



# Dev Meetup Lusaka 2025





Anita ⚡️🌈 Bitcoin for Fairness ✅  
@AnitaPosch

Promote

...

is this the future of payment? [http://www.youtube.com/watch?v=Um63OQz3bjo&feature=player\\_embedded](http://www.youtube.com/watch?v=Um63OQz3bjo&feature=player_embedded) #bitcoin 💰

10:39 AM · May 31, 2011









# Ghana

Meetups total: 50 participants  
Hardware Wallets Trezor give-aways  
AfroBitcoin conference speaker

## Zambia

Media appearances: 10  
Bitcoin-only WhatsApp group: 80 members  
Meetups total: 150 participants  
Bitcoin talks: 100 participants  
**Workshop with 50 Human Rights Activists**  
Workshop for Journalists: 10 participants  
Hardware Wallets Trezor workshop  
Bitcoin- and Lightning Node: 1  
Bitcoin VicFalls: found Co-Lead

## Namibia

Support local initiative EasySats

## South Africa

Bitcoin- and Lightning Node: 1  
Hardware Wallets Trezor workshop  
Matchmaker: Paxful education center  
Matchmaker: Bitcoin teacher

## Nigeria

Meetups total: 20 participants

## Kenya

AfroBitcoin conference speaker  
Project visits: Bitsacco, Bitcoin Dada, BTC Babies, Tando.me, BTC Nairobi

## Malawi

Connected Gridless Mining in Bondo

## Zimbabwe

Media appearances: 5  
Bitcoin-only WhatsApp group: 300 members  
Meetups total: 170 participants  
Bitcoin talks: 120 participants  
Hardware Wallets Trezor workshop  
Initiated Bitcoin mining with solar operation: 1

## Botswana

Bitcoin talk: 12 participants

# Upcoming BitDev?

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<https://www.youtube.com/watch?v=ZeRQgplckzg>

# Opportunities

## Q1, 2025 Btrust Grant Recipients

Btrust Grants support individuals and organizations, in the Global South, working to strengthen the Bitcoin open-source ecosystem.



Brandon Odiwuor



Itoro Ukpong

<https://www.btrust.tech/builders>

### General Fund

by OpenSats

We help you find and support open-source Bitcoin projects - helping create a better tomorrow, today.

### Operations Budget

by OpenSats

Contributions to the OpenSats Operations Budget will be used to cover our operating expenses as we...

### The Nostr Fund

by OpenSats

Funding nostr protocol development and other stuff.

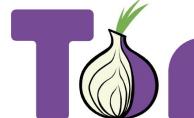
### Project Showcase



#### Bitcoin Design Community

by Christoph Ono

A free, open-source community resource for designers, developers, an...



#### The Tor Project

by The Tor Project

The Tor Project advances human rights and defends your privacy online through...



#### Bitcoin Core

by Bitcoin Core Developers

Bitcoin Core is the reference implementation of the Bitcoin protocol.



#### Damus

by William Casarin

Damus is one of the most established and popular nostr client for iOS.

<https://opensats.org>



# Bitcoin Gives Opportunities





Source: CoinGecko. Chart not to scale.



