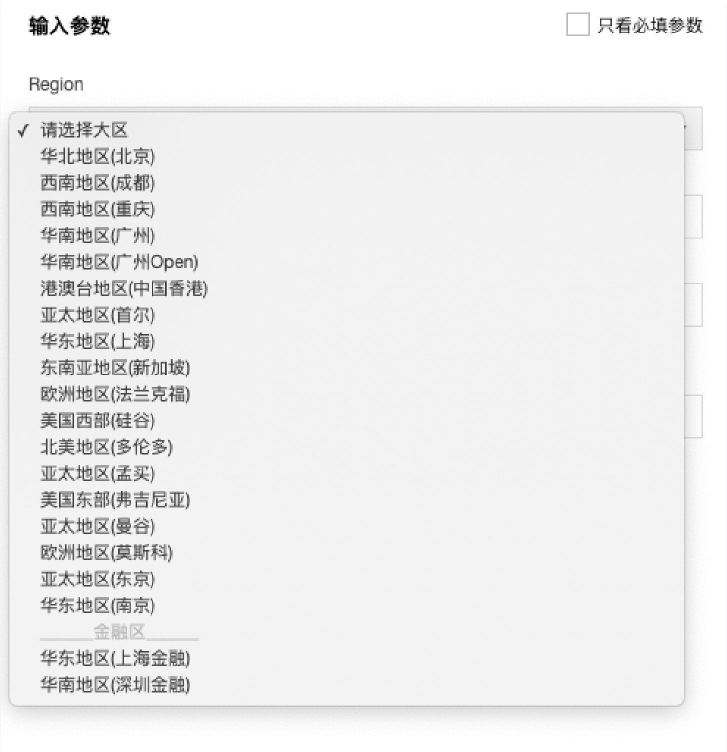
另外，本接口还支持多种增值能力，满足不同场景的需求。如身份证照片、人像照片的裁剪功能，同时具备9种告警功能，如下表所示。

增值能力	能力项
裁剪功能	身份证照片裁剪（去掉证件外多余的边缘、自动矫正拍摄角度）
	人像照片裁剪（自动抠取身份证头像区域）
告警功能	身份证有效日期不合法，即有效日期不符合5年、10年、20年、长期期限
	身份证边框不完整告警
	身份证复印件告警
	身份证翻拍告警
	身份证框内遮挡告警
	临时身份证告警
	身份证疑似存在PS痕迹告警
	图片模糊告警（可根据图片质量分数判断）

默认接口请求频率限制：20次/秒。

2. 输入参数

Among them, the Region parameter is a required parameter for each API, indicating the region where the OCR service resources are located. Click the **Region** dropdown box to select Tencent Cloud servers in different regions. It is recommended to choose a region close to the access point IP address: for example, if your access point is in Shenzhen, it is recommended to choose the South China region (Guangzhou).

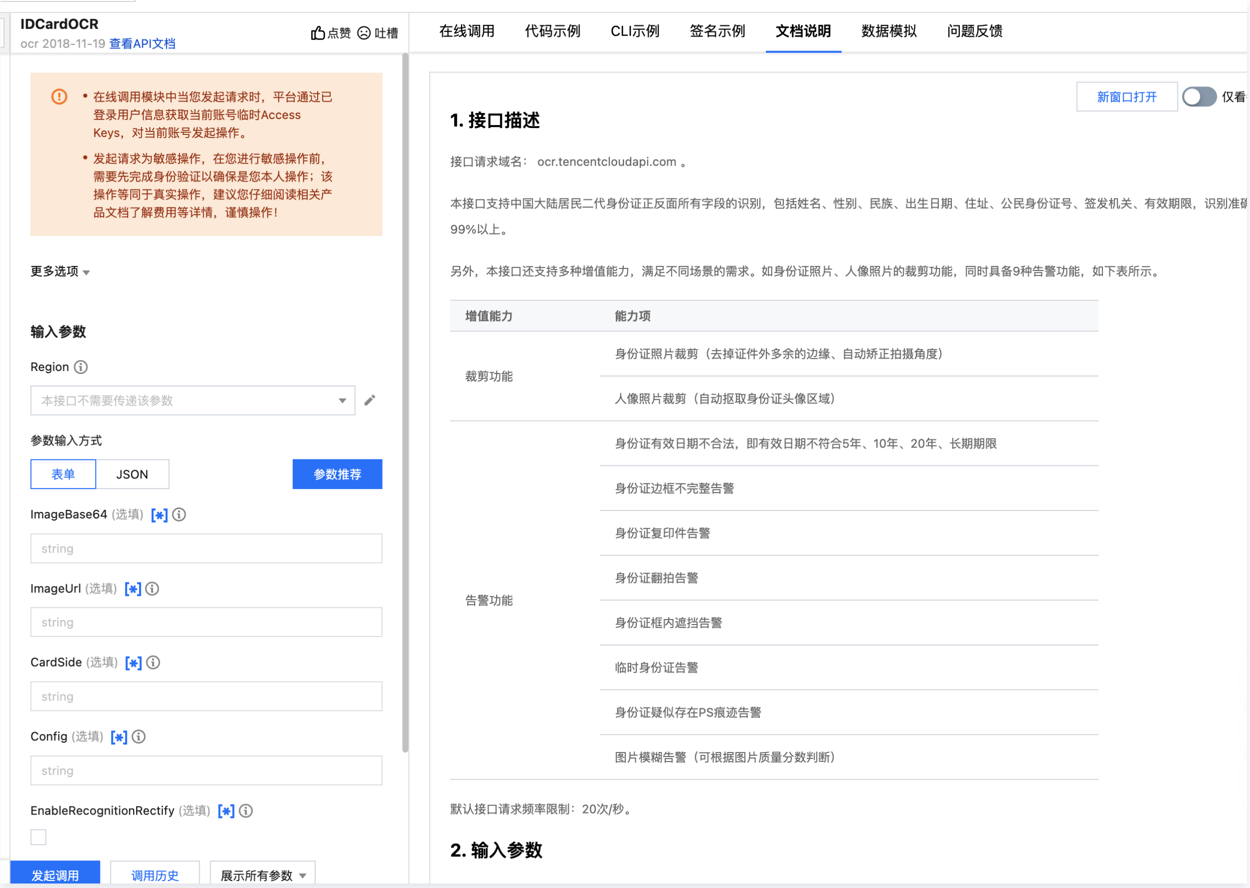


输入参数

Region

✓ 请选择大区
华北地区(北京)
西南地区(成都)
西南地区(重庆)
华南地区(广州)
华南地区(广州Open)
港澳台地区(中国香港)
亚太地区(首尔)
华东地区(上海)
东南亚地区(新加坡)
欧洲地区(法兰克福)
美国西部(硅谷)
北美地区(多伦多)
亚太地区(孟买)
美国东部(弗吉尼亚)
亚太地区(曼谷)
欧洲地区(莫斯科)
亚太地区(东京)
华东地区(南京)
金融区
华东地区(上海金融)
华南地区(深圳金融)

After filling in the **input parameters**, select the code generation tab to see the automatically generated code in different programming languages (supporting Java, Python, Node.js, PHP, GO, .NET, C++). Some field information and filled content in the generated code are associated. If you need to adjust the input parameters, you can modify the parameter values on the left and regenerate the code.



- 在线调用模块中当您发起请求时，平台通过已登录用户信息获取当前账号临时Access Keys，对当前账号发起操作。
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Config (选填) [*]: string

EnableRecognitionRectify (选填) [*]: □

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另外，本接口还支持多种增值能力，满足不同场景的需求。如身份证照片、人像照片的裁剪功能，同时具备9种告警功能，如下表所示。

增值能力	能力项
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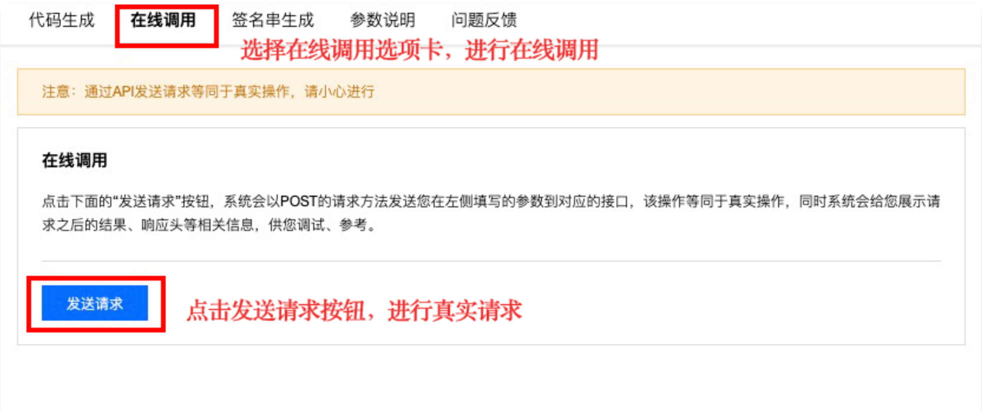
	人像照片裁剪（自动抠取身份证头像区域）
告警功能	身份证有效日期不合法，即有效日期不符合5年、10年、20年、长期期限
	身份证边框不完整告警
	身份证复印件告警
	身份证翻拍告警
	身份证框内遮挡告警
	临时身份证告警
	身份证疑似存在PS痕迹告警
	图片模糊告警（可根据图片质量分数判断）

默认接口请求频率限制：20次/秒。

2. 输入参数

After filling in the **input parameters**, select the **online calling** tab, and click the **send request** button to make a real request for debugging and reference.


代码生成
在线调用
签名串生成
参数说明
问题反馈
选择在线调用选项卡，进行在线调用
发送请求
点击发送请求按钮，进行真实请求

注意：通过API发送请求等同于真实操作，请小心进行

在线调用

点击下面的“发送请求”按钮，系统会以POST的请求方法发送您在左侧填写的参数到对应的接口，该操作等同于真实操作，同时系统会给您展示请求之后的结果、响应头等相关信息，供您调试、参考。

Step 3. Integrate the OCR SDK

Make sure the local dependency environment meets the following conditions:

Programming Environment	SDK Integration Requirements
Node.js	Version 7.10.1 or later is required.
Python	Version 2.7 to 3.6 is required.
Java	JDK 7 or above is required.

Go	Go 1.9 or above is required.
.Net	.NET Framework 4.5+ and .NET Core 2.1 are required.
PHP	Version 5.6.33 or later is required.
C++	The C++ compiler v4.8 or above and the build tool cmake v3.0 or above are required. Currently, only the Linux environment is supported, while Windows is not.

Install the Tencent Cloud OCR SDK corresponding to the local dependency environment. The following example demonstrates the SDK installation and usage for Node.js. For other languages, please refer to the Tencent Cloud SDK Integration Manual.
(1) Installing through npm (recommended): npm is the package management tool for Node.js. Execute the following installation command:

```
npm install tencentcloud-sdk-nodejs --save
```

(2) Installing through the source package: Go to the GitHub repository address and download the source package. Decompress the source package to an appropriate location in your project.
After the SDK installation is complete, you can reference the code automatically generated by API 3.0 Explorer in your project code. For example, a simple demo in Node.js is as follows:

```
const tencentcloud = require("tencentcloud-sdk-nodejs")

// Import the client models of the corresponding product module.
const OcrClient = tencentcloud.ocr.v20181119.Client

// Instantiate the client object of the requested product
const client = new OcrClient({
  // Tencent Cloud authentication information
  credential: {
    secretId: "secretId",
    secretKey: "secretKey",
  },
  // Product region
  region: "ap-shanghai",
  // Optional configuration instance
  profile: {
    signMethod: "TC3-HMAC-SHA256", // Signature method
    httpProfile: {
      reqMethod: "POST", // Request method
      reqTimeout: 30, // Specify the request timeout value in seconds. The default value is 60s
    },
  },
})

const params = {
    "ImageUrl": "https://ocr-demo-1254418846.cos.ap-
guangzhou.myqcloud.com/card/IDCardOCR/IDCardOCR1.jpg"
};

// Call the API (Action) you want to access through the client object; you need to pass in the request
object (Params) and the response callback function
// That is: client.Action(Params).then(res => console.log(res), err => console.error(err))
client.IDCardOCR(params).then(
    (data) => {
        console.log(data)
    },
    (err) => {
```

```
    console.error("error", err)
  }
)
```

Notes

- When calling common parameters with the SDK, only the Region field needs attention. It is recommended to use "ap-guangzhou" for both the domain name and Region.
- For Base64-encoded image or video, remove the `data:image/jpg;base64,` prefix and the line break `\n`. If the following error occurs when calling the SDK:

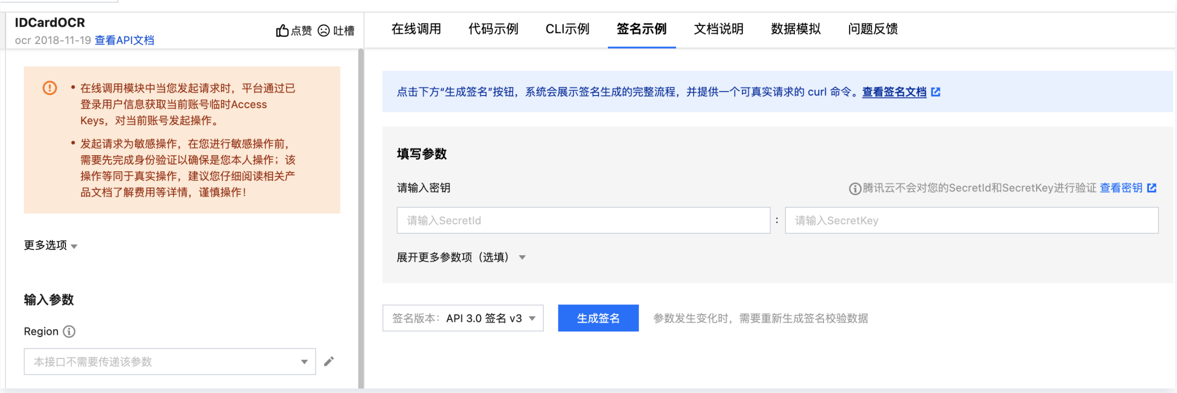
```
[TencentCloudSDKException]message:AuthFailure.SignatureFailure-The provided credentials
  could not be validated because of exceeding request size limit, please use new signature
  method TC3-HMAC-SHA256. requestId:719970d4-5814-4dd9-9757-a3f11ecc9b20
```

You need to manually configure the signature type:

```
  signMethod: "TC3-HMAC-SHA256", // Specify the signature algorithm "TC3-HMAC-SHA256". The default
value is HmacSHA256
```

If the API request content exceeds 1M, only V3 Authentication (TC3-HMAC-SHA256) can be used.

- The OCR API 3.0 SDK currently supports Node.js, Python, Java, PHP, Go, .Net, and C++. If you use other programming languages or do not want to use the Tencent Cloud SDK, you need to complete V3 authentication for API calls. For implementation details, refer to the Github samples. We recommend using the string signature generation tool in API 3.0 Explorer for verification.



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- 发起请求为敏感操作，在您进行敏感操作前，需要先完成身份验证以确保是您本人操作；该操作等同于真实操作，建议您仔细阅读相关产品文档了解费用等详情，谨慎操作！

输入参数

Region: 本接口不需要传递该参数

点击下方“生成签名”按钮，系统会展示签名生成的完整流程，并提供一个可真实请求的 curl 命令。查看签名文档

填写参数

请输入密钥　　腾讯云不会对您的SecretId和SecretKey进行验证 查看密钥

请输入SecretId : 请输入SecretKey

展开更多参数项（选填）

签名版本：API 3.0 签名 v3

参数发生变化时，需要重新生成签名校验数据

Visualize Calling the Optical Character Recognition (OCR) Service

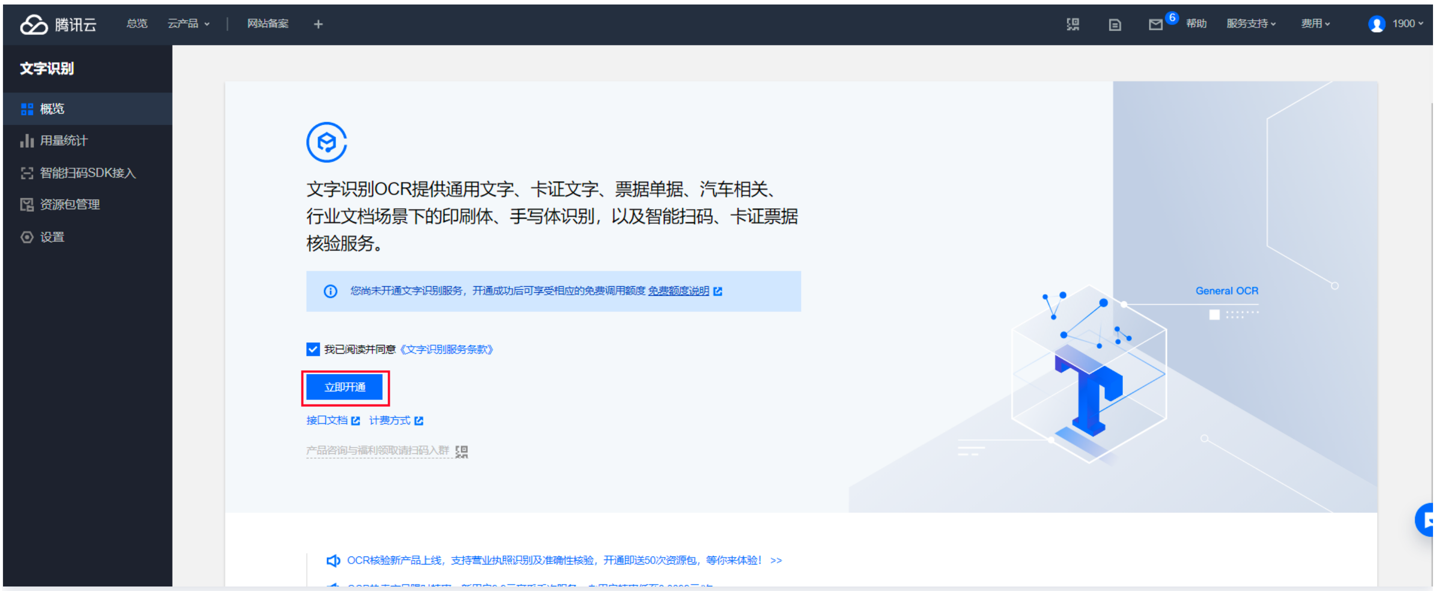
Last updated：2025-02-06 16:07:29

This article will introduce how to visualize OCR service calls, including two methods: API 3.0 Explorer and Postman. It is recommended to use API 3.0 Explorer. The specific steps are as follows.

Watch video

Activate OCR Service

Before calling the OCR related APIs, you need to enter the OCR Console, read the "OCR Terms of Service" then check the box to agree and click **Activate Now** to enable services such as **General Text, Card and Certificate Text, Bills and Invoices APIs** with one click.



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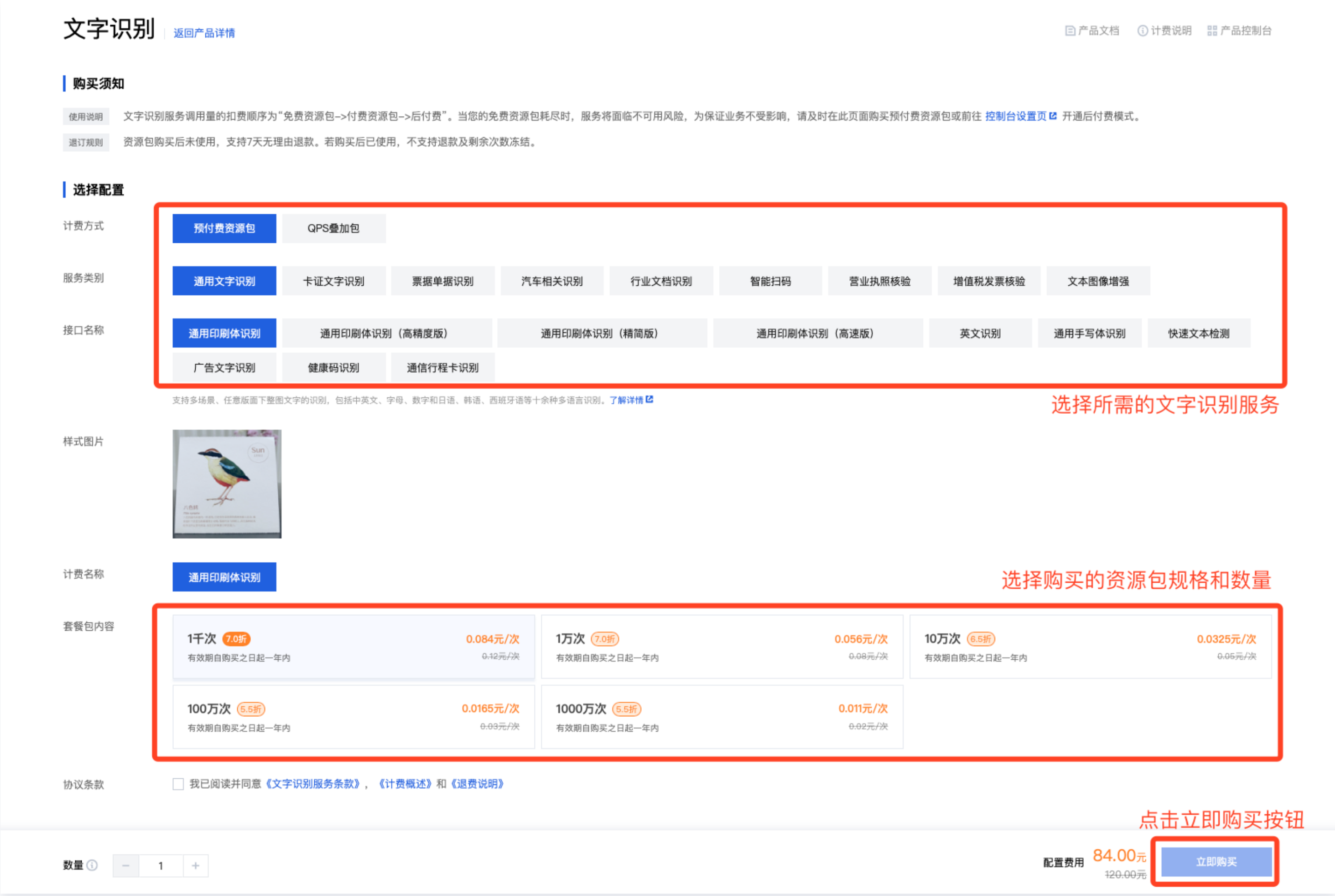
After the service is successfully activated, you will receive free usage quotas for each service, which can be viewed on the Resource Packs page. You can also purchase resource packages for the OCR service on the OCR purchase page. If the free quota and resource package usage are exhausted, billing will automatically switch to a postpaid method and settle monthly. For specific billing standards, please refer to the Billing Overview of OCR.



