

Getting Started Guide

Mimiq Track and AWS IoT Core Device Location

Overview

Mimiq Track is a credit-card sized tracker intended for enterprise use in tracking assets. This document details the step-by-step instructions about how to set up Mimiq Track and configure it in AWS IoT Core Device Location.

Hardware Details

Datasheet can be found [here](#).

(<https://mimiq.io/wp-content/uploads/2022/12/Mimiq-Track-Enterprise-v2.pdf>)

What You'll Need

1. Package Contents

- a. 1x Mimiq Track
- b. 1x Charge Adaptor

2. LoRaWAN gateway

- a. A gateway that can run LoRa Basic Station. We suggest using an AWS-qualified gateway listed in [Find IoT hardware that works with AWS | Search by industry, application, features, and more \(amazonaws.com\)](#).

3. Access to an AWS account with a region that supports AWS IoT Core for LoRaWAN (screenshots included in this document relate to the eu-west-1 region).

- a. While not strictly required, to simplify creating and configuring the required AWS resources, it is recommended to use a user (IAM user or federated identity) with administrative privileges on the AWS account.

4. 3rd party purchasable items

- a. Not applicable

5. Additional Hardware References

- a. Not applicable

Learn more about Mimiq Track Enterprise [here](#).

Setup your AWS account

If you don't have an AWS account, refer to the instructions in the guide [here](#). The relevant sections are [Sign up for an AWS account](#) and [Create an administrative user](#).

Onboard your gateway to AWS IoT Core for LoRaWAN

Once you have a [qualified gateway](#), you need to onboard it to AWS IoT Core for LoRaWAN. Follow the [online instructions](#) to do this.

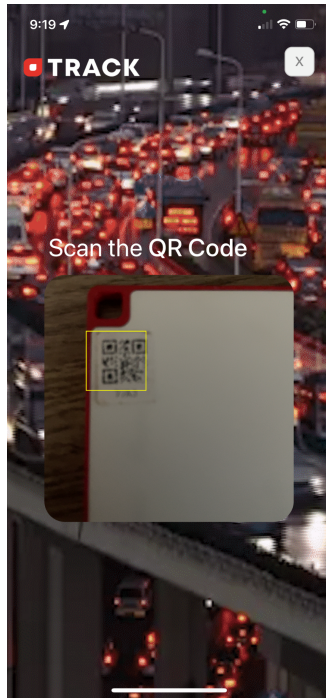
Configuring your tracker

This section describes all the steps required to get your tracker configured and to properly connect and operate with AWS IoT Core for LoRaWAN and AWS IoT Core Device Location.

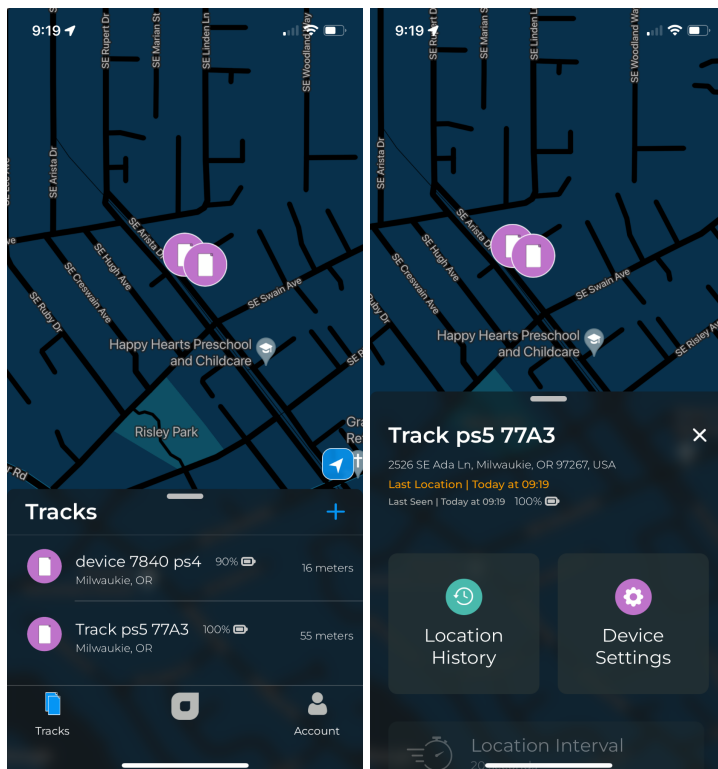
1. Unbox your tracker



2. Download the MimiQ Track app
3. Create an account and login
4. Once you login, you will be prompted to add a Track by scanning the QR code located on the back of your device



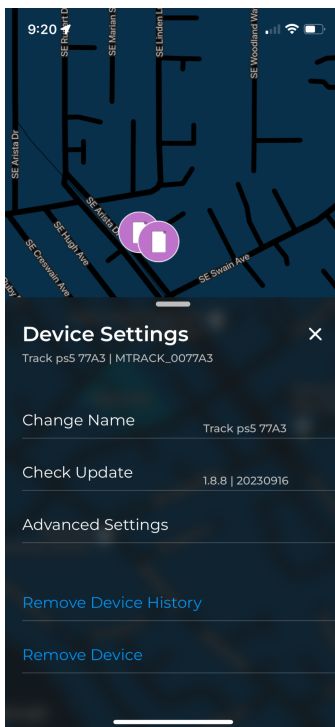
5. Once your Track has successfully been added and named, click on your device



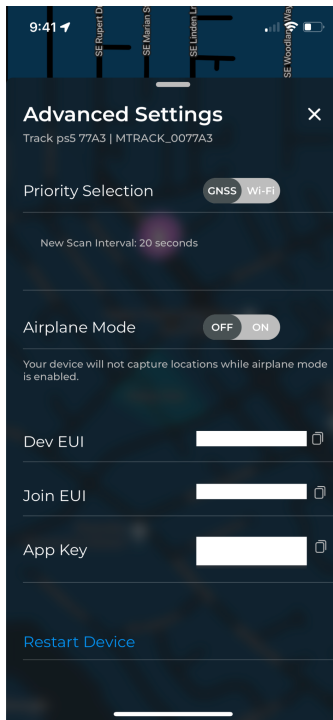
6. Make sure your device is up-to-date by clicking “Check Update” (pictured in screenshot under step 7). Enable BLE mode on Track by pressing the button located in the lower left corner for 3 seconds or until you hear a sound.



