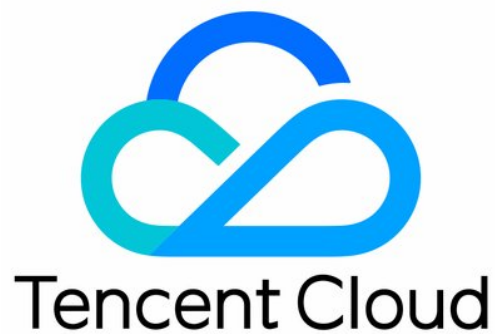


# **Optical Character Recognition**

## **Server APIs**

### **Product Documentation**



## Copyright Notice

©2013-2025 Tencent Cloud. All rights reserved.

Copyright in this document is exclusively owned by Tencent Cloud. You must not reproduce, modify, copy or distribute in any way, in whole or in part, the contents of this document without Tencent Cloud's the prior written consent.

## Trademark Notice



All trademarks associated with Tencent Cloud and its services are owned by the Tencent corporate group, including its parent, subsidiaries and affiliated companies, as the case may be. Trademarks of third parties referred to in this document are owned by their respective proprietors.

## Service Statement

This document is intended to provide users with general information about Tencent Cloud's products and services only and does not form part of Tencent Cloud's terms and conditions. Tencent Cloud's products or services are subject to change. Specific products and services and the standards applicable to them are exclusively provided for in Tencent Cloud's applicable terms and conditions.

# Contents

## Server APIs

History

Introduction

API Category

Making API Requests

Request Structure

Common Params

Signature v3

Signature

Responses

Smart Structured Information OCR APIs

SmartStructuralOCRV2

SmartStructuralPro

SmartStructuralPro

Card and Document OCR APIs

RecognizeMainlandIDCardOCR

MainlandPermitOCR

HmtResidentPermitOCR

HKIDCardOCR

MLIDPassportOCR

PermitOCR

MLIDCardOCR

RecognizeMacaoIDCardOCR

RecognizeIndonesiaIDCardOCR

RecognizeSingaporeIDCardOCR

RecognizeThailandCardOCR

RecognizeThaiPinkCard

RecognizeBrazilIDCardOCR

RecognizeBrazilRNEOCR

RecognizeBrazilRNMOCR

RecognizeMexicoVTID

RecognizeBrazilDriverLicenseOCR

PhilippinesDrivingLicenseOCR

PhilippinesSssIDOCR

PhilippinesTinIDOCR

PhilippinesVotelDOCR

PhilippinesUMIDOCR

General Text OCR APIs

GeneralBasicOCR

GeneralAccurateOCR

Vehicle Scene OCR APIs

VinOCR

Data Types

Error Codes

# Server APIs

## History

Last updated : 2025-06-27 15:03:02

### Release 39

Release time: 2025-06-27 15:02:41

Release updates:

Improvement to existing documentation.

Modified data structures:

- [WordItem](#)
  - **Modified members:** DetectedText, Coord

### Release 38

Release time: 2025-06-25 11:48:34

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeMexicoVTID](#)

### Release 37

Release time: 2025-05-13 14:42:29

Release updates:

Improvement to existing documentation.

Modified APIs:

- [PermitOCR](#)
  - New input parameters: CropPortrait

- New output parameters:PortraitImage, Type

## Release 36

Release time: 2025-04-28 16:23:15

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeBrazilRNMOCR](#)

## Release 35

Release time: 2025-04-18 15:03:54

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeBrazilRNEOCR](#)

## Release 34

Release time: 2025-03-21 14:48:12

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeBrazilIDCardOCR](#)

## Release 33

Release time: 2025-03-19 19:38:02

Release updates:

Improvement to existing documentation.

Modified APIs:

- [RecognizeThaiPinkCard](#)
  - New output parameters:WarnCardInfos

## Release 32

Release time: 2025-02-27 16:28:55

Release updates:

Improvement to existing documentation.

Modified APIs:

- [RecognizeThaiPinkCard](#)
  - New output parameters:ThaiSurName

## Release 31

Release time: 2025-02-19 11:58:21

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeBrazilDriverLicenseOCR](#)

## Release 30

Release time: 2025-01-21 16:29:34

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeThaiPinkCard](#)

## Release 29

Release time: 2025-01-17 10:26:07

Release updates:

Improvement to existing documentation.

Modified APIs:

- [RecognizeThailDCardOCR](#)
  - New input parameters:BackImageBase64, BackImageUrl
  - New output parameters:LaserID

## Release 28

Release time: 2025-01-07 11:09:58

Release updates:

Improvement to existing documentation.

New APIs:

- [SmartStructuralPro](#)

## Release 27

Release time: 2024-12-10 20:42:14

Release updates:

Improvement to existing documentation.

Modified APIs:

- [MLIDCardOCR](#)
  - New input parameters:BackImageBase64, BackImageUrl
  - New output parameters:MyKadNumber

## Release 26

Release time: 2024-11-25 16:28:06



Release updates:

Improvement to existing documentation.

Modified APIs:

- [RecognizeThailDCardOCR](#)
  - New output parameters:AdvancedInfo

## Release 25

Release time: 2024-10-29 19:02:20

Release updates:

Improvement to existing documentation.

Modified APIs:

- [RecognizeMacaoIDCardOCR](#)
  - New input parameters:BackImageUrl, BackImageBase64
  - New output parameters:ResidentType, WarnCardInfos

## Release 24

Release time: 2024-09-26 16:46:37

Release updates:

Improvement to existing documentation.

Modified APIs:

- [MLIDPassportOCR](#)
  - New output parameters:WarnCardInfos

## Release 23

Release time: 2024-08-02 15:56:23

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeMacaoIDCardOCR](#)

## Release 22

Release time: 2024-06-13 18:18:10

Release updates:

Improvement to existing documentation.

Modified APIs:

- [RecognizeIndonesianIDCardOCR](#)
  - New output parameters:WarnCardInfos

## Release 21

Release time: 2024-06-13 18:17:11

Release updates:

Improvement to existing documentation.

Modified APIs:

- [RecognizeThaiIDCardOCR](#)
  - New output parameters:EnIssueDate, EnExpirationDate, EnBirthday, Religion, SerialNumber, WarnCardInfos

## Release 20

Release time: 2024-06-13 18:13:54

Release updates:

Improvement to existing documentation.

Modified APIs:

- [MLIDCardOCR](#)
  - New output parameters:WarnCardInfos
  - **Deprecate output parameters:** Warn

## Release 19

Release time: 2024-06-13 18:05:53

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeSingaporeIDCardOCR](#)

Modified APIs:

- [HKIDCardOCR](#)
  - **Modified input parameters:** DetectFake
  - **Deprecate input parameters:** DetectFake
  - New output parameters: WarnCardInfos
  - **Deprecate output parameters:** FakeDetectResult, WarningCode

## Release 18

Release time: 2024-05-16 17:00:17

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeMainlandIDCardOCR](#)

## Release 17

Release time: 2024-04-08 16:35:36

Release updates:

Improvement to existing documentation.

Modified APIs:

- [MLIDPassportOCR](#)
  - New input parameters:ImageUrl

- **Modified input parameters:** ImageBase64
- New output parameters: Type, PassportRecognizeInfos

New data structures:

- [PassportRecognizeInfos](#)

## Release 16

Release time: 2023-06-25 15:59:03

Release updates:

Improvement to existing documentation.

New APIs:

- [HmtResidentPermitOCR](#)
- [IDCardOCR](#)
- [LicensePlateOCR](#)
- [MainlandPermitOCR](#)
- [PermitOCR](#)
- [RecognizeGeneralInvoice](#)
- [RecognizeTableAccurateOCR](#)
- [RecognizeThailDCardOCR](#)
- [SealOCR](#)
- [VinOCR](#)

New data structures:

- [AirTransport](#)
- [BusInvoice](#)
- [FlightItem](#)
- [GeneralMachineItem](#)
- [InvoiceItem](#)
- [LicensePlateInfo](#)
- [MachinePrintedInvoice](#)
- [MedicalInvoice](#)
- [MotorVehicleSaleInvoice](#)
- [NonTaxIncomeBill](#)
- [NonTaxItem](#)

- [OtherInvoice](#)
- [OtherInvoiceItem](#)
- [OtherInvoiceList](#)
- [QuotaInvoice](#)
- [Rect](#)
- [SealInfo](#)
- [ShippingInvoice](#)
- [SingleInvoiceItem](#)
- [TableCellInfo](#)
- [TableInfo](#)
- [TaxiTicket](#)
- [TollInvoice](#)
- [TrainTicket](#)
- [UsedCarPurchaseInvoice](#)
- [VatElectronicInfo](#)
- [VatElectronicItemInfo](#)
- [VatInvoiceInfo](#)
- [VatInvoiceItemInfo](#)
- [VatInvoiceRoll](#)
- [VatRollItem](#)

## Release 15

Release time: 2023-05-31 11:02:19

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizePhilippinesUMIDOCR](#)

## Release 14

Release time: 2023-05-29 10:10:53

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeKoreanDrivingLicenseOCR](#)
- [RecognizeKoreanIDCardOCR](#)

Modified data structures:

- [Key](#)
  - New members: ConfigName

## Release 13

Release time: 2023-05-19 14:59:13

Release updates:

Improvement to existing documentation.

New APIs:

- [SmartStructuralOCRV2](#)

New data structures:

- [GroupInfo](#)
- [ItemInfo](#)
- [Key](#)
- [LineInfo](#)
- [Polygon](#)
- [Value](#)
- [WordItem](#)

## Release 12

Release time: 2023-04-23 15:20:02

Release updates:

Improvement to existing documentation.

New APIs:

- [RecognizeIndonesianIDCardOCR](#)

- [RecognizePhilippinesDrivingLicenseOCR](#)
- [RecognizePhilippinesSssIDOCR](#)
- [RecognizePhilippinesTinIDOCR](#)
- [RecognizePhilippinesVoteIDOCR](#)

New data structures:

- [TextDetectionResult](#)

## Release 11

Release time: 2023-03-21 17:20:44

Release updates:

Improvement to existing documentation.

Modified APIs:

- [MLIDPassportOCR](#)
  - New output parameters: Surname, GivenName

## Release 10

Release time: 2022-08-19 11:15:22

Release updates:

Improvement to existing documentation.

New APIs:

- [MLIDCardOCR](#)

## Release 9

Release time: 2022-08-02 10:32:11

Release updates:

Improvement to existing documentation.

**Deleted APIs:**

- [MLIDCardOCR](#)

## Release 8

Release time: 2022-04-01 10:12:28

Release updates:

Improvement to existing documentation.

Modified APIs:

- [MLIDPassportOCR](#)
  - New output parameters:CodeSet, CodeCrc

## Release 7

Release time: 2021-11-19 18:46:19

Release updates:

Improvement to existing documentation.

Modified APIs:

- [GeneralAccurateOCR](#)
  - New input parameters:IsPdf, PdfPageNumber

## Release 6

Release time: 2021-10-13 16:08:36

Release updates:

Improvement to existing documentation.

Modified APIs:

- [GeneralAccurateOCR](#)
  - New input parameters:EnableDetectSplit

## Release 5



Release time: 2021-07-07 11:25:32

Release updates:

Improvement to existing documentation.

Modified APIs:

- [BankCardOCR](#)
  - New input parameters:EnableQualityValue
  - New output parameters:QualityValue
- [GeneralAccurateOCR](#)
  - New input parameters:IsWords
- [GeneralBasicOCR](#)
  - New input parameters:IsWords

New data structures:

- [DetectedWordCoordPoint](#)
- [DetectedWords](#)

Modified data structures:

- [TextDetection](#)
  - New members:Words, WordCoordPoint

## Release 4

Release time: 2021-01-27 15:26:16

Release updates:

Improvement to existing documentation.

Modified APIs:

- [BankCardOCR](#)
  - New output parameters:CardType, CardName, BorderCutImage, CardNoImage, WarningCode

## Release 3

Release time: 2021-01-18 15:18:26

Release updates:

Improvement to existing documentation.

Modified APIs:

- [BankCardOCR](#)
  - New input parameters: RetBorderCutImage, RetCardNoImage, EnableCopyCheck, EnableReshootCheck, EnableBorderCheck

## Release 2

Release time: 2020-09-10 17:01:40

Release updates:

Improvement to existing documentation.

New APIs:

- [GeneralAccurateOCR](#)
- [TableOCR](#)

Modified APIs:

- [GeneralBasicOCR](#)
  - New input parameters: IsPdf, PdfPageNumber
  - New output parameters: PdfPageSize
- [MLIDCardOCR](#)
  - New output parameters: Birthday

New data structures:

- [TextTable](#)

## Existing Release

Release time: 2020-08-06 19:48:59

Existing APIs/data structures are as follows:

Improvement to existing documentation.

Existing APIs:

- [BankCardOCR](#)
- [GeneralBasicOCR](#)
- [HKIDCardOCR](#)
- [MLIDCardOCR](#)
- [MLIDPassportOCR](#)

Existing data structures:

- [Coord](#)
- [ItemCoord](#)
- [TextDetection](#)

# Introduction

Last updated : 2024-04-08 16:35:42

Based on Tencent Cloud's self-developed deep learning technology and massive data, Optical Character Recognition (OCR) offers text recognition service for various cases, where printed and handwritten text on cards and documents can be recognized and custom templates are available, greatly improving the information input efficiency and reducing users' costs.

# API Category

Last updated : 2025-06-27 15:03:01

## Smart Structured Information OCR APIs

| API Name                             | Feature                              | Frequency Limit (maximum requests per second) |
|--------------------------------------|--------------------------------------|-----------------------------------------------|
| <a href="#">SmartStructuralOCRV2</a> | Smart Structured Information OCR V2  | -                                             |
| <a href="#">SmartStructuralPro</a>   | Smart Structured Information OCR Pro | -                                             |

## Industry-Specific Document OCR APIs

| API Name                                  | Feature                                   | Frequency Limit (maximum requests per second) |
|-------------------------------------------|-------------------------------------------|-----------------------------------------------|
| <a href="#">GeneralBasicOCR</a>           | Recognizes general print.                 | -                                             |
| <a href="#">GeneralAccurateOCR</a>        | Recognizes general print (high-precision) | -                                             |
| <a href="#">RecognizeTableAccurateOCR</a> | Recognizes a table (v3)                   | -                                             |

## Card and Document OCR APIs

| API Name                                   | Feature                                 | Frequency Limit (maximum requests per second) |
|--------------------------------------------|-----------------------------------------|-----------------------------------------------|
| <a href="#">IDCardOCR</a>                  | Recognizes an ID card                   | -                                             |
| <a href="#">RecognizeMainlandIDCardOCR</a> | Mainland ID Card OCR                    | 20                                            |
| <a href="#">BankCardOCR</a>                | Recognizes a bank card                  | -                                             |
| <a href="#">MainlandPermitOCR</a>          | Recognizes a mainland travel permit for | -                                             |

|                                             |                                                                                       |    |
|---------------------------------------------|---------------------------------------------------------------------------------------|----|
|                                             | Hong Kong, Macao, or Taiwan residents                                                 |    |
| <a href="#">HmtResidentPermitOCR</a>        | Recognizes a residence permit for Hong Kong, Macao, or Taiwan residents               | -  |
| <a href="#">HKIDCardOCR</a>                 | Recognizes Hong Kong (China) identity card                                            | 5  |
| <a href="#">MLIDPassportOCR</a>             | Recognizes a non-Mainland China passport                                              | -  |
| <a href="#">PermitOCR</a>                   | Recognizes an exit/entry permit for traveling to and from Hong Kong, Macao, or Taiwan | -  |
| TableOCR                                    | Form OCR (v1)                                                                         | -  |
| <a href="#">MLIDCardOCR</a>                 | Recognizes a Malaysian identity card                                                  | 5  |
| RecognizeKoreanDrivingLicenseOCR            | Recognizes a South Korean driver's license                                            | 20 |
| RecognizeKoreanIDCardOCR                    | Recognizes a South Korean ID card                                                     | 20 |
| RecognizePhilippinesDrivingLicenseOCR       | Recognizes a Philippine driver's license                                              | 20 |
| RecognizePhilippinesSssIDOCR                | Recognizes a Philippine SSSID/UMID card                                               | 20 |
| RecognizePhilippinesTinIDOCR                | Recognizes a Philippine TIN ID card                                                   | 20 |
| RecognizePhilippinesUMIDOCR                 | Recognizes a Philippine UMID card                                                     | 20 |
| RecognizePhilippinesVoteIDOCR               | Recognizes a Philippine voters ID card                                                | 20 |
| <a href="#">RecognizeMacaoIDCardOCR</a>     | Recognizes Macao (China) identity card                                                | -  |
| <a href="#">RecognizeIndonesiaIDCardOCR</a> | Recognizes an Indonesian identity card                                                | -  |
| <a href="#">RecognizeSingaporeIDCardOCR</a> | Singapore Card OCR                                                                    | 20 |
| <a href="#">RecognizeThaiIDCardOCR</a>      | Recognizes a Thai identity card                                                       | -  |
| <a href="#">RecognizeBrazilIDCardOCR</a>    | Brazil ID card OCR                                                                    | 20 |
| <a href="#">RecognizeBrazilRNEOCR</a>       | Brazil RNE ID OCR                                                                     | 20 |
| <a href="#">RecognizeBrazilRNMOCR</a>       | Brazil RNM OCR                                                                        | 20 |
|                                             |                                                                                       |    |

|                                                 |                             |    |
|-------------------------------------------------|-----------------------------|----|
| <a href="#">RecognizeThaiPinkCard</a>           | Recognizes a Thai pink card | 20 |
| <a href="#">RecognizeMexicoVTID</a>             | Mexican Voter ID Card OCR   | 20 |
| <a href="#">RecognizeBrazilDriverLicenseOCR</a> | Brazil Driver License       | 20 |

## Invoice and Ticket OCR APIs

| API Name                                | Feature                                 | Frequency Limit (maximum requests per second) |
|-----------------------------------------|-----------------------------------------|-----------------------------------------------|
| <a href="#">RecognizeGeneralInvoice</a> | Recognizes a general invoice (advanced) | -                                             |

## Vehicle Scene OCR APIs

| API Name                        | Feature                                          | Frequency Limit (maximum requests per second) |
|---------------------------------|--------------------------------------------------|-----------------------------------------------|
| <a href="#">LicensePlateOCR</a> | Recognizes a vehicle license plate               | -                                             |
| <a href="#">VinOCR</a>          | Recognizes a vehicle identification number (VIN) | 10                                            |
| <a href="#">SealOCR</a>         | Recognizes a seal                                | -                                             |

# Making API Requests

## Request Structure

Last updated : 2025-06-25 11:48:44

### 1. Service Address

The API supports access from either a nearby region (at `ocr.intl.tencentcloudapi.com`) or a specified region (at `ocr.ap-guangzhou.tencentcloudapi.com` for Guangzhou, for example).

We recommend using the domain name to access the nearest server. When you call an API, the request is automatically resolved to a server in the region **nearest** to the location where the API is initiated. For example, when you initiate an API request in Guangzhou, this domain name is automatically resolved to a Guangzhou server, the result is the same as that of specifying the region in the domain like "`ocr.ap-guangzhou.tencentcloudapi.com`".

**Note: For latency-sensitive businesses, we recommend that you specify the region in the domain name.**

Tencent Cloud currently supports the following regions:

| Hosted region                                                                | Domain name                                       |
|------------------------------------------------------------------------------|---------------------------------------------------|
| Local access region (recommended, only for non-financial availability zones) | <code>ocr.intl.tencentcloudapi.com</code>         |
| South China (Guangzhou)                                                      | <code>ocr.ap-guangzhou.tencentcloudapi.com</code> |
| East China (Shanghai)                                                        | <code>ocr.ap-shanghai.tencentcloudapi.com</code>  |
| East China (Nanjing)                                                         | <code>ocr.ap-nanjing.tencentcloudapi.com</code>   |
| North China (Beijing)                                                        | <code>ocr.ap-beijing.tencentcloudapi.com</code>   |
| Southwest China (Chengdu)                                                    | <code>ocr.ap-chengdu.tencentcloudapi.com</code>   |
| Southwest China (Chongqing)                                                  | <code>ocr.ap-chongqing.tencentcloudapi.com</code> |
| Hong Kong, Macao, Taiwan (Hong Kong, China)                                  | <code>ocr.ap-hongkong.tencentcloudapi.com</code>  |
| Southeast Asia (Singapore)                                                   | <code>ocr.ap-singapore.tencentcloudapi.com</code> |
|                                                                              |                                                   |



|                                  |                                          |
|----------------------------------|------------------------------------------|
| Southeast Asia (Jakarta)         | ocr.ap-jakarta.tencentcloudapi.com       |
| Southeast Asia (Bangkok)         | ocr.ap-bangkok.tencentcloudapi.com       |
| Northeast Asia (Seoul)           | ocr.ap-seoul.tencentcloudapi.com         |
| Northeast Asia (Tokyo)           | ocr.ap-tokyo.tencentcloudapi.com         |
| U.S. East Coast (Virginia)       | ocr.na-ashburn.tencentcloudapi.com       |
| U.S. West Coast (Silicon Valley) | ocr.na-siliconvalley.tencentcloudapi.com |
| South America (São Paulo)        | ocr.sa-saopaulo.tencentcloudapi.com      |
| Europe (Frankfurt)               | ocr.eu-frankfurt.tencentcloudapi.com     |

## 2. Communications Protocol

All the Tencent Cloud APIs communicate via HTTPS, providing highly secure communication tunnels.

## 3. Request Methods

Supported HTTP request methods:

- POST (recommended)
- GET

The Content-Type types supported by POST requests:

- application/json (recommended). The TC3-HMAC-SHA256 signature algorithm must be used.
- application/x-www-form-urlencoded. The HmacSHA1 or HmacSHA256 signature algorithm must be used.
- multipart/form-data (only supported by certain APIs). You must use TC3-HMAC-SHA256 to calculate the signature.

The size of a GET request packet is up to 32 KB. The size of a POST request is up to 1 MB when the HmacSHA1 or HmacSHA256 signature algorithm is used, and up to 10 MB when TC3-HMAC-SHA256 is used.

## 4. Character Encoding

Only UTF-8 encoding is used.

# Common Params

Last updated : 2024-11-15 10:53:01

Common parameters are used for all APIs authenticating requestors. Common parameters must be included in all API requests, and they will not be described in individual API documents.

The exact contents of the common parameters will vary depending on the version of the signature method you use.

## Common parameters for Signature Algorithm v3

When the TC3-HMAC-SHA256 algorithm is used, the common parameters should be uniformly placed in the HTTP request header, as shown below:

| Parameter Name | Type    | Required | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------|---------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| X-TC-Action    | String  | Yes      | The name of the API for the desired operation. For the specific value, see description of common parameter <code>Action</code> in the input parameters in r documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .                                                                                                                                                                                          |
| X-TC-Region    | String  | Yes      | Region parameter, which is used to identify the region to which the data y work with belongs. For values supported for an API, see the description c parameter <code>Region</code> in the input parameters in related API documentati parameter is not required for some APIs (which will be indicated in relatec documentation), and will not take effect even it is passed.                                                                                   |
| X-TC-Timestamp | Integer | Yes      | The current UNIX timestamp that records the time when the API request for example, 1529223702. Note: If the difference between the UNIX times server time is greater than 5 minutes, a signature expiration error may oc                                                                                                                                                                                                                                        |
| X-TC-Version   | String  | Yes      | API version of the action. For the valid values, see the description of the c parameter <code>Version</code> in the API documentation. For example, the versi 2017-03-12.                                                                                                                                                                                                                                                                                       |
| Authorization  | String  | Yes      | The HTTP authentication request header, for example:<br>TC3-HMAC-SHA256 Credential=AKID*****/Date/service/tc3_request,<br>SignedHeaders=content-type;host,<br>Signature=fe5f80f77d5fa3beca038a248ff027d0445342fe2855ddc96317<br>Here:<br>- TC3-HMAC-SHA256: Signature method, currently fixed as this value;<br>- Credential: Signature credential; AKID***** is the SecretId; Date is a d time, and this value must match the value of X-TC-Timestamp (a commo |

|            |        |    |                                                                                                                                                                                                                                                                                                                                                 |
|------------|--------|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            |        |    | UTC time format; service is the name of the product/service, and is general name prefix. For example, a domain name cvm.tencentcloudapi.com refers to product and the value would be cvm;<br>- SignedHeaders: The headers that contain the authentication information type and host are the required headers;<br>- Signature: Signature digest. |
| X-TC-Token | String | No | The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.                                                                                                                                                    |

Assuming you want to query the list of Cloud Virtual Machine instances in the Guangzhou region, the request structure in the form of request URL, request header and request body may be as follows:

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Limit=10&Offset=0

Authorization: TC3-HMAC-SHA256 Credential=AKID*****/2018-10-09/cvm/tc3_request, SignedHeaders=content-type;host, Signature=5da7a33f6993f0614b047e5df4582db9e9bf4672ba50567dba16c6ccf174c474
Content-Type: application/x-www-form-urlencoded
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1539084154
X-TC-Region: ap-guangzhou
```

The following example shows you how to structure an HTTP POST (application/json) request:

```
https://cvm.tencentcloudapi.com/

Authorization: TC3-HMAC-SHA256 Credential=AKID*****/2018-05-30/cvm/tc3_request, SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b13162d9279b0855cfba6789a8edb4c
Content-Type: application/json
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1527672334
X-TC-Region: ap-guangzhou

{"Offset":0,"Limit":10}
```

Example of an HTTP POST (multipart/form-data) request structure (only supported by specific APIs):

```
https://cvm.tencentcloudapi.com/
```

```
Authorization: TC3-HMAC-SHA256 Credential=AKID*****/2018-05-30/cvm/tc3_request, SignedHeaders=content-type;host, Signature=582c400e06b5924a6f2b5d7d672d79c15b13162d9279b0855cfba6789a8edb4c
```

```
Content-Type: multipart/form-data; boundary=58731222010402
```

```
Host: cvm.tencentcloudapi.com
```

```
X-TC-Action: DescribeInstances
```

```
X-TC-Version: 2017-03-12
```

```
X-TC-Timestamp: 1527672334
```

```
X-TC-Region: ap-guangzhou
```

```
--58731222010402
```

```
Content-Disposition: form-data; name="Offset"
```

```
0
```

```
--58731222010402
```

```
Content-Disposition: form-data; name="Limit"
```

```
10
```

```
--58731222010402--
```

## Common parameters for Signature Algorithm v1

To adopt the HmacSHA1 and HmacSHA256 signature methods, common parameters must be put into the request string, as shown below:

| Parameter Name | Type   | Required | Description                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------|--------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | String | Yes      | The name of the API for the desired operation. For the specific value, see the description of common parameter <code>Action</code> in the input parameters in related API documentation. For example, the API for querying the CVM instance list is <code>DescribeInstances</code> .                                                                                                                                 |
| Region         | String | Yes      | Region parameter, which is used to identify the region to which the data you want to work with belongs. For values supported for an API, see the description of common parameter <code>Region</code> in the input parameters in related API documentation. Note: This parameter is not required for some APIs (which will be indicated in related API documentation), and will not take effect even if it is passed. |
|                |        |          |                                                                                                                                                                                                                                                                                                                                                                                                                      |

|                 |         |     |                                                                                                                                                                                                                                                 |
|-----------------|---------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Timestamp       | Integer | Yes | The current UNIX timestamp that records the time when the API request was initiated, for example, 1529223702. If the difference between the value and the current system time is too large, a signature expiration error may occur.             |
| Nonce           | Integer | Yes | A random positive integer used along with <code>Timestamp</code> to prevent replay attacks.                                                                                                                                                     |
| SecretId        | String  | Yes | The identifying SecretId obtained on the <a href="#">Cloud API Key</a> page. A SecretId corresponds to a unique SecretKey which is used to generate the request signature (Signature).                                                          |
| Signature       | String  | Yes | Request signature used to verify the validity of this request. This is calculated based on the actual input parameters. For more information about how this is calculated, see the API authentication documentation.                            |
| Version         | String  | Yes | API version of the action. For the valid values, see the description of the common input parameter <code>Version</code> in the API documentation. For example, the version of CVM is 2017-03-12.                                                |
| SignatureMethod | String  | No  | Signature method. Currently, only HmacSHA256 and HmacSHA1 are supported. The HmacSHA256 algorithm is used to verify the signature only when this parameter is specified as HmacSHA256. In other cases, the signature is verified with HmacSHA1. |
| Token           | String  | No  | The token used for a temporary certificate. It must be used with a temporary key. You can obtain the temporary key and token by calling a CAM API. No token is required for a long-term key.                                                    |

Assuming you want to query the list of Cloud Virtual Machine instances in the Guangzhou region, the request structure in the form of request URL, request header and request body may be as follows:

Example of an HTTP GET request structure:

```
https://cvm.tencentcloudapi.com/?Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=1527672334&Signature=37ac2f4fde00b0ac9bd9eadeb459b1bb224158d66e7ae5fcadb70b2d181d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKID*****
```

```
Host: cvm.tencentcloudapi.com
Content-Type: application/x-www-form-urlencoded
```

Example of an HTTP POST request structure:

```
https://cvm.tencentcloudapi.com/
```

```
Host: cvm.tencentcloudapi.com
```

```
Content-Type: application/x-www-form-urlencoded
```

```
Action=DescribeInstances&Version=2017-03-12&SignatureMethod=HmacSHA256&Timestamp=
1527672334&Signature=37ac2f4fde00b0ac9bd9eadeb459b1bbec224158d66e7ae5fcadb70b2d18
1d02&Region=ap-guangzhou&Nonce=23823223&SecretId=AKID*****
****
```

# Signature v3

Last updated : 2025-01-07 11:10:07

TencentCloud API authenticates every single request, i.e., the request must be signed using the security credentials in the designated steps. Each request has to contain the signature information (Signature) in the common request parameters and be sent in the specified way and format.

## Applying for Security Credentials

The security credential used in this document is a key, which includes a SecretId and a SecretKey. Each user can have up to two pairs of keys.

- SecretId: Used to identify the API caller, which is just like a username.
- SecretKey: Used to authenticate the API caller, which is just like a password.
- **You must keep your security credentials private and avoid disclosure; otherwise, your assets may be compromised. If they are disclosed, please disable them as soon as possible.**

You can apply for the security credentials through the following steps:

1. Log in to the [Tencent Cloud Console](#).
2. Go to the [TencentCloud API Key](#) console page.
3. On the [TencentCloud API Key](#) page, click **Create** to create a SecretId/SecretKey pair.

## Using the Resources for Developers

TencentCloud API comes with SDKs for seven commonly used programming languages, including [Python](#), [Java](#), [PHP](#), [Go](#), [NodeJS](#) and [.NET](#). In addition, it provides [API Explorer](#) which enables online call, signature verification, and SDK code generation. If you have any troubles calculating a signature, consult these resources.

## TC3-HMAC-SHA256 Signature Algorithm

Compatible with the previous HmacSHA1 and HmacSHA256 signature algorithms, the TC3-HMAC-SHA256 signature algorithm is more secure and supports larger requests and JSON format with better performance. We recommend using TC3-HMAC-SHA256 to calculate the signature.

TencentCloud API supports both GET and POST requests. For the GET method, only the Content-Type: application/x-www-form-urlencoded protocol format is supported. For the POST method, two protocol formats,

Content-Type: application/json and Content-Type: multipart/form-data, are supported. The JSON format is supported by default for all business APIs, and the multipart format is supported only for specific business APIs. In this case, the API cannot be called in JSON format. See the specific business API documentation for more information. The POST method is recommended, as there is no difference in the results of both the methods, but the GET method only supports request packets up to 32 KB.

The following uses querying the list of CVM instances in the Guangzhou region as an example to describe the steps of signature splicing. We chose this API because:

1. CVM is activated by default, and this API is often used;
2. It is read-only and does not change the status of existing resources;
3. It covers many types of parameters, which allows it to be used to demonstrate how to use arrays containing data structures.

In the example, we try to choose common parameters and API parameters that are prone to mistakes. When you actually call an API, please use parameters based on the actual conditions. The parameters vary by API. Do not copy the parameters and values in this example.

Assuming that your SecretId and SecretKey are `AKID*****` and `*****`, respectively, if you want to view the status of the instance in the Guangzhou region whose CVM instance name is "unnamed" and have only one data entry returned, then the request may be:

```
curl -X POST https://cvm.tencentcloudapi.com \
-H "Authorization: TC3-HMAC-SHA256 Credential=AKID*****
*/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=a7b85514
48762bd123d6f79e81815e31a92013640a6cef36a08ad4b292a4d2f2" \
-H "Content-Type: application/json; charset=utf-8" \
-H "Host: cvm.tencentcloudapi.com" \
-H "X-TC-Action: DescribeInstances" \
-H "X-TC-Timestamp: 1551113065" \
-H "X-TC-Version: 2017-03-12" \
-H "X-TC-Region: ap-guangzhou" \
-d '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}'
```

The signature calculation process is explained in detail below.

## 1. Concatenating the CanonicalRequest String

Concatenate the canonical request string (CanonicalRequest) in the following pseudocode format:

```
CanonicalRequest =
HTTPRequestMethod + '\n' +
CanonicalURI + '\n' +
```



```
CanonicalQueryString + '\n' +
CanonicalHeaders + '\n' +
SignedHeaders + '\n' +
HashedRequestPayload
```

| Field Name           | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HTTPRequestMethod    | HTTP request method (GET or POST). This example uses <code>POST</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| CanonicalURI         | URI parameter. Slash ("/") is used for API 3.0.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| CanonicalQueryString | <p>The query string in the URL of the originating HTTP request. This is always an empty string for POST requests, and is the string after the question mark (?) for GET requests. For example: <code>Limit=10&amp;Offset=0</code>.</p> <p>Note: <code>CanonicalQueryString</code> must be URL-encoded, referencing <a href="#">RFC3986</a>, the UTF8 character set. We recommend using the programming language library. All special characters must be encoded and capitalized.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| CanonicalHeaders     | <p>Header information for signature calculation, including at least two headers of <code>host</code> and <code>content-type</code>. Custom headers can be added to participate in the signature process to improve the uniqueness and security of the request.</p> <p>Concatenation rules:</p> <ol style="list-style-type: none"> <li>Both the key and value of the header should be converted to lowercase with the leading and trailing spaces removed, so they are concatenated in the format of <code>key:value\n</code> format;</li> <li>If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase).</li> </ol> <p>The calculation result in this example is <code>content-type:application/json; charset=utf-8\nhost:cvm.tencentcloudapi.com\n</code>.</p> <p>Note: <code>content-type</code> must match the actually sent content. In some programming languages, a charset value would be added even if it is not specified. In this case, the request sent is different from the one signed, and the server will return an error indicating signature verification failed.</p> |
| SignedHeaders        | <p>Header information for signature calculation, indicating which headers of the request participate in the signature process (they must each individually correspond to the headers in CanonicalHeaders). <code>Content-type</code> and <code>host</code> are required headers.</p> <p>Concatenation rules:</p> <ol style="list-style-type: none"> <li>Both the key and value of the header should be converted to lowercase;</li> <li>If there are multiple headers, they should be sorted in ASCII ascending order by the header keys (lowercase) and separated by semicolons (;).</li> </ol> <p>The value in this example is <code>content-type;host</code></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| HashedRequestPayload | Hash value of the request payload (i.e., the body, such as <code>{"Limit": 1, "Filter</code>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

`[{"Values": ["unnamed"], "Name": "instance-name"}]}` in this example

The pseudocode for calculation is

Lowercase(HexEncode(Hash.SHA256(RequestPayload))) by SHA256 hashing the payload of the HTTP request, performing hexadecimal encoding, and finally converting the encoded string to lowercase letters. For GET requests, `RequestPayload` is always an empty string. The calculation result in this example is

`99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907`

According to the rules above, the `CanonicalRequest` string obtained in the example is as follows:

```
POST
/

content-type:application/json; charset=utf-8
host:cvm.tencentcloudapi.com

content-type;host
99d58dfbc6745f6747f36bfca17dee5e6881dc0428a0a36f96199342bc5b4907
```

## 2. Concatenating the String to Be Signed

The string to sign is concatenated as follows:

```
StringToSign =
Algorithm + \n +
RequestTimestamp + \n +
CredentialScope + \n +
HashedCanonicalRequest
```

| Field Name       | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Algorithm        | Signature algorithm, which is currently always <code>TC3-HMAC-SHA256</code> .                                                                                                                                                                                                                                                                                                                                                                                                |
| RequestTimestamp | Request timestamp, i.e., the value of the common parameter <code>X-TC-Timestamp</code> in request header, which is the UNIX timestamp of the current time in seconds, such as <code>1551113065</code> in this example.                                                                                                                                                                                                                                                       |
| CredentialScope  | Scope of the credential in the format of <code>Date/service/tc3_request</code> , including date, requested service and termination string (tc3_request). <b>Date is a date in UTC time, whose value should match the UTC date converted by the common parameter X-TC-Timestamp</b> ; <code>service</code> is the product name, which should match the domain name of the product called. The calculation result in this example is <code>2018-05-25/cvm/tc3_request</code> . |
|                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

HashedCanonicalRequest

Hash value of the CanonicalRequest string concatenated in the steps above. The pseudocode for calculation is Lowercase(HexEncode(Hash.SHA256(CanonicalRequest))). The calculation result in this example is

```
2815843035062fffd6f2a44ea8a34818b0dc46f024b8b3786976a3ad
```

Note:

1. Date has to be calculated from the timestamp "X-TC-Timestamp" and the time zone is UTC+0. If you add the system's local time zone information (such as UTC+8), calls can succeed both day and night but will definitely fail at 00:00. For example, if the timestamp is 1551113065 and the time in UTC+8 is 2019-02-26 00:44:25, the UTC+0 date in the calculated Date value should be 2019-02-25 instead of 2019-02-26.
2. Timestamp must be the same as your current system time, and your system time and standard time must be synced; if the difference between Timestamp and your current system time is larger than five minutes, the request will fail. If your system time is out of sync with the standard time for a while, the request will fail and return a signature expiration error.

According to the preceding rules, the string to be signed obtained in the example is as follows:

```
TC3-HMAC-SHA256
1551113065
2019-02-25/cvm/tc3_request
2815843035062fffd6f2a44ea8a34818b0dc46f024b8b3786976a3adda7a
```

### 3. Calculating the Signature

1. Calculate the derived signature key with the following pseudocode:

```
SecretKey = "*****"
SecretDate = HMAC_SHA256("TC3" + SecretKey, Date)
SecretService = HMAC_SHA256(SecretDate, Service)
SecretSigning = HMAC_SHA256(SecretService, "tc3_request")
```

| Field Name | Explanation                                                                    |
|------------|--------------------------------------------------------------------------------|
| SecretKey  | The original SecretKey, i.e., *****.                                           |
| Date       | The Date field information in Credential , such as 2019-02-25 in this example. |

|         |                                                                                                   |
|---------|---------------------------------------------------------------------------------------------------|
| Service | Value in the Service field in <code>Credential</code> , such as <code>cvm</code> in this example. |
|---------|---------------------------------------------------------------------------------------------------|

2. Calculate the signature with the following pseudocode:

```
Signature = HexEncode(HMAC_SHA256(SecretSigning, StringToSign))
```

## 4. Concatenating the Authorization

The Authorization is concatenated as follows:

```
Authorization =  
Algorithm + ' ' +  
'Credential=' + SecretId + '/' + CredentialScope + ', ' +  
'SignedHeaders=' + SignedHeaders + ', ' +  
'Signature=' + Signature
```

| Field Name      | Explanation                                                                                                                                |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Algorithm       | Signature algorithm, which is always <code>TC3-HMAC-SHA256</code> .                                                                        |
| SecretId        | The SecretId in the key pair, i.e., <code>AKID*****</code> .                                                                               |
| CredentialScope | Credential scope (see above). The calculation result in this example is <code>2019-02-25/cvm/tc3_request</code> .                          |
| SignedHeaders   | Header information for signature calculation (see above), such as <code>content-type;host</code> in this example.                          |
| Signature       | Signature value. The calculation result in this example is <code>a7b8551448762bd123d6f79e81815e31a92013640a6cef36a08ad4b292a4d2f2</code> . |

According to the rules above, the value obtained in the example is:

```
TC3-HMAC-SHA256 Credential=AKID*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=a7b8551448762bd123d6f79e81815e31a92013640a6cef36a08ad4b292a4d2f2
```

The following example shows a finished authorization header:

```
POST https://cvm.tencentcloudapi.com/  
Authorization: TC3-HMAC-SHA256 Credential=AKID*****/2019-02-25/cvm/tc3_request, SignedHeaders=content-type;host, Signature=a7b8551448762bd123d6f79e81815e31a92013640a6cef36a08ad4b292a4d2f2
```

```
Content-Type: application/json; charset=utf-8
Host: cvm.tencentcloudapi.com
X-TC-Action: DescribeInstances
X-TC-Version: 2017-03-12
X-TC-Timestamp: 1551113065
X-TC-Region: ap-guangzhou

