


Freedom_Tech_Summit_

20260610 Prague

Zappool_org_

```
>_ First  
   Nostr-friendly  
   Home miner  
   Proxy  
   Mining Pool
```

by OptOut 



Zappool

Bitaxe + Nostr

*) Bitaxe, and other small homeminers
NerdQaxe, Avalon, etc.

BitAxe: Solo or Pooled?



Why not pooled?

They produce a tiny amount

Small payments are needed

Friction of pool registration, account

Pooled is more fun!

*) there is "solo pool", but it's not pooled

The Golden Use Case: Daily Zaps!

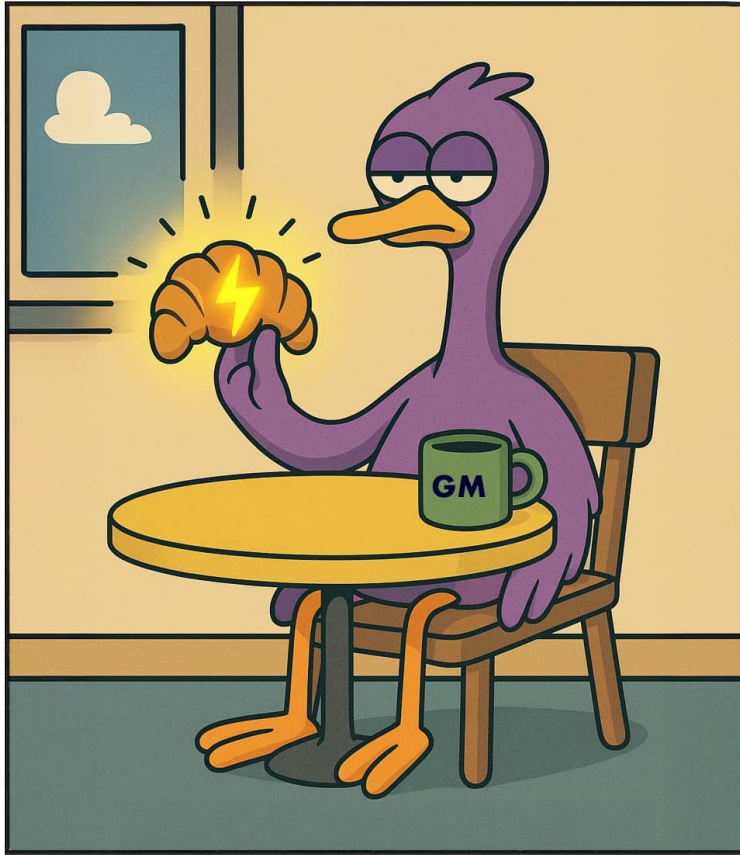
Tiny amounts

uselessly tiny
an avg. Bitaxe produces ~40 sats/day
it won't make you rich

Zap?

Zap!

can be used for zapping away on Nostr!
if it can be used conveniently (e.g. same wallet)



ZAP ZIDE – Well, zap to that.

iZapPool!

