



Quick Start (application Dimension)

Open API > Quick Start

Version: 20200221

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Quick Start (application Dimension)

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 Operating procedures

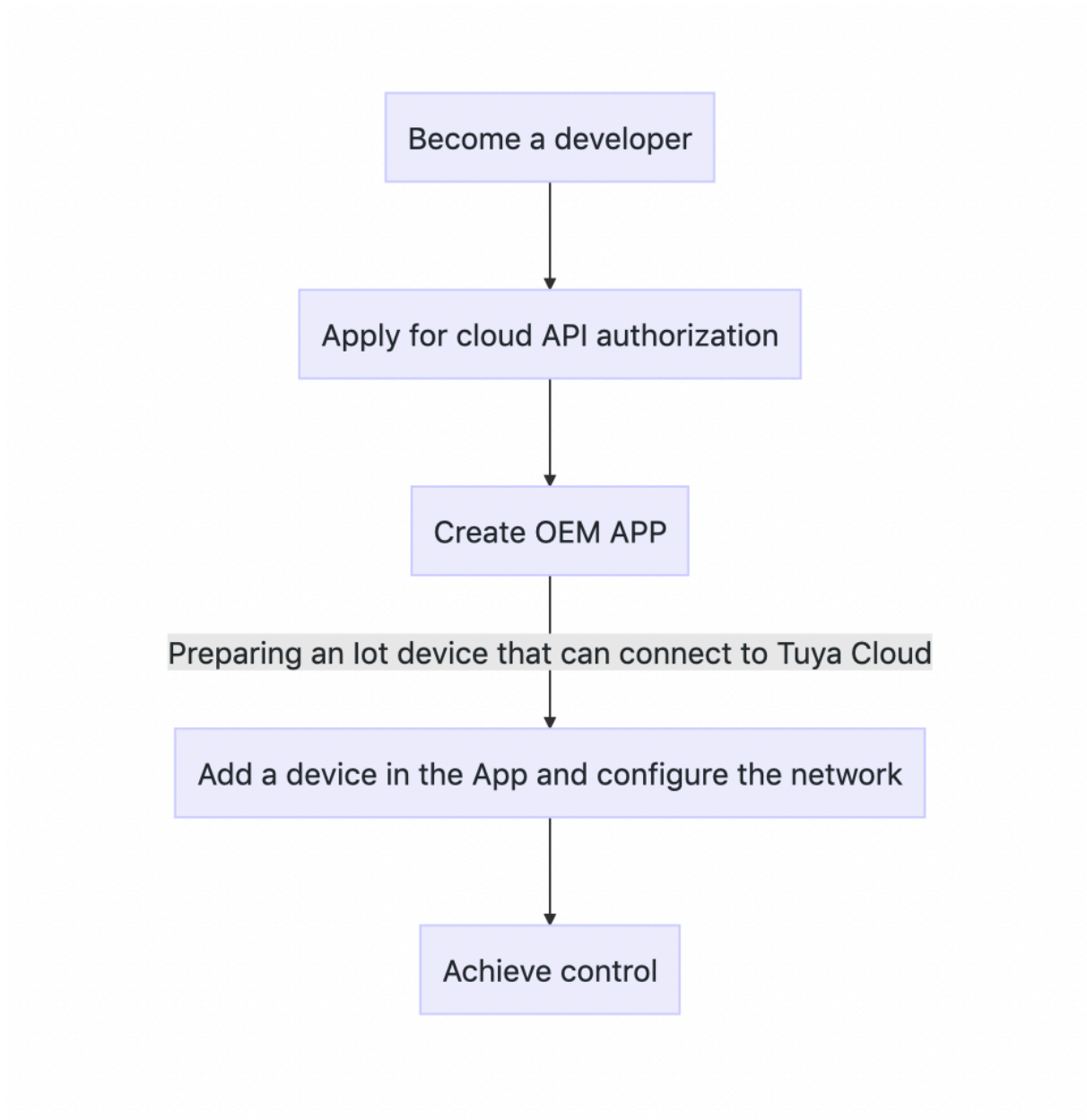


Figure 1: Tuya Smart Global Smart Platform

2 Become a Developer

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.