{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}
```

## 5. Signature Demo

When calling API 3.0, you are recommended to use the corresponding Tencent Cloud SDK 3.0 which encapsulates the signature process, enabling you to focus on only the specific APIs provided by the product when developing. See [SDK Center](#) for more information. Currently, the following programming languages are supported:

- [Python](#)
- [Java](#)
- [PHP](#)
- [Go](#)
- [NodeJS](#)
- [.NET](#)

To further explain the signing process, we will use a programming language to implement the process described above. The request domain name, API and parameter values in the sample are used here. This goal of this example is only to provide additional clarification for the signature process, please see the SDK for actual usage.

The final output URL might be: `https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceId=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKID*****&Signature=EliP9YW3pW28FpsEdkXt%2F%2BWcGel%3D&Timestamp=1465185768&Version=2017-03-12.`

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.

Note: In the example below, even if you use the same programming language, the order of the parameters in the URL may be different for each execution. However, the order does not matter, as long as all the parameters are included in the URL and the signature is calculated correctly.

Note: The following code is only applicable to API 3.0. It cannot be directly used in other signature processes. Even with an older API, signature calculation errors may occur due to the differences in details. Please refer to the corresponding documentation.

## Java

```
import java.nio.charset.Charset;
import java.nio.charset.StandardCharsets;
import java.security.MessageDigest;
import java.text.SimpleDateFormat;
import java.util.Date;
import java.util.TimeZone;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.xml.bind.DatatypeConverter;

public class TencentCloudAPITC3Demo {
    private final static Charset UTF8 = StandardCharsets.UTF_8;
    private final static String SECRET_ID = "AKID*****";
    private final static String SECRET_KEY = "*****";
    private final static String CT_JSON = "application/json; charset=utf-8";

    public static byte[] hmac256(byte[] key, String msg) throws Exception {
        Mac mac = Mac.getInstance("HmacSHA256");
        SecretKeySpec secretKeySpec = new SecretKeySpec(key, mac.getAlgorithm());
        mac.init(secretKeySpec);
        return mac.doFinal(msg.getBytes(UTF8));
    }

    public static String sha256Hex(String s) throws Exception {
        MessageDigest md = MessageDigest.getInstance("SHA-256");
        byte[] d = md.digest(s.getBytes(UTF8));
        return DatatypeConverter.printHexBinary(d).toLowerCase();
    }

    public static void main(String[] args) throws Exception {
        String service = "cvm";
        String host = "cvm.tencentcloudapi.com";
        String region = "ap-guangzhou";
        String action = "DescribeInstances";
        String version = "2017-03-12";
        String algorithm = "TC3-HMAC-SHA256";
        String timestamp = "1551113065";
        //String timestamp = String.valueOf(System.currentTimeMillis() / 1000);
        SimpleDateFormat sdf = new SimpleDateFormat("yyyy-MM-dd");
        // Pay attention to the time zone; otherwise, errors may occur
        sdf.setTimeZone(TimeZone.getTimeZone("UTC"));
        String date = sdf.format(new Date(Long.valueOf(timestamp + "000")));

        // ***** Step 1: Concatenate the CanonicalRequest string *****
    }
```

```

String httpRequestMethod = "POST";
String canonicalUri = "/";
String canonicalQueryString = "";
String canonicalHeaders = "content-type:application/json; charset=utf-8\n" + "host:" + host + "\n";
String signedHeaders = "content-type;host";

String payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}] }";
String hashedRequestPayload = sha256Hex(payload);
String canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
System.out.println(canonicalRequest);

// ***** Step 2: Concatenate the string to sign *****
String credentialScope = date + "/" + service + "/" + "tc3_request";
String hashedCanonicalRequest = sha256Hex(canonicalRequest);
String stringToSign = algorithm + "\n" + timestamp + "\n" + credentialScope +
"\n" + hashedCanonicalRequest;
System.out.println(stringToSign);

// ***** Step 3: Calculate the signature *****
byte[] secretDate = hmac256(("TC3" + SECRET_KEY).getBytes(UTF8), date);
byte[] secretService = hmac256(secretDate, service);
byte[] secretSigning = hmac256(secretService, "tc3_request");
String signature = DatatypeConverter.printHexBinary(hmac256(secretSigning, stringToSign)).toLowerCase();
System.out.println(signature);

// ***** Step 4: Concatenate the Authorization *****
String authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
System.out.println(authorization);

TreeMap<String, String> headers = new TreeMap<String, String>();
headers.put("Authorization", authorization);
headers.put("Content-Type", CT_JSON);
headers.put("Host", host);
headers.put("X-TC-Action", action);
headers.put("X-TC-Timestamp", timestamp);
headers.put("X-TC-Version", version);
headers.put("X-TC-Region", region);

StringBuilder sb = new StringBuilder();
sb.append("curl -X POST https://").append(host)

```

```

.append(" -H \"Authorization: ").append(authorization).append("\")
.append(" -H \"Content-Type: application/json; charset=utf-8\"")
.append(" -H \"Host: ").append(host).append("\")
.append(" -H \"X-TC-Action: ").append(action).append("\")
.append(" -H \"X-TC-Timestamp: ").append(timestamp).append("\")
.append(" -H \"X-TC-Version: ").append(version).append("\")
.append(" -H \"X-TC-Region: ").append(region).append("\")
.append(" -d '").append(payload).append("'");
System.out.println(sb.toString());
}
}

```

## Python

```

# -*- coding: utf-8 -*-
import hashlib, hmac, json, os, sys, time
from datetime import datetime

# Key Parameters
secret_id = "AKID*****"
secret_key = "*****"

service = "cvm"
host = "cvm.tencentcloudapi.com"
endpoint = "https://" + host
region = "ap-guangzhou"
action = "DescribeInstances"
version = "2017-03-12"
algorithm = "TC3-HMAC-SHA256"
#timestamp = int(time.time())
timestamp = 1551113065
date = datetime.utcfromtimestamp(timestamp).strftime("%Y-%m-%d")
params = {"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}

# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = "POST"
canonical_uri = "/"
canonical_querystring = ""
ct = "application/json; charset=utf-8"
payload = json.dumps(params)
canonical_headers = "content-type:%s\nhost:%s\n" % (ct, host)
signed_headers = "content-type;host"
hashed_request_payload = hashlib.sha256(payload.encode("utf-8")).hexdigest()
canonical_request = (http_request_method + "\n" +
canonical_uri + "\n" +

```



```

canonical_querystring + "\n" +
canonical_headers + "\n" +
signed_headers + "\n" +
hashed_request_payload)
print(canonical_request)

# ***** Step 2: Concatenate the string to sign *****
credential_scope = date + "/" + service + "/" + "tc3_request"
hashed_canonical_request = hashlib.sha256(canonical_request.encode("utf-8")).hexdigest()
string_to_sign = (algorithm + "\n" +
str(timestamp) + "\n" +
credential_scope + "\n" +
hashed_canonical_request)
print(string_to_sign)

# ***** Step 3: Calculate the Signature *****
# Function for computing signature digest
def sign(key, msg):
return hmac.new(key, msg.encode("utf-8"), hashlib.sha256).digest()
secret_date = sign(("TC3" + secret_key).encode("utf-8"), date)
secret_service = sign(secret_date, service)
secret_signing = sign(secret_service, "tc3_request")
signature = hmac.new(secret_signing, string_to_sign.encode("utf-8"), hashlib.sha256).hexdigest()
print(signature)

# ***** Step 4: Concatenate the Authorization *****
authorization = (algorithm + " " +
"Credential=" + secret_id + "/" + credential_scope + ", " +
"SignedHeaders=" + signed_headers + ", " +
"Signature=" + signature)
print(authorization)

print('curl -X POST ' + endpoint
+ ' -H "Authorization: ' + authorization + '" '
+ ' -H "Content-Type: application/json; charset=utf-8" '
+ ' -H "Host: ' + host + '" '
+ ' -H "X-TC-Action: ' + action + '" '
+ ' -H "X-TC-Timestamp: ' + str(timestamp) + '" '
+ ' -H "X-TC-Version: ' + version + '" '
+ ' -H "X-TC-Region: ' + region + '" '
+ " -d '" + payload + "'")

```

## Golang

```
package main

import (
    "crypto/hmac"
    "crypto/sha256"
    "encoding/hex"
    "fmt"
    "time"
)

func sha256hex(s string) string {
    b := sha256.Sum256([]byte(s))
    return hex.EncodeToString(b[:])
}

func hmacsha256(s, key string) string {
    hashed := hmac.New(sha256.New, []byte(key))
    hashed.Write([]byte(s))
    return string(hashed.Sum(nil))
}

func main() {
    secretId := "AKID*****"
    secretKey := "*****"
    host := "cvm.tencentcloudapi.com"
    algorithm := "TC3-HMAC-SHA256"
    service := "cvm"
    version := "2017-03-12"
    action := "DescribeInstances"
    region := "ap-guangzhou"
    //var timestamp int64 = time.Now().Unix()
    var timestamp int64 = 1551113065

    // step 1: build canonical request string
    httpRequestMethod := "POST"
    canonicalURI := "/"
    canonicalQueryString := ""
    canonicalHeaders := "content-type:application/json; charset=utf-8\n" + "host:" +
    host + "\n"
    signedHeaders := "content-type;host"
    payload := `{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-na
me"}]}`
    hashedRequestPayload := sha256hex(payload)
    canonicalRequest := fmt.Sprintf("%s\n%s\n%s\n%s\n%s\n%s",
    httpRequestMethod,
    canonicalURI,
```

```

canonicalQueryString,
canonicalHeaders,
signedHeaders,
hashedRequestPayload)
fmt.Println(canonicalRequest)

// step 2: build string to sign
date := time.Unix(timestamp, 0).UTC().Format("2006-01-02")
credentialScope := fmt.Sprintf("%s/%s/tc3_request", date, service)
hashedCanonicalRequest := sha256hex(canonicalRequest)
string2sign := fmt.Sprintf("%s\n%d\n%s\n%s",
algorithm,
timestamp,
credentialScope,
hashedCanonicalRequest)
fmt.Println(string2sign)

// step 3: sign string
secretDate := hmacsha256(date, "TC3"+secretKey)
secretService := hmacsha256(service, secretDate)
secretSigning := hmacsha256("tc3_request", secretService)
signature := hex.EncodeToString([]byte(hmacsha256(string2sign, secretSigning)))
fmt.Println(signature)

// step 4: build authorization
authorization := fmt.Sprintf("%s Credential=%s/%s, SignedHeaders=%s, Signature=%s",
algorithm,
secretId,
credentialScope,
signedHeaders,
signature)
fmt.Println(authorization)

curl := fmt.Sprintf(`curl -X POST https://%s\
-H "Authorization: %s"\
-H "Content-Type: application/json; charset=utf-8"\
-H "Host: %s" -H "X-TC-Action: %s"\
-H "X-TC-Timestamp: %d"\
-H "X-TC-Version: %s"\
-H "X-TC-Region: %s"\
-d '%s'`, host, authorization, host, action, timestamp, version, region, payload)
fmt.Println(curl)
}

```

## PHP

```
<?php
$secretId = "AKID*****";
$secretKey = "*****";
$host = "cvm.tencentcloudapi.com";
$service = "cvm";
$version = "2017-03-12";
$action = "DescribeInstances";
$region = "ap-guangzhou";
// $timestamp = time();
$timestamp = 1551113065;
$algorithm = "TC3-HMAC-SHA256";

// step 1: build canonical request string
$httpRequestMethod = "POST";
$canonicalUri = "/";
$canonicalQueryString = "";
$canonicalHeaders = "content-type:application/json; charset=utf-8\n"."host:". $host. "\n";
$signedHeaders = "content-type;host";
$payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-name"}]}';
$hashedRequestPayload = hash("SHA256", $payload);
$canonicalRequest = $httpRequestMethod. "\n"
.$canonicalUri. "\n"
.$canonicalQueryString. "\n"
.$canonicalHeaders. "\n"
.$signedHeaders. "\n"
.$hashedRequestPayload;
echo $canonicalRequest. PHP_EOL;

// step 2: build string to sign
$date = gmdate("Y-m-d", $timestamp);
$credentialScope = $date. "/" . $service. "/tc3_request";
$hashedCanonicalRequest = hash("SHA256", $canonicalRequest);
$stringToSign = $algorithm. "\n"
.$timestamp. "\n"
.$credentialScope. "\n"
.$hashedCanonicalRequest;
echo $stringToSign. PHP_EOL;

// step 3: sign string
$secretDate = hash_hmac("SHA256", $date, "TC3". $secretKey, true);
$secretService = hash_hmac("SHA256", $service, $secretDate, true);
$secretSigning = hash_hmac("SHA256", "tc3_request", $secretService, true);
$signature = hash_hmac("SHA256", $stringToSign, $secretSigning);
echo $signature. PHP_EOL;
```

```
// step 4: build authorization
$authorization = $algorithm
." Credential=".$secretId."/".$credentialScope
.", SignedHeaders=content-type;host, Signature=".$signature;
echo $authorization.PHP_EOL;

$curl = "curl -X POST https://" . $host
.' -H "Authorization: ' . $authorization . '"'
.' -H "Content-Type: application/json; charset=utf-8"'
.' -H "Host: ' . $host . '"'
.' -H "X-TC-Action: ' . $action . '"'
.' -H "X-TC-Timestamp: ' . $timestamp . '"'
.' -H "X-TC-Version: ' . $version . '"'
.' -H "X-TC-Region: ' . $region . '"'
." -d '" . $payload . '"';
echo $curl.PHP_EOL;
```

## Ruby

```
# -*- coding: UTF-8 -*-
# require ruby>=2.3.0
require 'digest'
require 'json'
require 'time'
require 'openssl'

# Key Parameters
secret_id = 'AKID*****'
secret_key = '*****'

service = 'cvm'
host = 'cvm.tencentcloudapi.com'
endpoint = 'https://' + host
region = 'ap-guangzhou'
action = 'DescribeInstances'
version = '2017-03-12'
algorithm = 'TC3-HMAC-SHA256'
# timestamp = Time.now.to_i
timestamp = 1551113065
date = Time.at(timestamp).utc.strftime('%Y-%m-%d')

# ***** Step 1: Concatenate the CanonicalRequest string *****
http_request_method = 'POST'
canonical_uri = '/'
canonical_querystring = ''
```

```

canonical_headers = "content-type:application/json; charset=utf-8\nhost:#{host}
\n"
signed_headers = 'content-type;host'
# params = { 'Limit' => 1, 'Filters' => [{ 'Name' => 'instance-name', 'Values' =>
['unnamed'] }] }
# payload = JSON.generate(params, { 'ascii_only' => true, 'space' => ' ' })
# json will generate in random order, to get specified result in example, we hard
-code it here.
payload = '{"Limit": 1, "Filters": [{"Values": ["unnamed"], "Name": "instance-nam
e"}]}'
hashed_request_payload = Digest::SHA256.hexdigest(payload)
canonical_request = [
http_request_method,
canonical_uri,
canonical_querystring,
canonical_headers,
signed_headers,
hashed_request_payload,
].join("\n")

puts canonical_request

# ***** Step 2: Concatenate the string to sign *****
credential_scope = date + '/' + service + '/' + 'tc3_request'
hashed_request_payload = Digest::SHA256.hexdigest(canonical_request)
string_to_sign = [
algorithm,
timestamp.to_s,
credential_scope,
hashed_request_payload,
].join("\n")
puts string_to_sign

# ***** Step 3: Calculate the Signature *****
digest = OpenSSL::Digest.new('sha256')
secret_date = OpenSSL::HMAC.digest(digest, 'TC3' + secret_key, date)
secret_service = OpenSSL::HMAC.digest(digest, secret_date, service)
secret_signing = OpenSSL::HMAC.digest(digest, secret_service, 'tc3_request')
signature = OpenSSL::HMAC.hexdigest(digest, secret_signing, string_to_sign)
puts signature

# ***** Step 4: Concatenate the Authorization *****
authorization = "#{algorithm} Credential=#{secret_id}/#{credential_scope}, Signed
Headers=#{signed_headers}, Signature=#{signature}"
puts authorization

puts 'curl -X POST ' + endpoint \

```

```
+ ' -H "Authorization: ' + authorization + "' \
+ ' -H "Content-Type: application/json; charset=utf-8"' \
+ ' -H "Host: ' + host + "' \
+ ' -H "X-TC-Action: ' + action + "' \
+ ' -H "X-TC-Timestamp: ' + timestamp.to_s + "' \
+ ' -H "X-TC-Version: ' + version + "' \
+ ' -H "X-TC-Region: ' + region + "' \
+ " -d '" + payload + "'"
```

## DotNet

```
using System;
using System.Collections.Generic;
using System.Security.Cryptography;
using System.Text;

public class Application
{
    public static string SHA256Hex(string s)
    {
        using (SHA256 algo = SHA256.Create())
        {
            byte[] hashbytes = algo.ComputeHash(Encoding.UTF8.GetBytes(s));
            StringBuilder builder = new StringBuilder();
            for (int i = 0; i < hashbytes.Length; ++i)
            {
                builder.Append(hashbytes[i].ToString("x2"));
            }
            return builder.ToString();
        }
    }

    public static byte[] HmacSHA256(byte[] key, byte[] msg)
    {
        using (HMACSHA256 mac = new HMACSHA256(key))
        {
            return mac.ComputeHash(msg);
        }
    }

    public static Dictionary<String, String> BuildHeaders(string secretid,
        string secretkey, string service, string endpoint, string region,
        string action, string version, DateTime date, string requestPayload)
    {
        string datestr = date.ToString("yyyy-MM-dd");
        DateTime startTime = new DateTime(1970, 1, 1, 0, 0, 0, 0, DateTimeKind.Utc);
        long requestTimestamp = (long)Math.Round((date - startTime).TotalMilliseconds, Mi
```

```

dpointRounding.AwayFromZero) / 1000;
// ***** Step 1: Concatenate the CanonicalRequest string *****
string algorithm = "TC3-HMAC-SHA256";
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string contentType = "application/json";
string canonicalHeaders = "content-type:" + contentType + "; charset=utf-8\n" +
"host:" + endpoint + "\n";
string signedHeaders = "content-type;host";
string hashedRequestPayload = SHA256Hex(requestPayload);
string canonicalRequest = httpRequestMethod + "\n"
+ canonicalUri + "\n"
+ canonicalQueryString + "\n"
+ canonicalHeaders + "\n"
+ signedHeaders + "\n"
+ hashedRequestPayload;
Console.WriteLine(canonicalRequest);
Console.WriteLine("-----");

// ***** Step 2: Concatenate the string to sign *****
string credentialScope = datestr + "/" + service + "/" + "tc3_request";
string hashedCanonicalRequest = SHA256Hex(canonicalRequest);
string stringToSign = algorithm + "\n" + requestTimestamp.ToString() + "\n" + cre
dentialScope + "\n" + hashedCanonicalRequest;
Console.WriteLine(stringToSign);
Console.WriteLine("-----");

// ***** Step 3: Calculate the signature *****
byte[] tc3SecretKey = Encoding.UTF8.GetBytes("TC3" + secretkey);
byte[] secretDate = HmacSHA256(tc3SecretKey, Encoding.UTF8.GetBytes(datestr));
byte[] secretService = HmacSHA256(secretDate, Encoding.UTF8.GetBytes(service));
byte[] secretSigning = HmacSHA256(secretService, Encoding.UTF8.GetBytes("tc3_requ
est"));
byte[] signatureBytes = HmacSHA256(secretSigning, Encoding.UTF8.GetBytes(stringTo
Sign));
string signature = BitConverter.ToString(signatureBytes).Replace("-", "").ToLower
();
Console.WriteLine(signature);
Console.WriteLine("-----");

// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " "
+ "Credential=" + secretid + "/" + credentialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", "
+ "Signature=" + signature;
Console.WriteLine(authorization);

```



```
Console.WriteLine("-----");

Dictionary<string, string> headers = new Dictionary<string, string>();
headers.Add("Authorization", authorization);
headers.Add("Host", endpoint);
headers.Add("Content-Type", contentType + "; charset=utf-8");
headers.Add("X-TC-Timestamp", requestTimestamp.ToString());
headers.Add("X-TC-Version", version);
headers.Add("X-TC-Action", action);
headers.Add("X-TC-Region", region);
return headers;
}

public static void Main(string[] args)
{
    // SecretID and SecretKey
    string SECRET_ID = "AKID*****";
    string SECRET_KEY = "*****";

    string service = "cvm";
    string endpoint = "cvm.tencentcloudapi.com";
    string region = "ap-guangzhou";
    string action = "DescribeInstances";
    string version = "2017-03-12";

    // The timestamp `2019-02-26 00:44:25` used here is only for reference. In a project, use the following parameter:
    // DateTime date = DateTime.UtcNow;
    // Enter the correct time zone. We recommend using UTC timestamp to avoid errors.
    DateTime date = new DateTime(1970, 1, 1, 0, 0, 0, 0, DateTimeKind.Utc).AddSeconds(1551113065);
    string requestPayload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}]}";

    Dictionary<string, string> headers = BuildHeaders(SECRET_ID, SECRET_KEY, service, endpoint, region, action, version, date, requestPayload);

    Console.WriteLine("POST https://cvm.tencentcloudapi.com");
    foreach (KeyValuePair<string, string> kv in headers)
    {
        Console.WriteLine(kv.Key + ": " + kv.Value);
    }
    Console.WriteLine();
    Console.WriteLine(requestPayload);
}
```

## NodeJS

```

const crypto = require('crypto');

function sha256(message, secret = '', encoding) {
  const hmac = crypto.createHmac('sha256', secret)
  return hmac.update(message).digest(encoding)
}

function getHash(message, encoding = 'hex') {
  const hash = crypto.createHash('sha256')
  return hash.update(message).digest(encoding)
}

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 SECRET_ID = "AKID*****"
  const SECRET_KEY = "*****"

  const endpoint = "cvm.tencentcloudapi.com"
  const service = "cvm"
  const region = "ap-guangzhou"
  const action = "DescribeInstances"
  const version = "2017-03-12"
  //const timestamp = getTime()
  const timestamp = 1551113065
  const date = getDate(timestamp)

  // ***** Step 1: Concatenate the CanonicalRequest string *****
  const signedHeaders = "content-type;host"

  const payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}]}"

  const hashedRequestPayload = getHash(payload);
  const httpRequestMethod = "POST"
  const canonicalUri = "/"
  const canonicalQueryString = ""
  const canonicalHeaders = "content-type:application/json; charset=utf-8\n" + "host:" + endpoint + "\n"

  const canonicalRequest = httpRequestMethod + "\n"

```

```

+ canonicalUri + "\n"
+ canonicalQueryString + "\n"
+ canonicalHeaders + "\n"
+ signedHeaders + "\n"
+ hashedRequestPayload
console.log(canonicalRequest)
console.log("-----")

// ***** Step 2: Concatenate the string to sign *****
const algorithm = "TC3-HMAC-SHA256"
const hashedCanonicalRequest = getHash(canonicalRequest);
const credentialScope = date + "/" + service + "/" + "tc3_request"
const stringToSign = algorithm + "\n" +
timestamp + "\n" +
credentialScope + "\n" +
hashedCanonicalRequest
console.log(stringToSign)
console.log("-----")

// ***** Step 3: Calculate the signature *****
const kDate = sha256(date, 'TC3' + SECRET_KEY)
const kService = sha256(service, kDate)
const kSigning = sha256('tc3_request', kService)
const signature = sha256(stringToSign, kSigning, 'hex')
console.log(signature)
console.log("-----")

// ***** Step 4: Concatenate the Authorization *****
const authorization = algorithm + " " +
"Credential=" + SECRET_ID + "/" + credentialScope + ", " +
"SignedHeaders=" + signedHeaders + ", " +
"Signature=" + signature
console.log(authorization)
console.log("-----")

const Call_Information = 'curl -X POST ' + "https://" + endpoint
+ ' -H "Authorization: ' + authorization + '"'
+ ' -H "Content-Type: application/json; charset=utf-8"'
+ ' -H "Host: ' + endpoint + '"'
+ ' -H "X-TC-Action: ' + action + '"'
+ ' -H "X-TC-Timestamp: ' + timestamp.toString() + '"'
+ ' -H "X-TC-Version: ' + version + '"'
+ ' -H "X-TC-Region: ' + region + '"'
+ " -d '" + payload + '"'
console.log(Call_Information)
}
main()

```

## C++

```
#include <iostream>
#include <iomanip>
#include <sstream>
#include <string>
#include <stdio.h>
#include <time.h>
#include <openssl/sha.h>
#include <openssl/hmac.h>

using namespace std;

string get_data(int64_t &timestamp)
{
    string utcDate;
    char buff[20] = {0};
    // time_t timenow;
    struct tm sttime;
    sttime = *gmtime(&timestamp);
    strftime(buff, sizeof(buff), "%Y-%m-%d", &sttime);
    utcDate = string(buff);
    return utcDate;
}

string int2str(int64_t n)
{
    std::stringstream ss;
    ss << n;
    return ss.str();
}

string sha256Hex(const string &str)
{
    char buf[3];
    unsigned char hash[SHA256_DIGEST_LENGTH];
    SHA256_CTX sha256;
    SHA256_Init(&sha256);
    SHA256_Update(&sha256, str.c_str(), str.size());
    SHA256_Final(hash, &sha256);
    std::string NewString = "";
    for(int i = 0; i < SHA256_DIGEST_LENGTH; i++)
    {
        sprintf(buf, sizeof(buf), "%02x", hash[i]);
        NewString = NewString + buf;
    }
    return NewString;
}
```

```
}  
string HmacSha256(const string &key, const string &input)  
{  
    unsigned char hash[32];  
  
    HMAC_CTX *h;  
    #if OPENSSSL_VERSION_NUMBER < 0x10100000L  
    HMAC_CTX hmac;  
    HMAC_CTX_init(&hmac);  
    h = &hmac;  
    #else  
    h = HMAC_CTX_new();  
    #endif  
  
    HMAC_Init_ex(h, &key[0], key.length(), EVP_sha256(), NULL);  
    HMAC_Update(h, ( unsigned char* )&input[0], input.length());  
    unsigned int len = 32;  
    HMAC_Final(h, hash, &len);  
  
    #if OPENSSSL_VERSION_NUMBER < 0x10100000L  
    HMAC_CTX_cleanup(h);  
    #else  
    HMAC_CTX_free(h);  
    #endif  
  
    std::stringstream ss;  
    ss << std::setfill('0');  
    for (int i = 0; i < len; i++)  
    {  
        ss << hash[i];  
    }  
  
    return (ss.str());  
}  
string HexEncode(const string &input)  
{  
    static const char* const lut = "0123456789abcdef";  
    size_t len = input.length();  
  
    string output;  
    output.reserve(2 * len);  
    for (size_t i = 0; i < len; ++i)  
    {  
        const unsigned char c = input[i];  
        output.push_back(lut[c >> 4]);  
        output.push_back(lut[c & 15]);  
    }  
}
```

```

return output;
}

int main()
{
string SECRET_ID = "AKID*****";
string SECRET_KEY = "*****";

string service = "cvm";
string host = "cvm.tencentcloudapi.com";
string region = "ap-guangzhou";
string action = "DescribeInstances";
string version = "2017-03-12";
int64_t timestamp = 1551113065;
string date = get_data(timestamp);

// ***** Step 1: Concatenate the CanonicalRequest string *****
string httpRequestMethod = "POST";
string canonicalUri = "/";
string canonicalQueryString = "";
string canonicalHeaders = "content-type:application/json; charset=utf-8\nhost:" +
host + "\n";
string signedHeaders = "content-type;host";
string payload = "{\"Limit\": 1, \"Filters\": [{\"Values\": [\"unnamed\"], \"Name\": \"instance-name\"}] }";
string hashedRequestPayload = sha256Hex(payload);
string canonicalRequest = httpRequestMethod + "\n" + canonicalUri + "\n" + canonicalQueryString + "\n"
+ canonicalHeaders + "\n" + signedHeaders + "\n" + hashedRequestPayload;
cout << canonicalRequest << endl;
cout << "-----" << endl;

// ***** Step 2: Concatenate the string to sign *****
string algorithm = "TC3-HMAC-SHA256";
string RequestTimestamp = int2str(timestamp);
string credentialScope = date + "/" + service + "/" + "tc3_request";
string hashedCanonicalRequest = sha256Hex(canonicalRequest);
string stringToSign = algorithm + "\n" + RequestTimestamp + "\n" + credentialScope + "\n" + hashedCanonicalRequest;
cout << stringToSign << endl;
cout << "-----" << endl;

// ***** Step 3: Calculate the signature *****
string kKey = "TC3" + SECRET_KEY;
string kDate = HmacSha256(kKey, date);
string kService = HmacSha256(kDate, service);
string kSigning = HmacSha256(kService, "tc3_request");

```

```

string signature = HexEncode(HmacSha256(kSigning, stringToSign));
cout << signature << endl;
cout << "-----" << endl;

// ***** Step 4: Concatenate the Authorization *****
string authorization = algorithm + " " + "Credential=" + SECRET_ID + "/" + creden
tialScope + ", "
+ "SignedHeaders=" + signedHeaders + ", " + "Signature=" + signature;
cout << authorization << endl;
cout << "-----" << endl;

string headers = "curl -X POST https://" + host + "\n"
+ " -H \"Authorization: \" + authorization + "\n"
+ " -H \"Content-Type: application/json; charset=utf-8\"" + "\n"
+ " -H \"Host: \" + host + "\n"
+ " -H \"X-TC-Action: \" + action + "\n"
+ " -H \"X-TC-Timestamp: \" + RequestTimestamp + "\n"
+ " -H \"X-TC-Version: \" + version + "\n"
+ " -H \"X-TC-Region: \" + region + "\n"
+ " -d '" + payload;
cout << headers << endl;
return 0;
};

```

## Signature Failure

The following situational error codes for signature failure may occur. Please resolve the errors accordingly.

| Error Code                   | Description                                                                                                                                                           |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AuthFailure.SignatureExpire  | Signature expired. Timestamp and server time cannot differ by more than five minutes.                                                                                 |
| AuthFailure.SecretIdNotFound | The key does not exist. Please go to the console to check whether it is disabled or you copied fewer or more characters.                                              |
| AuthFailure.SignatureFailure | Signature error. It is possible that the signature was calculated incorrectly, the signature does not match the content actually sent, or the SecretKey is incorrect. |
| AuthFailure.TokenFailure     | Temporary certificate token error.                                                                                                                                    |
| AuthFailure.InvalidSecretId  | Invalid key (not a TencentCloud API key type).                                                                                                                        |

# Signature

Last updated : 2025-01-07 11:10:08

Tencent Cloud API authenticates each access request, i.e. each request needs to include authentication information (Signature) in the common parameters to verify the identity of the requester.

The Signature is generated by the security credentials which include SecretId and SecretKey. If you don't have the security credentials yet, go to the [TencentCloud API Key](#) page to apply for them; otherwise, you cannot invoke the TencentCloud API.

## 1. Applying for Security Credentials

Before using the TencentCloud API for the first time, go to the [TencentCloud API Key](#) page to apply for security credentials.

Security credentials consist of SecretId and SecretKey:

- SecretId is used to identify the API requester.
- SecretKey is used to encrypt the signature string and verify it on the server.
- **You must keep your security credentials private and avoid disclosure.**

You can apply for the security credentials through the following steps:

1. Log in to the [Tencent Cloud Console](#).
2. Go to the [TencentCloud API Key](#) page.
3. On the [API Key Management](#) page, click **Create Key** to create a SecretId/SecretKey pair.

Note: Each account can have up to two pairs of SecretId/SecretKey.

## 2. Generating a Signature

With the SecretId and SecretKey, a signature can be generated. The following describes how to generate a signature:

Assume that the SecretId and SecretKey are:

- SecretId: AKID\*\*\*\*\*
- SecretKey: \*\*\*\*\*

**Note: This is just an example. For actual operations, please use your own SecretId and SecretKey.**



Take the Cloud Virtual Machine's request to view the instance list (DescribeInstances) as an example. When you invoke this API, the request parameters may be as follows:

| Parameter name | Description                          | Parameter value   |
|----------------|--------------------------------------|-------------------|
| Action         | Method name                          | DescribeInstances |
| SecretId       | Key ID                               | AKID*****         |
| Timestamp      | Current timestamp                    | 1465185768        |
| Nonce          | Random positive integer              | 11886             |
| Region         | Region where the instance is located | ap-guangzhou      |
| InstanceIds.0  | ID of the instance to query          | ins-09dx96dg      |
| Offset         | Offset                               | 0                 |
| Limit          | Allowed maximum output               | 20                |
| Version        | API version number                   | 2017-03-12        |

## 2.1. Sorting Parameters

First, sort all the request parameters in an ascending lexicographical order (ASCII code) by their names. Notes: (1) Parameters are sorted by their names instead of their values; (2) The parameters are sorted based on ASCII code, not in an alphabetical order or by values. For example, InstanceIds.2 should be arranged after InstanceIds.12. You can complete the sorting process using a sorting function in a programming language, such as the ksort function in PHP. The parameters in the example are sorted as follows:

```
{
  'Action' : 'DescribeInstances',
  'InstanceIds.0' : 'ins-09dx96dg',
  'Limit' : 20,
  'Nonce' : 11886,
  'Offset' : 0,
  'Region' : 'ap-guangzhou',
  'SecretId' : 'AKID*****',
  'Timestamp' : 1465185768,
  'Version' : '2017-03-12',
}
```

When developing in another programming language, you can sort these sample parameters and it will work as long as you obtain the same results.

## 2.2. Concatenating a Request String

This step generates a request string.

Format the request parameters sorted in the previous step into the form of "parameter name"="parameter value". For example, for the Action parameter, its parameter name is "Action" and its parameter value is "DescribeInstances", so it will become Action=DescribeInstances after formatted.

**Note: The "parameter value" is the original value but not the value after URL encoding.**

Then, concatenate the formatted parameters with "&". The resulting request string is as follows:

```
Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0
&Region=ap-guangzhou&SecretId=AKID*****&Timestamp=1465
185768&Version=2017-03-12
```

## 2.3. Concatenating the Signature Original String

This step generates a signature original string.

The signature original string consists of the following parameters:

1. HTTP method: POST and GET modes are supported, and GET is used here for the request. Please note that the method name should be in all capital letters.
2. Request server: the domain name of the request to view the list of instances (DescribeInstances) is cvm.tencentcloudapi.com. The actual request domain name varies by the module to which the API belongs. For more information, see the instructions of the specific API.
3. Request path: The request path in the current version of TencentCloud API is fixed to /.
4. Request string: the request string generated in the previous step.

The concatenation rule of the signature original string is: Request method + request host + request path + ? + request string

The concatenation result of the example is:

```
GETcvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&L
imit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKID*****
*****&Timestamp=1465185768&Version=2017-03-12
```

## 2.4. Generating a Signature String

This step generates a signature string.

First, use the HMAC-SHA1 algorithm to sign the **signature original string** obtained in the previous step, and then

encode the generated signature using Base64 to obtain the final signature.

The specific code is as follows with the PHP language being used as an example:

```
$secretKey = '*****';
$srcStr = 'GETcvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKID*****&Timestamp=1465185768&Version=2017-03-12';
$signStr = base64_encode(hash_hmac('sha1', $srcStr, $secretKey, true));
echo $signStr;
```

The final signature is:

```
7RAM2xfNMO9EiVTNmPg06MRnCvQ=
```

When developing in another programming language, you can sign and verify the original in the example above and it works as long as you get the same results.

### 3. Encoding a Signature String

The generated signature string cannot be directly used as a request parameter and must be URL encoded.

For example, if the signature string generated in the previous step is 7RAM2xfNMO9EiVTNmPg06MRnCvQ=, the final signature string request parameter (Signature) is 7RAM2xfNMO9EiVTNmPg06MRnCvQ%3D, which will be used to generate the final request URL.

**Note:** If your request method is GET, or the request method is POST and the Content-Type is application/x-www-form-urlencoded, then all the request parameter values need to be URL encoded (except the parameter key and the symbol of =) when sending the request. Non-ASCII characters need to be encoded with UTF-8 before URL encoding.

**Note:** The network libraries of some programming languages automatically URL encode all parameters, in which case there is no need to URL encode the signature string; otherwise, two rounds of URL encoding will cause the signature to fail.

**Note:** Other parameter values also need to be encoded using [RFC 3986](#). Use %XY in percent-encoding for special characters such as Chinese characters, where "X" and "Y" are hexadecimal characters (0-9 and uppercase A-F), and using lowercase will cause an error.

### 4. Signature Failure

The following situational error codes for signature failure may occur. Please resolve the errors accordingly.

| Error code                   | Error description                             |
|------------------------------|-----------------------------------------------|
| AuthFailure.SignatureExpire  | The signature is expired                      |
| AuthFailure.SecretIdNotFound | The key does not exist                        |
| AuthFailure.SignatureFailure | Signature error                               |
| AuthFailure.TokenFailure     | Token error                                   |
| AuthFailure.InvalidSecretId  | Invalid key (not a TencentCloud API key type) |

## 5. Signature Demo

When calling API 3.0, you are recommended to use the corresponding Tencent Cloud SDK 3.0 which encapsulates the signature process, enabling you to focus on only the specific APIs provided by the product when developing. See [SDK Center](#) for more information. Currently, the following programming languages are supported:

- [Python](#)
- [Java](#)
- [PHP](#)
- [Go](#)
- [NodeJS](#)
- [.NET](#)

To further explain the signing process, we will use a programming language to implement the process described above. The request domain name, API and parameter values in the sample are used here. This goal of this example is only to provide additional clarification for the signature process, please see the SDK for actual usage.

The final output URL might be: `https://cvm.tencentcloudapi.com/?Action=DescribeInstances&InstanceIds.0=ins-09dx96dg&Limit=20&Nonce=11886&Offset=0&Region=ap-guangzhou&SecretId=AKID*****&Signature=7RAM2xfNMO9EiVTNmPg06MRnCvQ%3D&Timestamp=1465185768&Version=2017-03-12` .

Note: The key in the example is fictitious, and the timestamp is not the current time of the system, so if this URL is opened in the browser or called using commands such as curl, an authentication error will be returned: Signature expired. In order to get a URL that can work properly, you need to replace the SecretId and SecretKey in the example with your real credentials and use the current time of the system as the Timestamp.

Note: In the example below, even if you use the same programming language, the order of the parameters in the URL may be different for each execution. However, the order does not matter, as long as all the parameters are included in the URL and the signature is calculated correctly.

Note: The following code is only applicable to API 3.0. It cannot be directly used in other signature processes. Even with an older API, signature calculation errors may occur due to the differences in details. Please refer to the corresponding documentation.

## Java

```
import java.io.UnsupportedEncodingException;
import java.net.URLEncoder;
import java.util.Random;
import java.util.TreeMap;
import javax.crypto.Mac;
import javax.crypto.spec.SecretKeySpec;
import javax.xml.bind.DatatypeConverter;

public class TencentCloudAPIDemo {
    private final static String CHARSET = "UTF-8";

    public static String sign(String s, String key, String method) throws Exception {
        Mac mac = Mac.getInstance(method);
        SecretKeySpec secretKeySpec = new SecretKeySpec(key.getBytes(CHARSET), mac.getAlgorithm());
        mac.init(secretKeySpec);
        byte[] hash = mac.doFinal(s.getBytes(CHARSET));
        return DatatypeConverter.printBase64Binary(hash);
    }

    public static String getStringToSign(TreeMap<String, Object> params) {
        StringBuilder s2s = new StringBuilder("GETcvm.tencentcloudapi.com/?");
        // When signing, the parameters need to be sorted in lexicographical order. TreeMap
        // is used here to guarantee the correct order.
        for (String k : params.keySet()) {
            s2s.append(k).append("=").append(params.get(k).toString()).append("&");
        }
        return s2s.toString().substring(0, s2s.length() - 1);
    }

    public static String getUrl(TreeMap<String, Object> params) throws UnsupportedEncodingException {
        StringBuilder url = new StringBuilder("https://cvm.tencentcloudapi.com/?");
        // There is no requirement for the order of the parameters in the actual request
        // URL.
        for (String k : params.keySet()) {
```

```
// The request string needs to be URL encoded. As the Key is all in English letters, only the value is URL encoded here.
url.append(k).append("=").append(URLEncoder.encode(params.get(k).toString(), CHARSET)).append("&");
}
return url.toString().substring(0, url.length() - 1);
}

public static void main(String[] args) throws Exception {
    TreeMap<String, Object> params = new TreeMap<String, Object>(); // TreeMap enables automatic sorting
    // A random number should be used when actually calling, for example: params.put("Nonce", new Random().nextInt(Integer.MAX_VALUE));
    params.put("Nonce", 11886); // Common parameter
    // The current time of the system should be used when actually calling, for example: params.put("Timestamp", System.currentTimeMillis() / 1000);
    params.put("Timestamp", 1465185768); // Common parameter
    params.put("SecretId", "AKID*****"); // Common parameter
    params.put("Action", "DescribeInstances"); // Common parameter
    params.put("Version", "2017-03-12"); // Common parameter
    params.put("Region", "ap-guangzhou"); // Common parameter
    params.put("Limit", 20); // Business parameter
    params.put("Offset", 0); // Business parameter
    params.put("InstanceIds.0", "ins-09dx96dg"); // Business parameter
    params.put("Signature", sign(getStringToSign(params), "*****", "HmacSHA1")); // Common parameter
    System.out.println(getUrl(params));
}
}
```

## Python

Note: If running in a Python 2 environment, the following requests dependency package must be installed first: `pip install requests`.

