

A network diagram is formed by several dark pins stuck into a dark, textured surface. The pins are connected by thin, light-colored string, creating a complex web of interconnected nodes and edges. The background is a dark, slightly blurred surface, possibly a table or a board, with some faint grid lines visible. The overall lighting is soft and focused on the central part of the network.

Helium Updates & DataSet

LPWAN CONFERENCE 2024 - PAU



**Helium is a blockchain for LoRaWan Distributed
Global crowdsourced IoT Network**

Helium Statistics 2024



- Active Hotspots 330.000
- Packet Transfer 5.000.000 / day
- Devices (estimated) 250.000 native
+100.000 in a year
- Roaming 17% (vs 25%)
600.000 messages
- IoT economy \$32.400 / y
- Mobile economy \$720.000 / y

Distributed Network

48 LNS

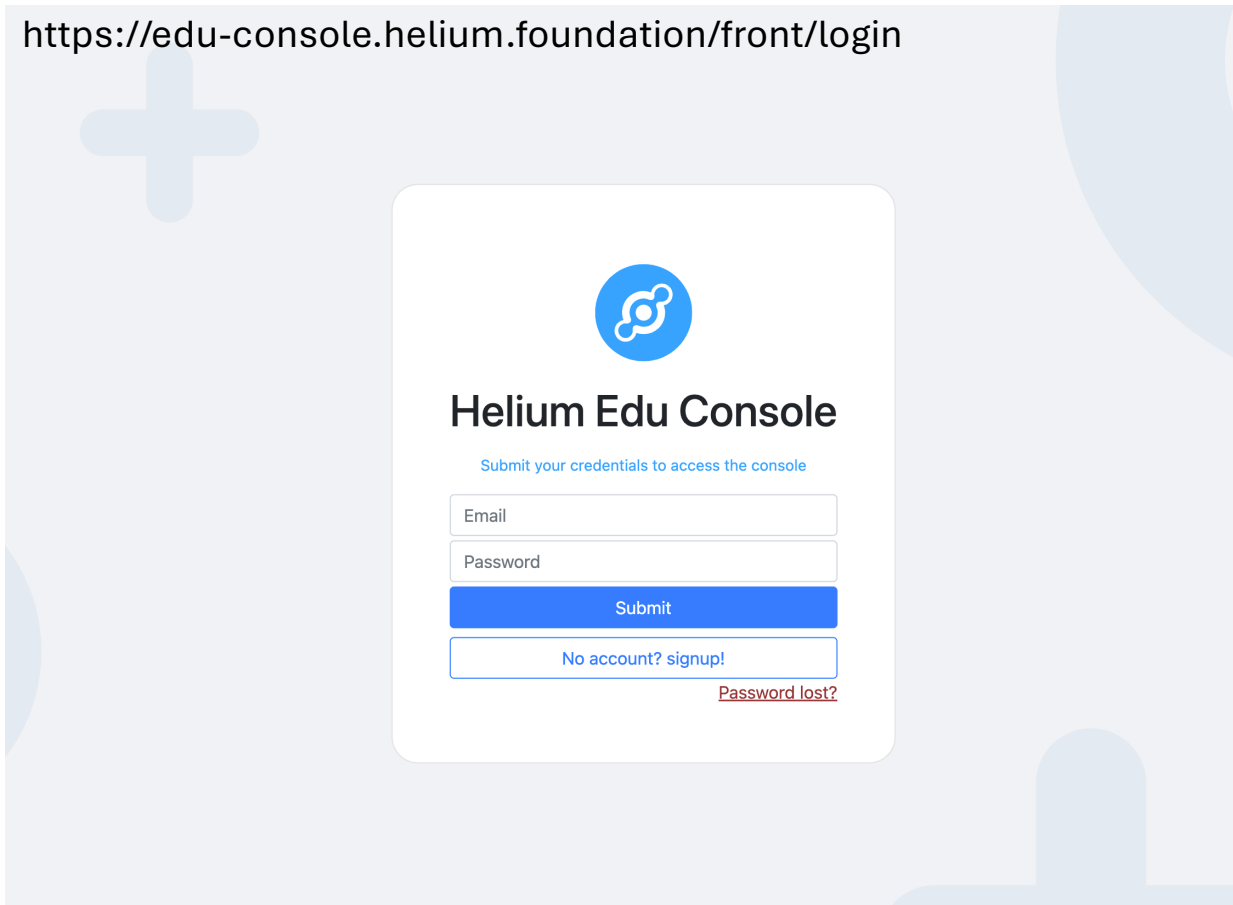
- 14+ Running Helium-Chirpstack


Cost reduction in 2024

- OUI + 8 DevAddr - \$200 vs \$900

Eduationnal console – free for 24h

<https://edu-console.helium.foundation/front/login>





Helium Edu Console

Submit your credentials to access the console

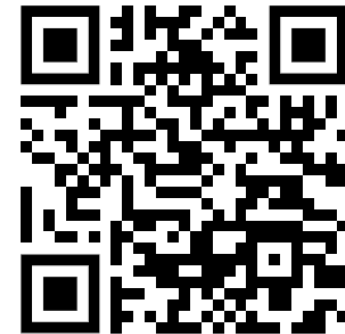
Email

Password

[Submit](#)

[No account? signup!](#)

[Password lost?](#)



Helium-IoT / University Program

Helium IoT
EUROPE

Home About Helium IoT network **Offers** Legacy Console Console Contact

University program

We are more than happy to assist teachers in carrying out their practical work and projects involving LoRaWAN. For this, we provide them and their students with communication credits.

Send a contact request containing the following informations:

- professional email
- name of the university, country
- number of students that needs to have a tenant with credits.

You will get a coupon code to be used by students on registration to get a free 2500 credits and a coupon code for the teacher with 25000 credits.

If you have a specific project where more credits is required, please give us details, we will consider your request.

Send a message

Your name

Your e-mail

Message

I consent to having this website store my submitted information so they can respond to my inquiry