No Inflation  
Digital  
Resistant





# Ownership Inclusion Privacy

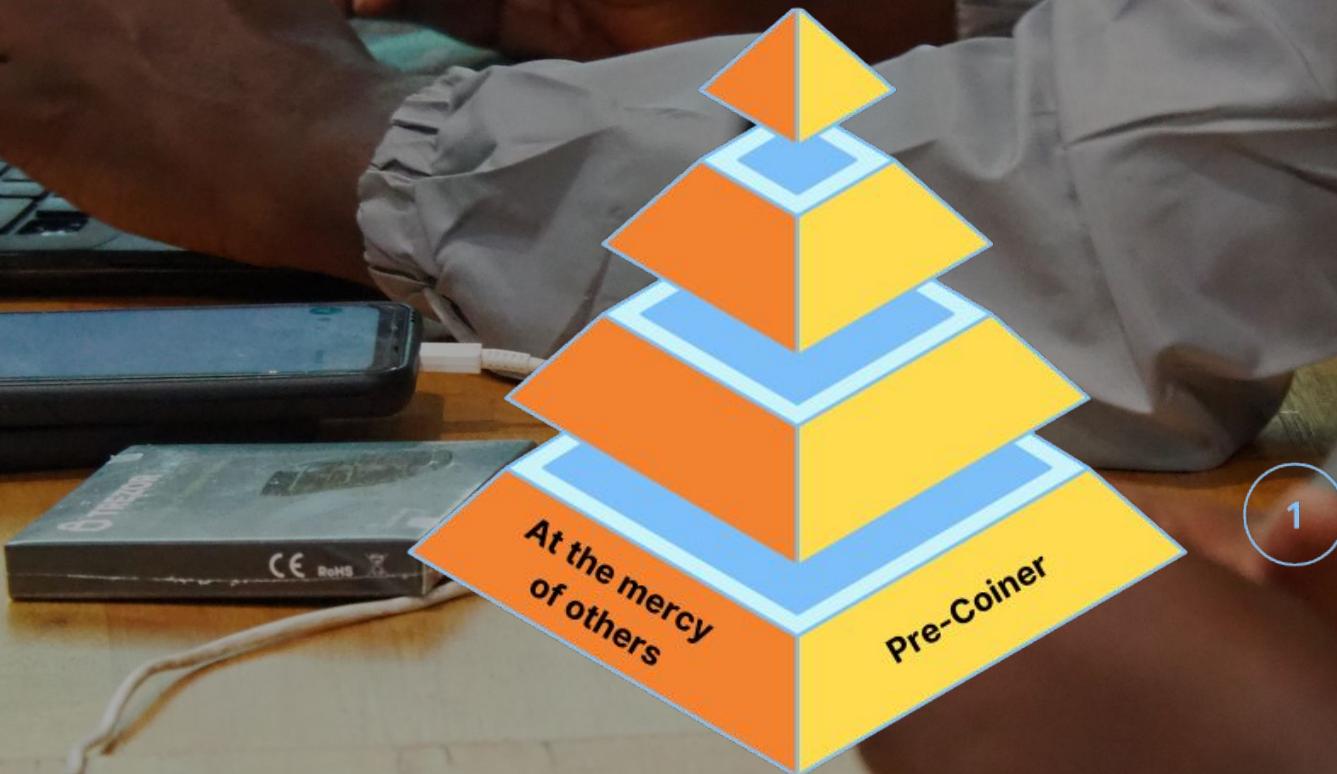




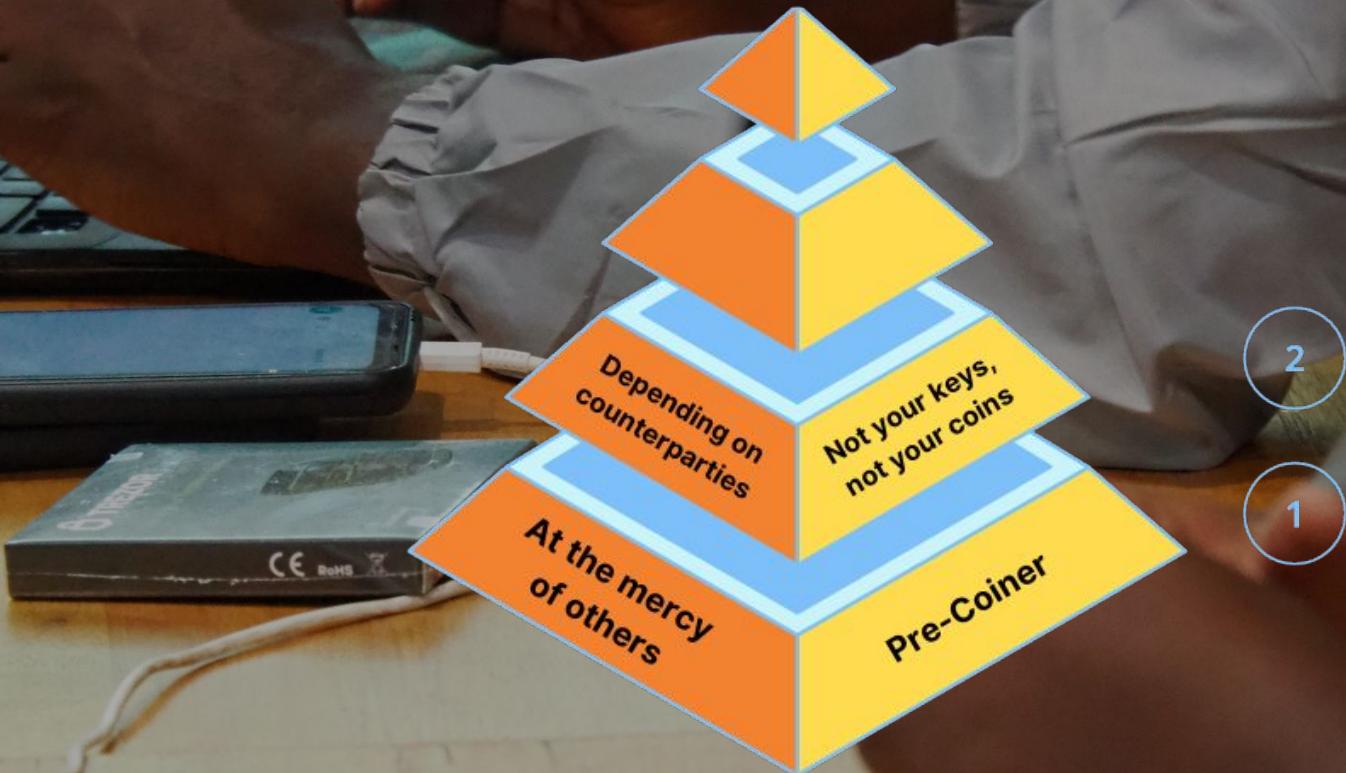
Ownership =  
Self-Custody



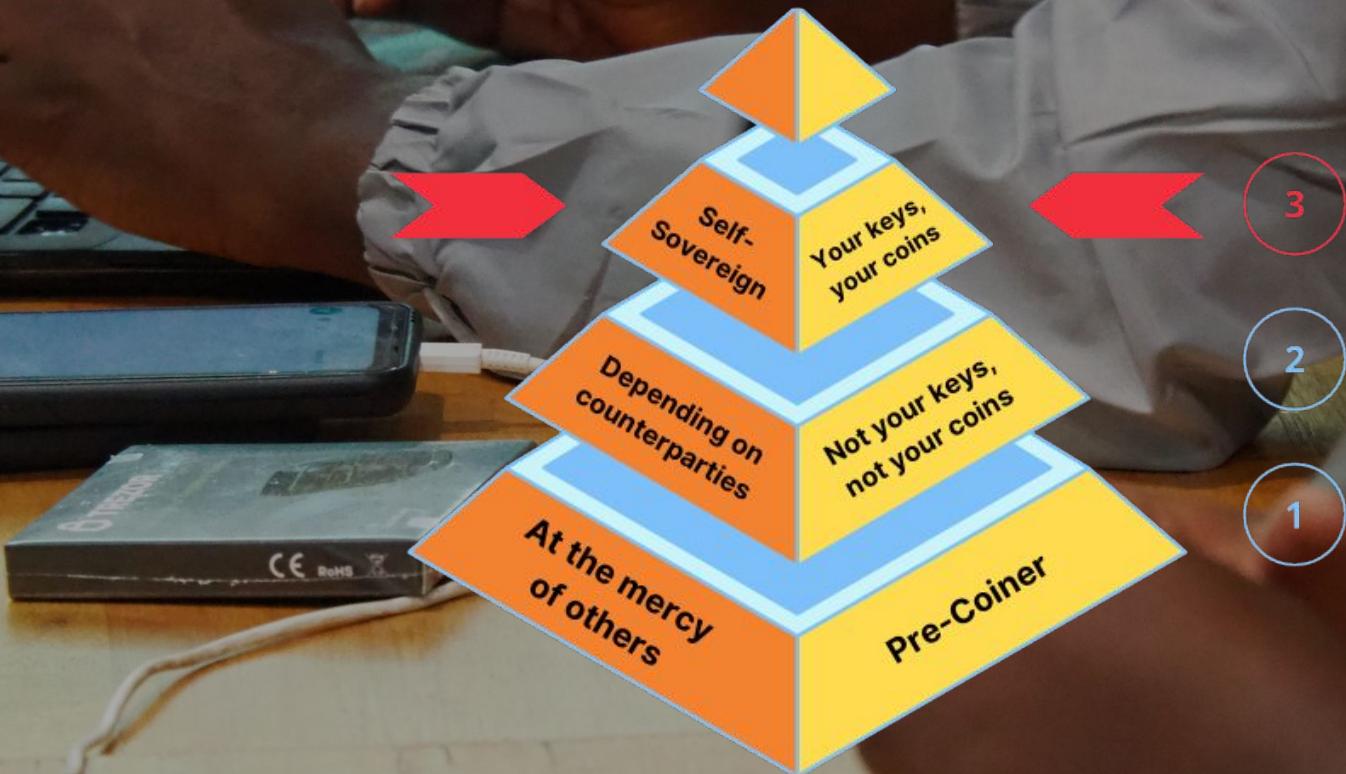
# Staircase to Self-Sovereignty



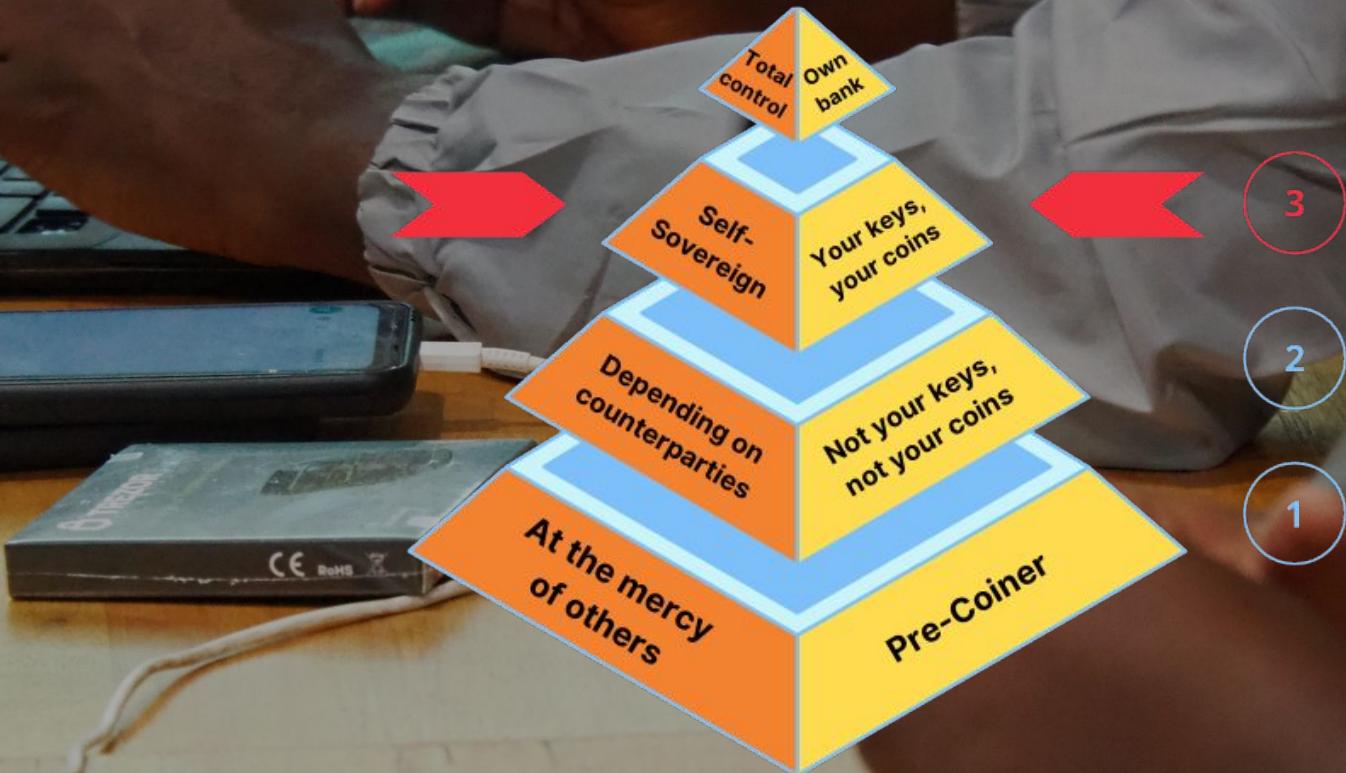
# Staircase to Self-Sovereignty



# Staircase to Self-Sovereignty



# Staircase to Self-Sovereignty





# A Fork on the Road



# Bitcoin Is: 21 Mio. Limit

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$$\sum_{i=0}^{32} \frac{50}{2^i}$$

The sum equals the total number of bitcoin

→

210,000

Number of blocks between halvings

$\frac{50}{2^i}$

The block subsidy (the original block subsidy was 50 BTC)

The  $i$  represents the halving events

The diagram illustrates the mathematical derivation of the total number of Bitcoin (210,000) as a sum of a geometric series. The formula is  $\sum_{i=0}^{32} \frac{50}{2^i}$ . An annotation points to the summand  $\frac{50}{2^i}$  with the text "The block subsidy (the original block subsidy was 50 BTC)". Another annotation points to the index  $i$  with the text "The  $i$  represents the halving events". A third annotation points to the result 210,000 with the text "Number of blocks between halvings". A fourth annotation points to the entire formula with the text "The sum equals the total number of bitcoin".