```
# -*- coding: utf8 -*-
import base64
import hashlib
import hmac
import time

import requests

secret_id = "AKID*****"
secret_key = "*****"
```

```

def get_string_to_sign(method, endpoint, params):
    s = method + endpoint + "/"
    query_str = "&".join("%s=%s" % (k, params[k]) for k in sorted(params))
    return s + query_str

def sign_str(key, s, method):
    hmac_str = hmac.new(key.encode("utf8"), s.encode("utf8"), method).digest()
    return base64.b64encode(hmac_str)

if __name__ == '__main__':
    endpoint = "cvm.tencentcloudapi.com"
    data = {
        'Action' : 'DescribeInstances',
        'InstanceIds.0' : 'ins-09dx96dg',
        'Limit' : 20,
        'Nonce' : 11886,
        'Offset' : 0,
        'Region' : 'ap-guangzhou',
        'SecretId' : secret_id,
        'Timestamp' : 1465185768, # int(time.time())
        'Version': '2017-03-12'
    }
    s = get_string_to_sign("GET", endpoint, data)
    data["Signature"] = sign_str(secret_key, s, hashlib.sha1)
    print(data["Signature"])
    # An actual invocation would occur here, which may incur fees after success
    # resp = requests.get("https://" + endpoint, params=data)
    # print(resp.url)

```

## Golang

```

package main

import (
    "bytes"
    "crypto/hmac"
    "crypto/sha1"
    "encoding/base64"
    "fmt"
    "sort"
)

func main() {
    secretId := "AKID*****"
    secretKey := "*****"

```

```

params := map[string]string{
    "Nonce": "11886",
    "Timestamp": "1465185768",
    "Region": "ap-guangzhou",
    "SecretId": secretId,
    "Version": "2017-03-12",
    "Action": "DescribeInstances",
    "InstanceIds.0": "ins-09dx96dg",
    "Limit": "20",
    "Offset": "0",
}

var buf bytes.Buffer
buf.WriteString("GET")
buf.WriteString("cvm.tencentcloudapi.com")
buf.WriteString("/")
buf.WriteString("?")

// sort keys by ascii asc order
keys := make([]string, 0, len(params))
for k, _ := range params {
    keys = append(keys, k)
}
sort.Strings(keys)

for i := range keys {
    k := keys[i]
    buf.WriteString(k)
    buf.WriteString("=")
    buf.WriteString(params[k])
    buf.WriteString("&")
}
buf.Truncate(buf.Len() - 1)

hashed := hmac.New(sha1.New, []byte(secretKey))
hashed.Write(buf.Bytes())

fmt.Println(base64.StdEncoding.EncodeToString(hashed.Sum(nil)))
}

```

## PHP

```

<?php
$secretId = "AKID*****";
$secretKey = "*****";
$params["Nonce"] = 11886; //rand();

```



```

$params["Timestamp"] = 1465185768;//time();
$params["Region"] = "ap-guangzhou";
$params["SecretId"] = $secretId;
$params["Version"] = "2017-03-12";
$params["Action"] = "DescribeInstances";
$params["InstanceIds.0"] = "ins-09dx96dg";
$params["Limit"] = 20;
$params["Offset"] = 0;

ksort($params);

$signStr = "GETcvm.tencentcloudapi.com/?";
foreach ( $params as $key => $value ) {
    $signStr = $signStr . $key . "=" . $value . "&";
}
$signStr = substr($signStr, 0, -1);

$signature = base64_encode(hash_hmac("sha1", $signStr, $secretKey, true));
echo $signature.PHP_EOL;
// need to install and enable curl extension in php.ini
// $params["Signature"] = $signature;
// $url = "https://cvm.tencentcloudapi.com/?".http_build_query($params);
// echo $url.PHP_EOL;
// $ch = curl_init();
// curl_setopt($ch, CURLOPT_URL, $url);
// $output = curl_exec($ch);
// curl_close($ch);
// echo json_decode($output);

```

## Ruby

```

# -*- coding: UTF-8 -*-
# require ruby>=2.3.0
require 'time'
require 'openssl'
require 'base64'

secret_id = "AKID*****"
secret_key = "*****"

method = 'GET'
endpoint = 'cvm.tencentcloudapi.com'
data = {
  'Action' => 'DescribeInstances',
  'InstanceIds.0' => 'ins-09dx96dg',
  'Limit' => 20,

```

```

'Nonce' => 11886,
'Offset' => 0,
'Region' => 'ap-guangzhou',
'SecretId' => secret_id,
'Timestamp' => 1465185768, # Time.now.to_i
'Version' => '2017-03-12',
}
sign = method + endpoint + '/'?
params = []
data.sort.each do |item|
  params << "#{item[0]}=#{item[1]}"
end
sign += params.join('&')
digest = OpenSSL::Digest.new('sha1')
data['Signature'] = Base64.encode64(OpenSSL::HMAC.digest(digest, secret_key, sign))
puts data['Signature']

# require 'net/http'
# uri = URI('https://' + endpoint)
# uri.query = URI.encode_www_form(data)
# p uri
# res = Net::HTTP.get_response(uri)
# puts res.body

```

## DotNet

```

using System;
using System.Collections.Generic;
using System.Net;
using System.Security.Cryptography;
using System.Text;

public class Application {
  public static string Sign(string signKey, string secret)
  {
    string signRet = string.Empty;
    using (HMACSHA1 mac = new HMACSHA1(Encoding.UTF8.GetBytes(signKey)))
    {
      byte[] hash = mac.ComputeHash(Encoding.UTF8.GetBytes(secret));
      signRet = Convert.ToBase64String(hash);
    }
    return signRet;
  }

  public static string MakeSignPlainText(SortedDictionary<string, string> requestParams, string requestMethod, string requestHost, string requestPath)

```

```
{
    string retStr = "";
    retStr += requestMethod;
    retStr += requestHost;
    retStr += requestPath;
    retStr += "?";
    string v = "";
    foreach (string key in requestParams.Keys)
    {
        v += string.Format("{0}={1}&", key, requestParams[key]);
    }
    retStr += v.TrimEnd('&');
    return retStr;
}

public static void Main(string[] args)
{
    string SECRET_ID = "AKID*****";
    string SECRET_KEY = "*****";

    string endpoint = "cvm.tencentcloudapi.com";
    string region = "ap-guangzhou";
    string action = "DescribeInstances";
    string version = "2017-03-12";
    double RequestTimestamp = 1465185768;
    // long timestamp = ToTimestamp() / 1000;
    // string requestTimestamp = timestamp.ToString();
    Dictionary<string, string> param = new Dictionary<string, string>();
    param.Add("Limit", "20");
    param.Add("Offset", "0");
    param.Add("InstanceIds.0", "ins-09dx96dg");
    param.Add("Action", action);
    param.Add("Nonce", "11886");
    // param.Add("Nonce", Math.Abs(new Random().Next()).ToString());

    param.Add("Timestamp", RequestTimestamp.ToString());
    param.Add("Version", version);

    param.Add("SecretId", SECRET_ID);
    param.Add("Region", region);
    SortedDictionary<string, string> headers = new SortedDictionary<string, string>(param, StringComparer.Ordinal);
    string sigInParam = MakeSignPlainText(headers, "GET", endpoint, "/");
    Console.WriteLine(sigInParam);
    string sigOutParam = Sign(SECRET_KEY, sigInParam);
}
```

```
Console.WriteLine("GET https://cvm.tencentcloudapi.com");
foreach (KeyValuePair<string, string> kv in headers)
{
    Console.WriteLine(kv.Key + ": " + kv.Value);
}
Console.WriteLine("Signature" + ": " + WebUtility.UrlEncode(sigOutParam));
Console.WriteLine();

string result = "https://cvm.tencentcloudapi.com/?";
foreach (KeyValuePair<string, string> kv in headers)
{
    result += WebUtility.UrlEncode(kv.Key) + "=" + WebUtility.UrlEncode(kv.Value) +
"&";
}
result += WebUtility.UrlEncode("Signature") + "=" + WebUtility.UrlEncode(sigOutPa
ram);
Console.WriteLine("GET " + result);
}
}
```

## NodeJS

```
const crypto = require('crypto');

function get_req_url(params, endpoint){
    params['Signature'] = escape(params['Signature']);
    const url_strParam = sort_params(params)
    return "https://" + endpoint + "/" + url_strParam.slice(1);
}

function formatSignString(reqMethod, endpoint, path, strParam){
    let strSign = reqMethod + endpoint + path + "?" + strParam.slice(1);
    return strSign;
}

function sha1(secretKey, strsign){
    let signMethodMap = {'HmacSHA1': "sha1"};
    let hmac = crypto.createHmac(signMethodMap['HmacSHA1'], secretKey || "");
    return hmac.update(Buffer.from(strsign, 'utf8')).digest('base64')
}

function sort_params(params) {
    let strParam = "";
    let keys = Object.keys(params);
    keys.sort();
    for (let k in keys) {
        //k = k.replace(/_/g, '.');
    }
}
```

```
strParam += ("&" + keys[k] + "=" + params[keys[k]]);
}
return strParam
}

function main(){
const SECRET_ID = "AKID*****"
const SECRET_KEY = "*****"

const endpoint = "cvm.tencentcloudapi.com"
const Region = "ap-guangzhou"
const Version = "2017-03-12"
const Action = "DescribeInstances"
const Timestamp = 1465185768
// const Timestamp = Math.round(Date.now() / 1000)
const Nonce = 11886
//const nonce = Math.round(Math.random() * 65535)

let params = {};
params['Action'] = Action;
params['InstanceIds.0'] = 'ins-09dx96dg';
params['Limit'] = 20;
params['Offset'] = 0;
params['Nonce'] = Nonce;
params['Region'] = Region;
params['SecretId'] = SECRET_ID;
params['Timestamp'] = Timestamp;
params['Version'] = Version;

strParam = sort_params(params)

const reqMethod = "GET";
const path = "/";
strSign = formatSignString(reqMethod, endpoint, path, strParam)
console.log(strSign)
console.log("-----")

params['Signature'] = sha1(SECRET_KEY, strSign)
console.log(params['Signature'])
console.log("-----")

const req_url = get_req_url(params, endpoint)
console.log(params['Signature'])
console.log("-----")
console.log(req_url)
}
main()
```



# Responses

Last updated : 2024-04-08 16:35:47

## Response for Successful Requests

For example, when calling CAM API (version: 2017-03-12) to view the status of instances (DescribeInstancesStatus), if the request has succeeded, you may see the response as shown below:

```
{
  "Response": {
    "TotalCount": 0,
    "InstanceStatusSet": [],
    "RequestId": "b5b41468-520d-4192-b42f-595cc34b6c1c"
  }
}
```

- The API will return `Response` , which contains `RequestId` , as long as it processes the request. It does not matter if the request is successful or not.
- `RequestId` is the unique ID of an API request. Contact us with this ID when an exception occurs.
- Except for the fixed fields, all fields are action-specified. For the definitions of action-specified fields, see the corresponding API documentation. In this example, `TotalCount` and `InstanceStatusSet` are the fields specified by the API `DescribeInstancesStatus` . `0` `TotalCount` means that the requester owns 0 CVM instance so the `InstanceStatusSet` is empty.

## Response for Failed Requests

If the request has failed, you may see the response as shown below:

```
{
  "Response": {
    "Error": {
      "Code": "AuthFailure.SignatureFailure",
      "Message": "The provided credentials could not be validated. Please ensure your signature is correct."
    },
    "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
  }
}
```

- The presence of the `Error` field indicates that the request has failed. A response for a failed request will include `Error`, `Code` and `Message` fields.
- `Code` is the code of the error that helps you identify the cause and solution. There are two types of error codes so you may find the code in either common error codes or API-specified error codes.
- `Message` explains the cause of the error. Note that the returned messages are subject to service updates. The information the messages provide may not be up-to-date and should not be the only source of reference.
- `RequestId` is the unique ID of an API request. Contact us with this ID when an exception occurs.

## Common Error Codes

If there is an `Error` field in the response, it means that the API call failed. The `Code` field in `Error` indicates the error code. The following table lists the common error codes that all actions can return.

| Error Code                                     | Description                                                                                                       |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <code>AuthFailure.InvalidSecretId</code>       | Invalid key (not a TencentCloud API key type).                                                                    |
| <code>AuthFailure.MFAFailure</code>            | MFA failed.                                                                                                       |
| <code>AuthFailure.SecretIdNotFound</code>      | The key does not exist.                                                                                           |
| <code>AuthFailure.SignatureExpire</code>       | Signature expired.                                                                                                |
| <code>AuthFailure.SignatureFailure</code>      | Signature error.                                                                                                  |
| <code>AuthFailure.TokenFailure</code>          | Token error.                                                                                                      |
| <code>AuthFailure.UnauthorizedOperation</code> | The request does not have CAM authorization.                                                                      |
| <code>DryRunOperation</code>                   | DryRun Operation. It means that the request would have succeeded, but the <code>DryRun</code> parameter was used. |
| <code>FailedOperation</code>                   | Operation failed.                                                                                                 |
| <code>InternalError</code>                     | Internal error.                                                                                                   |
| <code>InvalidAction</code>                     | The API does not exist.                                                                                           |
| <code>InvalidParameter</code>                  | Incorrect parameter.                                                                                              |
| <code>InvalidParameterValue</code>             | Invalid parameter value.                                                                                          |
| <code>LimitExceeded</code>                     | Quota limit exceeded.                                                                                             |
| <code>MissingParameter</code>                  | A parameter is missing.                                                                                           |



|                       |                                                                       |
|-----------------------|-----------------------------------------------------------------------|
| NoSuchVersion         | The API version does not exist.                                       |
| RequestLimitExceeded  | The number of requests exceeds the frequency limit.                   |
| ResourceInUse         | Resource is in use.                                                   |
| ResourceInsufficient  | Insufficient resource.                                                |
| ResourceNotFound      | The resource does not exist.                                          |
| ResourceUnavailable   | Resource is unavailable.                                              |
| UnauthorizedOperation | Unauthorized operation.                                               |
| UnknownParameter      | Unknown parameter.                                                    |
| UnsupportedOperation  | Unsupported operation.                                                |
| UnsupportedProtocol   | HTTPS request method error. Only GET and POST requests are supported. |
| UnsupportedRegion     | API does not support the requested region.                            |

# Smart Structured Information OCR APIs

## SmartStructuralOCRV2

Last updated : 2025-06-27 15:03:04

### 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize fields from cards, documents, bills, forms, contracts, and other structured information. It is flexible and efficient to use, without any configuration required. This API is suitable for recognizing structured information.

A maximum of 10 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                   |
|----------------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: SmartStructuralOCRV2.                                                                                                                                                            |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                      |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                               |
| ImageUrl       | No       | String | The URL of the image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s. |

|                |    |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------|----|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                |    |                 | <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>The download speed and stability of non-Tencent Cloud URLs may be low.</p>                                                                                                                                                                                                                                                   |
| ImageBase64    | No | String          | <p>The Base64-encoded value of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> is used.</p> |
| IsPdf          | No | Boolean         | <p>Whether to enable PDF recognition. Default value: <code>false</code>. If you enable this feature, both images and PDF files can be recognized.</p>                                                                                                                                                                                                                                                                                  |
| PdfPageNumber  | No | Integer         | <p>The number of the PDF page that needs to be recognized. Only one single PDF page can be recognized. This parameter is valid if the uploaded file is a PDF and the value of <code>IsPdf</code> is <code>true</code>. Default value: <code>1</code>.</p>                                                                                                                                                                              |
| ItemNames.N    | No | Array of String | <p>The names of the fields you want to return for the structured information recognition.</p> <p>For example, if you want to return only the recognition result of the "Name" and "Gender" fields, set this parameter as follows: <code>ItemNames=["Name","Gender"]</code></p>                                                                                                                                                         |
| ReturnFullText | No | Boolean         | <p>Whether to enable recognition of all fields.</p>                                                                                                                                                                                                                                                                                                                                                                                    |

### 3. Output Parameters

| Parameter Name | Type                               | Description                                                                                                                                                                            |
|----------------|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Angle          | Float                              | The rotation angle (degrees) of the text on the image. 0: The text is horizontal. Positive value: The text is rotated clockwise. Negative value: The text is rotated counterclockwise. |
| StructuralList | Array of <a href="#">GroupInfo</a> | The structural information (key-value).                                                                                                                                                |
| WordList       | Array of                           | The recognized text information.                                                                                                                                                       |

|           | WordItem |                                                                                                                                                                                                                                         |
|-----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RequestId | String   | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

## 4. Example

### Example1 Recognizing structured information

This example shows you how to use the new API for smart structured information OCR.

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: SmartStructuralOCRV2
<Common request parameters>

{
  "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/document/SmartStructuralOCR/SmartStructuralOCRV2.jpg"
}
```

#### Output Example

```
{
  "Response": {
    "Angle": 0,
    "StructuralList": [
      {
        "Groups": [
          {
            "Lines": [
              {
                "Key": {
                  "AutoName": "abc"
                },
                "Value": {
                  "AutoContent": "abc",
                  "Coord": {
                    "LeftTop": {
                      "X": 0,
```

```
"Y": 0
},
"RightTop": {
  "X": 0,
  "Y": 0
},
"RightBottom": {
  "X": 0,
  "Y": 0
}
}
}
}
}
]
}
]
}
],
"WordList": [
{
  "DetectedText": "abc",
  "Coord": {}
}
],
"RequestId": "abc"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                                                                                    |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                           |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                                                                   |
| ResourceUnavailable.InArrears                    | The account is in arrears.                                                                               |
| ResourceUnavailable.ResourcePackageRunOut        | The account resource package is exhausted.                                                               |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |

# SmartStructuralPro

Last updated : 2025-06-27 15:03:03

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize fields from cards, documents, bills, forms, contracts, and other structured information. It is flexible and efficient to use, without any configuration required. This API is suitable for recognizing structured information.

A maximum of 10 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                      |
|----------------|----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: SmartStructuralPro.                                                                                                                                                                                                                                                                 |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                         |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                                                                                                  |
| ImageUrl       | No       | String | The URL of the image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.<br>We recommend that you store the image in Tencent Cloud for higher download speed and stability. |

|                |    |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------|----|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                |    |                 | The download speed and stability of non-Tencent Cloud URLs may be low.                                                                                                                                                                                                                                                                                                                                                                 |
| ImageBase64    | No | String          | <p>The Base64-encoded value of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> is used.</p> |
| PdfPageNumber  | No | Integer         | The number of the PDF page that needs to be recognized. Only one single PDF page can be recognized. This parameter is valid if the uploaded file is a PDF . Default value: <code>1</code> .                                                                                                                                                                                                                                            |
| ItemNames.N    | No | Array of String | <p>The names of the fields you want to return for the structured information recognition.</p> <p>For example, if you want to return only the recognition result of the "Name" and "Gender" fields, set this parameter as follows: <code>ItemNames=["Name","Gender"]</code></p>                                                                                                                                                         |
| ReturnFullText | No | Boolean         | Whether to enable recognition of all fields.                                                                                                                                                                                                                                                                                                                                                                                           |
| ConfigId       | No | String          | <p>Configuration ID support: General</p> <ul style="list-style-type: none"> <li>-- General scenarios; InvoiceEng</li> <li>-- Ocean bill of lading, international invoice template;</li> <li>-- Ocean shipment order template; WayBillEng</li> <li>-- CustomsDeclaration</li> <li>-- WeightNote</li> <li>-- MedicalMeter</li> </ul>                                                                                                     |
| EnableCoord    | No | Boolean         | Enable recognition of coordinate values in full-text fields                                                                                                                                                                                                                                                                                                                                                                            |

### 3. Output Parameters

| Parameter Name | Type     | Description                                                                                                                                                                            |
|----------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Angle          | Float    | The rotation angle (degrees) of the text on the image. 0: The text is horizontal. Positive value: The text is rotated clockwise. Negative value: The text is rotated counterclockwise. |
| StructuralList | Array of | The structural information (key-value).                                                                                                                                                |



|           |                   |                                                                                                                                                                                                                                         |
|-----------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | GroupInfo         |                                                                                                                                                                                                                                         |
| WordList  | Array of WordItem | The recognized text information.                                                                                                                                                                                                        |
| RequestId | String            | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

## 4. Example

### Example1 Smart Structured Information OCR Pro

Smart Structured Information OCR Pro

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: SmartStructuralPro
<Common request parameters>

{
  "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/document/SmartStructuralOCR/SmartStructuralPro1.png"
}
```

#### Output Example

```
{
  "Response": {
    "Angle": 0,
    "StructuralList": [
      {
        "Groups": [
          {
            "Lines": [
              {
                "Key": {
                  "AutoName": "abc"
                },
                "Value": {
                  "AutoContent": "abc",

```

```
"Coord": {
  "LeftTop": {
    "X": 0,
    "Y": 0
  },
  "RightTop": {
    "X": 0,
    "Y": 0
  },
  "RightBottom": {
    "X": 0,
    "Y": 0
  }
}
}
}
}
]
}
]
}
],
"WordList": [
{
  "DetectedText": "abc",
  "Coord": {}
}
],
"RequestId": "abc"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)

- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                                                                                    |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                           |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                                                                   |
| ResourceUnavailable.InArrears                    | The account is in arrears.                                                                               |
| ResourceUnavailable.ResourcePackageRunOut        | The account resource package is exhausted.                                                               |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |

# SmartStructuralPro

Last updated : 2025-01-07 11:10:18

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize fields from cards, documents, bills, forms, contracts, and other structured information. It is flexible and efficient to use, without any configuration required. This API is suitable for recognizing structured information.

A maximum of 10 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                      |
|----------------|----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: SmartStructuralPro.                                                                                                                                                                                                                                                                 |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                         |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                                                                                                  |
| ImageUrl       | No       | String | The URL of the image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.<br>We recommend that you store the image in Tencent Cloud for higher download speed and stability. |

|                |    |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------|----|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                |    |                 | The download speed and stability of non-Tencent Cloud URLs may be low.                                                                                                                                                                                                                                                                                                                                                                 |
| ImageBase64    | No | String          | <p>The Base64-encoded value of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> is used.</p> |
| PdfPageNumber  | No | Integer         | The number of the PDF page that needs to be recognized. Only one single PDF page can be recognized. This parameter is valid if the uploaded file is a PDF . Default value: 1.                                                                                                                                                                                                                                                          |
| ItemNames.N    | No | Array of String | <p>The names of the fields you want to return for the structured information recognition.</p> <p>For example, if you want to return only the recognition result of the "Name" and "Gender" fields, set this parameter as follows: <code>ItemNames=["Name","Gender"]</code></p>                                                                                                                                                         |
| ReturnFullText | No | Boolean         | Whether to enable recognition of all fields.                                                                                                                                                                                                                                                                                                                                                                                           |
| ConfigId       | No | String          | <p>Configuration ID support: General</p> <ul style="list-style-type: none"> <li>-- General scenarios; InvoiceEng</li> <li>-- Ocean bill of lading, international invoice template;</li> <li>-- Ocean shipment order template; WayBillEng</li> <li>-- CustomsDeclaration</li> <li>-- WeightNote</li> <li>-- MedicalMeter</li> </ul>                                                                                                     |
| EnableCoord    | No | Boolean         | Enable recognition of coordinate values in full-text fields                                                                                                                                                                                                                                                                                                                                                                            |

### 3. Output Parameters

| Parameter Name | Type     | Description                                                                                                                                                                            |
|----------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Angle          | Float    | The rotation angle (degrees) of the text on the image. 0: The text is horizontal. Positive value: The text is rotated clockwise. Negative value: The text is rotated counterclockwise. |
| StructuralList | Array of | The structural information (key-value).                                                                                                                                                |

|           |                   |                                                                                                                                                                                                                                         |
|-----------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | GroupInfo         |                                                                                                                                                                                                                                         |
| WordList  | Array of WordItem | The recognized text information.                                                                                                                                                                                                        |
| RequestId | String            | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

## 4. Example

### Example1 Smart Structured Information OCR Pro

Smart Structured Information OCR Pro

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: SmartStructuralPro
<Common request parameters>

{
  "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/document/SmartStructuralOCR/SmartStructuralPro1.png"
}
```

#### Output Example

```
{
  "Response": {
    "Angle": 0,
    "StructuralList": [
      {
        "Groups": [
          {
            "Lines": [
              {
                "Key": {
                  "AutoName": "abc"
                },
                "Value": {
                  "AutoContent": "abc",
```

```
"Coord": {
  "LeftTop": {
    "X": 0,
    "Y": 0
  },
  "RightTop": {
    "X": 0,
    "Y": 0
  },
  "RightBottom": {
    "X": 0,
    "Y": 0
  }
}
}
}
}
]
}
]
}
],
"WordList": [
{
  "DetectedText": "abc",
  "Coord": {}
}
],
"RequestId": "abc"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)

- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                |
|--------------------------------------------------|--------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                      |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                     |
| FailedOperation.OcrFailed                        | OCR failed.                                |
| FailedOperation.UnKnowError                      | Unknown error.                             |
| FailedOperation.UnOpenError                      | The service is not activated.              |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                 |
| LimitExceeded.TooLargeFileError                  | The file is too large.                     |
| ResourceUnavailable.InArrears                    | The account is in arrears.                 |
| ResourceUnavailable.ResourcePackageRunOut        | The account resource package is exhausted. |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                |



# Card and Document OCR APIs

## RecognizeMainlandIDCardOCR

Last updated : 2025-03-11 22:55:02

### 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This interface supports the identification of all fields on the front and back of the second-generation ID card for mainland Chinese residents. Including name, gender, ethnicity, date of birth, address, citizen ID number, issuing authority, and validity period, the identification accuracy reaches more than 99%. In addition, this interface also supports a variety of value-added capabilities to meet the needs of different scenarios. Such as the cropping function of ID card photos and portrait photos, and also has 5 alarm functions.

As shown in the table below.

| Value-added ability | Ability items                            |
|---------------------|------------------------------------------|
| Alarm function      | ID card copy warning                     |
|                     | ID card copy warning                     |
|                     | Alarm for occlusion in the ID card frame |
|                     | ID card reflective warning               |
|                     | Blurry picture warning                   |

Default interface request frequency limit: 20 times/second

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------|----------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: RecognizeMainlandIDCardOCR.                                                                                                                                                                                                                                                                                                                 |
| Version        | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                 |
| Region         | No       | String  | <a href="#">Common Params</a> . This parameter is not required for this API.                                                                                                                                                                                                                                                                                                                             |
| ImageBase64    | No       | String  | The Base64 value of the image. The image is required to be no larger than 7M after Base64 encoding, and the resolution is recommended to be 500*800 or above. PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupies at least 2/3 of the picture. One of ImageUrl and ImageBase64 of the image must be provided. If both are provided, only ImageUrl will be used. |
| ImageUrl       | No       | String  | The URL address of the image. The image is required to be no larger than 7M after Base64 encoding, and the resolution is recommended to be 500*800 or above. PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupies at least 2/3 of the picture. It is recommended that images be stored in Tencent Cloud to ensure higher download speed and stability.           |
| CardSide       | No       | String  | FRONT: The side of the ID card with the photo (portrait side), BACK: The side of the ID card with the national emblem (national emblem side). If this parameter is not filled in, the front and back of the ID card will be automatically determined for you.                                                                                                                                            |
| CropPortrait   | No       | Boolean | Whether to return the ID card portrait, the default is false                                                                                                                                                                                                                                                                                                                                             |
| CropIdCard     | No       | Boolean | Whether to enable ID card photo cropping (removing excess edges outside the ID, automatically correcting the shooting angle), the default value is false                                                                                                                                                                                                                                                 |

### 3. Output Parameters

| Parameter Name | Type | Description |
|----------------|------|-------------|
|----------------|------|-------------|

|               |                  |                                                                                                                                                                                                                                                                                                                       |
|---------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name          | String           | Name((portrait side))                                                                                                                                                                                                                                                                                                 |
| Sex           | String           | Sex((portrait side))                                                                                                                                                                                                                                                                                                  |
| Nation        | String           | Nation((portrait side))                                                                                                                                                                                                                                                                                               |
| Birth         | String           | Brithday((portrait side))                                                                                                                                                                                                                                                                                             |
| Address       | String           | Address(portrait side)                                                                                                                                                                                                                                                                                                |
| IdNum         | String           | ID number (portrait side)                                                                                                                                                                                                                                                                                             |
| Authority     | String           | Card authority(national emblem side)                                                                                                                                                                                                                                                                                  |
| ValidDate     | String           | Card valid date (national emblem side)                                                                                                                                                                                                                                                                                |
| WarnCardInfos | Array of Integer | Card Warning Information<br><br>-9101 Alarm for covered certificate,<br>-9102 Alarm for photocopied certificate,<br>-9103 Alarm for photographed certificate,<br>-9104 Alarm for PS certificate,<br>-9107 Alarm for reflective certificate,<br>-9108 Alarm for blurry image,<br>-9109 This capability is not enabled. |
| PortraitImage | String           | Portrait image base64                                                                                                                                                                                                                                                                                                 |
| IdCardImage   | String           | ID card photo cropping results base64                                                                                                                                                                                                                                                                                 |
| RequestId     | String           | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.                                                                               |

## 4. Example

### Example1 Example of a Chinese Mainland ID Card

Example of a Chinese mainland ID card.

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeMainlandIDCardOCR
```

<common request parameters>

```
{
  "ImageBase64": "/9j/4AAQSkZJRgABAQEAAQABAAD/2wBDAAgGBgcGBQgHBwcJCQgKDBQNDAsLDBkSE
w8UHRofHh0aHBwgJC4nICIsIxwcKDcpLDAxNDQ0Hyc5PTgyPC4zNDL/2wBDAQkJCQwLDBgNDRgyIRwhMj
IyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjIyMjL/wgARCAEAAAY8DASI
AAhEBAxEB/8QAGwAAAgMBAQEAAAAAAAAAAAAAAAAQIAAwQFBgf/xAAYAQEBAQEBAAAAAAAAAAAAAAAAAAQID
BP/aAAwDAQACEAMQAAAB7JcaiFgAlyoWKBbwVywCRhNLGEPdQ1CJAjFUjgUsbFDwWEgJFIHRADEELXNZc
JWXczmw1E0Azi+FF4MM4OpIQQEgFKhYAMQQSoaYrJbAC0DJKZk6BLEIwA0VgKy1IFCCqSLHhisySpsjKo
8WQWAGQ1FJAxBqU28rU6Fn06BVbx+pVnM6vHxoJXVE6Xne7LRXjtX07CxpY8WQEUFJZCQMsR0IoBgLDEQ
rVZec+dnozjLXbnE2JvKNFiNAhXpQa5GsR7FDraHDFMDrQmaK1uMuW28LhTfJolQtsrKmLJXgiGBhYwEh
BIFpknIuaeDnTWdNVYRyhGuzk9X2fn/so6kR4kIEV4kdTqHHR5+pou6i13l760c/fwOeuh1OB25TaoWq
qurc30aOPnXVqGaXTs4XdzpmgpoAkhVRIoAWMXjvT+S1ijSnejm4/Uce65UIvNoVG6XLaPotvP6MpVhYo
KyRhrNR0YUqsqRWWVarWlo0VmLJU6sq2rItk0c2iLTehCFerlHGItSwgKtGcnhffeF1LfScvs56AF5rzPN
95zNc/LHuPZ51utzmf9HPqgQqkR0RjBoMW/m6j206DBswdETNqyc9VTftibuP11Cmrc35b+Fjfo8l+Sy
6tsK36+J0pX08vq6lgLY2sZUDRRk/Iex5VvAdfnpztN5DRdRLj00Vl5XaruezBW7lBK7LFEKjSbih0IXU
VLULUOIR1dQSVVLVLUMFEJBGCgMIhkVmrZCIKYhkmXWi5rFM2yyoNara0vQZEevXZpsEvESFFVLGIm8nF
s5upqsy6SnRyusDB0eFz1qqz85fR04cMd6rLmXtLy1XsU14zrjDTL15z1OoeUTdb5remvX5LvHZdDa4Ci
15mm7lWhq6qmtRWKizp34N152xSwVMsCWVymQdyB1QrJREERUP56Xt18tZexVhxx22xcdr055WQ9KuWwt
qSpdc4HoZar7GrFZqhmueIldXm7e5kyZZ3o9D5v0cxoOZy1FqHzrWmHveU6F16y3xm68fSnPcwysfks3
kqxehgBADi9wTXLXrSXjZPRNLyOf6eHGp9AVxW6GXEm6Hn07aIkkVyrUIAZeD3POTvbmS5vL2sN98/STJ
pha786tjKWYHcTenB00b7u/Fs142UqybKrNSEMQsqpw4gXVuoFiSQQZSpVWUxowFRCIkAQCVFzLYRXSsP
k/Zc2dObOo07UW6bb5+fl7MueKvdByreipxKuxXO/H1X6626Ue+QKQyHVqjqRhJSiCGgI0AmgyhVaLKVZ
WpYkgkQiMABiR1iuslgR5AIzGihHAWy0oAlClkWdKxArrrKo6wWWUc9/N1N2cYdTpVJh0zRnqXrYzzr1
UZJe21VvLoMtnn5e42YEu5lqbs2XMdy3Bctx5lqbc2c1vmHOb+h5fSdzNioTtHm0p2hxepPZhynfTkhO6
6tQhFiRqojKyqQ2RXBWLStUcoKrQoSyz0skmpVoURLovP03MgybCY7bmMxvipToJme1rOTp1Qw5usGc7X
SyqXsldOkmSainAbCFMrUsoG6FcYm1wyDYtZTqWKRcTMNYXLNcXI94lznQChdaS55oVa5cCuXQpNwqo2A
rW2JTLIUGwWJGjMZZYWijhhCMDQEAt46sf/EACsQAAEEAAAYDAAIBBQEBAAAAAAEAAgMRBBASEzFBFCAhI
jAjJDIZNEJARf/aAaGBAQABBQKg0dAfOzkMtOVZ0qVKlS75VLpcZAZUqVelLtdqlSpUqC0haAtDUWMW3G
ttiZ+CtDhHmhn/ANX8CKrM5BdhdkVuvLr36P3OvWs69Ah8PZR4zv7atWiqRKGFxVfe8u8q++nS6z+59Zd
+tZHi0EF2cirVo/c7QV58kcZc585Wr9OvXvr9BQQ+Hgl9OD9S6MrbuwsRI9qZidSERxhhizAyMuRxEigx
bi5voF3mPTv9fxdlj1JXXyrsSj+SftP6o64z+KxdOUbDR/02sWHYAquTCNIeOBn316jK/vqXtC3AnYmNi
86NedGvNYo52SrrM598HhFug1FaGlAClpCdEHjaboZAwIRgX4y1mEia5Wr9by4Ve7licXpTpi5bpVq82
vLHYfF7iafcfVa4y4XCPpyqy1K/wBfKsuUMu1znip9LXOs+4JBws27H6HLhcrp0zWujla9E0N8W11hTYo
RPhx04+/g5UkgaGyguW60IPDk+drHMxDHutX6FFFc5zSiOOV5eVHGxJ0NAhFD0wku3K37lWRyGKVvg3IO
XH8WsUX9nWLYS/Ds25gqWq1021G3bf8AKe38oQdDq3cKdTrXWXSrPGsLmHlrbMcdN0/J4tPqU1YR+uHM
5AIjKqy5XWW23W2NrD3aFFFUUFQQAToGOW02/nufnpN/Y7nDN1SAKk6PUJ8KWHT6BYRumD1r7f0FOvr6u
j7WuTfwKv0BdK/SQamyDS/Bx/jXw6gmkotDlJhWFeJ9OFcdhU1v5xCmenOZUulMk1E8Ce3Zb4EhxOkux
GhHE0h9EkmgMk1kI4kBykk0ujfrEk7WE4lgQdqG9+I+oexHzGR1Nh21CTSfK5qaUEVI97VblXyBg8pvv2
VKxxMbDqI+aHax/bSkYd6SNaCZZmkOjj0xyR6lFG4Glp0IcFpfJCKZM8bjwGOgaWwaP428e8kQe6IUzSt
C05d0i3JkYtudq/Tusqyo5UVQy05EKlSr0pUFSA/S8IZnJ3IPxFM569B+g/VStUryvI/wDicL9CmucnFx
cMu42/pKMwD2Saxqobw0jg8GYgtxGpxxgamzh60KaEMS1zPKCZPrj8hq32aW4yMl07Wtjna80la0xyh7Z
JRG0SAreAc2QOYcbGDHM2T1d6WiRnGPY9eEfuXxFPb/JCKDxbdBCbwQnR6zAzS+VhJw7fxe07kbv6cMcx
fThtkLgRhtOl+J+P/7licZMKxwbio3OdhrILQ5+EAqT6/A3t52ppwxB3y04ErbTmIfBaicFf/g+NQawI
NagxrRtMQa1qIaUWtrQ0oNAAjaC6NrjtMvlNaGtdAx76TsNG5CFgcYwmSsi8BOxLU6ckPfu0Yfxy0LRk5
1CKY6mYgJrVftefGZykb3sNI7U3Eu3WSyE78mkSufD5Mut8r24V07y58rm4d0rhDuu8fevDjEPTTY9p
nFsdsveQ1Su1E8s/t4QkC3QjKEX2n/AOPhNNt1PjMePTH625j9MmH/ACjgqRmHDTHGdrx5LZC4xeG4yvw
```

