


Owntracks

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Logo	
Status	STABLE
Version	v1.0.1
Min. LB Version	LB 1.0
Download	https://github.com/Liver64/LoxBerry-Owntracks/archive/v1.0.1.zip
Zweck	Owntracks Geo Location for LoxBerry supporting Smartphone Apps for iOS as well as Android. Prerequisite is the MQTT Plugin to pass data to LoXone Miniserver
Languages	EN, DE
Diskussion	https://www.loxforum.com/forum/projektforen/loxberry/plugins/188828-loxberry-owntracks

Version History...

Version 1.0.0

- initial Version

Version 0.X

-

Content

- [Basic Info Owntracks](#)
- [Requirements](#)
- [Configuration](#)
- [Basic Setup of MQTT Plugin](#)
- [Setup Owntracks in iOS](#)
 - [Setup for MQTT Interface](#)
 - [Setup for HTTP Interface](#)
- [Setup Owntracks in Android](#)
- [Set-up Owntracks in LoXone](#)
 - [Mode "Set virtual inputs via HTTP Webservices \(recommended\)"](#)
 - [Mode "Send data via UDP"](#)
- [Differences between iOS/Android](#)
 - [Data Types](#)
 - [Data](#)
- [Tracking/Monitoring](#)
- [Owntracks](#)
- [.1](#)
- [Roadmap](#)
- [FAQ](#)

Basic Info Owntracks

OwnTracks is an Open Source project which provides an iOS and an Android app with which your smartphone records its current location. Whether you want your young child to know where you currently are, or you want to keep track of where you spent your last vacation, or you and a group of friends want to see each other on a map, OwnTracks does that. It consists of an app which runs on your smart phone, and which periodically, publishes a small chunk of data which other OwnTracks users you authorize may see. It also support beacon tracking (iOS devices only) and bring other added value to Miniserver. Using Owntracks you can set-up an presence detection as well as other stuff.

Download the Apps:

- Apple: [App Store](#)
- Android: [Play Store](#)

The App's are sending data whether using MQTT or HTTP to the receiver. The Plugin is designed to work only using MQTT mode. In addition the MQTT LoxBerry Plugin is required to be installed to get the data finally into Loxone.

Basically you use the App's to trigger an "enter/leave" event, as many of those GeoLocation Apps can. In addition to that Owntracks deliver quite a lot more of data which could be useful for your Smart Home like. Battery status of each device, ground speed in case you have an "enter" event and theoretically you can track all your (and other) movements during the day.

There is a Booklet covering tons of details how to set-up the App, your locations and how owntracks works. Personally I can't support how to use/set-up the App in your environment.

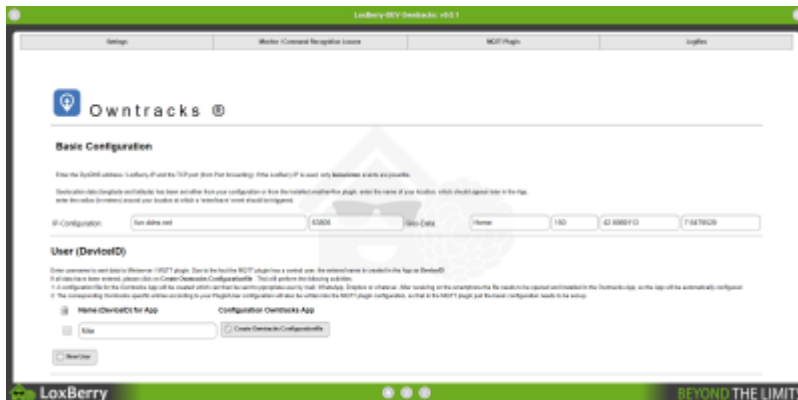
- Owntracks documentation: <https://owntracks.org/booklet/>

Requirements

1. DynDNS or static or local IP-Address (DynDNS recommended for security reasons) available This may change in the future to use TLS.
2. configure Portforwarding rule for TCP-Port 1883 to xxxx(x) in your Router
3. installed MQTT Plugin
4. installed Smartphone App

Configuration

Open Plugin post installation and you have all info required. In addition there is a tab to get the command recognition to be used for Loxone, as well as a direct link to MQTT. In case you have **weather4lox** Plugin installed your location data will be parsed in, if not a **google map** tab appears to identify your location data.



