



Quick Start

Cloud Development > Quick Start

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Contents

This guide is designed to help developers quickly understand how to create Apps and control devices through Tuya Cloud Platform to play smart. Let's start the application journey!

1 Prerequisites

- Download and install and register “Tuya Smart” APP
 - [Tuya Smart](#)



Figure 1: Tuya Smart

- Log in to Tuya Smart Development Platform <https://iot.tuya.com>, unregistered users sign up for a tuya account, and pass the enterprise authentication to become a platform developer.

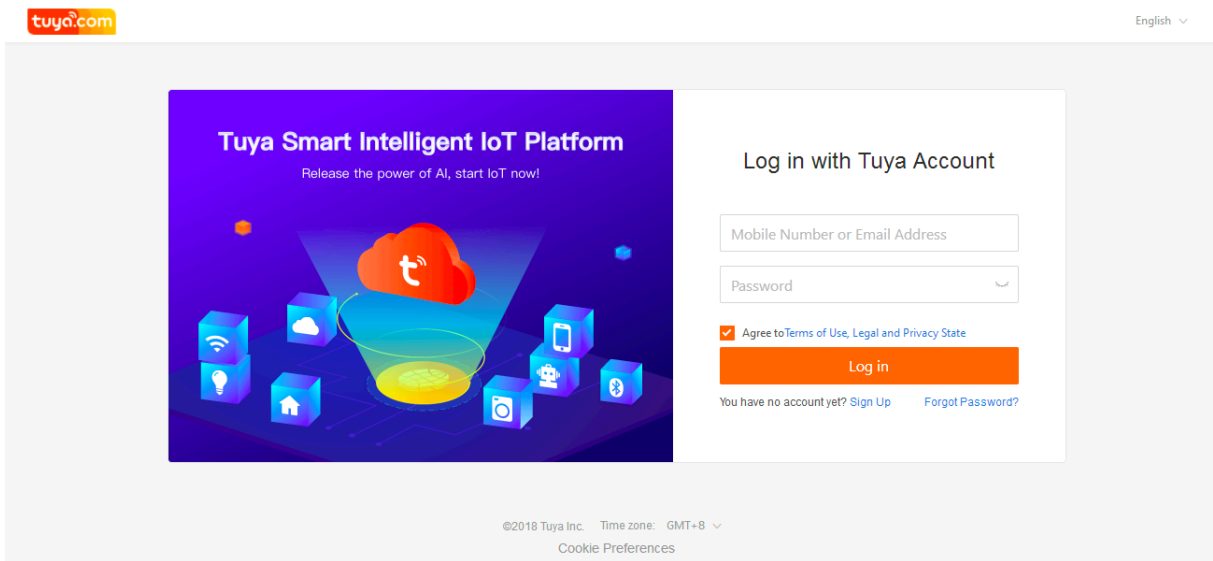


Figure 2: Tuya Smart Global Smart Platform

2 Operating procedures

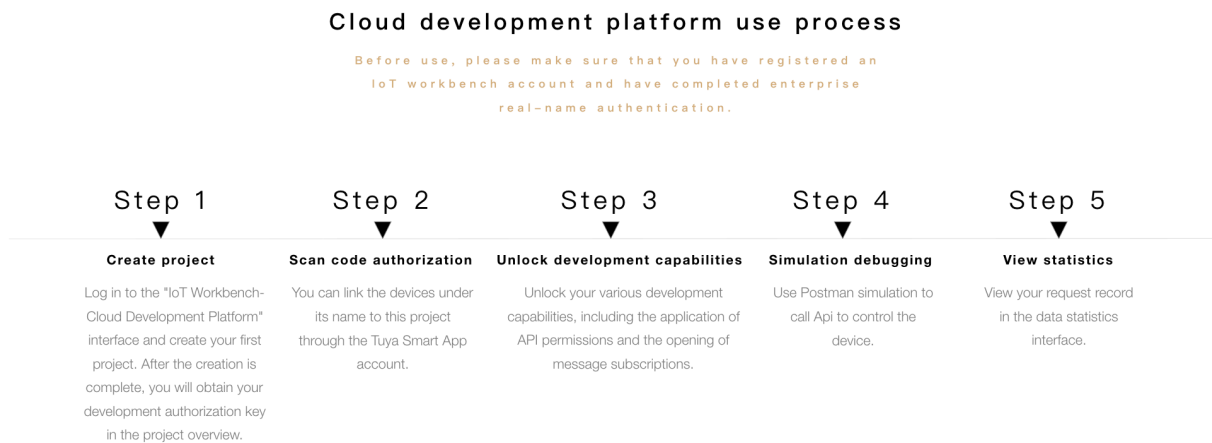


Figure 3: Tuya Smart Global Smart Platform

2.1 Apply for cloud API authorization

- Create SaaS
Enter [SaaS Development] and click Create SaaS.

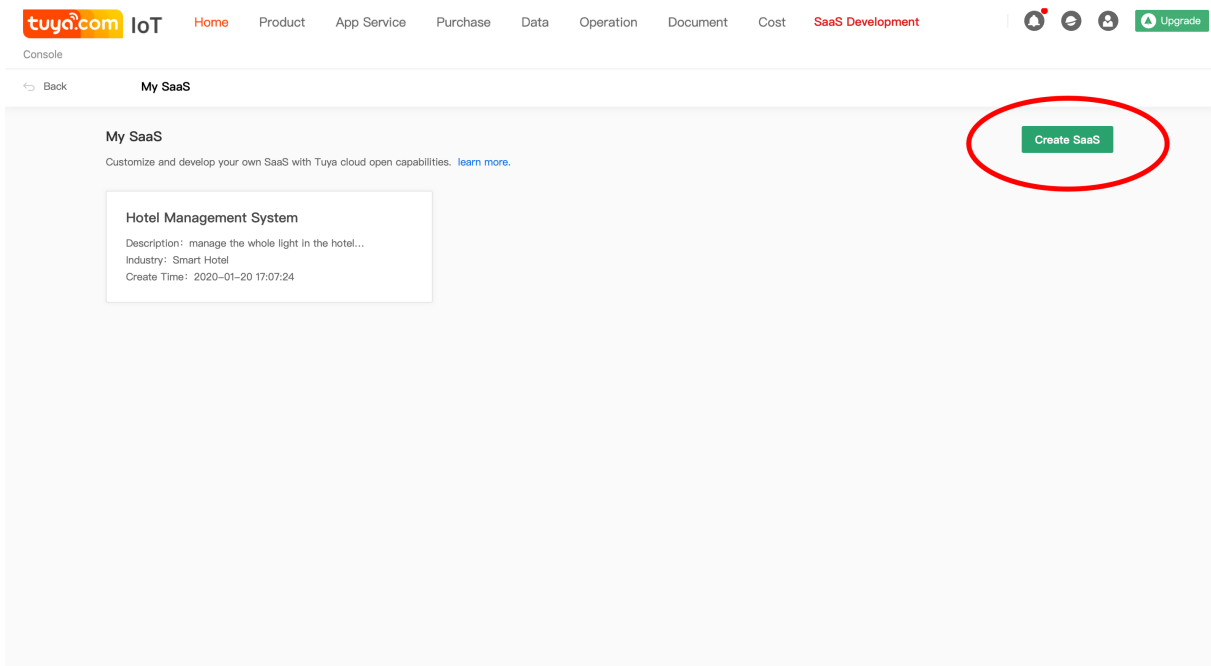


Figure 4: saas_zh

- Acquire Application Key

Click to enter the SaaS you create, you can acquire the application key on the right of [basic info]