YUwFGL+DbdstZUDYf4HQBpaA0ZUusp/8Y+qSSgBQYNT4X/FpBW0FoAVKZ6A/KP8AFxCezScJ/r9r4u/a1  
fylSIVKkFX5HLhWihl16XlMf4nvpN/Mu4hYnNTZSEJAVac5OktBiLalkFFv5MItydtQ5d+1Zd9UguzwOO  
6V1lWXfaPxxS1K88Sagp0iAoVaYPw0osW0tt6EJQjpaVKxEWITScPsP+LI8+xy5y6XZzvKs+RyMrt1ZXl  
KzXH4q8UrxjQhIG0torYWwthbK2Sn4ZxxivXiSNeIHUxulpyv7nedqkMjl3l26chd8LjKvvocqytalatD  
3r7xkVVoexRQQ/QPQ5DK1efXedX6B3zLrn34QyKML0ZJqBnUcmtOxAdw+2b3xz6Z5CdLoG/S5GTZWukln  
ZC0SgxsxbX0lxAiUU7Ht8xhdJiWxqOVsrRiIzLLiGQqPEmlacBEFJO2NRTtkHmRay74yVr2jGxF8kzY2x  
zt1G+wOfOyMR4hkh3mB2qkx7XntHLnK83UHx09xZrUZoOaS6NhOH00hH/DtFikB0k00s/tUlhkMj4pMSw  
GKEhuEjBnfiWuDoGP8cn+inlLVh4dqPbazHYmNwdgw4qt/FYhhvC6nD/52JLnDDveHf7TsTG/VhNT5HxB  
mKlcGRYWLS2aIMxWMC7RhSWvwgryN58rSqPVSftjT80NyLGL1IsaVWe20uLNQ226WYWFjnRmKvfbhIW  
ukw0cjo4hE3baZJImyt00mxNaZiWym0gA4OLVLA2VseHbEBhGML4g9gaGtdEHPkjErOBJE2R0kIlbBh2x  
G6V/bRKJ+Xf6r/AE19pVlfpz6VZzvMK6yOQ4XZR+gH5q9bVrrK8iPTpd51nz7d3l16XlaBRqgr+1336gr  
X/TG6nOwq8V68Z68Z68Z68aRePIvGkXjyrx5V48i8aRePitiRePitiStiRbEi2XrYkWzItiRbL1tSLaeh  
E9bbr2nrQ9bb1tvW25bbkWOWhy0FaHLQ5U5U5UVSor6jl9X2wxzjFFtj/8QAIhEAAGICAgICAwAAAAAA  
AAAAAECERAgIUASMTBQAYJB/9oACAEDAQE/AftU/p7+Ky8ovkbE+N2RVjj12Rw4nixrV4WnN4YnhaJWLR  
q+onq9XhPe82XlYrEumotnioj0X7eyUafx0UVr+P0LkfsvMfVko+SH0Y1/Tzin14shKNCmkSfPdsssti  
0vs1170v5P//EACARAQACAQCAwAAAAAAAAAAAAEAQIQUIDFAIVASMGD/2gAIAQIBAT8B9mESONerduJE  
8xI6gVMS487zS+uR0GXuI8zKtnitMY86Ifsd7GPMYK/CnWv0BKIBPiQCGJ1bl9m+t//EADEQAAEDAgMHA  
gYCAwEAAAAAAAAEAhEMRASQQMgIjAyUWFxkRNAQlCBobHhM1JgI//aAAgBAQAGPwKm7b7JYKysPZdI9l  
0j2XQPZdLfZdDVS2/bmThHzs4z/wBNTCJE45WazohwkSYWe5RnKSPqRnaBydLW0MaoB2uv2cimBmg1BKB  
tgGj/ACaLZ0j4ZqmWPZZYu7t5W00UDRTw0fi6aS0+3ylSrrqG5TlyFMYmgUKF5RDqhZAKIQ0cNkfKjIIC  
ka+/yUrK0q6vuyFlNDz5U43+QjevyvOvKgqMLFARwssad1liNdZVZYOBrbCHGf1BrzJRnleDyLKy/CNde  
yOArgaVNBVQW3Hfcaq/wijCqnCTBFFC4tBA5lNN2dN9p5FsbjDRXRfFe6lrRXkyRcygYqLcwo7vjebvXh  
5+fKIU413oQ5Eoo4Cn6U4DZ6lHh4QYJXQ6EeEwL+FRQKkq2EVMA4RT3UqIM+FqfRTopylTyCm4d05wtVR  
hW08ogC6PDC7oHK/3VcNn2qn7NuYSemE0RwtEp7QSM2kXQB7IKaD8YPq74mbhGBNRg5khnc05HxRNBvC6  
Xe/JdKHJ9Tzbb9Mbfaabtfmqq3OhWUoHE/8AmT5Cy5XD1Q4XX7Kk/kKlpiUSJpoul09lmiEPSUCTEo8UQ  
sxIQrU6IAm6kaqVROHYLMv6VD+vmDR1tEOr8o0lAZPbF7WNoHBEUo0IkN+o6J4tZESTlRL6oZ2mrpVbA0  
8qMxnJKZHh04jOcBbLpF7pn+Pq+1ZsrXCKSUw/Cb6oZRB6s1keGGfyj0Ce2ie8NraApi7kREV9ypxuuo  
q5x88y28YESrD2XCAETlFfCgCAvTCS00WaK3QJAMIHKKYQLKXCcOlZstU13bcpVeF4CG/5VeVbC60WmG0  
bUQP9lDs2byVtKW0zLacJ/JRb3f/ALJzulTonZZyZP8ACFXhusQswaSYWcNkxog/LJiYCDzQkIcZn0HIJ  
XEV4WQING+VOEtK4wpGuOnKflZM2TiRoActpLaLacJE2lZcjatiRovhOGWNRqiJsLwstSQtrlyBr6o7Nv  
aAsusQgzXLCa14qAsjA+fSigb5w8KdU5RrvZQIERiz05eny7lGik2GEqi4tymIcvRQm+n2JxXjEY0V1fE  
HD0U6IY3+ajdIXUupX50i0U0hQYhD/po3cuBEfvCFKt5Wbwuk+6kqx3C2stuszjCz6RKDS1zZtIQBk6A  
IkaXlCjoOsIAGmewWZq+GDxITrYBEjRa+ylyJaonxbCW1Cy5v0pc6FLXIMzcr0XEYXCZQYTU6YUd0707l  
zVu4ouFDqnReZsjBB/EIm89lUrqPTVASVxCPZNqTVTW2oQwcW3Ca0sdxVdIT3agFMJ0am7R9Gjpaht2kc  
Igytq93U+q2Q1kJrNmJe5RMk1JTQB9JTDsI4e6ftXCM9kR9Gz/AJTdq2OHRbXbGma2Gz2YMZ7l02LoOXs  
srBGzab90x7ROTRbTaxANFsiLkpzjWFnd1vWydq56axlC8wvgkNoJpzfVRFFCthJAwqBuB0VCLSSscPZA  
htVxNkDDMGVWZ4qobZDaRxWWVyhOcPqNVlCgFMG/dQ5GNVRz/dZSSAeyDW0Ca83b2Tmmx7IBNcZ4TKg/h  
E1JOp+y1+Sj7n4C4StFotF/a/taKw91Ye6t+1ZWVlZWVlZWVirLpViuldJXSVYrpPsrfDj9lY+y6Suk+ys  
fZWVlZWwtyqBVuv//EACYQAAMAAGICAwEAAwEBAQAAAAABESExQVFhcRCBkaHB0eHwsfH/2gAIAQEAAAT8  
hWIQqCECBBJUJrkG/9o1WlBMl1UaTYlg0ksCsexpr4ZcGkSGth0HezFCbMIaUOhIQ3s9Hu/0We2YTLGsO  
N0lXNJLyPR5pr2IrlvJLhgaWi8js0y1kXgh/6hXh+D1y+g02fgPK/Q/4kN2P5B3x+ELbN+Foka7LFjZku  
GNCs5HrDFrISen9HyJnp8Iaw8DeBfBYNhq5CS7FRjwxlgbeeDmNYWaWh4Qq9IaYsoSjhrTHmwqXIaiLj9  
Gv4aOkxieyNLx5E0vs9fweD4Eq1kirZHfBFH5Ep0ZqeCkIYVLwNkiEfDyWqR5FOUKd/A8MEdNCRusZS0X  
Jsgf+IedDcXZlNyR6siBP/ES55I55P6G8zgRs8mh6MjX0cL/BuNlXIaxsn/kaPLKE2tr7F1TnBXlajaMD  
DSyNKYGuMYEsSm3Bo8GJgawZLQzak0YVCw3kj9HMZmR3OyULDOBkxfr0Jtvag1mSd0psbylZ0WtJb6I8m  
DBqR1Ja8jceTGRiGtstdQxPBz+Gbk0WjQkRnTyV6Ym2pNDkyzwQ7nwNLngixwKP7JuD7rMidXsayaEWu  
REsMZMQ36GLlyxexOGagozqiynfwxZv+isy5qh6XvRvHn/AOCy+h1tzkVGAYPGWKJmD0ksIw3QlJsRPae



ju8IRzuidvQt1/onhiRI m2x6xyTODkaorpKdF0SMs0Tz5KZ1ozOjjGy5yxNNaM3L4FNb+/hFwIiCwv9M8  
Z6E2noRJyPO2RNsNjwOSyprjL69iFHPmU3Y4MVwFZRPBrqbdq5G3Pedrz6IbIxX64FTxsuytyWahZJ8+  
WR8vRVL SNJWnGri3e/RIKrzw+6JcGYL0LCqNqGsNFSDZS5g1VgvBSedDwVqsGvCMtC/pBtjDAKOkHwAdx  
5L9k3wPGmV6E1oJu8G+CYOGficrnQxorwVaGT/AEHej/Yi1JX0JjDY8lR7FFRJeC4GRuIIKbOCUiFEjC0  
0kcCNUptbGtfhOxGVNZWZ1B4eTJSZH1/S5bEt cGMvkg2ZedjjI8qoeqxZ1s57Ymso08IaZcCayuxnkRUu  
Dt2m2xvAmLz40JmI4KXBZ6PY0oXHkT55JQSWR0V/wHV6J2Gt iN7E+ESG1haxb1BZbayPlwE0jCnkJrZi7  
0XJfJdFwy1i/snJGtbMI dHs5CxDHV4Q8OiPQ3/5F1L8DrvkmsGRQtXxRaacYhLemAhcM834qdk a1DKY Gn  
ldDd2Gp1io8dcmUjgsKSapNFgbee38HZme2iEst5GhwKxrIIVTN9IWs j00VMb/AKTFFTvoZqEtnBKBur0  
StITcIV6E8msobnoaxrgXmVn9DT/6VocH3whpDkYlZkBP hgx8TK5iY0I3g04FrSEkwj6VEqymWOCrYEWb  
5qy5pkt7t1MY3x0MTely6tZMFOE9YHEydOhq7n9Ggj256fod6NPJpMA+29XjoRnpV47IokNjS5S/gqyya  
w15MxzFHoUW1fu12KMWPw0HBOycE0YmpBw6izZwJ/ZWbkQV2SsZRODWB6wr8FsnkmfgzUGNOoS kvo4mBi  
pdDud+yCs/ospYD1YO3U/A8Fg9CjfxKuJ9BvhoJcDiHFQ9mKfZYHjJlCcEZhMo5G1hnJNYZTLRsDXNyM7  
KvpyuhcR7H4E+UXlUb1g51syUXnY4/JOIY2XBveSJ4EpCVPwJYv0c2kHBCOk rNxC/ii+WsQ1tmFRDleT8  
Dco03n0ez9JFTCXR7Ov8IaxcFrk/hXZj8E5K0kN1MUfP9Gy4OR4o1DWpaRoYlJdG7/wsXaHnTJeRODcC8  
tDfXwZcGXXCe7UPGbmX+TKEQSX4lRGqOtQSLBVEfkyYwfsQnel8/Xw0JjhGPH4YPYwzaqVVYPJNRTTGWT  
n2yYcJp8mJ2Rhoec39G1M9QrIvoFMudcnKkfoRtdlITZsHoAIZszKzBp9f0blSmjRVIWhsCyVzAxuiT7o  
wvEq5sXkcY0VtbERUabaaEzbG9obDSmjENZRODwcH3BLi5yI9AhJuWdmsqGhsxgsiZo6uB0KM4BMfHGi  
roY8sx0WRcGSFGWkw2zMIxTkValdD6ohKms9j16Hm55H1gc3TeIfm9H+TYPgaavL04fAhkykQ1Ywk7lUQ  
ozOi8pv8MiyV2jTzgZ7rJUSEovIxluW9oaU1rrL9f7EIhWtTVuOBf2CVciZntj0ExXr4SyayceSz7+HZk  
7C6Ir6MnoaChCo8FHLg1gSvmgkQzjZd1gh50VrKYt9j+j9eh82cxmrej0HsujE0YvBISbXQ1m9DSmAYzf  
4NfJ6DBvSG/P4hbWyY0yW60Pq0YaIGUxFGerCH9mWiKL5eIVZiLBuG5qE3U18/D8oihpZWCHngsnnsa5R  
rL/p5FFvY86Pe/gQkVpDwFw2JYD4w2snKFfoxOy5QvZ9fKxs4LnPwsDOfhTHwpBa+KOZLVJcQSSJgYIbMu  
DlYlgiMj0f0wmXORJXDgzlDutCvczCNY2NGNwPyiOex7XZ5heRLUHStU100K4ZUWXQocLPEQvLNRWTz xg  
edLLSw7EZMZ78CYts/mNSfOqitaU5e/Qgwmqs7GtC7GTii0Fls6FMrekuWOMs6a3B6wzN/+9CTqmrOkKy  
rdc2wKdyXkhfdFrRkZoJjZVCCwuPihQiGiVUyleRBWuBZYwxGZOSaZ5Mak4x6DOVaQ3mthJOMbJlLX4Yi  
VVR14b5Qx26ojsy8FLmBvLkdHZj04UtVorxjoti9aeNroQIgkVvEePaJCzU1KNOPsaDDfR2ihpZx5Nfpi  
70Lsfq6PO+OmTBkwBAEKavI5cq dAVkuAub5dE5yVNoGFTg8ArqZMHZxkTZ4fwomPHgXwEOlkzQp4lIEru  
F5vi63kIJ0bwbNHA8ZEnKmZSyqOTpk4TRKsjFuUYm0LD4Gk0TAlPoauts20tsSxsd9hniPOFsTW1ra5qm  
FVLginPntVjkYS551yNhoVan0LsYaHhEp7HDjF4HtG1TpgpLS4h9ehvH4JUokhGk0idwSOJlWMDUt3VXA  
lSwH/optSFsE2PQZdsVxwTJRpzSEPHJUnRlrsTJfVi/Dpkcovs1wXt ouEbPOuy+oMfYv0LzQmcIca/oq5  
gNaf9LCcFeXHGCsfFowVPA8R60NyG4VaZ0KqrVj3YY1fAVMYtqIaxG1wXsSlVUbX9FnY0bwNyNeQ8FMCq  
rqlmfaqaF5yZpZxaOhEJnrye8ei48C77SpmmQc/CbG61cihaUV+ogPsO2MxQs74Zw75MIvaMxUuUPUX2I  
Uh1SCsHXtCDY2b6MQbz6L5y fjm9DkWCJ6LcJ1bnOTgD5DrMFNV41c3GRtOzSekG3UK0F/0MPALCWtPANI  
MpPvNkWUBR7LkVNSrIOAX+kPfaph0Y+NDil/iPr/AELGBawc+PhcQK+Rz4MfZ4Ohbd0tsU1Lca8mfbFL0  
ilXEGkzpDZp/GQouQycajxkyzhmp0xFkCaUYGWuDKS0nsW4qhr8ElOnyRT/AODXn+jy2I+wktFkUwhxwJ  
EhNnRwjWQWD0wTwJRqRNT4cZ2JtcUzJCs2yi/nQpw3CWHhsv1wbkTTjZy7COaHJD8kJXIzAvvnsY7yQHj  
ZxtieozrB+CdWzW38J2jziG2+08jT6X6LXEhGh5Ungw4EpJaWGVmjzPwYYIW/fgeAtDKmNHoseR4rgs9j  
XJyIzGIjdDhSFwWdHHTQ2y4OM4KYhqMb3L4DDroToYmo7+PdxzgyCnsoW4eBKYipp8CMPo8z6FNxejN/+  
140NdFKCaEqR/j4eYJ54NehNNDjxkx3jyVUXQsfkffI0LCpovZDOQLFEcBzJ5JFK0/Ci0/DUn8JKrBXaL  
cldlTaE1w0UtZMvBD4EF/sYjk3kVlZiOTsRDWzDXkXQJpPJF9v+CUXIsCKYNdwaOnR7YsordXJT xNm0JQ  
NVdli4Qmg0uCpexPHXwJ8JCxk6bQy14Gk1eTm5EmQxV2ceBMeC/BYXMEgsn5Fm+jJwRtCaVqK3RPGY+j i  
OfgtQU0yFloX0hY6lhmOYNsjtyZvBc5KX/hxRKJnZUGzld7MzYlG8Cbki j1knLyz2LXBLDrG7oyyONGWz  
WtGhsW/Z5PIb9B5fR45Mro8hM60Ofg+GcCDm8mMebRMMizgimyLNKpHsWpDN4EucEU5Ei/pBybar8CH  
d2ToTUuaaIgbSkc2Ycbm3NC4ds01061h4EtZ4VDjODuBGUj6VGjd+XVr4NMbEvr6BiCdcs123AOeG+VHy  
WnqbMKeiYNChUiifBjFh5SxfmNdDpbNaQggq62BWxj74NNRr6GiTcWbiZMecJLNG4ac6nsWf55aX2RZ3HJ  
cfAQTNFeRj2XHkeKENN/AKY2cHYUmnhkc0lkuCGKdEIw0NMsph8ix4MwmNHetjyk1sdVaG+RcmLHB9Psf  
NEz9Doq6GE4fTNqTR4y57FpTFZoIaTNctfcIFka/DY5b/4IbDmXOfocFW8IceKWckFowvJBm2v1V kz7GT

FQ4uy4872DY5i1z6NCSX/CXTF/zMW44TGoaVSqL6FNbgqDLhF012xjXoewYLLb+lqTV1NMCvKCjwjPswx  
2J9Z3WcwQhwp3DHvf7Tgvng6MKBUaTDGmnJ1zmOhhGdq2cpxWyeYIWrbb+haKRKewh+Okb0ZDb8C3OI6H  
q4pHzF+EUayMo1yJE5fRY35ySdHWnoT/ABEDrPLEuaRg15Jy5nbAnCeBKSElNCg1P4aXUEBw1ydmYhheR  
KiOi/8AMeg1E/YpJqajH48noIbpNZYoSoKTjj8ElZI6s6F6hFLYSvNt0bgwrLwLFWrWk5RJKLc4Fq5oMi  
J4cJ6kktJI4cZSoiInZTWIKpc7V1sVJUnYi3bgNhaSRjAmR0qCc3yMJJRMEDDk6E/SssnMonfOrFRo/E  
aJpmRNcFNck/2WCWlR7xyc4uCvGuzsuVsxkcT5F17OSKjSRMBIzTRE2YnwZiHwLpki5LXOCjjCFZWNYs  
WzB4IkYkm6Y/4PgRrI2vXkZWuxw1kSnhjVpT8KMuyFa419mUg2KMmciBh2Yqm8HHn2XDcNNCw2bFb5DE5  
h/BK4IFeOBpwyO8kNrGzWwsrJzGZ3wPBkpUkX6D4mBvGNiwsbHikjbSZ4HIWrdn9Dwsmyz0Rb4MpORX/g  
4/0dyhTKDYwyKuzUTyPBrAzS0Qm0XfiDZBvB9i7f2Pv/Rr/wAh+BjFMBzwv00OAKcZEh6wN8n9IfB/SO3  
+kKf+6P8Aiwf/ALqMpg27HvCnP8NmX4f/Aixn2/By/DAlb/Aoz+ZcDjF5CzN/oMf+YYP8DH/1Q7/5gnz/  
ABmLbPhnl/jGzl+HJH+HmfgnXDfGUS4+i29NZOxCSM2yJLWxbxL9OWGVLYqrV9s//9oADAMBAAIAAwAAA  
BBS45rrHa+S/b40F2BHSXOqoDwfVODCQ/z9i7tpBrgTYxsqTYIcOIHESQVGDPSy7y9RiaKeKn1cA/ORmQ  
ZaV7El6Ov+dSkzmCjEW6GX/dwGL50eF7RnSEwjOxiAcRBd3BNqCv6HUyHZvwT1FQBu7XDe9xCLyGeoMh+  
gxBLbh3Lc070pTvhUFyqChLAmRt7cB3gA1ieS2rzxBmG6hFmzUq9ue+/af3tPTobfDMYIjQ/ATPX5BFvk  
Aty1NCwR+bP92QqO+Ok17vgS6E/cd5vp7mFIZBDR65zCYkRY1XYpEqPrVesLZR9niWnzONnVIgL4e2jO4  
qGslMPpB0S9pKte5f1ygG1rZ/befLV1h0lobcCu9HgZkjne2rRmZge7yYdCSxVfzAYCjVCg+2FujSX/xA  
AfeQADAQEAAgMBAQAAAAAAAAAREQISAxQVFhcTD/2gAIAQMBAT8QvT48EIQtpfJ+HrEesnghCx57xa  
x/4N/QnSj6LEJiLnT++DGNZMfgtRRCfVpfjFL4PW2hUuir2IQ04xuoHr0UoTG/re8bxUSHR2HvoxYhfoo  
hCxZD+6SIfSvrJqGPPWEnBWxIhCB6KnDgUdt91rWSExNE31ierFnBKyyjJPESg0Qx60F9jm+nyfO0uE3S  
9hQq1Wl0RP2Mq49eUXdpc4JpkIiDGISnesbv7lY2IknsMkxiz2TEQSJj8H2EoU9nTlhF18DdMQo3ROfoL  
l8iTh+nyLELEIX6fzGswPEbhJSiaQVCQSlSRW+ijNC/dmrU/HpS4/FvPeNwbQqcGw2GjFhelZXsvSso2U  
pSl8FsIsgkLIiLEIQhEQf+UJiZSoSF/SoqIKUYx4/WfO//xAaEQADAAMBAQEBAQAAAAAAAAAREQICE  
xQTBRCf/aAAGBAgEBPxBLgliE/pCDJpCE1mr7+b2gswmIIU/RSfCTg/xWqIxrSip/mK8QebmEyunnhR  
FEJj4JCG+i1wKS5gujVOp9FehZC38D4KtPp8xRfzVnTv4eR6zwT9IEEx9eU6S30jwQ82EV6c8CQouaJwfp  
wXpRpi6taP8niYSFhnwRP0RKBCcGfPxWWQmGIWXwpS4o2LRJes/wAGPRK+btbXVnh8IRiX9H7Bo8QXn4  
vRZmE8oQX8Hm5eXl+7KHD/AHKw+YVPgrOjTdF0G7RhDW00hCEzBnwTwopWVjeLil0uLrMpcKUqw81kzX  
rSl5in//EACYQAQACAgICAQIDAQEBAAAAAEAESExQVFhcYGRobHB0fDh8RD/2gAIAQEAAAT8Q1AbWsvuK  
mSzgjBdX1DgAfiNaKs1UvzT0xbtL1U1hVvcuheUC4sNjuPBvsZbKMoqY9QmAou4BGwruIo5Xz1LgI+YXc  
PUapZiDikqFkX9wM3b9zGda9kqgLFi7Bd8l7i1va5eavXuKrKJ0skopZ8xFgD4YIHyFwONXtB1ZXVyrJ  
k7mdyvdyjSQA+WAC1ObjlI22w8XONGiBA/AQwQbOkFZVTUEBCqYzgLAUsrlH9RdVEzclat+P9VNxOi/9Eo  
Lfv8AqjvwpX2RMPKcEotUHEoFjZCkpzrFwWGqqtIMAetkgcrTzBdVS9hOwLXWEqSKIzi531slKBbv7IsU  
PSskQ7Y28S5Q2HZ3KFBWIEXSylAodO/DESvzP0RLElW8G4iYFuU6mIYBKLRrgeWVaVpWH7gkKVWoKg+XM  
QWKDJ0qXz4iqzTqCwaAjMU1A5100lCd04huVccygPmWbK/Zl4K26dH9xylXrcaa1cuYX29imZYKUZYIVS  
YeMoe37ZjURrin53rMLTIDtFfcMxw1gYi10hX6iayZxfUYfpxGwzbmdcj19wGFE2HqJIJSsy8HJzMTVKd  
Sw1BxxCvZ8iSjTOyK7aOSE2vJsiNr5JRLl68wDbb7cw4lscGyIw+jzLeTLqIg29kVEKrnMq6ajCu7Nx  
F0luIqA1pEDusviYtmPDxCjXflChTruJEheoiVHEVp4c3BrgDpRTff1C5QVvMLu8Oj3F7MXvRSUgTP8Au  
IoMwNnBCgSuP6xBaF+MrBaKDTWLZQhjTiBKttQazx6gEu/bKRQcdxH5Go9XT3HYrLQzClAc0wKF6g1srw  
Sz084Ys2YZitSifzMF7f3EEaawupVYsIs7qAG08QCvd3ceJvcpKBY4cxakP3heDx/TOC1vf8AcoQK8um  
I1W24XpK1UUDgV8zMDbuIJlNkZRH9RXV9wcBmU00HVxAXlkkFDN8ogBt5CDRoormChS+I8vuiAeDCY05b  
Yv4/iWtGx+fqPMP85g+UL5OZQSXsV9RZbnrmZpWe4LLUuJZbXTiO0nLdRLZlXcKuQrAVAt3KrHcsbXOUS  
D5fCBcBikDHLxOYq1iAZC8/8gJV+jmFEULjwbYld5z6T/yNkovb+pUQW6lQBNElKzcwDJHLscKvVP8AHc  
LVXIGwLT7QIkkoLWzg4JW8uZVRVgGabgc+scq8GeoRRVcKLdExnnowrQr4+IGzlw19S0kUYGskAvIFAIB  
blXDUpV3Wrlhva4hba01xZoDqI3c40ERL0auUhc/MCH+44MPmbLXMTMNURtNtpnwTzPhCv5ijN4fuaCw1  
cbcF2s4Usc8RFefpgAr7Y04nSPdhWmKWOF7g2A3olzzhAjRy87hQWXm2iVRLb/AhQ0ti3ESZ9GeYbJluA  
sFT04TaChc5Yo7g1nhTmg76DiGJiAvXR8Rrdi0CrfeQFqDcud1viV4NALCZ+vTUEE7nd8u00Q3y222V5  
u/mANjUZJXDVRUVob8g4DUvwQJLwYvrXMIeTWCmx4Y8ysCDUMs+n6hWjVa4hoM3y5+ZkULVp3LB5PDxKc  
n5Rqtul7iq1YD6l6W7HVEyGnqdMPEzyzXUXBLEVuuMzQzDcXkmhlCMBCqPyWULLvy4jmw+Z6UMssjE6Sa

xHBlhHL9RBt+4YVS+ZjAvLiK2HWZU1YuoLZcDcS5ONrBnQ3yS0LaR1XEaZPgXJGt+5jilxDMZXITXFNL  
xDSLEz4QtPGkFssv2vcvnKCF3K0dhHEUq1eQqWEwQUq0+pg7QrHzUeZrMBqEpELx05S+GBpVMs0zzhh8  
7+Ypw8KB+ZRFJtazMxv25/7H14YnDktf9QtopiuIjz5e5VMFub3DlQrdSg2grqADCuTxLm+ZeQa8yr1t3  
Liq05dRxdeTxFdHUyhZfPUp2X5ZImx4YssDy3BRCjuLzTe0vCbCY7lDmGN0KjjA6eGWK33xANRvrzPBY1  
7g3e3dkvC7XnxGiWzp1ApVy6LZUJanAqYQhXaPHRb8QxNqdpXKD/LUVA1hnzAzhmcRvYRxCXdx+IzASxi  
JWalpdkaNN4xG5FZ8ypkG+4vSleI2SYdmNDV8pmN64PTuXv+WmF+EiwLdaNMSjFPDcGtlzBt5jYwu3lf3  
K5sp3AbVw9zabvuWG080VtOZ8soBFEdfzKxsXxgSqwdLhFCbRrg5jhuAOcRCxjjGJrbcJqDmmLpqHqN3/  
GoSkqu4WlMnReIKrp6o5jCqkmWBKsvuDyp9yipNrGEl1r1M4Jp9cVAndKBykC6xvcVQECw5ahi1lG20zU  
Ci6gV1gxwM4y51Lo6thz40+4qUUv4jfpbvqOafuL6BQXMSx1WrUX4wU5mNkoA89RsQG2GABvEdGsTBmAU  
2PkzxNiCHkqiabCfuFa/ljSoM8RFKnYmw/KoAhgUFOf0gXvw38RFkfW1+Y6pw8sfNc3XUKeyy1cG5TA0D  
nuVKS0QFFsGILMYZrvMHGcxwrQ/inevUQIyvcPIWHQs8yoAO6mmr4KtHdwwOTFQ6KpgBAPZgorHxAKEgO  
TzcA11zLWQAUHMQCizR8TXpuHlCuqhpWJBiafxM77jgtXHGBivKXbOGtbxGnKmbUhumeeLhId1U/GguLa  
GaZwy0Hi9SxcukrNgDzhjIXhKqU7YbqoXM+Lvi84jDo9mFevkr6l5wCH51EHNbcc4ivXEWDcs7665ha8/  
cwswYtjm9GF7ifgOvcHprz3KEBrgIpE0B1C30Ip7lSu6mfJL3ce4uyLZGi7bmOEy8uph2zGVRuJ5ZmRVz  
PdQsHEc1YG2DX7hAqsY8RyMmM0y+0DatRbEb7iWQV5qXWQm+EIxoCgJxbmhF/5GI3Sd3FJyFLa6m0oftz  
AMkDAIRa3kOZYPZLzLpWF6Zds2QYRWIYggBd+MMBYfO9R9ojVkfFF9njUW5cxn/AI8QU7aipnFXbHlQXog  
HFwBNQUEUveoli1UHA26Kg0Y7UwWGVBlhFazHiiCsJvTtMvDrKGXnmMRytMrCVwlgZOeiKtPmCxCxZFIO  
ILJOVL+aJWqqdltS9Btl1CtWLUh5ggonOYVIQKgs9pYtCuyXQiRkIMbzYhNwK2kq29vPaLcKWYqXsXeYS  
wIkt0GioYkCuRm6IPMcGbxSjZk9mtMXbIaZyQqXb1KZgeMQK5KvmFQAPmMrRK5g1PYcTBkbavxFjfmTbT  
jEu2roi558JefhcLeXm5Vztg70edzJQpzc8p0Wq7CUBZ/SFaoHmCsI7h6pbMRrqKku8T75EHevhLtqiJp  
ningVPxKKu8wtOGIqbVBC8Iww203LKwEKUjR6hORQ/MKlC4O96iRtXeTqHVQM3gPMRBcVwHipSSuFslU9  
W1qFQlcForzfJpSg8jnhjsVgvsOtrzj8zgl9Ius9c1HmxafEELEUv5bh6wzH/pEGQwxiqdS+6Za+l+ZVr  
Y2bnameLmuoZqYEMlbbiog/nd7f3K6qDUqaXqGHpegk0QOzQfMwheDcVD5zRov8zIVFNbpc3EVKvNpQao  
ZiGB4RcynhBQPKBa5mZuYwOz6unc6Y7wMeb9VwOu0KqFZH7xOe+JUHLrLqDkPpUrxgswCu5QCq7YUaAsa  
SAtVMgyXwwWCQorvcTlzpOc3M/embledGgJnjOpQBhqlb+IbVernqZdB4nAxsKDyiljjyhDR35jT9Msy  
iqpktL4Di/UaGsXyEurQUyn7luP0DuK5PkhTygBoclaRvNyIMH4jNxnVfZz8SnAwmprhYaErlwaHqNwX9  
woLHLWIprLGj0wYWYZKzfEcRvgyrU4ubT+o1XB4qo7DtogssLyiyXvWajjqUdGm/ExHgP2iNCUMlnsQGT  
fmEDmP5oGOCGR4ZTSNqXdm9KdzSKZY1xKS503ANx6XNAb0wVskPLxAeXrARUQrbSP5gLRnisdiaAaib  
K/hKM7v5loPqi7tncwMvhEK7fMwIy5eIEqk7MRS/zVR9KDTfkw3i4HYj5gHOTMB0TfkgshycT0moV7u+S  
UizhjxHJTBwE2GjgQ/EupQQg28zI9a8xG++INbKwVndvMoubIMOkUIDlQ1XEw1iVmWnMuQ59QgGAHMzw5  
gONzcbw7FEWqzuAboK5ilrZbR8CA6GTgjUndsxSdnLp+ItakfpebDnw6iFMYeHDI4NXWtsxJDD1MC4b3x  
HJXfbFwWndsyaqt8Tsl/EB5nxqdm6+oihX4ipv4Tddo+Y31BMjKtjTTyWxXADxceamRMvU/TWI1vZ8VBb  
2ZdRdrzWYgzWobdkFbo+5YCGzE6DALa1BrPEUtxuB7qDfmbMdAefZPIZbq4gcpWpVRiDpEC6yxFzCBXuW  
jrpFUXsMSUPjOSCC/7IvJrdceZYyWoQuCviKkwFhGvuWUVlTHWbbydCqBRKNEbJcGDxLFayQGt2Vm8THu  
F0oL0+GZucCgvfd+oPsg2j7YbYL1kZKHkKqCdqxZB015hqXlBFdNviXArYMVNoyUbSVT/wBagvkSef8As  
wFpvAO1Aarg0B47lc+iIvowSI6Fa0QGiFjch6hq0NDKvAR/iG1ZdNR5LQ4iN6+0d152y0XxzAEw/nPHiJ  
rqNv4FxFq2UVC1juWsrjxGAVmDcK/+Gy9RyOphxVwe4MRkZuLjqADV1AJ5gozEOtRxc3MxK3+IGgINbLf  
EHoWHNkdI36Jk03znEpBdQXY8kvSQiH6EDG4UHMLkAltizGwa4ifpCRrEtD2D1/8AhfmJjEGpoflFDXwW  
tqZvZxAAqEs5F4blI8xrWDgVKMoc90YV8TLhRbFYx4CGZqBg9A7NfmZprAN4V8G5eK7zi1S43AmRByy4z  
hlAuLhNvXfgD+JZnUdcRvbiORo+1VLi/ilzR/MNUBuvyPLqU4J1mO+cums+4WY6QyUBrPLrXBqIKNbzf  
MPDcPKP6lObRxxvUpRtmCq+5VoIGsWhRDSZFkcSVwR8QBlvqLFJDAWfcbQCr4XD2ShELbSCfLiIFTP8S7t  
85mSi11Km2mKYU1v2zhvD1G+fObjiWU5gFDHw6ha/xalLAay3ZPmY6rLg2eWKfppHkYvgmHytd/cD1WxT  
aW0eW0vmHZ0MNF9wsnIv+OYAnFoNvaIh3aGbcRTlMBwTLJftTrHWuJkhBGRbDiGCFBAP+IMm6cJBO4IXm  
WDMqnP8UrzbXWoIO2oq3ym/mUN7H+BCokX073s+ZUyLNw1lbb1kFO2IWK7NS9ZN6xS7eZkNIfqA6Zwdzn  
k+45Rfy3DVi78EwDbrl5ItBL9LBCZ7GHDVRci46mXYjw0e434E1Kz44gFqQGt5cMzC3L0yynPmIXFdsku  
bHsiPIc9TXAVioxdIKrpaleLYxFvruGLZp+F9y1zsaBmrzn3KOlAaBQ/6nCDpGLL8NUe5u0AoeSvqLV5  
v0ZqP7DedafuOwwCRwD0z35lnMnFUBv/qOzYsgcr9Rp4ardt6qFFWJdhxe4TMA78HJ7hXomTJ+Zwr91/M



```
yqz1OaKNTCmKaBuNXZy5mxYyOGE7Sw3Cinre59yHUIeVHBANC7fFwYWSqxFnccpUv5kQ7TFteY2RtgMam
Iu04/4T9RoTML+KZHgDGBVtYho/ZBSC0m8ny3G7LZrUMGK+YGRjtMO655mUwgfliWybeOochhBFqnrUHD
GWwPJX1cVhZlncCCTWALB/Ywpdzeqi/qIqlB7Rm3vwiFKKYnlu/iBgal2IdGc8wtzNaNawdRYZ1NXhXqs
TD1NtApglxJdc8419yvH0g4Ssrc2AIVHA2UrC3N01n8SmSmhSvxDCOWS4gl2/E3J44iIX2mWt1xGU8Inh
D2i9y+YZuj1OoBD15ip2r4iZVaioICBi+YBmOxaPZCKdWwTjUBa17qfDFkXYXT1KuQLmWtxeIjYfKABsd
yuTHu4EQfrCBafSFspThQlm1ZuyWGFqcxFPJrj3PlMGCnezKKfUyi30Ivh9TH2/wBTECyHlYeCEB35IeT
yzLDeD5huwUpeYDhXvLLvur1Bcflog2aM5jhKLN9RYwxZiUoNpqLh8AdzLODVcwe6eZaFfMduDuOK4fuh
Bu1ZgRzO2P169sSaEuJDyYhsO8rDfBIUULh7IbcfEwW9LLRc7w9JfaLuuEIpzKzyQ3JHmU6yhFoxX1Gyg
+IVzL4jIH8moF1UDi9wLVGF24RGaOiMuh27iMGuisvUMA2cgS1g371LZSmECExCw8mYCoC3xHRVjzw3LA
YIhtXKLKYOr3HWh72w/rc/MGtB54gqqg8XawhrCxU+Py8yrOt8dQW29xIK0OvMNA4dRHWcVFNEuFdj4jl
FGKRunZjzKsABqCLKEoYGRLiNfM42HEddB6iGCxRcBKGNtMYfEwFJ6JW7RB1VhwkfdlQ7JTjErPPnxKdq
HmB2ZRFgRFRSX51XSx6Q5XBftMDiu1xsjFc8wctCz6gI4queJSvGqCHAtOGHKzTVwUWxuMt2xLb1lKdfw
l3TA9FygsU7c+or08u2A4yv+j2CqMjZxHYCnnCsL2fU4+YZwb5JpVDouAkNO5fXDWCL4zgmGmJZaQnqam
SQDtI4PSKGIGFaqfMEMaMt1Z5lXS/EALrB5BqmbI18beYhhQe4gxAcqs5KrAzfOuScogI69ThYDncdq17
I1gGncERTHiYLQ5ghuuCCLR48QqlWvZF1+Q7ZagbWp9xGz7jUqOSK6Jvc8TC0P4RbI9ooiSydd53AQu3F
wTF+AhGqO2GzQ8v8SqvRbtiGzxTli7cFalF0B31DaJ/CLYKp5j3S3NbMDCc8q6iFUGjmVuXSULOQM7mXW
2U4M6z/ADGhV0S/I+0Ea8rVSrAIsVEopyxiLopWmXQtxxCCEKBr6lLyOEt+s2ucwz4gsowBM+DcrEgWq4
gF/skSKt9RoKkGb4XFRALtm9/iCKC12kOC774JhQcxZYaCjzByd6vzAB0MwB4z75i0wc+phhShC6EHqDk
Hm2AVqr7mG9PmWrjQ5WglOT8BL5vT9RgXGdspyCREUH3qAA9+MR804rUtcmQ95dpQrWWZ6UHLlCmy3GpS
8Kqh1DAaY/MZHyTuADlsvP3LGrV7YhRw8kAAwXY6hQ2WuyUXzYrcRoxeeWEYMunMs0+0rEvjDD1Q8cwrN
8EyUa4wSy2xoZbShnfUVeTkBEttqjx6OReYLJXgym1omhZcKhbQ9w9iOxcIcXJ0/wCxIALmm8P13Lu2y+
x8sRXf8Q2/DEzK2pojic/eZ+4PBkPp2l4zU8lQS1sf+C4BHWUmjgEoywXBbltN04lgOF8ahi3dGZQ+AV
KC8X3G9pwHKHRB1xRDZqphRzSPWBYhccN+oiTY5Im7Jz4r9QgNIWk/iHnOSxYTY+oiUlkgRzDnAlqPBMw
Gti/MCq8gM+4PsVGUVBE6rYssuhEJPFdILB7k17ZhXLjHTzMJy2kB9oAsdEZV1RuYM0AKT04iohgRz/A
EgphsLaX1Mu/QuI3hUWFhUCKs1uUyJY6OWYLHaAxqOK5gChWEEZdICBQyPM1LVnFQHCDxcCbo9VLpzRti
b1KjTTQf8AcwONFV9pLbsPTYOz9RCBiqlD1qEm3NCfJSH+G5gAaPGJrOQEoxAwci6bHB4lXwQybV2Su6Q
YL3ubL4K3Iu4TNJAFGS8dfMTwDwl0XRF2rBDuWDKayeCXZ7L7HEdnNeaCHuVFc+z+IiKWzCee4uUppoEE
fG6Jtdw2NhTgW4ICbpVa6hwdw2rsysUGvL6e4YmyHVFXGw1dO936hW6YGUZr8VCQQKPAOfMVrurF1FC19
i9D+0EUsHFGq41CkXgyFWp3EVAwAT9kWo6DntnzGuL7leB6mJJG1+K/UtkNCYA5D0QL243LWgeJbhQ66c
wXrTcNZ83Dzlr+UrUHNegLkbm1XhBEQBYLqCkqlzTEhXmWF1cAI45uWG+TdS0qdpVs1DG7GrhSBE0299
x8loizD8QpyaHh1UFZB45ROE9mfmy9LCNfMbvK4P+TahWgsv+WUZnOE/uJb8YizaGP8qNgqOeG0DG4DpI
E1bacYVUCotrAfmal0nV9pz8xxFgNdJnUQUi8F1EU0QOh8RBkLRSv2y6gseTxAopkHyeIUCEUMUSpJuV2
6geu0szPfiArlXATIr3bPq5ktu2svCRbvO+4zY1FA710JgAL7hoapbFQ+VSrCpWYnPWYGM5WKKlJmconG
razL/RBvyAwdYNiw49QsnQ2QG21oQ+uNMsCW12TUI9S+oqsML6IZgUEDLbSrguAwXlIvBDba7dQxkoEvY
hbo3ADDIGvD5mHGqf9llgxh618QHCvDb+5Zs/U/UdxQX3iXpLf2+4IWF9dQogxm7jZI1ReXLKANZ6gpjT
eXiG2brFy9wQkEu3keKmnyNylmWv1LFMhyTDTYWWxbLLM95TWQyECmVC8PETimu042oFCAA29bCBBW0Ye
SOBtzyJSzDp1ETM/BlAs70oC1qzCeEa4cMQNnYQPFoxEbs7xiV3CI3BQMjglGN+cShbPBiZHuclyjC7gA
Y79zOJRnMQS5vARZ2K2k2KvRUGkaTCeISUpvmIGsC8GWBbhejcerbRrOJsadG/iISUJy6gUWlFH+xKMs
HBogxYX+YiC0scTJ0zgILQMvgIgT6rmYuvB1MBytZg1o5xL2AreITApRY9K7mm8sZgQDbzHJkDMCw8IgE
yxyFpmMFpbjLsmsJK5VQZTcakWuVRxV0q/7iOJ6Q6aOzYwcNP0lLlCSEL4hAMZoZVVSNUDCIyXGkYtm4R
LYxiF2ueKimm9dVzA1t71WK/wDI5VZwGvySiCR4f9R903++IWjHzv8AqLq7KT/Kgt1qhypHgxxq4GBjHGe
BmFb7YCMUccsqDat3n+6Xfw4PzMJgfZ+YsF8eX9o1i696PzGrnmLj+4FT23WP718Fx4P7nKEvgf3BqIjj
y/MABPUwuf/hQ+LsL5s085auNrOXi08ZQBA/C4qgf46gSQV40fiXA/wB3qY5g8N/EoLq7/wCEtKXH+sSs
b16oPZSXA4sQLC26F/ULcL5TBRQ7z1Y8AmCNPU4ULhdh4iBQ+EncBMjQVQ1vDCpVX3PCHcCygtAGAJxd
V+Yz4L3Ho8T/9k="
}
```

## Output Example

```
{
  "Response": {
    "Name": "abc",
    "Sex": "abc",
    "Nation": "abc",
    "Birth": "abc",
    "Address": "abc",
    "IdNum": "abc",
    "Authority": "abc",
    "ValidDate": "abc",
    "WarnCardInfos": [
      0
    ],
    "PortraitImage": "abc",
    "IdCardImage": "abc",
    "RequestId": "abc"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.CardSideError                    | The CardSide type of the ID card is incorrect.                                                           |
| FailedOperation.DownLoadError                    | File download failed.                                                                                    |
| FailedOperation.EmptyImageError                  | The image is empty.                                                                                      |
| FailedOperation.IdCardInfoIllegal                | The ID card information (ID number, name, etc.) is invalid.                                              |
| FailedOperation.IdCardTooSmall                   | The resolution of the image is too low or the proportion of the ID card in the image is too small.       |
| FailedOperation.ImageBlur                        | The image is blurry.                                                                                     |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.ImageNoIdCard                    | No ID card is detected in the image.                                                                     |
| FailedOperation.ImageSizeTooLarge                | The image is too large. Please see the description of image size limit in the output parameters.         |
| FailedOperation.MultiCardError                   | There are multiple cards in the photo.                                                                   |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                           |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| FailedOperation.WarningServiceFailed             | Warning service error.                                                                                   |
| InvalidParameter.ConfigFormatError               | Config is not in valid JSON format.                                                                      |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                                                                   |
| ResourceUnavailable.InArrears                    | The account is in arrears.                                                                               |
| ResourceUnavailable.ResourcePackageRunOut        | The account resource package is exhausted.                                                               |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |

# MainlandPermitOCR

Last updated : 2023-06-25 16:08:55

## 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to recognize all fields on the front of a mainland travel permit for Hong Kong, Macao, or Taiwan residents: name in Chinese, name in English, gender, date of birth, issuing authority, validity period, document number, place of issuance, number of issues, and document type.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                     |
|----------------|----------|--------|---------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: MainlandPermitOCR. |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.        |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required for this API.    |

| Parameter Name | Required | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageBase64    | No       | String  | <p>The Base64-encoded value of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> is used.</p>            |
| ImageUrl       | No       | String  | <p>The URL of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>The download speed and stability of non-Tencent Cloud URLs may be low.</p> |
| RetProfile     | No       | Boolean | Whether to return the ID photo. By default, the ID photo is not returned.                                                                                                                                                                                                                                                                                                                                                                         |

### 3. Output Parameters

| Parameter Name | Type   | Description       |
|----------------|--------|-------------------|
| Name           | String | Name in Chinese   |
| EnglishName    | String | Name in English   |
| Sex            | String | Gender            |
| Birthday       | String | Date of birth     |
| IssueAuthority | String | Issuing authority |
| ValidDate      | String | Validity period   |
| Number         | String | ID number         |

| Parameter Name | Type   | Description                                                                                                   |
|----------------|--------|---------------------------------------------------------------------------------------------------------------|
| IssueAddress   | String | Place of issue                                                                                                |
| IssueNumber    | String | Number of issues                                                                                              |
| Type           | String | Document type                                                                                                 |
| Profile        | String | Base64-encoded profile photo, which is returned only when <code>RetProfile</code> is set to <code>True</code> |
| RequestId      | String | The unique request ID, which is returned for each request. RequestId is required for locating a problem.      |

## 4. Example

### Example1 Recognizing a mainland travel permit for Hong Kong, Macao, or Taiwan residents

This example shows you how to recognize a mainland travel permit for Hong Kong, Macao, or Taiwan residents.

#### Input Example

```
POST / HTTP/1.1
Host: ocr.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: MainlandPermitOCR
<Common request parameters>

{
  "ImageUrl": "https://xx/a.jpg",
  "RetProfile": "False"
}
```

#### Output Example

```
{
  "Response": {
    "Name": "",
    "EnglishName": "LIMING",
    "Number": "C00000000",
    "Sex": "",
    "ValidDate": "2018.10.09-2028.10.08",
    "IssueAuthority": "",
  }
}
```

```
"IssueAddress": "",
"Birthday": "1981.08.03",
"IssueNumber": "02",
"Type": "",
"Profile": "",
"RequestId": "3090debe-3662-4ef1-8784-6ef2fb59f75e"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                        | Description            |
|-----------------------------------|------------------------|
| FailedOperation.DownloadError     | File download failed.  |
| FailedOperation.ImageDecodeFailed | Image decoding failed. |
| FailedOperation.OcrFailed         | OCR failed.            |

| Error Code                                       | Description                   |
|--------------------------------------------------|-------------------------------|
| FailedOperation.UnKnowError                      | Unknown error.                |
| FailedOperation.UnOpenError                      | The service is not activated. |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.    |
| LimitExceeded.TooLargeFileError                  | The file is too large.        |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.   |



# HmtResidentPermitOCR

Last updated : 2023-06-25 16:07:26

## 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to recognize key fields on the front and back sides of a residence permit for Hong Kong, Macao, or Taiwan residents, including name, gender, date of birth, address, ID number, issuing authority, validity period, number of issues, and permit number. It can be used for residence permit OCR in scenarios such as bank account opening and user registration.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                        |
|----------------|----------|--------|------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: HmtResidentPermitOCR. |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.           |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required for this API.       |

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageBase64    | No       | String | <p>The Base64-encoded value of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> is used.</p>            |
| ImageUrl       | No       | String | <p>The URL of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>The download speed and stability of non-Tencent Cloud URLs may be low.</p> |
| CardSide       | No       | String | <p><code>FRONT</code> : The side with the profile photo.</p> <p><code>BACK</code> : The side with the national emblem.</p> <p>If this parameter is not specified, the system will automatically determine the ID card side.</p>                                                                                                                                                                                                                   |

### 3. Output Parameters

| Parameter Name | Type    | Description                     |
|----------------|---------|---------------------------------|
| Name           | String  | Name                            |
| Sex            | String  | Gender                          |
| Birth          | String  | Date of birth                   |
| Address        | String  | Address                         |
| IdCardNo       | String  | ID card number                  |
| CardType       | Integer | 0: Front side.<br>1: Back side. |

| Parameter Name | Type   | Description                                                                                              |
|----------------|--------|----------------------------------------------------------------------------------------------------------|
| ValidDate      | String | Validity period                                                                                          |
| Authority      | String | Issuing authority                                                                                        |
| VisaNum        | String | Number of issues                                                                                         |
| PassNo         | String | Permit number                                                                                            |
| RequestId      | String | The unique request ID, which is returned for each request. RequestId is required for locating a problem. |

## 4. Example

### Example1 Recognizing a residence permit for Hong Kong, Macao, or Taiwan residents

This example shows you how to recognize a residence permit for Hong Kong, Macao, or Taiwan residents.