7. Click on Device Settings < Advanced Settings. Enable BLE again.



8. Grab your device keys under Advanced Settings. You will use these to provision your MimiQ Track.

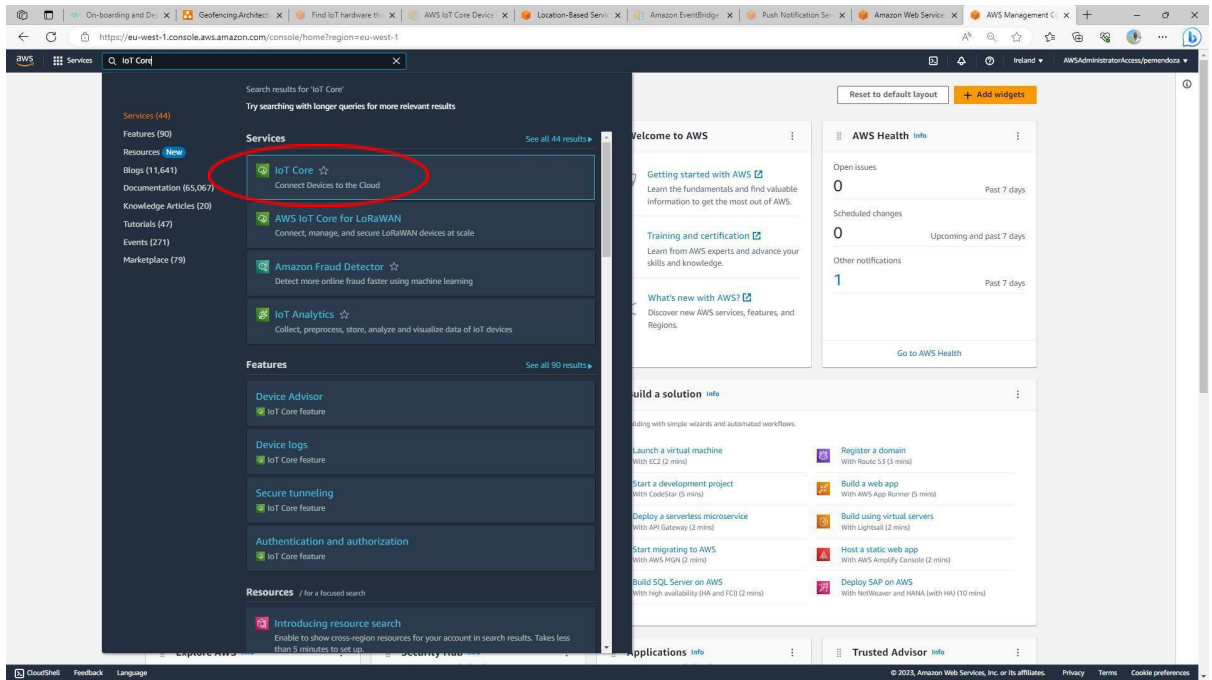


9. At this point, your Mimiq Track has been claimed and is ready for provision. Proceed to the next section.

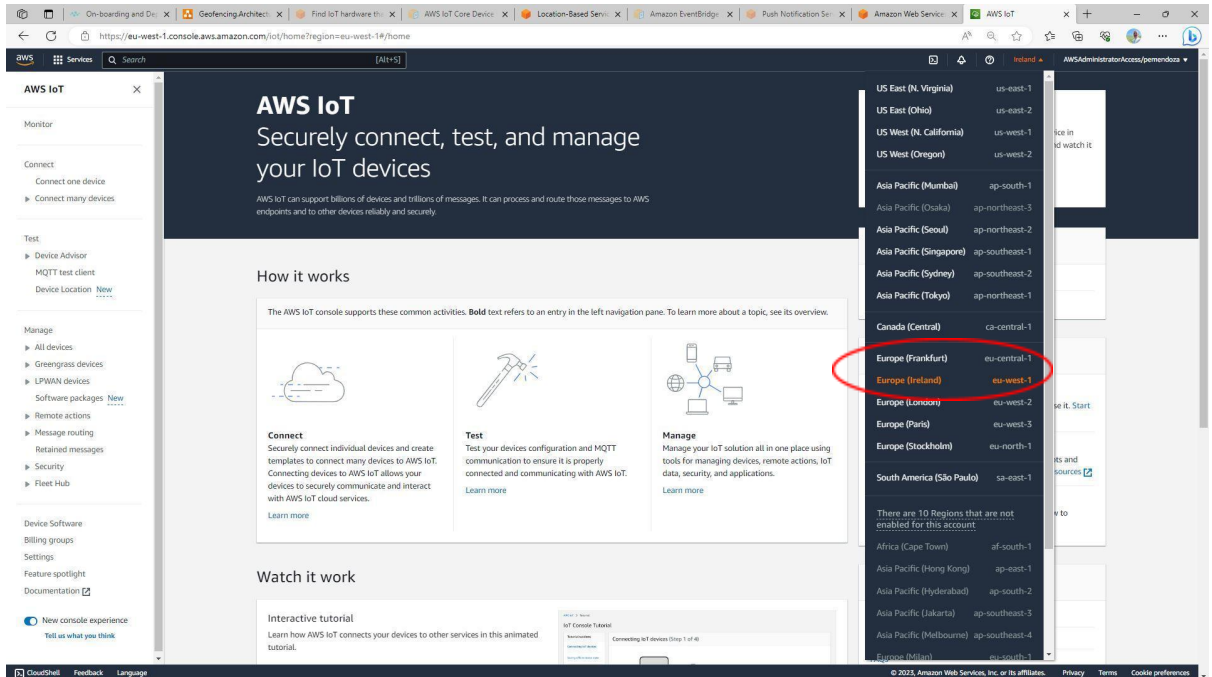
Provisioning & verifying your tracker on AWS IoT Core

This section shows the [steps required](#) to onboard your tracker on AWS IoT Core for LoRaWAN including the creation of device and service profiles.