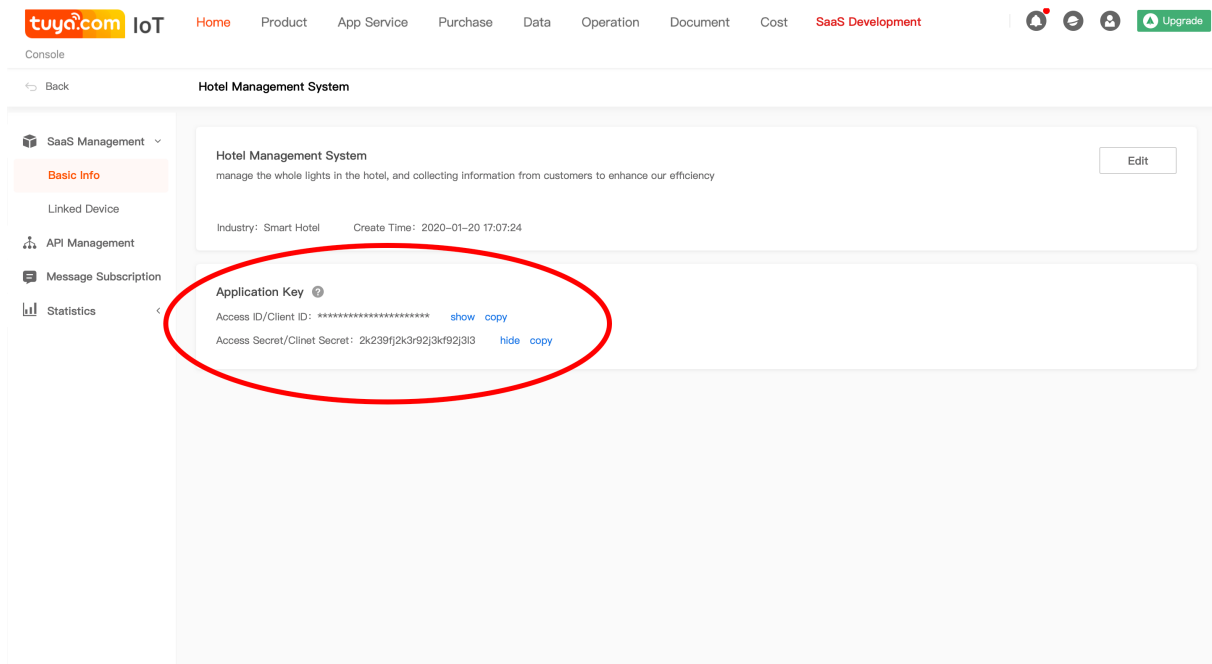


Figure 5: secret_en

Follow-up device control depends on Access ID and Access Secret, please keep it safe!

2.2 Scan code authorization

You can use the “Graffiti Smart” APP scan code to connect to your project.

“Cloud Development” -> “Associated Device” -> “Associated Device under Tuya Smart App Account”

