

# Face Fusion Quick Start Product Documentation





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# Quick Start Quick Start Guide

Last updated : 2024-11-07 16:25:43

### Registering an Account

Any user who wants to use Tencent Cloud services needs to register for a Tencent Cloud account first. Click here to go to the Tencent Cloud Registration Page. For details, refer to Register a Tencent Cloud Account.

### Activating the Service

Log in to the Face Fusion Console and click Activate Now to obtain API call permissions.

### **Managing Materials**

In the Face Fusion Console, click the left menu bar to enter the **Material Management** interface. Click **Create Activity**, follow the instructions to complete the creation, then enter the **Material Management** page, click **Add Material** to upload local material images.

Any use of materials involving copyright require proof of authorisation to use such materials. You can click here to download the Face Fusion Copyright Certification Template.

### Testing the Effect

After material processing is completed, you can experience the face fusion effect of the material in **Console** > **Material Management** > **Test Result**.

### Calling API

Face Fusion provides a free quota to help you easily trial the product.

You can fulfill business development needs through API calls.

To reduce the difficulty of using Tencent Cloud API, we recommend using API Explorer for online calls, signature verification, and SDK code generation.

### Purchasing the Service

### **Billing Mode**

#### Choose call volume billing or QPS billing.

If you choose call volume billing, you can use either prepaid or pay-as-you-go methods. If you use prepaid, Face Fusion provides resource packages of different specifications. You can go to Purchase Page to select. After the resource package is exhausted or expires, it will automatically switch to pay-as-you-go billing for settlement. If you use pay-as-you-go billing directly, there's no need to purchase separately. The system will calculate the total API calls of the previous month and automatically complete the billing and deduction from the 1st to the 3rd of each month. If you select QPS billing, Face Fusion supports purchasing QPS daily or monthly. You can go to Purchase Page to select.

### **Material Quota**

After activating the Face Fusion service, the system will automatically grant a free material quota. If you need more material quota, go to Purchase Page to select.

## **Explanation of Material Quota**

Last updated : 2024-09-29 20:05:57

### Material

Material refers to the Face Fusion template images designed by yourself. The images generated using the Face Fusion service will maintain the attributes of the characters in the template images, such as posture, expression, and actions. It is recommended to design materials around user usage and sharing scenarios, adhering to the principles of being attractive, interesting, or useful.

You can create and manage materials in the activity of Face Fusion Console. One material ID corresponds to one material, occupying one material quota. If the same template image is uploaded in multiple activities, multiple material IDs will be generated.

### Material Quota

Material quota refers to the total limit on the number of materials you can create and use. After activating the Face Fusion service, the system will automatically grant 10 free material quotas. If the material quota does not meet your needs, you can choose to delete some materials to free up space. If there are no materials which can be deleted, we recommend purchasing material quotas as needed in Purchase Page.

### Activity

Activities are used for the classified management of materials and can be created in the Face Fusion Console.

# **API Access Guide**

Last updated : 2024-10-16 11:47:57

### Prerequisites

### Prerequisites for Using the Official Website Account

1. First, use your Tencent Cloud International site account to Sign in.

Sign in with email
Email
Password
Sign in
Sign up   Forgot password   CAM user sign in Or
G Sign in with Google

2. Go to the API Key Management page to obtain the key information.

Tencent Cloud	Overview Products - +												
Cloud Access Management	API Key Management												
Dashboard	O Safeby Warning												
Users ×	Your API key represents your account identity and permissions. You can operate all the Tencent Cloud resources under your account with TencentCloud API.												
User Groups	• For your property and service security, please keep the key properly and change it regularly. Please do not upload or share your key information by any means (such as GitHub). For .												
Policies	. <ul> <li>Using lower-version TLS to call TencentCloud APIs poses security risks. You're advised to use TLS v1.2 or above.</li> </ul>												
Roles													
Identity Providers *	() Usage Notes												
Access Key ^	<ul> <li>*Last access time" refers to the last time the key was used to call TencentCloud API 3.0 APIs. It simply indicates if the key has been actively used recently and is thus used to call</li> </ul>												
API Keys	• From November 30, 2023, the SecretKey query for all accounts will be disabled to prevent key leaks. SecretKeys will only be visible at creation, please save them in a safe place now												
	Create Key												
	APPID Key Remarks Creation Time												
	2024-09-27 18:03:56												

3. If you use the sub-account key of Tencent Cloud International Site to call the API, the root account needs to authorize the sub-account. If you use the root account key, ignore this step.