After saving your config create a user specific App configuration file and pass it to corresponding User. Once User has completed the set-up on his Smartphone you should see incoming traffic either in Plugin Monitor or in MQTT Plugin

Basic Setup of MQTT Plugin

for setting up Owntracks you need to have a LoxBerry with appropriate Plugin installed. How to do that and do how-to do the basic configuration please visit the support Wiki page here: [MQTT Gateway](#) There are detailed instructions how to do.

I will focus on adding the owntracks required settings.

Please select the type of data transmission to Miniserver. You can use either HTTP or UDP, How it looks like then in MS you can find under (link to MS)



next step is switch on both "**Data transformations**" in order to get the data for command recognition into MS. If you don't set both you won't be able to get data, also the conversions won't work



The Owntrack specific settings Topic and necessary conversions will be added from the Owntracks Plugin

Setup Owntracks in iOS

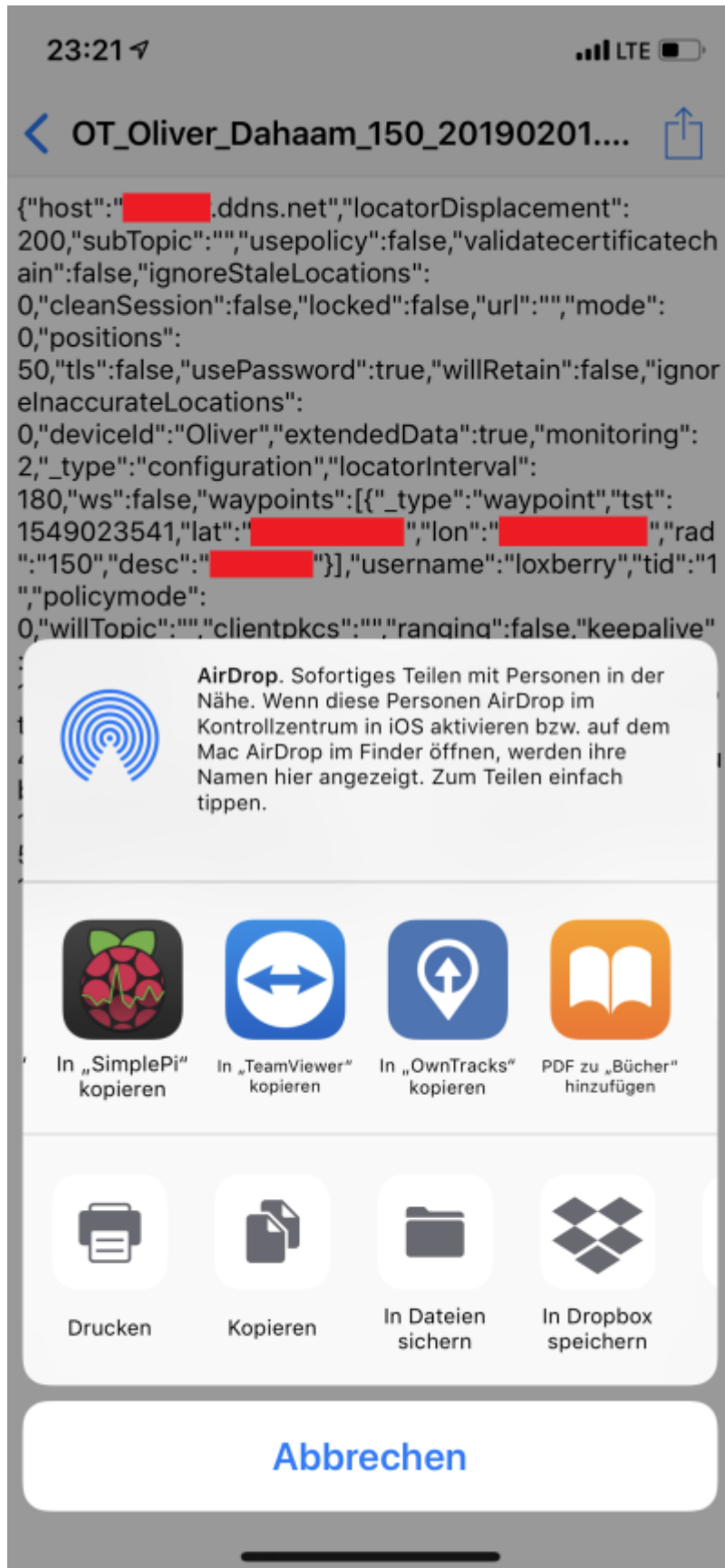
Setup for MQTT Interface

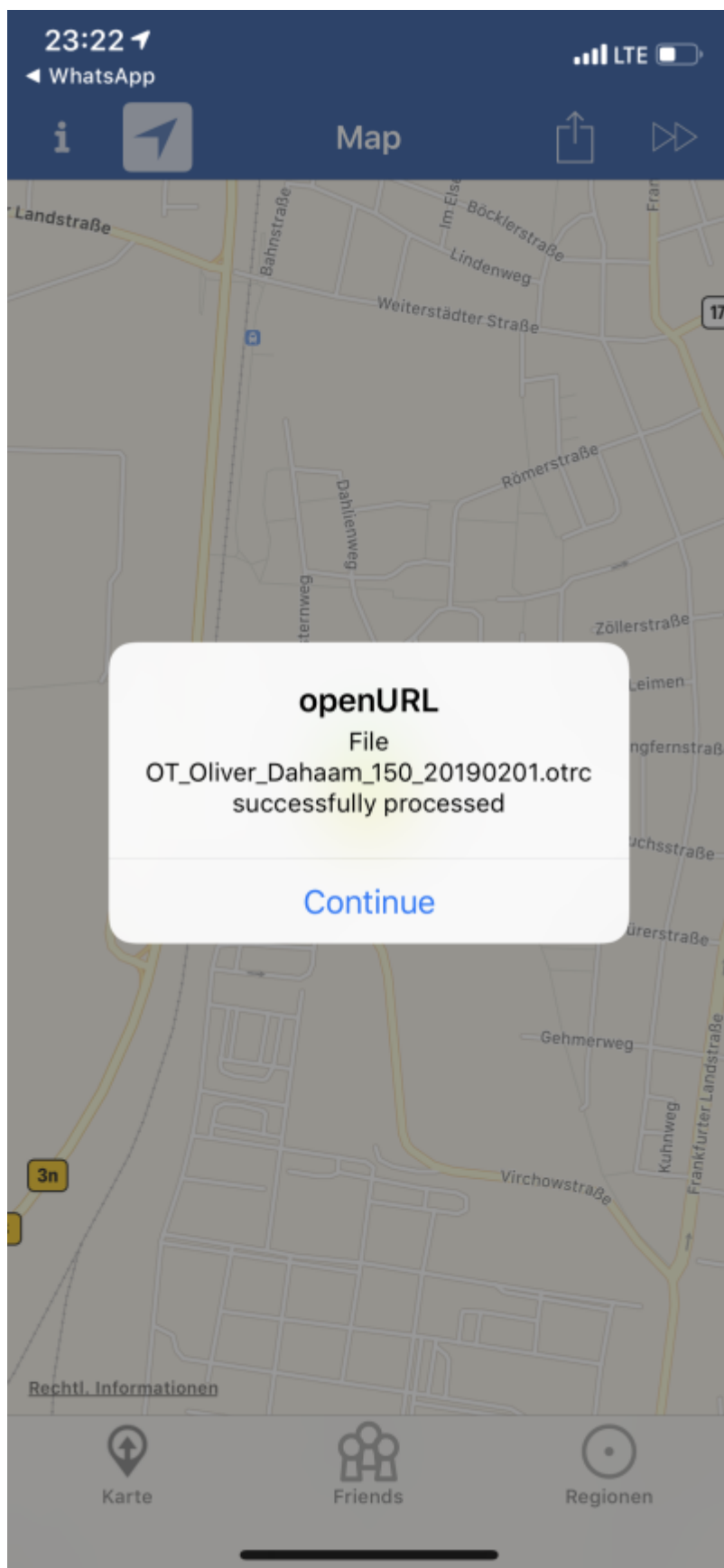
1. open App configuration file (press button at the top right corner)
2. select Owntracks to be installed
3. Owntracks confirmation
4. your location
5. check settings and connect status
6. check imported settings
7. test data transfer by clicking on **Publish waypoints**