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接口名称: 通用印刷体识别 | 通用印刷体识别（高精度版） | 通用印刷体识别（精简版） | 通用印刷体识别（高速版） | 英文识别 | 通用手写体识别 | 快速文本检测 | 广告文字识别 | 健康码识别 | 通信行程卡识别

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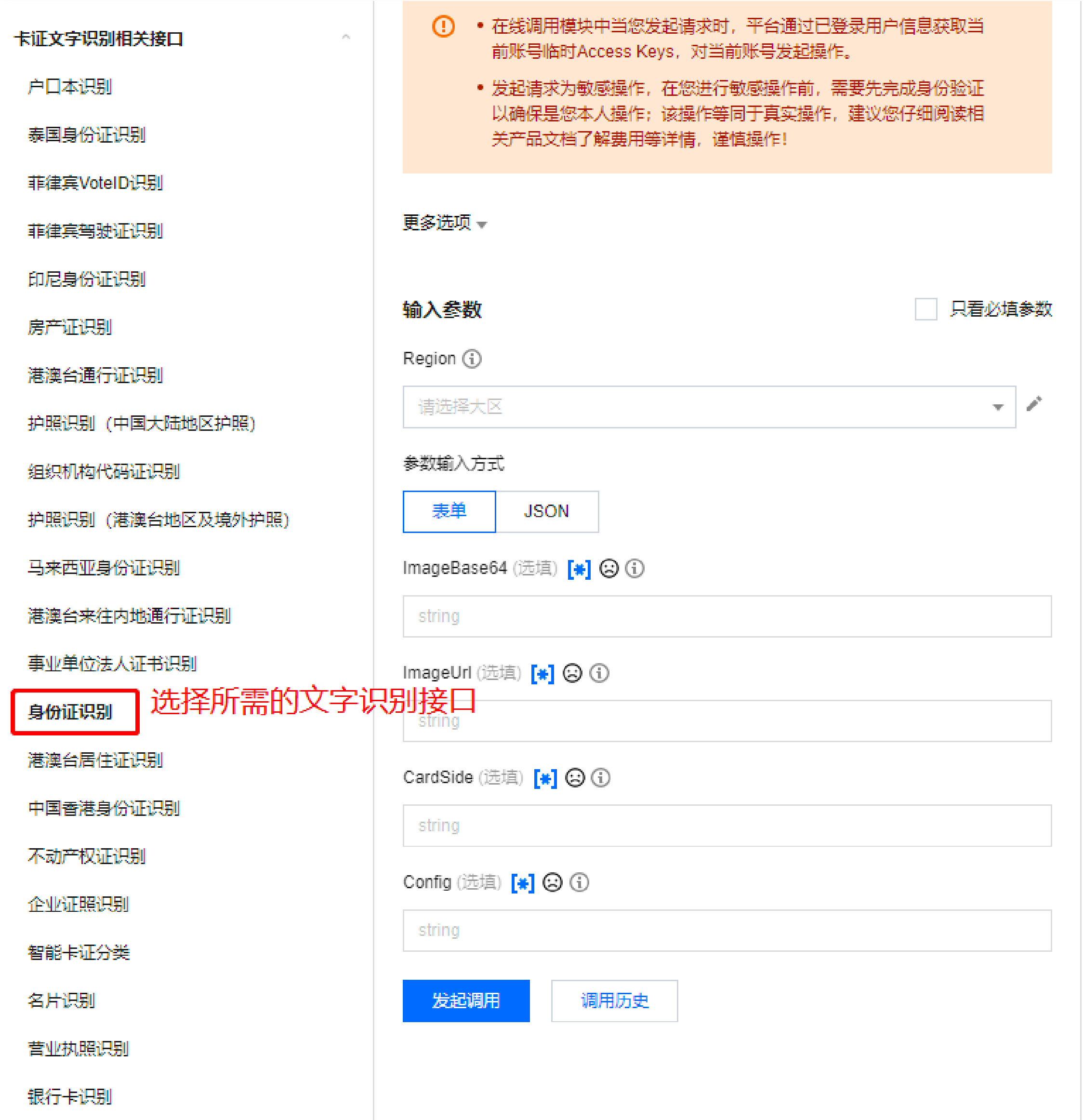
Description

After successfully activating the OCR service, you can call the OCR service in two ways as preferred. It is recommended to use API 3.0 Explorer.

Call OCR API Using API 3.0 Explorer

<Input Parameters>

Enter the OCR API 3.0 Explorer online interface debugging page, select the API you need to call, and fill in the **Input Parameter**.



卡证文字识别相关接口

- 户口本识别
- 泰国身份证识别
- 菲律宾VoteID识别
- 菲律宾驾驶证识别
- 印尼身份证识别
- 房产证识别
- 港澳台通行证识别
- 护照识别（中国大陆地区护照）
- 组织机构代码证识别
- 护照识别（港澳台地区及境外护照）
- 马来西亚身份证识别
- 港澳台来往内地通行证识别
- 事业单位法人证书识别
- 身份证识别
- 港澳台居住证识别
- 中国香港身份证识别
- 不动产权证识别
- 企业证照识别
- 智能卡证分类
- 名片识别
- 营业执照识别
- 银行卡识别

选择所需的文字识别接口

- 在线调用模块中当您发起请求时，平台通过已登录用户信息获取当前账号临时Access Keys，对当前账号发起操作。
- 发起请求为敏感操作，在您进行敏感操作前，需要先完成身份验证以确保是您本人操作；该操作等同于真实操作，建议您仔细阅读相关产品文档了解费用等详情，谨慎操作！

更多选项

输入参数 □ 只看必填参数

Region: 请选择大区

参数输入方式: 表单 | JSON

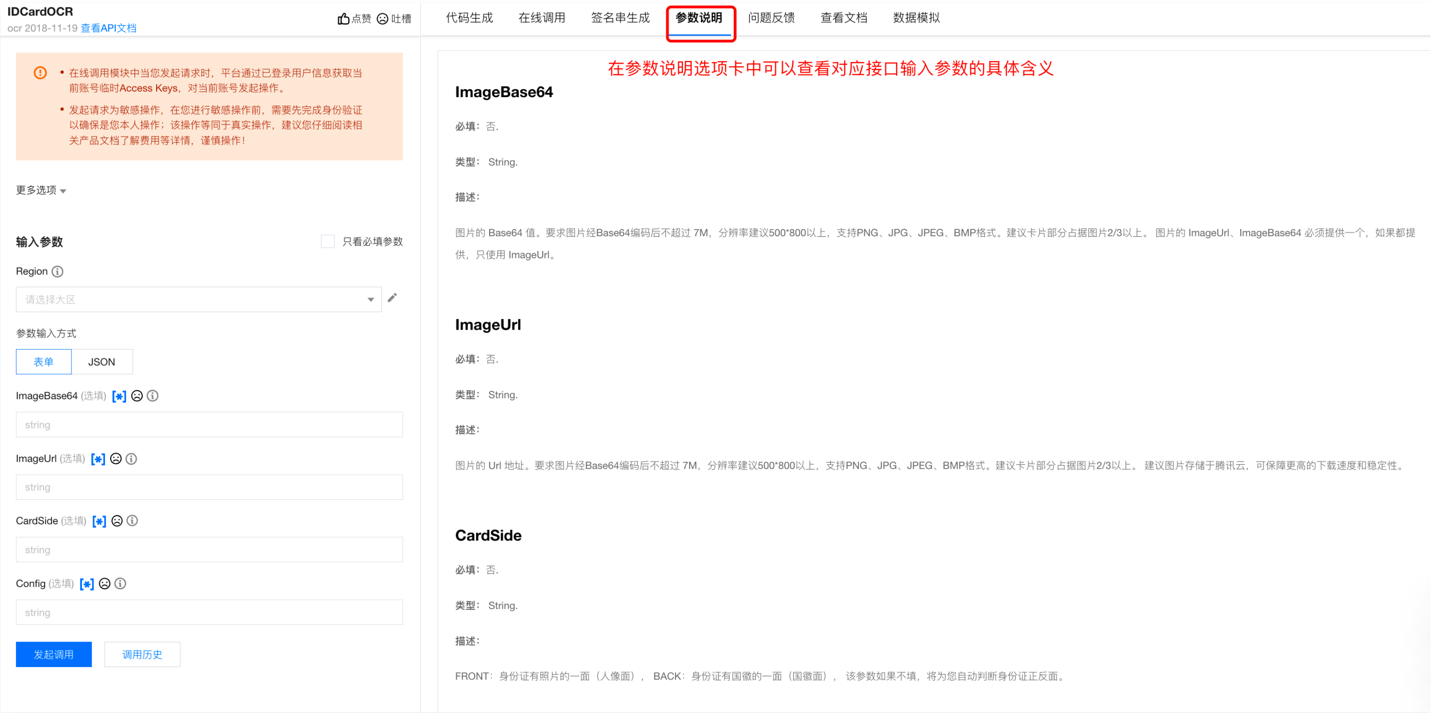
ImageBase64 (选填): string

ImageUrl (选填): string

CardSide (选填): string

Config (选填): string

In the **Parameter Description** tab of the API 3.0 Explorer interface, you can view the specific meanings of the input parameters for the corresponding API.



IDCardOCR
ocr 2018-11-19 查看API文档

点赞 吐槽

- 在线调用模块中当您发起请求时，平台通过已登录用户信息获取当前账号临时Access Keys，对当前账号发起操作。
- 发起请求为敏感操作，在您进行敏感操作前，需要先完成身份验证以确保是您本人操作；该操作等同于真实操作，建议您仔细阅读相关产品文档了解费用等详情，谨慎操作！

更多选项

输入参数 □ 只看必填参数

Region: 请选择大区

参数输入方式: 表单 JSON

ImageBase64 (选填): string

ImageUrl (选填): string

CardSide (选填): string

Config (选填): string

发起调用 调用历史

代码生成 在线调用 签名串生成 **参数说明** 问题反馈 查看文档 数据模拟

在参数说明选项卡中可以查看对应接口输入参数的具体含义

ImageBase64

必填：否.

类型： String.

描述：

图片的 Base64 值。要求图片经Base64编码后不超过 7M，分辨率建议500*800以上，支持PNG、JPG、JPEG、BMP格式。建议卡片部分占据图片2/3以上。 图片的 ImageUrl、ImageBase64 必须提供一个，如果都提供，只使用 ImageUrl。

ImageUrl

必填：否.

类型： String.

描述：

图片的 Url 地址。要求图片经Base64编码后不超过 7M，分辨率建议500*800以上，支持PNG、JPG、JPEG、BMP格式。建议卡片部分占据图片2/3以上。 建议图片存储于腾讯云，可保障更高的下载速度和稳定性。

CardSide

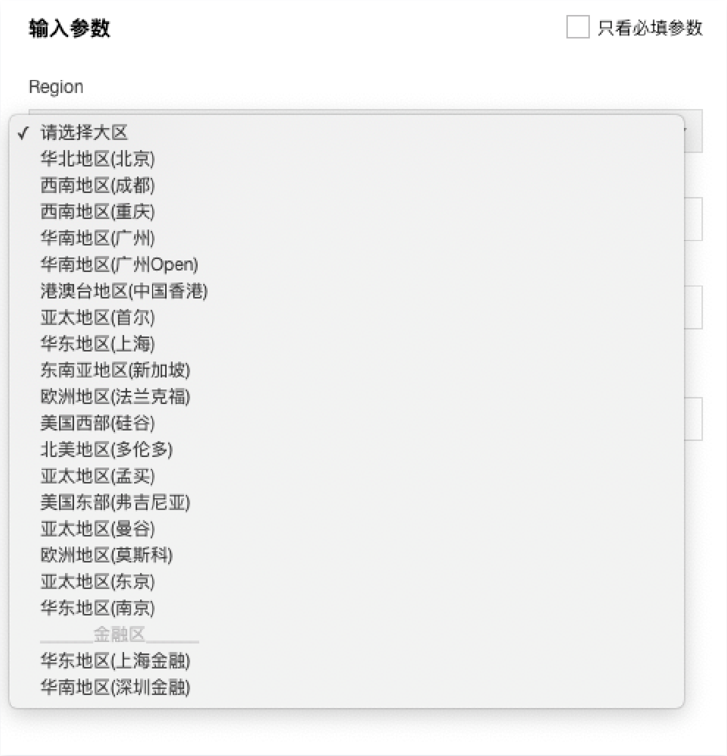
必填：否.

类型： String.

描述：

FRONT：身份证有照片的一面（人像面）， BACK：身份证有国徽的一面（国徽面）， 该参数如果不填，将为您自动判断身份证正反面。

Among them, the Region parameter is a required parameter for each API, indicating the region where the OCR service resources are located. Clicking the dropdown box of **Region** allows you to select Tencent Cloud servers in different regions. It is recommended to choose a region close to your access point IP address: for example, if your access point is in Shenzhen, it is recommended to choose South China (Guangzhou) for Region.

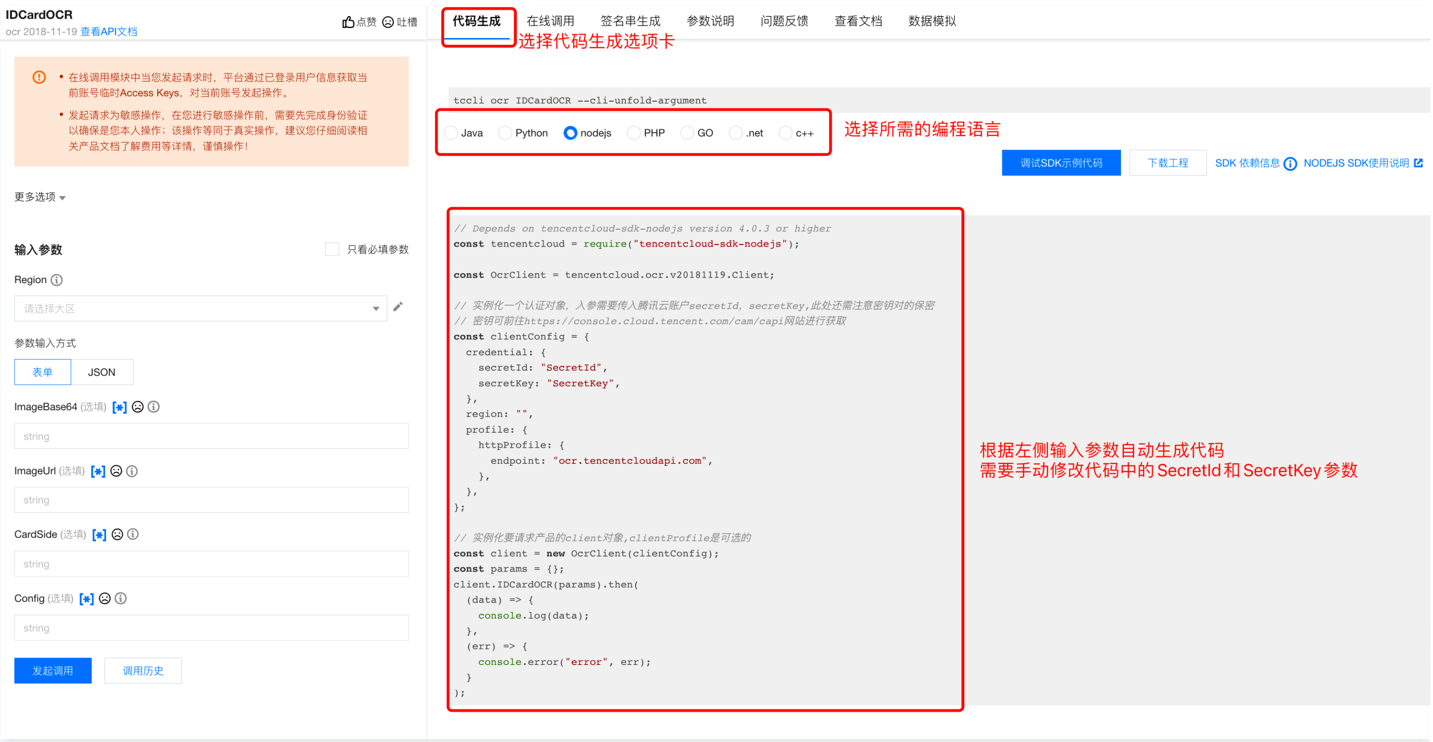


输入参数 □ 只看必填参数

Region

✓ 请选择大区
华北地区(北京)
西南地区(成都)
西南地区(重庆)
华南地区(广州)
华南地区(广州Open)
港澳台地区(中国香港)
亚太地区(首尔)
华东地区(上海)
东南亚地区(新加坡)
欧洲地区(法兰克福)
美国西部(硅谷)
北美地区(多伦多)
亚太地区(孟买)
美国东部(弗吉尼亚)
亚太地区(曼谷)
欧洲地区(莫斯科)
亚太地区(东京)
华东地区(南京)
金融区
华东地区(上海金融)
华南地区(深圳金融)

After filling in the **Input Parameter**, select the code generation tab, where you can see the automatically generated code in different programming languages (supporting Java, Python, Node.js, PHP, GO, .NET, C++ languages). Some field information in the generated code is related to the content filled in. If you need to adjust the input parameters, you can modify the parameter values on the left and regenerate the code.



- 在线调用模块中当您发起请求时，平台通过已登录用户信息获取当前账号临时Access Keys，对当前账号发起操作。
- 发起请求为敏感操作，在您进行敏感操作前，需要先完成身份验证以确保是您本人操作；该操作等同于真实操作，建议您仔细阅读相关产品文档了解费用等详情，谨慎操作！

选择代码生成选项卡

```
tccli ocr IDCardOCR --cli-unfold-argument
```

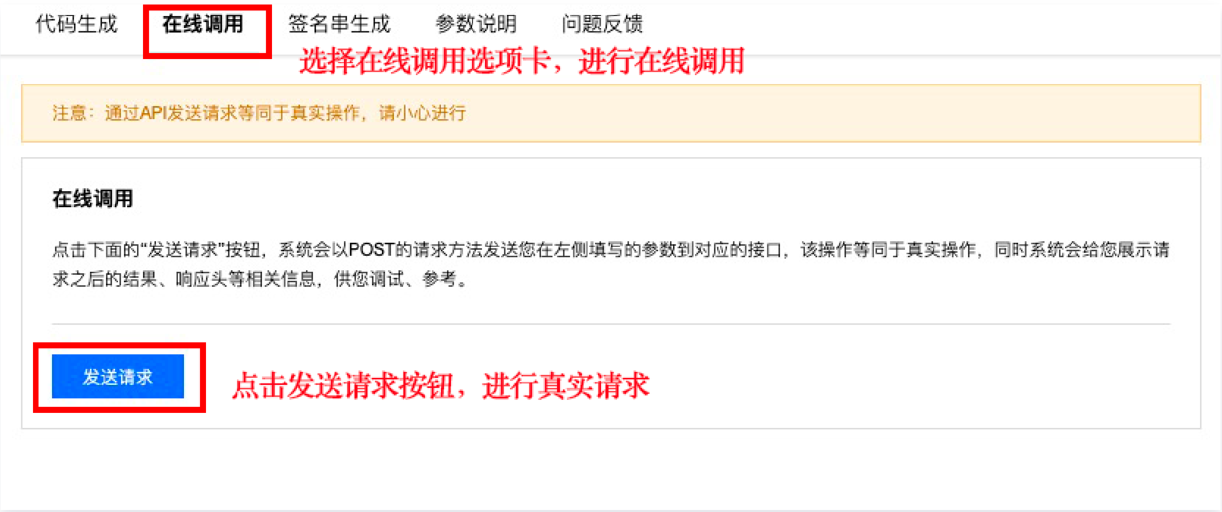
选择所需的编程语言

```
// Depends on tencentcloud-sdk-nodejs version 4.0.3 or higher
const tencentcloud = require("tencentcloud-sdk-nodejs");

const OcrClient = tencentcloud.ocr.v20181119.Client;

// 实例化一个认证对象，入参需要传入腾讯云账户secretId，secretKey,此处还需注意密钥对的保密
// 密钥可前往https://console.cloud.tencent.com/cam/capi网站进行获取
const clientConfig = {
  credential: {
    secretId: "SecretId",
    secretKey: "SecretKey",
  },
  region: "",
  profile: {
    httpProfile: {
      endpoint: "ocr.tencentcloudapi.com",
    },
  },
};

// 实例化要请求产品的client对象,clientProfile是可选的
const client = new OcrClient(clientConfig);
const params = {};
client.IDCardOCR(params).then(
  (data) => {
    console.log(data);
  },
  (err) => {
    console.error("error", err);
  }
);
```

根据左侧输入参数自动生成代码
需要手动修改代码中的SecretId和SecretKey参数

Initiate Request

After filling in the input parameters, select the **online calling** tab, and click the **send a request** button to make a real request for debugging and reference.



选择在线调用选项卡，进行在线调用

注意：通过API发送请求等同于真实操作，请小心进行

在线调用

点击下面的"发送请求"按钮，系统会以POST的请求方法发送您在左侧填写的参数到对应的接口，该操作等同于真实操作，同时系统会给您展示请求之后的结果、响应头等相关信息，供您调试、参考。

点击发送请求按钮，进行真实请求

Call OCR API Using Postman

Postman Download and Installation

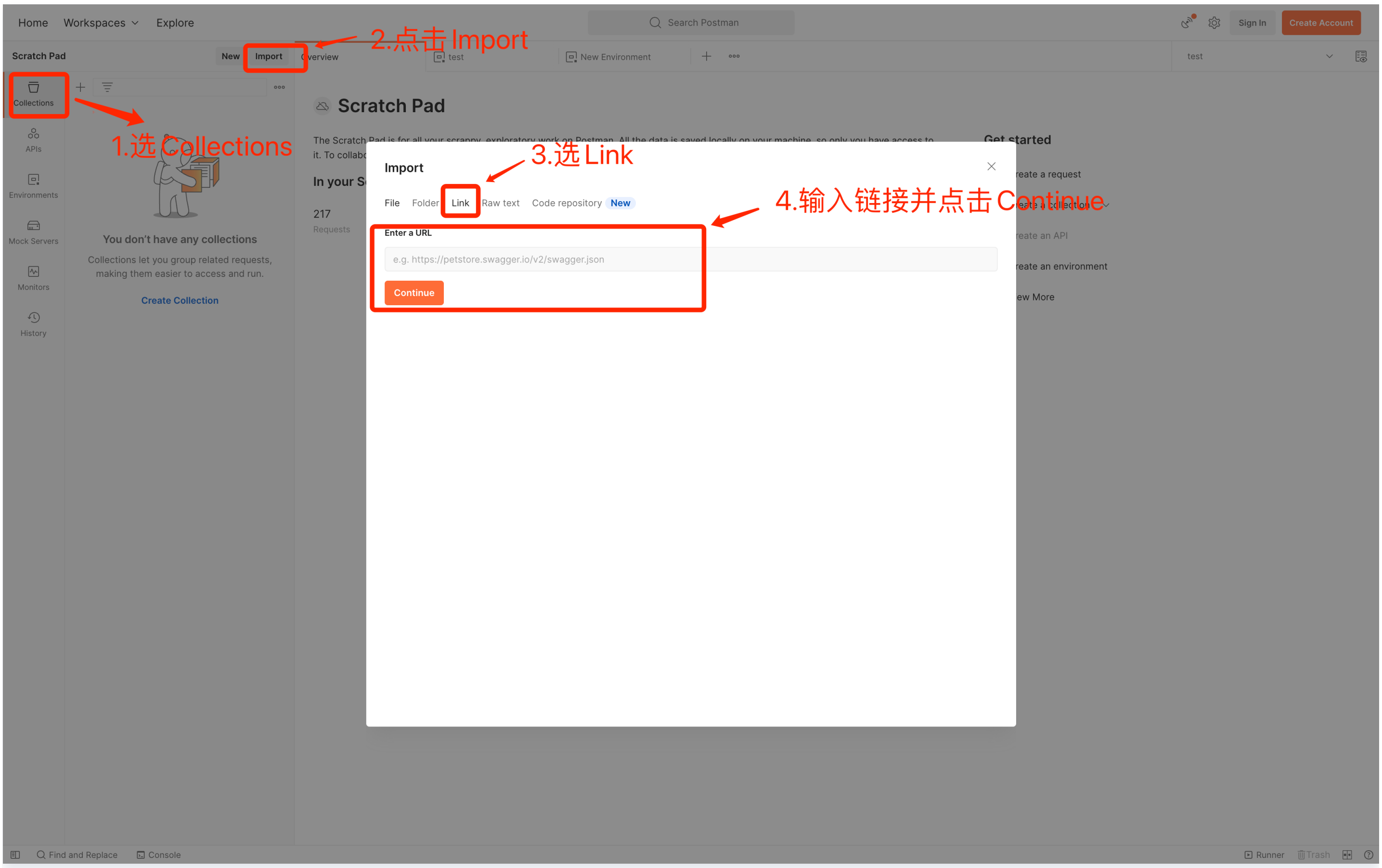
1. Download link: Download Postman | Get Started for Free . Choose the installation package according to your computer type.
2. After download, double-click the installation package for installation as prompted. If there are no special requirements, choose the default settings. The first time you open it, you need to log in. If you don't have an account, choose to skip.

