



Activity
Connecting with intelligence

How to connect an Abeeway tracker to Helium



FOREWORD

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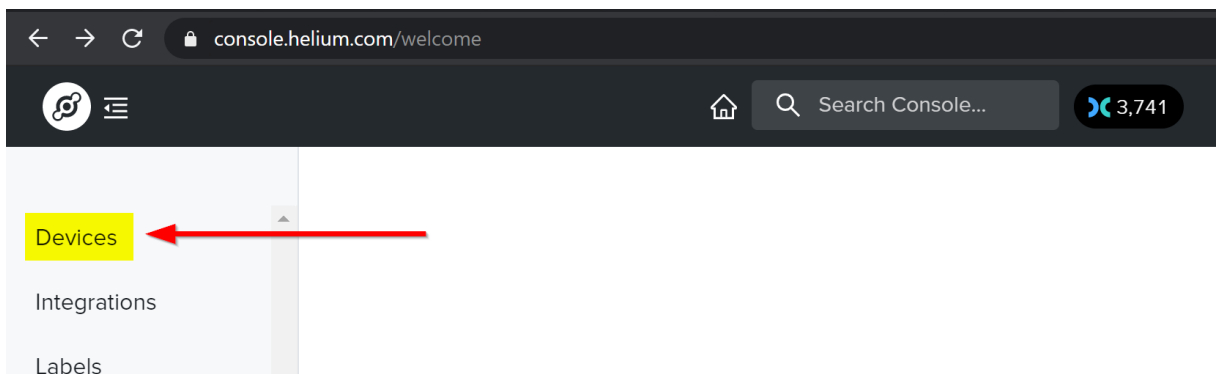


1 REQUIREMENTS

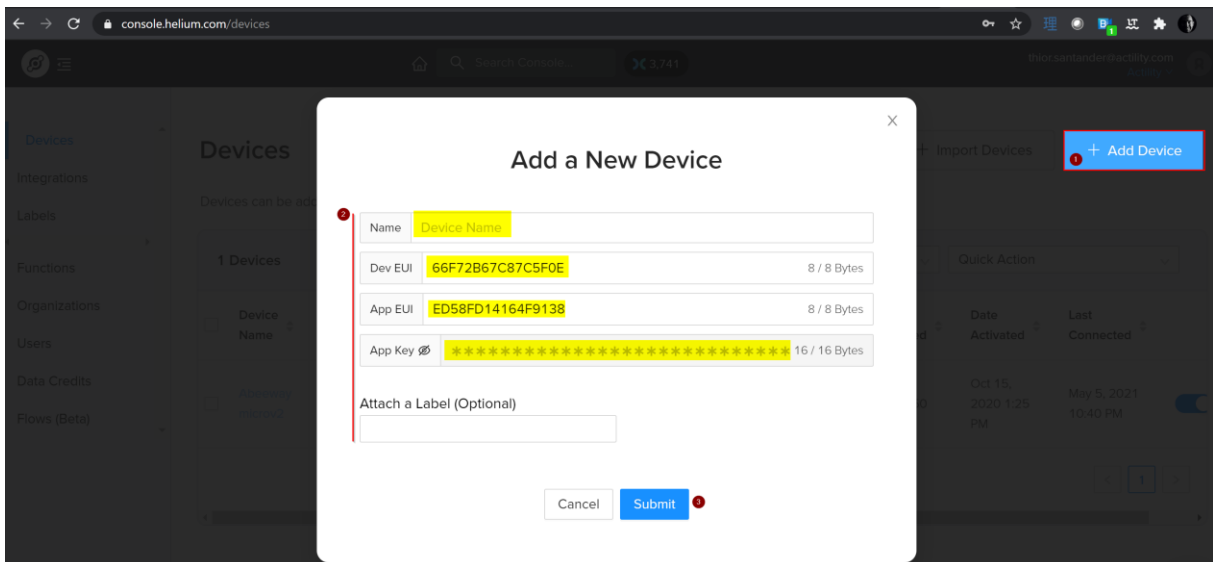
- Abeeway tracker
 - You must know your devEUI/appEUI/appKey
- Helium account
 - Visit <https://www.helium.com> to create an account
 - Log in to your account using <https://console.helium.com/>