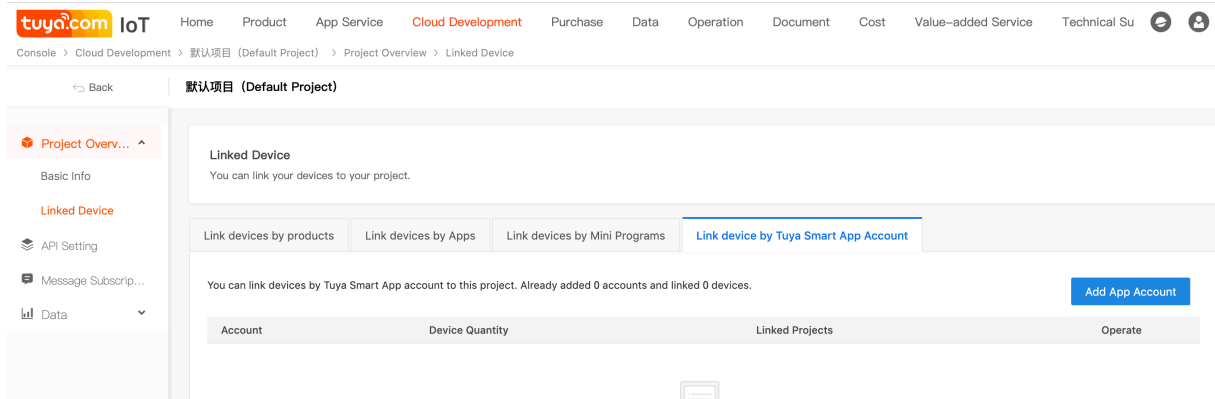


Figure 6: image.png

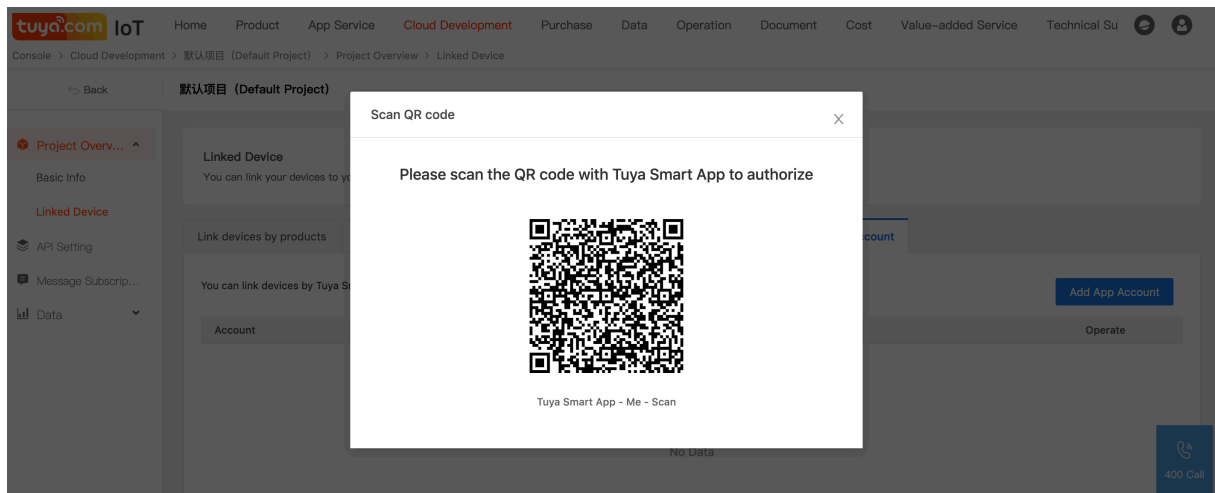


Figure 7: image.png



3 Use Postman to simulate OpenApi to control the device

The App created through the Tuya cloud platform has a built-in Tuya SDK, which can control the device interactively with Tuya cloud platform. Next, we call OpenApi through Postman to simulate the control device.