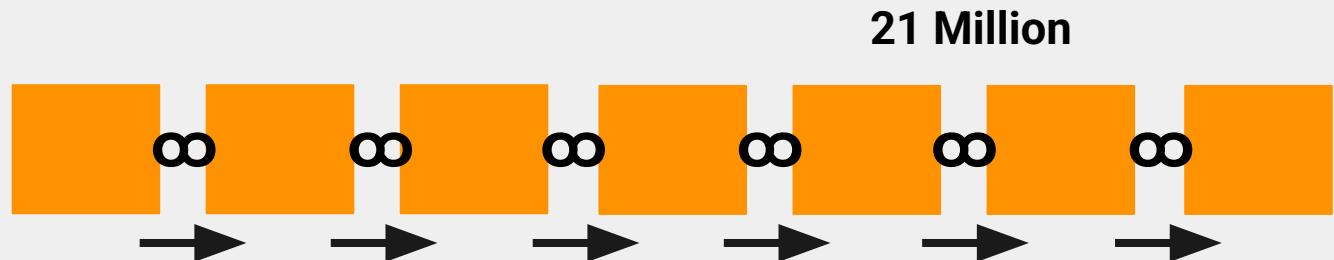
# Bitcoin Is: Rules Written in Code

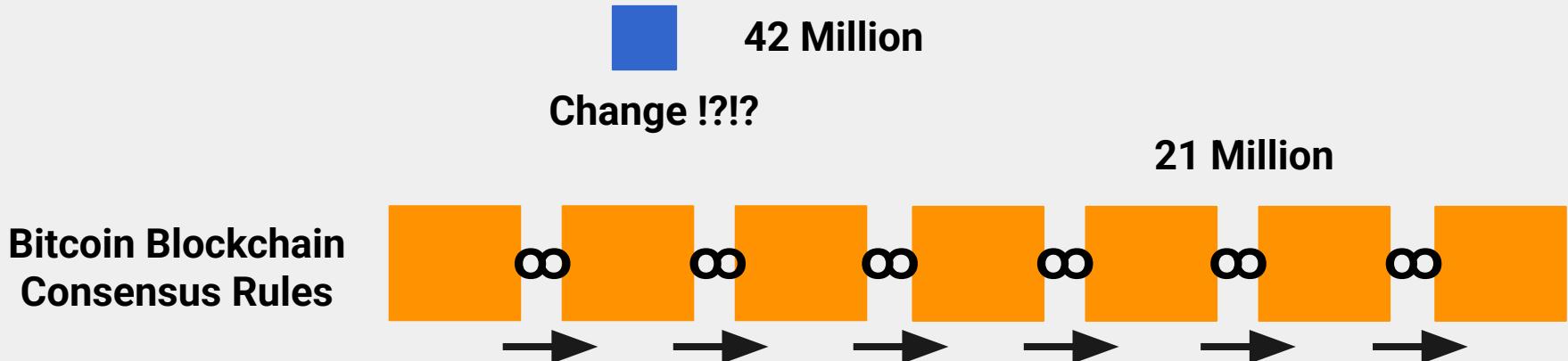
---

```
CAmount GetBlockSubsidy(int nHeight, const Consensus::Params& consensusParams)
{
    int halvings = nHeight / consensusParams.nSubsidyHalvingInterval;
    // Force block reward to zero when right shift is undefined.
    if (halvings >= 64)
        return 0;

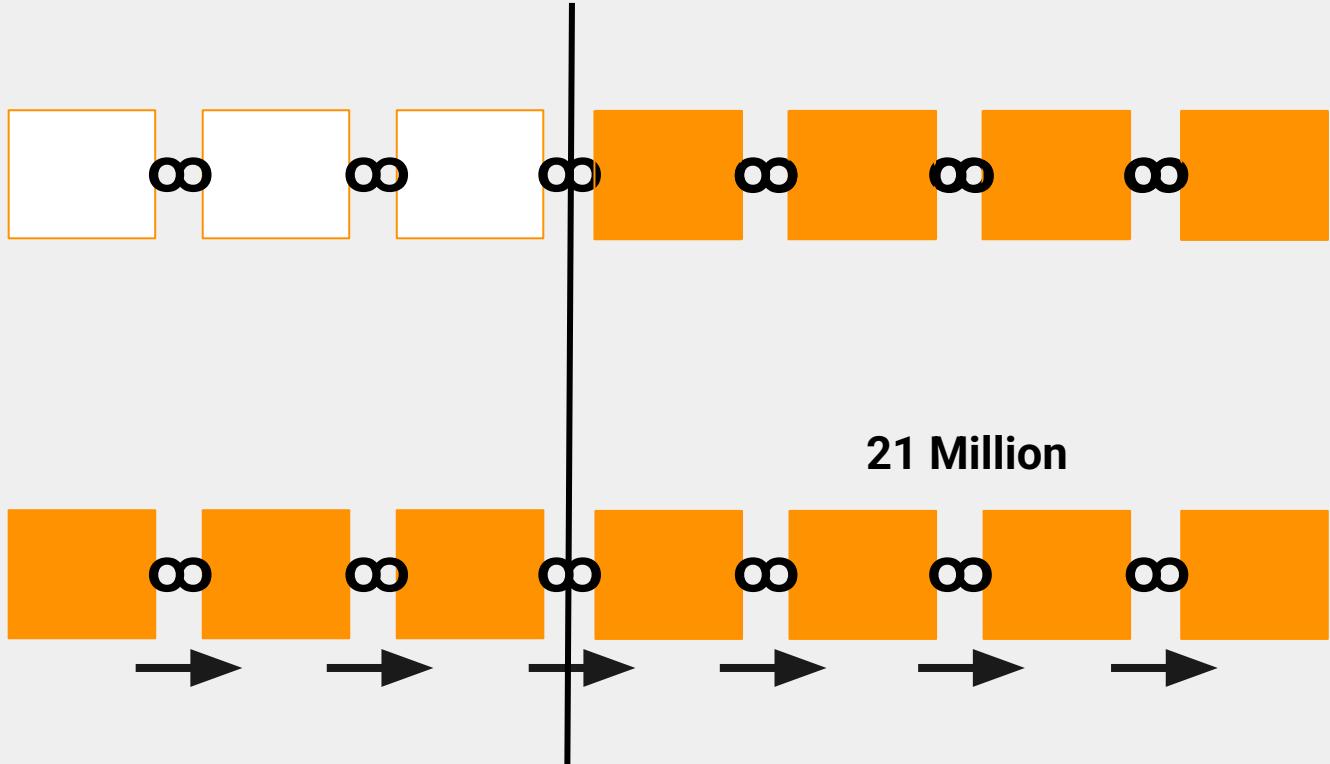
    CAmount nSubsidy = 50 * COIN;
    // Subsidy is cut in half every 210,000 blocks which will occur approximately every 4 years.
    nSubsidy >>= halvings;
    return nSubsidy;
}, []
}
```