2 PROVISION YOUR TRACKER

2.1 Go to the device page



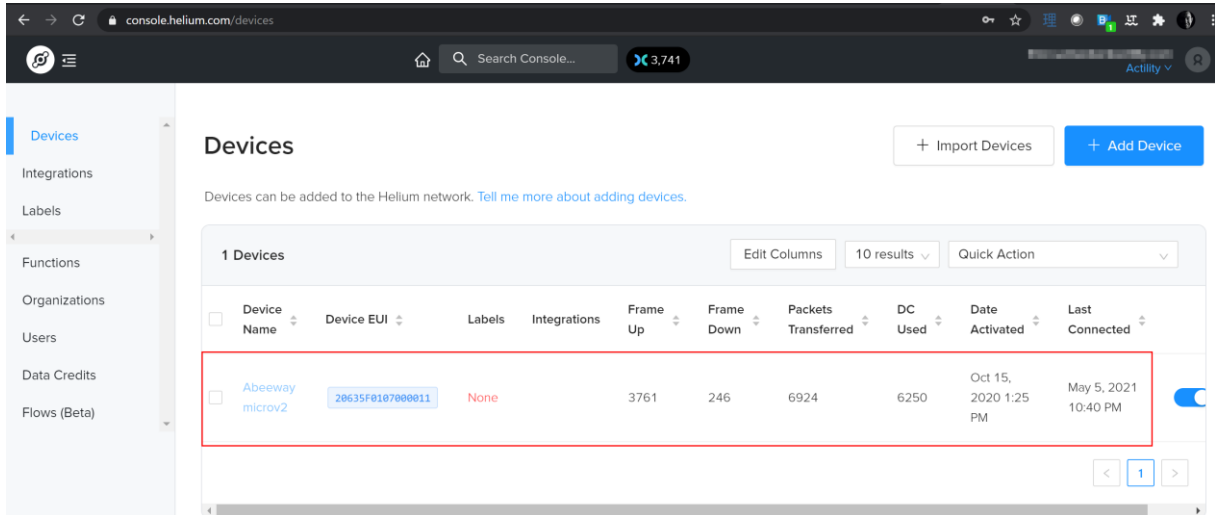
2.2 Click on Add Device, fill the form and Submit



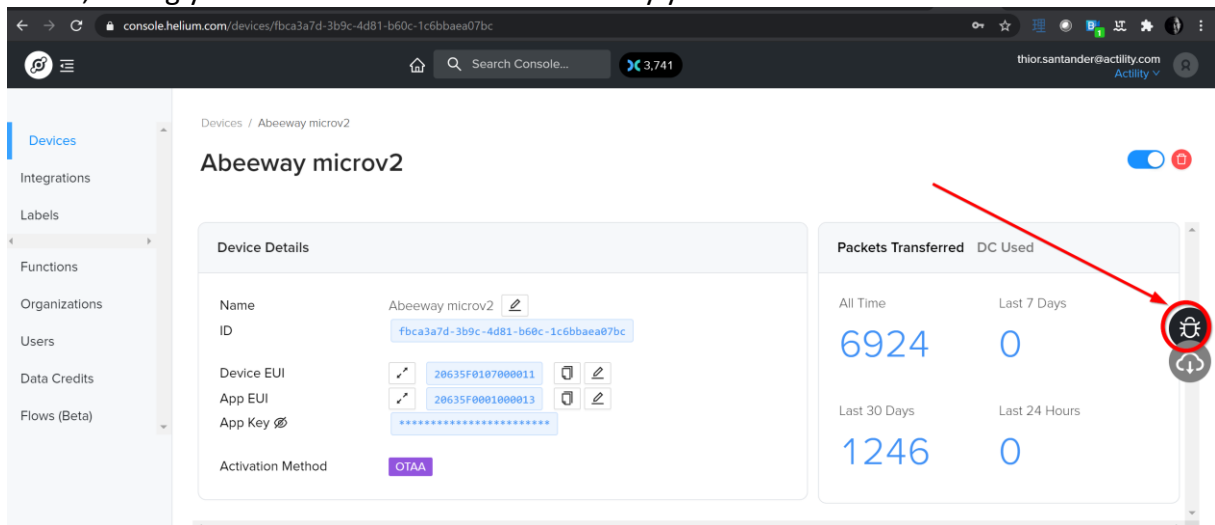


3 CHECK YOUR DEVICE INFORMATION

You can check your device's main statistic from the device page



Clicking on your device's line will provide you more details and give you access to the debug mode, letting you see the raw data transmitted by your device