Send a message

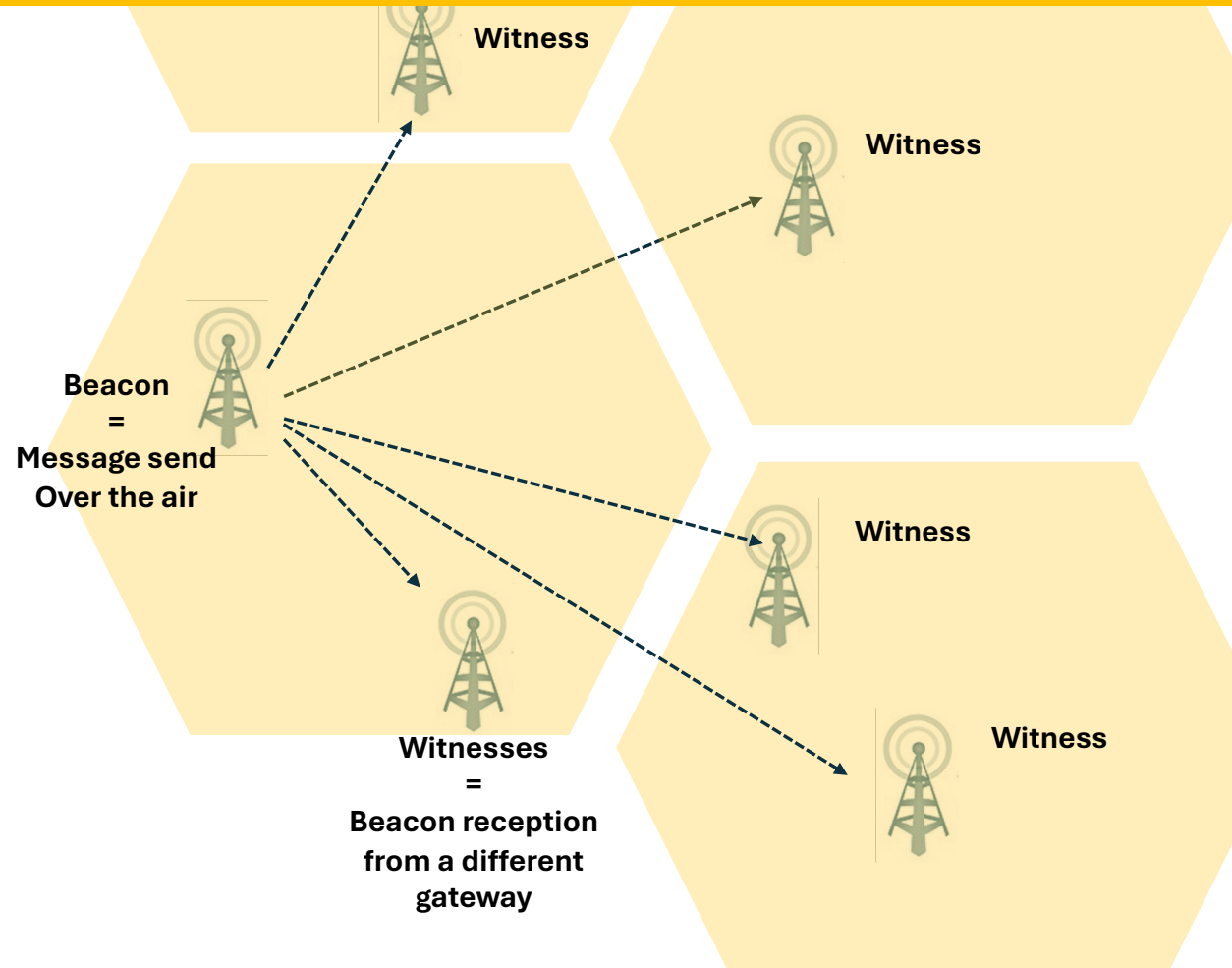


Helium DataSets

Proof of Coverage

> Every Hotspot sends 4 Beacon a day

> Any hotspot receiving it is witnessing

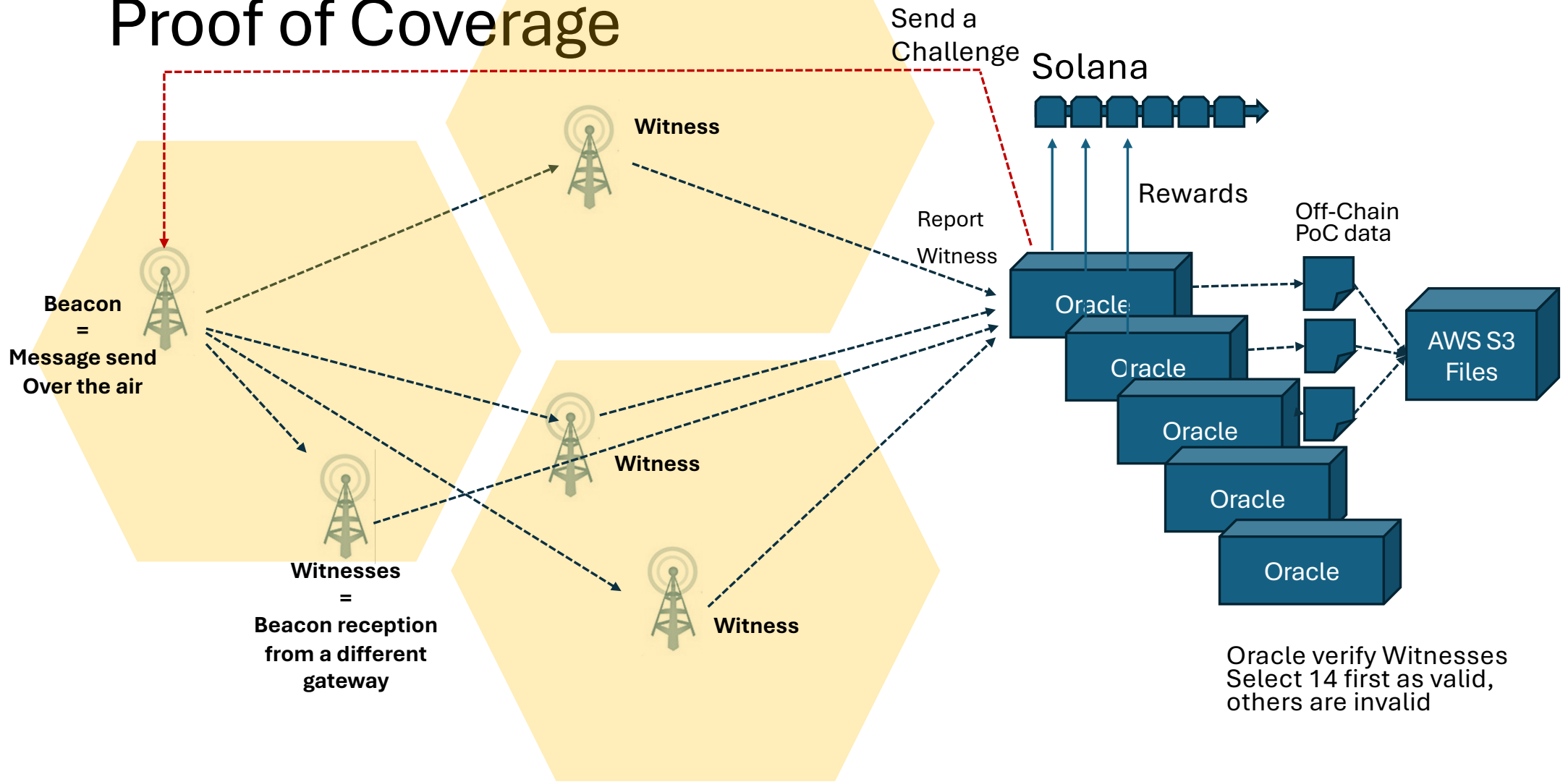


Volume of Transactions

- 330.000 HS with 4 PoC per day & 40 avg Witnesses
 - 1.300.000 PoC/ day
 - 52.800.000 Witness / day
- 12 month+ of history
 - 19.2B data points
- All with
 - **Good location**
 - **<1s timestamp**
 - **RSSI & SNR information**
 - **Stable conditions**



Proof of Coverage



Current Applications – Availability / Radio Coverage

Watchium Status Pages
Version: NA / 2.0.0

Last 24h Today Yesterday

MES COMPTES 4304

127+21 26 min (3h) 22h never **865**
26 min -3%

118+38 27 min (3h) 22h never **811**
27 min +6%

126+23 26 min (1h) 22h never **805**
26 min +2%

60+47 57 min (27 min) 22h never **384**
never 27 min +89%

53+101 27 min (4h) 22h 10 **364**
months 27 min +7%



7:44

146YUHK...YLzMKFb

146YUHKsYEN/WnTrqsejLgGJMh
1FYBveALnHdZFHWWLzMKfD

Remove Wallet
Remove Wallet

0.385 HNT
Projected Monthly 11,320 HNT -14%
Last Month 13,175 HNT
All Time 89,426 HNT

EXPORT REWARDS

Day To Day History

Date	Rewards	Witnesses	Beacons
Today	0.390	77	2
21	0.354	67	1
20	0.390	56	2
19	0.437	60	2