Mining Pool

not lottery

Home Miners

targeted for hobby miners

Daily Payouts

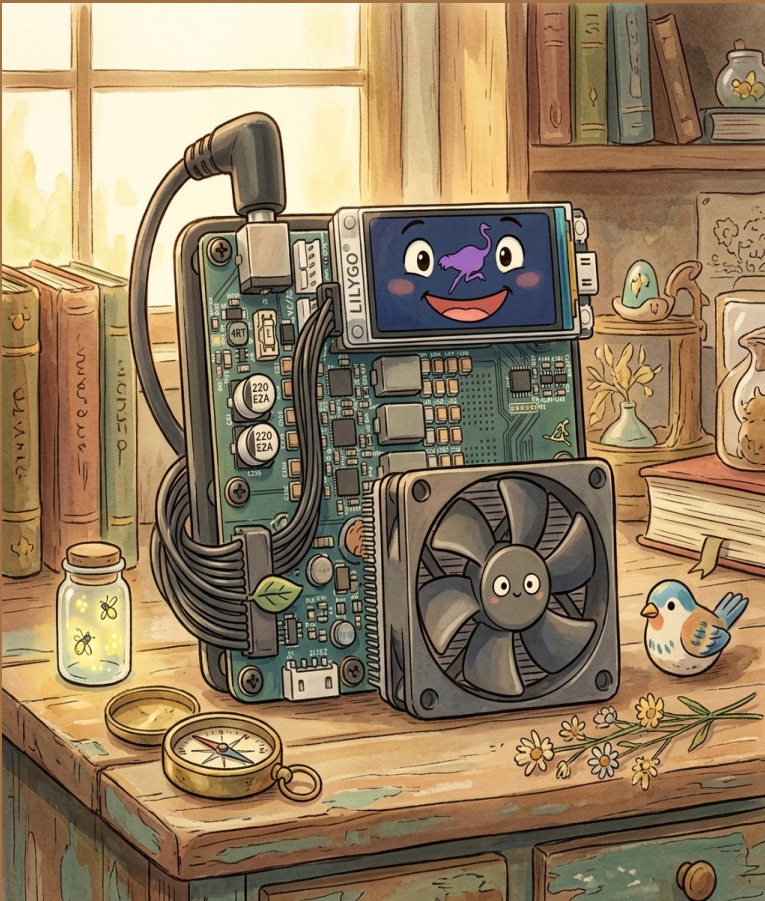
every noon

as Zaps

payouts as Nostr Zaps
(or plain Lightning)

Permissionless

no registration needed



How does it work?

- Proxy** acts as a pool proxy
- Mother** with another upstream 'mother' pool
- Nostr** handles the Nostr interfacing
- Zaps** handles the daily zap payouts
- Loan** pays upfront if needed



Birth

Hashpool

looked at hashpool

Proxy

started thinking about bootstrapping
& proxy pool

Prototype

Implemented, launched Sep'25

Status

Operational

Runs stable since Jan'26

Minimal usage

A handful of users

Nostr only

Limited publicity, on Nostr

Zero fee

No fee charged

Low resources

Personal hobby project

Plans

Brains support

Configurable mother

Hybrid pooled&lottery

Config Nostr-based user config

Cashu / NutZap

Scaling

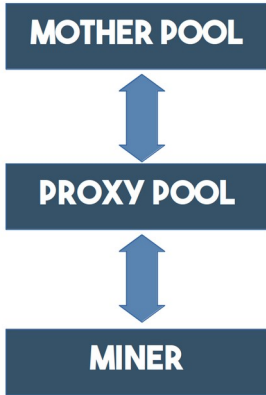
Donate hash reward

... etc.

Part II: Mother & Proxy



The Pool Bootstrapping Problem



For a pool to be practical, require
at least one block found per week (on average)

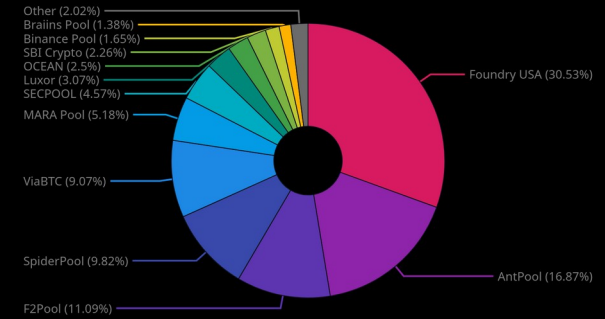
That needs:

0.09% of global hash power (HP)
~900 PH (0.9EH 900,000TH)

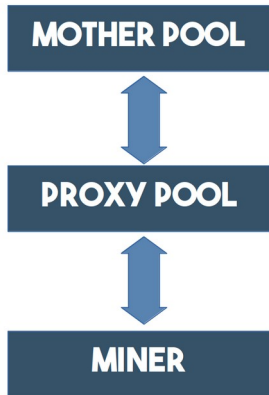
780,000 Bitaxes, or
 3,700 large miners (250TH)