Calling the API

Import Postman Configuration

Use Postman's import feature to initialize the configuration. Configuration link: `https://ocr-documents-1258344699.cos.ap-guangzhou.myqcloud.com/postman_config.json`

The specific import steps are as follows:



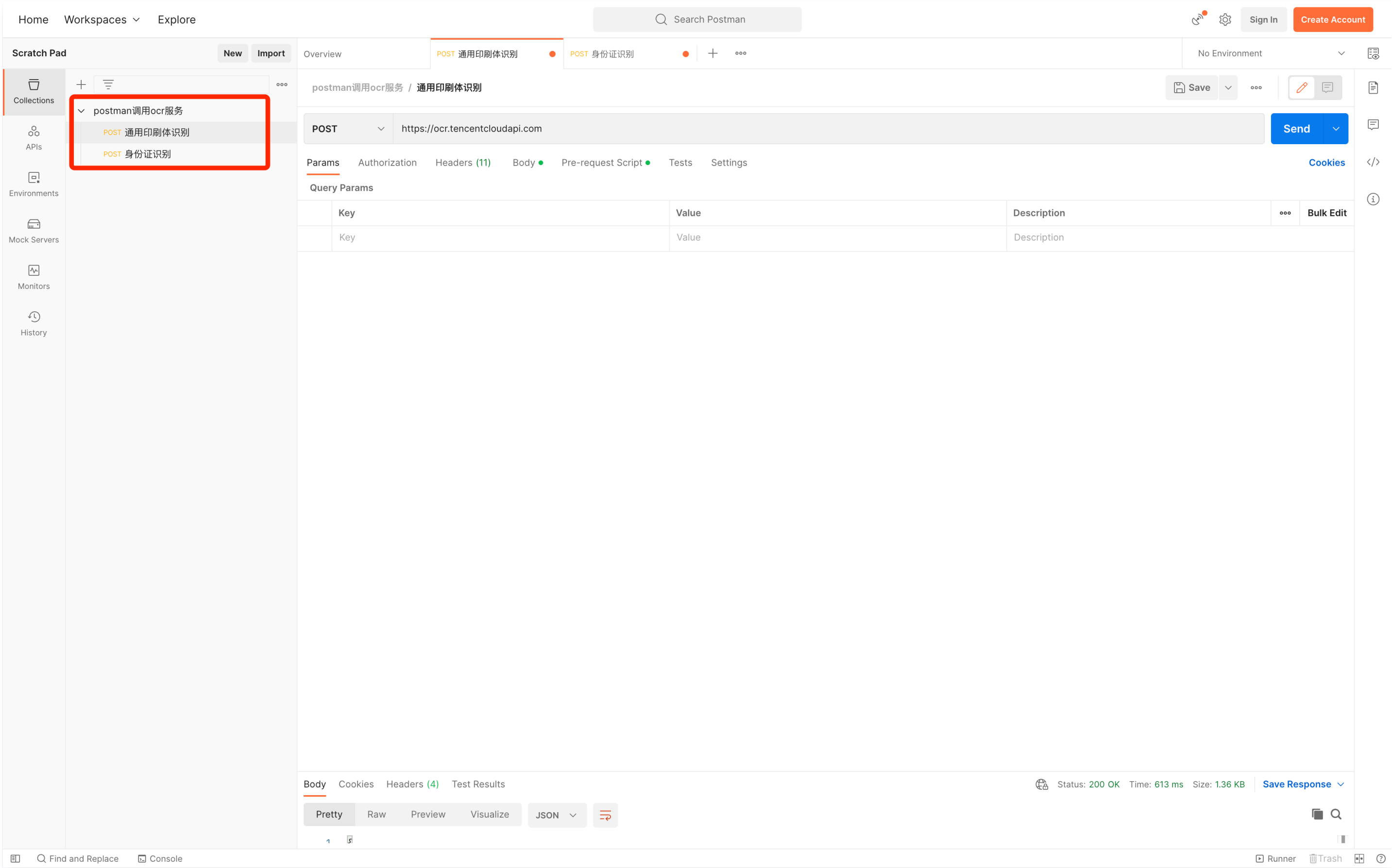
1.选 Collections

2.点击 Import

3.选 Link

4.输入链接并点击 Continue

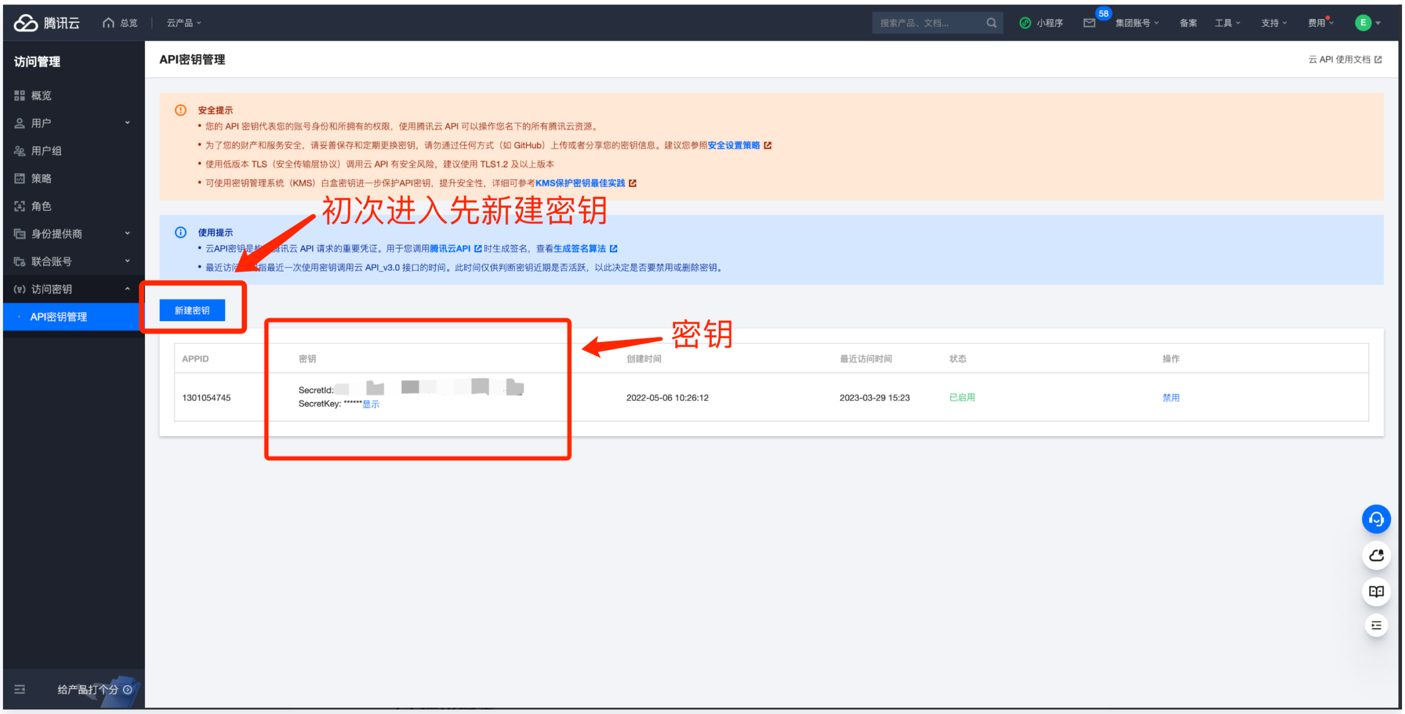
The initial configuration includes two API examples, with all required configuration information included. Seeing the following content indicates a successful import.



Modify tencent cloud key

Before making a request, you need to modify the key in the Pre-request-Script of the request to your own, so the script can correctly calculate the authentication parameter.

1. Log in to the Cloud Access Management console to get the key.



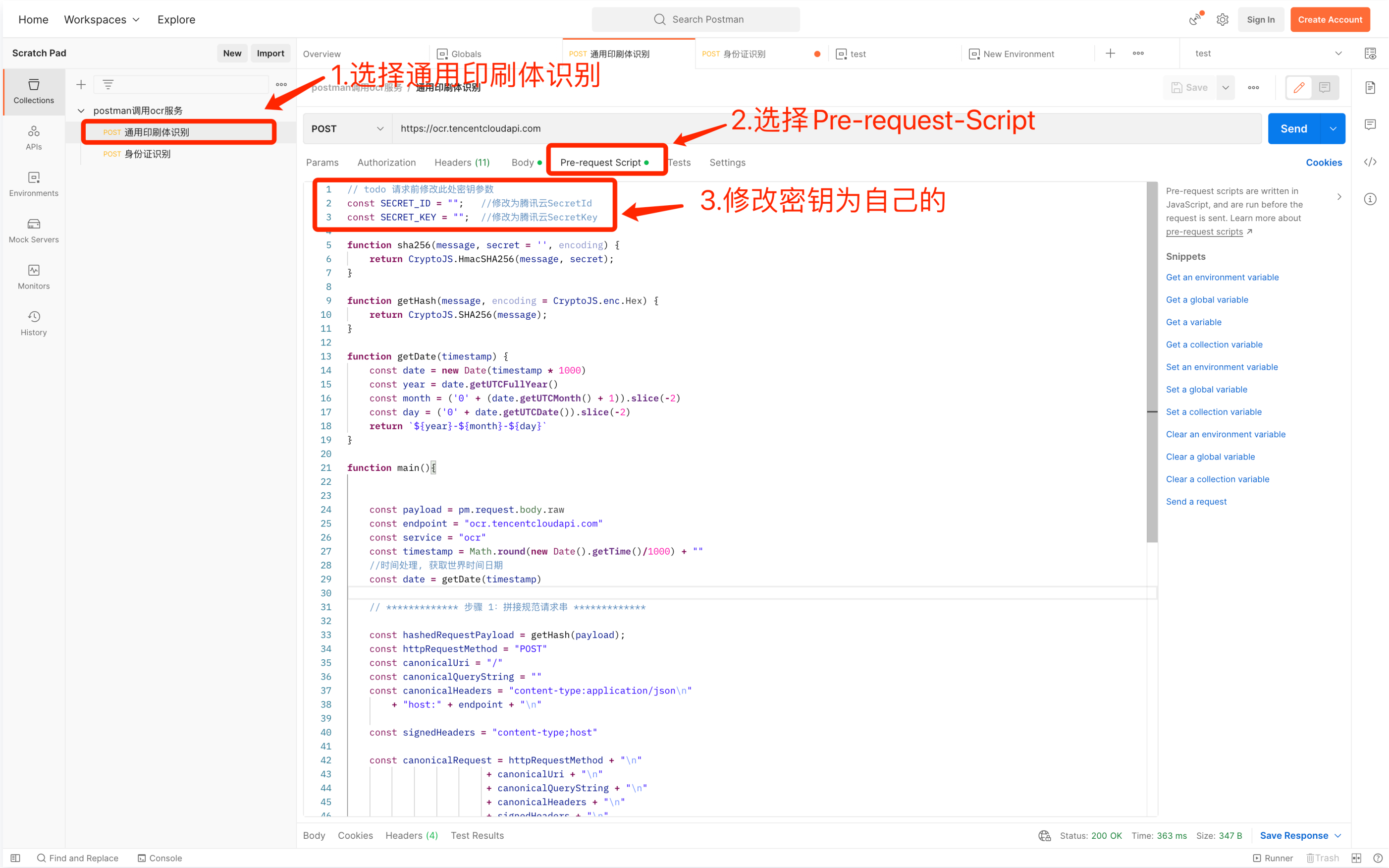
API密钥管理

安全提示
- 您的 API 密钥代表您的账号身份和所拥有的权限，使用腾讯云 API 可以操作您名下的所有腾讯云资源。
- 为了您的财产和服务安全，请妥善保存和定期更换密钥，请勿通过任何方式（如 GitHub）上传或者分享您的密钥信息。建议您参照安全设置策略
- 使用低版本 TLS（安全传输层协议）调用云 API 有安全风险，建议使用 TLS1.2 及以上版本
- 可使用密钥管理系统（KMS）白盒密钥进一步保护API密钥，提升安全性，详细可参考KMS保护密钥最佳实践

使用提示
- 云API密钥是构腾讯云 API 请求的重要凭证。用于您调用腾讯云API时生成签名，查看生成签名算法
- 最近访问指最近一次使用密钥调用云 API_v3.0 接口的时间。此时间仅供判断密钥近期是否活跃，以此决定是否要禁用或删除密钥。

APPID	密钥	创建时间	最近访问时间	状态	操作
1301054745	SecretId: [redacted] SecretKey: ******显示	2022-05-06 10:26:12	2023-03-29 15:23	已启用	禁用

2. For example, if we want to call the General print recognition API, modify the key in its preprocessing script.


1.选择通用印刷体识别

2.选择Pre-request-Script

3.修改密钥为自己的

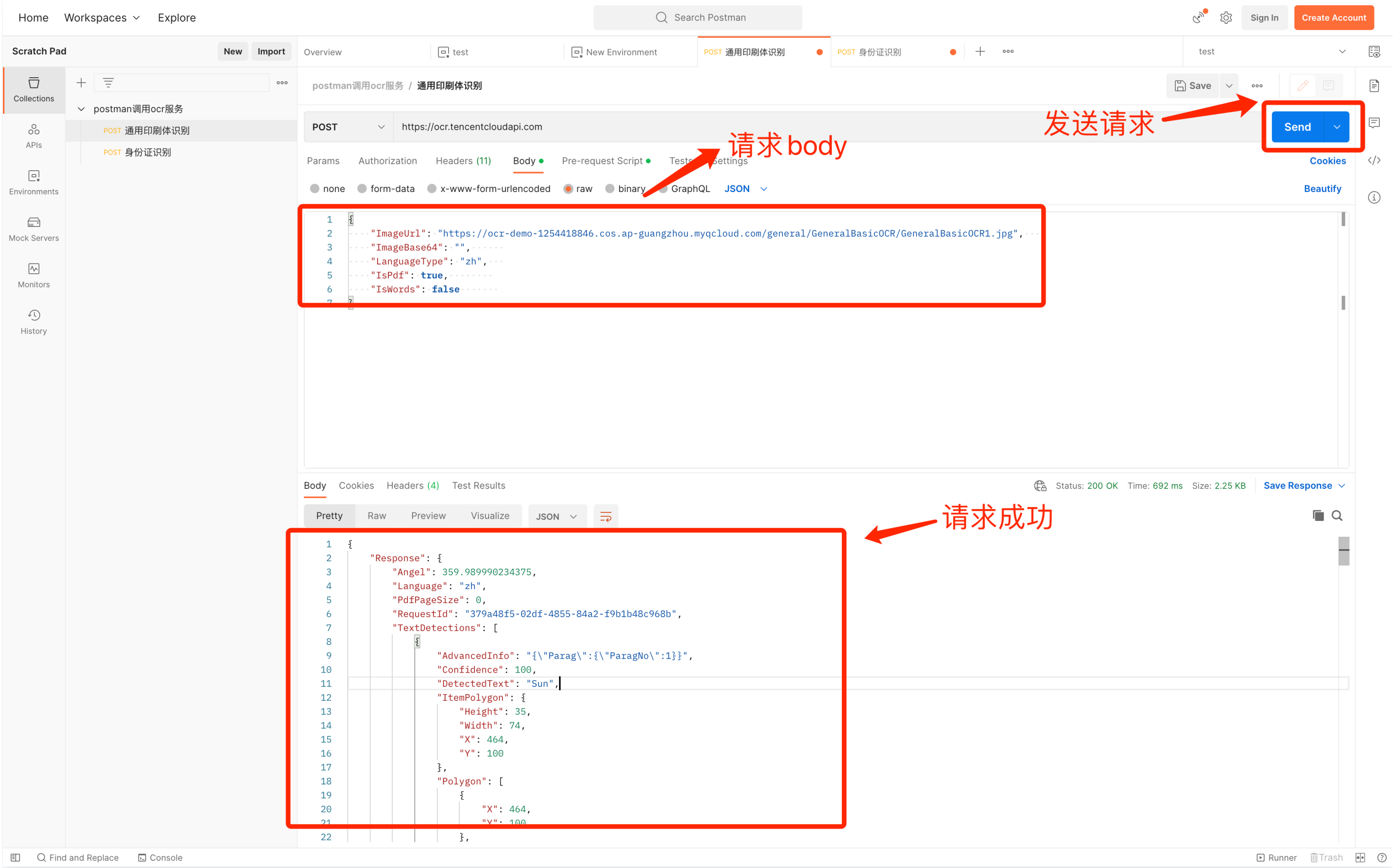
POST https://ocr.tencentcloudapi.com

```
// todo 请求前修改此处密钥参数
const SECRET_ID = "";   //修改为腾讯云SecretId
const SECRET_KEY = "";  //修改为腾讯云SecretKey

function sha256(message, secret = '', encoding) {
    return CryptoJS.HmacSHA256(message, secret);
}

function getHash(message, encoding = CryptoJS.enc.Hex) {
    return CryptoJS.SHA256(message);
}

function getDate(timestamp) {
    const date = new Date(timestamp * 1000)
    const year = date.getUTCFullYear()
    const month = ('0' + (date.getUTCMonth() + 1)).slice(-2)
    const day = ('0' + date.getUTCDate()).slice(-2)
    return `${year}-${month}-${day}`
}

function main(){


    const payload = pm.request.body.raw
    const endpoint = "ocr.tencentcloudapi.com"
    const service = "ocr"
    const timestamp = Math.round(new Date().getTime()/1000) + ""
    //时间处理，获取世界时间日期
    const date = getDate(timestamp)

    // ************* 步骤 1: 拼接规范请求串 *************

    const hashedRequestPayload = getHash(payload);
    const httpRequestMethod = "POST"
    const canonicalUri = "/"
    const canonicalQueryString = ""
    const canonicalHeaders = "content-type:application/json\n"
        + "host:" + endpoint + "\n"

    const signedHeaders = "content-type;host"

    const canonicalRequest = httpRequestMethod + "\n"
                           + canonicalUri + "\n"
                           + canonicalQueryString + "\n"
                           + canonicalHeaders + "\n"
                           + signedHeaders + "\n"
```

Status: 200 OK Time: 363 ms Size: 347 B

Initiate request

After modifying the key, click **Send** to send the request. Seeing the following content indicates a successful request.



POST https://ocr.tencentcloudapi.com

```
{
    "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/general/GeneralBasicOCR/GeneralBasicOCR1.jpg",
    "ImageBase64": "",
    "LanguageType": "zh",
    "IsPdf": true,
    "IsWords": false
}
```

Body Cookies Headers (4) Test Results

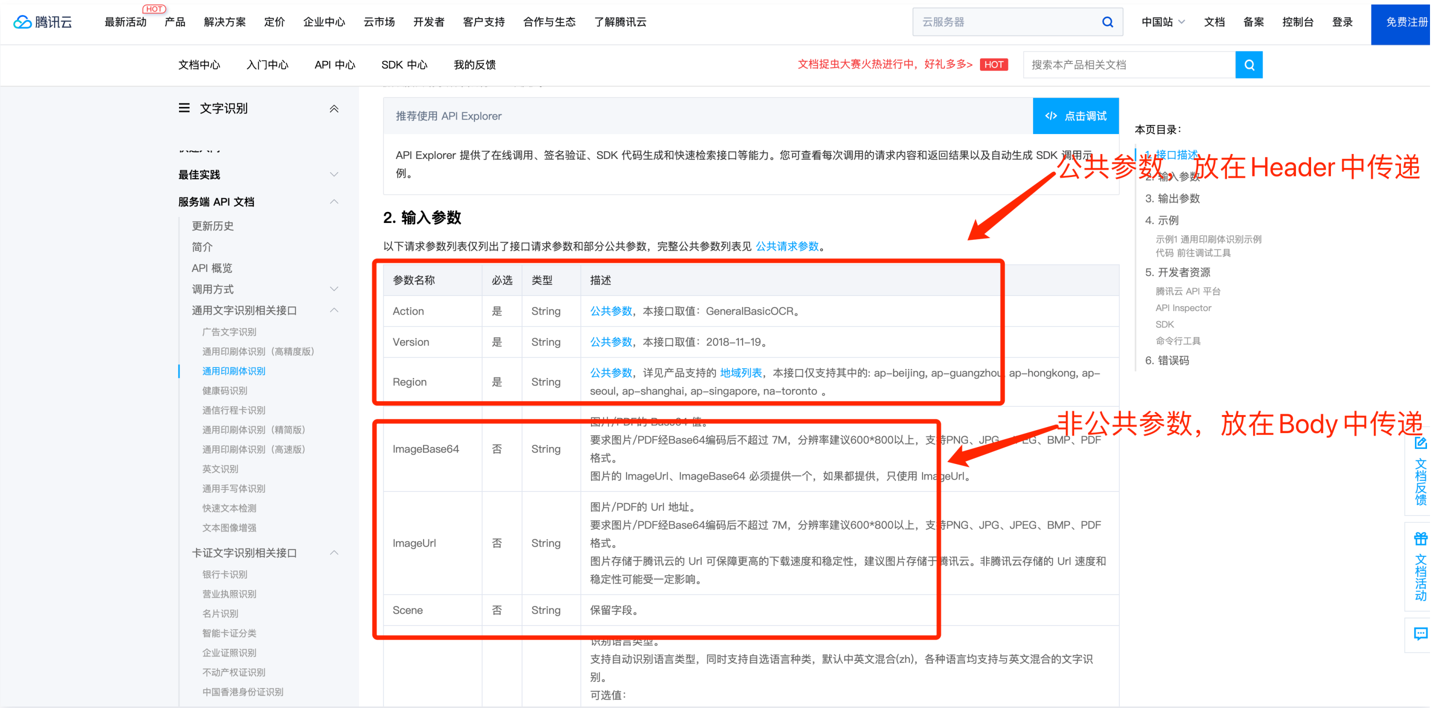
Status: 200 OK Time: 692 ms Size: 2.25 KB

```
{
    "Response": {
        "Angel": 359.989990234375,
        "Language": "zh",
        "PdfPageSize": 0,
        "RequestId": "379a48f5-02df-4855-84a2-f9b1b48c968b",
        "TextDetections": [
            {
                "AdvancedInfo": "{\"Parag\":{\"ParagNo\":1}}",
                "Confidence": 100,
                "DetectedText": "Sun",
                "ItemPolygon": {
                    "Height": 35,
                    "Width": 74,
                    "X": 464,
                    "Y": 100
                },
                "Polygon": [
                    {
                        "X": 464,
                        "Y": 100
                    },
```

How To Modify Request Parameters and Request API

Parameter introduction

OCR service (TencentCloud API) parameters are divided into common parameters and non-common parameters. Taking the General print recognition API as an example:



推荐使用 API Explorer

</> 点击调试

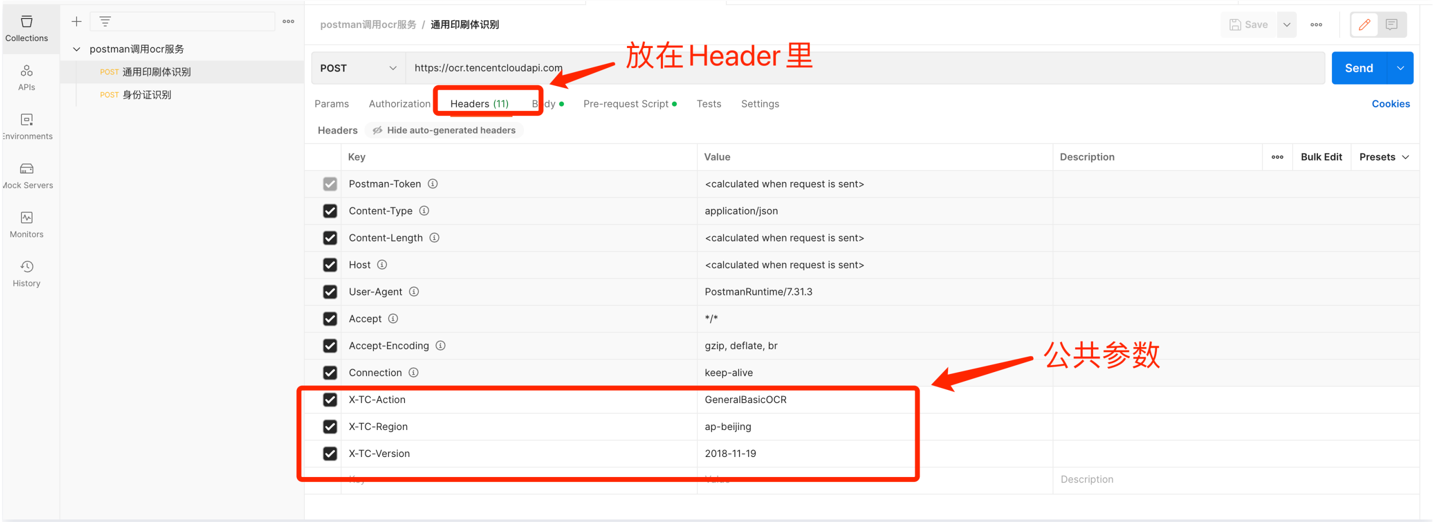
API Explorer 提供了在线调用、签名验证、SDK 代码生成和快速检索接口等能力。您可查看每次调用的请求内容和返回结果以及自动生成 SDK 调用示例。