Hotspots Map Settings

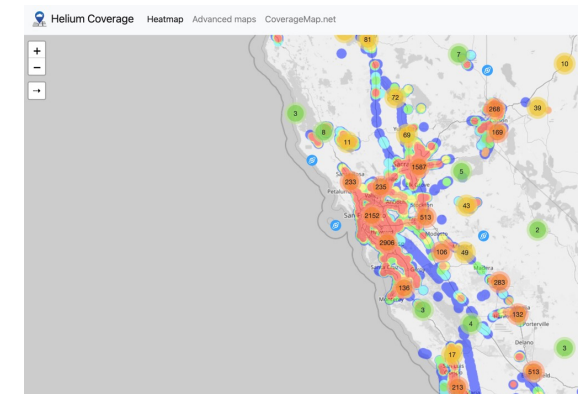
Check the health of your rewards

HotspotRF Home Helium 5G Helium IoT Host Matching Shop Blog Support My account

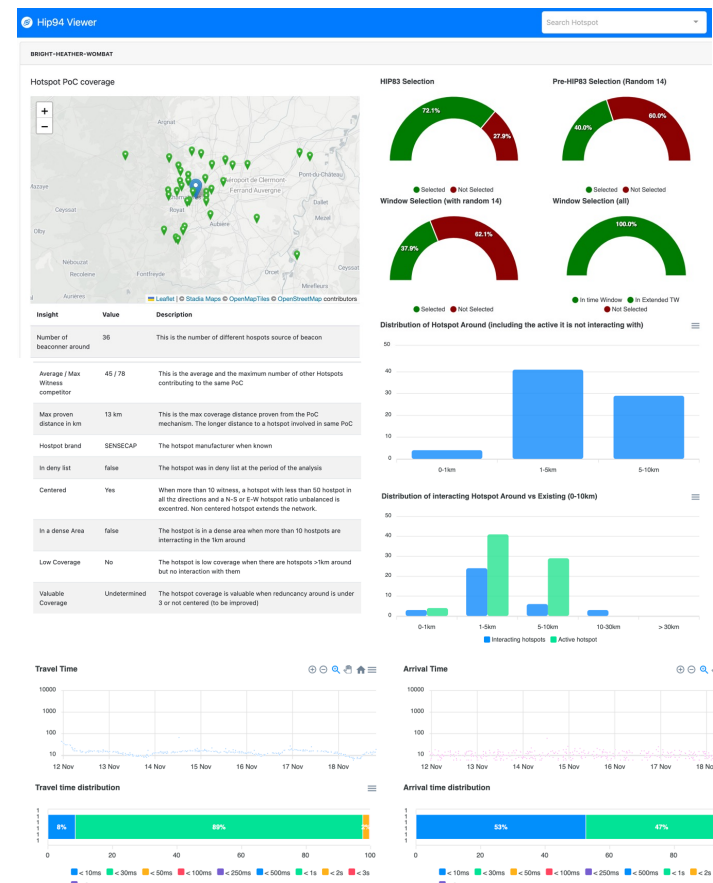
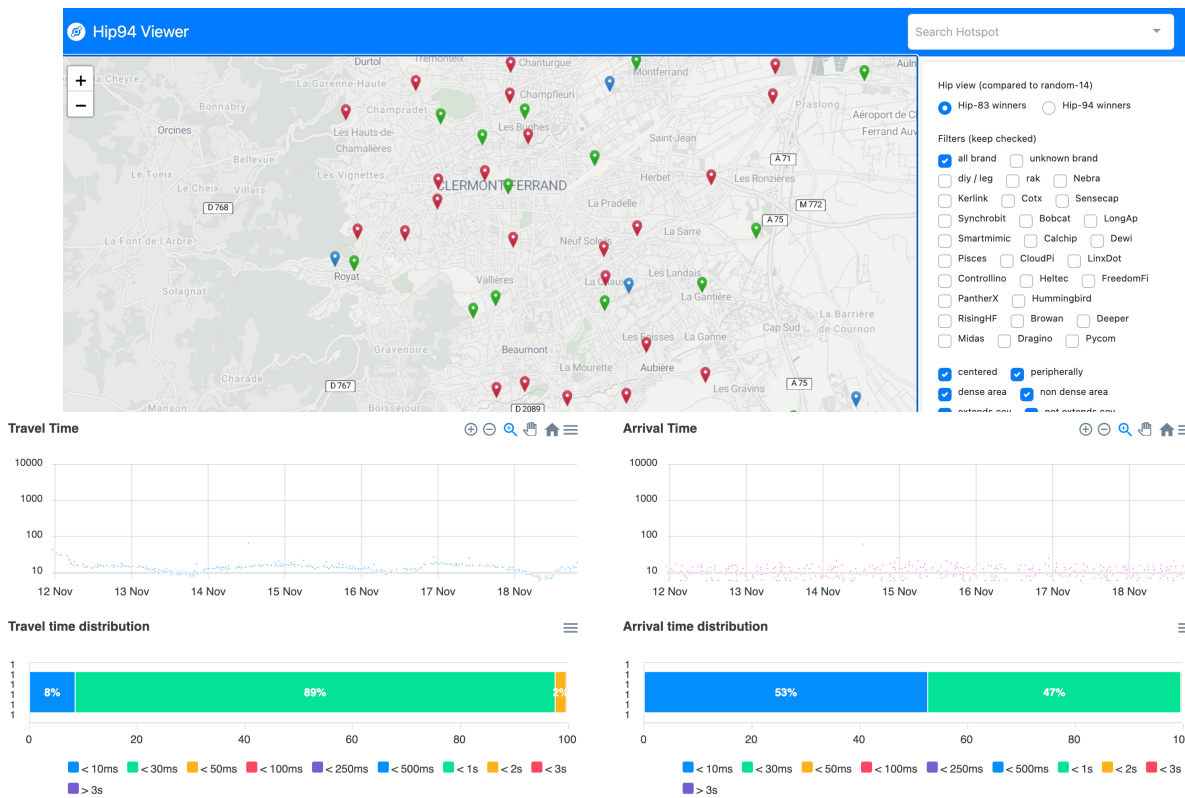
Helium IoT Mining Calculator

Find out your location's IoT earning potential with the click of a button! HotspotRF simulates Radio Frequency (RF) coverage and overlays it with Helium Hotspot data to calculate your IoT earning potential. Find out your Helium mining profitability in terms of both coverage and IoT earning potential via our Helium mining calculator! Claim your free credits and get started today!

