# **Home Assistant Installation**

This guide was written using Home Assistant version 2024.5.x.

# **Raspberry Pi Setup**

1. Install Raspberry Pi imager https://www.raspberrypi.com/software/.

Raspberry Pi Imager	👹 Raspberry Pi
aspberry Pi Imager is the quick and easy way to install aspberry Pi OS and other operating systems to a microSD ard, ready to use with your Raspberry Pi.	Resplercy Pl Drvke Operating System Storage CHOOSE DEVICE CHOOSE OS CHOOSE STORAGE
Download and install Raspberry Pi Imager to a computer with an SD card reader. Put the SD card you'll use with your Raspberry Pi into the reader and run Raspberry Pi mager.	and the second se
Download for Windows	
Download for Ubuntu for x86	
Sowmoud for obdited for XOO	

Fig. 1: Pick the operating system you are using

- 2. Insert the Micro SD card to the SD card reader.
- 3. Run the application.
- 4. Choose Device (Raspberry Pi 4 in this case).
- 5. Choose Operating System ("Other specific-purpose OS"  $\rightarrow$  "Home assistants and home automation"  $\rightarrow$  "Home Assistant"  $\rightarrow$  "Home Assistant OS 12.x").
- 6. Choose Storage.

spberry Pi Imager v1.8.5	berry Pi	_ C
Raspberry Pi Device	Operating System ME ASSISTANT OS 12.3 (RPI 4/400)	Storage SDHC CARD
		NEXT

Fig. 2: Home Assistant Installation, In this case, Raspberry Pi 4

- 7. Click "Next"  $\rightarrow$  "Yes". (Ignore Microsoft Error messages).
- 8. Remove the Micro SD card.
- 9. Insert the Micro SD card into the Raspberry Pi's Micro SD card slot.
- 10. Connect Raspberry Pi to power via the USB-C (or Micro-USB depending on the model) port.
- 11. Connect the Raspberry Pi to your network via the ethernet port on the Pi, make sure your computer is connected to the same network as well.
- 12. Home Assistant Installation happens automatically if the Micro SD card is inserted and the Raspberry Pi is powered on. This might take a few minutes. If you want to monitor the installation, connect the Raspberry Pi through its mini-HDMI port to a display.
- 13. Open a web explorer, navigate to http://homeassistant.local:8123/ and hit enter.
- 14. Wait for the setup to finish and click on "Create My Smart Home".
- 15. Create a user using your preferred credentials.

## **HACS** Installation

Home Assistant Community Store (HACS) is a third-party download manager for Home Assistant which contains various custom integrations. We need to install LocalTuya integration through HACS to locally control the pet feeder. This guide was written using HACS version 1.34.0.

1. Go to your user profile and enable "Advanced mode".



Fig. 3: User profile is found on the bottom right.

- 2. Go "Settings"  $\rightarrow$  "Add-ons"  $\rightarrow$  "Add-on store"  $\rightarrow$  search "SSH"  $\rightarrow$  Install "Terminal & SSH".
- 3. After the installation is complete, enable "Show in sidebar"

=<	Home Assistant	<del>~</del>	Info	Documentation	Configuration	Log	
55	Overview	Terminal & SSH					•
₽	Мар	Current version: 9.14.0 (Changelog)					
4	Energy	7 Rating 🕼 Manager 🐮 Ingress	Signed				
ŧΞ	Logbook	Allow logging in remotely to Home Assist Visit the Terminal & SSH page for more d	ant using SSH. etails				
1.	History						
	Media	<b>OpenSSII</b>					
▷-	Terminal	Start on boot Make the add-on start during a system boot					
Ê	To-do lists	Watchdog					
2=	10 00 11313	This will start the add-on if it crashes Auto update					
		Auto update the add-on when there is a new vers	ion available				
		Show in sidebar Add this add-on to your sidebar					
					-		
		START					UNINSTALL
		Home Assistant Ad	d-on: SS	SH server			
		Allow logging in remotely to Home Assi:	stant using SSH	or just the web termin	al with Ingress.		
~	Developer tools	aarch64 yes amd64 yes armhf yes	armv7 yes i38	6 yes			
۰.	Settings	About					
		Setting up an SSH server allows access Assistant API.	to your Home A	ssistant folders with a	ny SSH client. It also inclu	des a command-line tool to acces	s the Home
,	Notifications 1						
t							

Fig. 4: SSH Add-on options after installation

- 4. Navigate to "Terminal" on the sidebar, if it appears not to be running or if you are receiving error codes, refresh the instance.
- 5. Copy and paste (CTRL+SHIFT+V to paste) the following command to the terminal and hit Enter. This will initiate the installation of HACS.

wget -0 - https://get.hacs.xyz | bash -



Fig. 5: HA SSH

- 6. After the installation is completed, restart the home assistant ("Settings"  $\rightarrow$  three dots on the top right  $\rightarrow$  "Restart Home Assistant"  $\rightarrow$  "Restart Home Assistant").
- 7. Home Assistant should automatically restart, if the browser crashes, refresh the browser page to access Home Assistant again.
- 8. Navigate to "Settings" → "Devices & Services" → Click "Add Integration" on the bottom right corner.
- 9. Type "HACS" on the search bar, click on the result.