- Environmental preparation

```
1 - Meet Postman
2
3 Postman is a powerful Chrome plugin for webpage debugging and
4 sending HTTP requests for webpages.
5 Portal: https://www.jianshu.com/p/0c247b351f08
6
7 - Set up Postman environment
8
9 To be good at work, we must first sharpen our tools. Before we
10 begin, we must prepare the postman and Tuya cloud-related
11 environments.
12
13 - Download postman: https://www.getpostman.com
14
15 > Postman version is preferably 7.12.0 and above
16
17 - [Import Tuya Cloud API Interface Package](https://images.tuyacn.com/smart\_res/developer\_default/OpenAPI\_postman\_collection.zip):
18 ![Tuya Cloud API Interface](https://images.tuyacn.com/smart/docs/postman-api.png)
19
20 - [Import Tuya Cloud API Environment Package](https://images.tuyacn.com/smart\_res/developer\_default/OpenAPI\_postman\_environment.zip):
21 ![Tuya Cloud API Environment](https://images.tuyacn.com/smart/docs/postman-env.png)
22
23 - Set environment variables
24
25 - url: Tuya cloud service, taking China as an example:
26 https://openapi.tuyacn.com
27
28 - client_id: equivalent to accessId in the developer
29 platform
30
31 - secret: equivalent to accessKey in developer platform
32
33 - device_id: device ID, you can check the corresponding
34 information of the device in the App Device ID)
35
36 - The schema is the channel identifier of the App
37 application. Please obtain it based on the package name
38 . For example, your App package name is: com.aa.bb,
39 then your schema is: aabb.
```



```

1   - Request header settings
2
3   Any interface needs to add the following parameters to the header:
4
5   |   Parameter   | Type | Parameter position | Description | Required
6   | ----- | ----- | ----- | ----- |
7   | client_id | String | header | client_id | Yes |
8   | sign | String | header | Signature calculated using the
9   |   specified signature algorithm: token related interface, business
10  |   related interface | Yes |
11  | sign_method | String | header | Signature Digest Algorithm, HMAC-
12  |   SHA256 | Yes |
13  | t | Long | header | 13-bit standard timestamp | Yes |
14  | lang | String | header | language, default en | No |

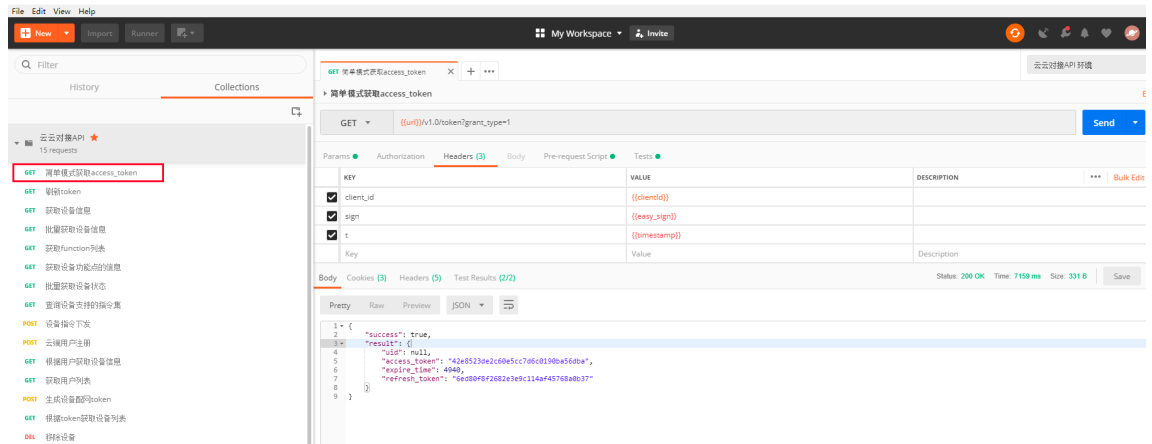
```

- Signature method Tuya Cloud currently provides two sets of signature algorithms according to different application scenarios:
 - Token related interface (v1.0 / token & v1.0 / token / {refresh_token}): sign = HMAC-SHA256 (client_id + t, secret) .toUpperCase ()
 - Business interface (non-token interface): sign = HMAC-SHA256 (client_id + access_token + t, secret) .toUpperCase ()
- Postman control equipment in action

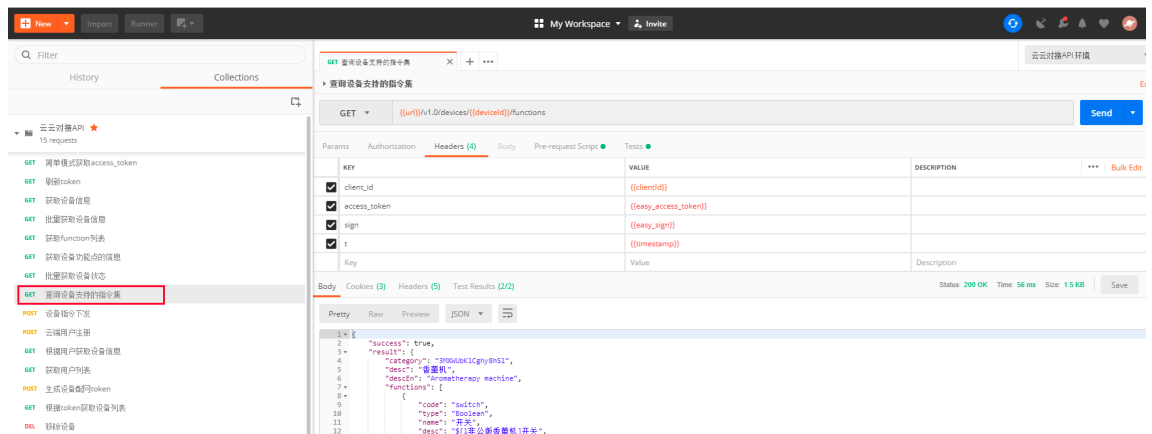
```

1 - Add products and network in the App
2
3 > Take Wi-Fi socket as an example, refer to the distribution
4   network
5 - Get token
6
7   Apply for a token to Tuya Cloud first, and then use this token
8   to request other APIs, otherwise there will be permission
9   problems.