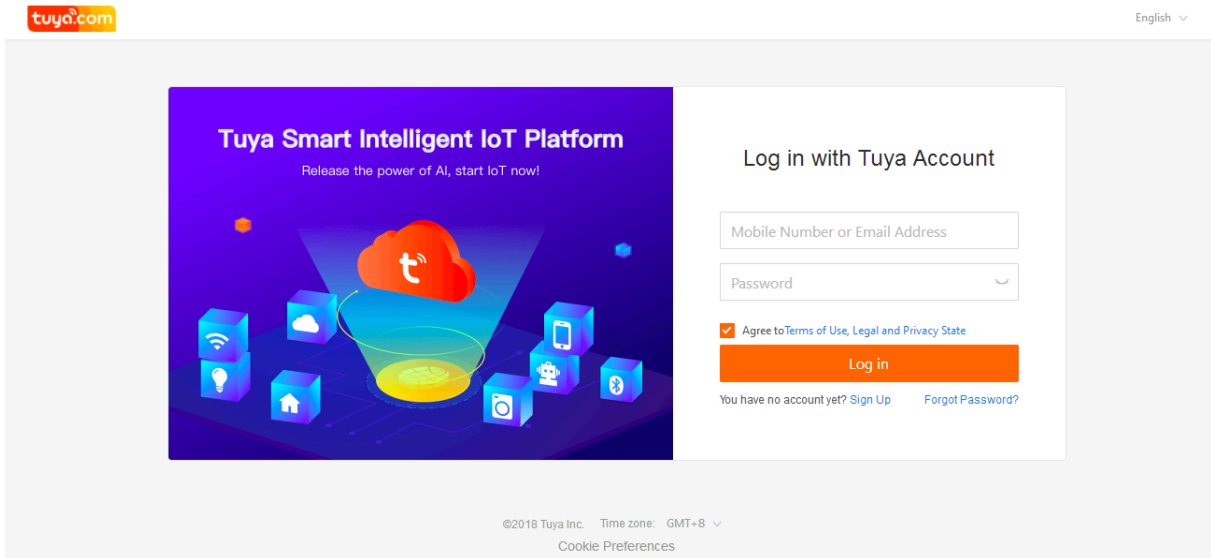


Figure 2: Tuya Smart Global Smart Platform

3 Apply for cloud API authorization

Tuya Cloud supports third-party clouds to access Tuya Cloud through HTTPS. Before connecting, Tuya Cloud must first apply for cloud API authorization. It can only be used after obtaining the AccessId and AccessKey. After logging in to the platform, click on the user's avatar, enter the "Cloud API Authorization", and click apply. After submitting the application, it will be reviewed within 1-2 working days.

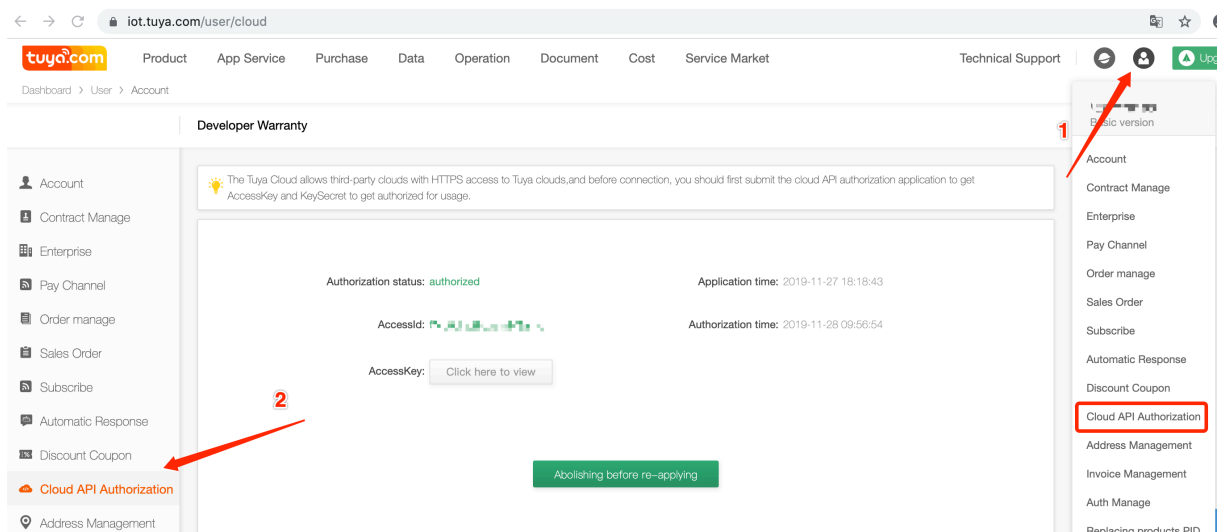


Figure 3: Cloud API Authorization

Follow-up device control depends on AccessId and AccessKey, please keep it safe!

