CONTROL TUYA DEVICES VIA OH3 WITHOUT FLASHING

This article describes the steps to control Tuya devices via Openhab3 without flashing the device. My consideration was that TASMOTA was not compatible with the firmware of my device, but I wanted to control anyhow via OH UI and OH App.

Version	User	When	Description
1.0	Becksen	17.04.2021	Initial tutorial

ACTIONS ON TUYA CLOUD

1. Create TUYA developer account

In order to use the TUYA API it is required to create a developer account on TUYA lot Platform:

https://iot.tuya.com

I didn't succeed in creating a European developer account because of GDPR reasons. It was required to proof own identity but there was no way of completing it. So I took a US account and it worked.

2. Create a project

After successfully logged on to lot Platform create a project. On the left pane select **Cloud** and then **Project**.

tuya lot Platform			
ŵ	Cloud		
Overview			
	Projects		
Product	API Management	^	
(-)	API Products		
App	API Explorer		
•	Data Statistics	~	
Cloud	Lloogo		

Enter

- Project Name
- Project Type
- Description
- Industry

I have not tested if industry has any impact on the project and the smart devices. I've selected Smart Home which made most sense for me.



Finally, you'll get a project overview like this. Details shown will become important later.

Project Overview	Link Devices	Device List	Virtual Device	
TB41				🖉 Edit
Control TB41 device remote	2			
Project Type: Others	Industry: Smart Home	Create Time	: 2021-03-15 23:19:0:	1
Authorization Key 🕼				
Access ID/Client ID:	on and the second spin rates			
Access Secret/Client Secr	et: ************************************	*********** Show	Сору	
Cloud Application ID W/				
Cloud Application IP wr				
IP whitelist restriction is n	ot enabled, any IP can u	ise the authorized k	key to access the API	of this
project				

3. Link a device

In the project area select Link Devices / Link Devices by App Account / Add App

Account

Project Overview	Link Devices	Device List	Virtual Device				
After you link the device to a pro	ject, the project c	an manage and control t	the linked device. We have	provided you with 4 methods to li	nk your devices.		
Link devices by products	Link devices	by Apps Link dev	vices by Mini Programs 名	Link devices by App Accour	t		
You can link devices by accounts	s of Tuya Smart Ap	op or OEM App to this pr	roject. Already added 1 acc	ounts and linked 1 devices.		8.	Add App Account

Once you click the button a QR code will appear:



Scan the QR code with the app you have linked your device to.

It is not necessarily the Tuya Smart App as mentioned above. Smart Life app is also possible which worked fine for me.

In the Smart Life app go to your profile and select the icon in the top right to scan the QR code.



I believe there was one approval step required to provide access to the devices via the lot Platform.

4. Activate API Products

For using the API successfully some "API products" need to be activated. At the beginning I've activated all. Navigate in the TUYA lot Plaform to **Cloud / API Products**. Select the particular API Product and subscribe.

Reviewing the Docs I believe that those are required for our use case:

- Smart Home Devices Management
- Authorization

Let me know in case you experience different ©

Once subscribed grant the authorization to your created project. This has to be repeated for each API.



Figure 1 Smart Home Devices API Product



Figure 2 Authorization API Product

ACTIONS ON OH3

5. Create dummy item

Create dummy switch item:

	Edit Item	
Name	LichtApartmentDummy	
Label	Licht Apartment	8
Туре		Switch >
Category	lightbulb	8
Compandia Olana		
		Equipment >
Group Membership		
📜 Parent Group(s)		Apartment (gApartment) >
Non-Semantic Tags		

6. Create Widget

Create a widget from Model and use the created dummy item.

÷	Edit Toggle Card Done
	Show advanced 🗌
Card	
Parameters of the card	
Title Licht Apartment	8
Title of the card	
Footer text Tuya Device	8
Footer of the card	
Toggle	
📜 Item	Licht Apartment (LichtApartmentDummy) >
Item to control	

7. Create Scripts

Create two scripts. One for switching light on and one for switching it off.

5 scripts	
S	
Schalte Licht Apartment AN Switch_Light_Apartment_ON	
Schalte Licht Apartment Aus Swith_Light_Apartment_Off	

Code is posted in the OH community post: