



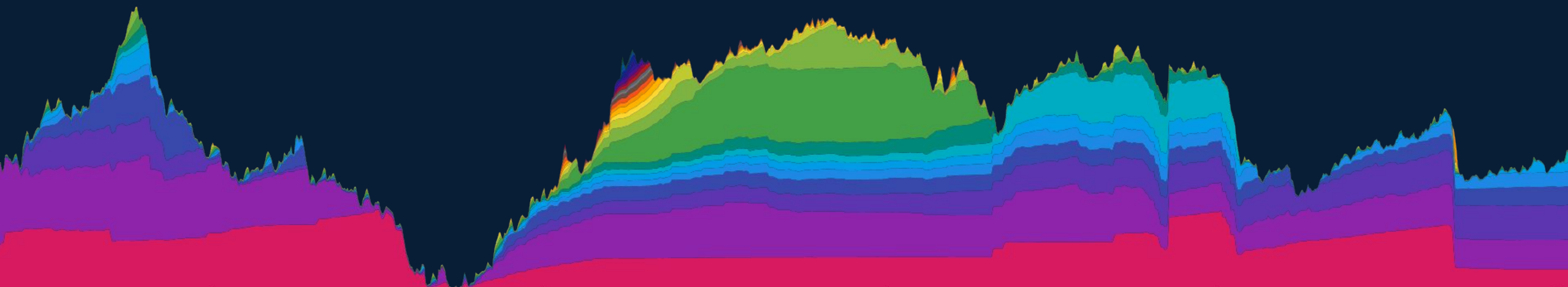
# The Rise of Liquid



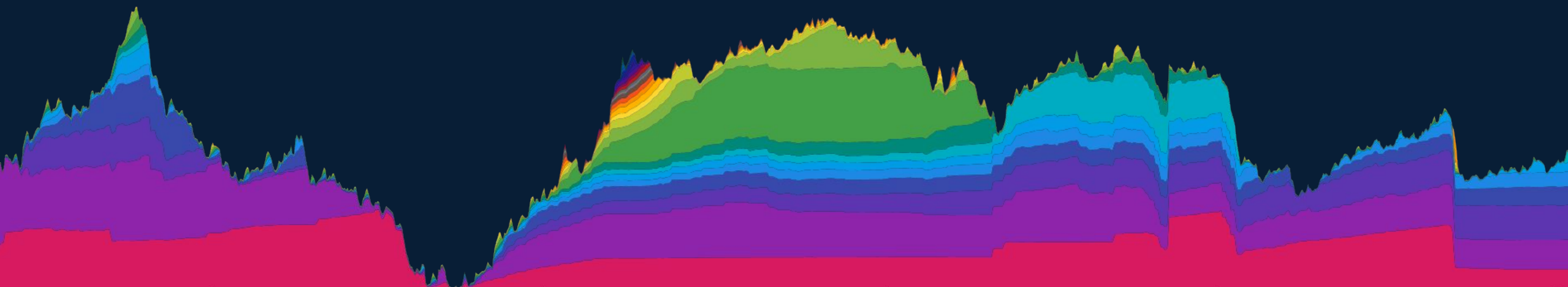
**Liquid** - The Good, the  
Bad and the Ugly

**Why now?**

Mainchain is wild



Mainchain will stay wild



# The Good

- + Extremely cheap (0.1 sat/vbyte)



# Production-grade Layer 2s



LIQUID  
NETWORK



Rootstock

# The Good

- + Extremely cheap (0.1 sat/vbyte)
- + Rock solid (live since 2018)