#### Input Example

```
POST / HTTP/1.1
Host: ocr.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: HmtResidentPermitOCR
<Common request parameters>

{
  "ImageUrl": "https://xx/a.jpg",
  "CardSide": "FRONT"
}
```

#### Output Example

```
{
  "Response": {
    "Name": "",
    "Sex": "",
    "Birth": "1997/6/2",
    "Address": "",
    "IdCardNo": "830000199706020042",
    "CardType": 0,
    "ValidDate": ""
  }
```

```
"Authority": "",
"VisaNum": "0",
"PassNo": "000",
"RequestId": "f72e7048-f1e0-42f3-b0bf-f8730d48bb5c"
}
}
```

## Example2 Recognizing a residence permit for Hong Kong, Macao, or Taiwan residents

This example shows you how to recognize a residence permit for Hong Kong, Macao, or Taiwan residents.

### Input Example

```
POST / HTTP/1.1
Host: ocr.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: HmtResidentPermitOCR
<Common request parameters>

{
  "ImageUrl": "https://xx/a.jpg"
}
```

### Output Example

```
{
  "Response": {
    "Name": "",
    "Sex": "",
    "Birth": "",
    "Address": "",
    "IdCardNo": "",
    "CardType": 1,
    "ValidDate": "2018.09.06-2023.09.06",
    "Authority": "",
    "VisaNum": "0",
    "PassNo": "000",
    "RequestId": "182abb0c-b0bd-403a-ab11-3dba21ae89d0"
  }
}
```

## 5. Developer Resources

## SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                       |
|--------------------------------------------------|-----------------------------------|
| FailedOperation.DownloadError                    | File download failed.             |
| FailedOperation.EmptyImageError                  | The image is empty.               |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.            |
| FailedOperation.ImageNoText                      | No text is detected in the image. |
| FailedOperation.OcrFailed                        | OCR failed.                       |
| FailedOperation.UnKnowError                      | Unknown error.                    |
| FailedOperation.UnOpenError                      | The service is not activated.     |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.        |
| LimitExceeded.TooLargeFileError                  | The file is too large.            |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.       |

# HKIDCardOCR

Last updated : 2024-11-13 11:04:09

## 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to recognize key fields on the photo side of a Hong Kong (China) identity card, including name in Chinese, name in English, telecode for name, date of birth, gender, document symbol, date of the first issue, date of the last receipt, identity card number, and permanent residency attribute.

This API is not fully available for the time being. For more information, please contact your [Tencent Cloud sales rep.](#)

A maximum of 5 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name  | Required | Type    | Description                                                                                                                                                                                                                                                   |
|-----------------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: HKIDCardOCR.                                                                                                                                                                                     |
| Version         | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                      |
| Region          | No       | String  | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                               |
| ReturnHeadImage | Yes      | Boolean | Whether to return identity photo.                                                                                                                                                                                                                             |
| ImageBase64     | No       | String  | Base64 string of the image<br>Supported image formats: PNG, JPG, JPEG. GIF is not supported yet.<br>Supported image size: The downloaded image cannot exceed 7 MB after being Base64-encoded, and it cannot take longer than 3 seconds to download the image. |
|                 |          |         |                                                                                                                                                                                                                                                               |

|          |    |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------|----|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageUrl | No | String | <p>URL address of image. (This field is not supported outside Chinese mainland)</p> <p>Supported image formats: PNG, JPG, JPEG. GIF is currently not supported.</p> <p>Supported image size: the downloaded image cannot exceed 3 MB after being Base64-encoded. The download time of the image cannot exceed 3 seconds.</p> <p>We recommend you store the image in Tencent Cloud, as a Tencent Cloud URL can guarantee higher download speed and stability.</p> <p>The download speed and stability of non-Tencent Cloud URLs may be low.</p> |
|----------|----|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 3. Output Parameters

| Parameter Name   | Type     | Description                                                                                                         |
|------------------|----------|---------------------------------------------------------------------------------------------------------------------|
| CnName           | String   | Name in Chinese                                                                                                     |
| EnName           | String   | Name in English                                                                                                     |
| TelexCode        | String   | Telecode for the name in Chinese                                                                                    |
| Sex              | String   | Gender. Valid values: Male, Female                                                                                  |
| Birthday         | String   | Date of birth                                                                                                       |
| Permanent        | Integer  | Permanent identity card.<br>0: non-permanent;<br>1: permanent;<br>-1: unknown.                                      |
| IdNum            | String   | Identity card number                                                                                                |
| Symbol           | String   | Document symbol, i.e., the symbol under the date of birth, such as "****AZ"                                         |
| FirstIssueDate   | String   | First issue date                                                                                                    |
| CurrentIssueDate | String   | Last receipt date                                                                                                   |
| HeadImage        | String   | Base64-encoded identity photo<br>Note: this field may return null, indicating that no valid values can be obtained. |
| WarnCardInfos    | Array of | Card Warning Information                                                                                            |

|           |         |                                                                                                                                                                                                                                                                                       |
|-----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|           | Integer | -9101 Alarm for covered certificate,<br>-9102 Alarm for photocopied certificate,<br>-9103 Alarm for photographed certificate,<br>-9104 Alarm for PS certificate,<br>-9107 Alarm for reflective certificate,<br>-9108 Alarm for blurry image,<br>-9109 This capability is not enabled. |
| RequestId | String  | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.                                               |

## 4. Example

### Example1 Recognizing Hong Kong (China) identity card

#### Input Example

```
POST / HTTP/1.1
Host: ocr.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: HKIDCardOCR

{
  "ReturnHeadImage": "false",
  "ImageUrl": "https://xx/a.jpg"
}
```

#### Output Example

```
{
  "Response": {
    "CnName": "",
    "EnName": "SAN, Nan",
    "TelexCode": "300000000000",
    "Sex": "",
    "Birthday": "01-01-2001",
    "Permanent": 1,
    "IdNum": "C000000 (E) ",
    "Symbol": "***AZ",
    "FirstIssueDate": "(09-99) ",
    "CurrentIssueDate": "23-09-10",
    "HeadImage": "",
    "WarnCardInfos": [
```



```
-9104
],
"RequestId": "fba1c9ad-aeb3-4418-9ecf-80ab1b5fc875"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                        | Description                    |
|-----------------------------------|--------------------------------|
| FailedOperation.DownloadError     | File download failed.          |
| FailedOperation.ImageDecodeFailed | Image decoding failed.         |
| FailedOperation.NoHKIDCard        | Not a Hong Kong identity card. |
| FailedOperation.OcrFailed         | OCR failed.                    |
| FailedOperation.UnKnowError       | Unknown error.                 |
|                                   |                                |

|                                                  |                               |
|--------------------------------------------------|-------------------------------|
| FailedOperation.UnOpenError                      | The service is not activated. |
| FailedOperation.WarningServiceFailed             |                               |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.    |
| LimitExceeded.TooLargeFileError                  | The file is too large.        |
| ResourceUnavailable.InArrears                    | The account is in arrears.    |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.   |

# MLIDPassportOCR

Last updated : 2025-03-26 14:50:04

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize a passport issued in Hong Kong/Macao/Taiwan (China) or other countries/regions. Recognizable fields include passport ID, name, date of birth, gender, expiration date, issuing country/region, and nationality. It has the features of cropping identity photos and alarming for photographed or photocopied documents. This interface supports regional scope: countries with machine-readable passports

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type    | Description                                                                                                                                                                                                                                                                   |
|----------------|----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: MLIDPassportOCR.                                                                                                                                                                                                 |
| Version        | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                      |
| Region         | No       | String  | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                               |
| ImageBase64    | No       | String  | Base64-encoded value of image. The image cannot exceed 7 MB in size after being Base64-encoded. A resolution above 500x800 is recommended. PNG, JPG, JPEG, BMP, and PDF formats are supported. It is recommended that the card part occupies more than 2/3 area of the image. |
| RetImage       | No       | Boolean | Whether to return an image.<br>Default value: false.                                                                                                                                                                                                                          |
| ImageUrl       | No       | String  | URL address of image. (This field is not supported outside Chinese                                                                                                                                                                                                            |

|  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  | <p>mainland)</p> <p>Supported image formats: PNG, JPG, JPEG, BMP, PDF.</p> <p>Supported image size: the downloaded image cannot exceed 7 MB after being Base64-encoded. The download time of the image cannot exceed 3 seconds.</p> <p>We recommend you store the image in Tencent Cloud, as a Tencent Cloud URL can guarantee higher download speed and stability. The download speed and stability of non-Tencent Cloud URLs may be low.</p> |
|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 3. Output Parameters

| Parameter Name   | Type             | Description                                                                                                                                                                                                       |
|------------------|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ID               | String           | Passport ID                                                                                                                                                                                                       |
| Name             | String           | Name                                                                                                                                                                                                              |
| DateOfBirth      | String           | Date of birth                                                                                                                                                                                                     |
| Sex              | String           | Gender (F: female, M: male)                                                                                                                                                                                       |
| DateOfExpiration | String           | Expiration date                                                                                                                                                                                                   |
| IssuingCountry   | String           | Issuing country                                                                                                                                                                                                   |
| Nationality      | String           | Country/region code                                                                                                                                                                                               |
| Warn             | Array of Integer | <p>Alarm codes</p> <p>-9102 Alarm for photocopy on a paper document (including black &amp; white and color ones)</p> <p>-9103 Alarm for photocopy on an electronic device</p> <p>-9106 Alarm for covered card</p> |
| Image            | String           | Identity photo                                                                                                                                                                                                    |
| AdvancedInfo     | String           | <p>Extended field:</p> <pre>{   ID:{     Confidence:0.9999   },   Name:{     Confidence:0.9996   } }</pre>                                                                                                        |

|                        |                                        |                                                                                                                                                                                                                                                                                                                       |
|------------------------|----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CodeSet                | String                                 | The first row of the machine-readable zone (MRZ) at the bottom                                                                                                                                                                                                                                                        |
| CodeCrc                | String                                 | The second row of the MRZ at the bottom                                                                                                                                                                                                                                                                               |
| Surname                | String                                 | The surname.<br>Note: This field may return null, indicating that no valid values can be obtained.                                                                                                                                                                                                                    |
| GivenName              | String                                 | The given name.<br>Note: This field may return null, indicating that no valid values can be obtained.                                                                                                                                                                                                                 |
| Type                   | String                                 | Type (in Machine Readable Zone)                                                                                                                                                                                                                                                                                       |
| PassportRecognizeInfos | <a href="#">PassportRecognizeInfos</a> | Document content in Information Zone                                                                                                                                                                                                                                                                                  |
| WarnCardInfos          | Array of Integer                       | Card Warning Information<br><br>-9101 Alarm for covered certificate,<br>-9102 Alarm for photocopied certificate,<br>-9103 Alarm for photographed certificate,<br>-9104 Alarm for PS certificate,<br>-9107 Alarm for reflective certificate,<br>-9108 Alarm for blurry image,<br>-9109 This capability is not enabled. |
| RequestId              | String                                 | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.                                                                               |

## 4. Example

### Example1

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: MLIDPassportOCR
<common request parameters>
```

### Output Example

©2013-2025 Tencent Cloud International Pte. Ltd.

```
-9109
```

```
]
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                    | Description                                      |
|-----------------------------------------------|--------------------------------------------------|
| FailedOperation.DownloadError                 | File download failed.                            |
| FailedOperation.FieldException                |                                                  |
| FailedOperation.ImageDecodeFailed             | Image decoding failed.                           |
| FailedOperation.InconsistencyBetweenMRZAndVRZ |                                                  |
| FailedOperation.NoPassport                    | Not a passport.                                  |
| FailedOperation.OcrFailed                     | OCR failed. This error may be caused by unstable |

|                                                  |                                                        |
|--------------------------------------------------|--------------------------------------------------------|
|                                                  | network connections,service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                         |
| FailedOperation.UnOpenError                      | The service is not activated.                          |
| FailedOperation.WarningServiceFailed             | Warning service error.                                 |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                             |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                 |
| ResourceUnavailable.InArrears                    | The account is in arrears.                             |
| ResourceUnavailable.ResourcePackageRunOut        | The account resource package is exhausted.             |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                            |



# PermitOCR

Last updated : 2025-05-13 14:42:50

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize the fields on an exit/entry permit (card) for traveling to and from Hong Kong, Macao, or Taiwan, including place of issuance, issuing authority, validity period, gender, date of birth, name in English, name in Chinese, and document number.

A maximum of 10 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: PermitOCR.                                                                                                                                                                                                                                                                                                                                             |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                            |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                                                                                                                                                                     |
| ImageBase64    | No       | String | The Base64-encoded value of the image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.<br>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> is used. |

|              |    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------|----|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageUrl     | No | String  | <p>The URL of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>The download speed and stability of non-Tencent Cloud URLs may be low.</p> |
| CropPortrait | No | Boolean | Whether to return the profile photo, default is false.                                                                                                                                                                                                                                                                                                                                                                                            |

### 3. Output Parameters

| Parameter Name | Type   | Description                                                                                                                                                                                                                             |
|----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name           | String | Name                                                                                                                                                                                                                                    |
| EnglishName    | String | Name in English                                                                                                                                                                                                                         |
| Number         | String | ID number                                                                                                                                                                                                                               |
| Sex            | String | Gender                                                                                                                                                                                                                                  |
| ValidDate      | String | Validity period                                                                                                                                                                                                                         |
| IssueAuthority | String | Issuing authority                                                                                                                                                                                                                       |
| IssueAddress   | String | Place of issue                                                                                                                                                                                                                          |
| Birthday       | String | Date of birth                                                                                                                                                                                                                           |
| PortraitImage  | String | Base64 of profile picture                                                                                                                                                                                                               |
| Type           | String | return type                                                                                                                                                                                                                             |
| RequestId      | String | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

### 4. Example

## Example1 Recognizing an exit/entry permit for traveling to and from Hong Kong, Macao, or Taiwan

This example shows you how to recognize an exit/entry permit for traveling to and from Hong Kong, Macao, or Taiwan.

### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: PermitOCR
<Common request parameters>

{
  "ImageUrl": "https://xx/a.jpg "
}
```

### Output Example

```
{
  "Response": {
    "Name": "",
    "EnglishName": "LIMING",
    "Number": "C00000000",
    "Sex": "",
    "ValidDate": "2018.10.09-2028.10.08",
    "IssueAuthority": "",
    "IssueAddress": "",
    "Birthday": "1981.08.03",
    "RequestId": "3090debe-3662-4ef1-8784-6ef2fb59f75e"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)

- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                                                                                    |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                           |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                                                                   |
| ResourceUnavailable.InArrears                    | The account is in arrears.                                                                               |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |

# MLIDCardOCR

Last updated : 2025-03-11 22:55:04

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize a Malaysian identity card, including identity card number, name, gender, and address. It is also used to crop identity photos and give alarms for photographed or photocopied certificates.

This API is not fully available for the time being. For more information, contact your [Tencent Cloud sales rep](#).

A maximum of 5 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name  | Required | Type   | Description                                                                                                                                                                                                                                                   |
|-----------------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | Yes      | String | <a href="#">Common Params</a> . The value used for this API: MLIDCardOCR.                                                                                                                                                                                     |
| Version         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                      |
| Region          | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                               |
| ImageBase64     | No       | String | The Base64-encoded value of an image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s. |
| BackImageBase64 | No       | String | Base64 value of the image on the back of the card. Supported image formats: PNG, JPG, JPEG, GIF format is not supported                                                                                                                                       |

|              |    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------|----|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |    |         | yet. Supported image size: The downloaded image cannot exceed 7M after Base64 encoding. The image download takes no more than 3 seconds. One of ImageUrl and ImageBase64 of the image must be provided. If both are provided, only ImageUrl will be used.                                                                                                                                                                                                                                                                        |
| ImageUrl     | No | String  | <p>The URL of an image. (This field is not available outside the Chinese mainland.)</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>For a non-Tencent Cloud URL, the download speed and stability may be low.</p>                  |
| BackImageUrl | No | String  | <p>The URL address of the image on the back of the card.</p> <p>Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image does not exceed 7M after Base64 encoding. The image download takes no more than 3 seconds. Storing images in Tencent Cloud URLs can ensure higher download speed and stability. It is recommended that images be stored in Tencent Cloud. The URL speed and stability of non-Tencent cloud storage may be affected to a certain extent.</p> |
| RetImage     | No | Boolean | Whether to return an image. Default value: <code>false</code> .                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

### 3. Output Parameters

| Parameter Name | Type   | Description    |
|----------------|--------|----------------|
| ID             | String | ID number      |
| Name           | String | Full name      |
| Address        | String | Address        |
| Sex            | String | Gender         |
| Image          | String | Identity photo |
|                |        |                |

|               |                  |                                                                                                                                                                                                                                                                                                                       |
|---------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| AdvancedInfo  | String           | This is an extended field,<br>with the confidence of a field recognition result returned in the following format.<br>{<br>Field name:{<br>Confidence:0.9999<br>}<br>}                                                                                                                                                 |
| Type          | String           | Certificate type<br>MyKad ID card<br>MyPR Permanent resident card<br>MyTentera Military identity card<br>MyKAS Temporary ID card<br>POLIS Police card<br>IKAD Work permit<br>MyKid Kid card                                                                                                                           |
| Birthday      | String           | Date of birth. This field is available only for work permits (i-Kad) and ID cards (MyKad).                                                                                                                                                                                                                            |
| MyKadNumber   | String           | Number on the back of Malaysia ID card                                                                                                                                                                                                                                                                                |
| WarnCardInfos | Array of Integer | Card Warning Information<br><br>-9101 Alarm for covered certificate,<br>-9102 Alarm for photocopied certificate,<br>-9103 Alarm for photographed certificate,<br>-9104 Alarm for PS certificate,<br>-9107 Alarm for reflective certificate,<br>-9108 Alarm for blurry image,<br>-9109 This capability is not enabled. |
| RequestId     | String           | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.                                                                               |

## 4. Example

### Example1 MLIDCardOCR Call

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
```

```
Content-Type: application/json
X-TC-Action: MLIDCardOCR
<common request parameters>

{
  "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/**/fakeur
  1.jpg"
}
```

## Output Example

```
{
  "Response": {
    "Name": "KAVIN ONG KHI MN",
    "ID": "710716-08-6085",
    "Address": "NO 11 PERSIARN PERAJRIT 4 TAMA PERAK 31400 IPOH ERAK",
    "Sex": "LEAKI",
    "Birthday": "",
    "Warn": [],
    "Image": "/9j/4AAQSkZJRg.....s97n//2Q==",
    "AdvancedInfo": "{\"ID\":{\"Confidence\":\"1.0000\"},\"Name\":{\"Confidence\": \"0.9996\"},\"Address\":{\"Confidence\": \"0.9997\"},\"Sex\":{\"Confidence\": \"0.9999\"}}",
    "Type": "MyKad",
    "RequestId": "c969da05-54e3-4d0a-a55d-b3ef90d4ebf5"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)



## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                                                                                    |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.NoMASIDCard                      | Non-Malaysian ID cards.                                                                                  |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                           |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| FailedOperation.WarningServiceFailed             | Warning service error.                                                                                   |
| InvalidParameter.EngineImageDecodeFailed         | Image decoding failed.                                                                                   |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                                                                   |
| ResourceUnavailable.ResourcePackageRunOut        | The account resource package is exhausted.                                                               |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |

# RecognizeMacaoIDCardOCR

Last updated : 2024-11-15 10:53:04

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize key fields on the photo side of a Macao (China) identity card, including name in Chinese, name in English, telecode for name, date of birth, gender, document symbol, date of the first issue, date of the last receipt, identity card number, and permanent residency attribute.

This API is not fully available for the time being. For more information, please contact your [Tencent Cloud sales rep.](#)

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizeMacaoIDCardOCR.                                                                                                                                                                                                                                                                                                                                                                           |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                                                                        |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                                                                                                                                                                                                                 |
| ImageUrl       | No       | String | The URL address of the image.<br>Supported image formats: PNG, JPG, JPEG. Not support GIF yet.<br>Supported image size: The downloaded image should not exceed 7M. The image download takes no more than 3 seconds.Storing images in Tencent Cloud URLs can ensure higher download speed and stability. It is recommended that images be stored in Tencent Cloud. The URL speed and stability of non-Tencent cloud storage may be affected to a certain extent. |

|                 |    |        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------|----|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| BackImageUrl    | No | String | The URL address of the image on the back of the card.<br>Supported image formats: PNG, JPG, JPEG. The GIF format is not supported yet. Supported image size: The downloaded image does not exceed 7M after Base64 encoding. The image download takes no more than 3 seconds. Storing images in Tencent Cloud URLs can ensure higher download speed and stability. It is recommended that images be stored in Tencent Cloud. The URL speed and stability of non-Tencent cloud storage may be affected to a certain extent. |
| ImageBase64     | No | String | Base64 value of the image. Supported image formats: PNG, JPG, JPEG. Not support GIF yet.<br>Supported image size: The downloaded image should not exceed 7M after Base64 encoding. The image download takes no more than 3 seconds.<br>One of ImageUrl and ImageBase64 of the image must be provided. If both are provided, only ImageUrl will be used.                                                                                                                                                                   |
| BackImageBase64 | No | String | Base64 value of the image on the back of the card. Supported image formats: PNG, JPG, JPEG. The GIF format is not supported yet. Supported image size: The downloaded image does not exceed 7M after Base64 encoding. The image download takes no more than 3 seconds. One of ImageUrl and ImageBase64 of the image must be provided. If both are provided, only ImageUrl will be used.                                                                                                                                   |
| Config          | No | String | The following optional fields are of string type and are empty by default:<br>RetImage: whether to return the processed image (base64 encrypted string); the value and meaning of RetImage are as follows: 1.portrait Return portrait image data 2. "" Do not return image data SDK setting method reference: Config = Json.stringify({"RetImage":"portrait"}) API 3.0 Explorer setting method reference: Config = {"RetImage":"portrait" }                                                                               |

### 3. Output Parameters

| Parameter Name | Type   | Description       |
|----------------|--------|-------------------|
| CnLastName     | String | Chinese last name |
| EnLastName     | String | English last name |
| LastNameCode   | String | Last name code    |

|                  |                  |                                                                                                                                                                                                                                                                                                                       |
|------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CnFirstName      | String           | Chinese first name                                                                                                                                                                                                                                                                                                    |
| EnFirstName      | String           | English first name                                                                                                                                                                                                                                                                                                    |
| FirstNameCode    | String           | First name code                                                                                                                                                                                                                                                                                                       |
| ID               | String           | ID Number                                                                                                                                                                                                                                                                                                             |
| Birthday         | String           | Birthday(DD-MM-YYYY)                                                                                                                                                                                                                                                                                                  |
| Sex              | String           | gender                                                                                                                                                                                                                                                                                                                |
| FirstIssueDate   | String           | First issue Date (DD-MM-YYYY)                                                                                                                                                                                                                                                                                         |
| CurrentIssueDate | String           | Issue date (DD-MM-YYYY)                                                                                                                                                                                                                                                                                               |
| ValidityPeriod   | String           | Validity period (DD-MM-YYYY)                                                                                                                                                                                                                                                                                          |
| Symbol           | String           | ID symbol                                                                                                                                                                                                                                                                                                             |
| Height           | String           | Height (unit: meters)                                                                                                                                                                                                                                                                                                 |
| RetImage         | String           | Processed image (Base64)                                                                                                                                                                                                                                                                                              |
| Angle            | String           | Image rotation angle, the horizontal direction of the text is 0, clockwise is positive, counterclockwise is negative                                                                                                                                                                                                  |
| ResidentType     | String           | Resident type.                                                                                                                                                                                                                                                                                                        |
| WarnCardInfos    | Array of Integer | Card Warning Information<br><br>-9101 Alarm for covered certificate,<br>-9102 Alarm for photocopied certificate,<br>-9103 Alarm for photographed certificate,<br>-9104 Alarm for PS certificate,<br>-9107 Alarm for reflective certificate,<br>-9108 Alarm for blurry image,<br>-9109 This capability is not enabled. |
| RequestId        | String           | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.                                                                               |

## 4. Example

### Example1 Recognizes Macao (China) identity card

Recognizes Macao (China) identity card

### Input Example

```
https://ocr.intl.tencentcloudapi.com/?Action=RecognizeMacaoIDCardOCR
&ImageUrl=https://xx/a.jpg
&Config={"RetImage\":"preprocess\"}
&<public parameters>
```

### Output Example

```
{
  "Response": {
    "Angle": "0",
    "CnLastName": "",
    "EnLastName": "HO",
    "LastNameCode": "0149",
    "CnFirstName": "*",
    "EnFirstName": "CHAN YOU",
    "FirstNameCode": "37****27",
    "ID": "15****0(4)",
    "Birthday": "22-04-1997",
    "Sex": "F",
    "FirstIssueDate": "06-05-2011",
    "CurrentIssueDate": "01-08-2014",
    "ValidityPeriod": "01-08-2024",
    "Symbol": "C",
    "Height": "1.64",
    "RetImage": "",
    "RequestId": "68f8fcbf-9314-6112a-ac18-6f1a9308fs100mab"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)

- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                         |
|--------------------------------------------------|-------------------------------------|
| FailedOperation.DownloadError                    | File download failed.               |
| FailedOperation.EmptyImageError                  | The image is empty.                 |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.              |
| FailedOperation.OcrFailed                        | OCR failed.                         |
| FailedOperation.UnKnowError                      | Unknown error.                      |
| FailedOperation.UnOpenError                      | The service is not activated.       |
| FailedOperation.WarningServiceFailed             |                                     |
| InvalidParameter.ConfigFormatError               | Config is not in valid JSON format. |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.          |
| LimitExceeded.TooLargeFileError                  | The file is too large.              |

# RecognizeIndonesiaIDCardOCR

Last updated : 2025-04-29 10:51:02

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize an Indonesian identity card.

The API request rate is limited to 20 requests/sec by default.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizeIndonesiaIDCardOCR.                                                                                                                                                                                                                                                                                                                                   |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                                    |
| Region         | Yes      | String | <a href="#">Common Params</a> . For more information, please see the <a href="#">list of regions</a> supported by the product. This API only supports: ap-jakarta, ap-singapore.                                                                                                                                                                                                                                            |
| ImageBase64    | No       | String | The Base64-encoded value of an image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.<br>Either the <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> will be used. |

|                 |    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------|----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageUrl        | No | String  | <p>The URL of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>For a non-Tencent Cloud URL, the download speed and stability may be affected.</p> |
| ReturnHeadImage | No | Boolean | Whether to return the identity photo.                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Scene           | No | String  | <p>The scene, which defaults to <code>V1</code>.</p> <p>Valid values:</p> <p>V1</p> <p>V2</p>                                                                                                                                                                                                                                                                                                                                                             |

### 3. Output Parameters

| Parameter Name   | Type   | Description                  |
|------------------|--------|------------------------------|
| NIK              | String | The Single Identity Number.  |
| Nama             | String | The full name.               |
| TempatTglLahir   | String | The place and date of birth. |
| JenisKelamin     | String | The gender.                  |
| GolDarah         | String | The blood type.              |
| Alamat           | String | The address.                 |
| RTRW             | String | The street.                  |
| KelDesa          | String | The village.                 |
| Kecamatan        | String | The region.                  |
| Agama            | String | The religion.                |
| StatusPerkawinan | String | The marital status.          |
| Perkerjaan       | String | The occupation.              |
|                  |        |                              |



|                 |                  |                                                                                                                                                                                                                                                                                    |
|-----------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KewargaNegaraan | String           | The nationality.                                                                                                                                                                                                                                                                   |
| BerlakuHingga   | String           | The expiry date.                                                                                                                                                                                                                                                                   |
| IssuedDate      | String           | The issue date.                                                                                                                                                                                                                                                                    |
| Photo           | String           | The photo.                                                                                                                                                                                                                                                                         |
| Provinsi        | String           | The province, which is supported when the value of <code>Scene</code> is <code>V2</code> .                                                                                                                                                                                         |
| Kota            | String           | The city, which is supported when the value of <code>Scene</code> is <code>V2</code> .                                                                                                                                                                                             |
| WarnCardInfos   | Array of Integer | Card Warning Information<br><br>-9101 Alarm for covered certificate,<br>-9102 Alarm for photocopied certificate,<br>-9103 Alarm for photographed certificate,<br>-9107 Alarm for reflective certificate,<br>-9108 Alarm for blurry image,<br>-9109 This capability is not enabled. |
| RequestId       | String           | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.                                            |

## 4. Example

### Example1

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeIndonesiaIDCardOCR
<common request parameters>

{
  "ReturnHeadImage": "false",
  "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/***/fakeurl.jpg"
}
```

#### Output Example

```
{
  "Response": {
    "Agama": "ATHOLIK",
    "Alamat": "BANJARSARI",
    "BerlakuHingga": "SEUMUR HIDUP",
    "GolDarah": "O",
    "IssuedDate": "15-05-2015",
    "JenisKelamin": "LAKEI AKI",
    "Kecamatan": "",
    "KelDesa": "PAKEMBINANGUN",
    "KewargaNegaraan": "INM",
    "NIK": "360000000006",
    "Nama": "",
    "Perkerjaan": "KARYAWAN SWASTA",
    "Photo": "",
    "RTRW": "00/000",
    "RequestId": "0000-0000-0000-0001",
    "StatusPerkawinan": "KAWFN",
    "TempatTglLahir": "JAKARTA 13-01-1987",
    "Provinsi": "DKI JAKARTA",
    "Kota": "DKI JAKARTA"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                                                                                    |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                           |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| FailedOperation.WarningServiceFailed             | Warning service error.                                                                                   |
| InvalidParameter.EngineImageDecodeFailed         | Image decoding failed.                                                                                   |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                                                                   |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |

# RecognizeSingaporeIDCardOCR

Last updated : 2025-03-25 16:31:22

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This interface supports the identification of all fields on the front side of ID card for Singapore residents. The identification accuracy reaches more than 99%. In addition, this interface also supports a variety of value-added capabilities to meet the needs of different scenarios. Such as the cropping function of ID card photos and portrait photos, and also has 5 alarm functions.

As shown in the table below.

| Value-added ability | Ability items                            |
|---------------------|------------------------------------------|
| Alarm function      | ID card copy warning                     |
|                     | ID card copy warning                     |
|                     | Alarm for occlusion in the ID card frame |
|                     | ID card reflective warning               |
|                     | Blurry picture warning                   |

Default interface request frequency limit: 20 times/second

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type | Description |
|----------------|----------|------|-------------|
|----------------|----------|------|-------------|

|                 |     |         |                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------|-----|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | Yes | String  | <a href="#">Common Params</a> . The value used for this API: RecognizeSingaporeIDCardOCR.                                                                                                                                                                                                                                                                                                                |
| Version         | Yes | String  | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                 |
| Region          | Yes | String  | <a href="#">Common Params</a> . For more information, please see the <a href="#">list of regions</a> supported by the product. This API only supports: ap-singapore.                                                                                                                                                                                                                                     |
| ImageBase64     | No  | String  | The Base64 value of the image. The image is required to be no larger than 7M after Base64 encoding, and the resolution is recommended to be 500*800 or above. PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupies at least 2/3 of the picture. One of ImageUrl and ImageBase64 of the image must be provided. If both are provided, only ImageUrl will be used. |
| ImageUrl        | No  | String  | The URL address of the image. The image is required to be no larger than 7M after Base64 encoding, and the resolution is recommended to be 500*800 or above. PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupies at least 2/3 of the picture. It is recommended that images be stored in Tencent Cloud to ensure higher download speed and stability.           |
| ReturnHeadImage | No  | Boolean | Whether to return portrait photos.                                                                                                                                                                                                                                                                                                                                                                       |

### 3. Output Parameters

| Parameter Name | Type   | Description        |
|----------------|--------|--------------------|
| ChName         | String | Chinese name       |
| EnName         | String | English name       |
| Sex            | String | gender             |
| CountryOfBirth | String | Birth Country      |
| Birthday       | String | Brithday           |
| Address        | String | Address(back side) |
| ID             | String | License number     |
|                |        |                    |

|                  |                  |                                                                                                                                                                                                                                                                                                                       |
|------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Race             | String           | Nationality(back side)                                                                                                                                                                                                                                                                                                |
| NRICCode         | String           | NRIC code(back side)                                                                                                                                                                                                                                                                                                  |
| PostCode         | String           | Post code(back side)                                                                                                                                                                                                                                                                                                  |
| DateOfExpiration | String           | Date of Expiration(back side)                                                                                                                                                                                                                                                                                         |
| DateOfIssue      | String           | Date of issue(back side)                                                                                                                                                                                                                                                                                              |
| Photo            | String           | Head image                                                                                                                                                                                                                                                                                                            |
| WarnCardInfos    | Array of Integer | Card Warning Information<br><br>-9101 Alarm for covered certificate,<br>-9102 Alarm for photocopied certificate,<br>-9103 Alarm for photographed certificate,<br>-9104 Alarm for PS certificate,<br>-9107 Alarm for reflective certificate,<br>-9108 Alarm for blurry image,<br>-9109 This capability is not enabled. |
| RequestId        | String           | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.                                                                               |

## 4. Example

### Example1 RecognizeSingaporeIDCardOCR

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeSingaporeIDCardOCR
<common request parameters>

{
  "ReturnHeadImage": "false",
  "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/**/fakeurl1.jpg"
}
```

## Output Example

```
{
  "Response": {
    "Address": "",
    "Birthday": "12/04/1988",
    "ChName": "***",
    "CountryOfBirth": "CHINA",
    "DateOfExpiration": "",
    "DateOfIssue": "",
    "EnName": "XIA ***YANG",
    "ID": "S7***22E",
    "NRICCode": "",
    "Photo": "",
    "PostCode": "",
    "Race": "CHINESE",
    "RequestId": "65b41f06-2759-4a7f-b5dd-639f1e676e28",
    "Sex": "M",
    "WarnCardInfos": [
      -9104
    ]
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                                                                                    |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                           |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| FailedOperation.WarningServiceFailed             | Warning service error.                                                                                   |
| InvalidParameter.EngineImageDecodeFailed         | Image decoding failed.                                                                                   |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |



# RecognizeThaiIDCardOCR

Last updated : 2025-04-14 10:18:51

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize the fields on a Thai identity card, including name in Thai, name in English, address, date of birth, identification number, date of issue, and date of expiry.