23:24

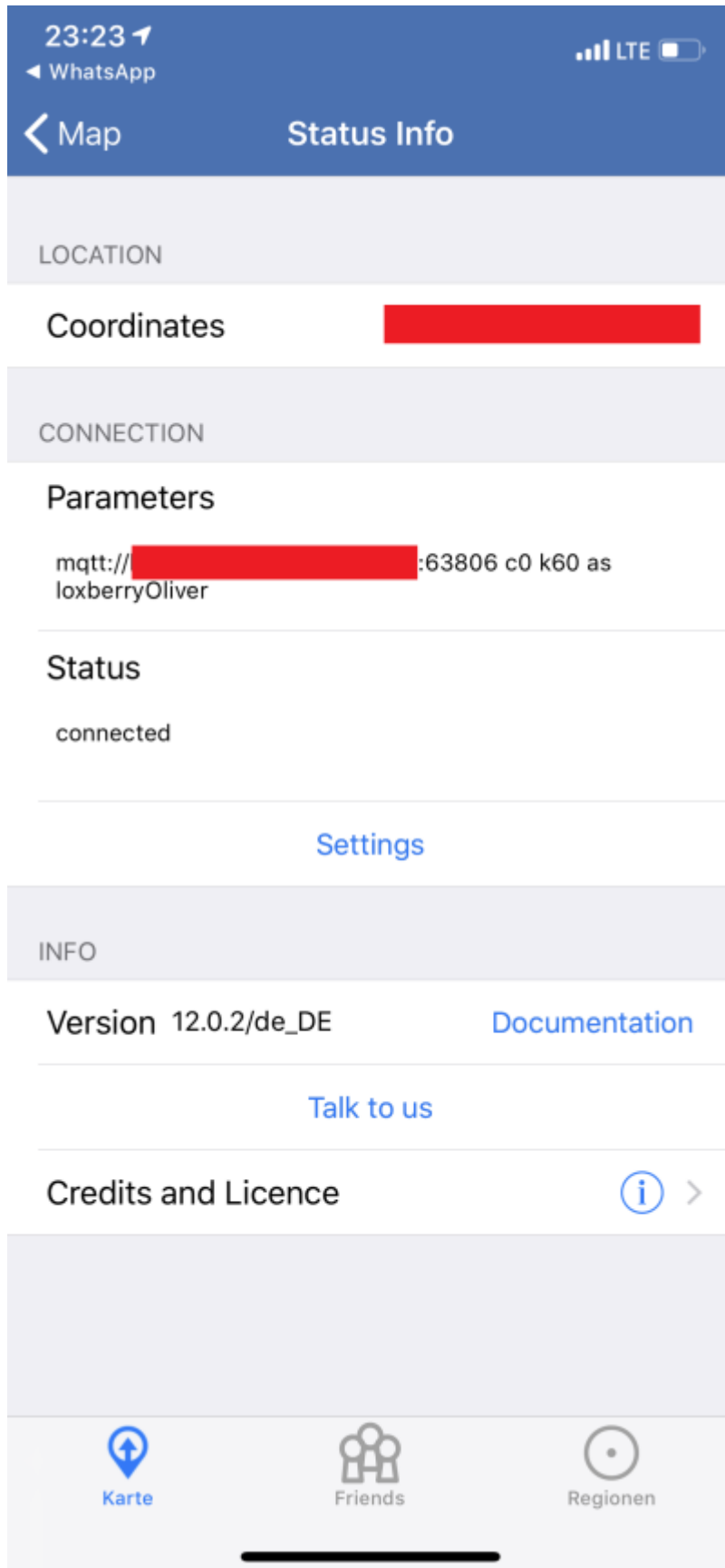

[← OT_Oliver_Dahaam_150_20190201....](#)


```
{
  "host": "[REDACTED].ddns.net",
  "locatorDisplacement": 200,
  "subTopic": "",
  "usepolicy": false,
  "validatecertificatechain": false,
  "ignoreStaleLocations": 0,
  "cleanSession": false,
  "locked": false,
  "url": "",
  "mode": 0,
  "positions": 50,
  "tls": false,
  "usePassword": true,
  "willRetain": false,
  "ignoreInaccurateLocations": 0,
  "deviceId": "Oliver",
  "extendedData": true,
  "monitoring": 2,
  "_type": "configuration",
  "locatorInterval": 180,
  "ws": false,
  "waypoints": [
    {
      "_type": "waypoint",
      "tst": 1549023541,
      "lat": [REDACTED],
      "lon": [REDACTED],
      "rad": "150",
      "desc": "Dahaam"
    }
  ],
  "username": "loxberry",
  "tid": "1",
  "policyMode": 0,
  "willTopic": "",
  "clientpkcs": "",
  "ranging": false,
  "keepalive": 60,
  "willQos": 1,
  "pubTopicBase": "",
  "auth": true,
  "passphrase": "",
  "mqttProtocolLevel": 4,
  "port": "63806",
  "clientId": "",
  "allowInvalidCerts": false,
  "sub": false,
  "pubQos": 1,
  "allowRemoteLocation": true,
  "password": "[REDACTED]",
  "validatedDomainName": false,
  "subQos": 1,
  "serverCrc": "",
  "cmd": false,
  "pubRetain": true
}