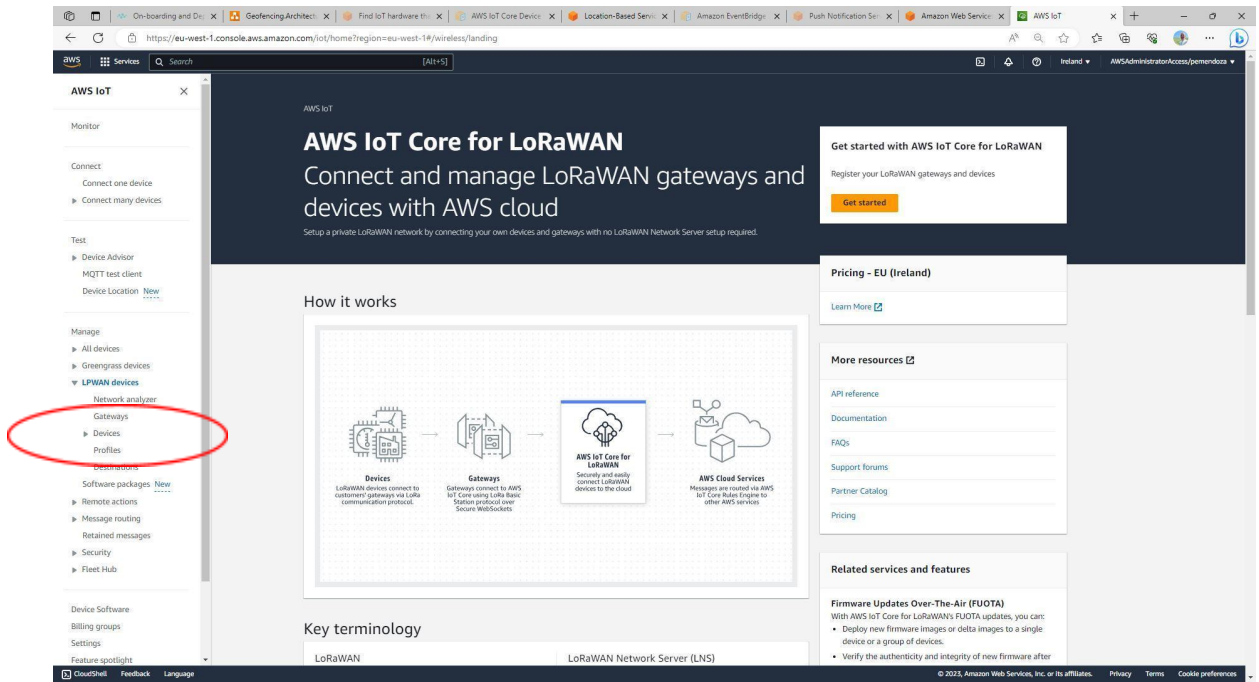
- 1- On the AWS Console, go to the Search box and enter *IoT Core*, then select it in the search results



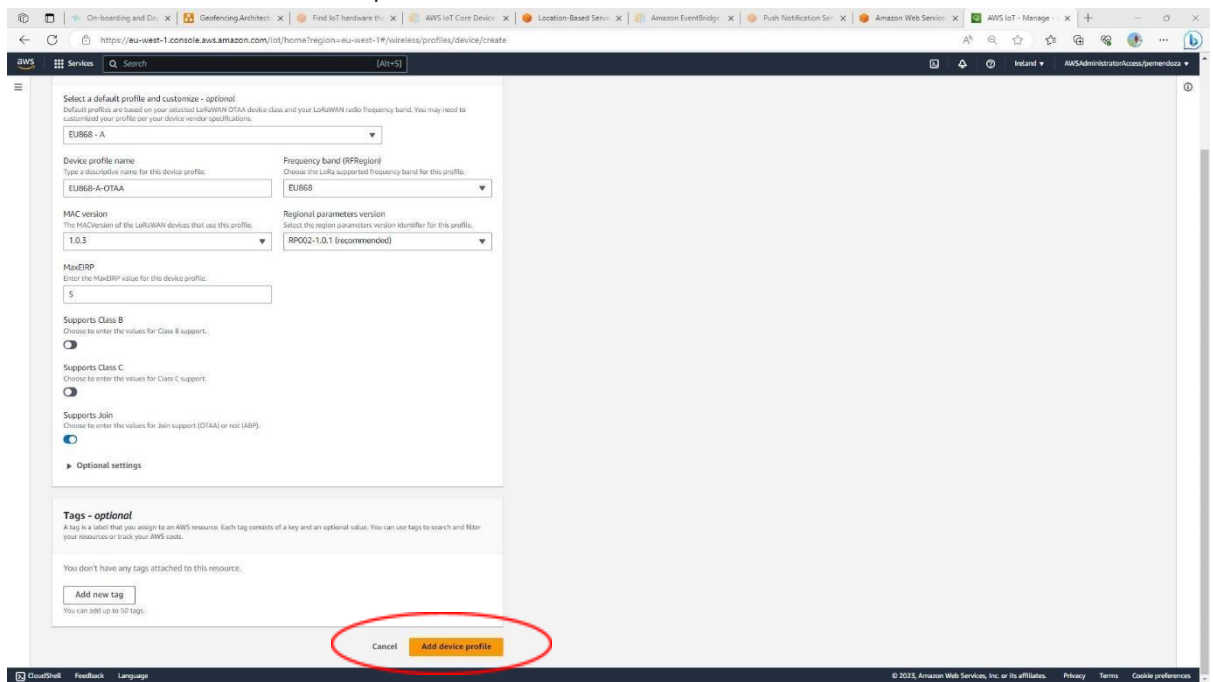
- 2- On the region selector, make sure to select the right region [*Ireland (eu-west-1)*] in our example



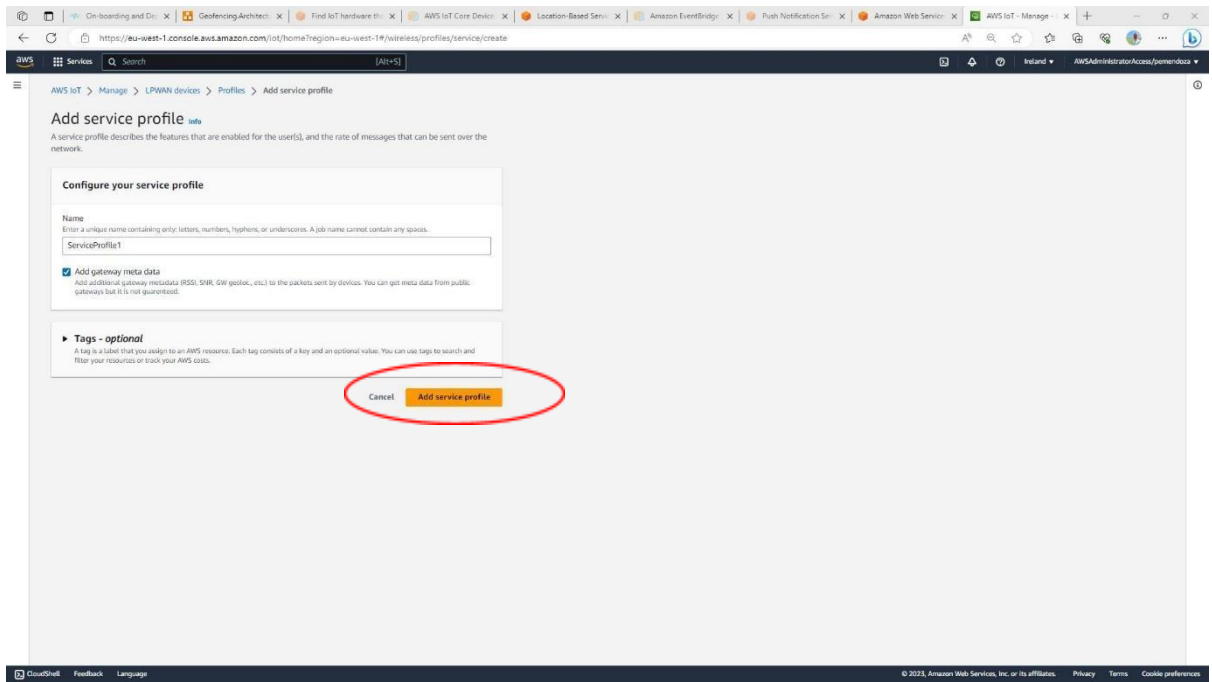
- 3- Now, you are ready to create the profiles. On the left-side menu, select *LPWAN devices* and then *Profiles*