A maximum of 10 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name  | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------|----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizeThaiIDCardOCR.                                                                                                                                                                                                                                                                                                                                    |
| Version         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                                |
| Region          | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                                                                                                                                                                         |
| ImageBase64     | No       | String | The Base64-encoded value of an image. The image cannot exceed 7 MB after being Base64-encoded. A resolution above 500 x 800 is recommended. PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupy more than 2/3 area of the image.<br>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, <code>ImageUrl</code> is used. |
| BackImageBase64 | No       | String | Base64 value of the image on the back of the card. Supported image formats: PNG, JPG, JPEG. GIF format is not supported                                                                                                                                                                                                                                                                                                 |

|              |    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|----|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |    |         | yet. Supported image size: The downloaded image does not exceed 7M after Base64 encoding. The image download takes no more than 3 seconds. One of ImageUrl and ImageBase64 of the image must be provided. If both are provided, only ImageUrl will be used.                                                                                                                                                                                                                                                               |
| ImageUrl     | No | String  | <p>The URL of the image. The image cannot exceed 7 MB after being Base64-encoded. A resolution above 500 x 800 is recommended. PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupy more than 2/3 area of the image.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p>                                                                                                                                                     |
| BackImageUrl | No | String  | <p>The URL address of the image on the back of the card. Supported image formats: PNG, JPG, JPEG. GIF format is not supported yet. Supported image size: The downloaded image does not exceed 7M after Base64 encoding. The image download takes no more than 3 seconds. Storing images in Tencent Cloud URLs can ensure higher download speed and stability. It is recommended that images be stored in Tencent Cloud. The URL speed and stability of non-Tencent cloud storage may be affected to a certain extent.</p> |
| CropPortrait | No | Boolean | <p>Whether to crop the profile photo. The default value is <code>false</code> , meaning not to return the Base64-encoded value of the profile photo on the Thai identity card.</p> <p>When this parameter is set to <code>true</code> , the Base64-encoded value of the profile photo on the Thai identity card after rotation correction is returned.</p>                                                                                                                                                                |

### 3. Output Parameters

| Parameter Name | Type   | Description           |
|----------------|--------|-----------------------|
| ID             | String | ID card number        |
| ThaiName       | String | Name in Thai          |
| EnFirstName    | String | Name in English       |
| EnLastName     | String | Name in English       |
| IssueDate      | String | Date of issue in Thai |

|                  |                  |                                                                                                                                                                                                                                                                                    |
|------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ExpirationDate   | String           | Expiration date in Thai                                                                                                                                                                                                                                                            |
| EnIssueDate      | String           | Date of issue in English                                                                                                                                                                                                                                                           |
| EnExpirationDate | String           | Expiration date in English                                                                                                                                                                                                                                                         |
| Birthday         | String           | Date of birth in Thai                                                                                                                                                                                                                                                              |
| EnBirthday       | String           | Date of birth in English                                                                                                                                                                                                                                                           |
| Religion         | String           | Religion                                                                                                                                                                                                                                                                           |
| SerialNumber     | String           | Serial number                                                                                                                                                                                                                                                                      |
| Address          | String           | Address                                                                                                                                                                                                                                                                            |
| LaserID          | String           | LaserID in the back of the card.                                                                                                                                                                                                                                                   |
| PortraitImage    | String           | Identity photo                                                                                                                                                                                                                                                                     |
| WarnCardInfos    | Array of Integer | Card Warning Information<br><br>-9101 Alarm for covered certificate,<br>-9102 Alarm for photocopied certificate,<br>-9103 Alarm for photographed certificate,<br>-9107 Alarm for reflective certificate,<br>-9108 Alarm for blurry image,<br>-9109 This capability is not enabled. |
| AdvancedInfo     | String           | Field confidence:<br>{ "ID": { "Confidence": 0.9999 }, "ThaiName": { "Confidence": 0.9996 } }                                                                                                                                                                                      |
| RequestId        | String           | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.                                            |

## 4. Example

### Example1

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeThaiIDCardOCR
```

<common request parameters>

```
{
  "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/***/fakeurl.jpg"
}
```

## Output Example

```
{
  "Response": {
    "Address": "ที่อยู่ 21/19 หมู่ที่ 3 ต.บางคูวัด อ.บางบัวทอง จ.นนทบุรี",
    "AdvancedInfo": "{\n\"ID\":0.9995814561843872,\n\"ThaiName\":0.9961479902267456,\n\"EnFirstName\":0.9232422113418579,\n\"EnLastName\":0.943652331829071,\n\"Birthday\":0.9828404188156128,\n\"EnBirthday\":0.92333984375,\n\"Religion\":1,\n\"ExpirationDate\":0.9919084906578064,\n\"IssueDate\":0.9893275499343872,\n\"EnExpirationDate\":0.9890950322151184,\n\"EnIssueDate\":0.9800618290901184,\n\"SerialNumber\":0.9995659589767456}\",
    "Birthday": "14 ธ.ค. 2509",
    "EnBirthday": "14 Dec. 1966",
    "EnExpirationDate": "13 Dec. 2024",
    "EnFirstName": "Mr. Thanakit",
    "EnIssueDate": "9 Dec. 2016",
    "EnLastName": "Boonyopakron",
    "ExpirationDate": "13 ธ.ค. 2567",
    "ID": "3 1020 01968 75 6",
    "IssueDate": "9 ธ.ค. 2559",
    "PortraitImage": "",
    "Religion": "พุทธ",
    "RequestId": "d4af8019-08e0-4d8d-a986-e1f45efb4a6c",
    "SerialNumber": "1204-03-12091012",
    "ThaiName": "นาย ธนakit บุญโฏปกรณ์",
    "WarnCardInfos": [
      -9109
    ]
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                                                                                    |
| FailedOperation.EmptyImageError                  | The image is empty.                                                                                      |
| FailedOperation.ImageBlur                        | The image is blurry.                                                                                     |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.ImageNoSpecifiedCard             | The card in the image is not of the specified type.                                                      |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                           |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| FailedOperation.WarningServiceFailed             | Warning service error.                                                                                   |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| LimitExceeded.ToolargeFileError                  | The file is too large.                                                                                   |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |

# RecognizeThaiPinkCard

Last updated : 2025-03-19 19:38:06

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This API is used to recognize the fields on a Thai identity card, including name in Thai, name in English, address, date of birth, identification number, date of issue, and date of expiry.

Currently, this API is not generally available. For more information, please [contact your sales rep.](#)

A maximum of 5 requests can be initiated per second for this API.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                             |
|----------------|----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizeThaiPinkCard.                                                                                                                                                                                     |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                         |
| ImageBase64    | No       | String | The Base64-encoded value of an image. The image cannot exceed 7 MB after being Base64-encoded. A resolution above 500 x 800 is recommended. PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupy more than 2/3 area of the image. |

|              |    |         |                                                                                                                                                                                                                                                                                                                                                                       |
|--------------|----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |    |         | Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, <code>ImageUrl</code> is used.                                                                                                                                                                                                                          |
| ImageUrl     | No | String  | <p>The URL of the image. The image cannot exceed 7 MB after being Base64-encoded. A resolution above 500 x 800 is recommended. PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupy more than 2/3 area of the image.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> |
| CropPortrait | No | Boolean | <p>Whether to crop the profile photo. The default value is <code>false</code> , meaning not to return the Base64-encoded value of the profile photo on the Thai identity card.</p> <p>When this parameter is set to <code>true</code> , the Base64-encoded value of the profile photo on the Thai identity card after rotation correction is returned.</p>            |

### 3. Output Parameters

| Parameter Name   | Type   | Description              |
|------------------|--------|--------------------------|
| Country          | String | Country                  |
| IDNumber         | String | ID number                |
| ThaiName         | String | Name in Thai             |
| EnName           | String | Name in English          |
| ThaiSurName      | String | Surname in Thai          |
| ThaiDOB          | String | Date of birth in Thai    |
| EnDOB            | String | Date of birth in English |
| PhotoNumber      | String | Photo number             |
| ThaiAddress      | String | Address in Thai          |
| ThaiDateOfIssue  | String | Date of issue in Thai    |
| DateOfIssue      | String | Date of issue in English |
| ThaiDateOfExpiry | String | Expiration date in Thai  |
|                  |        |                          |

|               |                  |                                                                                                                                                                                                                                                                                    |
|---------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DateOfExpiry  | String           | Expiration date in English                                                                                                                                                                                                                                                         |
| IssuingAgency | String           | Issuing agency                                                                                                                                                                                                                                                                     |
| RefNumber     | String           | Ref number                                                                                                                                                                                                                                                                         |
| AdvancedInfo  | String           | Field confidence:<br>{ "ID": { "Confidence": 0.9999 }, "ThaiName": { "Confidence": 0.9996 } }                                                                                                                                                                                      |
| PortraitImage | String           | Identity photo                                                                                                                                                                                                                                                                     |
| WarnCardInfos | Array of Integer | Card Warning Information<br><br>-9101 Alarm for covered certificate,<br>-9102 Alarm for photocopied certificate,<br>-9103 Alarm for photographed certificate,<br>-9107 Alarm for reflective certificate,<br>-9108 Alarm for blurry image,<br>-9109 This capability is not enabled. |
| RequestId     | String           | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem.                                            |

## 4. Example

### Example1 RecognizeThaiPinkCard Example

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeThaiPinkCard

{
  "ImageUrl": "https://ocr-demo-1254418846.cos.ap-guangzhou.myqcloud.com/****/fakeur1.jpg"
}
```

#### Output Example



```
{
  "Response": {
    "AdvancedInfo": "{\\"DateOfExpiry\\":0.6956542730331421,\\"EnDOB\\":0.69610595703125,\\"RefNumber\\":0.6244140863418579,\\"Country\\":0.803863525390625,\\"PhotoNumber\\":0.7247558832168579,\\"ThaiAddress\\":0.9462376236915588,\\"ThaiName\\":0.7324594259262085,\\"IssuingAgency\\":0.839324951171875,\\"ThaiDateOfIssue\\":0.7035577893257141,\\"DateOfIssue\\":0.688977062702179,\\"IDNumber\\":0.6976562738418579,\\"EnName\\":0.6729980707168579,\\"ThaiDOB\\":0.7289484143257141,\\"ThaiDateOfExpiry\\":0.71337890625}",
    "Country": "",
    "DateOfExpiry": "9 Aug. 2032",
    "DateOfIssue": "10 Aug. 2022",
    "EnDOB": "14 Feb. 1986",
    "EnName": "Mr. *** Tun",
    "IDNumber": "00 8401 155063 9",
    "IssuingAgency": "",
    "PhotoNumber": "8401-0223290",
    "PortraitImage": "",
    "RefNumber": "(CI) CC744457",
    "RequestId": "4706ff76-2e7a-43d1-a697-6db531e33492",
    "ThaiAddress": "",
    "ThaiDOB": "",
    "ThaiDateOfExpiry": "",
    "ThaiDateOfIssue": "",
    "ThaiName": ""
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                              |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                                                                                    |
| FailedOperation.EmptyImageError                  | The image is empty.                                                                                      |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.ImageNoSpecifiedCard             | The card in the image is not of the specified type.                                                      |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                                                                   |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |
| UnknownParameter                                 | Unrecognized argument.                                                                                   |

# RecognizeBrazilIDCardOCR

Last updated : 2025-03-21 14:48:20

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This interface supports identification of the front and back of Brazilian ID license. The identification fields include name, driver's license category, number, validity period, etc.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                            |
|----------------|----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizeBrazilIDCardOCR.                                                                                                                                                                                                 |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                               |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                                        |
| ImageBase64    | No       | String | Base64 value of the image. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image does not exceed 7M after Base64 encoding. Image download time does not exceed 3 seconds.                                               |
| ImageUrl       | No       | String | URL address of the image. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image download time should not exceed 3 seconds. URLs of images stored in Tencent Cloud can |

|                 |    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------|----|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |    |         | guarantee higher download speed and stability. It is recommended that images be stored in Tencent Cloud. The speed and stability of URLs not stored in Tencent Cloud may be affected to a certain extent.                                                                                                                                                                                                                                                                                                                        |
| BackImageBase64 | No | String  | Base64 value of the image on the back of the card. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image download time should not exceed 3 seconds. An ImageUrl and ImageBase64 must be provided. If both are provided, only ImageUrl will be used.                                                                                                                                                             |
| BackImageUrl    | No | String  | The URL address of the image on the back of the card. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image does not exceed 7M after Base64 encoding. The image download time does not exceed 3 seconds. The URL of the image stored in Tencent Cloud can ensure higher download speed and stability. It is recommended to store the image in Tencent Cloud. The speed and stability of the URL stored outside Tencent Cloud may be affected to a certain extent. |
| ReturnHeadImage | No | Boolean | Whether to return portrait photos.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### 3. Output Parameters

| Parameter Name | Type   | Description            |
|----------------|--------|------------------------|
| Nome           | String | Name                   |
| MemberShip     | String | Family information     |
| DataNascimento | String | Birthday               |
| IssuingAgency  | String | Issuing agency         |
| Fatorrh        | String | blood type             |
| NaturalIDade   | String | Birth place            |
| Observations   | String | Additional information |
| CPF            | String | CPF                    |

|               |        |                                                                                                                                                                                                                                         |
|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DNI           | String | DNI                                                                                                                                                                                                                                     |
| RegistroGeral | String | universal registration                                                                                                                                                                                                                  |
| DispatchDate  | String | Issue date                                                                                                                                                                                                                              |
| Registro      | String | address                                                                                                                                                                                                                                 |
| PortraitImage | String | Portrait image                                                                                                                                                                                                                          |
| DocOrigem     | String | Original identity information                                                                                                                                                                                                           |
| RequestId     | String | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

## 4. Example

### Example1 RecognizeBrazilIDCardOCR Example

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeBrazilDriverLicenseOCR
<public parameter>

{
  "ImageBase64": "/9j/4AAQSkZJRg.....s97n//2Q==",
  "ImageUrl": "",
  "BackImageBase64": "/9j/4AAQSkZJRg.....s97n//2Q==",
  "BackImageUrl": "",
  "ReturnHeadImage": true
}
```

#### Output Example

```
{
  "Response": {
    "CPF": "400123456/99",
    "DNI": "",
    "DataNascimento": "09/09/1999",
    "DispatchDate": "21/09/2017",
```

```
"DocOrigem": "XXXX-SP XXXXX DE XXXXX CN:LV.A91/XXXX.111/N 1111",
"Fatorrh": "",
"IssuingAgency": "XXXX-SP",
"MemberShip": "XXXX XXX XXX/XXXX XXX XXX",
"NaturalIDade": "XXXX- SP",
"Nome": "XXXX XXXX XXX",
"Observations": "",
"PortraitImage": "",
"Registro": "",
"RegistroGeral": "52.111.11-4 2 via",
"RequestId": "ace7b820-6476-440f-be2f-0dd1ce762562"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                    | Description           |
|-------------------------------|-----------------------|
| FailedOperation.DownloadError | File download failed. |

|                                           |                                            |
|-------------------------------------------|--------------------------------------------|
| FailedOperation.ImageDecodeFailed         | Image decoding failed.                     |
| FailedOperation.UnKnowError               | Unknown error.                             |
| FailedOperation.UnOpenError               | The service is not activated.              |
| LimitExceeded.TooLargeFileError           | The file is too large.                     |
| ResourceUnavailable.ResourcePackageRunOut | The account resource package is exhausted. |

# RecognizeBrazilRNEOCR

Last updated : 2025-04-18 15:04:14

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

Brazil RNE document recognition Default interface request frequency limit: 5 times/second

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                 |
|----------------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizeBrazilRNEOCR.                                                                                                                                                                                                                                                         |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                    |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                                                                                             |
| ImageBase64    | No       | String | Base64 value of the image. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image downloading time should not exceed 3 seconds.                                                                                             |
| ImageUrl       | No       | String | URL address of the image. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image download time should not exceed 3 seconds. URLs of images stored in Tencent Cloud can guarantee higher download speed and stability. It is |



|                 |    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------|----|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |    |         | recommended that images be stored in Tencent Cloud. The speed and stability of URLs not stored in Tencent Cloud may be affected to a certain extent.                                                                                                                                                                                                                                                                                                                                                                             |
| BackImageBase64 | No | String  | Base64 value of the image on the back of the card. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image download time should not exceed 3 seconds. An ImageUrl and ImageBase64 must be provided. If both are provided, only ImageUrl will be used.                                                                                                                                                             |
| BackImageUrl    | No | String  | The URL address of the image on the back of the card. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image does not exceed 7M after Base64 encoding. The image download time does not exceed 3 seconds. The URL of the image stored in Tencent Cloud can ensure higher download speed and stability. It is recommended to store the image in Tencent Cloud. The speed and stability of the URL stored outside Tencent Cloud may be affected to a certain extent. |
| ReturnHeadImage | No | Boolean | Whether to return portrait photos.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### 3. Output Parameters

| Parameter Name | Type   | Description        |
|----------------|--------|--------------------|
| RNE            | String | RNE                |
| CLASSIFICATION | String | Classification     |
| VALIDADE       | String | Valid date         |
| NOME           | String | Name               |
| Membership     | String | Family information |
| NACIONALIDADE  | String | Nationality        |
| NATURALIDADE   | String | Place of Birth     |
| IssuingAgency  | String | Issuing agency     |
| DateOfBirth    | String | Birthday           |

|               |        |                                                                                                                                                                                                                                         |
|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sex           | String | Gender                                                                                                                                                                                                                                  |
| EntryDate     | String | Date of entry                                                                                                                                                                                                                           |
| VIA           | String | VIA                                                                                                                                                                                                                                     |
| DispatchDate  | String | Dispatch date                                                                                                                                                                                                                           |
| MRZ           | String | MRZ                                                                                                                                                                                                                                     |
| PortraitImage | String | PortraitImage base64                                                                                                                                                                                                                    |
| RequestId     | String | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

## 4. Example

### Example1 RecognizeBrazilRNEOCR example

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeBrazilDriverLicenseOCR
<public parameter>

{
  "ImageBase64": "/9j/4AAQSkZJRg.....s97n//2Q==",
  "ImageUrl": "",
  "BackImageBase64": "/9j/4AAQSkZJRg.....s97n//2Q==",
  "BackImageUrl": "",
  "ReturnHeadImage": false
}
```

#### Output Example

```
{
  "Response": {
    "CLASSIFICATION": "PERMANENTE",
    "DateOfBirth": "01/01/2001",
    "DispatchDate": "01/01/2001",
    "EntryDate": "01/01/2001",
  }
}
```

```
"IssuingAgency": "CGPI/DIREX/DPF",
"MRZ": "AAAAA AAAA AAAA 111111",
"Membership": "",
"NACIONALIDADE": "CHINESA",
"NATURALIDADE": "REP.POPULAR DA CHINA",
"NOME": "XXXX CHEN",
"PortraitImage": "",
"RNE": "G1111-8",
"RequestId": "9681c688-e523-4f7e-9672-238e817b4e64",
"Sex": "M",
"VALIDADE": "26/10/2025",
"VIA": "1"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code | Description |
|------------|-------------|
|            |             |

|                                           |                                                                                                          |
|-------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError             | File download failed.                                                                                    |
| FailedOperation.ImageDecodeFailed         | Image decoding failed.                                                                                   |
| FailedOperation.OcrFailed                 | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError               | Unknown error.                                                                                           |
| FailedOperation.UnOpenError               | The service is not activated.                                                                            |
| LimitExceeded.TooLargeFileError           | The file is too large.                                                                                   |
| ResourceUnavailable.ResourcePackageRunOut | The account resource package is exhausted.                                                               |

# RecognizeBrazilRNMOCR

Last updated : 2025-04-28 16:23:36

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This interface supports identification of the front and back of Brazilian RNM license. The default interface request frequency limit is 5 times per second.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                     |
|----------------|----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizeBrazilRNMOCR.                                                                                                                                                             |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                        |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                 |
| ImageBase64    | No       | String | Base64 value of the image. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image downloading time should not exceed 3 seconds. |
| ImageUrl       | No       | String | URL address of the image. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image download time should not exceed 3              |

|                 |    |         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------|----|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |    |         | seconds. URLs of images stored in Tencent Cloud can guarantee higher download speed and stability. It is recommended that images be stored in Tencent Cloud. The speed and stability of URLs not stored in Tencent Cloud may be affected to a certain extent.                                                                                                                                                                                                                                                                    |
| BackImageBase64 | No | String  | Base64 value of the image on the back of the card. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image download time should not exceed 3 seconds. An ImageUrl and ImageBase64 must be provided. If both are provided, only ImageUrl will be used.                                                                                                                                                             |
| BackImageUrl    | No | String  | The URL address of the image on the back of the card. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image does not exceed 7M after Base64 encoding. The image download time does not exceed 3 seconds. The URL of the image stored in Tencent Cloud can ensure higher download speed and stability. It is recommended to store the image in Tencent Cloud. The speed and stability of the URL stored outside Tencent Cloud may be affected to a certain extent. |
| ReturnHeadImage | No | Boolean | Whether to return portrait photos.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

### 3. Output Parameters

| Parameter Name   | Type   | Description   |
|------------------|--------|---------------|
| SOBRENOME        | String | Last name     |
| NOME             | String | First name    |
| DATADENASCIMENTO | String | Date of Birth |
| SEXO             | String | Gender        |
| MEMBERSHIP       | String | Parents name  |
| NACIONALIDADE    | String | Nationality   |
| VALIDADE         | String | Expiry Date   |
| RNM              | String | RNM           |

|                   |        |                                                                                                                                                                                                                                         |
|-------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CPF               | String | CPF                                                                                                                                                                                                                                     |
| CLASSIFICATION    | String |                                                                                                                                                                                                                                         |
| PRAZODERESIDENCIA | String |                                                                                                                                                                                                                                         |
| ISSUANCE          | String | Issue Date                                                                                                                                                                                                                              |
| AMPAROLEGAL       | String | Legal basis                                                                                                                                                                                                                             |
| MRZ               | String | Machine readable zone code                                                                                                                                                                                                              |
| PortraitImage     | String | PortraitImage                                                                                                                                                                                                                           |
| PortraitImageBack | String | PortraitImage(Back)                                                                                                                                                                                                                     |
| RequestId         | String | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

## 4. Example

### Example1 RecognizeBrazilRNMOCR

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeBrazilRNMOCR
<public parameters>

{
  "ImageBase64": "/9j/4AAQSkZJRg.....s97n//2Q==",
  "ImageUrl": "",
  "BackImageBase64": "/9j/4AAQSkZJRg.....s97n//2Q==",
  "BackImageUrl": "",
  "ReturnHeadImage": false
}
```

#### Output Example

```
{
  "Response": {
    "AMPAROLEGAL": "AAAA. 37, XXX.",
    "CLASSIFICATION": "AAAA",
    "CPF": "111.111.111-11",
    "DATADENASCIMENTO": "10/06/1992",
    "ISSUANCE": "29/11/2020 XX/XX/XX",
    "MEMBERSHIP": "BBBB AAA/XXX XXX",
    "MRZ": "I BBBBB 4 00000AAA0000 6 AAA",
    "NACIONALIDADE": "AAAA",
    "NOME": "AAAA",
    "PRAZODERESIDENCIA": "Indeterminado",
    "PortraitImage": "",
    "PortraitImageBack": "",
    "RNM": "V11111-P",
    "RequestId": "50a1a4d1-1468-4097-a44e-bea39e17bf47",
    "SEXO": "",
    "SOBRENOME": "XXXX",
    "VALIDADE": "07/07/2031"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)



## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                | Description                                |
|-------------------------------------------|--------------------------------------------|
| FailedOperation.DownloadError             | File download failed.                      |
| FailedOperation.ImageDecodeFailed         | Image decoding failed.                     |
| FailedOperation.UnKnowError               | Unknown error.                             |
| FailedOperation.UnOpenError               | The service is not activated.              |
| LimitExceeded.TooLargeFileError           | The file is too large.                     |
| ResourceUnavailable.ResourcePackageRunOut | The account resource package is exhausted. |

# RecognizeMexicoVTID

Last updated : 2025-06-25 11:48:56

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This interface supports identification of the front and back of Mexican Voter ID Card. The default interface request frequency limit is 5 times per second.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                     |
|----------------|----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizeMexicoVTID.                                                                                                                                                               |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                        |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                 |
| ImageBase64    | No       | String | Base64 value of the image. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image downloading time should not exceed 3 seconds. |
| ImageUrl       | No       | String | URL address of the image. Supported image formats: PNG, JPG, JPEG, GIF format is not supported yet. Supported image size: The downloaded image should not exceed 7M after Base64 encoding. Image download time should not exceed 3              |

|                 |    |         |                                                                                                                                                                                                                                                               |
|-----------------|----|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 |    |         | seconds. URLs of images stored in Tencent Cloud can guarantee higher download speed and stability. It is recommended that images be stored in Tencent Cloud. The speed and stability of URLs not stored in Tencent Cloud may be affected to a certain extent. |
| ReturnHeadImage | No | Boolean | Whether to return portrait photos.                                                                                                                                                                                                                            |

### 3. Output Parameters

| Parameter Name | Type   | Description                                                                                                                                                                                                                             |
|----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name           | String | Name                                                                                                                                                                                                                                    |
| Sex            | String | Sex                                                                                                                                                                                                                                     |
| Address        | String | Address                                                                                                                                                                                                                                 |
| VotePIN        | String | Vote PIN Code                                                                                                                                                                                                                           |
| CURP           | String | Unique Population Registry Code                                                                                                                                                                                                         |
| Birth          | String | Birthday                                                                                                                                                                                                                                |
| SECCION        | String | Section Number                                                                                                                                                                                                                          |
| IssueDate      | String | IssueDate                                                                                                                                                                                                                               |
| ValidDate      | String | ValidDate                                                                                                                                                                                                                               |
| State          | String | State                                                                                                                                                                                                                                   |
| City           | String | City                                                                                                                                                                                                                                    |
| Locality       | String | Locality                                                                                                                                                                                                                                |
| EMISION        | String | Edition                                                                                                                                                                                                                                 |
| PortraitImage  | String | Portrait image base64                                                                                                                                                                                                                   |
| RequestId      | String | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

## 4. Example

### Example1 RecognizeMexicoVTID Example

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeMexicoVTID
<public parameters>

{
  "ImageBase64": "/9j/4AAQSkZJRg.....s97n//2Q==",
  "ImageUrl": "",
  "ReturnHeadImage": false
}
```

#### Output Example

```
{
  "Response": {
    "Address": "C. xxx 3080 xxxx 11111, xxxx.",
    "Birth": "19/01/1980",
    "CURP": "xxx11112222",
    "City": "",
    "EMISION": "",
    "IssueDate": "2003 01",
    "Locality": "",
    "Name": "xxxx xxxx",
    "PortraitImage": "",
    "RequestId": "6e773a78-69d6-4330-8001-d81f1840550b",
    "SECCION": "0703",
    "Sex": "H",
    "State": "",
    "ValidDate": "2022-2032",
    "VotePIN": "xxxxxx"
  }
}
```

## 5. Developer Resources

## SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                | Description                                |
|-------------------------------------------|--------------------------------------------|
| FailedOperation.DownloadError             | File download failed.                      |
| FailedOperation.ImageDecodeFailed         | Image decoding failed.                     |
| FailedOperation.UnKnowError               | Unknown error.                             |
| FailedOperation.UnOpenError               | The service is not activated.              |
| LimitExceeded.TooLargeFileError           | The file is too large.                     |
| ResourceUnavailable.ResourcePackageRunOut | The account resource package is exhausted. |

# RecognizeBrazilDriverLicenseOCR

Last updated : 2025-02-19 11:58:40

## 1. API Description

Domain name for API request: ocr.intl.tencentcloudapi.com.

This interface supports identification of the front and back of Brazilian driver's license. The identification fields include name, driver's license category, number, validity period, etc.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name  | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizeBrazilDriverLicenseOCR.                                                                                                                                                                                                                                                                                                                 |
| Version         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                      |
| Region          | No       | String | <a href="#">Common Params</a> . This parameter is not required.                                                                                                                                                                                                                                                                                                                                               |
| ImageBase64     | No       | String | The Base64 value of the image. It is required that the image after Base64 encoding should not exceed 7M, the resolution is recommended to be 500*800 or above, and PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupies at least 2/3 of the picture. One of ImageUrl and ImageBase64 of the image must be provided. If both are provided, only ImageUrl will be used. |
| BackImageBase64 | No       | String | The Base64 value of the image. It is required that the image after Base64 encoding should not exceed 7M, the resolution is                                                                                                                                                                                                                                                                                    |

|              |    |         |                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------|----|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|              |    |         | recommended to be 500*800 or above, and PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupies at least 2/3 of the picture. One of ImageUrl and ImageBase64 of the image must be provided. If both are provided, only ImageUrl will be used.                                                                                                                  |
| ImageUrl     | No | String  | The URL address of the image. It is required that the image after Base64 encoding should not exceed 7M, the resolution is recommended to be 500*800 or above, and PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupies at least 2/3 of the picture. It is recommended that images be stored in Tencent Cloud to ensure higher download speed and stability. |
| BackImageUrl | No | String  | The URL address of the image. It is required that the image after Base64 encoding should not exceed 7M, the resolution is recommended to be 500*800 or above, and PNG, JPG, JPEG, and BMP formats are supported. It is recommended that the card part occupies at least 2/3 of the picture. It is recommended that images be stored in Tencent Cloud to ensure higher download speed and stability. |
| CropPortrait | No | Boolean | Picture switch. The default is false, and the base64 encoding of the avatar photo is not returned. When set to true, the base64 encoding of the portrait photo is returned.                                                                                                                                                                                                                         |

### 3. Output Parameters

| Parameter Name | Type   | Description          |
|----------------|--------|----------------------|
| NOME           | String | Name                 |
| CatHab         | String | Driving license type |
| CNHNumber      | String | CNH number           |
| VALIDADE       | String | Valid date           |
| QUALIFICATION  | String | Qualification        |
| IDENTIDADE     | String | ID number            |
| CPF            | String | CPF                  |
| NASCIMENTO     | String | Birthday             |

|               |        |                                                                                                                                                                                                                                         |
|---------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| MEMBERSHIP    | String | Membership                                                                                                                                                                                                                              |
| REGISTRO      | String | Registration number                                                                                                                                                                                                                     |
| OBSERVATIONS  | String | Remark                                                                                                                                                                                                                                  |
| IssueDate     | String | Issue date                                                                                                                                                                                                                              |
| LOCAL         | String | Issue location                                                                                                                                                                                                                          |
| BackNumber    | String | Number in the back of the card                                                                                                                                                                                                          |
| AdvancedInfo  | String | Field confidence                                                                                                                                                                                                                        |
| PortraitImage | String | PortraitImage base64                                                                                                                                                                                                                    |
| RequestId     | String | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

## 4. Example

### Example1 RecognizeBrazilDriverLicenseOCR example

#### Input Example

```
POST / HTTP/1.1
Host: ocr.intl.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizeBrazilDriverLicenseOCR
<public parameter>

{
  "ImageBase64": "/9j/4AAQSkZJRg.....s97n//2Q=="
}
```

#### Output Example

```
{
  "Response": {
    "AdvancedInfo": "{\"NOME\":0.71914065,\"CatHab\":0.46235353,\"CNHNumber\":0.64985657,\"VALIDADE\":0.73679197,\"QUALIFICATION\":0.7534424,\"IDENTIDADE\":0.7685954,\"CPF\":0.74205434,\"NASCIMENTO\":0.73850095,\"MEMBERSHIP\":0.8054733,\"REGISTRO\":0.67544556}\",
```



```
"CNHNumber": "235*****10",
"CPF": "238.550.758-75",
"CatHab": "B",
"IDENTIDADE": "F048055D DIREX EX",
"MEMBERSHIP": "JINJI PAN/WEIHONG CHEN",
"NASCIMENTO": "28/03/1992",
"NOME": "ZHAOLIN PAN",
"PortraitImage": "",
"QUALIFICATION": "23/05/2012",
"REGISTRO": "07343723357",
"RequestId": "667fbb53-8bf9-46e2-b411-e53ae8cea7e1",
"VALIDADE": "07/08/2024"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code | Description |
|------------|-------------|
|            |             |

|                                                  |                               |
|--------------------------------------------------|-------------------------------|
| FailedOperation.DownloadError                    | File download failed.         |
| FailedOperation.EmptyImageError                  | The image is empty.           |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.        |
| FailedOperation.OcrFailed                        | OCR failed.                   |
| FailedOperation.UnOpenError                      | The service is not activated. |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.    |
| LimitExceeded.TooLargeFileError                  | The file is too large.        |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.   |
| UnknownParameter                                 |                               |

# PhilippinesDrivingLicenseOCR

Last updated : 2023-09-05 15:21:12

## 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to recognize a Philippine driver's license.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizePhilippinesDrivingLicenseOCR.                                                                                                                                                                                                                                                                                                                         |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                                    |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required for this API.                                                                                                                                                                                                                                                                                                                                                |
| ImageBase64    | No       | String | The Base64-encoded value of an image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.<br>Either the <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> will be used. |

| Parameter Name  | Required | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-----------------|----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageUrl        | No       | String  | <p>The URL of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>For a non-Tencent Cloud URL, the download speed and stability may be affected.</p> |
| ReturnHeadImage | No       | Boolean | Whether to return the identity photo.                                                                                                                                                                                                                                                                                                                                                                                                                     |

### 3. Output Parameters

| Parameter Name | Type                                | Description                        |
|----------------|-------------------------------------|------------------------------------|
| HeadPortrait   | <a href="#">TextDetectionResult</a> | The Base64-encoded identity photo. |
| Name           | <a href="#">TextDetectionResult</a> | The full name.                     |
| LastName       | <a href="#">TextDetectionResult</a> | The last name.                     |
| FirstName      | <a href="#">TextDetectionResult</a> | The first name.                    |
| MiddleName     | <a href="#">TextDetectionResult</a> | The middle name.                   |
| Nationality    | <a href="#">TextDetectionResult</a> | The nationality.                   |
| Sex            | <a href="#">TextDetectionResult</a> | The gender.                        |
| Address        | <a href="#">TextDetectionResult</a> | The address.                       |
| LicenseNo      | <a href="#">TextDetectionResult</a> | The license No.                    |
| ExpiresDate    | <a href="#">TextDetectionResult</a> | The expiration date.               |
| AgencyCode     | <a href="#">TextDetectionResult</a> | The agency code.                   |
| Birthday       | <a href="#">TextDetectionResult</a> | The date of birth.                 |

| Parameter Name | Type   | Description                                                                                              |
|----------------|--------|----------------------------------------------------------------------------------------------------------|
| RequestId      | String | The unique request ID, which is returned for each request. RequestId is required for locating a problem. |

## 4. Example

### Example1 Recognizing a Philippine driver's license

#### Input Example

```
POST / HTTP/1.1
Host: ocr.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizePhilippinesDrivingLicenseOCR
<Common request parameters>

{
  "ReturnHeadImage": "true",
  "ImageUrl": "https://xx/a.jpg"
}
```

#### Output Example

```
{
  "Response": {
    "Address": {
      "Polygon": [
        {
          "X": "442",
          "Y": "489"
        },
        {
          "X": "529",
          "Y": "489"
        },
        {
          "X": "529",
          "Y": "506"
        },
        {
          "X": "442",
```

```
"Y": "506"
},
],
"Value": "28 PAYAPA ST BAGONG DIWA"
},
"AgencyCode": {
  "Polygon": [],
  "Value": ""
},
"Birthdate": {
  "Polygon": [],
  "Value": ""
},
"ExpiresDate": {
  "Polygon": [],
  "Value": ""
},
"FirstName": {
  "Polygon": [],
  "Value": ""
},
"HeadPortrait": {
  "Polygon": [],
  "Value": ""
},
"LastName": {
  "Polygon": [],
  "Value": ""
},
"LicenseNo": {
  "Polygon": [],
  "Value": ""
},
"MiddleName": {
  "Polygon": [],
  "Value": ""
},
"Name": {
  "Polygon": [],
  "Value": ", "
},
"Nationality": {
  "Polygon": [],
  "Value": ""
},
"RequestId": "1234-1234-1234-1234",
"Sex": {
```

```
"Polygon": [],  
"Value": ""  
}  
}  
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                        | Description                   |
|-----------------------------------|-------------------------------|
| FailedOperation.DownloadError     | File download failed.         |
| FailedOperation.ImageDecodeFailed | Image decoding failed.        |
| FailedOperation.OcrFailed         | OCR failed.                   |
| FailedOperation.UnKnowError       | Unknown error.                |
| FailedOperation.UnOpenError       | The service is not activated. |

| Error Code                                       | Description                 |
|--------------------------------------------------|-----------------------------|
| InvalidParameter.EngineImageDecodeFailed         | Image decoding failed.      |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.  |
| LimitExceeded.TooLargeFileError                  | The file is too large.      |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status. |



# PhilippinesSssIDOCR

Last updated : 2023-09-05 15:21:42

## 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to recognize a Philippine SSSID/UMID card.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name  | Required | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------|----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: RecognizePhilippinesSssIDOCR.                                                                                                                                                                                                                                                                                                                                  |
| Version         | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                                    |
| Region          | No       | String  | <a href="#">Common Params</a> . This parameter is not required for this API.                                                                                                                                                                                                                                                                                                                                                |
| ReturnHeadImage | Yes      | Boolean | Whether to return the identity photo.                                                                                                                                                                                                                                                                                                                                                                                       |
| ImageBase64     | No       | String  | The Base64-encoded value of an image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.<br>Either the <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> will be used. |

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageUrl       | No       | String | <p>The URL of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>For a non-Tencent Cloud URL, the download speed and stability may be affected.</p> |

### 3. Output Parameters

| Parameter Name | Type                                | Description                                                                                              |
|----------------|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| HeadPortrait   | <a href="#">TextDetectionResult</a> | The Base64-encoded identity photo.                                                                       |
| LicenseNumber  | <a href="#">TextDetectionResult</a> | The common reference number (CRN).                                                                       |
| FullName       | <a href="#">TextDetectionResult</a> | The full name.                                                                                           |
| Birthday       | <a href="#">TextDetectionResult</a> | The date of birth.                                                                                       |
| RequestId      | String                              | The unique request ID, which is returned for each request. RequestId is required for locating a problem. |

### 4. Example

#### Example1 Recognizing a Philippine SSSID/UMID card

This example shows you how to recognize a Philippine SSSID/UMID card.

#### Input Example

```
https://ocr.tencentcloudapi.com/?Action=RecognizePhilippinesSssIDOCR
&ImageUrl=https://xx/a.jpg
&ReturnHeadImage=false
&<Common request parameters>
```

## Output Example

```
{
  "Response": {
    "Birthday": {
      "Polygon": [
        {
          "X": 543,
          "Y": 805
        },
        {
          "X": 754,
          "Y": 805
        },
        {
          "X": 754,
          "Y": 842
        },
        {
          "X": 543,
          "Y": 842
        }
      ],
      "Value": "JULY 7,1980"
    },
    "FullName": {
      "Polygon": [
        {
          "X": 540,
          "Y": 609
        },
        {
          "X": 1094,
          "Y": 609
        },
        {
          "X": 1094,
          "Y": 664
        },
        {
          "X": 540,
          "Y": 664
        }
      ],
      "Value": "JEFFREY"
    },
    "HeadPortrait": {
```

```
"Polygon": [],
"Value": "",
},
"LicenseNumber": {
  "Polygon": [
    {
      "X": 533,
      "Y": 736
    },
    {
      "X": 1014,
      "Y": 739
    },
    {
      "X": 1014,
      "Y": 816
    },
    {
      "X": 533,
      "Y": 813
    }
  ],
  "Value": "33-111111-1"
},
"RequestId": "11111-11111-11111-11111"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                   |
|--------------------------------------------------|-------------------------------|
| FailedOperation.DownloadError                    | File download failed.         |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.        |
| FailedOperation.OcrFailed                        | OCR failed.                   |
| FailedOperation.UnKnowError                      | Unknown error.                |
| FailedOperation.UnOpenError                      | The service is not activated. |
| InvalidParameter.EngineImageDecodeFailed         | Image decoding failed.        |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.    |
| LimitExceeded.TooLargeFileError                  | The file is too large.        |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.   |

# PhilippinesTinIDOCR

Last updated : 2023-09-05 15:22:04

## 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to recognize a Philippine TIN ID card.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name  | Required | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------|----------|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action          | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: RecognizePhilippinesTinIDOCR.                                                                                                                                                                                                                                                                                                                                  |
| Version         | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                                    |
| Region          | No       | String  | <a href="#">Common Params</a> . This parameter is not required for this API.                                                                                                                                                                                                                                                                                                                                                |
| ReturnHeadImage | Yes      | Boolean | Whether to return the identity photo.                                                                                                                                                                                                                                                                                                                                                                                       |
| ImageBase64     | No       | String  | The Base64-encoded value of an image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.<br>Either the <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> will be used. |

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageUrl       | No       | String | <p>The URL of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>For a non-Tencent Cloud URL, the download speed and stability may be affected.</p> |

### 3. Output Parameters

| Parameter Name | Type                                | Description                                                                                              |
|----------------|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| HeadPortrait   | <a href="#">TextDetectionResult</a> | The Base64-encoded identity photo.                                                                       |
| LicenseNumber  | <a href="#">TextDetectionResult</a> | The tax identification number (TIN).                                                                     |
| FullName       | <a href="#">TextDetectionResult</a> | The name.                                                                                                |
| Address        | <a href="#">TextDetectionResult</a> | The address.                                                                                             |
| Birthday       | <a href="#">TextDetectionResult</a> | The birth date.                                                                                          |
| IssueDate      | <a href="#">TextDetectionResult</a> | The issue date.                                                                                          |
| RequestId      | String                              | The unique request ID, which is returned for each request. RequestId is required for locating a problem. |

### 4. Example

#### Example1 Recognizing a Philippine TIN ID card

##### Input Example

```
https://ocr.tencentcloudapi.com/?Action=RecognizePhilippinesTinIDOCR  
&ImageUrl=https://xx/a.jpg
```

```
&ReturnHeadImage=false  
&<Common request parameters>
```