```









16:17

< Status Info

Settings

Mode MQTT

>

TrackerID 1

1

Export Settings

Export Waypoints

Publish Settings

Publish Waypoints

DeviceID Oliver

Oliver

Host

Port 63806

Websockets ☐

Proto 4

TLS ☐

UserID loxberry

Authentication

☒

Password

☒

Secret encryption key

secret

Karte

Friends

Regionen

Now you should open Owntracks Plugin and check either in "**Monitor / Command Recognition**" tab or in your MQTT Plugin and there "**Incoming overview**" or "**Logfiles**" if you have received data

Setup for HTTP Interface

Currently the HTTP Interface is not supported, it requires a script for further processing.

Setup Owntracks in Android

Due to missing hardware i can't support Android devices

(to be added by User)

[User 1a624](#) will provide this within the next few days

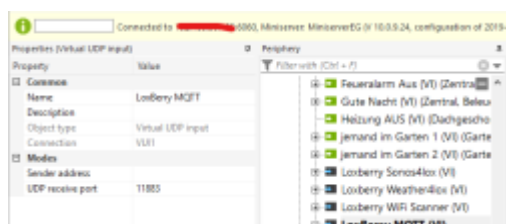
Set-up Owntracks in Loxone

Mode "Set virtual inputs via HTTP Webservices (recommended)"


(to be added by User)

Mode "Send data via UDP"

if you have selected "**Send data via UDP**" you have to add a virtual UDP input to your config and enter the MQTT Plugin Port (default is **11883**)



adding virtual UDP input command and the comand recognition:


 Offline, Miniserver: MiniserverEG, file: Lewald (not saved)