4 Create OEM App

- Enter the [App Workbench] section and click Create App

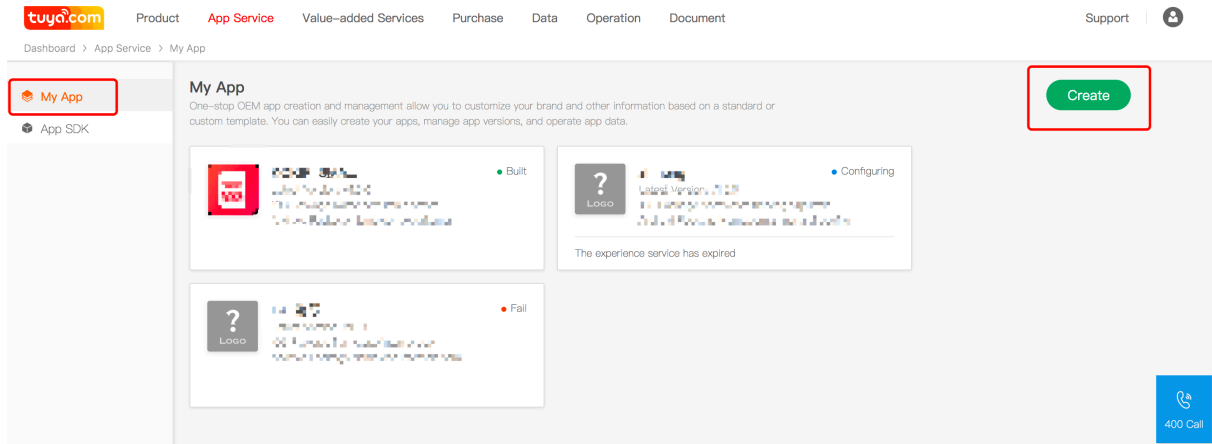
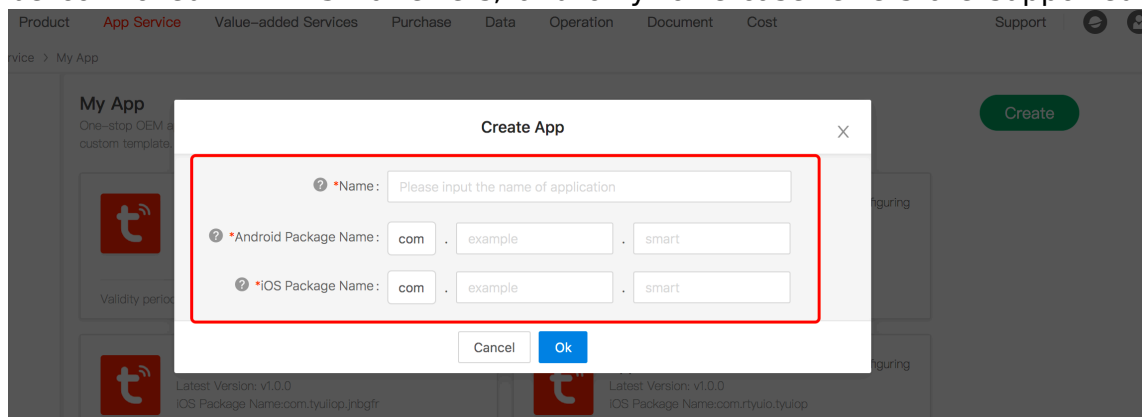



Figure 4: Create App



- Improve App Information - App name: The name of the App displayed on the desktop of the phone. The recommended length is 6 Chinese characters or 12 English characters. - App package name: As the unique identifier of the App, it is not allowed to be repeated. It is recommended that each paragraph be controlled within 3-20 letters, and only lowercase letters are supported.




- Configure App

- 1 - App icon settings
- 2
- 3 Only supports png format, the size is equal to 1024 * 1024px;


[Product](#)
[App Service](#)
[Value-added Services](#)
[Purchase](#)
[Data](#)
[Operation](#)
[Document](#)
[Cost](#)





[Dashboard](#) > [App Service](#) > [My App](#) > [App Show](#)




Personalization

1




Function

2




Build


3




Launch

4






Exclusive service team




Lightweight



Quick response


① During your free trial of the OEM App service, a test package is built for real tests. However, if you need a complete formal package to release your App on the App Store, you have to purchase the full service within the validity period. [Buy Now](#)

Please set your app icon

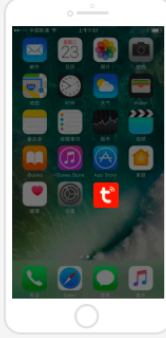


App icon

Dimensions: 1024 x 1024px, format: PNG format, less than 10M




Upload icon



Preview

The actual effect is subject to the installation package, the image is only for reference




App Show

Version: v1.0.0

Template: v3.9.5

Build status



Config

Next

1 - App startup map settings

Product
App Service
Value-added Services
Purchase
Data
Operation
Document
Cost
Support

Dashboard > App Service > My App > App Test

Personalization 1
Function 2
Build 3
Launch 4

Submit your question.
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Quick response

During your free trial of the OEM App service, a test package is built for real tests. However, if you need a complete formal package to release your App on the App Store, you have to purchase the full service within the validity period. [Buy Now](#)

A startup page has been automatically generated for you. If you are not satisfied with it, you can re-upload it

- PNG format, less than 10M
- System resizing support for uploading a picture with dimensions greater than 1242 x 2688px
- Individual template can be modified
- Does not support moving images and videos on this page
- Now we support for new iPhone models, so you need to add a 1242 x 2688px startup page.