10. Check all but the last checkbox and submit.

	HAC	S	?	$\times$
	Before	you can setup HACS you need to acknowledge the following		
	✓	I know how to access Home Assistant logs		
		I know that there are no add-ons in HACS		
V	<b>~</b>	I know that everything inside HACS including HACS itself is custom and u Home Assistant	ntested	by
	<b>~</b>	I know that if I get issues with Home Assistant I should disable all my custom_components		
T		Enable experimental features, this is what eventually will become HACS 2. enable it now you do not need to do anything when 2.0.0 is released	0.0, if yo	bu
			S	ивміт
Fig.	7			

- 11. Create a github account if you don't have one.
- 12. HACS will ask you to activate device through your github account. Follow the instructions provided and link HACS with your github account.



Device Activation
Signed in as
Enter the code displayed on your device
84D8-C4C
Continue
GitHub staff will never ask you to enter your code on this page.

Fig. 9: Paste the code here.

- 13. Click on "Authorize" and exit github.
- 14. If everything is set correctly you should have installed HACS on your Home Assistant. Do not pick an area on the pop-up and click on "finish".
- 15. Now HACS should show up on the sidebar of Home Assistant UI.

## LocalTuya integration Installation

LocalTuya integration is what we need to control the pet feeder locally. This guide was written for LocalTuya version 5.2.1.

1. On the HACS tab, click on "Integrations".

=<	Home Assistant	Home Assistant Community Store
55	Overview	2 Integrations
₽	Мар	This is where you find custom integrations (custom_components)
4	Energy	Frontend This is where you find themes, custom cards and other elements for lovelace
=	Logbook	Add-ons
1.	History	There are no addons in HACS, but you can click here to get to the supervisor
	HACS	About Show information about HACS
D	Media	
>_	Terminal	
Ē	To-do lists	

2. Click on "Explore & Download Repositories" on the bottom right, on the pop-up search, type "LocalTuya". Click on the result.



Fig. 11

3. Click on "Download" on the bottom right. Click on "Download" again on the pop-up.

=<	Home Assistant	← Local Tuya		1
55	Overview	erospogrigio epostiund 2669 1 1135		
₽	Мар	RELEASE V5.2.1		
4	Energy	HACS DEFAULT MAINTAINER BROSPOGRIGIO		
II	Logbook			
ıl.	History	🙀 local tuya		
	HACS	iocui tuyu	Local Tuya X	
۵	Media	A Home Assistant custom Integration for local handling of Tuya-based de	Show beta versions	
>_	Terminal	This custom integration updates device status via pushing updates instead	-	
Ê	To-do lists	The integration also supports the Tuya IoT Cloud APIs, for the retrieval of	Select version v5.2.1	
		NOTE: The Cloud API account configuration is not mandatory (LocalTuy, performed only at startup, and when a local_key update is needed.	When downloaded this will be located in '/config/custom_components/localtuya'	date after re-pairing a device) of local_keys. Cloud API calls are
		The following Tuya device types are currently supported:	Remember that you need to restart Home Assistant before changes to integrations (custom_components) are applied.	
		Switches	(dation_components) are appred.	
		Lights		2
		Covers	DOWNLOAD	$< \neg$
		• Fans		
		Climates		
		Vacuums		
~	Developer tools	Energy monitoring (voltage, current, watts, etc.) is supported for compatibl	e devices.	
\$	Settings	Currently, Tuya protocols from 3.1 to 3.4 are supported.		
۰	Notifications 1	This repository's development began as code from @NameLessJedi, @mile other features. Refer to the "Thanks to" section below.	perhour and @TradeFace. Their code was then deeply refactored to provide prop	er integration with Home Assistant environment, adding config flow and
t		Installation:		
г: "	10			

### Fig. 12

## **Adding Pet Feeder to Home Assistant**

- 1. Download the "Tuya Smart" app to your smartphone (version 5.13.0 was used for this guide).
- 2. Press both buttons on the pet feeder at the same time.
- 3. Run the "Tuya Smart" app, press "Add Device", the Pet feeder should appear automatically, turn on your Bluetooth if it doesn't. Insert the wireless credentials and press login. **Make sure the pet feeder and the Home Assistant are in the same network**.