## Bitcoin Blockchain Consensus Rules



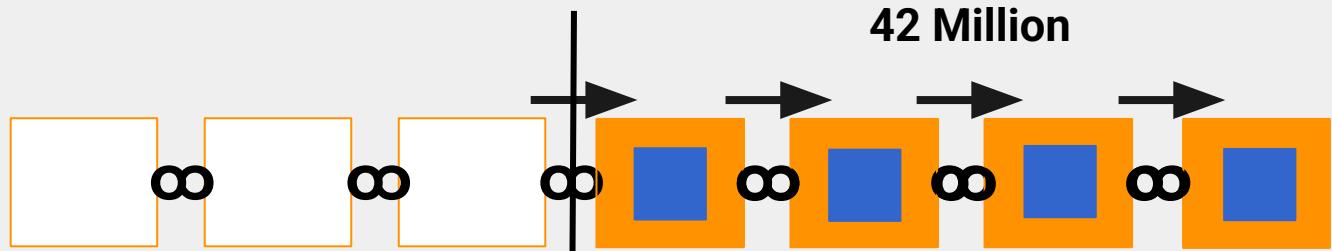


New Chain  
New Rules

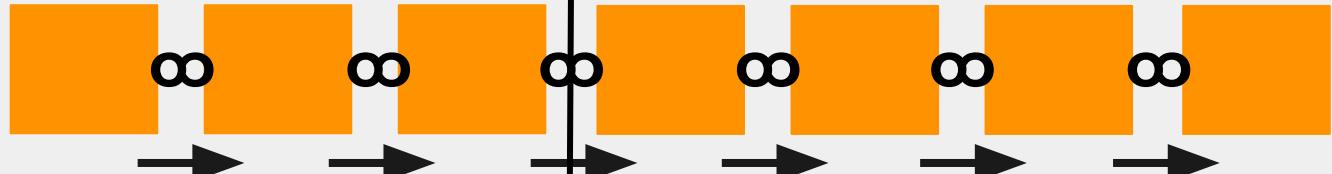


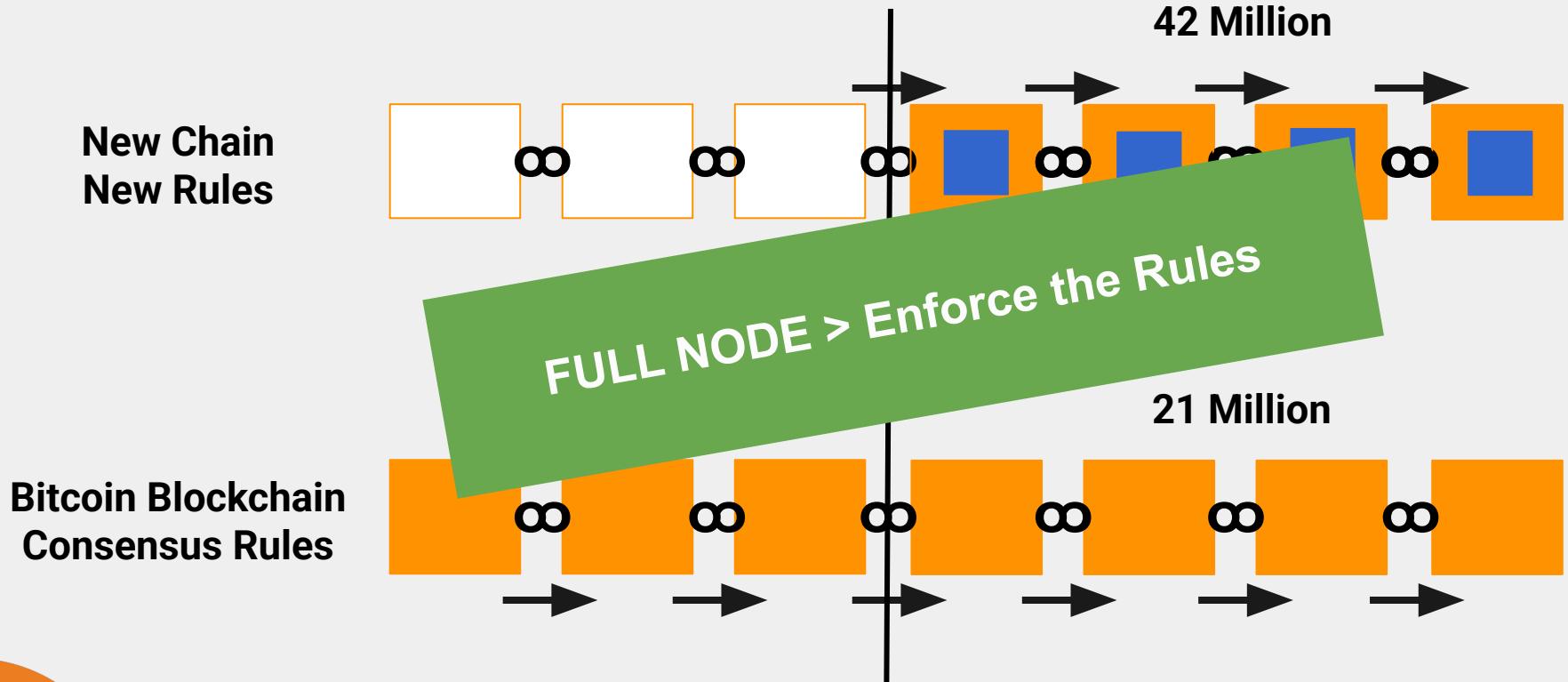
Bitcoin Blockchain  
Consensus Rules

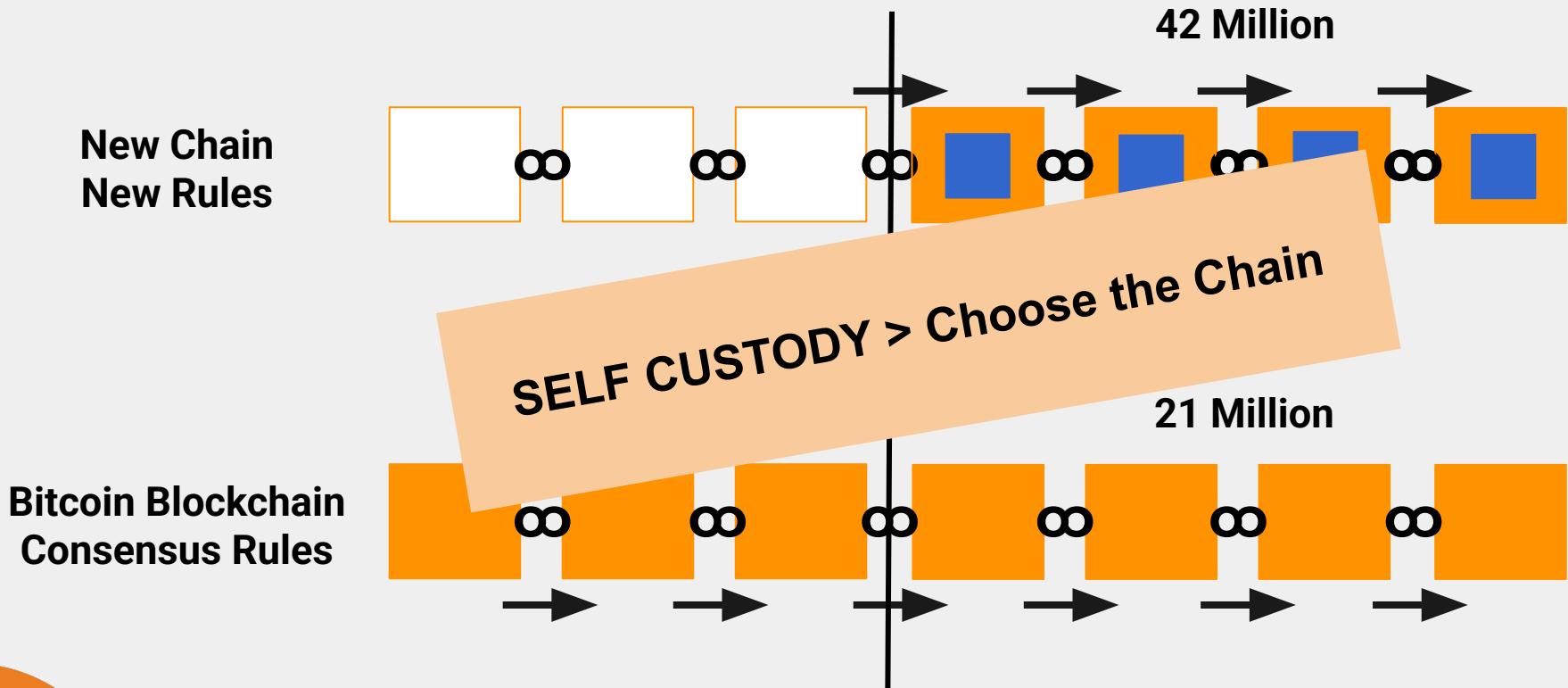
New Chain  
New Rules

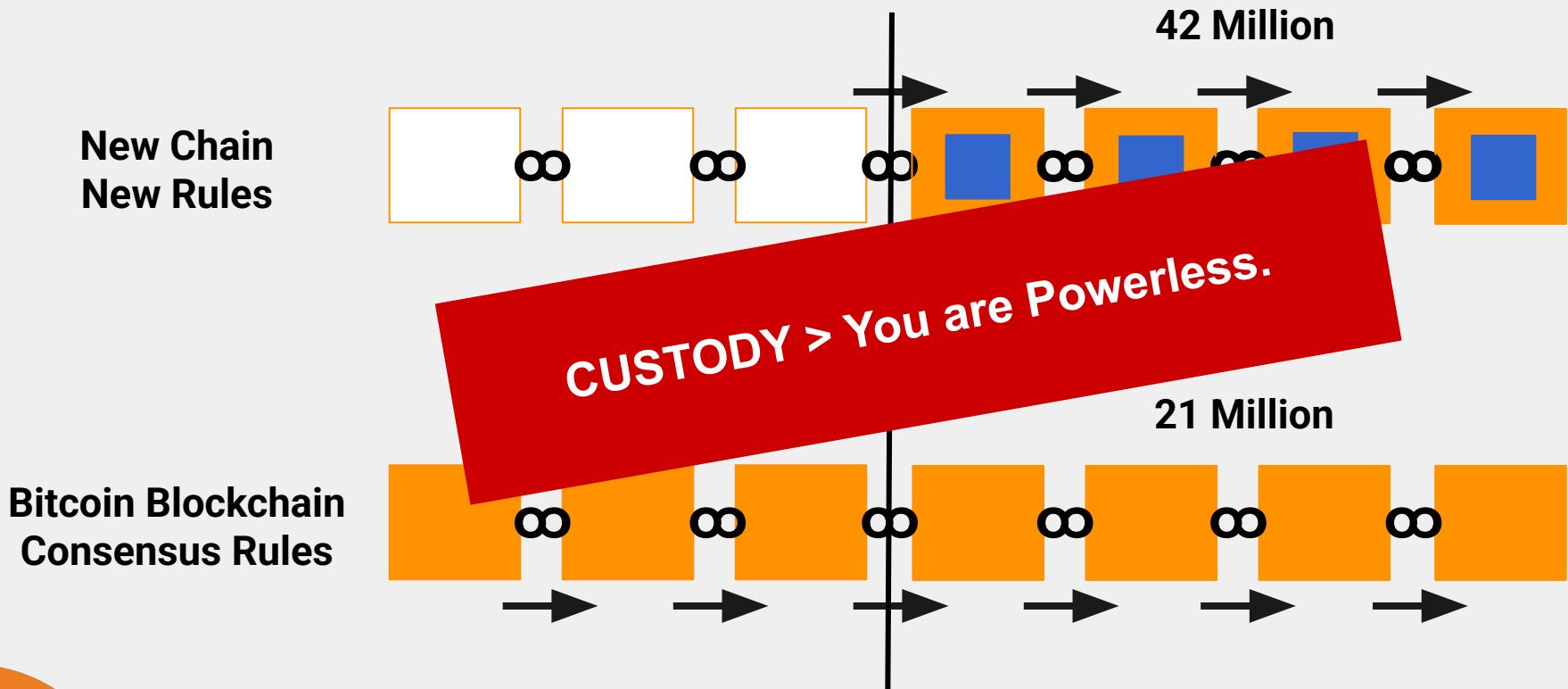


Bitcoin Blockchain  
Consensus Rules









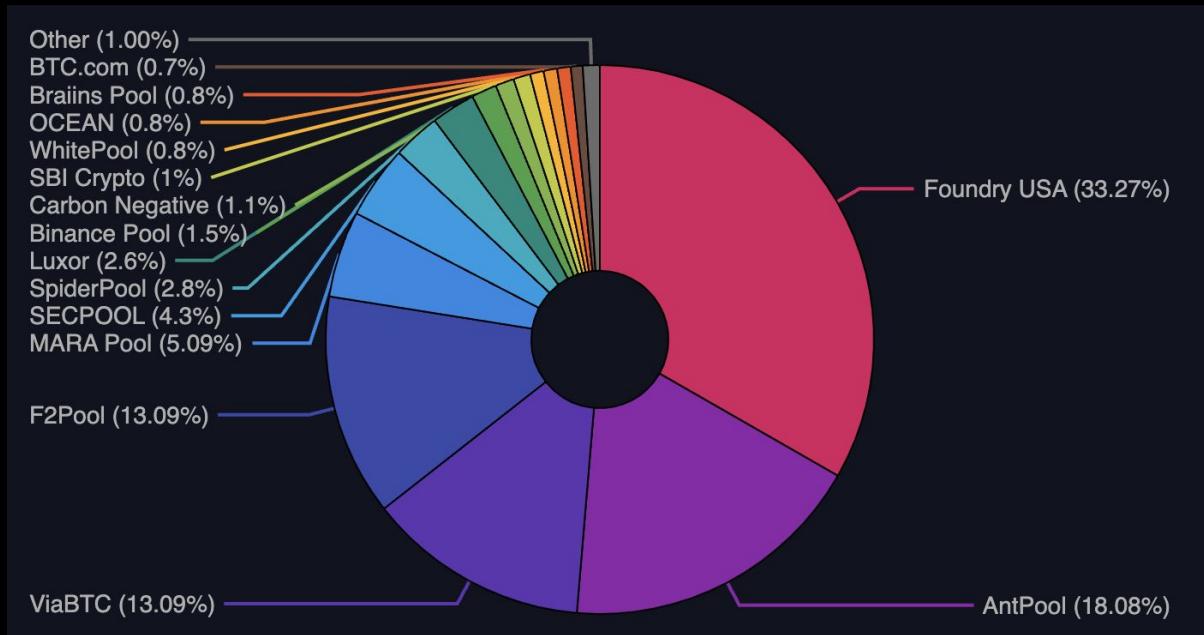
# Bitcoin's Characteristic Is Not A Given

Can be co-opted by people, who

- **Don't care** about Cypherpunk principles
- **Don't care** about people's privacy
- **Don't care** about enforcing human rights
- **Don't care** about fairness

# Bitcoin's Uncensorability Is Not a Given

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# Bitcoin's Uncensorability Is Not a Given

- **Mining corporations** underlying national regulations **can be forced to censor transactions.**
- **Next step: governments force miners to censor transactions** to shut down any protests.