Upload
Click once to upload
Restore defaults

1080*1920px

Preview
iPhone6
iPhone6p
iPhone XS Max
Android 16:9
Android 18:9

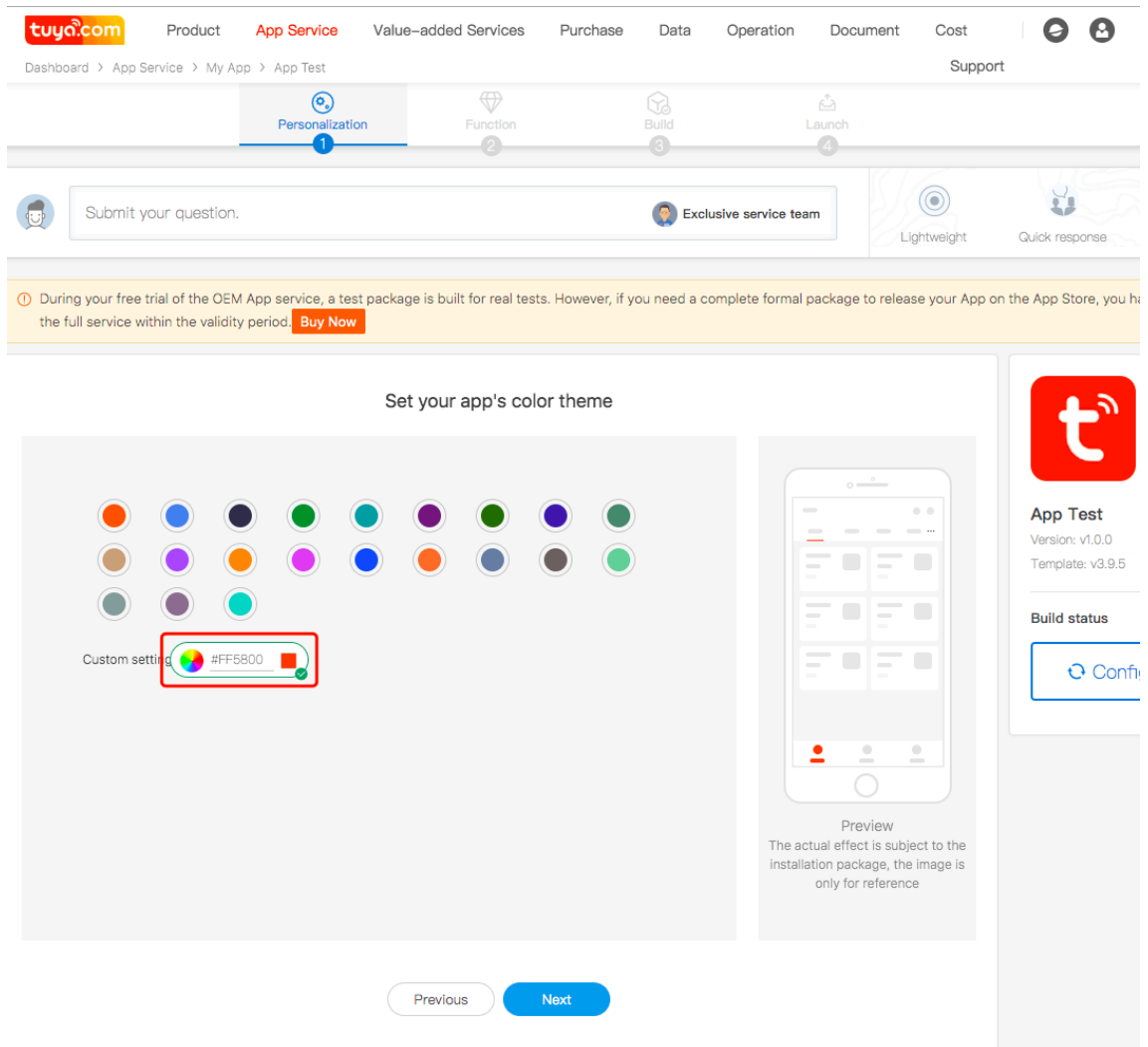
App Test
Version: v1.0.0
Template: v3.9.5

Build status
Configure

Previous
Next

No special requirements, directly “Next”

1 - App theme color settings



No special requirements, directly “Next”

- 1 - Map positioning settings
- 2
- 3 Click Get SHA1 to get App related values, check the help, configure the Map Key according to the operation manual guide, get the corresponding key and fill it in the box. (If the App needs to be on the shelf, this function must be equipped)
- 4
- 5 - Network equipment list setting

Network distribution device list ?

If you choose to configure the standard category, you will use Tuya's general distribution network logic; If the product has its own distribution method, please select "Custom category" to configure the corresponding distribution mode for each product.