## Output Example

```
{  
  "Response": {  
    "Address": {  
      "Polygon": [],  
      "Value": "18 A KATIPUNAN ST."  
    },  
    "Birthday": {  
      "Polygon": [  
        {  
          "X": 665,  
          "Y": 737  
        },  
        {  
          "X": 997,  
          "Y": 737  
        },  
        {  
          "X": 997,  
          "Y": 787  
        },  
        {  
          "X": 665,  
          "Y": 787  
        }  
      ],  
      "Value": "August 17,1902"  
    },  
    "FullName": {  
      "Polygon": [],  
      "Value": "VERGARA,AMALIA ALBIOR"  
    },  
    "HeadPortrait": {  
      "Polygon": [],  
      "Value": ""  
    },  
    "IssueDate": {  
      "Polygon": [  
        {  
          "X": 665,  
          "Y": 737  
        },  
        {  
          "X": 997,  
          "Y": 737  
        },  
        {  
          "X": 997,  
          "Y": 787  
        },  
        {  
          "X": 665,  
          "Y": 787  
        }  
      ],  
      "Value": "August 17,1902"  
    }  
  }  
}
```



```
{
  "X": 997,
  "Y": 737
},
{
  "X": 997,
  "Y": 787
},
{
  "X": 665,
  "Y": 787
}
],
"Value": "August 17,1902"
},
"LicenseNumber": {
  "Polygon": [
    {
      "X": 505,
      "Y": 522
    },
    {
      "X": 897,
      "Y": 522
    },
    {
      "X": 897,
      "Y": 572
    },
    {
      "X": 505,
      "Y": 572
    }
  ],
  "Value": "497-881-123-123"
},
"RequestId": "11111-11111-11111-11111"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                   |
|--------------------------------------------------|-------------------------------|
| FailedOperation.DownloadError                    | File download failed.         |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.        |
| FailedOperation.OcrFailed                        | OCR failed.                   |
| FailedOperation.UnKnowError                      | Unknown error.                |
| FailedOperation.UnOpenError                      | The service is not activated. |
| InvalidParameter.EngineImageDecodeFailed         | Image decoding failed.        |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.    |
| LimitExceeded.TooLargeFileError                  | The file is too large.        |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.   |

# PhilippinesVoteIDOCR

Last updated : 2023-09-05 15:20:43

## 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to recognize a Philippine voters ID card. It can recognize fields such as first name, family name, date of birth, civil status, citizenship, address, precinct, and voter's identification number (VIN).

The API request rate is limited to 20 requests/sec by default.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name  | Required | Type    | Description                                                                                 |
|-----------------|----------|---------|---------------------------------------------------------------------------------------------|
| Action          | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: RecognizePhilippinesVoteIDOCR. |
| Version         | Yes      | String  | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                    |
| Region          | No       | String  | <a href="#">Common Params</a> . This parameter is not required for this API.                |
| ReturnHeadImage | Yes      | Boolean | Whether to return the identity photo.                                                       |

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageBase64    | No       | String | <p>The Base64-encoded value of an image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>Either the <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> will be used.</p>            |
| ImageUrl       | No       | String | <p>The URL of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>For a non-Tencent Cloud URL, the download speed and stability may be affected.</p> |

### 3. Output Parameters

| Parameter Name | Type                                | Description                              |
|----------------|-------------------------------------|------------------------------------------|
| HeadPortrait   | <a href="#">TextDetectionResult</a> | The Base64-encoded identity photo.       |
| VIN            | <a href="#">TextDetectionResult</a> | The voter's identification number (VIN). |
| FirstName      | <a href="#">TextDetectionResult</a> | The first name.                          |
| LastName       | <a href="#">TextDetectionResult</a> | The last name.                           |
| Birthday       | <a href="#">TextDetectionResult</a> | The date of birth.                       |
| CivilStatus    | <a href="#">TextDetectionResult</a> | The civil status.                        |
| Citizenship    | <a href="#">TextDetectionResult</a> | The citizenship.                         |
| Address        | <a href="#">TextDetectionResult</a> | The address.                             |

| Parameter Name | Type                                | Description                                                                                              |
|----------------|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| PrecinctNo     | <a href="#">TextDetectionResult</a> | The precinct.                                                                                            |
| RequestId      | String                              | The unique request ID, which is returned for each request. RequestId is required for locating a problem. |

## 4. Example

### Example1 Recognizing a Philippine voters ID card

This example shows you how to recognize a Philippine voters ID card.

#### Input Example

```
POST / HTTP/1.1
Host: ocr.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizePhilippinesVoteIDOCR
<Common request parameters>

{
  "ReturnHeadImage": "false",
  "ImageUrl": "https://xx/a.jpg"
}
```

#### Output Example

```
{
  "Response": {
    "Address": {
      "Polygon": [
        {
          "X": "276",
          "Y": "337"
        },
        {
          "X": "351",
          "Y": "337"
        },
        {
          "X": "351",
          "Y": "357"
        }
      ]
    }
  }
}
```

```
},
{
  "X": "276",
  "Y": "357"
},
],
"Value": " IPIL, ZAMBOANGA CITY"
},
"Birthdate": {
  "Polygon": [
    {
      "X": "406",
      "Y": "257"
    },
    {
      "X": "552",
      "Y": "257"
    },
    {
      "X": "552",
      "Y": "279"
    },
    {
      "X": "406",
      "Y": "279"
    }
  ],
  "Value": "March 13, 1985"
},
"Citizenship": {
  "Polygon": [
    {
      "X": "405",
      "Y": "311"
    },
    {
      "X": "492",
      "Y": "311"
    },
    {
      "X": "492",
      "Y": "331"
    },
    {
      "X": "404",
      "Y": "331"
    }
  ]
}
```

```
],
"Value": "Filipino"
},
"CivilStatus": {
  "Polygon": [
    {
      "X": "407",
      "Y": "285"
    },
    {
      "X": "485",
      "Y": "285"
    },
    {
      "X": "485",
      "Y": "304"
    },
    {
      "X": "407",
      "Y": "304"
    }
  ],
  "Value": "Single"
},
"FirstName": {
  "Polygon": [
    {
      "X": "276",
      "Y": "173"
    },
    {
      "X": "344",
      "Y": "173"
    },
    {
      "X": "344",
      "Y": "195"
    },
    {
      "X": "276",
      "Y": "195"
    }
  ],
  "Value": "ROYO"
},
"HeadPortrait": {
  "Polygon": [],
```

```
"Value": ""
},
"LastName": {
  "Polygon": [
    {
      "X": "276",
      "Y": "214"
    },
    {
      "X": "376",
      "Y": "213"
    },
    {
      "X": "376",
      "Y": "238"
    },
    {
      "X": "276",
      "Y": "239"
    }
  ],
  "Value": "TUDTUD"
},
"PrecinctNo": {
  "Polygon": [
    {
      "X": "459",
      "Y": "415"
    },
    {
      "X": "520",
      "Y": "415"
    },
    {
      "X": "520",
      "Y": "434"
    },
    {
      "X": "459",
      "Y": "434"
    }
  ],
  "Value": "0398B"
},
"RequestId": "1234-1234-1234-1234",
"VIN": {
  "Polygon": [
```



```
{
  "X": "253",
  "Y": "128"
},
{
  "X": "652",
  "Y": "128"
},
{
  "X": "652",
  "Y": "153"
},
{
  "X": "253",
  "Y": "153"
}
],
"value": "7502-0398B-G0987ANT10000"
}
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                   |
|--------------------------------------------------|-------------------------------|
| FailedOperation.DownloadError                    | File download failed.         |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.        |
| FailedOperation.OcrFailed                        | OCR failed.                   |
| FailedOperation.UnKnowError                      | Unknown error.                |
| FailedOperation.UnOpenError                      | The service is not activated. |
| InvalidParameter.EngineImageDecodeFailed         | Image decoding failed.        |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.    |
| LimitExceeded.TooLargeFileError                  | The file is too large.        |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.   |

# PhilippinesUMIDOCR

Last updated : 2023-09-05 15:22:27

## 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to recognize a Philippine Unified Multi-Purpose ID (UMID) card.

A maximum of 20 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: RecognizePhilippinesUMIDOCR.                                                                                                                                                                                                                                                                                                                           |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                            |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required for this API.                                                                                                                                                                                                                                                                                                                                        |
| ImageBase64    | No       | String | The Base64-encoded value of the image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.<br>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> is used. |

| Parameter Name  | Required | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------|----------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageUrl        | No       | String  | <p>The URL of the image.</p> <p>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.</p> <p>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.</p> <p>We recommend that you store the image in Tencent Cloud for higher download speed and stability.</p> <p>The download speed and stability of non-Tencent Cloud URLs may be low.</p> |
| ReturnHeadImage | No       | Boolean | Whether to return the identity photo.                                                                                                                                                                                                                                                                                                                                                                                                             |

### 3. Output Parameters

| Parameter Name | Type                                | Description                                                                                              |
|----------------|-------------------------------------|----------------------------------------------------------------------------------------------------------|
| Surname        | <a href="#">TextDetectionResult</a> | The surname.                                                                                             |
| MiddleName     | <a href="#">TextDetectionResult</a> | The middle name.                                                                                         |
| GivenName      | <a href="#">TextDetectionResult</a> | The given name.                                                                                          |
| Address        | <a href="#">TextDetectionResult</a> | The address.                                                                                             |
| Birthday       | <a href="#">TextDetectionResult</a> | The date of birth.                                                                                       |
| CRN            | <a href="#">TextDetectionResult</a> | The common reference number (CRN).                                                                       |
| Sex            | <a href="#">TextDetectionResult</a> | The gender.                                                                                              |
| HeadPortrait   | <a href="#">TextDetectionResult</a> | The Base64-encoded identity photo.                                                                       |
| RequestId      | String                              | The unique request ID, which is returned for each request. RequestId is required for locating a problem. |

### 4. Example

#### Example1 Recognizing a Philippine UMID card

This example shows you how to recognize a Philippine UMID card.

### Input Example

```
POST / HTTP/1.1
Host: ocr.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: RecognizePhilippinesUMIDOCR
<Common request parameters>

{
  "ImageBase64": "abc",
  "ImageUrl": "abc",
  "ReturnHeadImage": true
}
```

### Output Example

```
{
  "Response": {
    "Address": {
      "Polygon": [
        {
          "X": 29,
          "Y": 98
        },
        {
          "X": 67,
          "Y": 98
        },
        {
          "X": 67,
          "Y": 103
        },
        {
          "X": 24,
          "Y": 102
        }
      ],
      "Value": "19 MOLAVE ST. ROSA-ROSARIOH PHL 4023"
    },
    "Birthday": {
      "Polygon": [
        {
          "X": 41,
          "Y": 14
        }
      ]
    }
  }
}
```

```
},
{
  "X": 91,
  "Y": 14
},
{
  "X": 52,
  "Y": 98
},
{
  "X": 41,
  "Y": 98
}
],
"Value": "1996/06/20"
},
"CRN": {
  "Polygon": [
    {
      "X": 449,
      "Y": 73
    },
    {
      "X": 653,
      "Y": 73
    },
    {
      "X": 65,
      "Y": 754
    },
    {
      "X": 44,
      "Y": 754
    }
  ],
  "Value": "CRN-8884732-0"
},
"GivenName": {
  "Polygon": [
    {
      "X": 26,
      "Y": 81
    },
    {
      "X": 41,
      "Y": 83
    },
```

```
{
  "X": 41,
  "Y": 84
},
{
  "X": 26,
  "Y": 83
}
],
"Value": "ARMAINE"
},
"HeadPortrait": {
  "Polygon": [
    {
      "X": 16,
      "Y": 73
    },
    {
      "X": 23,
      "Y": 73
    },
    {
      "X": 23,
      "Y": 10
    },
    {
      "X": 1,
      "Y": 10
    }
  ],
  "Value": "/9j/4AAQSkZp6nI6XG5Dg+oFVdzf32/76oorpSV2Zn//2Q=="
},
"MiddleName": {
  "Polygon": [
    {
      "X": 29,
      "Y": 89
    },
    {
      "X": 39,
      "Y": 89
    },
    {
      "X": 39,
      "Y": 91
    },
    {
```

Page 208 of 268



```
"Value": "SINO"
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                               | Description                   |
|------------------------------------------|-------------------------------|
| FailedOperation.DownloadError            | File download failed.         |
| FailedOperation.ImageDecodeFailed        | Image decoding failed.        |
| FailedOperation.OcrFailed                | OCR failed.                   |
| FailedOperation.UnKnowError              | Unknown error.                |
| FailedOperation.UnOpenError              | The service is not activated. |
| InvalidParameter.EngineImageDecodeFailed | Image decoding failed.        |

| Error Code                                       | Description                 |
|--------------------------------------------------|-----------------------------|
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.  |
| LimitExceeded.TooLargeFileError                  | The file is too large.      |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status. |

# General Text OCR APIs

## GeneralBasicOCR

Last updated : 2023-03-21 17:37:44

### 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to detect and recognize characters in an image in the following 20 languages: Chinese, English, Japanese, Korean, Spanish, French, German, Portuguese, Vietnamese, Malay, Russian, Italian, Dutch, Swedish, Finnish, Danish, Norwegian, Hungarian, Thai, and Arabic. Mixed characters in English and each supported language can be recognized together.

It can recognize printed text in paper documents, online images, ads, signboards, menus, video titles, profile photos, etc.

Strengths: it can automatically recognize the text language, return the text box coordinate information, and automatically rotate tilted text to the upright direction.

This API is not fully available for the time being. For more information, please contact your [Tencent Cloud sales rep.](#)

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                   |
|----------------|----------|--------|-------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: GeneralBasicOCR. |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.      |

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------|----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required for this API.                                                                                                                                                                                                                                                                                                                                                                           |
| ImageBase64    | No       | String | Base64-encoded value of image/PDF.<br>The image/PDF cannot exceed 7 MB after being Base64-encoded. A resolution above 600x800 is recommended. PNG, JPG, JPEG, BMP, and PDF formats are supported.                                                                                                                                                                                                                                                      |
| ImageUrl       | No       | String | URL address of image/PDF. (This field is not supported outside Chinese mainland)<br>The image/PDF cannot exceed 7 MB after being Base64-encoded. A resolution above 600x800 is recommended. PNG, JPG, JPEG, BMP, and PDF formats are supported.<br>We recommend you store the image in Tencent Cloud, as a Tencent Cloud URL can guarantee higher download speed and stability. The download speed and stability of non-Tencent Cloud URLs may be low. |
| Scene          | No       | String | Reserved field.                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Parameter Name | Required | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------|----------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LanguageType   | No       | String  | <p>Language to recognize</p> <p>The language can be automatically recognized or manually specified. Chinese-English mix ( <code>zh</code> ) is selected by default. Mixed characters in English and each supported language can be recognized together.</p> <p>Valid values:</p> <ul style="list-style-type: none"> <li><code>zh</code> : Chinese-English mix</li> <li><code>zh_rare</code> : supports letters, digits, rare Chinese characters, Traditional Chinese characters, special characters, etc.</li> <li><code>auto</code></li> <li><code>mix</code> : language mix</li> <li><code>jap</code> : Japanese</li> <li><code>kor</code> : Korean</li> <li><code>spa</code> : Spanish</li> <li><code>fre</code> : French</li> <li><code>ger</code> : German</li> <li><code>por</code> : Portuguese</li> <li><code>vie</code> : Vietnamese</li> <li><code>may</code> : Malay</li> <li><code>rus</code> : Russian</li> <li><code>ita</code> : Italian</li> <li><code>hol</code> : Dutch</li> <li><code>swe</code> : Swedish</li> <li><code>fin</code> : Finnish</li> <li><code>dan</code> : Danish</li> <li><code>nor</code> : Norwegian</li> <li><code>hun</code> : Hungarian</li> <li><code>tha</code> : Thai</li> <li><code>hi</code> : Hindi</li> <li><code>ara</code> : Arabic</li> </ul> |
| IsPdf          | No       | Boolean | Whether to enable PDF recognition. Default value: false. After this feature is enabled, both images and PDF files can be recognized at the same time.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| PdfPageNumber  | No       | Integer | Page number of the PDF page that needs to be recognized. Only one single PDF page can be recognized. This parameter is valid if the uploaded file is a PDF and the value of the <code>IsPdf</code> parameter is <code>true</code> . Default value: 1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Parameter Name | Required | Type    | Description                                                                    |
|----------------|----------|---------|--------------------------------------------------------------------------------|
| IsWords        | No       | Boolean | Whether to return the character information. Default value: <code>false</code> |

### 3. Output Parameters

| Parameter Name | Type                                   | Description                                                                                                                                                                                                       |
|----------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TextDetections | Array of <a href="#">TextDetection</a> | Information of recognized text, including the text line content, confidence, text line coordinates, and text line coordinates after rotation correction. For more information, please click the link on the left. |
| Language       | String                                 | Detected language. For more information on the supported languages, please see the description of the <code>LanguageType</code> input parameter.                                                                  |
| Angel          | Float                                  | Image rotation angle in degrees. 0°: The horizontal direction of the text on the image; a positive value: rotate clockwise; a negative value: rotate counterclockwise.                                            |
| PdfPageSize    | Integer                                | Total number of PDF pages to be returned if the image is a PDF. Default value: 0.                                                                                                                                 |
| RequestId      | String                                 | The unique request ID, which is returned for each request. RequestId is required for locating a problem.                                                                                                          |

### 4. Example

#### Example1 Recognizing general print ([debugging tool](#))

This example shows you how to recognize characters in multiple scenarios in any layout.

#### Input Example

```
POST / HTTP/1.1
Host: ocr.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: GeneralBasicOCR
<Common request parameters>
```

```
{  
  "ImageUrl": "https://xx/a.jpg"  
}
```

## Output Example

```
{  
  "Angel": 359.989990234375,  
  "Language": "zh",  
  "PdfPageSize": 0,  
  "RequestId": "0d82dc94-2fc0-43ce-b4db-9a8450ba99e0",  
  "TextDetections": [  
    {  
      "AdvancedInfo": "{ \"Parag\": { \"ParagNo\": 1 } }",  
      "Confidence": 100,  
      "DetectedText": "\"Good friends, good books,\"",  
      "ItemPolygon": {  
        "Height": 27,  
        "Width": 305,  
        "X": 241,  
        "Y": 93  
      },  
      "Polygon": [  
        {  
          "X": 241,  
          "Y": 93  
        },  
        {  
          "X": 546,  
          "Y": 95  
        },  
        {  
          "X": 546,  
          "Y": 122  
        },  
        {  
          "X": 241,  
          "Y": 121  
        }  
      ],  
      "WordCoordPoint": [],  
      "Words": []  
    },  
    {  
      "AdvancedInfo": "{ \"Parag\": { \"ParagNo\": 1 } }",  
      "Confidence": 100,  
      "DetectedText": "\"Good friends, good books,\"",  
      "ItemPolygon": {  
        "Height": 27,  
        "Width": 305,  
        "X": 241,  
        "Y": 93  
      },  
      "Polygon": [  
        {  
          "X": 241,  
          "Y": 93  
        },  
        {  
          "X": 546,  
          "Y": 95  
        },  
        {  
          "X": 546,  
          "Y": 122  
        },  
        {  
          "X": 241,  
          "Y": 121  
        }  
      ],  
      "WordCoordPoint": [],  
      "Words": []  
    }  
  ]  
}
```

```
"DetectedText": "and a sleepy conscience:",
"ItemPolygon": {
  "Height": 29,
  "Width": 279,
  "X": 254,
  "Y": 123
},
"Polygon": [
  {
    "X": 254,
    "Y": 123
  },
  {
    "X": 533,
    "Y": 128
  },
  {
    "X": 533,
    "Y": 157
  },
  {
    "X": 254,
    "Y": 152
  }
],
"WordCoordPoint": [],
"Words": []
},
{
  "AdvancedInfo": "{\\"Parag\\":{\\"ParagNo\\":2}}",
  "Confidence": 100,
  "DetectedText": "this is the ideal life\\",
  "ItemPolygon": {
    "Height": 26,
    "Width": 218,
    "X": 286,
    "Y": 157
  },
  "Polygon": [
    {
      "X": 286,
      "Y": 157
    },
    {
      "X": 504,
      "Y": 157
    },
    {
      "X": 504,
      "Y": 157
    },
    {
      "X": 286,
      "Y": 157
    }
  ],
  "WordCoordPoint": [],
  "Words": []
}
```



```
{
  "X": 504,
  "Y": 183
},
{
  "X": 286,
  "Y": 183
}
],
"WordCoordPoint": [],
"Words": []
},
{
  "AdvancedInfo": "{\"Parag\":{\"ParagNo\":2}}",
  "Confidence": 100,
  "DetectedText": "- Mark Twain",
  "ItemPolygon": {
    "Height": 21,
    "Width": 120,
    "X": 334,
    "Y": 188
  },
  "Polygon": [
    {
      "X": 334,
      "Y": 188
    },
    {
      "X": 454,
      "Y": 188
    },
    {
      "X": 454,
      "Y": 209
    },
    {
      "X": 334,
      "Y": 209
    }
  ],
  "WordCoordPoint": [],
  "Words": []
}
]
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                             | Description                          |
|----------------------------------------|--------------------------------------|
| FailedOperation.DownloadError          | File download failed.                |
| FailedOperation.EmptyImageError        | The image is empty.                  |
| FailedOperation.EngineRecognizeTimeout | Recognition by the engine timed out. |
| FailedOperation.ImageDecodeFailed      | Image decoding failed.               |
| FailedOperation.ImageNoText            | No text is detected in the image.    |
| FailedOperation.LanguageNotSupport     | The input language is not supported. |
| FailedOperation.OcrFailed              | OCR failed.                          |
| FailedOperation.UnKnowError            | Unknown error.                       |
| FailedOperation.UnOpenError            | The service is not activated.        |

| Error Code                                       | Description                 |
|--------------------------------------------------|-----------------------------|
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.  |
| LimitExceeded.TooLargeFileError                  | The file is too large.      |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status. |

# GeneralAccurateOCR

Last updated : 2023-03-21 17:36:24

## 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to detect and recognize characters in an image. It can recognize Chinese, English, Chinese-English, digits, and special symbols and return the text box positions and characters.

It is suitable for scenarios with a lot of characters in complex layouts and requiring high recognition accuracy, such as examination papers, online images, signboards, and legal documents.

Strengths: compared with general print recognition, it provides higher-precision character recognition services. Its accuracy and recall rate are higher in difficult scenarios such as a large number of characters, long strings of digits, small characters, blurry characters, and tilted text.

This API is not fully available for the time being. For more information, please contact your [Tencent Cloud sales rep](#).

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

## 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                      |
|----------------|----------|--------|----------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: GeneralAccurateOCR. |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.         |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required for this API.     |

| Parameter Name    | Required | Type    | Description                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------|----------|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ImageBase64       | No       | String  | Base64-encoded value of image.<br>The image cannot exceed 7 MB in size after being Base64-encoded. A resolution above 600x800 is recommended. PNG, JPG, JPEG, and BMP formats are supported.<br>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided; if both are provided, only <code>ImageUrl</code> will be used.                                                                                    |
| ImageUrl          | No       | String  | URL address of image. (This field is not supported outside Chinese mainland)<br>The image cannot exceed 7 MB after being Base64-encoded. A resolution above 600x800 is recommended. PNG, JPG, JPEG, and BMP formats are supported.<br>We recommend you store the image in Tencent Cloud, as a Tencent Cloud URL can guarantee higher download speed and stability. The download speed and stability of non-Tencent Cloud URLs may be low. |
| IsWords           | No       | Boolean | Whether to return the character information. Default value: <code>false</code>                                                                                                                                                                                                                                                                                                                                                            |
| EnableDetectSplit | No       | Boolean | Whether to slice the input image to enhance the recognition effects for scenarios where the whole image is big, but the size of a single character is small (e.g., test papers). This feature is disabled by default.                                                                                                                                                                                                                     |
| IsPdf             | No       | Boolean | Whether to enable PDF recognition. Default value: <code>false</code> . If you enable this feature, both images and PDF files can be recognized.                                                                                                                                                                                                                                                                                           |
| PdfPageNumber     | No       | Integer | Number of a PDF page that needs to be recognized. Currently, only one single page can be recognized. This parameter takes effect only if a PDF file is uploaded and <code>IsPdf</code> is set to <code>true</code> . Default value: <code>1</code>                                                                                                                                                                                        |

### 3. Output Parameters

| Parameter Name | Type | Description |
|----------------|------|-------------|
|----------------|------|-------------|

| Parameter Name | Type                                   | Description                                                                                                                                                                                                       |
|----------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TextDetections | Array of <a href="#">TextDetection</a> | Information on recognized text, including the text line content, confidence, text line coordinates, and text line coordinates after rotation correction. For more information, please click the link on the left. |
| Angel          | Float                                  | Image rotation angle in degrees. 0°: The horizontal direction of the text on the image; a positive value: rotate clockwise; a negative value: rotate counterclockwise.                                            |
| RequestId      | String                                 | The unique request ID, which is returned for each request. RequestId is required for locating a problem.                                                                                                          |

## 4. Example

### Example1 Recognizing general print (high-precision) ([debugging tool](#))

This example shows you how to detect and recognize characters in an image as a whole, where the text box positions and characters are returned.

#### Input Example

```
POST / HTTP/1.1
Host: ocr.tencentcloudapi.com
Content-Type: application/json
X-TC-Action: GeneralAccurateOCR
<Common request parameters>

{
  "ImageUrl": "https://xx/a.jpg"
}
```

#### Output Example

```
{
  "Angel": 359.989990234375,
  "RequestId": "8c8f6a55-b2ef-42f2-864c-e50a83acc2ad",
  "TextDetections": [
    {
      "AdvancedInfo": "{\"Parag\":{\"ParagNo\":1}}",
      "Confidence": 99,
      "DetectedText": "\"Good friends, good books,\"",
      "ItemPolygon": {
```

```
"Height": 29,
"Width": 306,
"X": 242,
"Y": 95
},
"Polygon": [
{
"X": 242,
"Y": 95
},
{
"X": 547,
"Y": 95
},
{
"X": 547,
"Y": 123
},
{
"X": 242,
"Y": 123
}
],
"WordCoordPoint": [],
"Words": []
},
{
"AdvancedInfo": "{\"Parag\":{\"ParagNo\":1}}",
"Confidence": 99,
"DetectedText": "and a sleepy conscience:",
"ItemPolygon": {
"Height": 28,
"Width": 279,
"X": 254,
"Y": 128
},
"Polygon": [
{
"X": 254,
"Y": 128
},
{
"X": 532,
"Y": 128
},
{
"X": 532,
```

```
"Y": 155
},
{
  "X": 254,
  "Y": 155
}
],
"WordCoordPoint": [],
"Words": []
},
{
  "AdvancedInfo": "{\\"Parag\\":{\\"ParagNo\\":2}}",
  "Confidence": 99,
  "DetectedText": "this is the ideal life\\",
  "ItemPolygon": {
    "Height": 27,
    "Width": 219,
    "X": 287,
    "Y": 159
  },
  "Polygon": [
    {
      "X": 287,
      "Y": 159
    },
    {
      "X": 505,
      "Y": 159
    },
    {
      "X": 505,
      "Y": 185
    },
    {
      "X": 287,
      "Y": 185
    }
  ],
  "WordCoordPoint": [],
  "Words": []
},
{
  "AdvancedInfo": "{\\"Parag\\":{\\"ParagNo\\":2}}",
  "Confidence": 99,
  "DetectedText": "- Mark Twain",
  "ItemPolygon": {
    "Height": 23,
```



```
"Width": 125,  
"X": 331,  
"Y": 189  
,  
"Polygon": [  
  {  
    "X": 331,  
    "Y": 189  
  },  
  {  
    "X": 455,  
    "Y": 189  
  },  
  {  
    "X": 455,  
    "Y": 211  
  },  
  {  
    "X": 331,  
    "Y": 211  
  }  
,  
"WordCoordPoint": [],  
"Words": []  
}  
]  
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for NodeJS](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

## Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                                                                                      |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------|
| FailedOperation.DownloadError                    | File download failed.                                                                            |
| FailedOperation.EmptyImageError                  | The image is empty.                                                                              |
| FailedOperation.EngineRecognizeTimeout           | Recognition by the engine timed out.                                                             |
| FailedOperation.ImageBlur                        | The image is blurry.                                                                             |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                           |
| FailedOperation.ImageNoText                      | No text is detected in the image.                                                                |
| FailedOperation.ImageSizeTooLarge                | The image is too large. Please see the description of image size limit in the output parameters. |
| FailedOperation.OcrFailed                        | OCR failed.                                                                                      |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                   |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                    |
| InvalidParameter.EngineImageDecodeFailed         | Image decoding failed.                                                                           |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                       |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                                                           |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                      |

# Vehicle Scene OCR APIs

## VinOCR

Last updated : 2024-03-06 15:47:41

### 1. API Description

Domain name for API request: ocr.tencentcloudapi.com.

This API is used to recognize the vehicle identification number (VIN) in an image.

A maximum of 10 requests can be initiated per second for this API.

We recommend you to use API Explorer

[Try it](#)

API Explorer provides a range of capabilities, including online call, signature authentication, SDK code generation, and API quick search. It enables you to view the request, response, and auto-generated examples.

### 2. Input Parameters

The following request parameter list only provides API request parameters and some common parameters. For the complete common parameter list, see [Common Request Parameters](#).

| Parameter Name | Required | Type   | Description                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Action         | Yes      | String | <a href="#">Common Params</a> . The value used for this API: VinOCR.                                                                                                                                                                                                                                                                                                                                                |
| Version        | Yes      | String | <a href="#">Common Params</a> . The value used for this API: 2018-11-19.                                                                                                                                                                                                                                                                                                                                            |
| Region         | No       | String | <a href="#">Common Params</a> . This parameter is not required for this API.                                                                                                                                                                                                                                                                                                                                        |
| ImageBase64    | No       | String | The Base64-encoded value of the image.<br>Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.<br>Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s.<br>Either <code>ImageUrl</code> or <code>ImageBase64</code> of the image must be provided. If both are provided, only <code>ImageUrl</code> is used. |
| ImageUrl       | No       | String | The URL of the image.                                                                                                                                                                                                                                                                                                                                                                                               |

Supported image formats: PNG, JPG, and JPEG. GIF is currently not supported.

Supported image size: The downloaded image after Base64 encoding can be up to 7 MB. The download time of the image cannot exceed 3s. We recommend that you store the image in Tencent Cloud for higher download speed and stability.

The download speed and stability of non-Tencent Cloud URLs may be low.

### 3. Output Parameters

| Parameter Name | Type   | Description                                                                                                                                                                                                                             |
|----------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Vin            | String | The detected VIN.                                                                                                                                                                                                                       |
| RequestId      | String | The unique request ID, generated by the server, will be returned for every request (if the request fails to reach the server for other reasons, the request will not obtain a RequestId). RequestId is required for locating a problem. |

### 4. Example

#### Example1 Recognizing a VIN

##### Input Example

```
https://ocr.tencentcloudapi.com/?Action=VinOCR
&ImageUrl=https://xx/a.jpg
&<Common request parameters>
```

##### Output Example