*How to get from 0 to 1 EH?
 Relevant for Mining Decentralization*

A proxy pool can solve the bootstrapping



Rank	Pool	Blocks	Avg Health	Avg Block Fees
1	Foundry USA	1390 (30.53%)	99.89%	-1.95%
2	AntPool	768 (16.87%)	99.56%	-4.45%
3	F2Pool	505 (11.09%)	99.54%	-4.09%
4	SpiderPool	447 (9.82%)	99.45%	-7.18%
5	ViaBTC	413 (9.07%)	99.65%	-13.71%
6	MARA Pool	236 (5.18%)	99.92%	-3.63%
7	SECPOOL	208 (4.57%)	99.78%	-5.02%
8	Luxor	140 (3.07%)	99.68%	-4.06%
9	OCEAN	114 (2.5%)	93.42%	-26.55%
10	SBI Crypto	103 (2.26%)	96.32%	-24.20%
11	Binance Pool	75 (1.65%)	98.48%	-2.05%
12	Braiiins Pool	63 (1.38%)	99.86%	-4.34%
13	ULTIMUSPOOL	21 (0.46%)	99.58%	-4.31%
14	Unknown	19 (0.42%)	99.43%	-5.47%



Why use a Proxy?

and not the mother pool directly

different	payment method
different	user ID/account
control of	block template

Drawbacks of Proxy:

fees	mother + proxy pool
custody	may need to temporarily custody the passed rewards
extra dependency	

Ideal Mother (pool)



No KYC

Non-custodial

Direct payout form coinbase

Lightning

Can pay out regularly

Custom Template

User-controlled block template

Zappool uses:



and



(in the works)



Pooled		✓		✓	
Over 1% HP		✓		✓	
Lightning	Small amount		✓		✓
	Auto pay		✓		?
	Pay to any LNURL	✓	✗	✓	?
	Pay now		✗		✓
Own template	Stratum v2	✓	✗	✗	?
	Datum		✓		✗
KYC free	No email	✓	✓	✓	✗
	No account		✓		✗
Non custodial	Non-cust on-chain	~	✓	✗	✗
	Non-cust LN		✗		✗
Ideologically neutral		✗		✓	