Please select a category:

☒ Standard category ?
 ☐ Custom category(Level 1 Catalog Mode)
 ☐ Custom category(Level 2 Catalog Mode)

	No.	Category icon	Category name	Distribution network
Electrical	1		Electrical Outlet	View
Smart Lighting	2		Electrical Outlet(BlueTooth)	View
Home Appliances I	3		Electrical Outlet	View
Home Appliances II	4		plug (Sub)	View
Kitchen	5		Multiple Socket	View
Security & Sensor	6		Wall Switch	View
Sport & Health	7		Wall Switch(BlueTooth)	View
Others	8		Wall Switch	View
	9		Curtain Switch	View

No special requirements, directly "Next"

1 - Apply for build

Product
App Service
Value-added Services
Purchase
Data
Operation
Document

Dashboard > App Service > App Show

Personalization
Function
Build
Launch

Submit your question.

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Quick response

App Show (v1.0.3) Building

Currently waiting in line, 30-60 minutes are needed, please wait patiently...

1 - Build completed, scan code installation



Quick Start (application Dimension) 4 CREATE OEM APP

ProductApp ServicePurchaseDataOperationDocumentCostService Market

Dashboard > App Service > My App > App Show

Personalization1

Function2

Build3

Launch4

Submit your question.

Exclusive service team

Lightweight

App Show (v1.0.0) Build successful

Warning: Since the test App will use the Tuya enterprise certificate, If the App fails during the test, you need to return to the tuya developer platform to rebuild the App and re-download it.

QR code previewBeta

Cannot be used for product packaging. For formal QR code, please go to the details page of the app and click "Download QR Code to Print" in the top right-hand corner to configure and download it.

The certificate of the iOS test package is valid for 2020/07/09
Tuya will update the certificate in time after the expiration of the iOS test package certificate. You just need to repackage it after the expiration.



5 Prepare lot devices that can connect to Tuya Cloud

You can purchase lot devices that can be connected to Tuya Cloud from service providers, such as WiFi sockets and WiFi lighting bulbs.



6 Add devices and configure network in App

- Add device There are two ways to add devices in the App: "Manual Add" and "Auto Discovery". Here we choose "Auto Discovery".