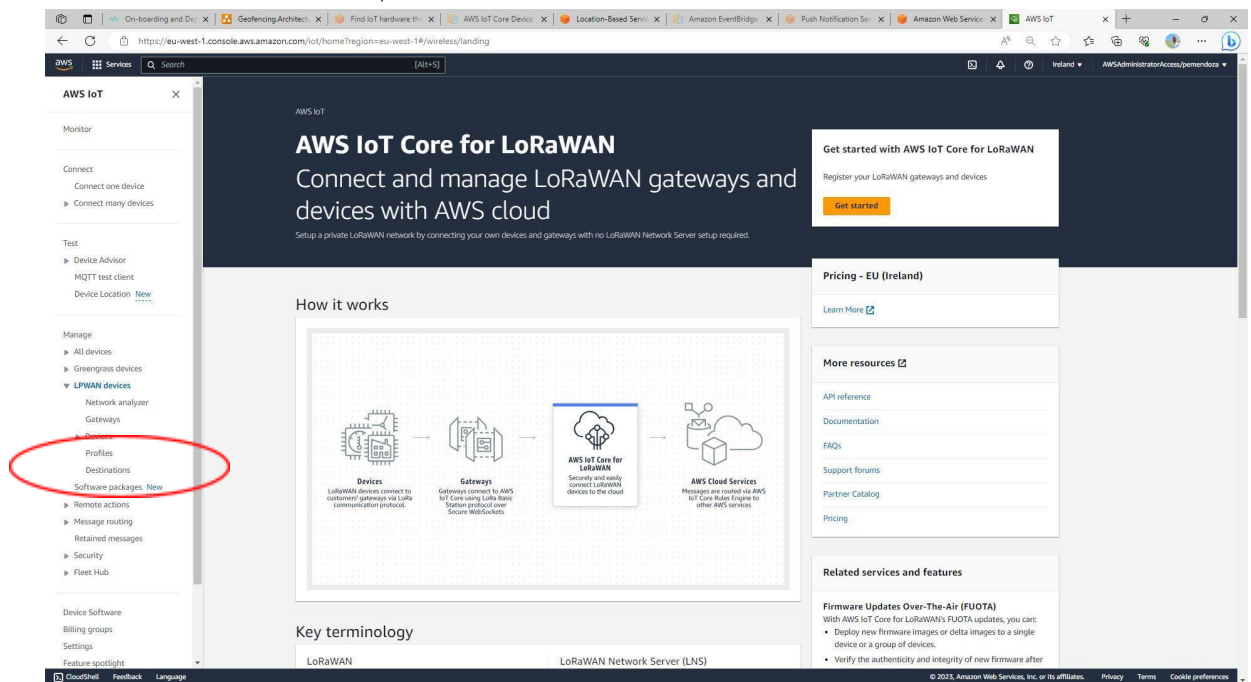
4- Click on *Add device profile* and then enter your device profile attributes and click on *Add device profile*



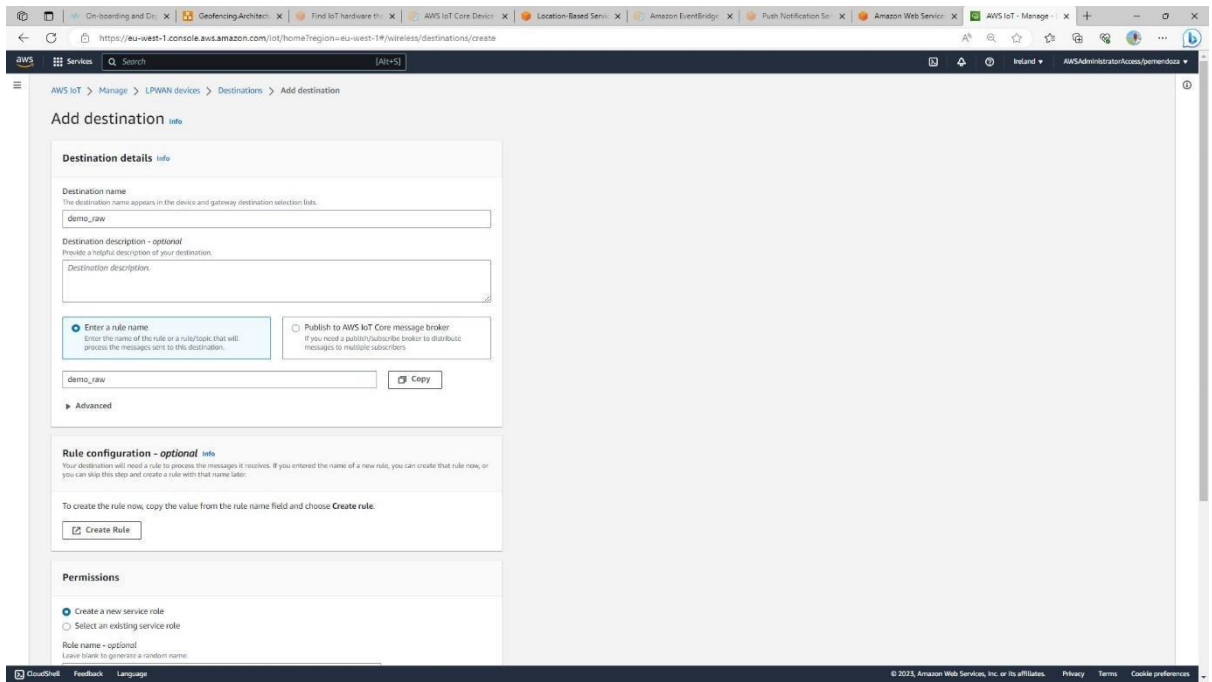
5- Next, click on *Add service profile* and then enter a friendly name for your profile and (optionally) check the *Add gateway metadata* setting. Finally, click on *Add service profile*