2. 输入参数

以下请求参数列表仅列出了接口请求参数和部分公共参数，完整公共参数列表见 公共请求参数。

参数名称	必选	类型	描述
Action	是	String	公共参数，本接口取值：GeneralBasicOCR。
Version	是	String	公共参数，本接口取值：2018-11-19。
Region	是	String	公共参数，详见产品支持的 地域列表，本接口仅支持其中的: ap-beijing, ap-guangzhou, ap-hongkong, ap-seoul, ap-shanghai, ap-singapore, na-toronto 。
ImageBase64	否	String	图片/PDF的 Base64 值。 要求图片/PDF经Base64编码后不超过 7M，分辨率建议600*800以上，支持PNG、JPG、JPEG、BMP、PDF格式。 图片的 ImageUrl、ImageBase64 必须提供一个，如果都提供，只使用 ImageUrl。
ImageUrl	否	String	图片/PDF的 Url 地址。 要求图片/PDF经Base64编码后不超过 7M，分辨率建议600*800以上，支持PNG、JPG、JPEG、BMP、PDF格式。 图片存储于腾讯云的 Url 可保障更高的下载速度和稳定性，建议图片存储于腾讯云。非腾讯云存储的 Url 速度和稳定性可能受一定影响。
Scene	否	String	保留字段。
			识别语言类型。 支持自动识别语言类型，同时支持自选语言种类，默认中英文混合(zh)，各种语言均支持与英文混合的文字识别。 可选值：

Corresponding to Postman:

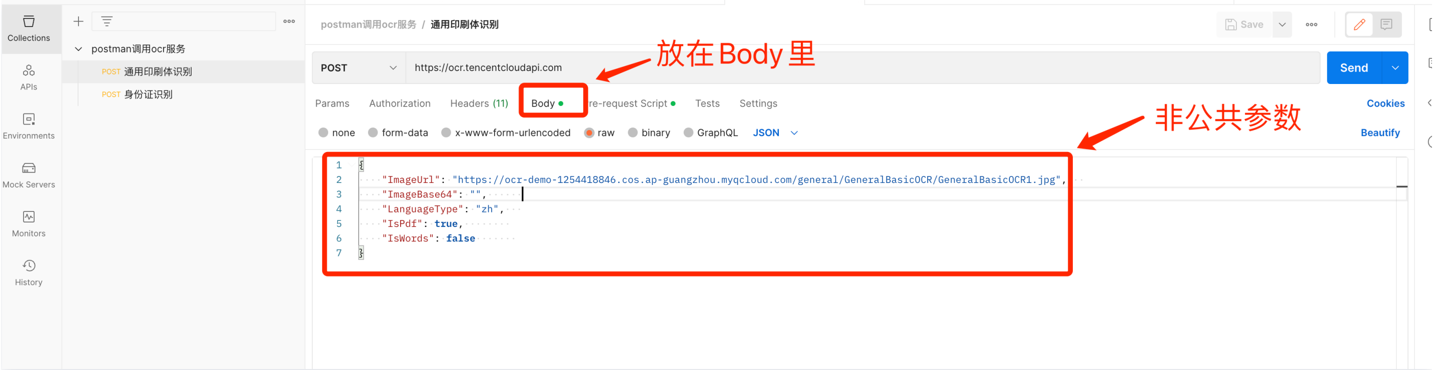


POST https://ocr.tencentcloudapi.com

	Key	Value	Description
☑	Postman-Token	<calculated when request is sent>	
☑	Content-Type	application/json	
☑	Content-Length	<calculated when request is sent>	
☑	Host	<calculated when request is sent>	
☑	User-Agent	PostmanRuntime/7.31.3	
☑	Accept	*/*	
☑	Accept-Encoding	gzip, deflate, br	
☑	Connection	keep-alive	
☑	X-TC-Action	GeneralBasicOCR	
☑	X-TC-Region	ap-beijing	
☑	X-TC-Version	2018-11-19	

Note

When transmitting common parameters, the parameter names need to be prefixed with "X-TC-". For details, see API Documentation Center.



POST https://ocr.tencentcloudapi.com

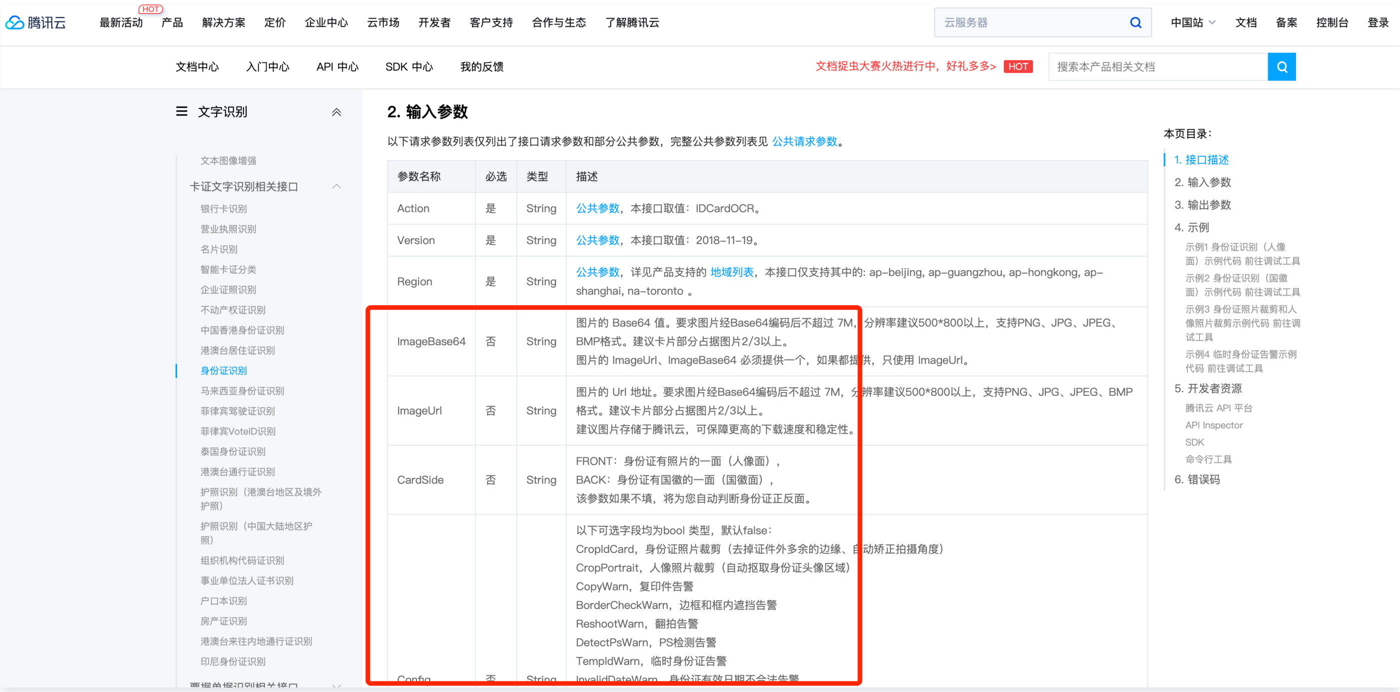
○ none ○ form-data ○ x-www-form-urlencoded ● raw ○ binary ○ GraphQL JSON

```
{
    "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/general/GeneralBasicOCR/GeneralBasicOCR1.jpg",
    "ImageBase64": "",
    "LanguageType": "zh",
    "IsPdf": true,
    "IsWords": false
}
```

Request parameter modification

If you want to resolve different images or set different request parameters, the steps are as follows:

1. View the input parameter definition of the API, such as the identity recognition API.

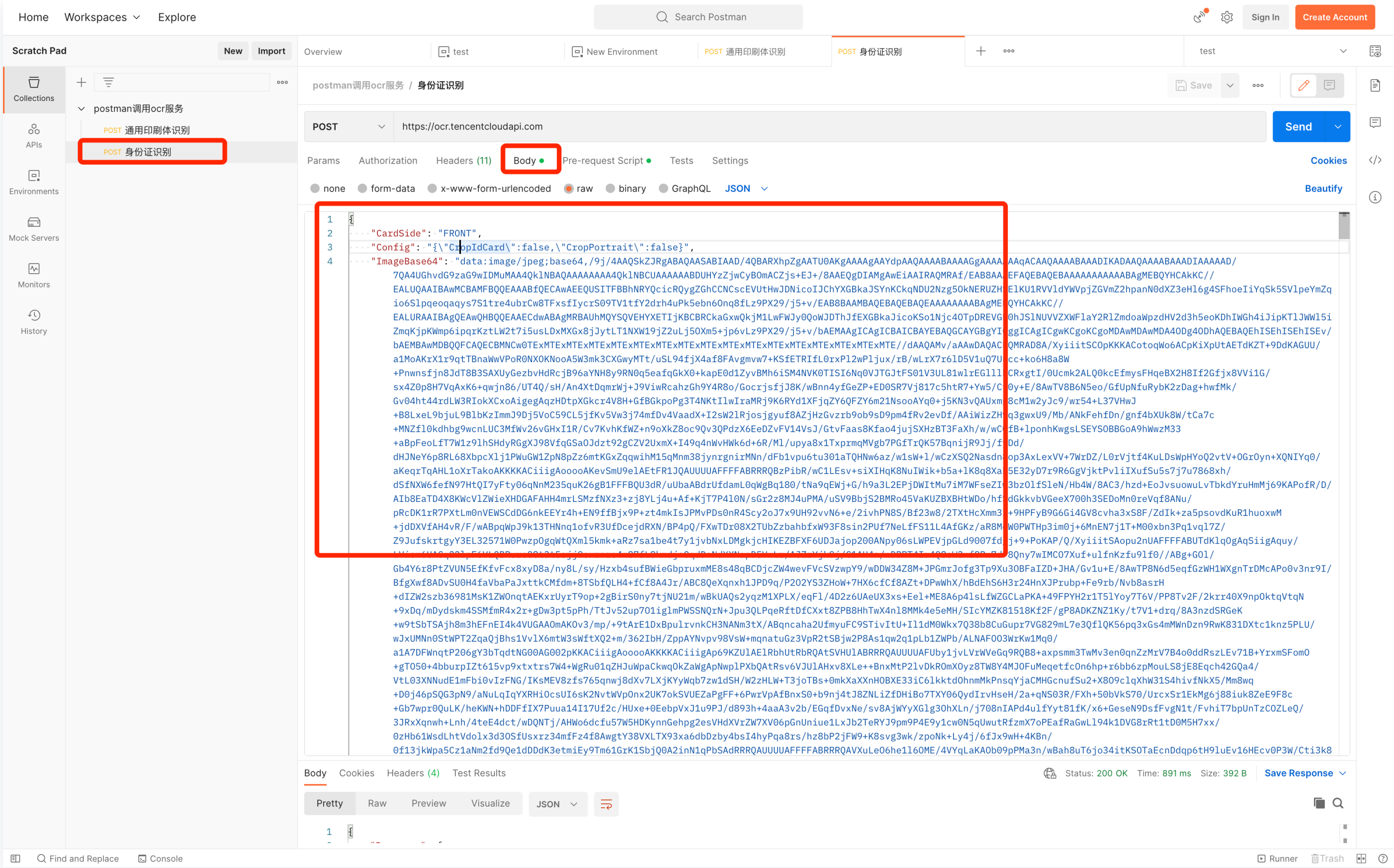


2. 输入参数

以下请求参数列表仅列出了接口请求参数和部分公共参数，完整公共参数列表见 公共请求参数。

参数名称	必选	类型	描述
Action	是	String	公共参数，本接口取值：IDCardOCR。
Version	是	String	公共参数，本接口取值：2018-11-19。
Region	是	String	公共参数，详见产品支持的 地域列表，本接口仅支持其中的: ap-beijing, ap-guangzhou, ap-hongkong, ap-shanghai, na-toronto 。
ImageBase64	否	String	图片的 Base64 值。要求图片经Base64编码后不超过 7M，分辨率建议500*800以上，支持PNG、JPG、JPEG、BMP格式。建议卡片部分占据图片2/3以上。 图片的 ImageUrl、ImageBase64 必须提供一个，如果都提供，只使用 ImageUrl。
ImageUrl	否	String	图片的 Url 地址。要求图片经Base64编码后不超过 7M，分辨率建议500*800以上，支持PNG、JPG、JPEG、BMP格式。建议卡片部分占据图片2/3以上。 建议图片存储于腾讯云，可保障更高的下载速度和稳定性。
CardSide	否	String	FRONT：身份证有照片的一面（人像面）， BACK：身份证有国徽的一面（国徽面）， 该参数如果不填，将为您自动判断身份证正反面。
Config	否	String	以下可选字段均为bool 类型，默认false： CropIdCard，身份证照片裁剪（去掉证件外多余的边缘、自动矫正拍摄角度） CropPortrait，人像照片裁剪（自动抠取身份证头像区域） CopyWarn，复印件告警 BorderCheckWarn，边框和框内遮挡告警 ReshootWarn，翻拍告警 DetectPsWarn，PS检测告警 TempIdWarn，临时身份证告警 InvalidDateWarn，身份证有效日期不合法告警

2. Change the parameter in the body. For example, if we want to pass the Base64 encoding of an image instead of a URL (search for the conversion between image and Base64), we need to pass the ImageBase64 parameter, as in the parameter passing of the identity card recognition example API.



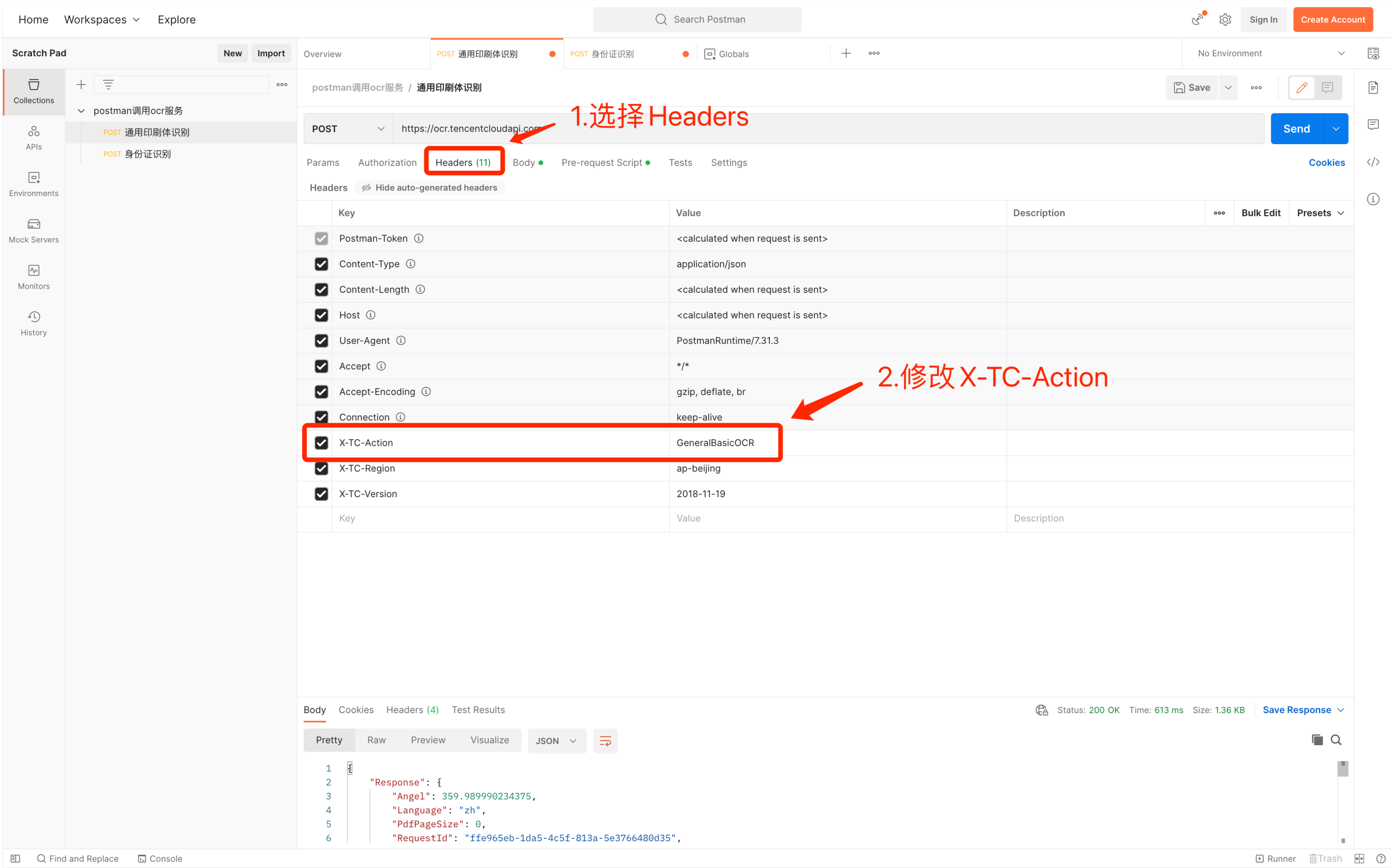
POST https://ocr.tencentcloudapi.com

Body ● raw JSON

```
{
    "CardSide": "FRONT",
    "Config": "{\"CropIdCard\":false,\"CropPortrait\":false}",
    "ImageBase64": "data:image/jpeg;base64,/9j/4AAQSkZJRgABAQAASABIAAD/4QBARXhpZgAATU0AKgAAAAgAAYdpAAQAAAABAAAAGgAAAA
```

Request for API changes

To request other APIs of the OCR service, you need to modify X-TC-Action in the Header.



1.选择 Headers

2.修改 X-TC-Action

	Key	Value	Description
☑	Postman-Token	<calculated when request is sent>	
☑	Content-Type	application/json	
☑	Content-Length	<calculated when request is sent>	
☑	Host	<calculated when request is sent>	
☑	User-Agent	PostmanRuntime/7.31.3	
☑	Accept	*/*	
☑	Accept-Encoding	gzip, deflate, br	
☑	Connection	keep-alive	
☑	X-TC-Action	GeneralBasicOCR	
☑	X-TC-Region	ap-beijing	
☑	X-TC-Version	2018-11-19	
	Key	Value	Description

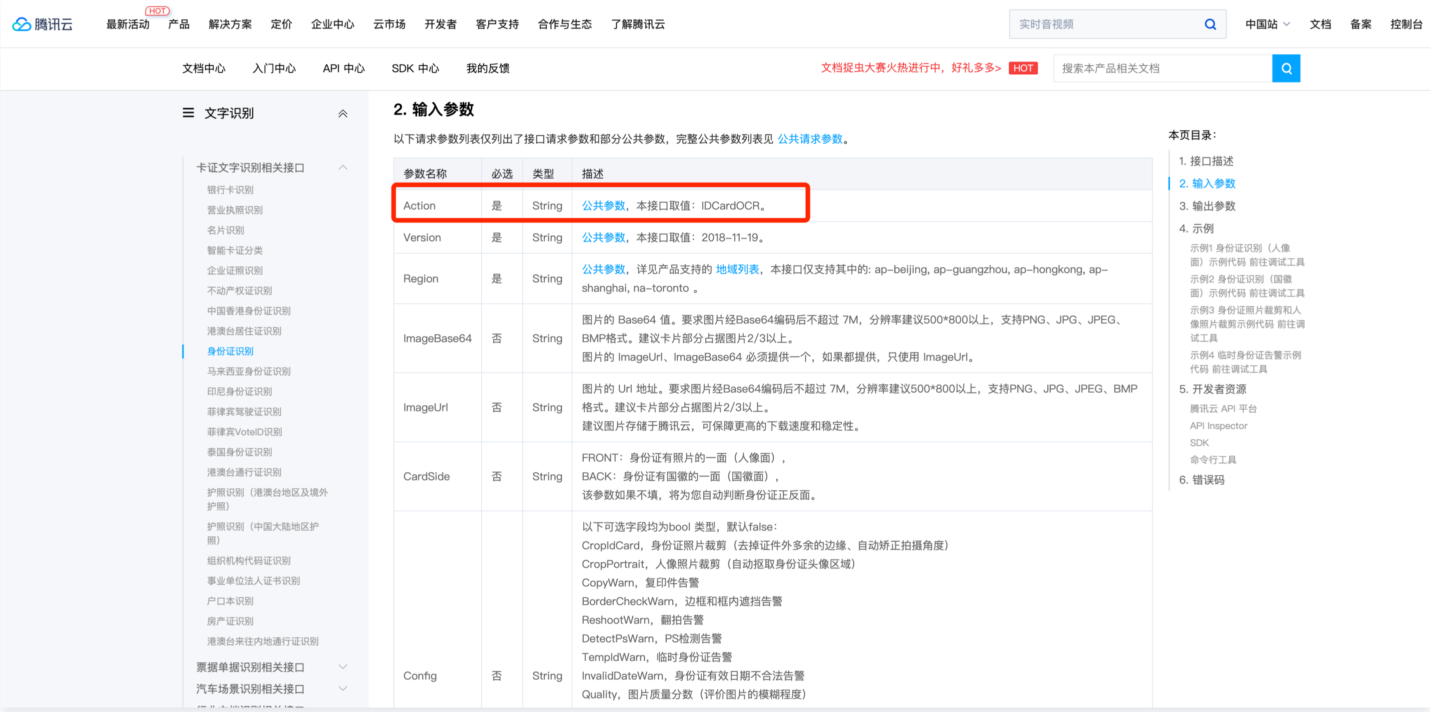
Body Cookies Headers (4) Test Results

Status: 200 OK Time: 613 ms Size: 1.36 KB Save Response

Pretty Raw Preview Visualize JSON

```
{
    "Response": {
        "Angel": 359.989990234375,
        "Language": "zh",
        "PdfPageSize": 0,
        "RequestId": "ffe965eb-1da5-4c5f-813a-5e3766480d35",
```

The X-TC-Action parameter corresponds to the Action input parameter in the API documentation, such as the Action for the identity card recognition API is IDCardOCR.



2. 输入参数

以下请求参数列表仅列出了接口请求参数和部分公共参数，完整公共参数列表见 公共请求参数。

参数名称	必选	类型	描述
Action	是	String	公共参数，本接口取值：IDCardOCR。
Version	是	String	公共参数，本接口取值：2018-11-19。
Region	是	String	公共参数，详见产品支持的 地域列表，本接口仅支持其中的: ap-beijing, ap-guangzhou, ap-hongkong, ap-shanghai, na-toronto 。
ImageBase64	否	String	图片的 Base64 值。要求图片经Base64编码后不超过 7M，分辨率建议500*800以上，支持PNG、JPG、JPEG、BMP格式。建议卡片部分占据图片2/3以上。 图片的 ImageUrl、ImageBase64 必须提供一个，如果都提供，只使用 ImageUrl。
ImageUrl	否	String	图片的 Url 地址。要求图片经Base64编码后不超过 7M，分辨率建议500*800以上，支持PNG、JPG、JPEG、BMP格式。建议卡片部分占据图片2/3以上。 建议图片存储于腾讯云，可保障更高的下载速度和稳定性。
CardSide	否	String	FRONT：身份证有照片的一面（人像面）， BACK：身份证有国徽的一面（国徽面）， 该参数如果不填，将为您自动判断身份证正反面。
Config	否	String	以下可选字段均为bool 类型，默认false： CropIdCard，身份证照片裁剪（去掉证件外多余的边缘、自动矫正拍摄角度） CropPortrait，人像照片裁剪（自动抠取身份证头像区域） CopyWarn，复印件告警 BorderCheckWarn，边框和框内遮挡告警 ReshootWarn，翻拍告警 DetectPsWarn，PS检测告警 TempIdWarn，临时身份证告警 InvalidDateWarn，身份证有效日期不合法告警 Quality，图片质量分数（评价图片的模糊程度）

After modifying the Action, modify the request Body according to the API documentation and initiate the request.