We the People;  
Need to Be Active





# REJECT FINANCE BILL

- Bitcoin is **once in a lifetime chance** to a fair accessible financial system that does not discriminate.
- **Self-custody, running nodes and home mining** are the backbone that **we the people** need to run to **secure this system**.



# Scaling Bitcoin



~32 sat/vB

31 - 33 sat/vB

**1.77 MB**

4,446 transactions

In ~31 minutes

~35 sat/vB

33 - 35 sat/vB

**1.41 MB**

1,984 transactions

In ~21 minutes

~36 sat/vB

35 - 280 sat/vB

**1.53 MB**

3,302 transactions

In ~10 minutes

826548

~46 sat/vB

38 - 545 sat/vB

**1.64 MB**

3,741 transactions

2 minutes ago

826547

~44 sat/vB

37 - 1,297 sat/vB

**1.62 MB**

4,076 transactions

24 minutes ago

826546

~32 sat/vB

32 - 1,297 sat/vB

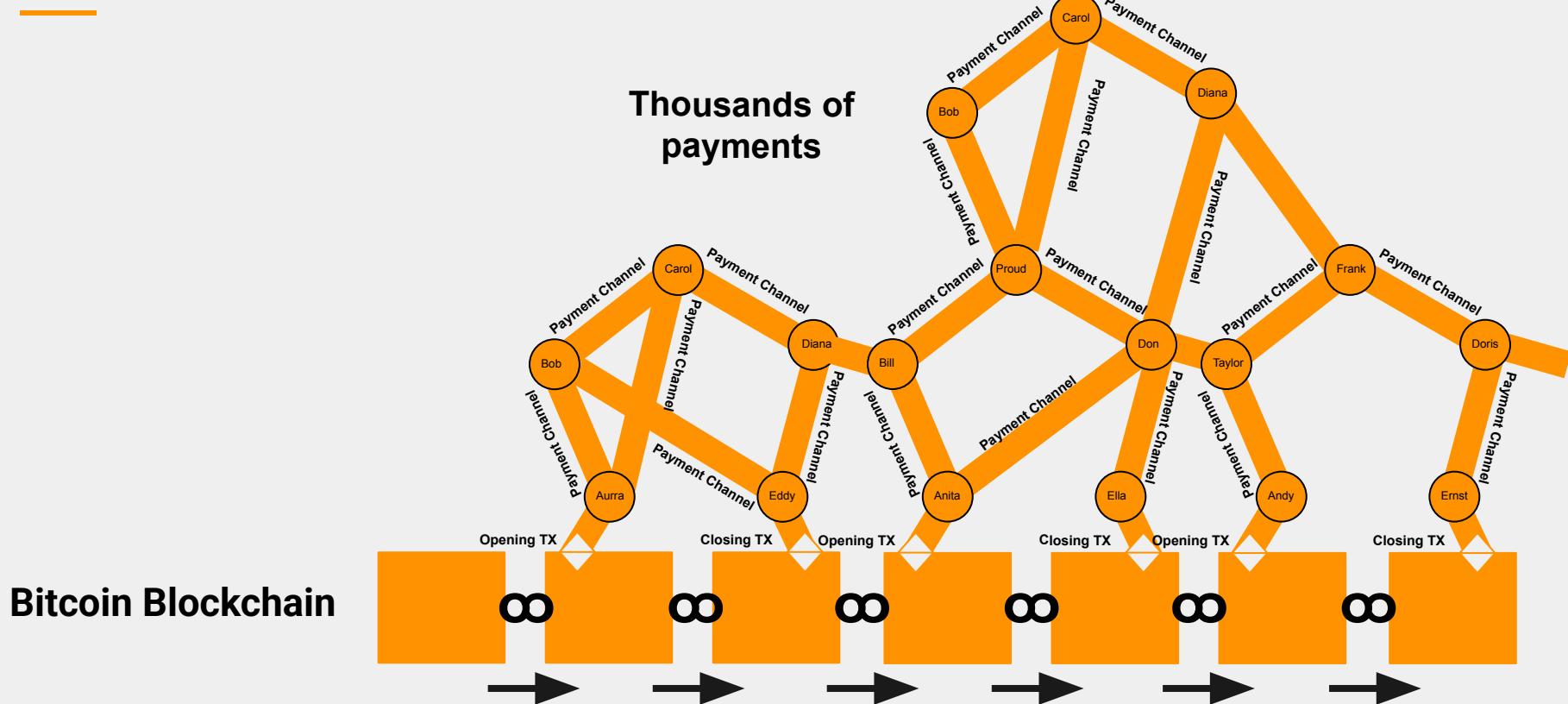
**2.16 MB**

5,409 transactions

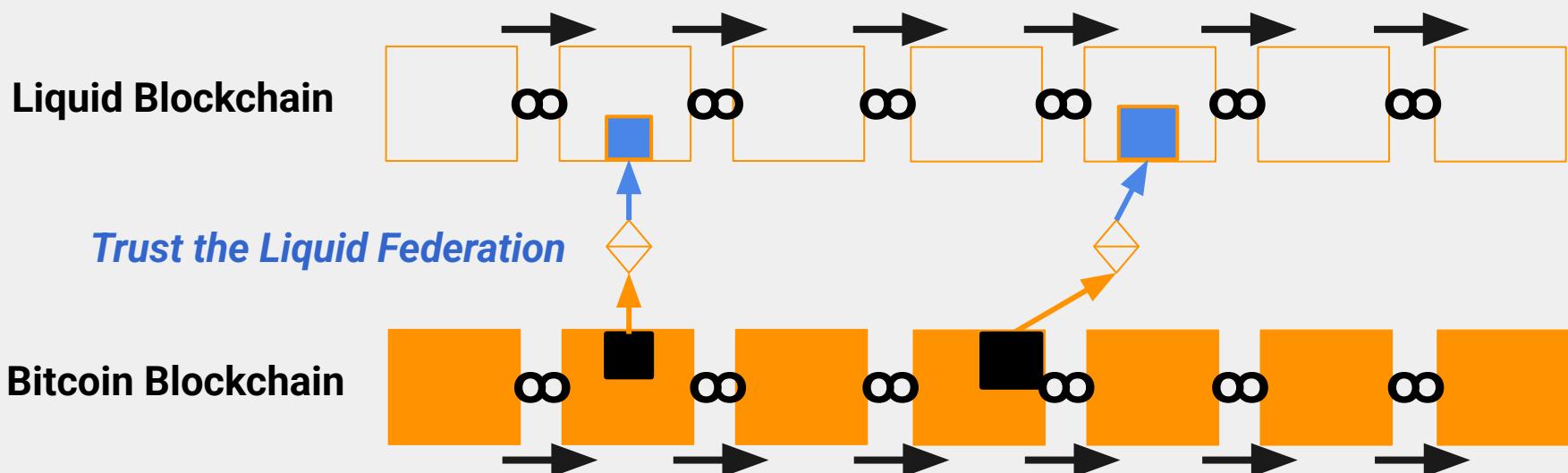
49 minutes ago

**Bitcoin Blockchain around 4,000 tx max. in a block  
every 10 min. new block  
576,000 tx per day**

# Lightning Network: Layer 2



# Liquid Network: Sidechain

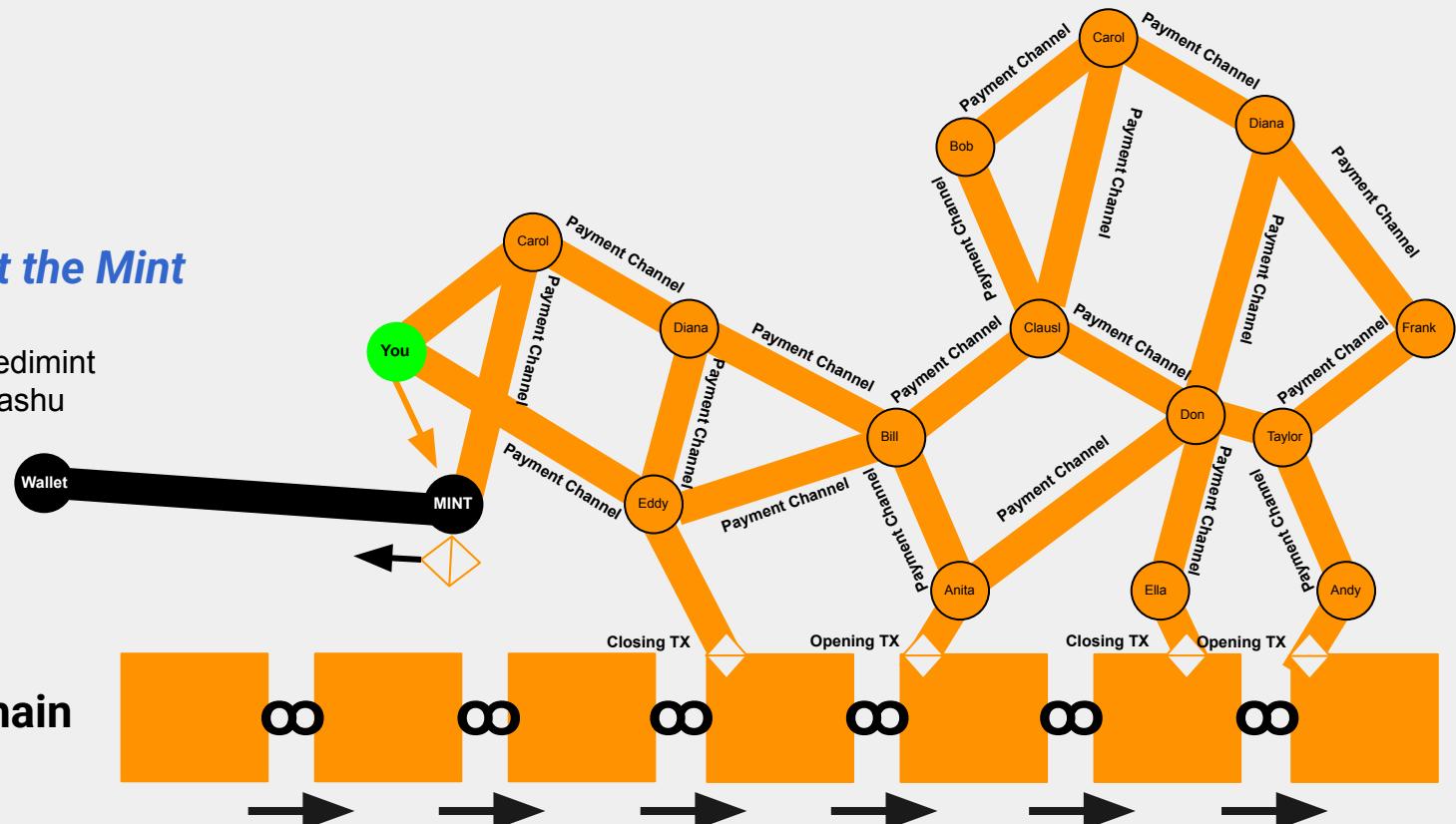


# E-Cash: Anonymous Digital Money

*Trust the Mint*

Fedimint  
Cashu

Bitcoin Blockchain





**Self-Custody  
Trump's  
Custody**



Wallet of Satoshi ✅  
@walletofsatoshi