Properties (Input reference)	
Property	Value
Common	
Object type	Input reference
Object color	<input type="text" value="eeeeee"/>
Modes	
Input	MQTT OT Oliver home (MiniserverEG)
Referenced object	
Common	
Name	MQTT OT Oliver home
Description	
Object type	Virtual UDP input command
Connection	VUI1.VCI142
<input type="checkbox"/> Statistics	
Authorised local users	Alle
Authorised remote users	Alle
Category	Test
Room	do not use
User interface	
<input type="checkbox"/> Use	
<input type="checkbox"/> User interface password	
Rating	☆☆☆☆☆☆☆☆
Modes	
Sender address	
Command recognition	owntracks/loxberry/Oliver/event/event=\v
<input type="checkbox"/> Use as digital input	
<input type="checkbox"/> Display error output	
<input checked="" type="checkbox"/> Signed values	

the basic command recognition is always "owntracks/loxberry/<DeviceID>/" followed by the type of data you would like to have.

Differences between iOS/Android

Depending on used Hardware and Interface there are differences in the data layout/set which been send to Loxone. Those can be found here <https://owntracks.org/booklet/tech/json/> very detailed splitted by message payloads (Types)

Data Types

OwnTracks publishes its message payloads in [JSON](#) format. The different payload types are identified by a `_type` element. Depending on the app platform, different payload types are supported.

_type	iOS	Android
beacon	Y	N
card	Y	Y
cmd	Y	Y
configuration	Y	Y

_type	iOS	Android
encrypted	Y	Y
location	Y	Y
lwt	Y	Y
steps	Y	N
transition	Y	Y
waypoint	Y	Y
waypoints	Y	Y

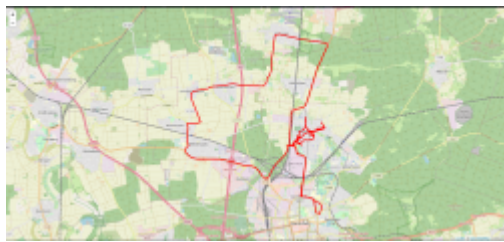
Data

following data could be used for entry/leave events:

command	description	MQTT conversion required	unit	Apple	Android
cog	Course over ground		degree	X	
batt	Device battery level		percent	X	X
lon	longitude		meters	X	X
acc	Accuracy of the reported location in meters without unit		meters	X	X
p	barometric pressure		kPa	X	
vel	velocity		km/h	X	
vac	vertical accuracy of the alt element		meters	X	
lat	latitude		meters	X	X
t	p ping issued randomly by background task	Yes		X	X
	c circular region enter/leave event	Yes		X	X
	b beacon region enter/leave event	Yes		X	
	r response to a reportLocation cmd message	Yes		X	X
	u manual publish requested by the user	Yes		X	X
	t timer based publish in move move	Yes		X	
	v updated by Settings/Privacy/Locations Services/System Services/Frequent Locations monitoring			X	
conn	Internet connectivity status (route to host) when the message is created				
	w phone is connected to a WiFi connection	Yes		X	X
	o phone is offline	Yes		X	X
	m mobile data	Yes		X	X
tst	UNIX epoch timestamp in seconds of the location fix		epoch	X	X
alt	Altitude measured above sea level		meters	X	X
tid	Tracker ID used to display the initials of a user		string	X	X
enter	enter/leave region	Yes	string	X	X

Tracking/Monitoring

introducing from v0.3.0 onwards the Plugin contains a real Tracking/monitoring feature. All data from Users are captured in a database and visualized with either OpenStreetMap or Google Maps (require a Google Maps API key).



Roadmap

- add-on for Live Tracking of Geo Locations → done

FAQ

<https://www.loxforum.com/forum/projektforen/loxberry/plugins/188828-loxberry-owntracks>

From:

<https://wiki.loxberry.de/> - **LoxBerry Wiki - BEYOND THE LIMITS**

Permanent link:

<https://wiki.loxberry.de/plugins/owntracks/start?rev=1662805132>

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