Console Operation Instructions

Last updated：2025-02-06 16:07:42

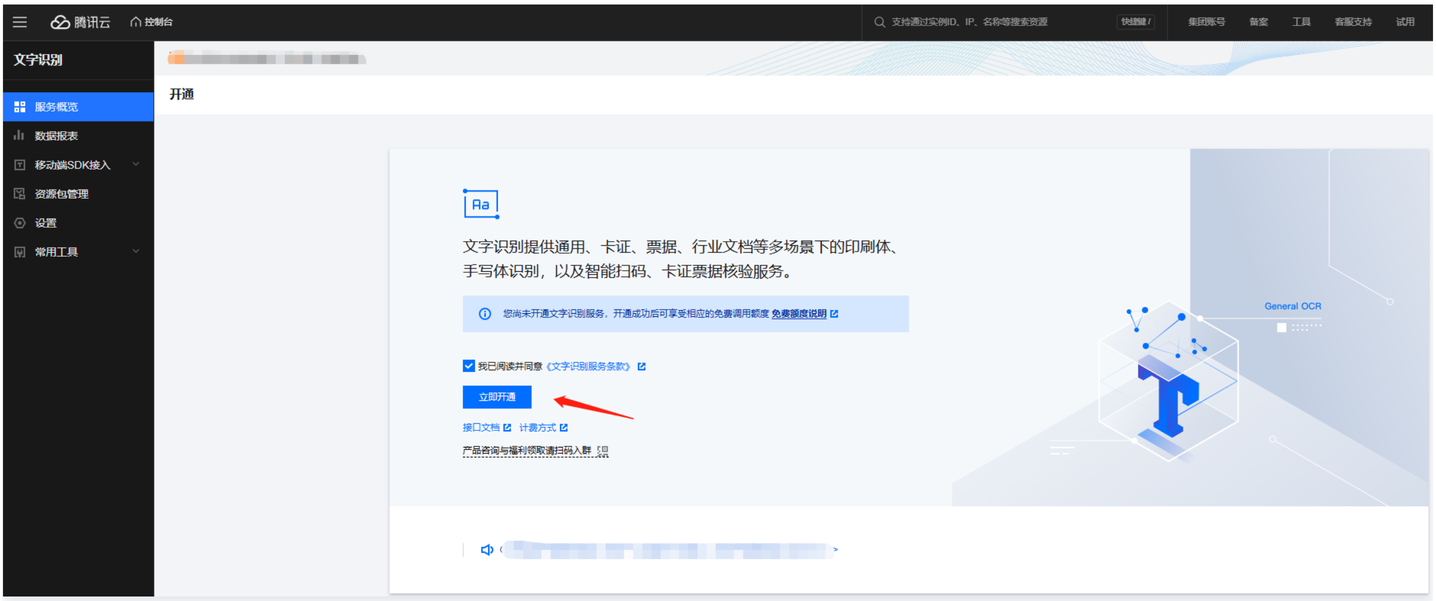
This article will introduce how to use the new console of Tencent Cloud OCR, helping you get started quickly.

Feature Overview

1. The new console features include service overview, data reports, mobile terminal SDK integration, resource package management, settings, usage query, permission management, and common tools.
2. The service overview module includes access guide, API total calls overview, API usage overview for the past 30 days, resource package usage overview, and provides product news, common documents, feature experience, and contact us guidance.
3. The data reports module provides filter and export functions. You can filter and query the usage of each API based on time period, service category, API name, account, and channel. It supports viewing total calls, billing usage, number of successes, success rate, failure count, and error code distribution, and supports exporting call details to local.
4. The mobile terminal SDK integration module provides an entry for applying for Optical Character Recognition (OCR) client SDK integration, supporting iOS SDK, Android SDK, and Harmony SDK downloads. The Intelligent Scan SDK integration provides an entry for applying for Intelligent Scan SDK. You can apply for the trail version or purchase the official version online.
5. The resource package management module provides resource package usage details.
6. The settings module allows users to independently set whether to enable postpaid and disable OCR services; it supports enabling postpaid settings, disabling all OCR API interfaces and OCR SDK services (excluding Intelligent Scan SDK).

Activate Product

If you haven't activated the OCR service, upon entering the console, you will be directed to the service activation page. After reading the "OCR Service Terms," click to check the agreement box, and you can activate all OCR API services with one click, obtaining a free resource package for each API.



文字识别提供通用、卡证、票据、行业文档等多场景下的印刷体、手写体识别，以及智能扫码、卡证票据核验服务。

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☑ 我已阅读并同意《文字识别服务条款》

立即开通

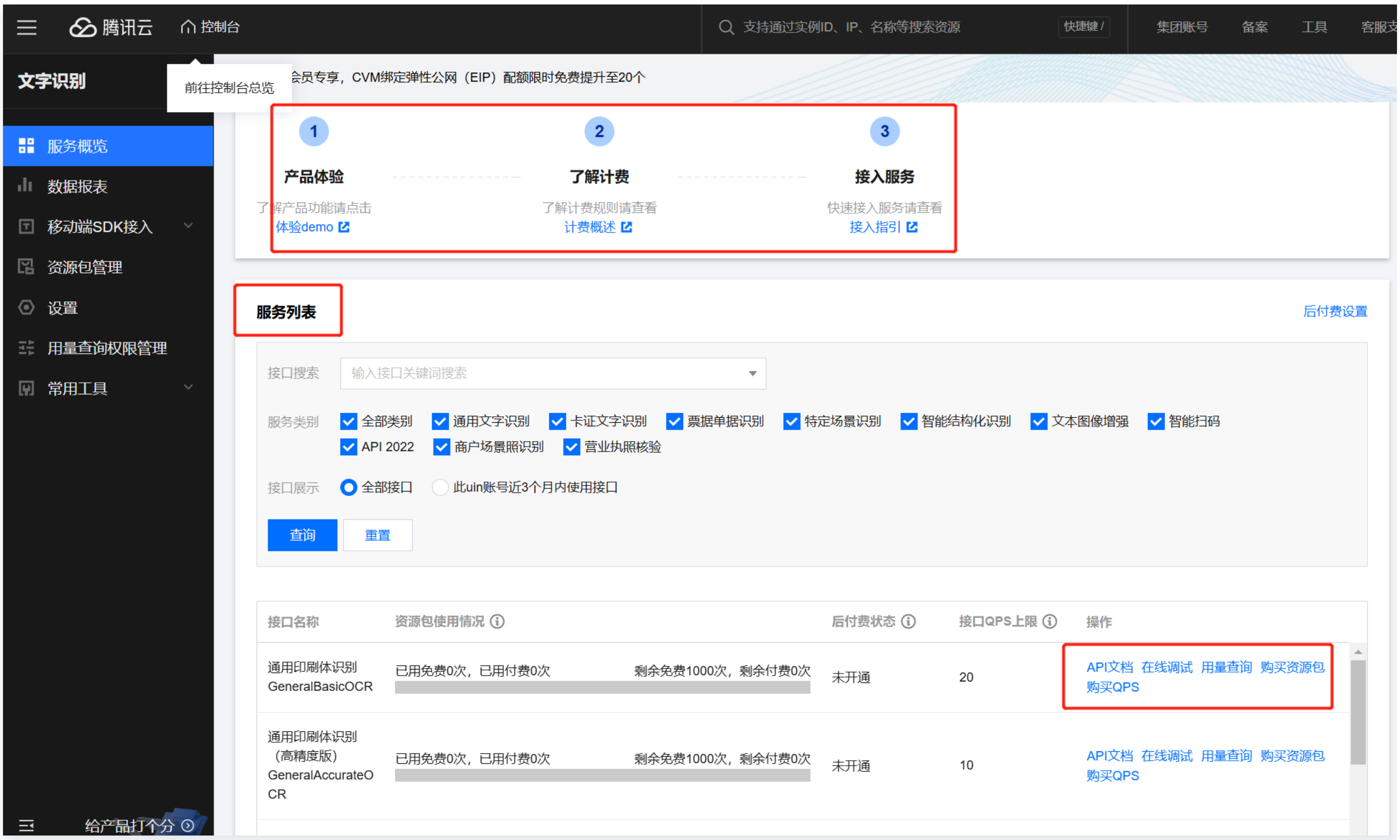
接口文档 计费方式

产品咨询与福利领取请扫码入群

Viewing Service Overview

1. **Getting Started**

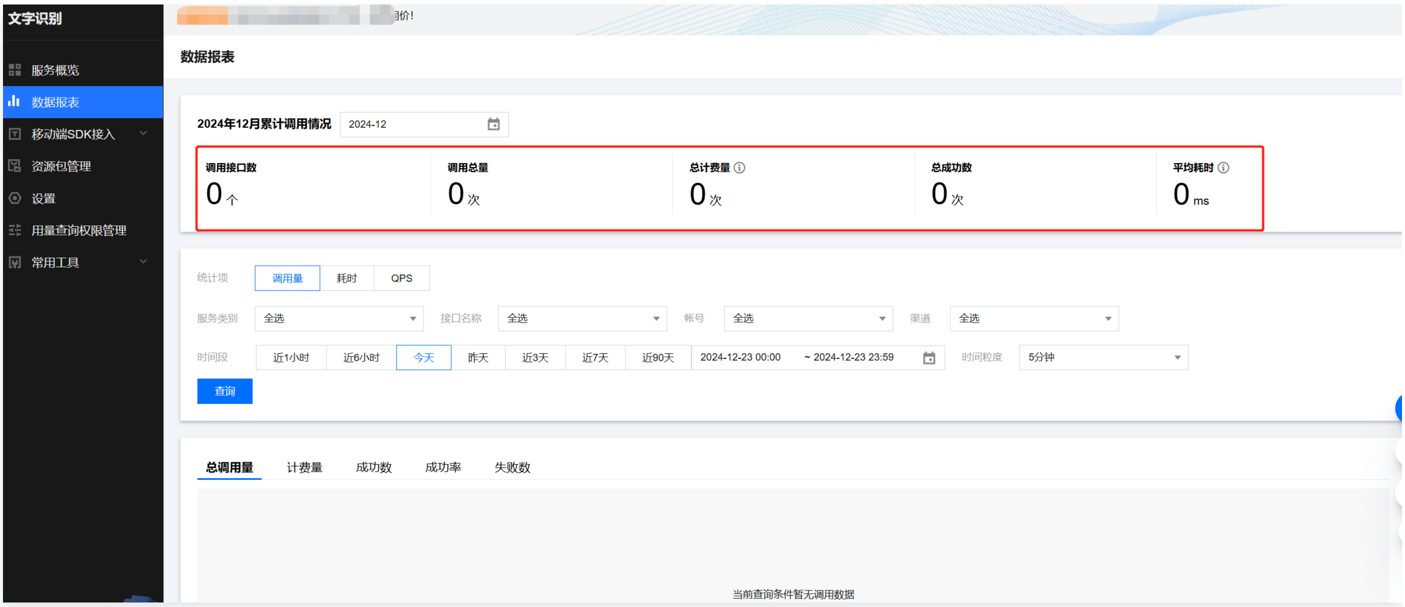
   If you are a new user, you can follow the steps and documentation provided in the **Service Overview** module to learn about the product, pricing, and how to integrate and use it. You can search and query APIs through the **Service List** below, or click "API Documentation, Online Debugging, Usage Query, Purchase Resource Pack, Purchase QPS" to jump to the corresponding links for the next step.



接口名称	资源包使用情况 ⓘ	后付费状态 ⓘ	接口QPS上限 ⓘ	操作
通用印刷体识别 GeneralBasicOCR	已用免费0次，已用付费0次 剩余免费1000次，剩余付费0次	未开通	20	API文档 在线调试 用量查询 购买资源包 购买QPS
通用印刷体识别（高精度版） GeneralAccurateOCR	已用免费0次，已用付费0次 剩余免费1000次，剩余付费0次	未开通	10	API文档 在线调试 用量查询 购买资源包 购买QPS

2. **API Calling Volume Overview**

   If you have started using OCR, you can view your API usage for the past month in the **Report Data** module, including the number of API calls, total calls, total successful calls, and total billing amount.



2024年12月累计调用情况 2024-12

调用接口数	调用总量	总计费量 ⓘ	总成功数	平均耗时 ⓘ
0 个	0 次	0 次	0 次	0 ms

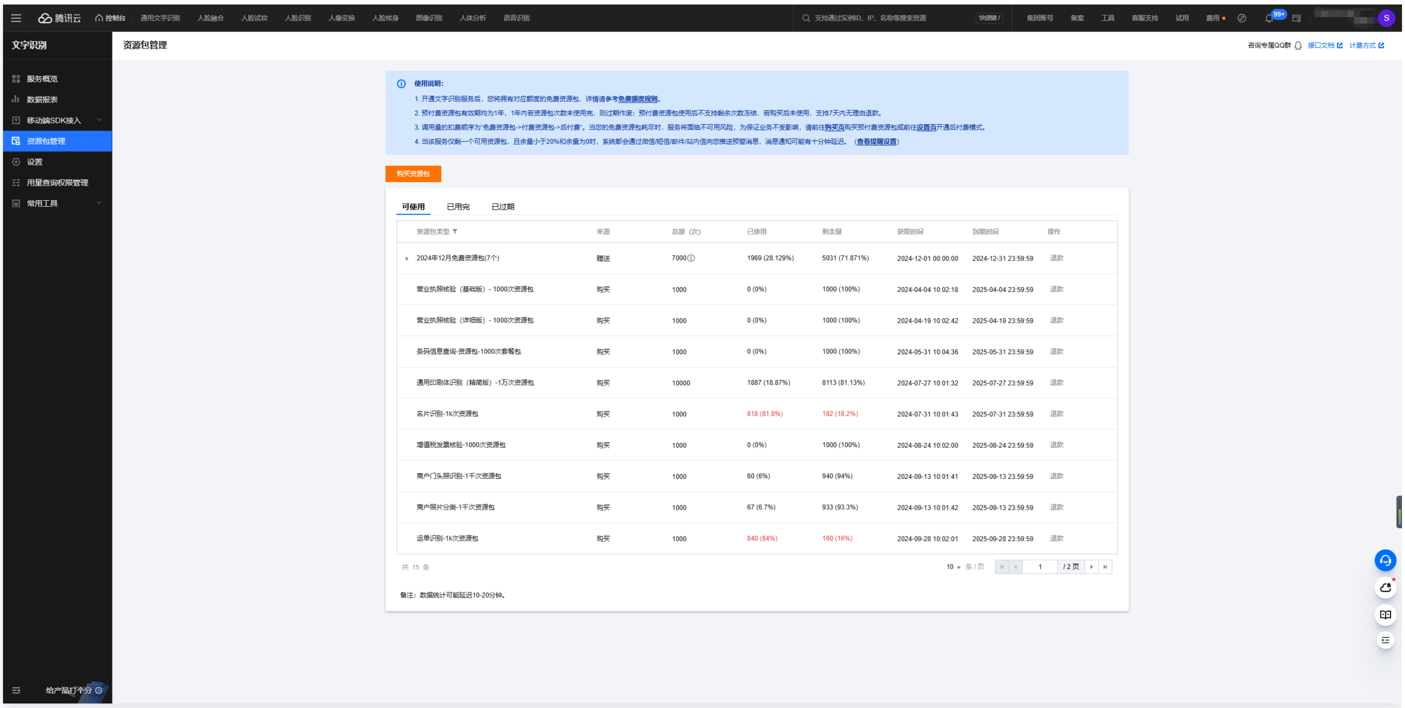
服务类别：全选　接口名称：全选　帐号：全选　渠道：全选

时间段：今天　2024-12-23 00:00 ~ 2024-12-23 23:59　时间粒度：5分钟

当前查询条件暂无调用数据

3. **Resource Pack Overview**

   The Resource Package Overview module provides an overview of the resource packages, where you can see the available APIs and the remaining/total amount. When the remaining amount is low, you can click **Purchase Now** to jump to the purchase page to buy resource packages. If you need to modify the notification method for message alerts, you can click **Viewing the set status** in the usage instructions to jump and set it.



资源包管理

使用说明：
1. 开通文字识别服务后，您将拥有对应额度的免费资源包，详情请参考免费额度规则。
2. 预付费资源包有效期均为1年，1年内若资源包次数未使用完，则过期作废；预付费资源包使用后不支持剩余次数冻结，若购买后未使用，支持7天内无理由退款。
3. 调用量的扣费顺序为"免费资源包->付费资源包->后付费"。当您的免费资源包耗尽时，服务将面临不可用风险，为保证业务不受影响，请前往购买页购买预付费资源包或前往设置页开通后付费模式。
4. 当该服务仅剩一个可用资源包，且余量小于20%和余量为0时，系统都会通过微信/短信/邮件/站内信向您推送预警消息，消息通知可能有十分钟延迟。（查看提醒设置）

购买资源包

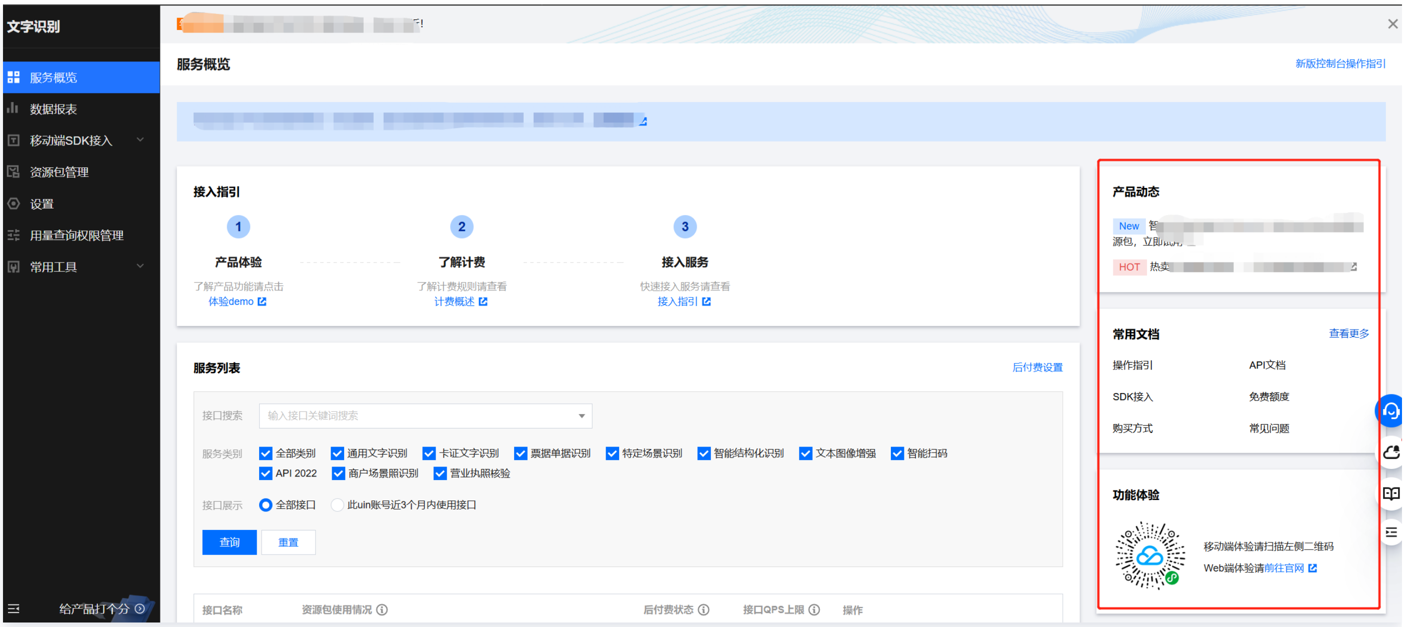
可使用 已用完 已过期

资源包类型	来源	总额（次）	已使用	剩余量	获取时间	到期时间	操作
2024年12月免费资源包(7个)	赠送	7000	1969 (28.129%)	5031 (71.871%)	2024-12-01 00:00:00	2024-12-31 23:59:59	退款
营业执照核验（基础版）- 1000次资源包	购买	1000	0 (0%)	1000 (100%)	2024-04-04 10:02:18	2025-04-04 23:59:59	退款
营业执照核验（详细版）- 1000次资源包	购买	1000	0 (0%)	1000 (100%)	2024-04-19 10:02:42	2025-04-19 23:59:59	退款
条码信息查询-资源包-1000次套餐包	购买	1000	0 (0%)	1000 (100%)	2024-05-31 10:04:36	2025-05-31 23:59:59	退款
通用印刷体识别（精简版）-1万次资源包	购买	10000	1887 (18.87%)	8113 (81.13%)	2024-07-27 10:01:32	2025-07-27 23:59:59	退款
名片识别-1k次资源包	购买	1000	818 (81.8%)	182 (18.2%)	2024-07-31 10:01:43	2025-07-31 23:59:59	退款
增值税发票核验-1000次资源包	购买	1000	0 (0%)	1000 (100%)	2024-08-24 10:02:00	2025-08-24 23:59:59	退款
商户门头照识别-1千次资源包	购买	1000	60 (6%)	940 (94%)	2024-09-13 10:01:41	2025-09-13 23:59:59	退款
商户照片分类-1千次资源包	购买	1000	67 (6.7%)	933 (93.3%)	2024-09-13 10:01:42	2025-09-13 23:59:59	退款
运单识别-1k次资源包	购买	1000	840 (84%)	160 (16%)	2024-09-28 10:02:01	2025-09-28 23:59:59	退款

共 15 条 10 条/页 1 /2页

备注：数据统计可能延迟10-20分钟。

4. **Product Updates and Common Documents**
   The overview page on the right provides product news, common documents, feature experiences, and after-sales service guides. You can use the relevant features as needed.