...

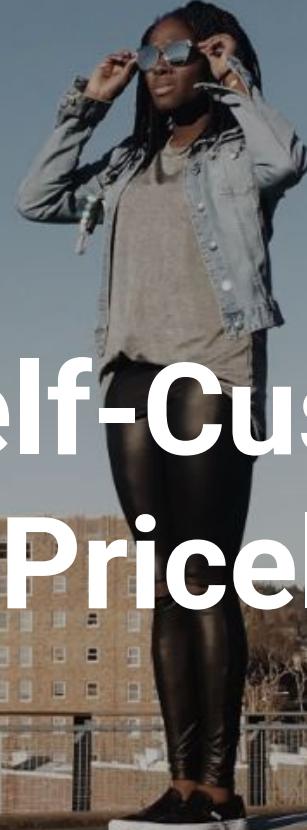
To our valued Wallet of Satoshi community in the United States of America,

We've dedicated ourselves to providing the best Bitcoin experience with Wallet of Satoshi, being at the forefront of Lightning usability and adoption. However, we've made the difficult decision to remove our app from the U.S. Apple and Google app stores, and will not serve U.S. customers going forward.

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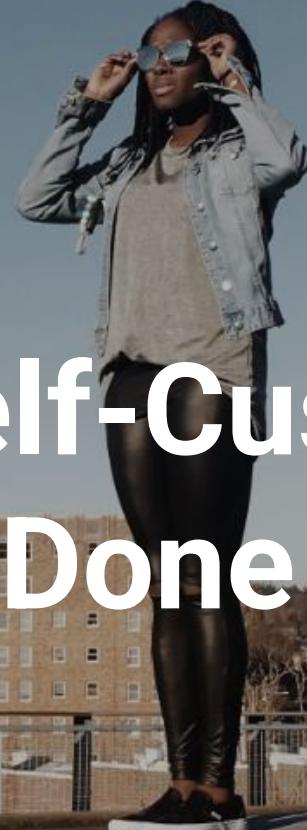


Self-Custody  
Is Priceless





**Self-Custody  
Is Done in Steps**



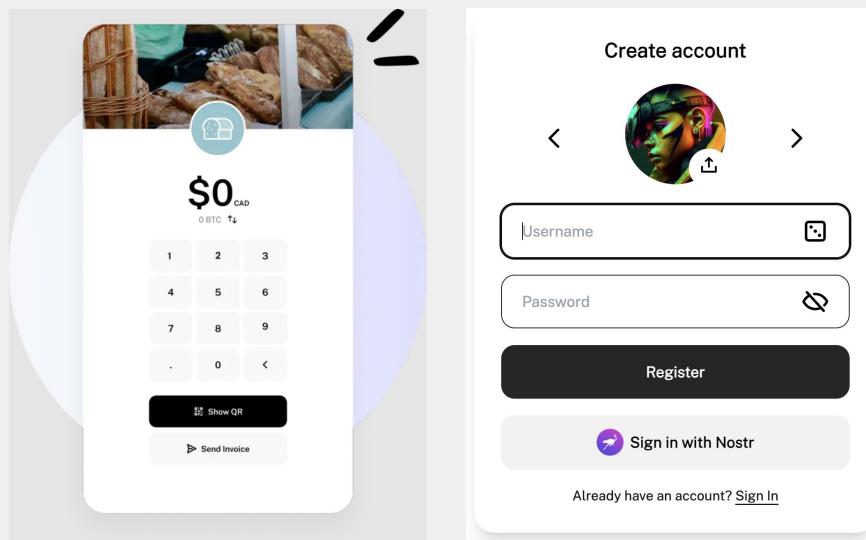


**Start with Aqua Wallet or Coinos**  
**Stack ~100,000 sats**  
**Open a channel on Phoenix**  
**Swap ~80,000 into Liquid**  
**Result: Channel to receive 80,000 and send 20,000**

# Custodial Bitcoin, Lightning, Liquid, eCash: Coinos

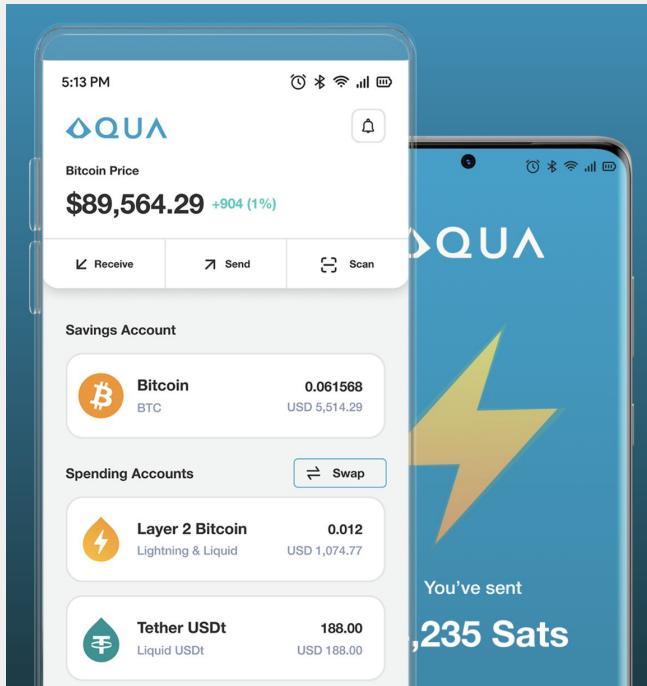
Coinos is a web-based bitcoin and nostr client. You can use it as a front end to your personal bitcoin and lightning nodes or host a public instance that allows anyone to register with a username and password. Try ours at <https://coinos.io>

This repository contains the code for the API server. The frontend code is at <https://github.com/coinos/coinos-ui>