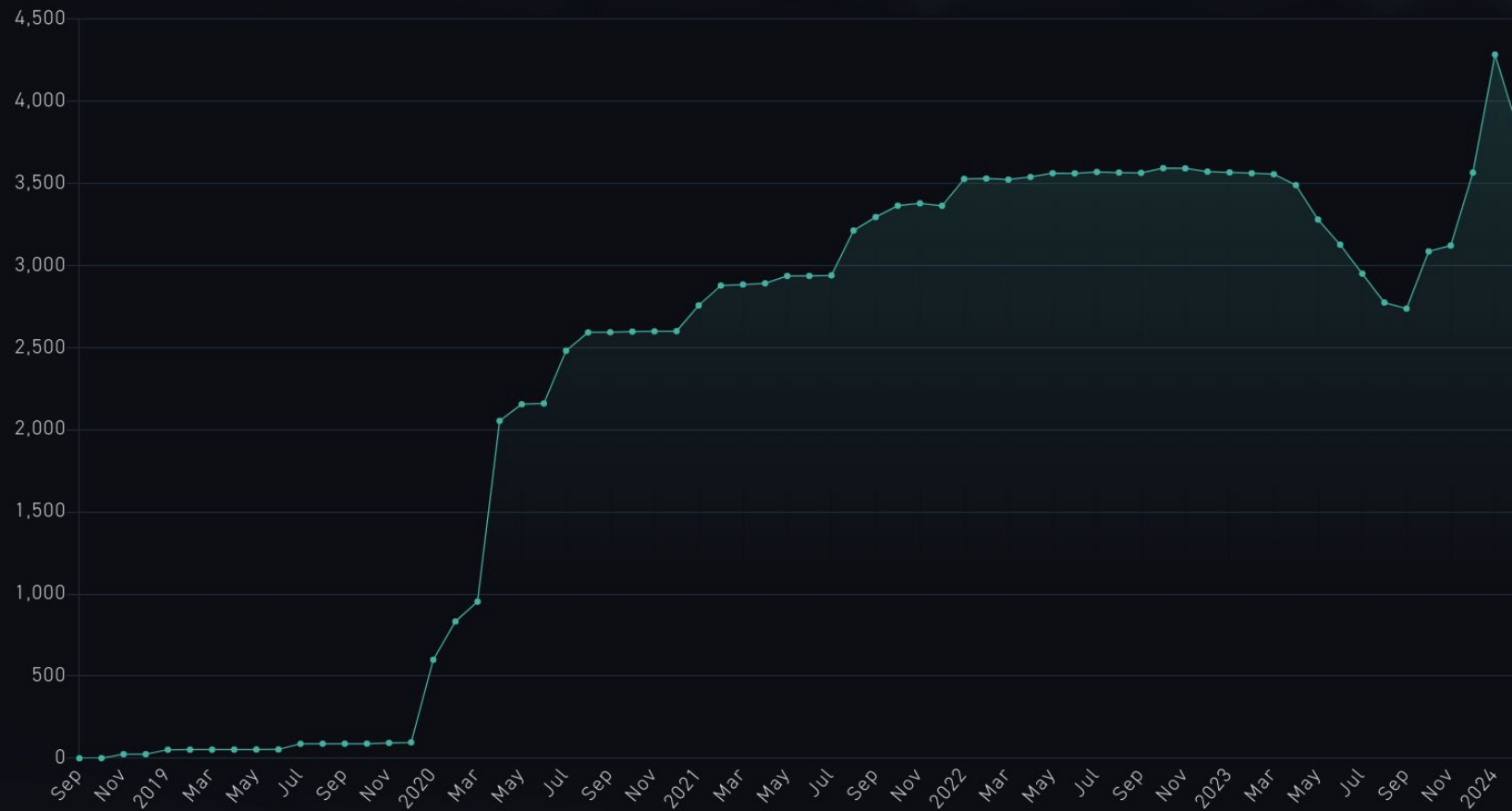


# It's a Blockchain!

```
bitcoin@boltz:~$ elements-cli getblockchaininfo
{
  "chain": "liquidv1",
  "blocks": 2724475,
  "headers": 2724475,
  "bestblockhash": "86fdd719f44ee3b77173f5819996dce5f0ac169ea891d48f501f186d91f23215",
  "mediantime": 1707777728,
  "verificationprogress": 1,
  "initialblockdownload": false,
  "size_on_disk": 19938259386,
  "pruned": false,
```

# It's a Blockchain!

## L-BTC in circulation



Stats as of UTC Feb 12, 2024, 11:07 PM, block 2724495

# The Good

- + Extremely cheap (0.1 sat/vbyte)
- + Rock solid (live since 2018)
- + Run a node (verify!)



# 4MB blocks every 60s

2724257

- sat/vB

- sat/vB

**6.48 kB**

2 transactions

3 hours ago

2724256

- sat/vB

- sat/vB

**15.46 kB**

3 transactions

3 hours ago

2724255

- sat/vB

- sat/vB

**42.36 kB**

4 transactions

3 hours ago

2724254

- sat/vB

- sat/vB

**42.66 kB**

5 transactions

3 hours ago

# The Good





- + Extremely cheap (0.1 sat/vbyte)
- + Rock solid (live since 2018)
- + Run a node (verify!)
- + Throughput  $\approx$  mainchain (space!)



# Confidential Transactions by Default

## Inputs & Outputs

Details

 ex1qf4r2zrwazeynjdu03qfyz... y0nkqg34	Confidential	Gok6Q5Gr6Z8LpwzyhXc5zRsFuoNcGJfK2F	Confidential 
		ex1qefxua8q7mz0yn7ucqqz7a... l9t0g5sl	Confidential 
		Transaction fee	0.00000250 L-BTC 
Confidential			

# The Good

- + Extremely cheap (0.1 sat/vbyte)
- + Rock solid (live since 2018)
- + Run a node (verify!)
- + Throughput  $\approx$  mainchain (space!)
- + Hidden amounts with CT (default!)