[redacted]

服务概览

[redacted]

接入指引

1 产品体验 了解产品功能请点击 体验demo
2 了解计费 了解计费规则请查看 计费概述
3 接入服务 快速接入服务请查看 接入指引

服务列表

接口搜索 输入接口关键词搜索

服务类别 ☑ 全部类别 ☑ 通用文字识别 ☑ 卡证文字识别 ☑ 票据单据识别 ☑ 特定场景识别 ☑ 智能结构化识别 ☑ 文本图像增强 ☑ 智能扫码 ☑ API 2022 ☑ 商户场景照识别 ☑ 营业执照核验

接口展示 ● 全部接口 ○ 此uin账号近3个月内使用接口

查询 重置

接口名称	资源包使用情况	后付费状态	接口QPS上限	操作

产品动态

New [redacted]

HOT 热卖 [redacted]

常用文档 查看更多

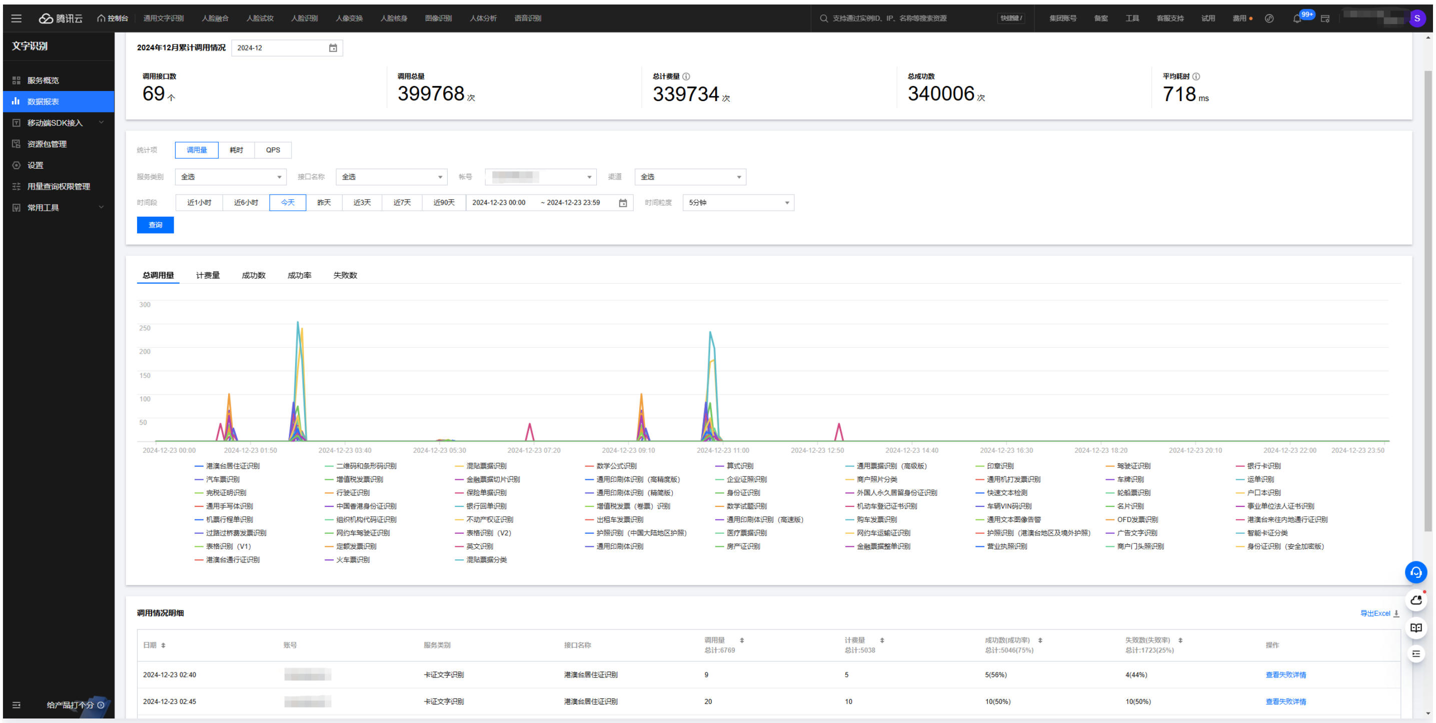
操作指引 API文档
SDK接入 免费额度
购买方式 常见问题

功能体验

移动端体验请扫描左侧二维码
Web端体验请前往官网

Viewing API Usage Statistics

On the **Data List** page, you can filter by time period, service category, API name, use account, and channel. The total calling volume, billing usage, number of successes, success rate, failure count, line chart, and call details table under the selected conditions will be displayed below. You can view the API usage in the chart overview, check the usage details in the call details table, click to view call failure details, and see the error code distribution. You can also export the call details to Excel for local download for further data analysis.



2024年12月累计调用情况 2024-12

调用接口数	调用总量	总计费量	总成功数	平均耗时
69 个	399768 次	339734 次	340006 次	718 ms

统计项: 调用量 / 耗时 / QPS

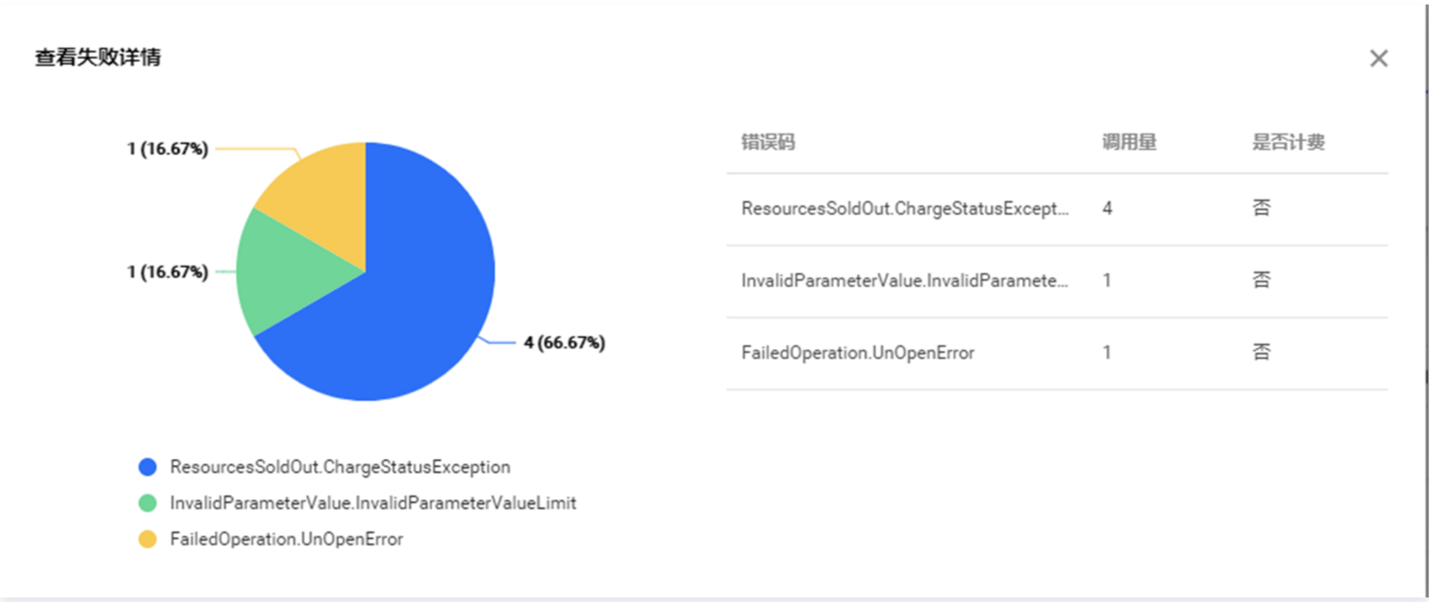
服务类别: 全选　接口名称: 全选　帐号: [redacted]　渠道: 全选

时间段: 近1小时 / 近6小时 / 今天 / 昨天 / 近3天 / 近7天 / 近90天　2024-12-23 00:00 ~ 2024-12-23 23:59　时间粒度: 5分钟

调用情况明细

日期	账号	服务类别	接口名称	调用量
				总计:6769
					计费量
					总计:5038
						成功数(成功率)
						总计:5046(75%)
							失败数(失败率)
							总计:1723(25%)
								操作

2024-12-23 02:40	[redacted]	卡证文字识别	港澳台居住证识别	9	5	5(56%)	4(44%)	查看失败详情
2024-12-23 02:45	[redacted]	卡证文字识别	港澳台居住证识别	20	10	10(50%)	10(50%)	查看失败详情



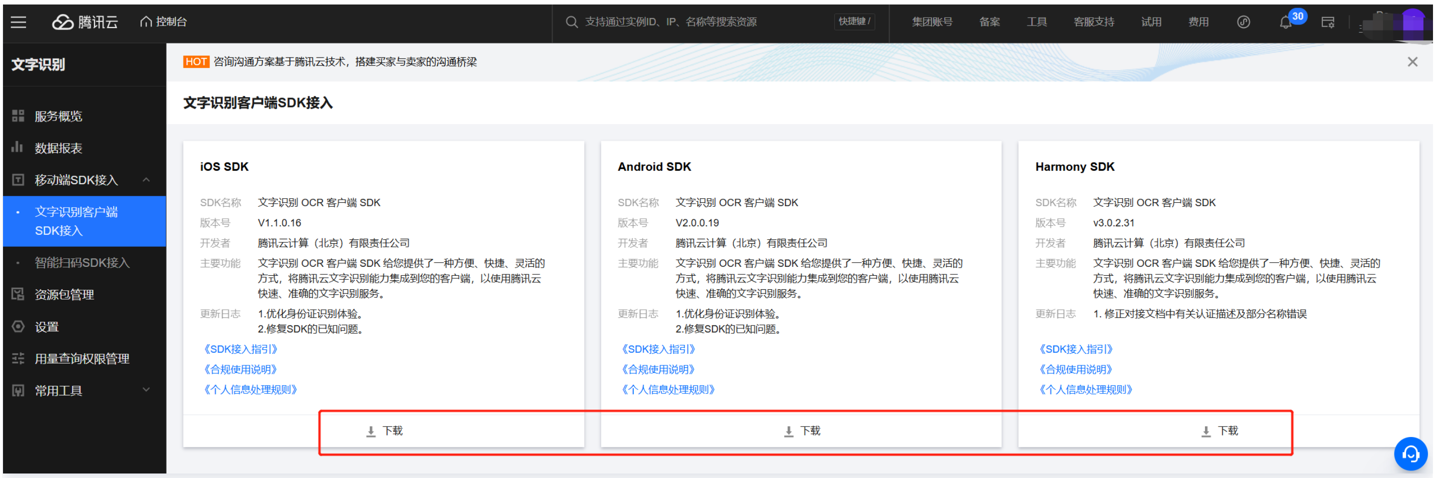
查看失败详情

1 (16.67%)
1 (16.67%)
4 (66.67%)
ResourcesSoldOut.ChargeStatusException
InvalidParameterValue.InvalidParameterValueLimit
FailedOperation.UnOpenError

错误码	调用量	是否计费
ResourcesSoldOut.ChargeStatusExcept...	4	否
InvalidParameterValue.InvalidParamete...	1	否
FailedOperation.UnOpenError	1	否

OCR Client SDK Integration Application

The console provides an application entry for the OCR client SDK, supporting downloads for iOS SDK, Android SDK, Harmony SDK, and more.



HOT 咨询沟通方案基于腾讯云技术，搭建买家与卖家的沟通桥梁

文字识别客户端SDK接入

iOS SDK

SDK名称 文字识别 OCR 客户端 SDK
版本号 V1.1.0.16
开发者 腾讯云计算（北京）有限责任公司
主要功能 文字识别 OCR 客户端 SDK 给您提供了一种方便、快捷、灵活的方式，将腾讯云文字识别能力集成到您的客户端，以使用腾讯云快速、准确的文字识别服务。
更新日志 1.优化身份证识别体验。
2.修复SDK的已知问题。
《SDK接入指引》
《合规使用说明》
《个人信息处理规则》
下载

Android SDK

SDK名称 文字识别 OCR 客户端 SDK
版本号 V2.0.0.19
开发者 腾讯云计算（北京）有限责任公司
主要功能 文字识别 OCR 客户端 SDK 给您提供了一种方便、快捷、灵活的方式，将腾讯云文字识别能力集成到您的客户端，以使用腾讯云快速、准确的文字识别服务。
更新日志 1.优化身份证识别体验。
2.修复SDK的已知问题。
《SDK接入指引》
《合规使用说明》
《个人信息处理规则》
下载

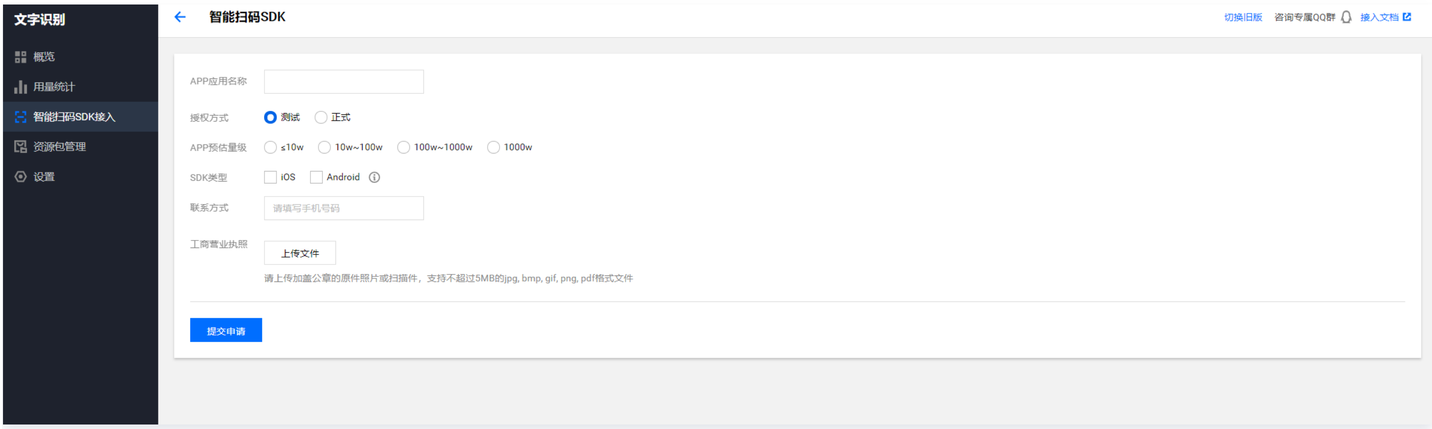
Harmony SDK

SDK名称 文字识别 OCR 客户端 SDK
版本号 v3.0.2.31
开发者 腾讯云计算（北京）有限责任公司
主要功能 文字识别 OCR 客户端 SDK 给您提供了一种方便、快捷、灵活的方式，将腾讯云文字识别能力集成到您的客户端，以使用腾讯云快速、准确的文字识别服务。
更新日志 1. 修正对接文档中有关认证描述及部分名称错误
《SDK接入指引》
《合规使用说明》
《个人信息处理规则》
下载

Intelligent Scan SDK Integration Application

The console provides an application entry for the Intelligent Scan SDK. After logging in to the console, you can apply for the trial version or the official version. The Intelligent Scan SDK trial version offers a three-month free trial period. After submitting the application and passing the review, you will receive an exclusive key and a demo project file download link. Each account can only apply once. You can also directly obtain the official version for integration through online purchase.

> **Description**
> If the Intelligent Scan SDK is not purchased, the application for the official version will not be approved.



智能扫码SDK

APP应用名称

授权方式 ● 测试 ○ 正式

APP预估量级 ○ ≤10w ○ 10w~100w ○ 100w~1000w ○ 1000w

SDK类型 □ iOS □ Android

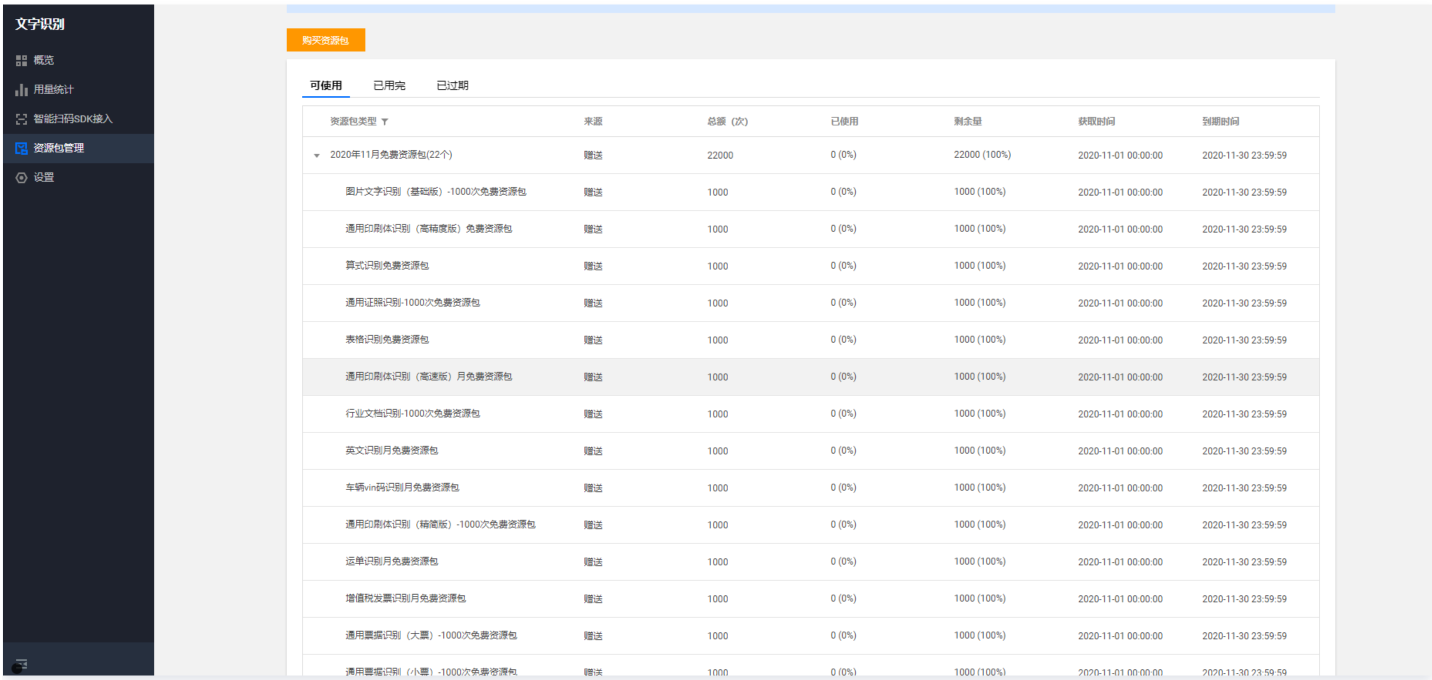
联系方式 请填写手机号码

工商营业执照 上传文件
请上传加盖公章的原件照片或扫描件，支持不超过5MB的jpg, bmp, gif, png, pdf格式文件

提交申请

Viewing Resource Pack Usage Details

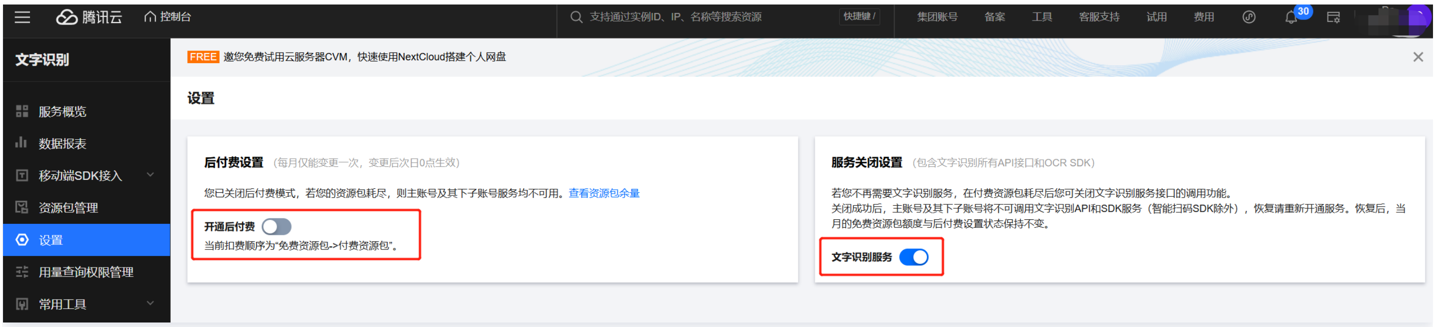
You can view the usage of all resource packages on the **Resource Package Management** page, including source, total amount, used amount, remaining amount, and validity period. When the resource package is about to run out, you can click the **Purchase Resource Package** button above to purchase a resource package. If the free quota and prepaid resource package call times are exhausted, the API billing will automatically switch to the postpaid mode and be settled monthly. For specific billing standards, you can check the OCR Purchase Page.



资源包类型	来源	总额（次）	已使用	剩余量	获取时间	到期时间
2020年11月免费资源包(22个)	赠送	22000	0 (0%)	22000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
图片文字识别（基础版）-1000次免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
通用印刷体识别（高精度版）免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
算式识别免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
通用证照识别-1000次免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
表格识别免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
通用印刷体识别（高速版）月免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
行业文档识别-1000次免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
英文识别月免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
车辆vin码识别月免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
通用印刷体识别（精简版）-1000次免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
运单识别月免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
增值税发票识别月免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
通用票据识别（大票）-1000次免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59
通用票据识别（小票）-1000次免费资源包	赠送	1000	0 (0%)	1000 (100%)	2020-11-01 00:00:00	2020-11-30 23:59:59

Disabling OCR Service

You can disable the OCR service in **Settings**. After successful deactivation, the root account and its sub-accounts will not be able to call the OCR API and SDK services (excluding the Intelligent Scan SDK). To resume, you need to reactivate the service.



FREE 邀您免费试用云服务器CVM，快速使用NextCloud搭建个人网盘

设置

后付费设置（每月仅能变更一次，变更后次日0点生效）

您已关闭后付费模式，若您的资源包耗尽，则主账号及其下子账号服务均不可用。查看资源包余量

开通后付费 ○

当前扣费顺序为“免费资源包->付费资源包”。

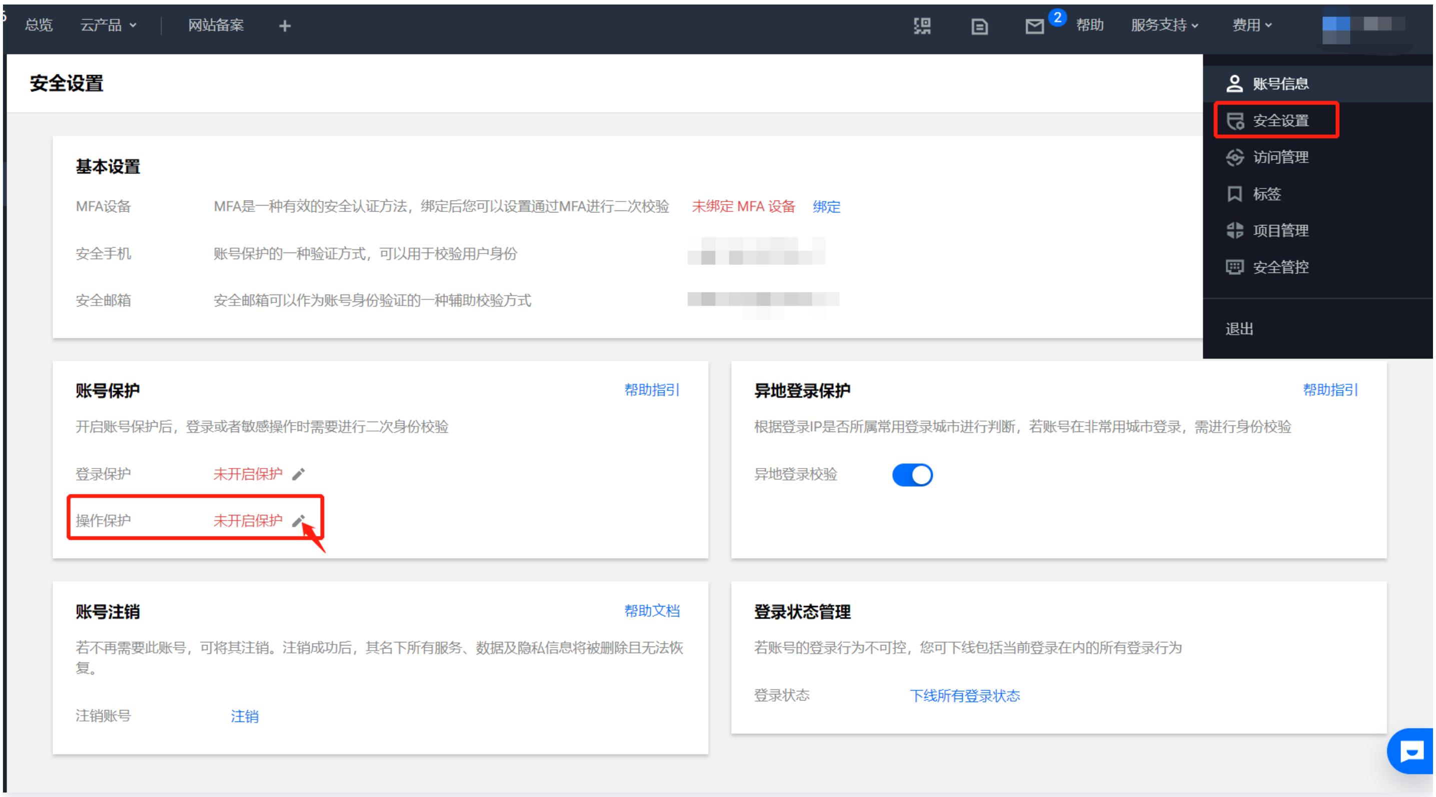
服务关闭设置（包含文字识别所有API接口和OCR SDK）

若您不再需要文字识别服务，在付费资源包耗尽后您可关闭文字识别服务接口的调用功能。
关闭成功后，主账号及其下子账号将不可调用文字识别API和SDK服务（智能扫码SDK除外），恢复请重新开通服务。恢复后，当月的免费资源包额度与后付费设置状态保持不变。

文字识别服务 ●

Disabling the OCR service may affect your subsequent use of the service. It is a sensitive operation, and it is recommended to enable the operation protection feature. Only after identity verification can you set the feature to ensure it is operated by you. Operation protection supports WeChat QR code authentication, MFA device authentication, and mobile Captcha authentication. It is recommended to enable WeChat QR code authentication. The steps are as follows:

After logging in to the Tencent Cloud account, click **Security Settings** in the avatar dropdown list to enter the security settings page. In the **Account Protection** module, click the operation protection edit feature and select **Enable WeChat Scan Code Verification**. If you have not associated a WeChat ID, you can enable it after scanning the code to associate.