4. Navigate to Tuya IoT development platform and create an account.

# Create Your Tuya Account

* Email	
@gmail.com	
* Verification Code	
837329	Resend After 14 s
* Password	
	- Syster
Confirm Password	
	havet
Organization Name	
Company Name (Optional)	
* Country/Region	
Germany	$\sim$
Agree to Terms of Use, Legal Statement, Pr	
I declare that I have reached legal age of m the capacity to consent to the above docur	
Next	

- 5. Once the account is created, navigate to the developer platform on the top right corner of the page you were redirected to.
- 6. Skip the tutorials, hover the cursor over "Cloud" on the sidebar and click on "Development".





7. Click on "Create Cloud Project" on the Development page. Fill in the project details. Pick "Custom" Development method and "Central European Data Center", pick the rest as you see fit.

tuya	Developer Platform			Help	Documents	Tech Support	English(EN) 🔻	My Space 🔻	1		<b>.</b>
Overview	Development Based on the API products and supporting technical services provided by the Cloud Developme	Create Cloud Project		х							
Product	Operation Guide Cloud Development Website 7	* Project Name:	pet feeder								
App	My Cloud Projects Upgrade IoT Core Plan >	Description:	Please briefly describe the functions and scenarios of your project, with no more than 255 words.	1				$\Rightarrow$	Create	lloud Proj	ject
Cloud											
Data		* Industry:	Others V	3							
Operation		* Development Method :	Custom								
Purchase		Data Center ():	Central Europe Data Center ×								
VAS 7	•		Cancel								
Fig	10										

Fig. 15

# 8. In the next step, add "Smart Home Basic Service" and "[Deprecate]Device Log Query" to the selected API services. Click on "Authorize".

thorize API Services platform recommends some API services, and you can removind this project will be granted access the API products.	ve and selec	t them as needed. The selected unsubscribed API se	ervices will be subscrib
Select API Services	All	Selected API Service(s) (5)	Delete All
Fire Protection Service	>	IoT Core (Free Basic Resource Pack)	×
Vehicle Detection	>	Authorization Token Management	×
General Scene Template	>	Industry Basic Service	X
[Deprecate]Industrial General Device Group Management	>	industry basic service	~
Elevator Control Service	>	Smart Home Basic Service	×
Pet Detection	>	[Deprecate]Device Log Query	X
Country and City Info	>		

## Fig. 16

9. Now that the project is created, let's add the pet feeder to the project. Navigate to "Devices"  $\rightarrow$  "Link Tuya App Account"  $\rightarrow$  "Add App Account".

<mark>tບງດ</mark> ີ D	eveloper Platform					Help	Documents	Tech Support En	glish(EN) 🔻	My Space 🔻	¥.	
Overview	← pet feed	ler Switch Project	•					Show	w Wizard $\sim$	Central E	urope Data Cer	nter $\vee$
Product	Overview A	uthorization	Service API Devices Message	Service Project SaaS								
App	You can add devid Device Linking Me		using the IoT Device Management app,	and can also link device resources of other apps. 🗢 Opera	tion Guide 🛛 🕒 View							
Cloud	All Devices	Link My App	Link My WeChat Mini Program	ink Tuya App Account Link SaaS								
Data	You can link devices	to this project by usin	ng accounts of Smart Life App. Already added 0	accounts and linked 0 devices.							Add Ap	p Account
peration	App Account		UID	App Name	Devices	Linked Projects		Device Linking Method	l Lini Der	ked (	Operation	
Purchase												
VAS 7												
•					No data found							

- 10. A QR code will appear, open the "Tuya Smart" app on your phone, press on "Me" on the bottom right and then press on the scan icon on the top right, scan the QR code.
- 11. After the QR code is scanned, pick "Automatic Device Linking Method" and click on OK.

	Link Tuya App Account	×
sa	You are trying to link the "Tuya Smart" App Account and subordinate devices with this project. Please select the device linking method and device permission to continue.	
	Device Linking Method	
l	Automatic Link (Recommended) : After you confirm the linking operation, all devices under the App Account will be automatically linked with the project.	
le	Custom Link : After you confirm the linking operation, you need to manually select and link the specified device(s) with the project.	
L	Cancel	К

12. Once the linking is complete, you should be able to see your account details on the "Link Tuya App Account" tab. **Make note of the "UID"**, we will use this later. Click on "Manage Devices".