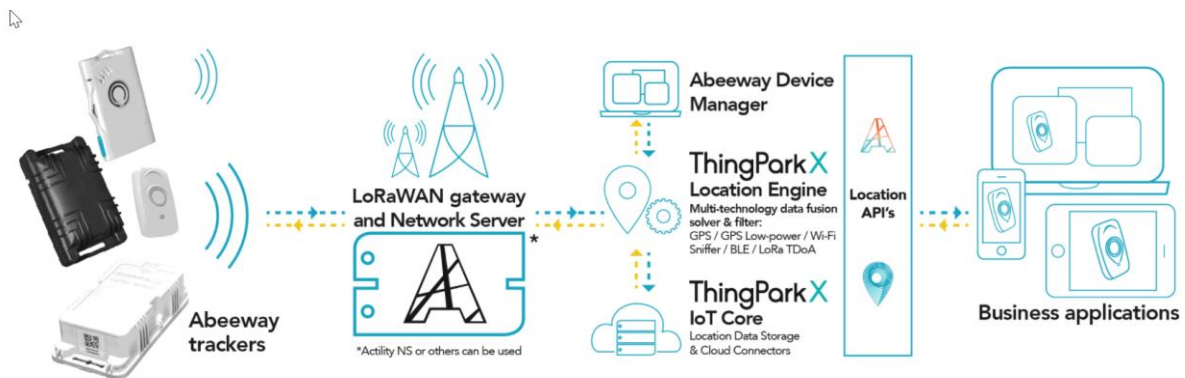
4 HELIUM INTEGRATION WITH ABEEWAY DEVICE MANAGER

Abeeway trackers are LoRaWAN® devices ensuring asset localization by leveraging multiple geolocation technologies: **GPS**, **Low Power-GPS (LP-GPS)**, **Wi-Fi** sniffing, **LoRaWAN®**, and **BLE** radios. Multiple form factors are available to match the wide variety of vertical applications.

TP X Location Engine is a multi-technology solver that computes and exposes the best location information possible by combining the various information transmitted by the tracker. The location engine also exposes a set of APIs to interact with the trackers – for example to request a position, change configuration, etc.

Abeeway Device Manager (ADM) is TP X location Engine's companion application to efficiently manage your fleet of trackers. With ADM you can:

- Manage your trackers configuration
- Visualize your trackers on a map
- Assess your trackers' behavior and performance, visualizing their key metrics at a glance.



HELIUM - ASSET TRACKING EVALUATION KIT gives you free access to Abeeway Device Manager.

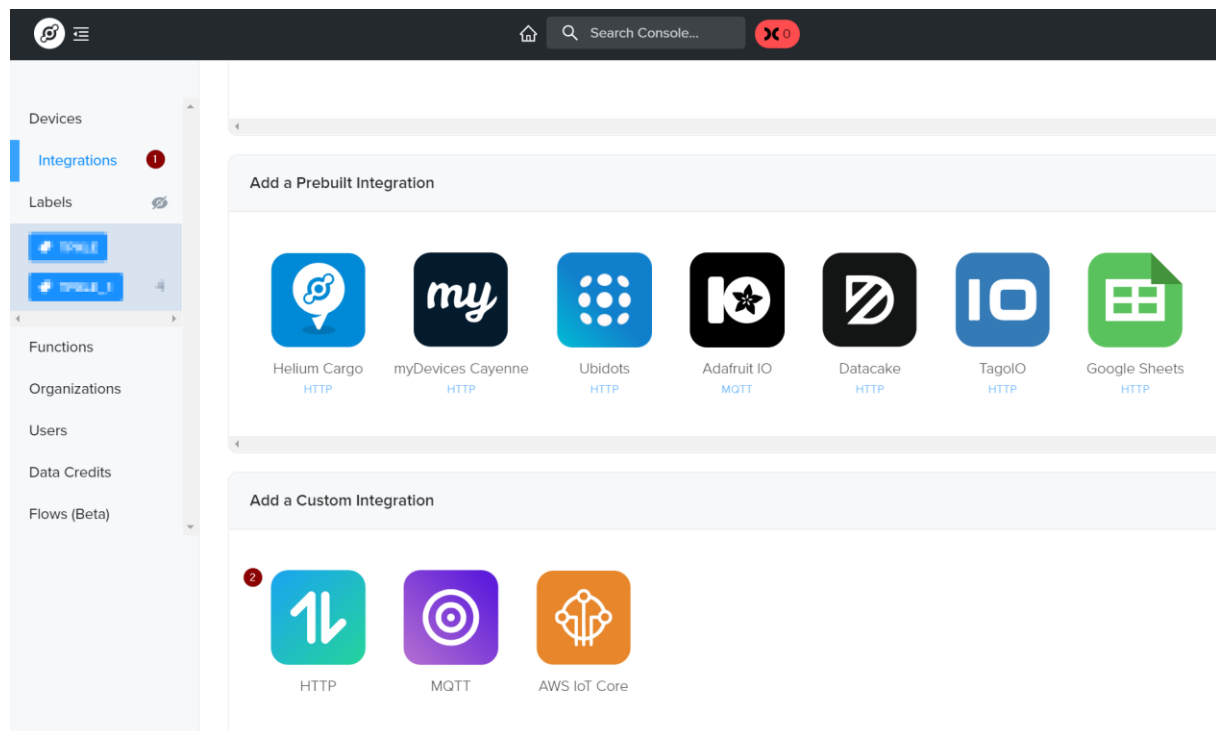


4.1 Create integration

To be able to use Abeeway Device Manager, an access to ThingPark Community portal must be created: <https://community.thingpark.org>