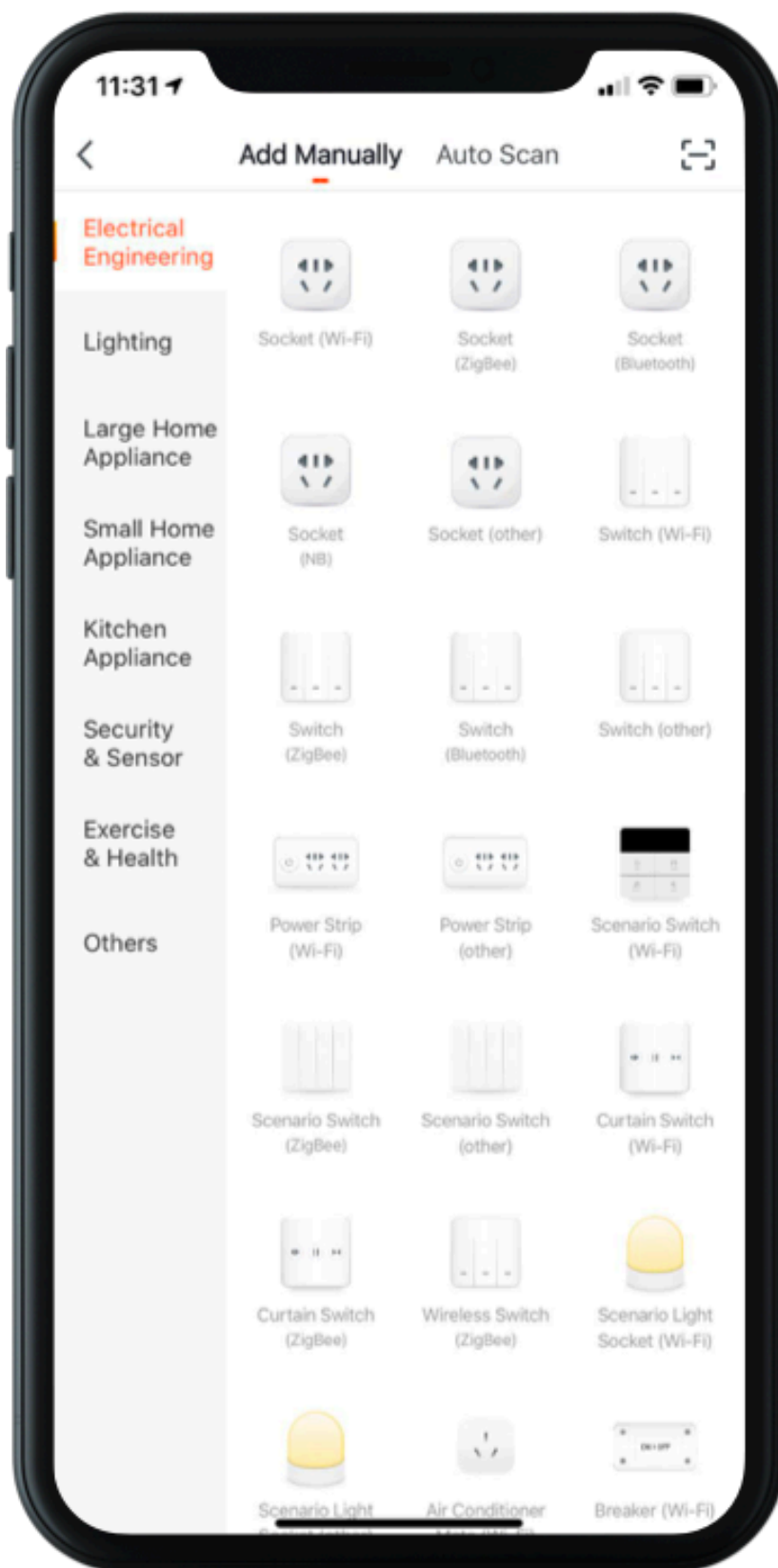
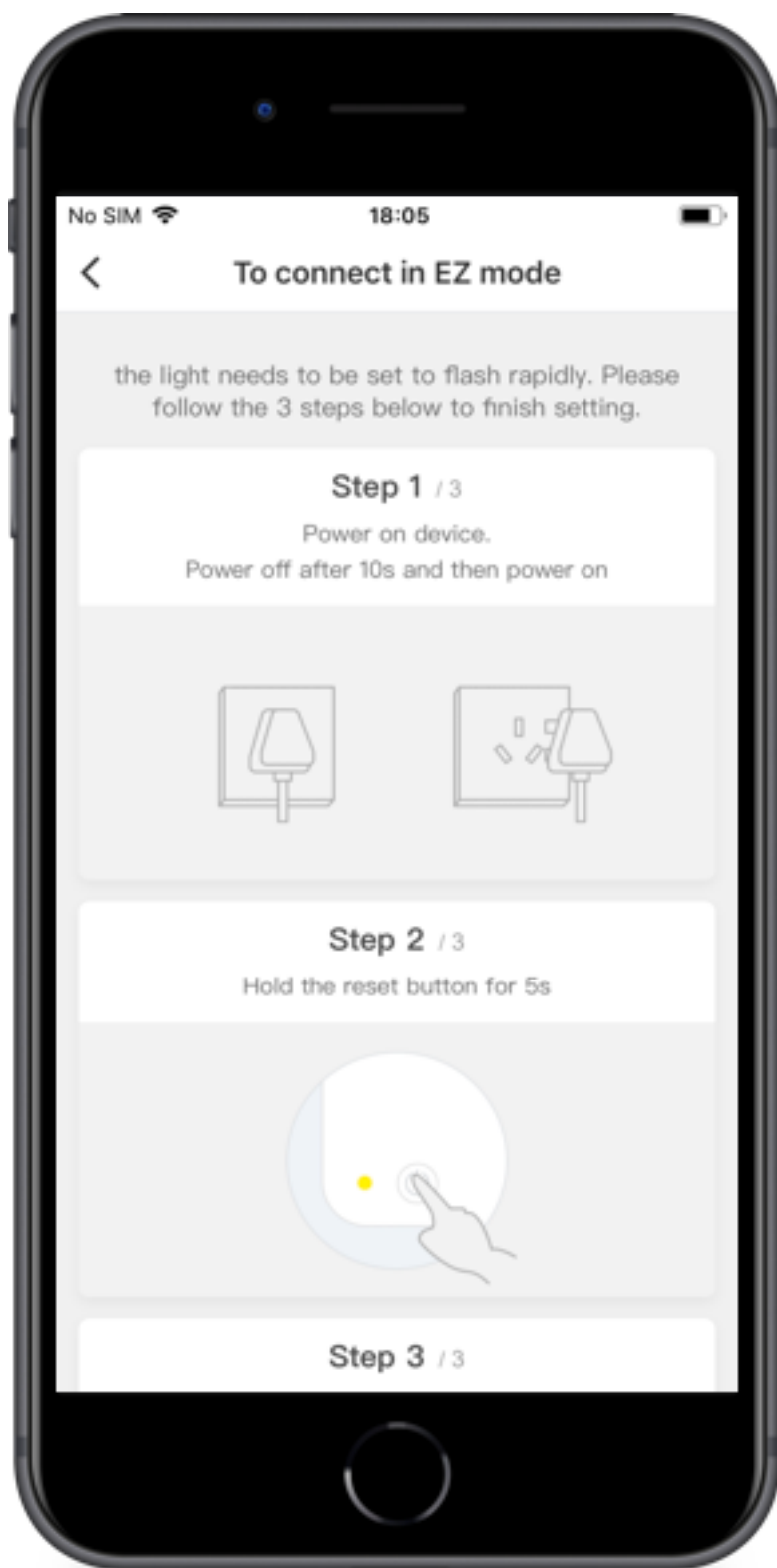