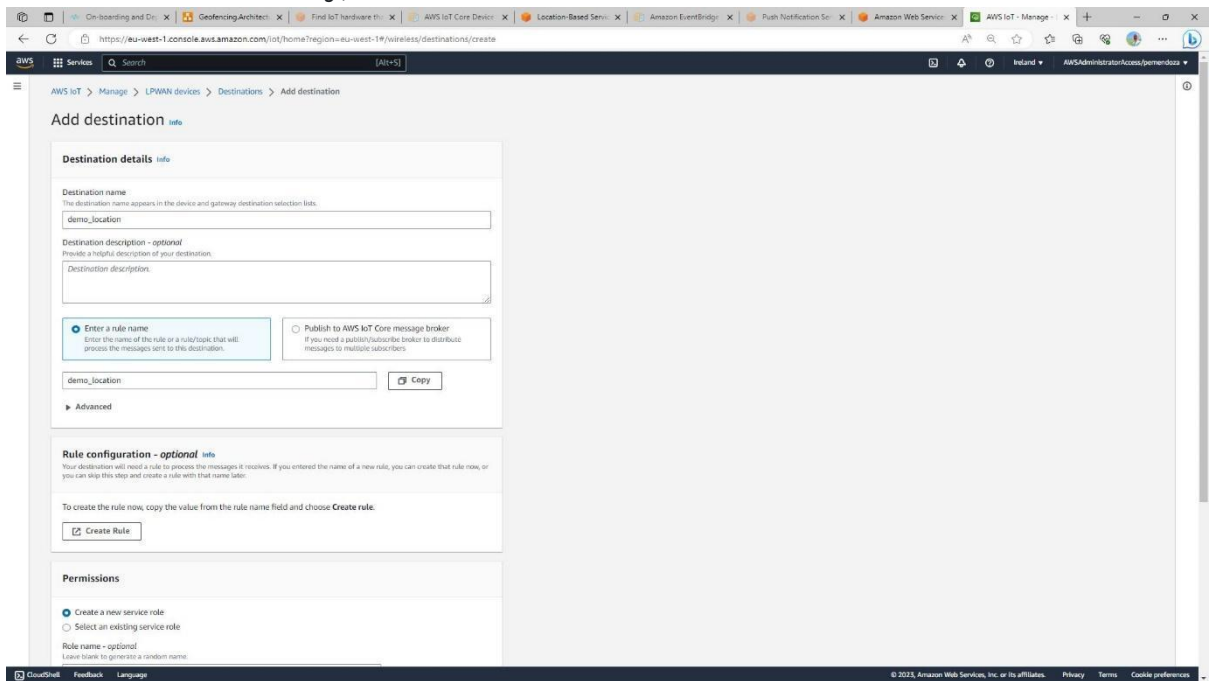
6- Next, let's create a couple of Destinations for the tracker to route data to. On the left-side menu, select LPWAN devices and then Destinations



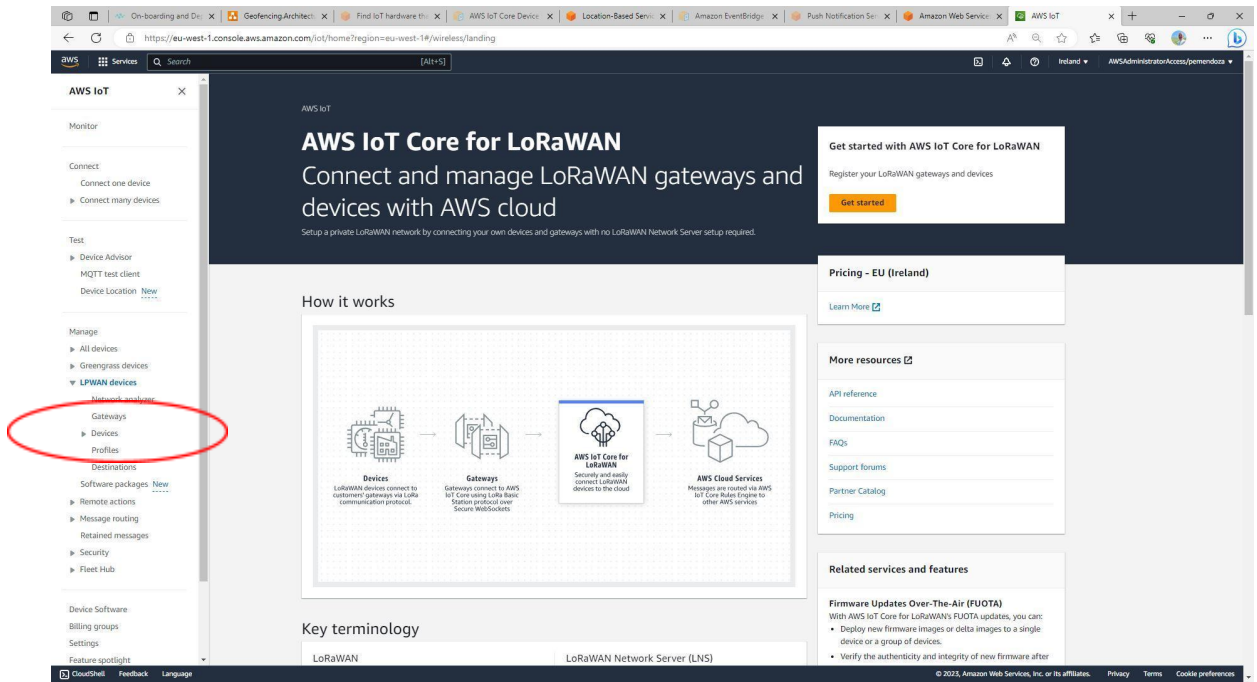
7- Click on *Add destination* and then enter a friendly name for your destination (*demo_raw* in the example). Make sure the *Enter a rule name* option is selected and enter a friendly name for your rule name (*demo_raw* in the example). Make sure the *Create a new service role* is selected. Finally, click on *Add destination*.