4. Go to the User List page, select the corresponding product name, and click Authorize.

5. On the policy selection page, select the authorization policy **QcloudFaceFusionFullAccess**, and click **OK**.

#### **Description:**

If the sub-account is not authorized to call the API, the message You are not authorized to perform this operation. Check your CAM policies, and ensure that you are using the correct access keys will be prompted during the call.

Tencent Cloud	Overview Products > +
Cloud Access Management	User List
Dashboard	
Users ^	CAN contracts the security of your sensitive information. You can alick the dron, down button (b) on the left side of the list to view more information shout the user such as identify security shows
User List	Associate Policy
User Settings	Select Policies (1 Total) 1 selected
User Groups	QcloudFaceFusionFullAccess
Policies	Policy Name Policy Type Y QcloudFaceFusionFullAccess
Roles	QcloudFaceFusionFullAccess QcloudFaceFusionFullAccess QcloudFaceFusionFullAccess
Identity Providers *	
Access Key 🛛 👻	
	Support for holding shift key down for multiple selection OK Cancel
=	

6. Go to the Face Fusion console to enable the service.

#### **Description:**

If the service is not enabled, the message The billing status is unknown. Check whether the service has been activated in the console will be prompted during the API call.

#### **Prerequisites for API Access**

#### **Description:**

Due to the overseas access, the request duration might be higher than in China, mainly because the download of overseas images from URLs times out or the transmission of the large package that contains images to be transmitted in Base64 format is time-consuming.

1. Use the request domain name facefusion.tencentcloudapi.com for nearby parsing.

2. Suggestions for input information containing images:

Use the Tencent COS address as the URL.

Using the Tencent COS address: Images are downloaded through the private network from Tencent services, which can reduce download time.

Using the CDN address: CDN addresses may involve origin-pull, which may cause a timeout and failure in the first download attempt. In this case, you can retry the request.

If the input parameter is an image, it is recommended to transmit Base64-encoded data to reduce download time. 3. Output image:

If the request is not initiated by the client (App or HTML5), during the request, the client IP address is passed in through the X-Forwarded-For field in the HTTP header. In this case, Tencent Cloud services will return the resource address for the generated result based on the IP location.

If the customer's service is already in the location of the client group, there is no need to pass the client IP address in through the X-Forwarded-For field. In this case, Tencent Cloud services will return the resource address for the generated result based on the customer's service IP address.

### **API** Calling Guide

### Image Face Fusion (Basic)

There is an explanation of the interface parameters inside. Click "**Try it**" to enter the API Explorer for online testing. You need to upload materials in the console and obtain the ProjectId and ModelId before testing.

Documentation		Q Search the cont	tent in this	product	
Face Fusion	≡	Documentation > Fac	e Fusion >	API Documentation	n > Face Fusion APIs > FuseFace
Product Introduction Purchase Guide Quick Start Operation Guide API Documentation Making API Requests Face Fusion APIs • FuseFace Data Types Error Codes	* * * *	FuseFace Last updated: 2024- 1. API Description Domain name for API or This API is used to per add logos to generated • The signature methor SHA256.	09-25 16: D <b>N</b> form the fue d images. So od in the pu	54:52 efusion.tencentclou sion of a single face ee Fusion Access Gu blic parameters mu:	dapi.com. , multiple faces, and specified faces with the material templa uide. st be specified as the V3 version. In other words, set the Sigr
Related Agreement Contact Us Glossary	v	We recommend you API Explorer provide view the request, res <b>2. Input Parame</b> The following request para Common Request Para Parameter Name	to use API es a range o sponse, and ters parameter I ameters. Required	Explorer f capabilities, includ l auto-generated exa ist only provides API	ling online call, signature authentication, SDK code generatio imples. I request parameters and some common parameters. For the Description

### **API Using Testing**

### Step 1: Selecting an API

In the left sidebar, select FuseFace.