```
{
  "Response": {
    "Vin": "LBV2B25G2E5069977",
    "RequestId": "c59d9002-6c8c-426d-b57f-a8837dee2c7c"
  }
}
```

## 5. Developer Resources

### SDK

TencentCloud API 3.0 integrates SDKs that support various programming languages to make it easier for you to call APIs.

- [Tencent Cloud SDK 3.0 for Python](#)
- [Tencent Cloud SDK 3.0 for Java](#)
- [Tencent Cloud SDK 3.0 for PHP](#)
- [Tencent Cloud SDK 3.0 for Go](#)
- [Tencent Cloud SDK 3.0 for Node.js](#)
- [Tencent Cloud SDK 3.0 for .NET](#)
- [Tencent Cloud SDK 3.0 for C++](#)

### Command Line Interface

- [Tencent Cloud CLI 3.0](#)

## 6. Error Code

The following only lists the error codes related to the API business logic. For other error codes, see [Common Error Codes](#).

| Error Code                                       | Description                   |
|--------------------------------------------------|-------------------------------|
| FailedOperation.DownloadError                    | File download failed.         |
| FailedOperation.EmptyImageError                  | The image is empty.           |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.        |
| FailedOperation.OcrFailed                        | OCR failed.                   |
| FailedOperation.UnKnowError                      | Unknown error.                |
| FailedOperation.UnOpenError                      | The service is not activated. |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.    |
| LimitExceeded.TooLargeFileError                  | The file is too large.        |
| ResourceUnavailable.InArrears                    |                               |
|                                                  |                               |

|                                           |                             |
|-------------------------------------------|-----------------------------|
| ResourceUnavailable.ResourcePackageRunOut |                             |
| ResourcesSoldOut.ChargeStatusException    | Exceptional billing status. |

# Data Types

Last updated : 2025-01-07 11:10:09

## AirTransport

Itinerary/Receipt of e-ticket for air transportation

Used by actions: RecognizeGeneralInvoice.

| Name               | Type   | Description                   |
|--------------------|--------|-------------------------------|
| Title              | String | Invoice title                 |
| Number             | String | E-ticket No.                  |
| CheckCode          | String | Check code                    |
| SerialNumber       | String | Serial number                 |
| Date               | String | Date of issue                 |
| AgentCode          | String | Agent code                    |
| AgentCodeFirst     | String | First line of the agent code  |
| AgentCodeSecond    | String | Second line of the agent code |
| UserName           | String | Name                          |
| UserID             | String | ID card number                |
| Issuer             | String | Issuer                        |
| Fare               | String | Fare                          |
| Tax                | String | Tax                           |
| FuelSurcharge      | String | Fuel surcharge                |
| AirDevelopmentFund | String | Aviation Development Fund     |
| Insurance          | String | Insurance                     |
| Total              | String | Total amount (in figures)     |
| Kind               | String | Invoice type                  |

|                          |                                     |                                            |
|--------------------------|-------------------------------------|--------------------------------------------|
| DomesticInternationalTag | String                              | Domestic or international tag              |
| DateStart                | String                              | Not-valid-before date                      |
| DateEnd                  | String                              | Not-valid-after date                       |
| Endorsement              | String                              | Endorsements/Restrictions                  |
| QRCodeMark               | Integer                             | Whether there is a QR code (0: No, 1: Yes) |
| FlightItems              | Array of <a href="#">FlightItem</a> | Items                                      |

## BusInvoice

Bus ticket

Used by actions: [RecognizeGeneralInvoice](#).

| Name          | Type    | Description                                |
|---------------|---------|--------------------------------------------|
| Title         | String  | Invoice title                              |
| QRCodeMark    | Integer | Whether there is a QR code (0: No, 1: Yes) |
| Number        | String  | Invoice number                             |
| Code          | String  | Invoice code                               |
| Date          | String  | Date of issue                              |
| TimeGetOn     | String  | Departure time                             |
| DateGetOn     | String  | Departure date                             |
| StationGetOn  | String  | Departure station                          |
| StationGetOff | String  | Destination                                |
| Total         | String  | Fare                                       |
| UserName      | String  | Name                                       |
| Kind          | String  | Consumption type                           |
| UserID        | String  | ID card number                             |
| Province      | String  | Province                                   |



|             |        |                 |
|-------------|--------|-----------------|
| City        | String | City            |
| PlaceGetOn  | String | Departure place |
| GateNumber  | String | Check-in gate   |
| TicketType  | String | Fare category   |
| VehicleType | String | Vehicle type    |
| SeatNumber  | String | Seat No.        |
| TrainNumber | String | Fleet number    |

## Coord

### Coordinates

Used by actions: GeneralAccurateOCR, GeneralBasicOCR, RecognizeGeneralInvoice, RecognizePhilippinesDrivingLicenseOCR, RecognizePhilippinesSssIDOCR, RecognizePhilippinesTinIDOCR, RecognizePhilippinesUMIDOCR, RecognizePhilippinesVoteIDOCR, RecognizeTableAccurateOCR, SmartStructuralOCRv2, SmartStructuralPro, TableOCR.

| Name | Type    | Description           |
|------|---------|-----------------------|
| X    | Integer | Horizontal coordinate |
| Y    | Integer | Vertical coordinate   |

## DetectedWordCoordPoint

Coordinates of a word's four corners in a clockwise order on the input image, starting from the upper-left corner

Used by actions: GeneralAccurateOCR, GeneralBasicOCR.

| Name           | Type                           | Description                                                                                                       |
|----------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| WordCoordinate | Array of <a href="#">Coord</a> | Coordinates of a word's four corners in a clockwise order on the input image, starting from the upper-left corner |

## DetectedWords

Information about a character detected, including the character itself and its confidence

Used by actions: GeneralAccurateOCR, GeneralBasicOCR.

| Name       | Type    | Description                    |
|------------|---------|--------------------------------|
| Confidence | Integer | Confidence. Value range: 0–100 |
| Character  | String  | A possible character           |

## FlightItem

Flight items

Used by actions: RecognizeGeneralInvoice.

| Name           | Type   | Description        |
|----------------|--------|--------------------|
| TerminalGetOn  | String | Departure terminal |
| TerminalGetOff | String | Arrival terminal   |
| Carrier        | String | Carrier            |
| FlightNumber   | String | Flight number      |
| Seat           | String | Class              |
| DateGetOn      | String | Departure date     |
| TimeGetOn      | String | Departure time     |
| StationGetOn   | String | Departure city     |
| StationGetOff  | String | Arrival city       |
| Allow          | String | Baggage allowance  |
| FareBasis      | String | Fare category      |

## GeneralMachineItem

Items of a general machine-printed invoice

Used by actions: RecognizeGeneralInvoice.

| Name          | Type   | Description   |
|---------------|--------|---------------|
| Name          | String | Item name     |
| Specification | String | Specification |
| Unit          | String | Unit          |
| Quantity      | String | Quantity      |
| Price         | String | Unit price    |
| Total         | String | Amount        |
| TaxRate       | String | Tax rate      |
| Tax           | String | Tax amount    |

## GroupInfo

The sequence number of an element group in the image

Used by actions: SmartStructuralOCRv2, SmartStructuralPro.

| Name   | Type                              | Description                |
|--------|-----------------------------------|----------------------------|
| Groups | Array of <a href="#">LineInfo</a> | The elements in each line. |

## InvoiceItem

Recognition information of a single invoice/ticket among multiple types of invoices/tickets

Used by actions: RecognizeGeneralInvoice.

| Name | Type   | Description                                                                                                                                                                                                                                                                                                                                              |
|------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Code | String | <p>The recognition result.</p> <p><code>OK</code> : Recognition is successful.</p> <p><code>FailedOperation.UnsupportedInvoice</code> : Recognition is not supported.</p> <p><code>FailedOperation.UnknowError</code> : Recognition failed.</p> <p>For the information about other error codes, see the OCR API description for each invoice/ticket.</p> |

|                    |                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type               | Integer           | The type of invoice/ticket to which the recognized image belongs.<br>-1: Unknown<br>0: Taxi receipt<br>1: Quota invoice<br>2: Train ticket<br>3: VAT invoice<br>5: Itinerary/Receipt of e-ticket for air transportation<br>8: General machine-printed invoice<br>9: Bus ticket<br>10: Ship ticket<br>11: VAT invoice (roll)<br>12: Car sales invoice<br>13: Toll receipt<br>15: Non-tax revenue invoice<br>16: Fully digitalized electronic invoice |
| Polygon            | Polygon           | The coordinates of the four vertices of the rotated image.                                                                                                                                                                                                                                                                                                                                                                                          |
| Angle              | Float             | The rotation angle of the recognized image in the image with multiple types of invoices/tickets.                                                                                                                                                                                                                                                                                                                                                    |
| SingleInvoiceInfos | SingleInvoiceItem | The recognized content.                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Page               | Integer           | The number of the page on which the recognized invoice is in the image or PDF file, starting from 1 by default.                                                                                                                                                                                                                                                                                                                                     |
| SubType            | String            | The detailed invoice type. See the description of <code>SubType</code> .                                                                                                                                                                                                                                                                                                                                                                            |
| TypeDescription    | String            | The invoice description. See the description of <code>TypeDescription</code> .                                                                                                                                                                                                                                                                                                                                                                      |
| CutImage           | String            | The image file after cropping, encoded in Base64. This is returned if <code>EnableCutImage</code> is set to <code>true</code> .                                                                                                                                                                                                                                                                                                                     |
| SubTypeDescription | String            | The description of the detailed invoice type. See the description of <code>SubType</code> .                                                                                                                                                                                                                                                                                                                                                         |

## ItemCoord

Pixel coordinates of the text line in the image after rotation correction, which is in the format of `(X-coordinate of top-left point, Y-coordinate of top-left point, width, height)` .

Used by actions: GeneralAccurateOCR, GeneralBasicOCR.

| Name | Type | Description |
|------|------|-------------|
|------|------|-------------|

|        |         |                                 |
|--------|---------|---------------------------------|
| X      | Integer | X-coordinate of top-left point. |
| Y      | Integer | Y-coordinate of top-left point. |
| Width  | Integer | Width                           |
| Height | Integer | Height                          |

## ItemInfo

Structured element group

Used by actions: SmartStructuralOCRv2, SmartStructuralPro.

| Name  | Type  | Description                                                                                                  |
|-------|-------|--------------------------------------------------------------------------------------------------------------|
| Key   | Key   | The key information.<br>Note: This field may return null, indicating that no valid values can be obtained.   |
| Value | Value | The value information.<br>Note: This field may return null, indicating that no valid values can be obtained. |

## Key

Key information

Used by actions: SmartStructuralOCRv2, SmartStructuralPro.

| Name       | Type   | Description                                                                                                                            |
|------------|--------|----------------------------------------------------------------------------------------------------------------------------------------|
| AutoName   | String | The name of the recognized field.                                                                                                      |
| ConfigName | String | The name of a defined field (the key passed in).<br>Note: This field may return null, indicating that no valid values can be obtained. |

## LicensePlateInfo

Vehicle license plate information

Used by actions: LicensePlateOCR.

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

| Name       | Type                 | Description                                                                                                                                      |
|------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Number     | String               | The recognized license plate number.                                                                                                             |
| Confidence | Integer              | The confidence score (0–100).                                                                                                                    |
| Rect       | <a href="#">Rect</a> | The bounding box coordinates of the text line in the original image.                                                                             |
| Color      | String               | The recognized license plate color, which currently includes "white", "black", "blue", "green", "yellow", "yellow-green", and "temporary plate". |

## LineInfo

Line number

Used by actions: SmartStructuralOCRV2, SmartStructuralPro.

| Name  | Type                              | Description            |
|-------|-----------------------------------|------------------------|
| Lines | Array of <a href="#">ItemInfo</a> | The elements in a line |

## MachinePrintedInvoice

General machine-printed invoice

Used by actions: RecognizeGeneralInvoice.

| Name       | Type    | Description                                |
|------------|---------|--------------------------------------------|
| Title      | String  | Invoice title                              |
| QRCodeMark | Integer | Whether there is a QR code (0: No, 1: Yes) |
| Code       | String  | Invoice code                               |
| Number     | String  | Invoice number                             |
| Date       | String  | Date of issue                              |
| Time       | String  | Time                                       |
| CheckCode  | String  | Check code                                 |
| Ciphertext | String  | Ciphertext                                 |
|            |         |                                            |

| Category          | String  | Category                                                                                                 |
|-------------------|---------|----------------------------------------------------------------------------------------------------------|
| PretaxAmount      | String  | Amount before tax                                                                                        |
| Total             | String  | Total amount (in figures)                                                                                |
| TotalCn           | String  | Total amount (in words)                                                                                  |
| Tax               | String  | Tax                                                                                                      |
| IndustryClass     | String  | Industry                                                                                                 |
| Seller            | String  | Seller's name                                                                                            |
| SellerTaxID       | String  | Seller's taxpayer identification number                                                                  |
| SellerAddrTel     | String  | Seller's address and phone number                                                                        |
| SellerBankAccount | String  | Seller's bank account number                                                                             |
| Buyer             | String  | Buyer's name                                                                                             |
| BuyerTaxID        | String  | Buyer's taxpayer identification number                                                                   |
| BuyerAddrTel      | String  | Buyer's address and phone number                                                                         |
| BuyerBankAccount  | String  | Buyer's bank account number                                                                              |
| Kind              | String  | Invoice type                                                                                             |
| Province          | String  | Province                                                                                                 |
| City              | String  | City                                                                                                     |
| CompanySealMark   | Integer | Whether there is a company seal (0: No, 1: Yes)                                                          |
| ElectronicMark    | Integer | Whether it is a general machine-printed invoice issued by Zhejiang or Guangdong province (0: No, 1: Yes) |
| Issuer            | String  | Issuer                                                                                                   |
| Receptor          | String  | Payee                                                                                                    |
| Reviewer          | String  | Reviewer                                                                                                 |
| Remark            | String  | Remarks                                                                                                  |
| PaymentInfo       | String  | Operator's payment information                                                                           |
| TicketPickupUser  | String  | Operator-assigned invoice pickup user                                                                    |

|                     |                                                |                            |
|---------------------|------------------------------------------------|----------------------------|
| MerchantNumber      | String                                         | Operator's merchant number |
| OrderNumber         | String                                         | Operator's order number    |
| GeneralMachineItems | Array of<br><a href="#">GeneralMachineItem</a> | Items                      |

## MedicalInvoice

Used by actions: RecognizeGeneralInvoice.

| Name      | Type   | Description |
|-----------|--------|-------------|
| Title     | String |             |
| Code      | String |             |
| Number    | String |             |
| Total     | String |             |
| TotalCn   | String |             |
| Date      | String |             |
| CheckCode | String |             |
| Place     | String |             |
| Reviewer  | String |             |

## MotorVehicleSaleInvoice

Motor vehicle sales invoice

Used by actions: RecognizeGeneralInvoice.

| Name   | Type   | Description    |
|--------|--------|----------------|
| Title  | String | Invoice title  |
| Code   | String | Invoice code   |
| Number | String | Invoice number |



|                    |        |                                        |
|--------------------|--------|----------------------------------------|
| Date               | String | Date of issue                          |
| PretaxAmount       | String | Amount before tax                      |
| Total              | String | Total amount (in figures)              |
| TotalCn            | String | Total amount (in words)                |
| Seller             | String | Seller's name                          |
| SellerTaxID        | String | Seller's company code                  |
| SellerTel          | String | Seller's phone number                  |
| SellerAddress      | String | Seller's address                       |
| SellerBank         | String | Seller's account opening bank          |
| SellerBankAccount  | String | Seller's bank account number           |
| Buyer              | String | Buyer's name                           |
| BuyerTaxID         | String | Buyer's taxpayer identification number |
| BuyerID            | String | Buyer's ID number/organization code    |
| TaxAuthorities     | String | Tax authority                          |
| TaxAuthoritiesCode | String | Code of the tax authority              |
| VIN                | String | VIN                                    |
| VehicleModel       | String | Vehicle model                          |
| VehicleEngineCode  | String | Engine No.                             |
| CertificateNumber  | String | No. of the certificate of conformity   |
| InspectionNumber   | String | Inspection No.                         |
| MachineID          | String | Machine No.                            |
| VehicleType        | String | Vehicle type                           |
| Kind               | String | Invoice type                           |
| Province           | String | Province                               |
| City               | String | City                                   |
|                    |        |                                        |

|                 |         |                                                 |
|-----------------|---------|-------------------------------------------------|
| Tax             | String  | Tax                                             |
| TaxRate         | String  | Tax rate                                        |
| CompanySealMark | Integer | Whether there is a company seal (0: No, 1: Yes) |
| Tonnage         | String  | Tonnage                                         |
| Remark          | String  | Remarks                                         |
| FormType        | String  | Form type                                       |
| FormName        | String  | Form name                                       |
| Issuer          | String  | Issuer                                          |
| TaxNum          | String  | Tax payment voucher number                      |
| MaxPeopleNum    | String  | Passenger capacity                              |
| Origin          | String  | Origin                                          |
| MachineCode     | String  | Machine-printed invoice code                    |
| MachineNumber   | String  | Machine-printed invoice number                  |
| QRCodeMark      | Integer | Whether there is a QR code (0: No, 1: Yes)      |

## NonTaxIncomeBill

Non-tax revenue

Used by actions: RecognizeGeneralInvoice.

| Name      | Type   | Description               |
|-----------|--------|---------------------------|
| Title     | String | Invoice title             |
| Number    | String | Invoice number            |
| Code      | String | Invoice code              |
| CheckCode | String | Check code                |
| Date      | String | Date of issue             |
| Total     | String | Total amount (in figures) |

|                 |                                     |                                            |
|-----------------|-------------------------------------|--------------------------------------------|
| TotalCn         | String                              | Total amount (in words)                    |
| Buyer           | String                              | Payer's name                               |
| BuyerTaxID      | String                              | Payer's taxpayer identification number     |
| Seller          | String                              | Payee's name                               |
| SellerCompany   | String                              | Payee's company name                       |
| Remark          | String                              | Remarks                                    |
| CurrencyCode    | String                              | Currency                                   |
| Reviewer        | String                              | Reviewer                                   |
| QRCodeMark      | Integer                             | Whether there is a QR code (0: No, 1: Yes) |
| OtherInfo       | String                              | Other information                          |
| PaymentCode     | String                              | Payment code                               |
| ReceiveUnitCode | String                              | Collecting organization's code             |
| Receiver        | String                              | Collecting organization's name             |
| Operator        | String                              | Operator                                   |
| PayerAccount    | String                              | Payer's account                            |
| PayerBank       | String                              | Payer's account opening bank               |
| ReceiverAccount | String                              | Payee's account                            |
| ReceiverBank    | String                              | Payee's account opening bank               |
| NonTaxItems     | Array of <a href="#">NonTaxItem</a> | Items                                      |

## NonTaxItem

Non-tax revenue items

Used by actions: RecognizeGeneralInvoice.

| Name   | Type   | Description |
|--------|--------|-------------|
| ItemID | String | Item code   |

|          |        |           |
|----------|--------|-----------|
| Name     | String | Item name |
| Unit     | String | Unit      |
| Quantity | String | Quantity  |
| Standard | String | Standard  |
| Total    | String | Amount    |

## OtherInvoice

Other invoices

Used by actions: RecognizeGeneralInvoice.

| Name                   | Type                                      | Description   |
|------------------------|-------------------------------------------|---------------|
| Title                  | String                                    | Invoice title |
| Total                  | String                                    | Amount        |
| OtherInvoiceListItems  | Array of <a href="#">OtherInvoiceItem</a> | List          |
| OtherInvoiceTableItems | Array of <a href="#">OtherInvoiceList</a> | Table         |

## OtherInvoiceItem

Items of other invoices

Used by actions: RecognizeGeneralInvoice.

| Name  | Type   | Description |
|-------|--------|-------------|
| Name  | String | Field name  |
| Value | String | Field value |

## OtherInvoiceList

Table of other invoices

Used by actions: RecognizeGeneralInvoice.

| Name                 | Type                                      | Description |
|----------------------|-------------------------------------------|-------------|
| OtherInvoiceItemList | Array of <a href="#">OtherInvoiceItem</a> | List        |

## PassportRecognizeInfos

Used by actions: MLIDPassportOCR.

| Name             | Type   | Description |
|------------------|--------|-------------|
| Type             | String |             |
| IssuingCountry   | String |             |
| PassportID       | String |             |
| Surname          | String |             |
| GivenName        | String |             |
| Name             | String |             |
| Nationality      | String |             |
| DateOfBirth      | String |             |
| Sex              | String |             |
| DateOfIssuance   | String |             |
| DateOfExpiration | String |             |
| Signature        | String |             |
| IssuePlace       | String |             |
| IssuingAuthority | String |             |

## Polygon

The coordinates of the four vertices of the text

Note: This field may return null, indicating that no valid values can be obtained.

Used by actions: RecognizeGeneralInvoice, SmartStructuralOCRv2, SmartStructuralPro.

| Name        | Type  | Description                                |
|-------------|-------|--------------------------------------------|
| LeftTop     | Coord | The coordinates of the upper-left vertex.  |
| RightTop    | Coord | The coordinates of the upper-right vertex. |
| RightBottom | Coord | The coordinates of the lower-left vertex.  |
| LeftBottom  | Coord | The coordinates of the lower-right vertex. |

## QuotaInvoice

Quota invoice

Used by actions: RecognizeGeneralInvoice.

| Name            | Type    | Description                                     |
|-----------------|---------|-------------------------------------------------|
| Title           | String  | Invoice title                                   |
| Code            | String  | Invoice code                                    |
| Number          | String  | Invoice number                                  |
| Total           | String  | Total amount (in figures)                       |
| TotalCn         | String  | Total amount (in words)                         |
| Kind            | String  | Invoice type                                    |
| Province        | String  | Province                                        |
| City            | String  | City                                            |
| QRCodeMark      | Integer | Whether there is a QR code (0: No, 1: Yes)      |
| CompanySealMark | Integer | Whether there is a company seal (0: No, 1: Yes) |

## Rect

Coordinates

Used by actions: LicensePlateOCR, SealOCR.

| Name   | Type    | Description                    |
|--------|---------|--------------------------------|
| X      | Integer | X-coordinate of top-left point |
| Y      | Integer | Y-coordinate of top-left point |
| Width  | Integer | Width                          |
| Height | Integer | Height                         |

## SealInfo

Seal information

Used by actions: SealOCR.

| Name       | Type                 | Description                                                                                   |
|------------|----------------------|-----------------------------------------------------------------------------------------------|
| SealBody   | String               | Seal body information                                                                         |
| Location   | <a href="#">Rect</a> | Seal coordinates                                                                              |
| OtherTexts | Array of String      | Other text content                                                                            |
| SealShape  | String               | Seal shape. Valid values:<br>0: Round<br>1: Oval<br>2: Rectangle<br>3: Diamond<br>4: Triangle |

## ShippingInvoice

Ship ticket

Used by actions: RecognizeGeneralInvoice.

| Name       | Type    | Description                                |
|------------|---------|--------------------------------------------|
| Title      | String  | Invoice title                              |
| QRCodeMark | Integer | Whether there is a QR code (0: No, 1: Yes) |

|               |        |                   |
|---------------|--------|-------------------|
| Code          | String | Invoice code      |
| Number        | String | Invoice number    |
| UserName      | String | Name              |
| Date          | String | Date              |
| Time          | String | Time              |
| StationGetOn  | String | Departure station |
| StationGetOff | String | Destination       |
| Total         | String | Fare              |
| Kind          | String | Invoice type      |
| Province      | String | Province          |
| City          | String | City              |
| CurrencyCode  | String | Currency          |

## SingleInvoiceItem

Content of a single invoice/ticket among multiple types of invoices/tickets

Used by actions: RecognizeGeneralInvoice.

| Name                        | Type                           | Description                                                                                                          |
|-----------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------|
| VatSpecialInvoice           | <a href="#">VatInvoiceInfo</a> | Special VAT invoice<br>Note: This field may return null, indicating that no valid values can be obtained.            |
| VatCommonInvoice            | <a href="#">VatInvoiceInfo</a> | General VAT invoice<br>Note: This field may return null, indicating that no valid values can be obtained.            |
| VatElectronicCommonInvoice  | <a href="#">VatInvoiceInfo</a> | Electronic general VAT invoice<br>Note: This field may return null, indicating that no valid values can be obtained. |
| VatElectronicSpecialInvoice | <a href="#">VatInvoiceInfo</a> | Electronic special VAT invoice<br>Note: This field may return null, indicating that                                  |



|                                 |                                         |                                                                                                                             |
|---------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
|                                 |                                         | no valid values can be obtained.                                                                                            |
| VatElectronicInvoiceBlockchain  | <a href="#">VatInvoiceInfo</a>          | Blockchain electronic invoice<br>Note: This field may return null, indicating that no valid values can be obtained.         |
| VatElectronicInvoiceToll        | <a href="#">VatInvoiceInfo</a>          | Electronic general VAT invoice (toll)<br>Note: This field may return null, indicating that no valid values can be obtained. |
| VatElectronicSpecialInvoiceFull | <a href="#">VatElectronicInfo</a>       | Electronic invoice (special)<br>Note: This field may return null, indicating that no valid values can be obtained.          |
| VatElectronicInvoiceFull        | <a href="#">VatElectronicInfo</a>       | Electronic invoice (general)<br>Note: This field may return null, indicating that no valid values can be obtained.          |
| MachinePrintedInvoice           | <a href="#">MachinePrintedInvoice</a>   | General machine-printed invoice<br>Note: This field may return null, indicating that no valid values can be obtained.       |
| BusInvoice                      | <a href="#">BusInvoice</a>              | Bus ticket<br>Note: This field may return null, indicating that no valid values can be obtained.                            |
| ShippingInvoice                 | <a href="#">ShippingInvoice</a>         | Ship ticket<br>Note: This field may return null, indicating that no valid values can be obtained.                           |
| TollInvoice                     | <a href="#">TollInvoice</a>             | Toll receipt<br>Note: This field may return null, indicating that no valid values can be obtained.                          |
| OtherInvoice                    | <a href="#">OtherInvoice</a>            | Other invoice<br>Note: This field may return null, indicating that no valid values can be obtained.                         |
| MotorVehicleSaleInvoice         | <a href="#">MotorVehicleSaleInvoice</a> | Motor vehicle sales invoice<br>Note: This field may return null, indicating that no valid values can be obtained.           |
| UsedCarPurchaseInvoice          | <a href="#">UsedCarPurchaseInvoice</a>  | Used car invoice<br>Note: This field may return null, indicating that no valid values can be obtained.                      |
| VatInvoiceRoll                  | <a href="#">VatInvoiceRoll</a>          | General VAT invoice (roll)<br>Note: This field may return null, indicating that                                             |

|                            |                                  |                                                                                                                                            |
|----------------------------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|                            |                                  | no valid values can be obtained.                                                                                                           |
| TaxiTicket                 | <a href="#">TaxiTicket</a>       | Taxi receipt<br>Note: This field may return null, indicating that no valid values can be obtained.                                         |
| QuotaInvoice               | <a href="#">QuotaInvoice</a>     | Quota invoice<br>Note: This field may return null, indicating that no valid values can be obtained.                                        |
| AirTransport               | <a href="#">AirTransport</a>     | Itinerary/Receipt of e-ticket for air transportation<br>Note: This field may return null, indicating that no valid values can be obtained. |
| NonTaxIncomeGeneralBill    | <a href="#">NonTaxIncomeBill</a> | Non-tax revenue general receipt<br>Note: This field may return null, indicating that no valid values can be obtained.                      |
| NonTaxIncomeElectronicBill | <a href="#">NonTaxIncomeBill</a> | Non-tax revenue unified payment voucher<br>Note: This field may return null, indicating that no valid values can be obtained.              |
| TrainTicket                | <a href="#">TrainTicket</a>      | Train ticket<br>Note: This field may return null, indicating that no valid values can be obtained.                                         |
| MedicalOutpatientInvoice   | <a href="#">MedicalInvoice</a>   |                                                                                                                                            |
| MedicalHospitalizedInvoice | <a href="#">MedicalInvoice</a>   |                                                                                                                                            |

## TableCellInfo

Cell data

Used by actions: RecognizeTableAccurateOCR.

| Name  | Type    | Description                                        |
|-------|---------|----------------------------------------------------|
| ColTl | Integer | Column index of the upper-left corner of the cell  |
| RowTl | Integer | Row index of the upper-left corner of the cell     |
| ColBr | Integer | Column index of the lower-right corner of the cell |
| RowBr | Integer | Row index of the lower-right corner of the cell    |

|            |                                |                                                                                                  |
|------------|--------------------------------|--------------------------------------------------------------------------------------------------|
| Text       | String                         | Recognized string text within the cell. If there are multiple lines, they are separated by "\n". |
| Type       | String                         | Cell type                                                                                        |
| Confidence | Float                          | Cell confidence                                                                                  |
| Polygon    | Array of <a href="#">Coord</a> | Four-point coordinates of the cell in the image                                                  |

## TableInfo

Recognized table information

Used by actions: [RecognizeTableAccurateOCR](#).

| Name            | Type                                   | Description                                                                                                                                                                                                             |
|-----------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cells           | Array of <a href="#">TableCellInfo</a> | Cell content<br>Note: This parameter may return null, indicating that no valid values can be obtained.                                                                                                                  |
| Type            | Integer                                | Type of text in the image. Valid values:<br>0: Non-table text<br>1: Text in a bordered table<br>2: Text in a borderless table<br>Note: This parameter may return null, indicating that no valid values can be obtained. |
| TableCoordPoint | Array of <a href="#">Coord</a>         | The coordinates of the four vertices (upper-left, upper-right, lower-right, and lower-left) of the table body.<br>Note: This field may return null, indicating that no valid values can be obtained.                    |

## TaxiTicket

Taxi receipt

Used by actions: [RecognizeGeneralInvoice](#).

| Name  | Type   | Description   |
|-------|--------|---------------|
| Title | String | Invoice title |

|                 |         |                                                 |
|-----------------|---------|-------------------------------------------------|
| QRCodeMark      | Integer | Whether there is a QR code (0: No, 1: Yes)      |
| Code            | String  | Invoice code                                    |
| Number          | String  | Invoice number                                  |
| Date            | String  | Date of issue                                   |
| TimeGetOn       | String  | Start time                                      |
| TimeGetOff      | String  | End time                                        |
| Price           | String  | Unit price                                      |
| Mileage         | String  | Distance                                        |
| Total           | String  | Total amount                                    |
| Place           | String  | Invoice place                                   |
| Province        | String  | Province                                        |
| City            | String  | City                                            |
| Kind            | String  | Invoice type                                    |
| LicensePlate    | String  | License plate number                            |
| FuelFee         | String  | Fuel surcharge                                  |
| BookingCallFee  | String  | Booking fee                                     |
| CompanySealMark | Integer | Whether there is a company seal (0: No, 1: Yes) |

## TextDetection

OCR result.

Used by actions: GeneralAccurateOCR, GeneralBasicOCR.

| Name         | Type                           | Description                                              |
|--------------|--------------------------------|----------------------------------------------------------|
| DetectedText | String                         | Recognized text line content.                            |
| Confidence   | Integer                        | Confidence. Value range: 0–100.                          |
| Polygon      | Array of <a href="#">Coord</a> | Text line coordinates, which are represented as 4 vertex |

|                |                                                 |                                                                                                                                                                                       |
|----------------|-------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                |                                                 | coordinates.<br>Note: this field may return null, indicating that no valid values can be obtained.                                                                                    |
| AdvancedInfo   | String                                          | Extended field.<br>The paragraph information <code>Parag</code> returned by the <code>GeneralBasicOcr</code> API contains <code>ParagNo</code> .                                      |
| ItemPolygon    | <a href="#">ItemCoord</a>                       | Pixel coordinates of the text line in the image after rotation correction, which is in the format of (X-coordinate of top-left point, Y-coordinate of top-left point, width, height). |
| Words          | Array of <a href="#">DetectedWords</a>          | Information about a character, including the character itself and its confidence. Supported APIs: <code>GeneralBasicOCR</code> , <code>GeneralAccurateOCR</code>                      |
| WordCoordPoint | Array of <a href="#">DetectedWordCoordPoint</a> | Coordinates of a word's four corners on the input image. Supported APIs: <code>GeneralBasicOCR</code> , <code>GeneralAccurateOCR</code>                                               |

## TextDetectionResult

Recognition result

Used by actions: `RecognizePhilippinesDrivingLicenseOCR`, `RecognizePhilippinesSssIDOCR`, `RecognizePhilippinesTinIDOCR`, `RecognizePhilippinesUMIDOCR`, `RecognizePhilippinesVoteIDOCR`.

| Name    | Type                           | Description                                                         |
|---------|--------------------------------|---------------------------------------------------------------------|
| Value   | String                         | The recognized text line content.                                   |
| Polygon | Array of <a href="#">Coord</a> | The coordinates, represented in the coordinates of the four points. |

## TextTable

Form recognition result.

Used by actions: `TableOCR`.

| Name  | Type    | Description                                      |
|-------|---------|--------------------------------------------------|
| ColTI | Integer | Column index of the top-left corner of the cell. |

|              |                                |                                                                       |
|--------------|--------------------------------|-----------------------------------------------------------------------|
| RowTl        | Integer                        | Row index of the top-left corner of the cell.                         |
| ColBr        | Integer                        | Column index of the bottom-right corner of the cell.                  |
| RowBr        | Integer                        | Row index of the bottom-right corner of the cell.                     |
| Text         | String                         | Cell text                                                             |
| Type         | String                         | Cell type. Valid values: body, header, footer                         |
| Confidence   | Integer                        | Confidence. Value range: 0-100                                        |
| Polygon      | Array of <a href="#">Coord</a> | Text line coordinates, which are represented as 4 vertex coordinates. |
| AdvancedInfo | String                         | Extended field                                                        |

## TollInvoice

Toll receipt

Used by actions: [RecognizeGeneralInvoice](#).

| Name        | Type    | Description                                |
|-------------|---------|--------------------------------------------|
| Title       | String  | Invoice title                              |
| Code        | String  | Invoice code                               |
| Number      | String  | Invoice number                             |
| Total       | String  | Total amount (in figures)                  |
| Kind        | String  | Invoice type                               |
| Date        | String  | Date                                       |
| Time        | String  | Time                                       |
| Entrance    | String  | Entrance                                   |
| Exit        | String  | Exit                                       |
| HighwayMark | Integer | Highway mark (0: No, 1: Yes)               |
| QRCodeMark  | Integer | Whether there is a QR code (0: No, 1: Yes) |

# TrainTicket

Train ticket

Used by actions: RecognizeGeneralInvoice.

| Name           | Type   | Description               |
|----------------|--------|---------------------------|
| Title          | String | Invoice title             |
| Number         | String | Invoice number            |
| DateGetOn      | String | Departure date            |
| TimeGetOn      | String | Departure time            |
| Name           | String | Passenger's name          |
| StationGetOn   | String | Departure station         |
| StationGetOff  | String | Destination               |
| Seat           | String | Seat class                |
| Total          | String | Total amount              |
| Kind           | String | Invoice type              |
| SerialNumber   | String | Serial number             |
| UserID         | String | ID card number            |
| GateNumber     | String | Check-in gate             |
| TrainNumber    | String | Fleet number              |
| HandlingFee    | String | Handling fee              |
| OriginalFare   | String | Original ticket price     |
| TotalCn        | String | Total amount (in words)   |
| SeatNumber     | String | Seat No.                  |
| PickUpAddress  | String | Ticket pickup address     |
| TicketChange   | String | Ticket change information |
| AdditionalFare | String | Additional fare           |

|                   |         |                                                      |
|-------------------|---------|------------------------------------------------------|
| ReceiptNumber     | String  | Receipt No.                                          |
| QRCodeMark        | Integer | Whether there is a QR code (0: No, 1: Yes)           |
| ReimburseOnlyMark | Integer | Whether it is for reimbursement only (0: No, 1: Yes) |

## UsedCarPurchaseInvoice

Used car sales invoice

Used by actions: RecognizeGeneralInvoice.

| Name          | Type    | Description                                   |
|---------------|---------|-----------------------------------------------|
| Title         | String  | Invoice title                                 |
| QRCodeMark    | Integer | Whether there is a QR code (0: No, 1: Yes)    |
| Code          | String  | Invoice code                                  |
| Number        | String  | Invoice number                                |
| Date          | String  | Date of issue                                 |
| Total         | String  | Total amount (in figures)                     |
| TotalCn       | String  | Total amount (in words)                       |
| Seller        | String  | Seller's name                                 |
| SellerTel     | String  | Seller's phone number                         |
| SellerTaxID   | String  | Seller's company code/personal ID card number |
| SellerAddress | String  | Seller's address                              |
| Buyer         | String  | Buyer's name                                  |
| BuyerID       | String  | Buyer's company code/personal ID card number  |
| BuyerAddress  | String  | Buyer's address                               |
| BuyerTel      | String  | Buyer's phone number                          |
| CompanyName   | String  | Company (used car market) name                |
| CompanyTaxID  | String  | Company's taxpayer identification number      |



|                            |         |                                                      |
|----------------------------|---------|------------------------------------------------------|
| CompanyBankAccount         | String  | Company's account opening bank and account number    |
| CompanyTel                 | String  | Company's phone number                               |
| CompanyAddress             | String  | Company's address                                    |
| TransferAdministrationName | String  | Name of the transfer-to department of motor vehicles |
| LicensePlate               | String  | License plate number                                 |
| RegistrationNumber         | String  | Registration certificate No.                         |
| VIN                        | String  | VIN                                                  |
| VehicleModel               | String  | Vehicle model                                        |
| Kind                       | String  | Invoice type                                         |
| Province                   | String  | Province                                             |
| City                       | String  | City                                                 |
| VehicleType                | String  | Vehicle type                                         |
| Remark                     | String  | Remarks                                              |
| FormType                   | String  | Form type                                            |
| FormName                   | String  | Form name                                            |
| CompanySealMark            | Integer | Whether there is a company seal (0: No, 1: Yes)      |

## Value

Value information

Used by actions: SmartStructuralOCRv2, SmartStructuralPro.

| Name        | Type    | Description                                                                                                                 |
|-------------|---------|-----------------------------------------------------------------------------------------------------------------------------|
| AutoContent | String  | The value of the recognized field.                                                                                          |
| Coord       | Polygon | The coordinates of the four vertices.<br>Note: This field may return null, indicating that no valid values can be obtained. |

## VatElectronicInfo

Return values for an electronic invoice

Used by actions: RecognizeGeneralInvoice.

| Name               | Type                                           | Description                             |
|--------------------|------------------------------------------------|-----------------------------------------|
| Title              | String                                         | Invoice title                           |
| Number             | String                                         | Invoice number                          |
| Date               | String                                         | Date of issue                           |
| PretaxAmount       | String                                         | Amount before tax                       |
| Tax                | String                                         | Tax                                     |
| Total              | String                                         | Total amount (in figures)               |
| TotalCn            | String                                         | Total amount (in words)                 |
| Seller             | String                                         | Seller's name                           |
| SellerTaxID        | String                                         | Seller's taxpayer identification number |
| Buyer              | String                                         | Buyer's name                            |
| BuyerTaxID         | String                                         | Buyer's taxpayer identification number  |
| Issuer             | String                                         | Issuer                                  |
| Remark             | String                                         | Remarks                                 |
| SubTotal           | String                                         | Subtotal amount                         |
| SubTax             | String                                         | Subtotal tax                            |
| VatElectronicItems | Array of <a href="#">VatElectronicItemInfo</a> | Detailed items of an electronic invoice |

## VatElectronicItemInfo

Detailed items of an electronic invoice

Used by actions: RecognizeGeneralInvoice.

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

| Name                   | Type   | Description                                                                                                                    |
|------------------------|--------|--------------------------------------------------------------------------------------------------------------------------------|
| Name                   | String | Item name                                                                                                                      |
| Quantity               | String | Quantity                                                                                                                       |
| Specification          | String | Specification                                                                                                                  |
| Price                  | String | Unit price                                                                                                                     |
| Total                  | String | Amount                                                                                                                         |
| TaxRate                | String | Tax rate                                                                                                                       |
| Tax                    | String | Tax amount                                                                                                                     |
| Unit                   | String | Unit                                                                                                                           |
| VehicleType            | String | Vehicle type                                                                                                                   |
| VehicleBrand           | String | Vehicle No.                                                                                                                    |
| DeparturePlace         | String | Departure place                                                                                                                |
| ArrivalPlace           | String | Destination                                                                                                                    |
| TransportItemsName     | String | Name of the transported goods. It is returned only for a goods transport service invoice.                                      |
| PlaceOfBuildingService | String | Location of the construction service. It is returned only for a construction invoice.                                          |
| BuildingName           | String | Name of the construction project. It is returned only for a construction invoice.                                              |
| EstateNumber           | String | Property or real estate ownership certificate No. It is returned only for a real estate operation and leasing service invoice. |
| AreaUnit               | String | Unit of area. It is returned only for a real estate operation and leasing service invoice.                                     |

## VatInvoiceInfo

Return values for a VAT invoice

Used by actions: RecognizeGeneralInvoice.

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

| Name               | Type    | Description                                  |
|--------------------|---------|----------------------------------------------|
| CheckCode          | String  | Check code                                   |
| FormType           | String  | Form type                                    |
| TravelTax          | String  | Vehicle and vessel tax                       |
| BuyerAddrTel       | String  | Buyer's address and phone number             |
| BuyerBankAccount   | String  | Buyer's bank account number                  |
| CompanySealContent | String  | Company seal content                         |
| TaxSealContent     | String  | Tax authority seal content                   |
| ServiceName        | String  | Service type                                 |
| City               | String  | City                                         |
| QRCodeMark         | Integer | Whether there is a QR code (0: No, 1: Yes)   |
| AgentMark          | Integer | Whether there is an agent (0: No, 1: Yes)    |
| TransitMark        | Integer | Whether there is a toll (0: No, 1: Yes)      |
| OilMark            | Integer | Whether there is refined oil (0: No, 1: Yes) |
| Title              | String  | Invoice title                                |
| Kind               | String  | Invoice type                                 |
| Code               | String  | Invoice code                                 |
| Number             | String  | Invoice number                               |
| NumberConfirm      | String  | Machine-printed invoice number               |
| Date               | String  | Date of issue                                |
| Total              | String  | Total amount (in figures)                    |
| TotalCn            | String  | Total amount (in words)                      |
| PretaxAmount       | String  | Amount before tax                            |
| Tax                | String  | Tax                                          |
| MachineCode        | String  | Machine No.                                  |
|                    |         |                                              |

|                      |                                             |                                                 |
|----------------------|---------------------------------------------|-------------------------------------------------|
| Ciphertext           | String                                      | Ciphertext                                      |
| Remark               | String                                      | Remarks                                         |
| Seller               | String                                      | Seller's name                                   |
| SellerTaxID          | String                                      | Seller's taxpayer identification number         |
| SellerAddrTel        | String                                      | Seller's address and phone number               |
| SellerBankAccount    | String                                      | Seller's bank account number                    |
| Buyer                | String                                      | Buyer's name                                    |
| BuyerTaxID           | String                                      | Buyer's taxpayer identification number          |
| CompanySealMark      | Integer                                     | Whether there is a company seal (0: No, 1: Yes) |
| Issuer               | String                                      | Issuer                                          |
| Reviewer             | String                                      | Reviewer                                        |
| Province             | String                                      | Province                                        |
| VatInvoiceItemInfos  | Array of <a href="#">VatInvoiceItemInfo</a> | Information about VAT invoice items             |
| CodeConfirm          | String                                      | Machine-printed invoice code                    |
| Receptor             | String                                      | Payee                                           |
| ElectronicFullMark   | Integer                                     |                                                 |
| ElectronicFullNumber | String                                      |                                                 |
| FormName             | String                                      |                                                 |

## VatInvoiceItemInfo

Information about VAT invoice items

Used by actions: RecognizeGeneralInvoice.

| Name          | Type   | Description   |
|---------------|--------|---------------|
| Name          | String | Item name     |
| Specification | String | Specification |

|              |        |                      |
|--------------|--------|----------------------|
| Unit         | String | Unit                 |
| Quantity     | String | Quantity             |
| Price        | String | Unit price           |
| Total        | String | Amount               |
| TaxRate      | String | Tax rate             |
| Tax          | String | Tax amount           |
| DateStart    | String | Start date           |
| DateEnd      | String | End date             |
| LicensePlate | String | License plate number |
| VehicleType  | String | Vehicle type         |

## VatInvoiceRoll

General VAT invoice (roll)

Used by actions: RecognizeGeneralInvoice.

| Name          | Type   | Description                             |
|---------------|--------|-----------------------------------------|
| Title         | String | Invoice title                           |
| Code          | String | Invoice code                            |
| Number        | String | Invoice number                          |
| NumberConfirm | String | Machine-printed invoice number          |
| Date          | String | Date of issue                           |
| CheckCode     | String | Check code                              |
| Seller        | String | Seller's name                           |
| SellerTaxID   | String | Seller's taxpayer identification number |
| Buyer         | String | Buyer's name                            |
| BuyerTaxID    | String | Buyer's taxpayer identification number  |

|                    |                                      |                                                 |
|--------------------|--------------------------------------|-------------------------------------------------|
| Category           | String                               | Category                                        |
| Total              | String                               | Total amount (in figures)                       |
| TotalCn            | String                               | Total amount (in words)                         |
| Kind               | String                               | Invoice type                                    |
| Province           | String                               | Province                                        |
| City               | String                               | City                                            |
| CompanySealMark    | Integer                              | Whether there is a company seal (0: No, 1: Yes) |
| QRCodeMark         | Integer                              | Whether there is a QR code (0: No, 1: Yes)      |
| ServiceName        | String                               | Service type                                    |
| CompanySealContent | String                               | Company seal content                            |
| TaxSealContent     | String                               | Tax authority seal content                      |
| VatRollItems       | Array of <a href="#">VatRollItem</a> | Items                                           |

## VatRollItem

Items of a general VAT invoice (roll)

Used by actions: RecognizeGeneralInvoice.

| Name     | Type   | Description |
|----------|--------|-------------|
| Name     | String | Item name   |
| Quantity | String | Quantity    |
| Price    | String | Unit price  |
| Total    | String | Amount      |

## WordItem

The recognized text information.

Used by actions: SmartStructuralOCRV2, SmartStructuralPro.

| Name         | Type    | Description                           |
|--------------|---------|---------------------------------------|
| DetectedText | String  | The text content.                     |
| Coord        | Polygon | The coordinates of the four vertices. |



# Error Codes

Last updated : 2025-03-26 14:50:04

## Feature Description

If there is an Error field in the response, it means that the API call failed. For example:

```
{
  "Response": {
    "Error": {
      "Code": "AuthFailure.SignatureFailure",
      "Message": "The provided credentials could not be validated. Please check your signature is correct."
    },
    "RequestId": "ed93f3cb-f35e-473f-b9f3-0d451b8b79c6"
  }
}
```

Code in Error indicates the error code, and Message indicates the specific information of the error.

## Error Code List

### Common Error Codes

| Error Code                       | Description                                                                                                                                                                                          |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| ActionOffline                    | This API has been deprecated.                                                                                                                                                                        |
| AuthFailure.InvalidAuthorization | Authorization in the request header is invalid.                                                                                                                                                      |
| AuthFailure.InvalidSecretId      | Invalid key (not a TencentCloud API key type).                                                                                                                                                       |
| AuthFailure.MFAFailure           | MFA failed.                                                                                                                                                                                          |
| AuthFailure.SecretIdNotFound     | Key does not exist. Check if the key has been deleted or disabled in the console, and if not, check if the key is correctly entered. Note that whitespaces should not exist before or after the key. |
| AuthFailure.SignatureExpire      | Signature expired. Timestamp and server time cannot differ by more than five minutes. Please                                                                                                         |

|                                                   |                                                                                                                                                               |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                   | ensure your current local time matches the standard time.                                                                                                     |
| AuthFailure.SignatureFailure                      | Invalid signature. Signature calculation error. Please ensure you've followed the signature calculation process described in the Signature API documentation. |
| AuthFailure.TokenFailure                          | Token error.                                                                                                                                                  |
| AuthFailure.UnauthorizedOperation                 | The request is not authorized. For more information, see the <a href="#">CAM</a> documentation.                                                               |
| DryRunOperation                                   | DryRun Operation. It means that the request would have succeeded, but the DryRun parameter was used.                                                          |
| FailedOperation                                   | Operation failed.                                                                                                                                             |
| InternalServerError                               | Internal error.                                                                                                                                               |
| InvalidAction                                     | The API does not exist.                                                                                                                                       |
| InvalidParameter                                  | Incorrect parameter.                                                                                                                                          |
| InvalidParameterValue                             | Invalid parameter value.                                                                                                                                      |
| InvalidRequest                                    | The multipart format of the request body is incorrect.                                                                                                        |
| IpInBlacklist                                     | Your IP is in uin IP blacklist.                                                                                                                               |
| IpNotInWhitelist                                  | Your IP is not in uin IP whitelist.                                                                                                                           |
| LimitExceeded                                     | Quota limit exceeded.                                                                                                                                         |
| MissingParameter                                  | A parameter is missing.                                                                                                                                       |
| NoSuchProduct                                     | The product does not exist.                                                                                                                                   |
| NoSuchVersion                                     | The API version does not exist.                                                                                                                               |
| RequestLimitExceeded                              | The number of requests exceeds the frequency limit.                                                                                                           |
| RequestLimitExceeded.GlobalRegionUinLimitExceeded | Uin exceeds the frequency limit.                                                                                                                              |
| RequestLimitExceeded.IPLimitExceeded              | The number of ip requests exceeds the frequency limit.                                                                                                        |
| RequestLimitExceeded.UinLimitExceeded             | The number of uin requests exceeds the frequency                                                                                                              |

|                           |                                                                           |
|---------------------------|---------------------------------------------------------------------------|
|                           | limit.                                                                    |
| RequestSizeLimitExceeded  | The request size exceeds the upper limit.                                 |
| ResourceInUse             | Resource is in use.                                                       |
| ResourceInsufficient      | Insufficient resource.                                                    |
| ResourceNotFound          | The resource does not exist.                                              |
| ResourceUnavailable       | Resource is unavailable.                                                  |
| ResponseSizeLimitExceeded | The response size exceeds the upper limit.                                |
| ServiceUnavailable        | Service is unavailable now.                                               |
| UnauthorizedOperation     | Unauthorized operation.                                                   |
| UnknownParameter          | Unknown parameter.                                                        |
| UnsupportedOperation      | Unsupported operation.                                                    |
| UnsupportedProtocol       | HTTP(S) request protocol error; only GET and POST requests are supported. |
| UnsupportedRegion         | API does not support the requested region.                                |

## Service Error Codes

| Error Code                             | Description                                                                                        |
|----------------------------------------|----------------------------------------------------------------------------------------------------|
| FailedOperation.CardSideError          | The CardSide type of the ID card is incorrect.                                                     |
| FailedOperation.DownLoadError          | File download failed.                                                                              |
| FailedOperation.EmptyImageError        | The image is empty.                                                                                |
| FailedOperation.EngineRecognizeTimeout | Recognition by the engine timed out.                                                               |
| FailedOperation.FieldException         |                                                                                                    |
| FailedOperation.IdCardInfoIllegal      | The ID card information (ID number, name, etc.) is invalid.                                        |
| FailedOperation.IdCardTooSmall         | The resolution of the image is too low or the proportion of the ID card in the image is too small. |
| FailedOperation.IllegalBankCardError   | Invalid bank card information.                                                                     |

|                                                  |                                                                                                          |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------|
| FailedOperation.ImageBlur                        | The image is blurry.                                                                                     |
| FailedOperation.ImageDecodeFailed                | Image decoding failed.                                                                                   |
| FailedOperation.ImageNoIdCard                    | No ID card is detected in the image.                                                                     |
| FailedOperation.ImageNoSpecifiedCard             | The card in the image is not of the specified type.                                                      |
| FailedOperation.ImageNoText                      | No text is detected in the image.                                                                        |
| FailedOperation.ImageSizeTooLarge                | The image is too large. Please see the description of image size limit in the output parameters.         |
| FailedOperation.InconsistencyBetweenMRZAndVRZ    |                                                                                                          |
| FailedOperation.LanguageNotSupport               | The input language is not supported.                                                                     |
| FailedOperation.MultiCardError                   | There are multiple cards in the photo.                                                                   |
| FailedOperation.NoBankCardError                  | No bank card found.                                                                                      |
| FailedOperation.NoHKIDCard                       | Not a Hong Kong identity card.                                                                           |
| FailedOperation.NoMASIDCard                      | Non-Malaysian ID cards.                                                                                  |
| FailedOperation.NoPassport                       | Not a passport.                                                                                          |
| FailedOperation.OcrFailed                        | OCR failed. This error may be caused by unstable network connections, service anomalies or other issues. |
| FailedOperation.UnKnowError                      | Unknown error.                                                                                           |
| FailedOperation.UnOpenError                      | The service is not activated.                                                                            |
| FailedOperation.WarningServiceFailed             | Warning service error.                                                                                   |
| InvalidParameter.ConfigFormatError               | Config is not in valid JSON format.                                                                      |
| InvalidParameter.EngineImageDecodeFailed         | Image decoding failed.                                                                                   |
| InvalidParameterValue.InvalidParameterValueLimit | Incorrect parameter value.                                                                               |
| LimitExceeded.TooLargeFileError                  | The file is too large.                                                                                   |
| ResourceUnavailable.InArrears                    | The account is in arrears.                                                                               |
| ResourceUnavailable.ResourcePackageRunOut        | The account resource package is exhausted.                                                               |
| ResourcesSoldOut.ChargeStatusException           | Exceptional billing status.                                                                              |