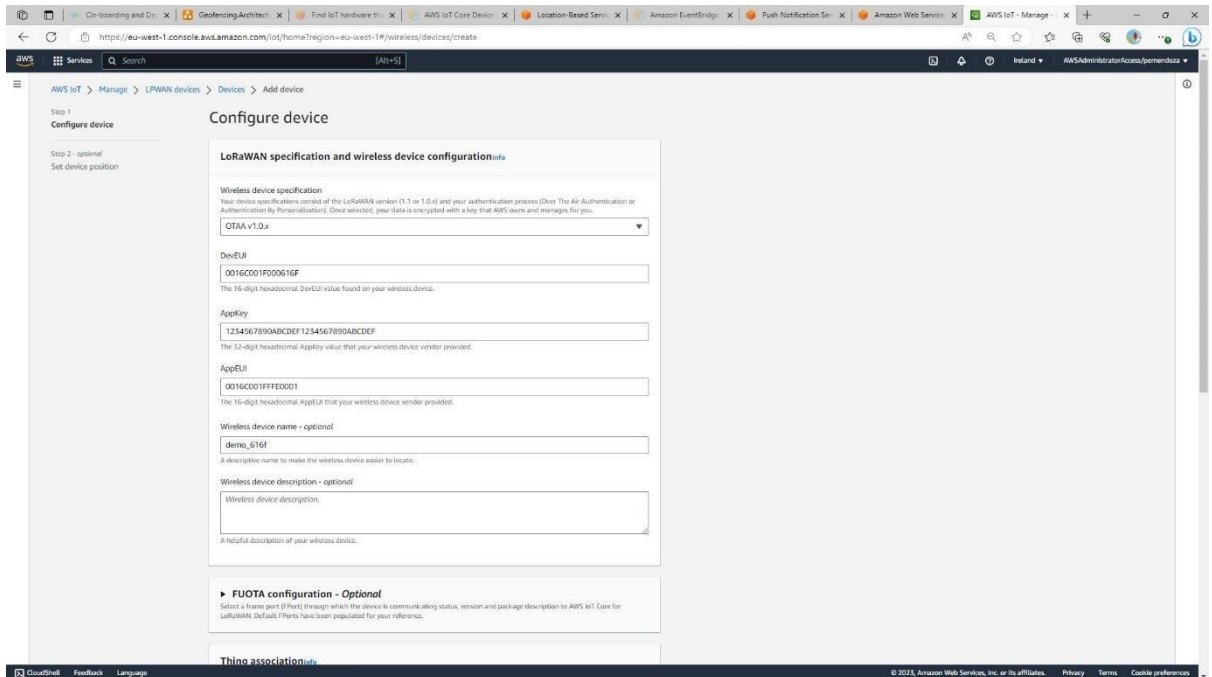
- 8- Now, let's repeat the previous step for the location destination. Click on *Add destination* and then enter a friendly name for your destination (*demo_location* in the example). Make sure the *Enter a rule name* option is selected and enter a friendly name for your rule name (*demo_location* in the example). Make sure the *Create a new service role* is selected. Finally, click on *Add destination*.



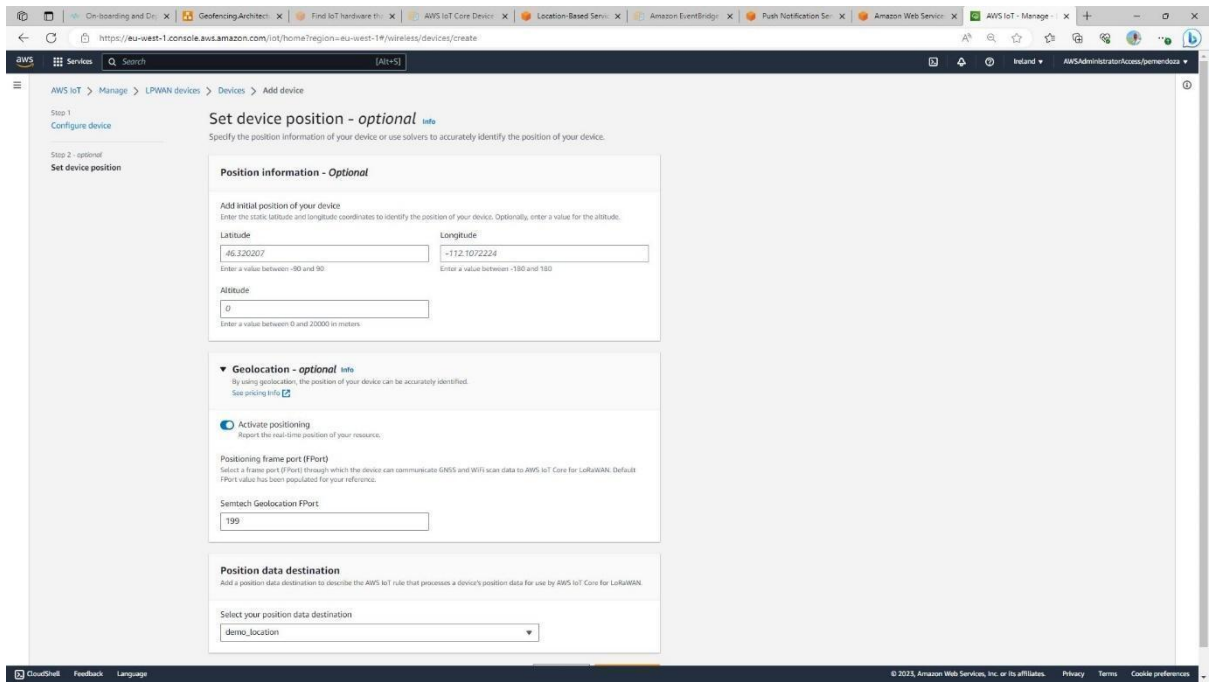
- 9- Finally, we are ready to provision our tracker device. Let's start by selecting *LPWAN devices* and then *Devices* on the left-side menu



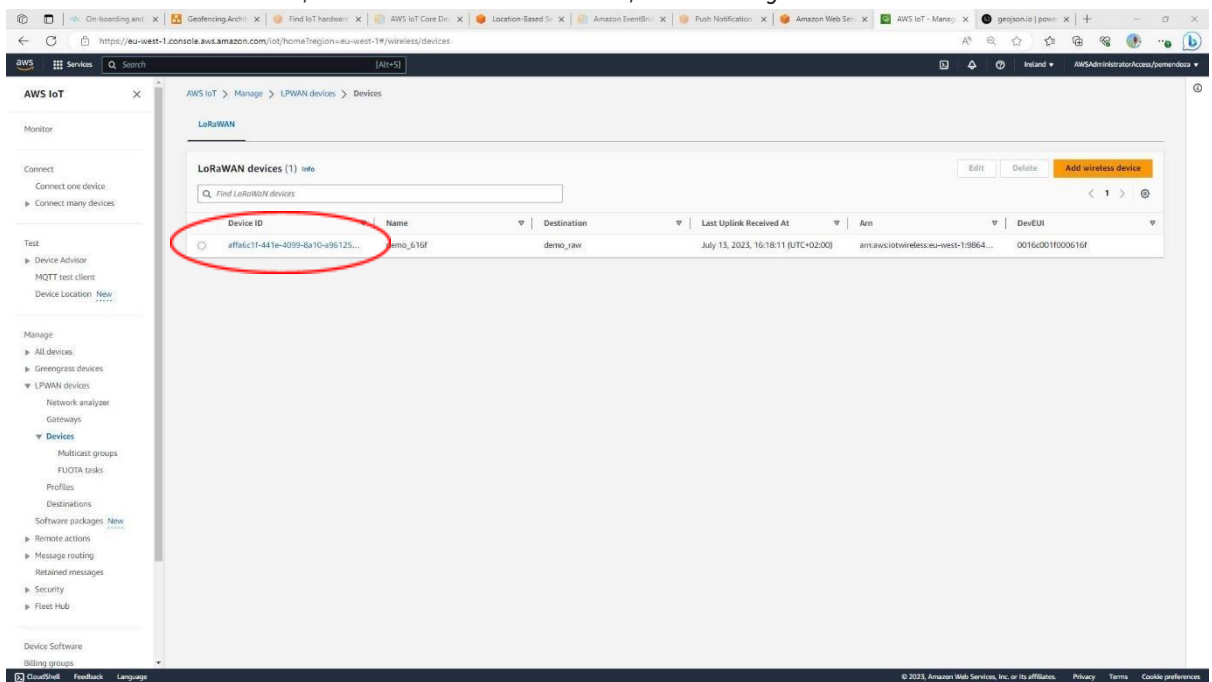
10- Click on *Add wireless device* and enter the required parameters for your tracker. Specifically, you need to ensure you are using the right DevEUI, the AppKey you exported from LoRa Cloud before and the profiles you created above. Finally, make sure to select the “raw” destination (*demo_raw* in our example) that was created above. Once you are done, click *Next*