#### Step 2: Installing the SDK of the Corresponding Language

Currently, only the following programming languages are supported: Node.js, Python, Java, PHP, Go, .NET, and C++. Click **Sample Code**, choose **Connection Method** and **Programming Language**. If **Connection Method** is **SDK** or **SDK Common Client**, you need to install the corresponding SDK for the programming language via **SDK Information** and **SDK Usage Guide**.



Step 3: Entering Parameters and Copying the Call Example

1. In **Input Parameters**, input the parameter information, copy the sample code, and adjust the "SecretId" and "SecretKey" parameters for the call.

**Region**: This parameter determines the access point, and you can choose the nearest region.

**ProjectId**: Activity ID. View it in the activity list on the Face Fusion console material management page.

Face Fusion	Activity Mar	nagement				
Image ^ Face Fusion		Create Activity		Activity ID		
Service Overview		Activity Name	Activity ID	Number of Materials	Algorithm Version $\mathbf{T}$	Creation time
<ul> <li>Material Management</li> </ul>		te		1	Basic Edition 🔻	2024-09-26 17:38:20
<ul> <li>Data Report</li> <li>Resource Package Management</li> </ul>		Total items: 1				
Settings						

**Modelld**: Material ID. In the activity list under material management on the Face Fusion console, click material management under operation, you can view the material ID in the list.

Face Fusion	÷	test						
<ul> <li>Image ^</li> <li>Face Fusion</li> </ul>			Add Material Batch D	Delete				
Service Overview			Material Name	Material Image	Material ID	TemplateFaceID 🕐	Upload Date ↓	Sta
<ul> <li>Material Management</li> </ul>			□ > r <b>m</b> 19	<b>1</b>	mt_:	View	2024-09-27 16:13:50	Ap
<ul> <li>Data Report</li> </ul>				04-		J		
<ul> <li>Resource Package Management</li> </ul>			Total items: 1					
Settings								

MergeInfos.N: User face image and face position information of the material template.

**Image or Url**: Either Image (base64 image data) or URL must be provided. If both are provided, URL takes precedence.

**TemplateFaceID**: The face ID of the material image. Click view as shown below to see the material face and its corresponding FaceID (specify the face for fusion if there are multiple faces in the material image).

Face Fusion	← test						
<ul> <li>Image ^</li> <li>Face Fusion</li> </ul>		Add Material Batch Delete					
Service Overview		Material Name	Material Image	Material ID	TemplateFaceID (?)	Upload Date ↓	Status ▼
Material Management		v m: g		18 To	Hide	2024-09-27 16:13:50	Approved
Data Report							
<ul> <li>Resource Package Management</li> </ul>		Material faces and corresponding	face IDs				
Settings		3_11					
		Total items: 1					

InputImageFaceRect: The face position coordinates (face frame) in the user's image, specifying the user's face image for Face Fusion. If not provided, face detection will be called by default to use the largest face.
RspImgType: Method of returning image (URL or base64), choose one. The URL is valid for 7 days.
After the parameters are entered, copy the call example, as shown in the following figure.