# It's a Bitcoin Core Fork!





# The Good

- + Extremely cheap (0.1 sat/vbyte)
- + Rock solid (live since 2018)
- + Run a node (verify!)
- + Throughput  $\approx$  mainchain (space!)
- + Hidden amounts with CT (default!)
- + Moar OP\_CODES, test use cases



# The Good

- + Extremely cheap (0.1 sat/vbyte)
- + Rock solid (live since 2018)
- + Run a node (verify!)
- + Throughput  $\approx$  mainchain (space!)
- + Hidden amounts with CT (default!)
- + Moar OP\_CODES, test use cases
- + Easy to increase block size, speed etc.



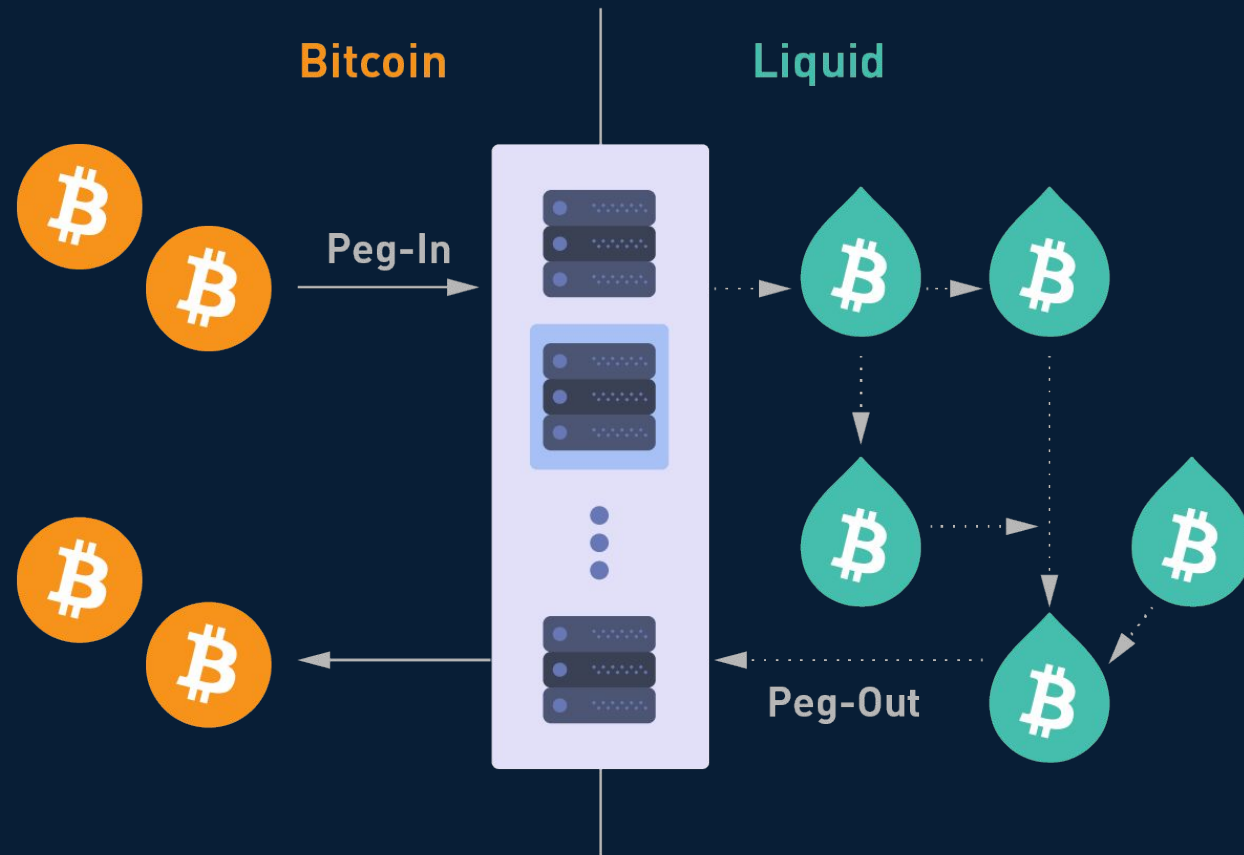
# The Bad

- Still a blockchain, doesn't scale
- Inherits Bitcoin's scripting limitations
- Trust in Federation
- CT doesn't hide tx graph
- Although there are independent governance boards, Blockstream runs development



# The Ugly

- Pegout



# FAQ

- + Functionaries secure peg AND produce blocks
- + Functionaries are anonymous
- + Blocks arrive every 60s and are final
- + 0-conf is safe on Liquid, will be kept safe
- + Liquid is one implementation of “Elements”, the open-source base of Liquid
- + Need elements + bitcoin node to pegin
- + Emergency keys are good & needed

# Tl;dr

Liquid is here and ready, let's use it! Good for “daily” usage, NOT your savings.