Figure 5: Build



- Equipment distribution After “auto-discovering” the device, configure the network according to the relevant instructions.
 - Power on the device
 - Long press the reset button (switch) for 5 seconds
 - Make sure the indicator flashes quickly





1 > Wi-Fi socket is used as an example for current network configuration.
Different products have different network configurations. Please follow the corresponding network configuration instructions to configure the network.

- After the device is successfully networked, you can operate the device through the App.

7 Use Postman to simulate OpenApi to control the device

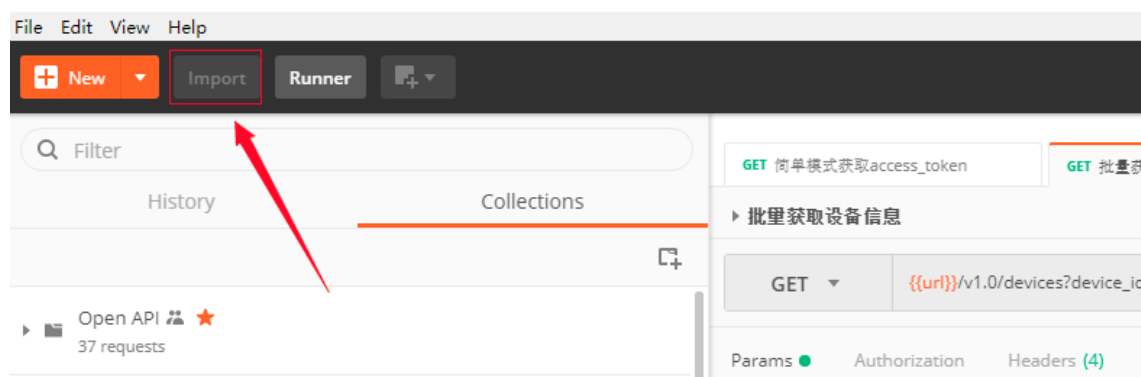
The App created through the Tuya cloud platform has a built-in Tuya SDK, which can control the device interactively with Tuya cloud platform. Next, we call OpenApi through Postman to simulate the control device.

- Environmental preparation

```

1 - Meet Postman
2
3     Postman is a powerful Chrome plugin for webpage debugging and
4       sending HTTP requests for webpages.
5
6     Portal: https://www.jianshu.com/p/0c247b351f08
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 - Download postman: https://www.getpostman.com
    > Postman version is preferably 7.12.0 and above
- [Import Tuya Cloud API Interface Package](https://images.tuyacn.com/smart\_res/developer\_default/OpenAPI\_postman\_collection.zip):

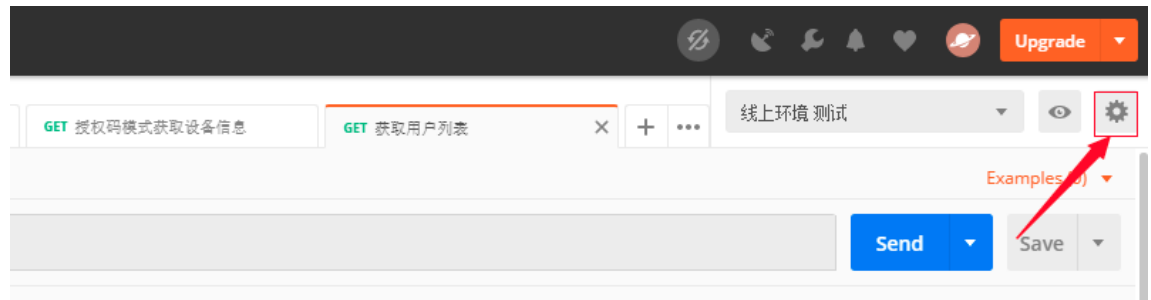
```



```

1 - [Import Tuya Cloud API Environment Package](https://images.tuyacn.com/smart\_res/developer\_default/OpenAPI\_postman\_environment.zip):

```



```

1  \- Set environment variables
2      \- url: Tuya cloud service, taking China as an example: <
3          https://openapi.tuyacn.com>
4      - client_id: equivalent to accessId in the developer
5        platform
6      - secret: equivalent to accessKey in developer platform
7      - device_id: device ID, you can check the corresponding
8        information of the device in the App Device ID)
9
10     - The schema is 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.
  