Tencent Cloud	Overview Products - +															
Cloud API	API Explorer FaceFusion (FACEFUS	ION)	¥													
API Explorer	Enter API name Q	Fuse facefu	Face ision 2022-09-27	Inline invocation	Sample Code Sample CLI Sample Signature Parameter d											
😔 API Doctor	Face Fusion APIs	Para	ameter input method		Con	nnection Method	SDK SDK Common Client HTTP Request									
	SubmitVideoFaceFusionJob SubmitVideoFaceFusionJob		Form JSON	Recommended parameters	Prog	gramming Language	Golang	Python	Java	C++	Node.js	PHP				
	QueryVideoFaceFusionJob QueryVideoFaceFusionJob	Proj	ectid [*] (i)			Download project										
	FuseFace FuseFace	Mod Rspl	Ing (*) (*) inter the parameter ImgType (*) (*)		<pre>import json import types from tencentcloud.common import credential from tencentcloud.common.profile.client_profile import ClientProfile from tencentcloud.common.profile.thtg_profile import HttpProfile from tencentcloud.common.exception.tencent_cloud_sdk_exception import TencentCl from tencentcloud.facefusion.v20220927 import facefusion_client, models try:     # Required steps:     # Instantiate an authentication object. The Tencent Cloud account key pair     # This example uses the way to read from the environment variable, so you     # You can also write the key pair directly into the code. but be careful n </pre>											
		▲ M	Hergelnfos.N [*] () Image () string UH () string * InputrmageFaceRect () X () integer Y () integer Width () Integer Height ()		<pre># Ouery the CAN cred = credenti # Instantiate = httpProfile = httpProfile.ent # Optional step # Instantiate = clientProfile.ent # Instantiate = clientProfile. # Instantiate = the client from</pre>	<pre># Query the CAM key: https://console.tencentcloud.com/capi cred = credential.credential"Secretid", "Secret&amp;vp") Enter the key # Instantiate an HITP option (optional; skip if there are no special requirement httpprofile. Httpprofile() httpprofile.endpoint = "facefusion.tencentcloudapi.com" # Optional steps: # Instantiate a Client configuration object. You can specify the timeout period ClientProfile.elCientProfile() ClientProfile = ClientProfile() ClientProfile = ClientProfile = httpprofile # Instantiate an client object # The second parameter is the region information. You can directly enter the so Client = facefusion_client.FacefusionClient(cred, "", clientProfile) # Instantiate a request object. You can further set the request parameters act req = models.FuseFaceRequest() params = { } req.from_json_string(json.dumps(params)) # The returned "resp" is an instance of the FuseFaceResponse class which corr resp = client.FuseFace(req) # A string return packet in JSON format is output print(resp.to_json_string())</pre>										
			integer		print(err)											
			TemplateFaceID (j)													
3	Show English API 😔 Complain	Initia	TemplateEaceRect ①     templateEaceRect ①	Show all parameters V												



#### **Description:**

#### Method of fusing multiple faces:

A maximum of 6 faces in the material image can be fused. If no faces are specified, face detection will be called by default to use the largest face.

If multiple faces need to be fused, click **Add** to continue entering the IDs of the faces to be fused, and fuse them with the user image by specifying TemplateFaceID of the material image.

🗞 Tencent Cloud	Overview Products	s <b>▼</b> +															
Cloud API	API Explorer	FaceFusion (FACEFUS	sion)	Ŧ													
API Explorer	Enter API name	Q	FuseFace facefusion 2	022-09-27			பூLike 🔅 Complair	Online invocati	on	Sample Cod	e Sam	ple CLI	Sample S	Data simulat			
API Explorer	Enter API name Face Fusion APIs SubmitVideoFaceFus CueryVideoFaceFus FuseFace FuseFace FuseFace	a existindob isondob	Add LegoAdd (	222-09-27 ttp://ut2.jpg intp	t () 3			<pre>Online invocati Programming Lang Download proje import types from tencentc from # Dratam # Dratam # Dratam # Dratam # Dratam # Dratam # Instant c clientPro # Instant c clientPro # Instant req = mod params ==     ""Herg {     }     }     ]     req.from # The rec # A strin parameter = the string # Dratam # The rec # The from # Dratam # Dratam</pre>	on uage total	Sample Cod Golang common import common.profil common.profil common.profil common.except facefusion.v2 os: an authentica uses the way write the ke W key: https: ial.Credentia an HTTP optial distribution of a client conf clientProfile() dpoint = "face osi an althrefuent susfaceReques sof: [rl": "http://mmplateFaceID string(json.d "resp? is an "resp? is an "resp? is an "resp? is an	e Sam Python credentii credent	al al al al al al al al al al	Sample S mport Clii ort HttpP sdk_excepter sdk_excepte	ignature intProfile int intervention interventintervention intervention intervention interventio	Parameter PHP t TencentCl els t key pair e, so you no careful no cial requir t imeout pe ly enter th ile) parameters ss which co	description .NetNet	Data simulat otion and `secretKey these two valu upload, or sha ther configurat ap-guangzhou" o to the API call
3	Show English AF	PI 🙁 Complain	▲ LogoPa Initiate inve	ram (Optional) [*] (	cation history	Show all pa	arameters *	except Tencent print(err	Cloud	dSDKException	as err:						