						Help	Documents	Tech Support English(Ef	N) 🔻 My Spa	ce* 🗑 🖣 🎹 🌡
← pftk s	witch Project 🗢							Show Wiza	rd 🗸 🛛 Cen	tral Europe Data Center \vee
Overview A	Authorization	Service API Devices Mess	sage Service Project SaaS							
		using the IoT Device Management a	pp, and can also link device res	ources of other apps. 😒	Operation Guide 🛛 🕈 View					
All Devices	Link My App	Link My WeChat Mini Program	Link Tuya App Account	Link SaaS						
You can link device:	s to this project by usir	ng accounts of Smart Life App. Already add	led 1 accounts and linked 0 devices.							Add App Account
App Account		UID		App Name	Devices	Linked Projects		Device Linking Method	Linked Devices	Operation
?	@gmail.com	eu171-	YBR1	Tuya Smart	1	pftk		Custom Link	0	Manage Devices Unlink
								Total Items	:1 < 1	> 10 Items/Page >
	Overview A You can add dev Device Linking N All Devices You can link device App Account	Overview         Authorization           You can add devices to a project by Device Linking Methods         Ink My App           All Devices         Link My App           You can link devices to this project by using App Account         Interview	Overview         Authorization         Service API         Devices         Mes           You can add devices to a project by using the IoT Device Management a Device Uning Methods         Device Uning Methods         Mill Devices         Link My App         Link My WeChat Mini Program           You can link devices to this project by using accounts of Smart Life App. Already add         App Account         UID	Overview         Authorization         Service API         Devices         Message Service         Project SaaS           You can add devices to a project by using the IoT Device Management app, and can also link device res         Device Linking Methods         Device Linking Methods         Link My App         Link My WeChat Mini Program         Link Tuya App Account         Vou can link devices to this project by using accounts of Smart Life App. Already added 1 accounts and linked 0 devices         App Account         UID	Overview     Authorization     Service API     Devices     Message Service     Project SaaS       You can add devices to a project by using the IoT Device Management app, and can also link device resources of other apps.     P       Device Linking Methods     Ink My App     Link My WeChat Mini Program     Link Tuya App Account     Link SaaS       You can link devices to this project by using accounts of Smart Life App Already added 1 accounts and linked devices.     App Account     UID     App Name	Overview     Authorization     Service API     Devices     Message Service     Project SaaS       You can add devices to a project by using the IoT Device Management app, and can also link device resources of other apps.        • Operation Guide       • View Device Management app, and can also link device resources of other apps.       • Operation Guide       • View Device Management app, and can also link device resources of other apps.       • Operation Guide       • View Device Management app, and can also link device resources of other apps.       • Operation Guide       • View Device Management app, and can also link device resources of other apps.       • Operation Guide       • View Device Management app, and can also link device resources of other apps.       • Operation Guide       • View Device Management app, and can also link devices.         • View Device Management app, and can also link devices.        You can link devices to this project by using accounts of Smart Life App. Already added 1 accounts and linked 0 devices.         App Account       UID       App Name       Devices	Overview     Authorization     Service API     Devices     Message Service     Project SaaS       You can add devices to a project by using the IoT Device Management app. and can also link device resources of other apps.        • Operation Guide       • View       • Device Uning Methods       • Unit My App       Link My WeChat Mini Program       Link Topa App Account       Link SaaS         • View       • Vi	Overview     Authorization     Service API     Devices     Message Service     Project SasS       You can add devices to a project by using the IoT Device Management app. and can also link device resources of other apps.     Operation Guide     View       Policic Linking Methods     Link My App     Link My WeChat Mini Program     Link Tuya App Account     Link SasS       You can link devices to this project by using accounts of Smart Life App. Already added 1 accounts and linked 0 devices.     App Account     UID     App Name     Devices     Linked Projects	Overview       Authorization       Service API       Devices       Message Service       Project SaaS         Vou can did devices to a project by using the IoT Device Management app, and can also link device resources of other apps. <ul> <li>Operation Guide</li> <li>View</li> <li>Device Linking Methods</li> </ul> <ul> <li>Init My App</li> <li>Link My WeChat Mini Program</li> <li>Link Tuga App Account</li> <li>Link SaaS</li> </ul> You can link devices to this project by using accounts of Smart Life App. Aiready added 1 accounts and linked 0 devices. <ul> <li>App Account</li> <li>View</li> <li>App Name</li> <li>Devices</li> <li>Linked Projects</li> <li>Beroid Linking Method</li> <li>Beroid Linking Method</li> <li>Beroid Linking Method</li> <li>Beroid Linking Method</li> </ul>	Overview       Authorization       Service API       Devices       Message Service       Project SaaS         You can add devices to a project by using the IoT Device Management app, and can also link device resources of other apps. <ul> <li>Operation Guide</li> <li>View</li> <li>Device Linking Methods</li> </ul> All Devices       Link My App       Link My WeChat Mini Program       Link Tuge App Account       Link SaaS         You can link devices to this project by using accounts of Smart Life App. Already added 1 accounts and linked 0 devices.       Devices       Linked Projects       Linked Pro