```



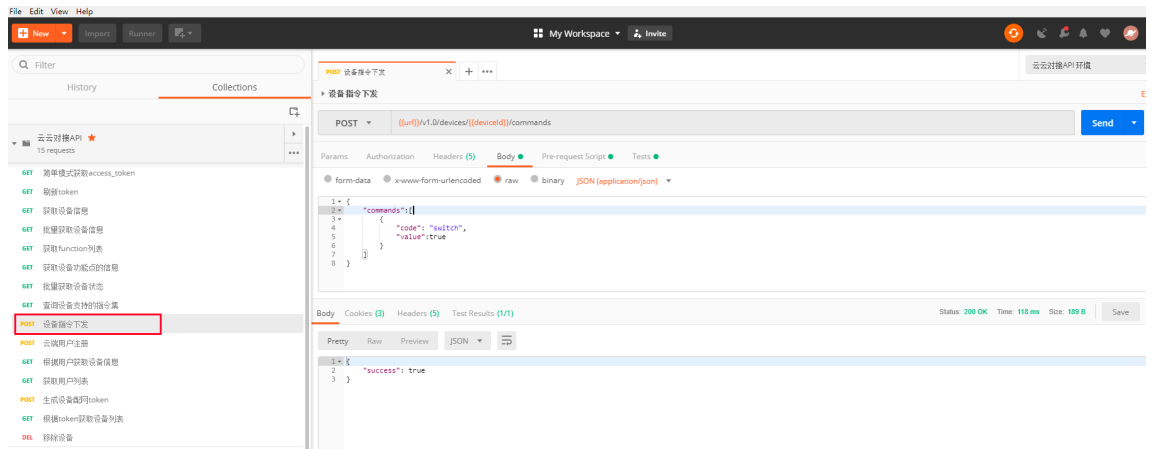
- 1 > grant_type = 1 means use simple mode grant
- 2
- 3 - Query the instruction set supported by the device
- 4
- 5 Obtain instructions supported by the device, and subsequent control devices can use this result.



- 1 - controlling device
- 2
- 3 According to the instructions supported by the device, different effects can be achieved by issuing control devices.



3 USE POSTMAN TO SIMULATE OPENAPI TO CONTROL THE DEVICE



4 FAQ

Q: How long is the token validity period?

Tuya: The token is valid for two hours and needs to be reapplied after it expires.

Q: What are clientId and secret and how do I get them?

Tuya: The clientId is the AccessId in the developer platform, and secret is the AccessKey in the developer platform.

Q: What is a schema and how to get it?

Tuya: The channel identifier of the App application, please obtain it based on the package name. For example, your App package name is: com.aa.bb, then your schema is: aabb.

Q: What is the data operation permission in the application scenario?

Tuya: In the application scenario, the device in the app, the developer has the operation permission.

Q: Why does the access interface encounter permission deny?

Tuya:

1. Check whether the device has been removed;
2. Whether the device is associated with the current developer clientId.

5 Concluding remarks

Through the above simple tutorial, I believe you have a general understanding of the capabilities provided by Tuya Cloud OpenAPI, and then you can code to implement Tuya Cloud API and carry out corresponding business development;

For more interfaces, please refer to the API interface list. If you have more customization requirements, please contact Tuya Business.

If you still have questions about the interface call, you can ask technical questions on the Tuya developer platform bill of lading. Before asking the questions, try to provide the interface request parameters.