安全设置

基本设置

MFA设备 MFA是一种有效的安全认证方法，绑定后您可以设置通过MFA进行二次校验 未绑定 MFA 设备 绑定

安全手机 账号保护的一种验证方式，可以用于校验用户身份 [redacted]

安全邮箱 安全邮箱可以作为账号身份验证的一种辅助校验方式 [redacted]

账号保护 帮助指引

开启账号保护后，登录或者敏感操作时需要进行二次身份校验

登录保护 未开启保护

操作保护 未开启保护

异地登录保护 帮助指引

根据登录IP是否所属常用登录城市进行判断，若账号在非常用城市登录，需进行身份校验

异地登录校验

账号注销 帮助文档

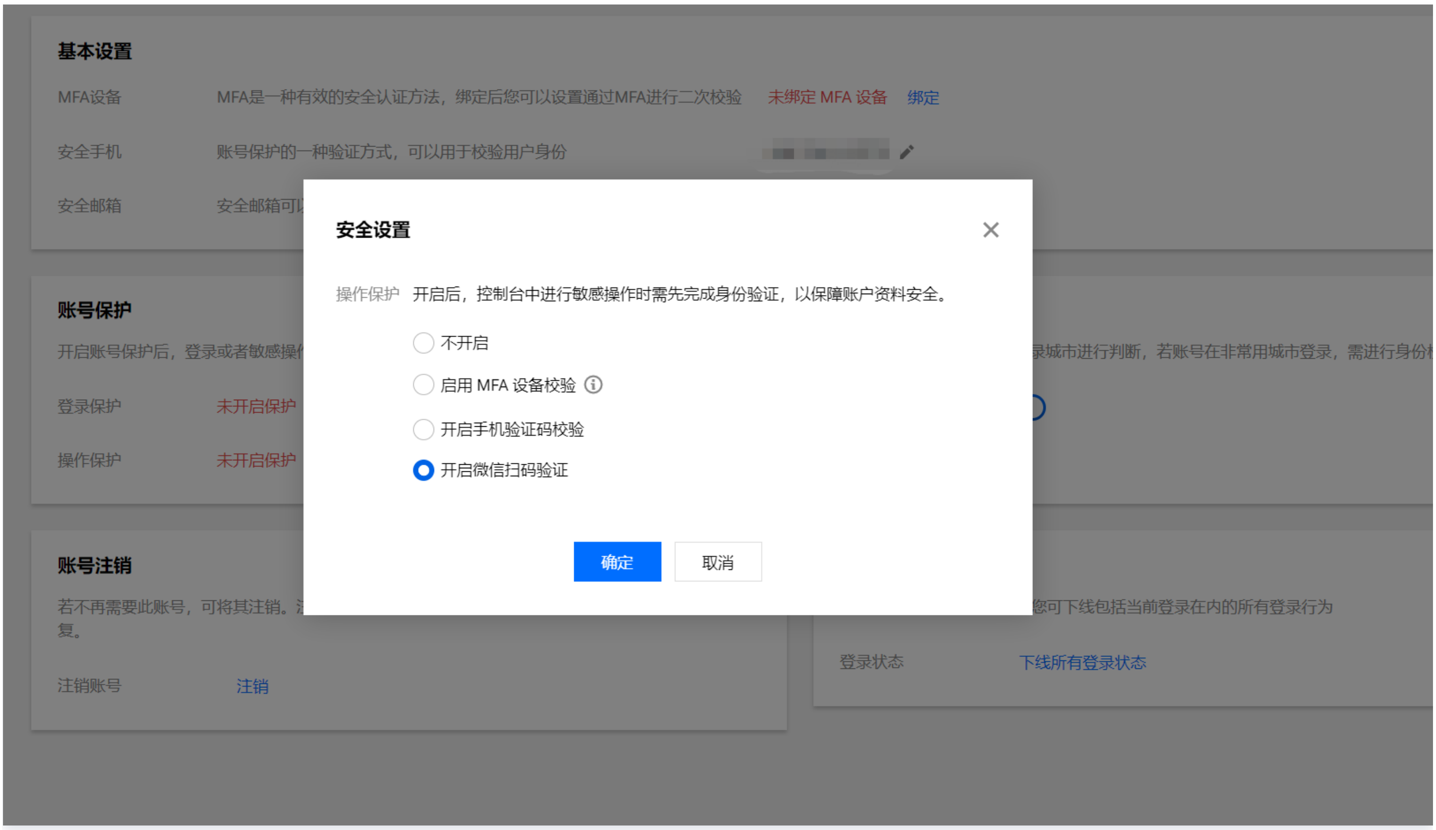
若不再需要此账号，可将其注销。注销成功后，其名下所有服务、数据及隐私信息将被删除且无法恢复。

注销账号 注销

登录状态管理

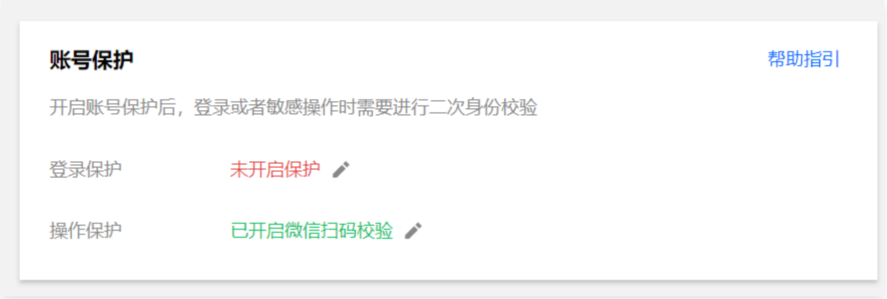
若账号的登录行为不可控，您可下线包括当前登录在内的所有登录行为

登录状态 下线所有登录状态


安全设置

操作保护 开启后，控制台中进行敏感操作时需先完成身份验证，以保障账户资料安全。

○ 不开启
○ 启用 MFA 设备校验
○ 开启手机验证码校验
● 开启微信扫码验证



账号保护

帮助指引

开启账号保护后，登录或者敏感操作时需要进行二次身份校验

登录保护 未开启保护

操作保护 已开启微信扫码校验

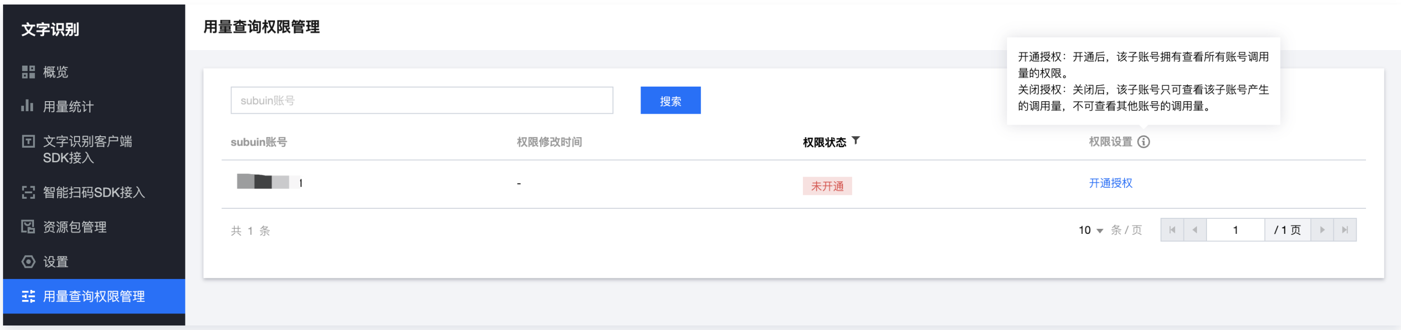
Must-Knows

1. If your paid resource package is not exhausted, you cannot turn off the OCR service.
2. Once you have turned off the OCR service, you will not be able to view the original use of data when re-entering the console unless you reactivate it. After reactivation, you can view the previous usage record.

How Can a Sub-Account View the Calling Volume Of Other Accounts On the OCR Console?

The root account can view the calling volume of all sub-accounts under it. Sub-accounts are only allowed to view their own calling volume. If you need to grant a sub-account permission to view the calling volume of all other accounts, you need to perform the following operations:

1. **Root account** logs in to the OCR console Usage Permission Query Management Page to grant permissions to the sub-account. This page involves permission management operations, **only the root account has access permission.**



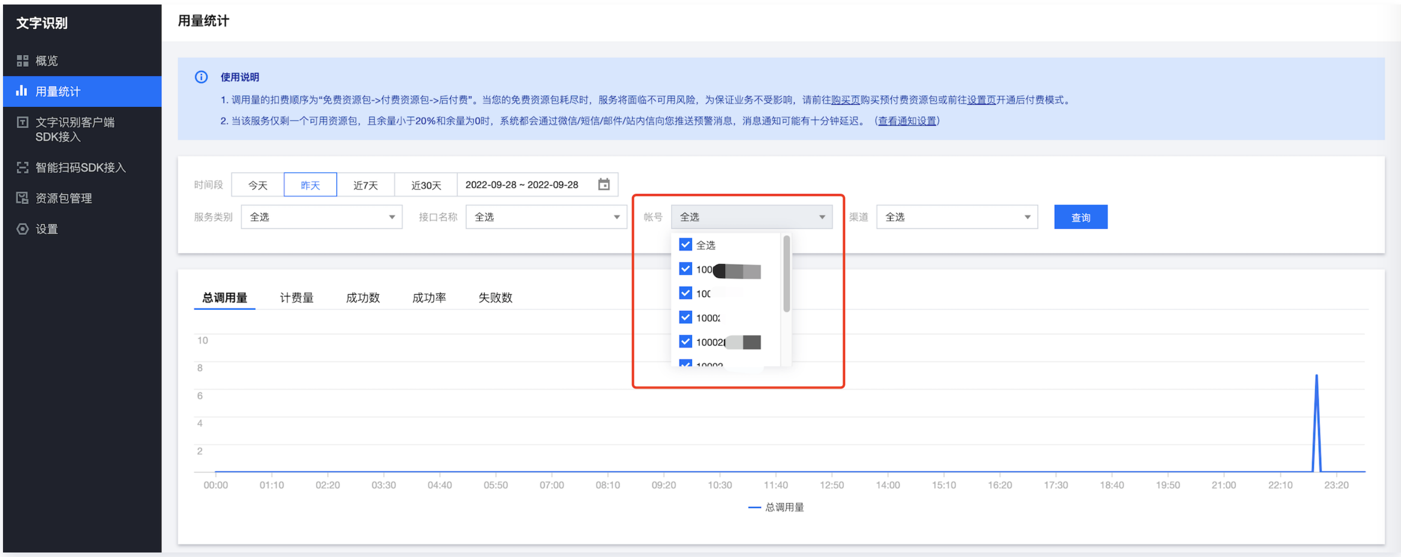
用量查询权限管理

开通授权：开通后，该子账号拥有查看所有账号调用量的权限。
关闭授权：关闭后，该子账号只可查看该子账号产生的调用量，不可查看其他账号的调用量。

subuin账号	权限修改时间	权限状态	权限设置
[redacted]	-	未开通	开通授权

共 1 条　10 条 / 页　1 / 1 页

2. Log in to the OCR console Usage Statistics Page with the authorized **sub-account**, and you can select other sub-accounts to view their calling volume.



用量统计

使用说明

1. 调用量的扣费顺序为“免费资源包->付费资源包->后付费”。当您的免费资源包耗尽时，服务将面临不可用风险，为保证业务不受影响，请前往购买页购买预付费资源包或前往设置页开通后付费模式。
2. 当该服务仅剩一个可用资源包，且余量小于20%和余量为0时，系统都会通过微信/短信/邮件/站内信向您推送预警消息，消息通知可能有十分钟延迟。（查看通知设置）

时间段：昨天　2022-09-28 ~ 2022-09-28

服务类别：全选　接口名称：全选　帐号：全选　渠道：全选

☑ 全选
☑ 100[redacted]
☑ 10(
☑ 1000:
☑ 10002[redacted]

Image Compression Example

Last updated：2025-02-06 16:07:52

Example Code For Compressing On IOS:

```
@implementation ImageCompressTool

/ The following mainly introduces two methods, which can be combined in actual use /

/**
 * Compress image quality
 * @param image Original image
 * @param quality Target quality for compression 0-1.0f
 * @return
 */
+ (UIImage *)doCompressQuality:(UIImage *)image quality:(CGFloat)quality {
    NSData * data = UIImageJPEGRepresentation(image, quality);
    return [UIImage imageWithData:data];
}

/**
 * Scale an image to a specified size
 * @param inputImage
 * @param newWidth New width
 * @param newHeight The new height
 * @return
 */
+ (UIImage *)scaleSizeImage:(UIImage *)inputImage newWidth:(CGFloat)newWidth newHeight:
(CGFloat)newHeight {
    UIGraphicsBeginImageContext(CGSizeMake(newWidth, newHeight));
    [inputImage drawInRect:CGRectMake(0.0f, 0.0f, newWidth, newHeight)];
    UIImage *newImage = UIGraphicsGetImageFromCurrentImageContext();
    UIGraphicsEndImageContext();
    // If you want to combine with the above method, you can do quality compression here
    return newImage;
}

@end
```

Example Code For Compressing On Android:

```
/**
 * Image compression helper type, refer to the tool class
 *
 * @author jerrydong
 * @since 2023/5/23
 */
public class ImageCompressUtils {

    private static final String TAG = "ImageCompressUtils";

    // Compression ratio for Jpg, can be modified as needed
    private static final int QUALITY_DEFAULT = 85;

    /**
     * Proactive algorithm to compress YUV images
     *
     * @param image Image to be compressed
     * @return
     */
    public static byte[] doCompressYuvImage(YuvImage image) {
        int dataWidth = image.getWidth();
        int dataHeight = image.getHeight();
        try (ByteArrayOutputStream outputSteam = new ByteArrayOutputStream()) {
            image.compressToJpeg(new Rect(0, 0, dataWidth, dataHeight), QUALITY_DEFAULT, outputSteam);
            // Convert to Bitmap and compress
            Options options = new BitmapFactory.Options();
            // Do not use transparent channel
            options.inPreferredConfig = Config.RGB_565;
            // Modify the sampling rate of the image
            options.inSampleSize = 2;
            Bitmap bmp = BitmapFactory.decodeByteArray(outputSteam.toByteArray(), 0,
outputSteam.size(), options);
            outputSteam.reset();
            // Proactively compress image
            bmp.compress(CompressFormat.JPEG, QUALITY_DEFAULT, outputSteam);
            return outputSteam.toByteArray();
        } catch (IOException e) {
            Log.e(TAG, "Compress error");
        }
        return null;
    }

    /**
     * Proactively compress Bitmap
     *
     * @param inputMap
     * @return
     */
    public Bitmap doCompressBitMap(Bitmap inputMap) {
        try (ByteArrayOutputStream outputSteam = new ByteArrayOutputStream()) {
            inputMap.compress(CompressFormat.JPEG, QUALITY_DEFAULT, outputSteam);
            // Convert to Bitmap and compress (can write a common method!)
            Options options = new BitmapFactory.Options();
            // Do not use transparent channel
            options.inPreferredConfig = Config.RGB_565;
            // Modify the sampling rate of the image (can be calculated based on actual situation)
            options.inSampleSize = 2;
            Bitmap bmp = BitmapFactory.decodeByteArray(outputSteam.toByteArray(), 0,
outputSteam.size(), options);
            outputSteam.reset();
            return bmp;
        } catch (IOException e) {
            Log.e(TAG, "Compress error");
        }
        return null;
    }


    /**
     * Scale using scaling method
     *
     * @param inputMap
     * @param scale   Scale size
     * @return
     */
    public Bitmap matrixBitmap(Bitmap inputMap, float scale) {
        // Generate a rotation matrix based on the rotation angle
        Matrix matrix = new Matrix();
        matrix.setScale(scale, scale);
        Bitmap bitmap = Bitmap.createBitmap(inputMap, 0, 0, inputMap.getWidth(), inputMap.getHeight(),
matrix, true);
        return bitmap;
    }

}
```

Console Access Management

Last updated：2025-02-06 16:08:05

OCR has been integrated into Tencent Cloud's Cloud Access Management (CAM) system. You can perform a series of management operations such as user groups, users, roles, and policies in the CAM Console.

By setting CAM policies, you can control which Sub-user or Collaborator accounts have viewing and operating permissions for the OCR API and console.

Currently, OCR supports two types of policies: preset policies and custom policies.

> **Note:**
> Customers who activated the OCR service before September 21, 2023, cannot use the new console CAM feature. If needed, please Contact Us for configuration.

Preset Policy

Description

The preset policies for OCR are divided into three types: full read/write permission, read-only permission, and read-only self permission.

1. QcloudOCRFullAccess full read/write permission. When the preset full read/write policy is granted to a subaccount, it will be able to access all OCR features just like you.
2. QcloudOCRReadOnlyaccess read-only permission. When the preset read-only policy is granted to a subaccount, the subaccount can access recognition and verification APIs, and read-only interfaces of the OCR console, such as viewing calling volume and resource packages.
3. QcloudOCRReadSelfUinUsage read-only self permission. When the preset read-only self policy is granted to a subaccount, the subaccount can access recognition and verification APIs, and read-only interfaces of the OCR console, such as viewing calling volume and resource packages. However, when viewing calling volume, duration, QPS, and the intelligent SDK application list, it can only query its own sub-account data.

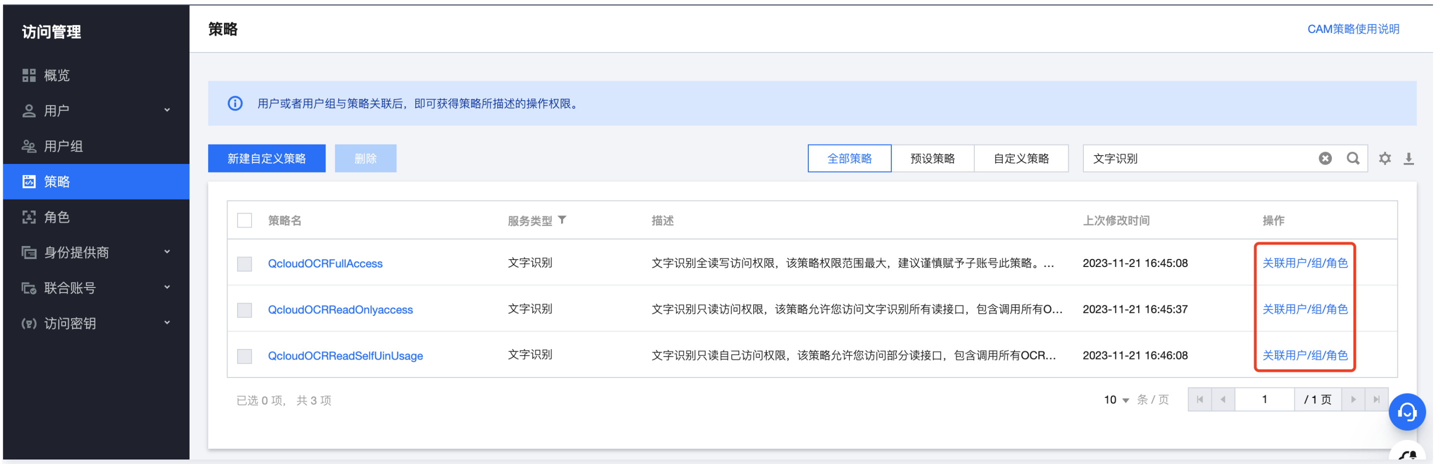
Differences in preset policies:

Major Category	<Category Segmentation>	Full Read-Write	Read-Only	Read-Only Self
Recognition category API		✓	✓	✓
Verification category API		✓	✓	✓
Read API	View calling volume\duration\QPS\View Intelligent Scan SDK application list	✓	You can view the usage and SDK application list of **all accounts**	View the usage and SDK application list of **your own account** only
	Other Read APIs	✓	✓	✓
Write API	Apply for Intelligent Scan SDK	✓	×	×
	Activate Service	✓	×	×
	Turn Off Service	✓	×	×
	Enable/Disable Pay-As-You-Go	✓	×	×
	Other Write APIs	✓	×	×

Configuration Method

Preset policies can be authorized in the CAM Console. **If there are no special permission requirements, it is recommended to use preset policies.**

Method 1. As shown in the figure, you can search for the corresponding preset policy and associate it with a user, group, or role based on the policy description:



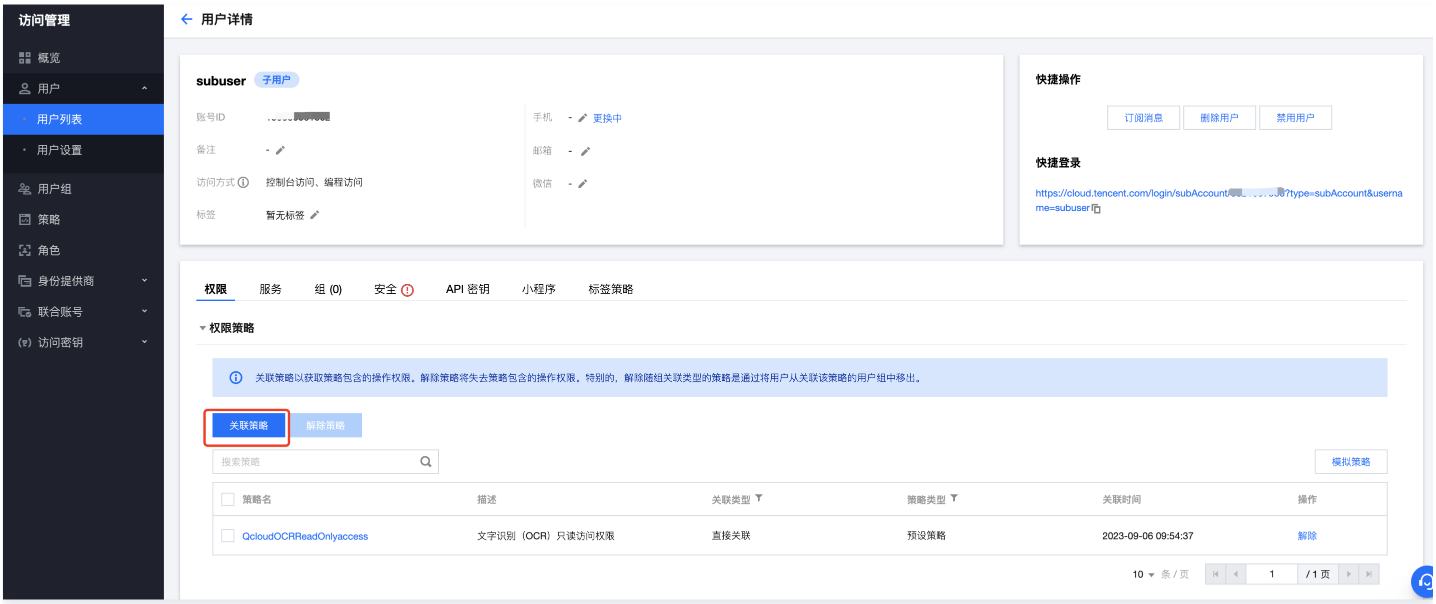
用户或者用户组与策略关联后，即可获得策略所描述的操作权限。

文字识别

策略名	服务类型	描述	上次修改时间	操作
QcloudOCRFullAccess	文字识别	文字识别全读写访问权限，该策略权限范围最大，建议谨慎赋予子账号此策略。...	2023-11-21 16:45:08	关联用户/组/角色
QcloudOCRReadOnlyaccess	文字识别	文字识别只读访问权限，该策略允许您访问文字识别所有读接口，包含调用所有O...	2023-11-21 16:45:37	关联用户/组/角色
QcloudOCRReadSelfUinUsage	文字识别	文字识别只读自己访问权限，该策略允许您访问部分读接口，包含调用所有OCR...	2023-11-21 16:46:08	关联用户/组/角色

已选 0 项，共 3 项　10 条 / 页　1 / 1 页

Method 2. As shown in the figure, you can associate the required preset policy with a sub-user:



subuser 子用户

账号ID [redacted]
备注 -
访问方式 控制台访问、编程访问
标签 暂无标签
手机 - 更换中
邮箱 -
微信 -

快捷操作

快捷登录

https://cloud.tencent.com/login/subAccount/[redacted]?type=subAccount&username=subuser

权限策略

关联策略以获取策略包含的操作权限。解除策略将失去策略包含的操作权限。特别的，解除随组关联类型的策略是通过将用户从关联该策略的用户组中移出。

策略名	描述	关联类型	策略类型	关联时间	操作
QcloudOCRReadOnlyaccess	文字识别（OCR）只读访问权限	直接关联	预设策略	2023-09-06 09:54:37	解除

10 条 / 页　1 / 1 页

Customizing Policies

Description

Custom policies for OCR support both API-level and resource-level authorization:

1. API-level authorization: You can authorize a subaccount by API dimension in the CAM console, and the subaccount will only be able to use the APIs you have authorized. Refer to the usage example for granting permission to a single API.
2. Resource-level authorization: Viewing calling volume, duration, and QPS supports resource-level authorization. You can authorize a subaccount by sub-account dimension in the CAM console, and the subaccount will only be able to view the calling volume, duration, and QPS you have authorized for it.