```



7 USE POSTMAN TO SIMULATE OPENAPI TO CONTROL THE DEVICE

MANAGE ENVIRONMENTS ×

Environment Name

云云对接API 环境

	VARIABLE	INITIAL VALUE ⓘ	CURRENT VALUE ⓘ	...	Persist All	Reset All
<input checked="" type="checkbox"/>	url	https://openapi.tuya...	https://openapi.tuyacn.com			
<input checked="" type="checkbox"/>	client_id		...			
<input checked="" type="checkbox"/>	secret		...			
<input checked="" type="checkbox"/>	device_id		...			
<input checked="" type="checkbox"/>	schema		...			
<input checked="" type="checkbox"/>	easy_sign		...			

ⓘ Use variables to reuse values in different places. Work with the current value of a variable to prevent sharing sensitive values with your team. [Learn more about variable values](#) ×

Cancel Update

```
1 - OpenApi settings
2
3   - Request method
4
5     - Supported request methods are as follows:
6
7       - GET
8       - PUT
9       - POST
10      - DELETE
11
12    > Please note: When the request method is `POST`, Content-Type
      needs to use `application / json`
```

```

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
   specified signature algorithm: token related interface, business
   related interface | Yes |
9  | sign_method | String | header | Signature Digest Algorithm, HMAC-
   SHA256 | Yes |
10 | t | Long | header | 13-bit standard timestamp | Yes |
11 | 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

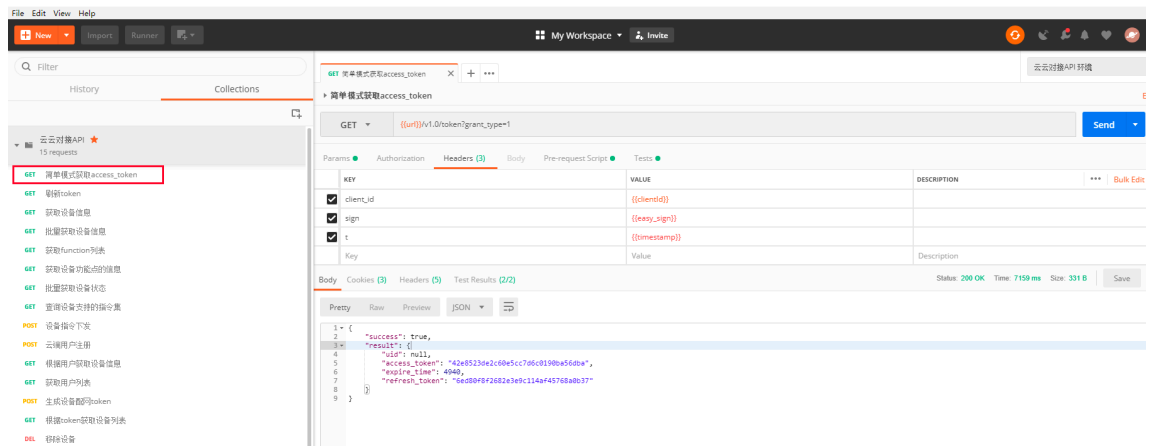
```

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

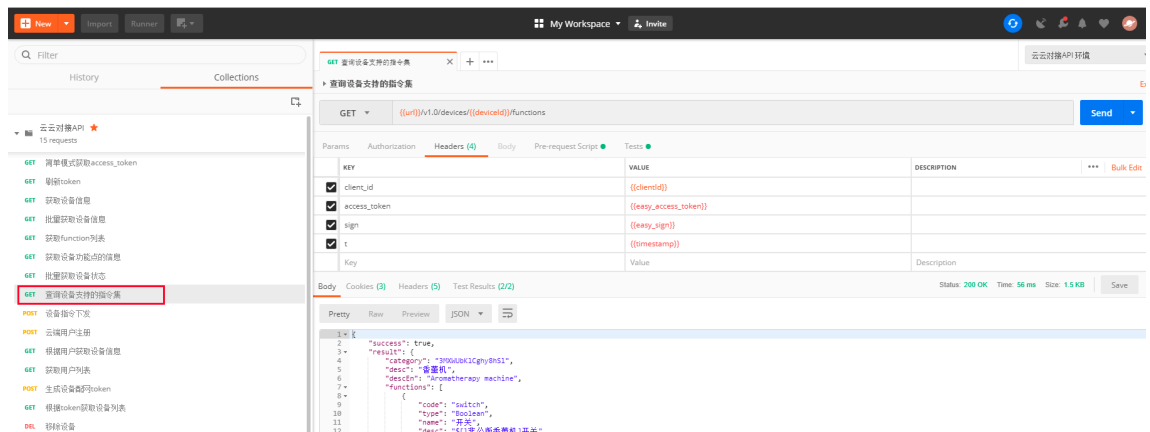
```



7 USE POSTMAN TO SIMULATE OPEN API TO CONTROL THE DEVICE



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



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



7 USE POSTMAN TO SIMULATE OPENING TO CONTROL THE DEVICE