Then an HTTP custom integration must be created on Helium console - <https://console.helium.com/integrations>





Step 2 - Endpoint Details

POST GET PUT PATCH

Endpoint URL (Required)
https://community.thingpark.io/tpxle-nit/uplink_from_helium

HTTP Headers (Optional)

x-client-id	community-api/john.doe@acme.com
x-client-secret	xxxxx

+ Add Header

The Endpoint URL to be configured must be: [https://community.thingpark.io/tpxle-nit/uplink from helium](https://community.thingpark.io/tpxle-nit/uplink_from_helium)

The following 2 headers must be configured:

- x-client-id: community-api/<YOUR_COMMUNITY_CLIENT_ID>

where <YOUR_COMMUNITY_CLIENT_ID> is the email used to create your account on Activity Community Portal - <https://community.thingpark.org>

- x-client-secret: <YOUR_COMMUNITY_CLIENT_SECRET>

where <YOUR_COMMUNITY_CLIENT_SECRET> is the password set up during our account creation on Activity Community Portal - <https://community.thingpark.org>

In Integration creation – step 3, name your integration.

In Integration creation – step 4, attach a label to this integration.

More information on how to create Helium integrations can be found here - <https://docs.helium.com/use-the-network/console/integrations/http/>



4.2 Add Integration label to your device

Go in Devices, click on Add Label corresponding to your newly created integration

The screenshot displays the 'Devices' management interface. On the left, a sidebar menu includes 'Devices', 'Integrations', 'Labels', 'Functions', 'Organizations', 'Users', 'Data Credits', and 'Flows (Beta)'. The 'Labels' section is active, showing three labels: 'ADA', 'TPKLE', and 'TPKLE_1'. The main area shows 'Device Details' for a device named 'Microtracker-2u79-Montant'. The details include the device name, ID, Device EUI, App EUI, App Key, and Activation Method (OTAA). To the right, a summary table shows 'Packets Transferred' and 'DC Used' for different time periods. Below the details, a section titled '2 Labels Attached providing 2 Integrations' lists the attached labels and their associated integrations.

Labels	Associated Integrations	Date Activated
ADA	ABEWAY DEVICE MANAGER	Jun 2, 2021 9:52 PM
TPKLE_1	TPKLE_1	May 28, 2021 3:59 AM

5 ABEWAY DEVICE MANAGER ACCESS

To start tracking your assets using the Abeeway Device Manager application. Follow the steps described in the link below, you will be able to view your trackers on a map and monitor their performance, such as battery level.

⇒ https://docs.thingpark.com/thingpark-location/Content/C-Procedure-Topics/TrackAssetsAEK_T.htm



6 UPDATE ABEWAY CONFIGURATION FROM ADA

It is possible to update Abeeway tracker configuration from Abeeway Device Manager. To do so, a binder to Helium must be configured.

First step is to connect to ThingPark DX API Platform: <https://dx-api.thingpark.io/getstarted/#/>

Get started with the ThingPark DX API Platform!

Here you can change your ThingPark credentials for a token which will allow you to use any ThingPark DX API.

community-api (community.thingpark.io) ▾	?
cpel.lorinc@community@actility.com	?
*****	?

Generate a token

Same Client_Id and Client_Password must be used to connect. Then click on Generate a token.



Click on Swagger-UI in DX Location API.

Now you can use any of the following DX APIs:

DX Admin API Token management and other DX platform administration features Doc Swagger-UI	DX Core API Account management, offer subscription, device and base station provisioning Doc Swagger-UI	Tpx IoT-Flow API Data processing and dataflow management (drivers and connectors) Doc
DX Location API Integration with ThingPark geolocation solutions (solvers and applications) Doc Swagger-UI		

Expand POST /binderConfigs and click on Try it out

POST /feeds Feed request

BinderConfig Binder configuration operations are used to configure connection between ThingPark Location Engine and LoRa operators. Currently only the ThingPark Location Engine can be configured to push downlink commands to a target HTTP server.

GET /binderConfigs Binder configurations retrieval

POST /binderConfigs Binder configuration creation

Creates a new binder configuration.

Parameters

No parameters

Request body *required* application/json

Contents of the binder configuration to create.
Example Value | Schema

Try it out



In Contents of the binder configuration to create, paste the following json document:

```
{  
  "callbackURL": "https://community.thingpark.io/tpxle-nit/downlink_to_helium",  
  "deviceEUIList": "*" }  
}
```

And click on Execute.

Now when clicking on Update in Abeeway Device Manger tab – Device configuration, downlink command will be sent the device to update its configuration.