Fig. 19

13. If the Pet Feeder is shown as unlinked, check the checkbox next to the pet feeder and hit "Link Device".

Manage Devices	X
You can choose either method to link devices. In the automatic mode, all devices under the app账号 will be linked with the cloud projed device allowance of your IoT Core is sufficient. In the custom mode, you need to manually select and add device(s) to the cloud projed	
Information	
Name: @gmail.com Type: app账号	
Linking Configuration	
Device Management Method:Custom settings Modify 1	
Je vice List	
Tevice Type V Device Permissi V Enter device information for f Search	
✓ 1 Device(s) Selecter Link Device Unlink	
✓ Device Name Device ID Product Device Device Device Activation Time Device Permission	Operation
Pet Feederbfd6:liadNooie NPF01Real2024-05-24 Device12:37:36	Link
Total Items: 1 < 1 >	10 / page \vee

14. Confirm the pet feeder exists on the "All Devices" tab, do not close this webpage.

yo Developer Platform	Help Docum	ents Tech Support English(EN) * My Space	· * * * II *
view 🗲 pftk Switch Project 🕈		Show Wizard ~ Centr	al Europe Data Center \vee 🏾 🜒
Overview Authorization Service API Devices Message Service Project SaaS			
You can add devices to a project by using the IoT Device Management app, and can also link device resources of other apps.  Operation Guide View Device Linking Methods			
All Devices Link My App Link My WeChat Mini Program Link Tuya App Account Link SaaS			
View Devices by Product.			~
ation Device: 1 Standard Instruction			
have			
Choose V Device Type V Device Permission V Product V Enter device name, or d Search Reset			Add Device
Device Name Device ID Product Source Online Status	Device Type Activation Time	Device Permission	Operation
Pet Feeder bfd£ /63iad Nooie NPF01 @gmail.com Online	Real Device 2024-05-24 12:3	7:36 Read Change	Debug Device

- 15. Navigate back to the Home Assistant UI
- 16. Go to "Settings" → "Devices & Services" → "Add Integration" on the bottom right corner, Search for "LocalTuya". Click on "LocalTuya Integration".

Last update: 2024/06/03 14:26	amc:ss2024:bird_feeder:h	a_installation https://student-wiki.eolab.de/doku.php?id=amc:ss2024:bird_feeder:ha_inst	tallation
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≡<	Home Assistant	÷	Integrations	Devices Entities H	Helpers	:
	Overview	Q Search				<del>,</del>
8	Мар	Discovered				
4	Energy	ปก็ศา	Select brand	×		
≣	Logbook	Dream-Machine-ProIoTLab (192.168	O Search for a brand name	×		
•	History	UniFi Protect	Q Search for a brand name localtuya		2	
	HACS	CONFIGURE	LocalTuya integration	� → <		
	Media	Configured				
2.	Terminal					•
伯	To-do lists	Bluetooth > 5	Goog	>	HACS >	Home Assistant Supervisor >
			DEVICE	0	1 SERVICE 🧐 🔿	5 SERVICES
		Meteorologisk institutt >	Radic	>	Shopping List	XÔX Sun >
			ENTRY		1 ENTITY	1 SERVICE
7	Developer tools					
\$	Settings					
t	Notifications ()				1	
Fig	. 22					

17. Once LocalTuya is installed, Cloud API configuration pop up will appear. Make sure API server region is EU. For the rest of the credentials, we need to navigate back to Tuya developer platform.

	Cloud API account configuration 🕜	$\times$	
	Input the credentials for Tuya Cloud API.		
	API server region		
	o eu		
	O us		
L	🔿 cn		
L	) in		
Ŀ			
•	Client ID		
	Secret	o	
		•	
31	User ID		
	localtuya		
L			
	Do not configure a Cloud API account		
		SUBMIT	



18. On the left sidebar, hover on "Cloud" → "Development" → "Open Project". The "Client ID" and the "Secret" can be found under the "Overview" tab of the cloud project. (not the Overview on the sidebar, the one under our project name).