Ocean

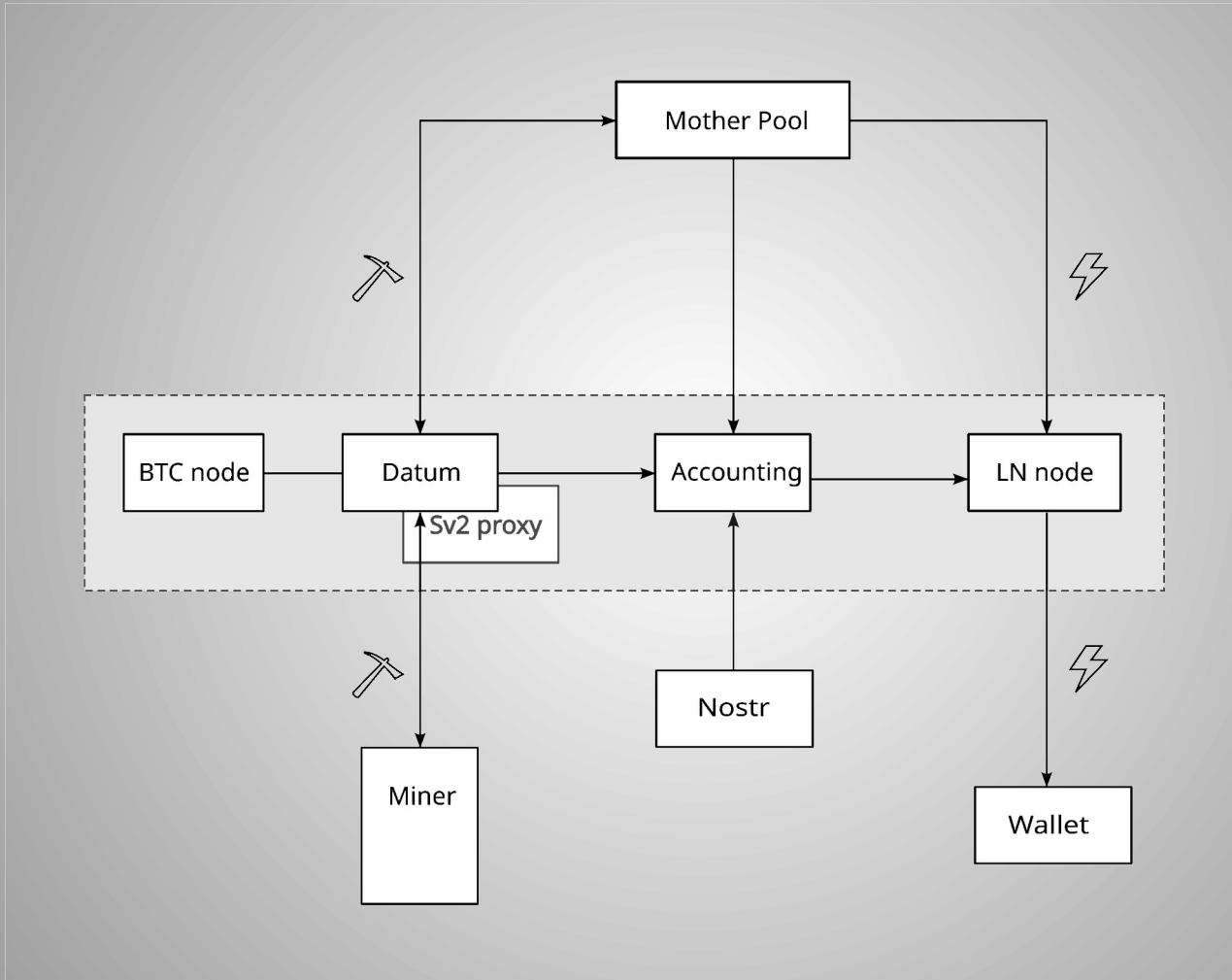
is technologically great
but

Ideology-wise controversial, divisive
(Knots, BIP110)

Brains

great alternative
in the works

Architecture



Part III:

Objectives and

Mining Decentralization



ZAP ZIDE – Hashing was up.



Objective 1:

Zappool World Domination!

Increase user base ...

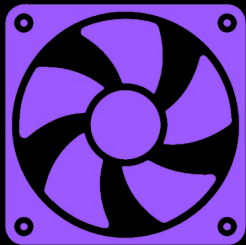
Capture all home miners & beyond ...

Collect enough HP to go independent (1%)

Zappool pre-packaged with Bitaxes

UNLIKELY

minerID: npub



Objective 2:

Motivate & help other pools to be Nostr friendly

Nostr for **ID layer**
Nostr for **payment info**
Nostr for **settings**
Permissionless

Zappool:
Working example
Source code
Standard way for config, etc. (e.g. on-chain payment address)
Education



Objective 3:

Help other new decentralized mining initiatives to bootstrap

Many exciting projects exist

Bootstrap off the back of a mother pool

Zappool:
Proxy pool example
Source code

Hashpool

BraidPool

Parasite Pool

Hydra Pool

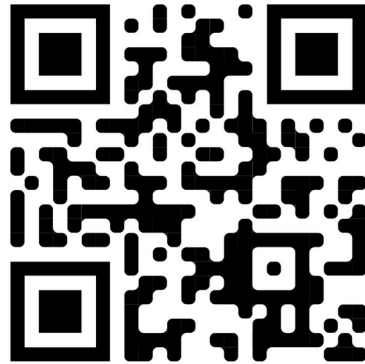
P2Pool

etc.

zappool.org

github: zappool

nostr: zappool@zappool.org
zappool



8PT

Easy pooled mining with Bitaxe

Synergy with Nostr

Proxy Pool

Try it!

If you have a home miner

Cooperate

Open for cooperations

(e.g. home miner sellers, other pools)

Looking for collaborators