<https://coinos.io>

# Self-Custody Bitcoin, L-BTC, USDT, LN payments: Aqua



Android



iPhone

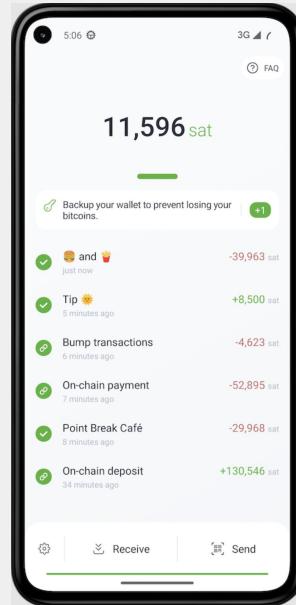


# **Self-Custody Lightning: Phoenix Wallet**



<https://www.youtube.com/watch?v=chSktrFRN6E>

# Self-Custody Lightning: Phoenix Wallet



Android



iPhone



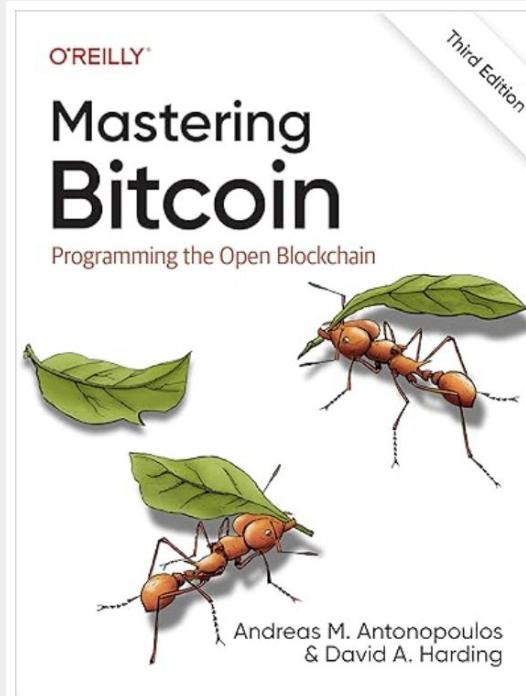


# Bitcoin Dev Resources



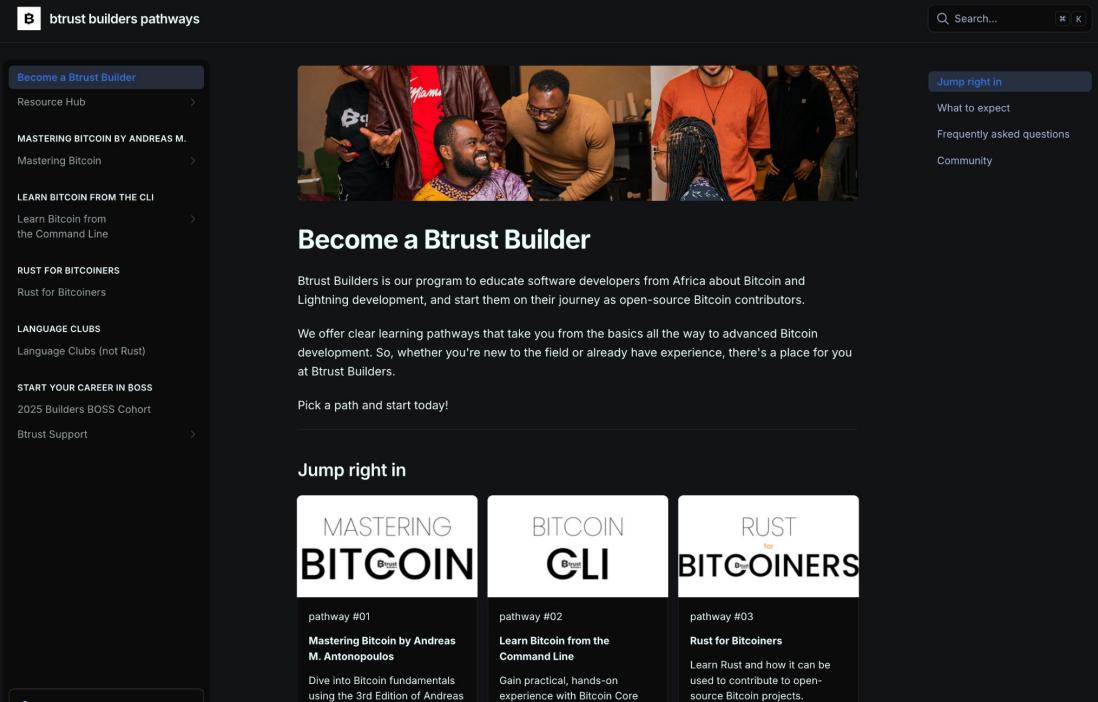
# Mastering Bitcoin

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<https://github.com/bitcoinbook/bitcoinbook/blob/develop/BOOK.md>

# BTrust Builders



The screenshot shows the homepage of the BTrust Builders pathways website. The header features the BTrust Builders logo and a search bar. The main content area has a dark background with white text and several call-to-action buttons.

**Become a Btrust Builder**

- Resource Hub
- MASTERING BITCOIN BY ANDREAS M.  
Mastering Bitcoin
- LEARN BITCOIN FROM THE CLI  
Learn Bitcoin from the Command Line
- RUST FOR BITCOINERS  
Rust for Bitcoiners
- LANGUAGE CLUBS  
Language Clubs (not Rust)
- START YOUR CAREER IN BOSS  
2025 Builders BOSS Cohort
- Brust Support

**Jump right in**

<b>MASTERING BITCOIN</b> pathway #01 Mastering Bitcoin by Andreas M. Antonopoulos Dive into Bitcoin fundamentals using the 3rd Edition of Andreas	<b>BITCOIN CLI</b> pathway #02 Learn Bitcoin from the Command Line Gain practical, hands-on experience with Bitcoin Core	<b>RUST for BITCOINERS</b> pathway #03 Rust for Bitcoiners Learn Rust and how it can be used to contribute to open-source Bitcoin projects.
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<https://pathways.btrust.tech/>

# Run a Bitcoin Node

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[https://youtu.be/PXg\\_xUIYN84?si=RZwhf6mJGq\\_Xqm\\_h&t=277](https://youtu.be/PXg_xUIYN84?si=RZwhf6mJGq_Xqm_h&t=277)

# BTCPay Server



Start Accepting Bitcoin Payments With 0% Fees & No Third-party

BTCPay Server is a self-hosted, open-source cryptocurrency payment processor. It's secure, private, censorship-resistant and free.

[Learn more](#) [Donate](#)

01 Launch a server in a cloud, your own hardware device or use an existing host.

02 Connect your e-commerce store or use one of many apps to get paid.

03 Funds arrive directly to your connected wallet.

<https://btcpayserver.org/>

# BTCPay Server

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For getting started with BTCPay Server I highly recommend the workshop by ndeet:

<https://x.com/BtcpayServer/status/1770500825044906171>

ndeet shows all the details on how to do this:

<https://www.youtube.com/watch?v=fespfZXGOtw>

Besides these videos, I highly recommend Developer part of documentation on how to get started:

<https://docs.btcpayserver.org/Development/>

(there is video of Nicolas presenting architecture of BTCPay)

And then additionally:

<https://docs.btcpayserver.org/Development/ecommerce-integration-guide/>

<https://docs.btcpayserver.org/Development/GreenFieldExample/>

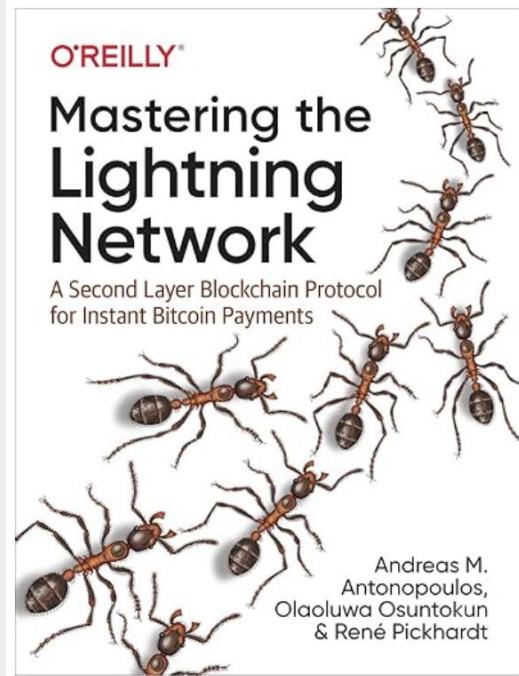


# Lightning Network Dev Resources



# Lightning Development

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<https://github.com/lbook/lbook>

# Lightning Development

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 **Builder's Guide**

Welcome to the Builder's Guide to the LND Galaxy!

**THE LIGHTNING NETWORK**

- Overview
- Payment Channels >
- The Gossip Network >
- Pathfinding >
- Lightning Network Invoices >
- Making Payments >
- Liquidity >
- L402: Lightning HTTP 402 Protocol >
- Taproot Assets >

**LIGHTNING NETWORK TOOLS**

- LND >
- Lightning Terminal >
- Loop >

**Welcome to the Builder's Guide to the LND Galaxy!**

This repository is designed as a home for those looking to learn about the Lightning Network, use and build on LND, Lightning Terminal, Loop, Pool as well as those developing their own LAPPs.

**The Lightning Network** >

Start here if the terms "payment channel" and "hash time-locked contract" are foreign to you.

**LND** >

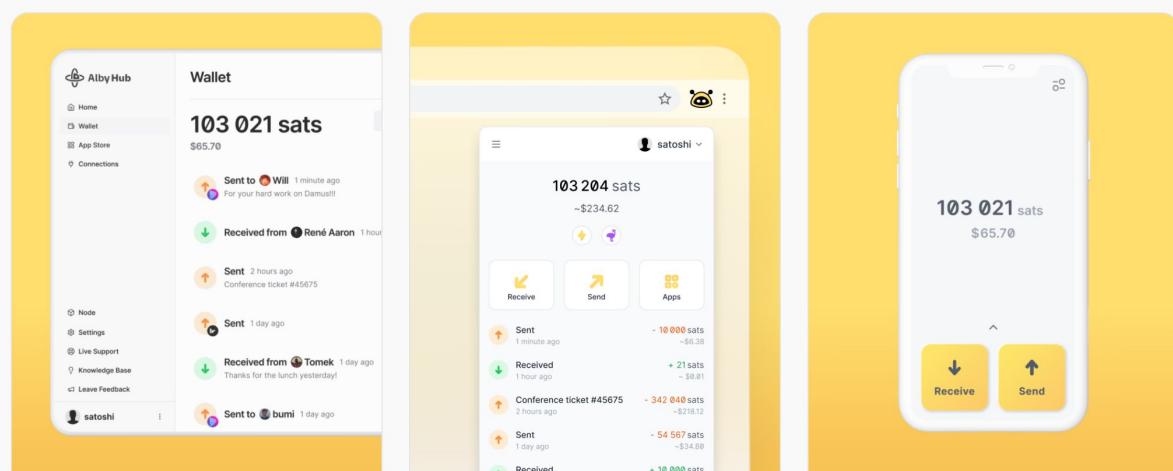
Look here if you're getting started with LND, want to configure it optimally or learn how to integrate LND into your production environment.

**Lightning Terminal** >

Lightning Terminal is a browser-based, self-hosted dashboard for Lightning Labs products. Read this guide to learn how to set up Lightning Terminal and get the most out of it.