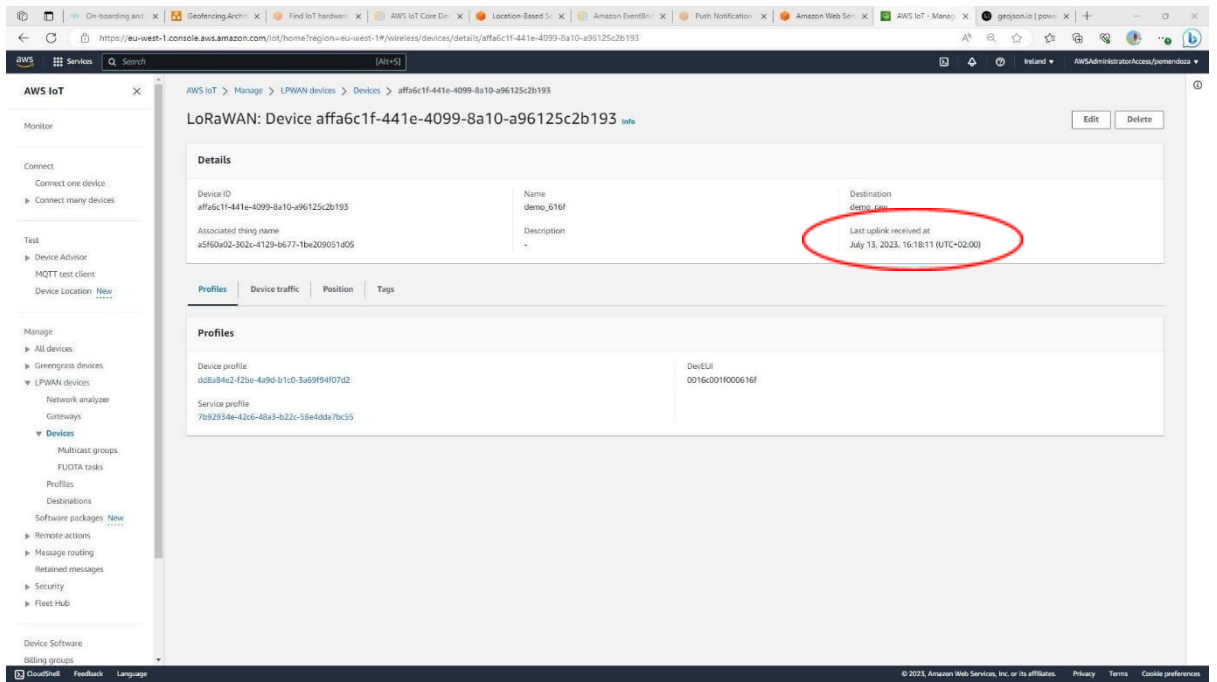
11- On the next page, configure your device as “location-aware” by turning on the *Activate positioning* toggle and selecting the “location” destination (*demo_location* in our example) that was created above. Finally, click *Add device*



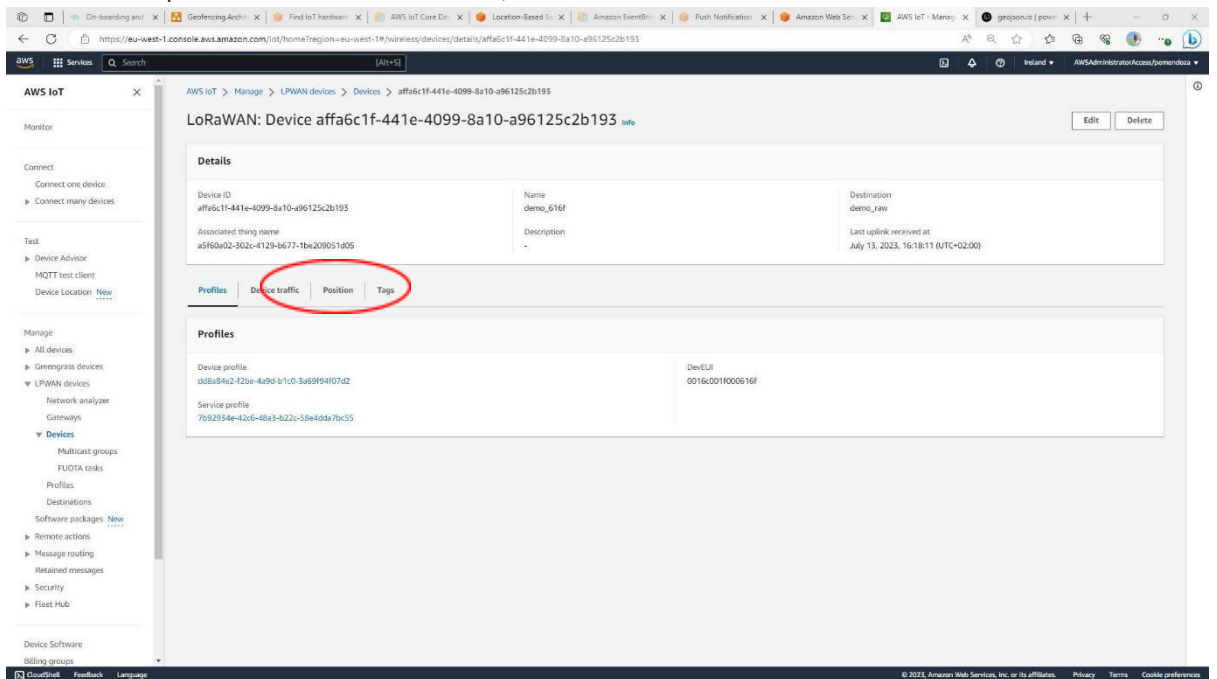
12- After a few minutes, on the list of devices, click on your device ID.