# Ecosystem

## Liquid Federation Structure



### Functionaries

Functionaries run specialised HSM hardware to confirm transactions and secure the network's Bitcoin funds.



### Members

In addition to the ability to peg-out Liquid Bitcoin, Liquid members vote on board elections and network updates.



### Full Nodes

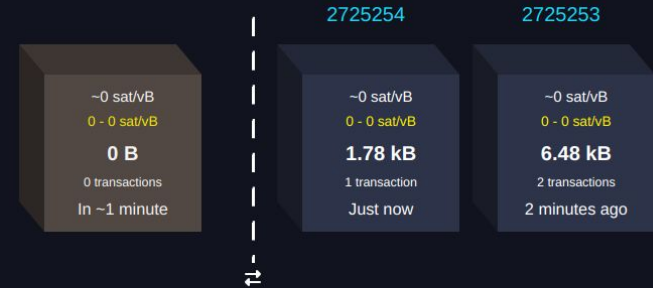
Liquid full nodes ensure functionaries are behaving correctly by verifying transactions and peg-ins.

## Withdrawal

Choose a cryptocurrency

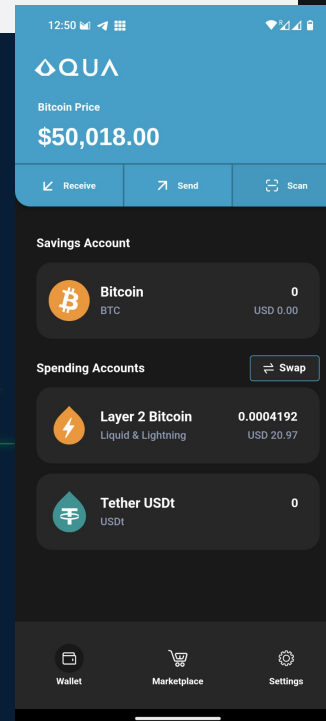
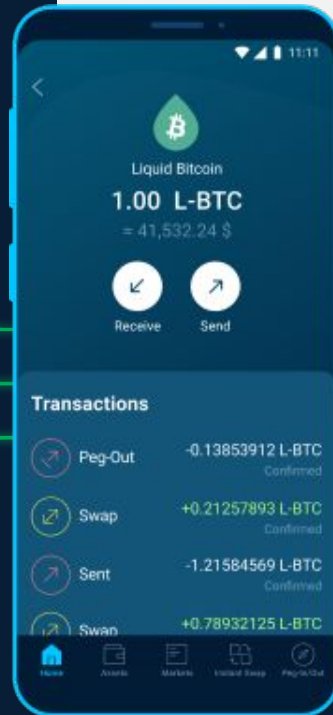
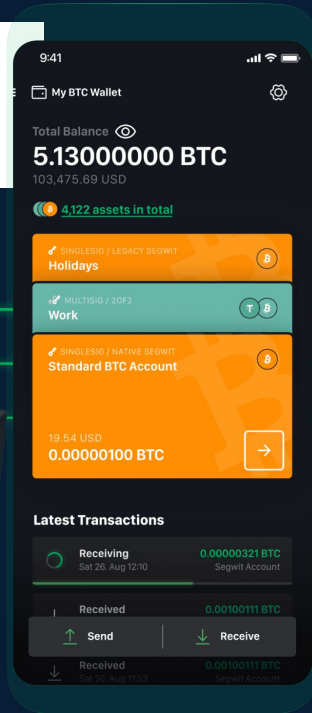
Choose

Bitcoin (Liquid)



# Bull Bitcoin

# BTSE



L-BTC in circulation

3,813.51 L-BTC  
As of block 2725254

BTC Reserves

3,813.66 BTC  
As of block 830279

Peg-O-Meter



## Boltz

### Crear intercambio atómico

El pago incluye la comisión de red y servicio de Boltz  
Enviar Mín: 1149 Máx: 25025148

LIQUID

50000

LIGHTNING

49802

Comisión de red: 148  
Comisión de Boltz (0.1%): 50

**Demo**