Last update: amc:ss2024:bird\_feeder:ha\_installation https://student-wiki.eolab.de/doku.php?id=amc:ss2024:bird\_feeder:ha\_installation https://student-wiki.eolab.de/doku.php?id=amc:ss20

tuyດື	Develope	er Platform	Help	Documents	Tech Support
Overview	÷	pftk Switch Project +			
>_ Product	Ove	view Authorization Service API Devices Message Service Project SaaS			
App		cloud development project is a collection of resources on the Tuya IoT Development Platform, including devices. APIs, and data, Resources deployed for project are isolated from those for the other projects. 🗢 Operation Guide			
Cloud	P	ftk			🖉 Edit
Data		ndustry : Smart Home Creation Time : 2024-05-08 16:13:28 ata Center : Central Europe Data Center			
Operation		uthorization Key 🚳		View Aut	horization >
Purchase	А	ccess ID/Client ID: qið yitj ccess Secret/Client Secret: ************************************			
VAS 7	c	loud Authorization IP Allowiist 🐵 🛛 💽			
	•	o improve security, you can set up a list of IPs that can legally access Tuya's data centers through the IP whitelist function. Requests from source IPs that are not in this list will be rejected.			

Fig. 24

- 19. Insert the credentials back to Home Assistant. Use the previously mentioned "UID" from "Link Tuya App Account" tab and click on "Submit".
- 20. LocalTuya Integration is now linked with your Tuya Development Account. We still need to configure the pet feeder for local use.
- 21. You will be redirected to LocalTuya integration page, if not, Navigate to "Settings"  $\rightarrow$  "Devices & Integrations"  $\rightarrow$  "LocalTuya".
- 22. Click on "Configure" on the same page  $\rightarrow$  "Add a New Device"  $\rightarrow$  "Pet Feeder" (which should be recognized automatically) and submit.

🔬 local tu	ya	Integration entries	
5.2.1		localtuya No devices or entities	CONFIGURE
😚 Custom integration		ADD ENTRY	
II Documentation	Ø		
🐞 Known issues	Z		
Known issues	Ø		





Name* Pet Feeder	
Host* 192.168.2	
Device ID* b1	3iad
Local key* _ZG('	}_n
rotocol Versi	
rotocol Versi	
-	
3.1	
<ul><li>3.1</li><li>3.2</li></ul>	
<ul> <li>3.1</li> <li>3.2</li> <li>3.3</li> <li>3.4</li> </ul>	



1. Skip to step 23 if the credentials of the Pet Feeder are configured automatically. If the Pet

Feeder's configuration is **not set automatically**, navigate back to the Tuya Developer Platform, hover on the "Cloud" icon on the sidebar  $\rightarrow$  "API Explorer".



Fig. 29: Optional step, refer to step 22.a.

- 2. On the API explorer, Navigate to "Query Devices in Project" on "Device Management".
- 3. Type "1" to "page\_size" and click on "Submit Request".
- 4. The response query gives us credentials of the device. We can find the local key and device id (called "id").

Last update:	ameres2024 hird	foodoriba	installation https:	//studont wiki oc	lah do/doku nhn?	id=amc:ss2024:bird	foodoriba	installation
2024/06/03 14:26	amc.ssz0z4.biru_	ieeuer.na_		//student-wiki.ed		iu—airic.552024.biru		Installation

<b>ເບບດ</b> ີ <b>IoT Platform</b> API Exp	lorer pftk Switch Project 🕈	English(EN) 🔻 My Spac
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Search Q	Query Devices in Project ⑦	1564476DED52D65266FF76C65EB81DC5E8EFABF85E111803FC6A"header "access_token: 03e6 bdf052953e96b97da7b8c48b67"
Space Management	Parameter(Request Method: GET)	
<ul> <li>Device Management</li> </ul>	Params	Response
Get Status Reporting	page_size ⑦ :	
Get Update Progress	page_size () :	{ "result": [
	1	{
Query Device Details i	product_ids ② :	"activeTime": 1716800168,
Delete Device	string	"bindSpaceId": "191405820",
Get Update Information	categories ⑦ :	"category": "cwwsq", "createTime": 1715678729,
	string	"customName": "",
Query Device Details	last_id ② :	"icon": "smart/icon/ay1514359068372Hd98B/7417249f407bb07aab91b7a3befbcb
Confirm Start of Update	string	"id": "bfd671 ;iad",
Get Device State	9	"isOnline": true,
		"lat": "51.5",
Get Operation Log		"localKey": "eVCgi "NZ",
Modify Basic Properties		"lon": "6.55", "model": "",
Freeze/Unfreeze Device		"name": "Pet Feeder",
		"productId":
Transfer Device		"productName": "Nooie NPF01", "sub": false,
Restore Factory Defau		"timeZone": "+02:00",
Query Devices in Space		"updateTime": 1716800172,
		"uuid":
Query Devices in Proj		
Pair Device by Scanni		"success": true,
Query Pairing Result		"t": 1716815105151,
Device Control		}
<ul> <li>Device Group</li> </ul>		٩
<ul> <li>Scene Linkage Rules</li> </ul>	Submit Reg	uest

Fig. 30: Optional step, refer to step 22.a.