APIs supporting resource-level authorization

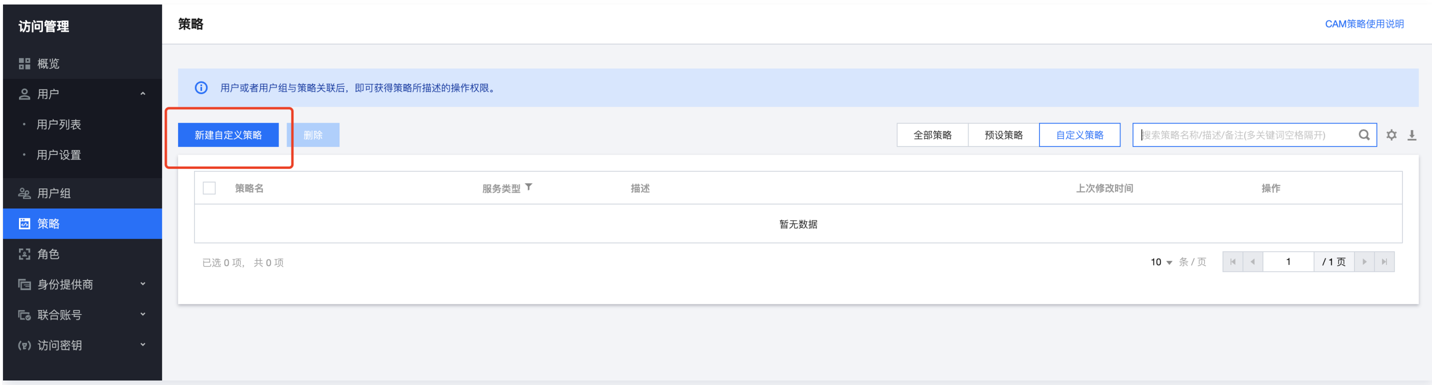
API Name	API Description	Resource	Six-Segment Example Of

		Type	Resource
QueryQpsForConsole	Query QPS data	Subaccount ID	qcs::ocr:::subUin/* qcs::ocr:::subUin/${uin}
QueryCallForConsole	Query calling volume data	Subaccount ID	qcs::ocr:::subUin/* qcs::ocr:::subUin/${uin}
QueryCostTimeForConsole	Query duration data	Subaccount ID	qcs::ocr:::subUin/* qcs::ocr:::subUin/${uin}
GetIntelligentScanSDKListForConsole	Query Intelligent Scan SDK List	Subaccount ID	qcs::ocr:::subUin/* qcs::ocr:::subUin/${uin}

> ⚠ **Note:**
> Other APIs only support API-level authorization.

Configuration Method

Custom policies also need to be authorized in the CAM Console, consistent with predictive policies.
For the method of creating a custom policy, please see Creating Custom Policy with Policy Generator.



用户或者用户组与策略关联后，即可获得策略所描述的操作权限。

暂无数据

已选 0 项， 共 0 项

- When creating a custom policy, both API-level and resource-level APIs follow these rules.
- Filling the resource field with "*" is equivalent to granting all permissions for the APIs in the action.
- The resource of API-level APIs must be configured with "*" to be used.
- The resource of resource-level APIs can be configured with "*" or through the Six-Segment Resource Description.
- Policies with a larger permission scope will override those with a smaller permission scope. For example, if the resource field of a resource-level API is filled with "*", the corresponding Six-Segment Resource Description for that API will not take effect.

Custom Policy Example

- Grant permission to a single API

Below is the authorization for granting a subaccount permission to open services (ConsoleServiceOpen) and close services (ConsoleServiceSetting). Fill in the corresponding API names in the action field:

```
{
    "version": "2.0",
    "statement": [
        {
            "effect": "allow",
            "resource": [
                "*"
            ],
            "action": [
                "ocr:ConsoleServiceOpen",
                "ocr:ConsoleServiceSetting"
            ]
        }
    ]
}
```

The action field can specify multiple APIs and support wildcards *. The above authorization method can also be simplified as follows:

```
{
    "version": "2.0",
    "statement": [
        {
            "effect": "allow",
            "resource": [
                "*"
            ],
            "action": [
                "ocr:ConsoleService*"
            ]
        }
    ]
}
```

- Grant permission to certain resources of an API

Below is the authorization for granting a subaccount permission to query the calling volume data of sub-user (subuin:0001), sub-user (subuin:0002), and itself.

```
{
    "version": "2.0",
    "statement": [
        {
            "effect": "allow",
            "resource": [
                "qcs::ocr:::subUin/${uin}",
                "qcs::ocr:::subUin/0001",
                "qcs::ocr:::subUin/0002",
            ],
            "action": [
                "ocr:QueryCallForConsole"
            ]
        }
    ]
}
```

Guide To Sensitive Data Encryption

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This guide applies to scenarios where the Optical Character Recognition (OCR) service API is used and sensitive data needs to be encrypted.

If your development language is Java, Go, Nodejs, or Python, it is recommended to use Method 1 for encryption and decryption.
If the development language is not within the above range, it is recommended to use Method 2 for the encryption and decryption feature.

Method 1: Using the Official Demo To Implement Encryption and Decryption (Recommended)

The official demo currently supports Java, Go, Nodejs, and Python development languages. The steps are as follows:

Obtain the Encryption and Decryption SDK

Contact Optical Character Recognition (OCR) aftersales support to obtain the demo code for the corresponding development language.

Using SDK

Importing Public Dependencies

```
<dependency>
    <groupId>org.bouncycastle</groupId>
    <artifactId>bcprov-jdk15on</artifactId>
    <version>1.70</version>
</dependency>
<dependency>
    <groupId>org.bouncycastle</groupId>
    <artifactId>bcpkix-jdk15on</artifactId>
    <version>1.70</version>
</dependency>
```

Importing Encryption and Decryption SDK

Download the latest release version jar package and include it in your project.
Refer to the API demo below to implement the sensitive information encryption and decryption feature.

API Supporting Encryption and Decryption Of Sensitive Information

- Identity card recognition (encrypted version): RecognizeEncryptedIDCardOCR

Method 2: Implementing Encryption and Decryption Without Using the Official SDK

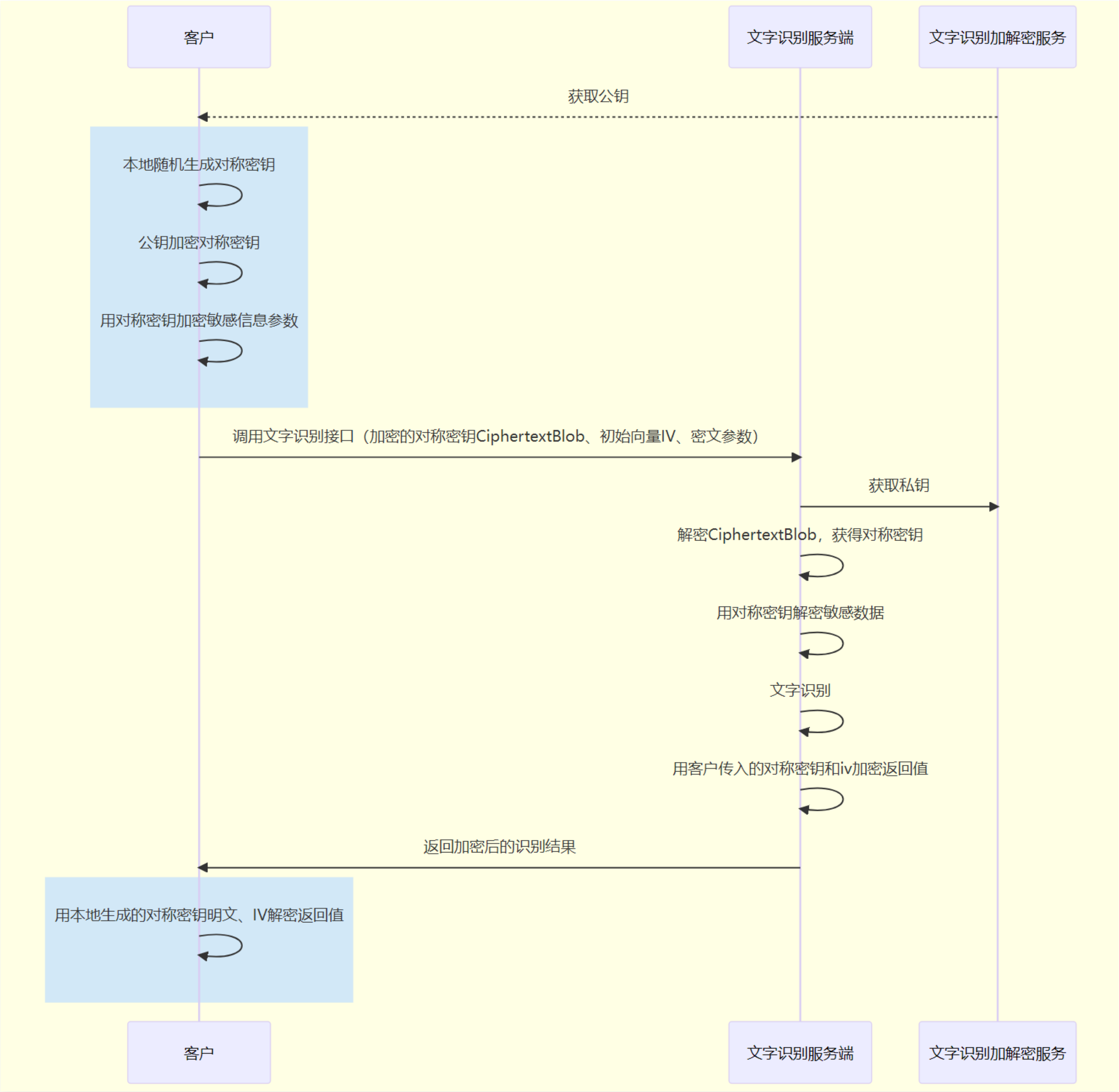
Explanation Of the Encryption and Decryption Process

- The current sensitive information encryption and decryption supports the standard encryption algorithm AES-CBC and the SM algorithm SM4-GCM. You can choose the appropriate encryption algorithm based on your business requirements.
- The essence of sensitive information encryption and decryption is to perform symmetric encryption on the request and response parameters of the API transmission. The OCR service decrypts the encrypted data before performing the recognition. If the OCR API response involves sensitive information, it will be encrypted with the same symmetric key. The caller needs to decrypt the sensitive information upon receiving the API response.
- The symmetric key is randomly generated locally by the caller. To ensure the secure transmission of the symmetric key, the caller needs to use an asymmetric encryption algorithm to encrypt the symmetric key. The encrypted public key can be obtained by contacting after-sales support.

```
sequenceDiagram
    participant customer as customer
    participant faceid as OCR server
    participant console as OCR encryption and decryption service
    console-->>customer: Get public key

    rect rgba(191, 223, 255, 0.7)
    customer->>customer: Locally generate a random symmetric key
    customer->>customer: Encrypt symmetric key with public key
    customer->>customer: Encrypt sensitive information parameter with symmetric key
    end

    customer->>faceid: Call OCR API (encrypted symmetric key CiphertextBlob, initial vector IV,
encrypted parameter)
    faceid->>console: Retrieve private key
    faceid->>faceid: Decrypt CiphertextBlob to obtain symmetric key
    faceid->>faceid: Decrypt sensitive data with symmetric key
    faceid->>faceid: Text Recognition
    faceid->>faceid: Encrypt return value with customer-provided symmetric key and IV
    faceid->>customer: Return encrypted recognition result
    rect rgba(191, 223, 255, 0.7)
    customer->>customer: Decrypt return value with locally generated plaintext symmetric key and IV
    end
```


客户
文字识别服务端
文字识别加解密服务
获取公钥
本地随机生成对称密钥
公钥加密对称密钥
用对称密钥加密敏感信息参数
调用文字识别接口（加密的对称密钥CiphertextBlob、初始向量IV、密文参数）
获取私钥
解密CiphertextBlob，获得对称密钥
用对称密钥解密敏感数据
文字识别
用客户传入的对称密钥和iv加密返回值
返回加密后的识别结果
用本地生成的对称密钥明文、IV解密返回值
客户
文字识别服务端
文字识别加解密服务

Using the AES-256-CBC Algorithm

Loading RSA Public Key

Load the RSA public key: First, Base64 decode the obtained public key string, then load it in the corresponding format.

- Format: PKCS1
- Save format: PEM format Base64 encoding
- Length: 1024

```
// Load RSA public key
bytes, err := base64.StdEncoding.DecodeString(publicKey)
if err != nil {
  return nil, err
}
```

```
block, _ := pem.Decode(bytes)
x509.ParsePKCS1PublicKey(block.Bytes)
```

Generating Symmetric Key and Vector

Randomly generate a 32-byte symmetric key and a 16-byte initial vector, with the initial vector represented as IV.

```
// Generate symmetric key
key := make([]byte, 32)
rand.Read(key)

// Generate 16-byte iv
iv := make([]byte, 16)
rand.Read(iv)
```

Encrypting Symmetric Key With RSA Public Key

Encrypt the previously generated **symmetric key** using the RSA public key, and represent the encrypted result as **CiphertextBlob**.

```
// Encrypt symmetric key
buffer := bytes.Buffer{}
bytes, _ := rsa.EncryptPKCS1v15(rand.Reader, publicKey, key)
buffer.Write(bytes)
buffer.Bytes()
```

Encrypting Sensitive Data

Use the previously generated **symmetric key and initial vector** to encrypt sensitive data (name, identity card number) using the AES-256-CBC algorithm.

```
// AES-CBC encrypt plaintext data
// Plaintext key
// Initial vector iv
// Sensitive data plaintext
block, _ := aes.NewCipher(key)
blockSize := block.BlockSize()
pkcs7 := func(cipherText []byte, blockSize int) []byte {
    padding := blockSize - len(cipherText)%blockSize
    padText := bytes.Repeat([]byte{byte(padding)}, padding)
    return append(cipherText, padText...)
}
plaintext = pkcs7(plaintext, blockSize)
blockMode := cipher.NewCBCEncrypter(block, iv)
ciphertext := make([]byte, len(plaintext))
blockMode.CryptBlocks(ciphertext, plaintext)
fmt.Print(ciphertext)
```

Calling the OCR API

Take the ID Card Recognition (Secure Encryption Version) RecognizeEncryptedIDCardOCR API as an example:
The original data is:

```
{
    "Action": "RecognizeEncryptedIDCardOCR",
    "Version": "2018-11-19",
    "ImageUrl": "https://xx/a.jpg",
    "Config": "{\"TempIdWarn\":true}",
    "CardSide": "FRONT"
}
```

CiphertextBlob, IV, TAG, and the encrypted request input parameter need to be Base64 encoded before transmission:

- **The generated symmetric key is:** aqPpVPUV9XMCCr5QQSu4p6mI8BAgbMz3 (32 Bytes)
- **The generated initial vector (IV) is:** Pcr1F3d9Bkn6ub7jduJcBw== (16 Bytes IV, Base64 encoding)
- **The symmetric key encrypted with the public key (CiphertextBlob) is:**
  Ows39pc3d7x34m/g6uWmo/HlQbxw+1IA4C1QiTCbbYuMt1W3tzxG7Wp3UEAB38kE1PTgUt2tHKOE8FDboEbkR9Bgnti+Hj1aNiGOlxiI9ABz6vTKA4Rx3FlFvnsM9+PulDPQWb7PgCEYIYWOAXNtfaa6iDAMW+qT0H8LBEg4Mss= (Base64 encoded)

Use the symmetric key to encrypt the request input parameter, and the encrypted results are:

- **Encrypted request parameter EncryptedBody:**
  MrUQbU7Tkva7sWSxEScx7U9zOikFtM5fCf7weC21z96kPE93MFnGbbMKR+CgsTSCLpqmfBKSDeErek4HAyyRGwzctETaJOJ7cFD8E4gBXk0R7yZhFn9INamfTMJusIhWGkmXPP0/+lrZoqGhOm01FNTAaUf6qHNwWUXOiaMntBSRmC5vscx9+arg4IW9XtTwENsK2ho68s7bw21uKNNJPw== (Base64 encoded)
- **The final encrypted API data is:**

```
{
    "Action": "RecognizeEncryptedIDCardOCR",
    "Version": "2018-11-19",
    "ImageUrl": "",
    "Config": "",
    "CardSide": "",
    "EncryptedBody":
"MrUQbU7Tkva7sWSxEScx7U9zOikFtM5fCf7weC21z96kPE93MFnGbbMKR+CgsTSCLpqmfBKSDeErek4HAyyRGwzctETaJOJ7cFD8E4
gBXk0R7yZhFn9INamfTMJusIhWGkmXPP0/+lrZoqGhOm01FNTAaUf6qHNwWUXOiaMntBSRmC5vscx9+arg4IW9XtTwENsK2ho68s7bw
21uKNNJPw==",
    "Encryption": {
        "EncryptList": [
            "EncryptedBody"
        ],
        "TagList": [],
        "CiphertextBlob":
"Ows39pc3d7x34m/g6uWmo/HlQbxw+1IA4C1QiTCbbYuMt1W3tzxG7Wp3UEAB38kE1PTgUt2tHKOE8FDboEbkR9Bgnti+Hj1aNiGOlx
iI9ABz6vTKA4Rx3FlFvnsM9+PulDPQWb7PgCEYIYWOAXNtfaa6iDAMW+qT0H8LBEg4Mss=",
        "Iv": "Pcr1F3d9Bkn6ub7jduJcBw==",
        "Algorithm": "AES-256-CBC"
        }
}
```

Using the SM4-GCM Algorithm

Loading SM2 Public Key

Load the SM2 public key: First, Base64 decode the public key string obtained from the console, then load it in the corresponding format.

- Format: PKCS8
- Save format: PEM format Base64 encoding
- Length: 512

```
// Load SM2 public key
bytes, err := base64.StdEncoding.DecodeString(publicKey)
if err != nil {
    return nil, err
}
```

```
x509.ReadPublicKeyFromPem(bytes)
```

Generating Symmetric Key and Vector

Randomly generate a 16-byte symmetric key and a 12-byte initial vector, with the initial vector represented as IV.

```
// Generate symmetric key
key := make([]byte, 16)
rand.Read(key)

// Generate 16-byte iv
iv := make([]byte, 12)
rand.Read(iv)
```

Encrypting Symmetric Key With SM2 Public Key

Encrypt the previously generated **symmetric key** using the SM2 public key, and represent the encrypted result as CiphertextBlob.

- Pay attention to using C1C3C2 data concatenation when outputting ciphertext.
- When converting data types, always use PC=04, i.e., uncompressed.

```
// Encrypt symmetric key
ciphertext, err := sm2.Encrypt(publicKey, plaintext, rand.Reader, sm2.C1C3C2)
if err != nil {
    return nil, err
}
return cipherText, nil
```

Encrypting Sensitive Data

Use the previously generated **symmetric key and initial vector** to encrypt sensitive data (request input parameter) using the SM4-GCM algorithm.

```
// SM4-GCM encrypt plaintext data
// Plaintext key
// Initial vector iv
// Sensitive data plaintext
block, err := sm4.NewCipher(key)
if err != nil {
    return nil, nil, err
}
gcm, err := cipher.NewGCM(block)
if err != nil {
    return nil, nil, err
}
ciphertext := gcm.Seal(nil, iv, plaintext, nil)
tag := ciphertext[len(ciphertext)-gcm.Overhead():]
ciphertextWithoutTag := ciphertext[:len(ciphertext)-gcm.Overhead()]
return ciphertextWithoutTag, tag, nil
```

Calling the OCR API

Take the ID Card Recognition (Secure Encryption Version) RecognizeEncryptedIDCardOCR API as an example:
The original data is:

```
{
    "Action": "RecognizeEncryptedIDCardOCR",
    "Version": "2018-11-19",
    "ImageUrl": "https://xx/a.jpg",
    "Config": "{\"TempIdWarn\":true}",
    "CardSide": "FRONT"
}
```

CiphertextBlob, IV, TAG, and the encrypted request parameter need to be Base64 encoded before transmission.

- **The generated symmetric key is:** zpBn0BkD44bvJuSF (16 Bytes)
- **The generated initial vector (IV) is:** MUZsKuqk7N2u7Ayh (12 Bytes IV, Base64 encoding)
- **The symmetric key encrypted with the public key (CiphertextBlob) is:** BHknHJ1Wgzg8DAONoGJ7ch+ijF/rsrs7mmvxER1WlFKSJHY66BSJbmzc5OtQyVK84Ye2zAD2x63nmr4ZXoEyw1T2zqKcAbDWP2DTypjsbijvqdU6oSVOrlWE3TlQpA+k6ID3YoRdNdJOCjKnsMOnEls= (Base64 encoding)

Use the symmetric key to encrypt the request input parameter, and the encrypted results are:

- **Encrypted request parameter EncryptedBody:** 12nTF6/CcyMqUDmbU63FPMFRpsye8NdZDwfGceRZIjpSr9ClHKAqWJBhcbqOGolvuOqG+ES1Eru94+5NlJtK/1UE+BgUb9+1571TgS/7Nn0d8zpR320ZZoFZO3djdpkkyXL32sM3FyuwdOkQXMOYcS+3y8A8YCOSLjDL6L7rAC2fP8sqqWWGndZAUdyK9fshwZ+rbCtf3zMl0uWY (Base64 encoded)
- **The final encrypted API data is:**

```
{
    "Action": "RecognizeEncryptedIDCardOCR",
    "Version": "2018-11-19",
    "ImageUrl": "",
    "Config": "",
    "CardSide": "",
    "EncryptedBody":
"12nTF6/CcyMqUDmbU63FPMFRpsye8NdZDwfGceRZIjpSr9ClHKAqWJBhcbqOGolvuOqG+ES1Eru94+5NlJtK/1UE+BgUb9+1571TgS
/7Nn0d8zpR320ZZoFZO3djdpkkyXL32sM3FyuwdOkQXMOYcS+3y8A8YCOSLjDL6L7rAC2fP8sqqWWGndZAUdyK9fshwZ+rbCtf3zMl0
uWY",
    "Encryption": {
        "EncryptList": [
            "EncryptedBody"
        ],
        "TagList": [],
        "CiphertextBlob":
"BHknHJ1Wgzg8DAONoGJ7ch+ijF/rsrs7mmvxER1WlFKSJHY66BSJbmzc5OtQyVK84Ye2zAD2x63nmr4ZXoEyw1T2zqKcAbDWP2DTyp
jsbijvqdU6oSVOrlWE3TlQpA+k6ID3YoRdNdJOCjKnsMOnEls=",
        "Iv": "MUZsKuqk7N2u7Ayh",
        "Algorithm": "AES-256-CBC"
        }
}
```