REGISTER TO CLAIM FREE CREDITS PRICING



Current Applications – Internet Acces / Radio

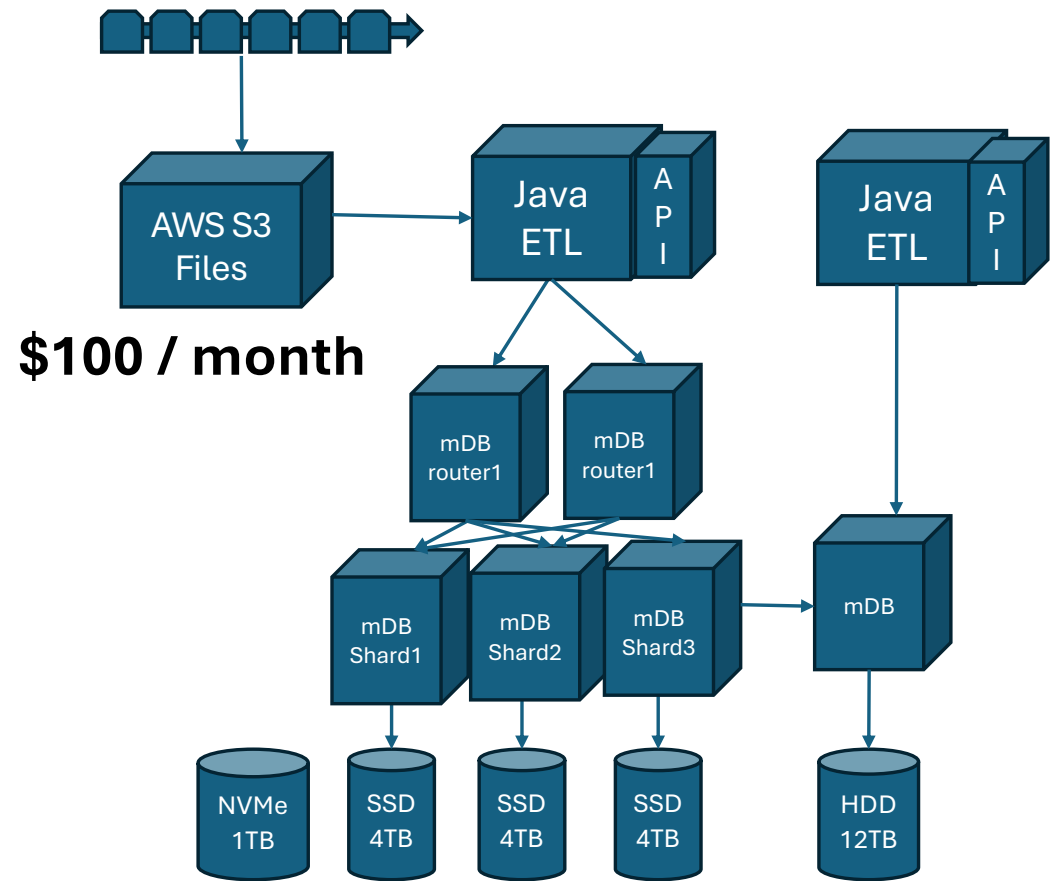


Applications for research

- Geo-Location algorithm
- AI trained Geo-Location
- Radio propagation
- “Environmental” impact on radio propagation
- Crowdsourced network SLA
- ...

ETL Project

- MongoDB cluster
- 256GB RAM
- 32 Core
- 3x4TB SSD/NVMe



How I can Help

- Ask for API access
- Ask for Database Dump
- Ask for raw files

FREE for universities
Until it impacts my servers

Thank You

Questions ?

Keep in touch