- 5. The Host address can be obtained via your router's web interface.
- 23. After you submit, you will be met with the "Entity Type Selection" pop-up. The pet feeder has different functions such as dispensing food or turning the LED on the pet feeder on and off. Each of these functions has their own "Data Point ID" to communicate with the cloud. We need to intercept these Data Points and create separate entities to control the device via the Home Assistant.

Entity type selection	) ×
Please pick the type of entity you want to a	ıdd.
Platform* switch	•
	SUBMIT

Fig. 31

24. Do not exit the Home Assistant instance and navigate back to Tuya Developer Platform. Open your project and navigate to "All Devices" tab under "Devices" and click on "Debug Device".

21/26

	witch Project 🗘 Authorization	Service API Devices	Message Service Proje	ct SaaS				Show Wizard V	ntral Europe Data Center $\vee$
u can add dev evice Linking N		y using the IoT Device Manager	nent app, and can also link de	vice resources of other apps. 🗢 Op	peration Guide 🛛 🕒 View				
All Devices	Link My App	Link My WeChat Mini Progr	am Link Tuya App Accor	unt Link SaaS					
View Devices by	Product.								· · · · · · · · · · · · · · · · · · ·
Nooie NPF01 Devices:1	Standard Instruction								
Choose	∨ Device	Type V Device Perr	nission V Product	✓ Enter device name, or	d Search Reset				Add Device
Device Name	Device	D	Product	Source	Online Status	Device Type	Activation Time	Device Permission	Operation
		iad	Nooie NPF01	@gmail.com	Online	Real Device	2024-05-27 10:56:08	Read Change	Debug Device

Fig. 32

- 25. On the device debugging page, under "Standard Instructions Set" are the functions of the device we can set new values for. Under "Standard Status Set" are the previously mentioned functions and the available sensors of the device.
- 26. To find out which Data Point is associated with which function of the device, navigate to "Device Logs" tab.

	vitch Project 🕈	Service API <b>Devices</b> Me:	ssage Service Project Sa	aS				Show Wizard V	Central Europe Data Center V
You can add devi Device Linking M		using the IoT Device Management	app, and can also link device	resources of other apps. 📚 Operation	Guide 🕒 View				
All Devices	Link My App	Link My WeChat Mini Program	Link Tuya App Account	Link SaaS					
View Devices by	Product.								~
Noole NPF01 Devices:1 5	Standard Instruction								
Choose	V Device 1	Type V Device Permissio	on V Product	V Enter device name, or d	Search Reset				Add Device
Device Name	Device ID		Product	Gource	Online Status	Device Type	Activation Time	Device Permission	Operation
Pet Feeder	b	iad	Nooie NPF01	@gmail.com	Online	Real Device	2024-05-27 10:56:08	Read Change	Debug Device

Fig. 33

- 27. Turn the developer console on of your browser (CTRL+SHIFT+I or F12 for Google Chrome). Navigate to "Network" tab on the developer console.
- 28. Notice the "Select DP ID" dropdown menu on the top left side of the page.
- 29. While the Developer console is on, click on the DP ID dropdown menu and select "Manual Feed", click on "Search".
- 30. After you click on "Search", you should see the network tab of your developer console update with several different logs. "list" is the one we are looking for.

tuyດ IoT Platform Device De	ebugging pftk	Switch Project 🗘				English(EN) 🔻	My Space 🔻 🚨		ts Console :				8 : × L  ⊕
Central Europe Data Center 🛛 🗸 🕚	Basic Information	Device Debugging	g Device Log	js				± €			2		
Tuya App Account / taycankaya@ 🗸	Select DP ID		t V 2024-05-2	7 16:05:19 → 2024-05	i-27 16:05:19 📋 Sear	ch		Filter All Fetch/XHR [	loc CSS JS Fr	ant Img Media		Wasm Other	
Enter device ID Q	Time	Device Event	DP ID	Event Details	Source	Source Details		20 ms	40 ms	60 ms	80 m		00 ms
Pet Feeder(bfd67fe2ceb62d3d963iad)													
				暂无日志									

Fig. 34

31. Click on "list", and navigate to the "Payload" tab, "Code" is the Data Point ID we are looking for. In this case it's 3. Last update: amc:ss2024:bird\_feeder:ha\_installation https://student-wiki.eolab.de/doku.php?id=amc:ss2024:bird\_feeder:ha\_installation https://student-wiki.eolab.de/doku.php?id=amc:ss20