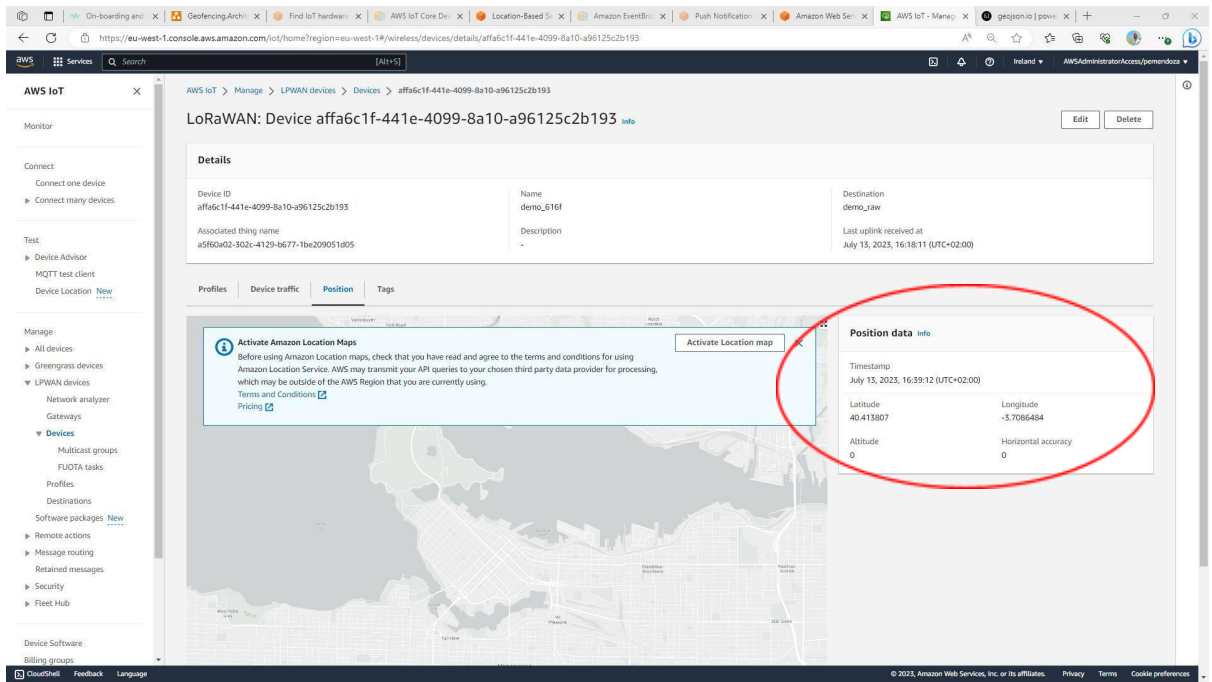
13- You should be able to see that the device has properly joined and is sending data by inspecting the *Last uplink received at* field



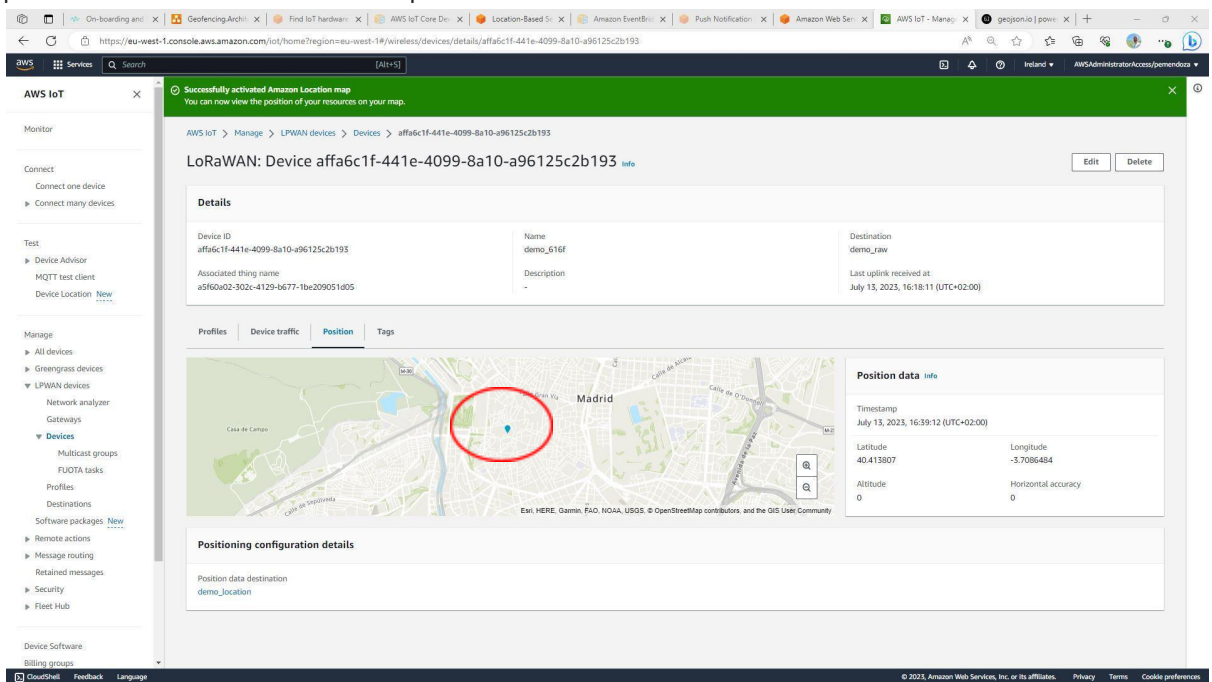
14- To see the position of the tracker, select the *Position* tab



15- Assuming your tracker has managed to successfully scan (either GNSS or Wi-Fi), you should see its position.



16- Additionally, you can click on *Activate Location Map* to have that position rendered on a map



Troubleshooting

- Ensure your Mimiq Track firmware is up-to-date
- Ensure you have AWS account privileges
- Make sure you have successfully setup AWS IoT Core by verifying the connection between your AWS IoT Core gateway and Mimiq Track

- Ensure your gateway has internet connectivity

Additional Help

You are now done with your tracker onboarding in AWS IoT Core Device Location. For any further questions, please contact our support team [here](https://mimiq.io/contact-us/). (<https://mimiq.io/contact-us/>)

Version History

V1.0	9/29/23	First version
V1.1	10/19/23	Added HW details and operating details