🔆 🗖 Elements Console Sources Net	twork Performance Memory Application Security >> 🛛 😣 11 🔺 3 🗖 1 🔅 🗄 🗙
🧿 Ø │ 🝸 🔍 │ 🗖 Preserve log │ 🗖 Disable	cache No throttling 🔻 🕱   🛨 🛃 🛛 🕸
Filter Invert   Hide	data URLs 📃 Hide extension URLs
All Fetch/XHR Doc CSS JS Font Img Me	edia) Manifest WS Wasm Other Blocked response cookies Blocked requests
□ 3rd-party requests	
20000 ms 40000 ms 60000 ms	80000 ms 100000 ms 120000 ms 140000 ms 160000 ms 200000 ms 200000 ms 220
Name	X Headers Payload Preview Response Initiator Timing Cookies
O data:īmage/svg+xml,	▼Request Payload view source
(i) list	{startRowId: "", pageNo: 1, pageSize: 10, code: "3", startTime: 1716818719016, endTime: 1
tpm.gif?ss=1920x1080&ws=898x963&sp=0x0∾	code: "3"
tpm.gif?ss=1920x1080&ws=898x963&sp=0x0∾	
8 envelope/?sentry_key=92a749b330bd49b19d769	endTime: 1716818719017 pageNo: 1
tpm.gif?ss=1920x1080&ws=996x963&sp=0x0∾	pageNo. 1 pageSize: 10
tpm.gif?ss=1920x1080&ws=996x963&sp=0x0∾	
	projectCode: "p171 1p"
	region: "EU" sourceId: "eu171 IR1"
	sourceType: "4"
	startRowId: ""
	startTime: 1716818719016

Fig. 35

- 32. The ID is our Data Point, which is 3.
- 33. Navigate back to "Device Debugging" tab, make note of the manual\_feed's type and values. It's an integer with a minimum value of 1, maximum value of 20 and with a step of 1.

Control Device with Standard Update Device Status JSON Editing	Standard Instructi	on Set Sta	andard Status Set
Instruction Set	Code	Туре	Values
feed_report (0 - 20)	meal_plan	Raw	0
charge_state battery_percentage (0 - 100%) 0 manual_feed (1 - 20)	manual_feed	Integer	<pre>{     "unit": "",     "min": 1,     "max": 20,     "scale": 0,     "step": 1 }</pre>
0	factory_reset	Boolean	"{true,false}"
factory_reset	light	Boolean	"{true,false}"
light			

- 34. Navigate back to Home Assistant, last time, we were at the Entity Type Selection pop-up.
   "Settings" → "Devices & Services" → "LocalTuya" → "Configure" → "Add a new Device" → "Submit" → "Submit".
- 35. Let's add the manual feed function to LocalTuya. LocalTuya includes integers in "number", pick it from the dropdown menu and submit.



36. The "ID" dropdown menu includes DP IDs of the pet feeder, we know 3 is manual feed. From the dropdown menu, pick 3. Call it Manual Feed. The minimum value is 1, maximum value is 20 and the increment between values is 1. Click "Submit'.

Confi	gure entity	0	>
	ill out the details for an entity with type number . All settings exc changed from the Options page later.	cept for	I
<sup>ID*</sup> 3 (valu	ie: 3)		Ŧ
Friendly Manua	name* al Feed		
Minimur 1	m Value		
Maximu 20	im Value*		
Minimur 1	m increment between numbers*		
	Restore the last set value in HomeAssistant after a lost connection		
	Passive entity - requires integration to send initialisation value		
Defau	lt value when un-initialised (optional)		
		SUE	31

37. On the next step, the entity type selection will appear again, for now, check the "Do not add any more entities" and click "Submit" (we can always add more later).



38. Now let's see if the manual feed entity works. Click on "1 device" below the logo of localtuya.

🔬 local tuy	ya	Integration entries			
5.2.1		localtuya 1 device and 1 entity	CONFIGURE		
😚 Custom integration		ADD ENTRY			
al device	>				
▲ 1 entity	>				
III Documentation	Z				
Known issues	Z				
👯 Enable debug logging					

Fig. 40

39. Slide the Manual Feed to any value and check the Pet Feeder is dispensing food.

Controls	3
Manual Feed	<u> </u>
ADD TO DASHBOARD	

## Fig. 41

40. Add more entities by repeating step 26 and beyond.

Last update: 2024/06/03 14:26 amc:ss2024:bird\_feeder:ha\_installation https://student-wiki.eolab.de/doku.php?id=amc:ss2024:bird\_feeder:ha\_installation

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