<https://docs.lightning.engineering/>

# Lightning Development



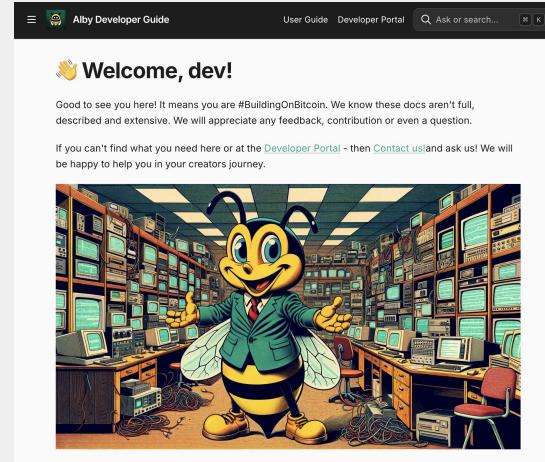
The image displays three mobile device screens side-by-side, each showing a different Alby app interface:

- Alby Hub:** Shows a wallet balance of 103 021 sats and \$65.70. It lists recent transactions and connections, including a message from "Will" and a conference ticket from "René Aaron".
- Alby Extension:** Shows a wallet balance of 103 204 sats and ~\$234.62. It lists recent transactions and a conference ticket from "Tomek".
- Alby Go:** Shows a wallet balance of 103 021 sats and \$65.70. It has large "Receive" and "Send" buttons.

**Alby Hub**  
Powerful, self-custodial lightning wallet that connects to apps

**Alby Extension**  
Browser extension to use Alby Hub and other wallets on the web

**Alby Go**  
The easiest mobile wallet to use Alby Hub on the go



The image shows a screenshot of the Alby Developer Guide website. The header includes the Alby logo, "Alby Developer Guide", "User Guide", "Developer Portal", and a search bar. The main content features a "Welcome, dev!" message, a brief introduction, and a cartoon bee mascot standing in a room full of computer monitors.

Welcome, dev!

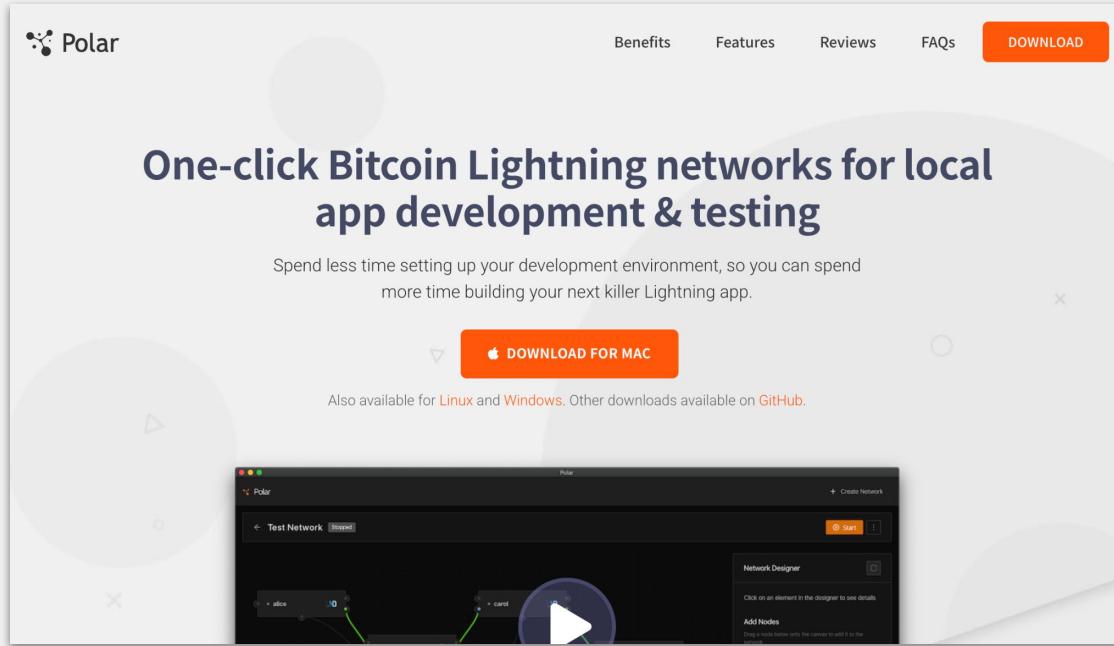
Good to see you here! It means you are #BuildingOnBitcoin. We know these docs aren't full, described and extensive. We will appreciate any feedback, contribution or even a question.

If you can't find what you need here or at the [Developer Portal](#) - then [Contact us](#) and ask us! We will be happy to help you in your creators journey.



<https://getalby.com>

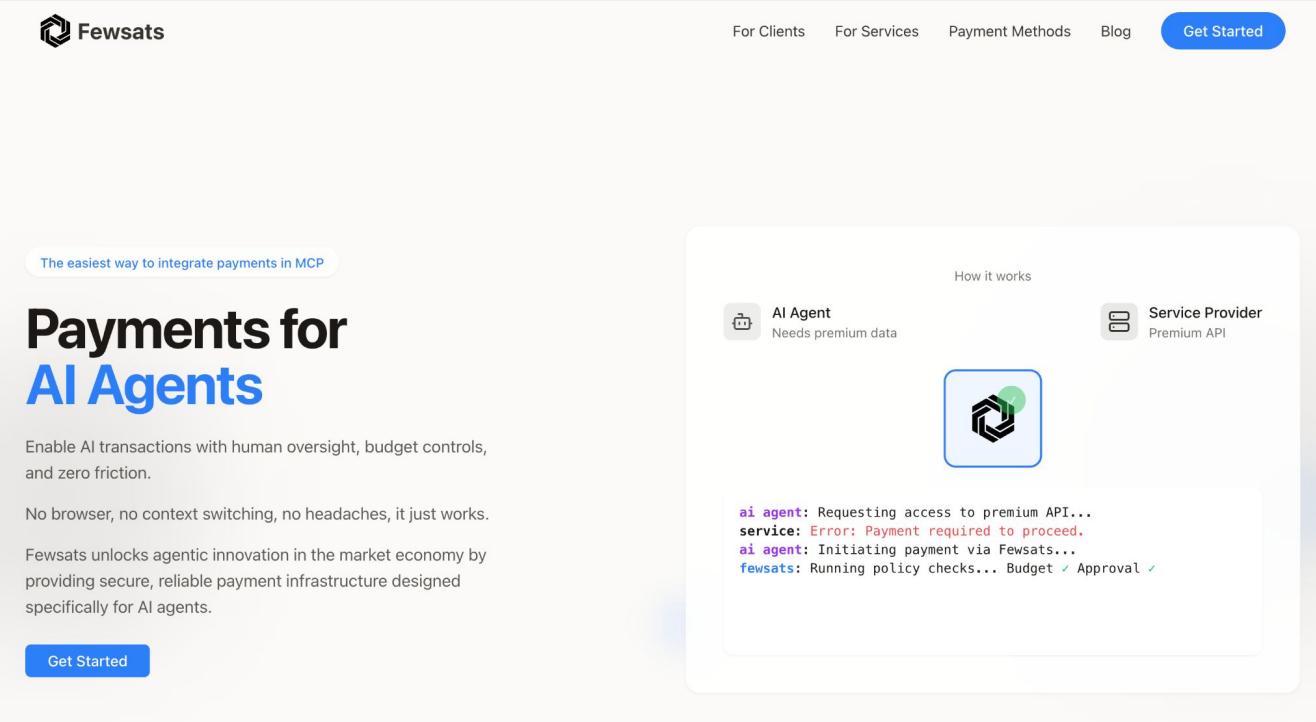
# Lightning Dev Simulator



To simulate scenarios and run a node.

<https://lightningpolar.com/>

# Bitcoin and AI



The screenshot shows the Fewsats website. At the top, there's a navigation bar with the Fewsats logo, menu items for 'For Clients', 'For Services', 'Payment Methods', 'Blog', and a 'Get Started' button. Below the header, a large banner features the text 'The easiest way to integrate payments in MCP' and a section titled 'Payments for AI Agents'. This section includes a subtext about enabling AI transactions with human oversight and zero friction, and another snippet about no browser or context switching required. A 'Get Started' button is located at the bottom of this section. To the right, a diagram titled 'How it works' illustrates the integration process between an 'AI Agent' (represented by a hexagonal icon) and a 'Service Provider' (represented by a double-server icon). It shows the AI agent requesting access to a premium API, encountering a payment requirement, initiating a payment via Fewsats, and finally having policy checks run with budget and approval status indicated.

<https://fewsats.com>

# Lightning Dev Tutorials

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Lightning Development with Swift: Make Your First Lightning App with LDK Node Swift

<https://www.youtube.com/watch?v=rcU3LU6iZCs>

Building Lightning Apps with Lightning Node Connect

<https://www.youtube.com/watch?v=vZWbydel-bU>

Other ideas is create a plug-in in any language on Core-Lightning

<https://cdecker-lightning.readthedocs.io/PLUGINS.html>

<https://docs.corelightning.org/docs/plugin-development>

Write a Core Lightning plugin in Go | LNROOM #18

<https://www.youtube.com/watch?v=RaPdsi5houA>

Write a Core Lightning plugin in JavaScript in Go | LNROOM #17

<https://www.youtube.com/watch?v=XtxqQAD6leg>

## BitDevsNBO

[Events](#) [Luma](#) [Discord](#) [X](#)

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BitDevsNBO is a meetup devoted to the research and development of Bitcoin.

### Upcoming and Recent Events

22 Feb 2025 » [Socratic Seminar #15](#)

25 Jan 2025 » [Socratic Seminar #14](#)

30 Nov 2024 » [Socratic Seminar #13](#)

26 Oct 2024 » [Socratic Seminar #12](#)

28 Sep 2024 » [Socratic Seminar #11](#)

31 Aug 2024 » [Socratic Seminar #10](#)

27 Jul 2024 » [Socratic Seminar #9](#)

[See all events](#)

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# CRACK THE ORANGE

## How Money Is Created



### Transcript

Hello. In this lesson, we are going to look at the question of how money is actually being created in today's world, and I want to start with a quote from Satoshi Nakamoto, who described that very well: "The Central Bank must be trusted not to debase the currency, but the history of fiat currencies is full of breaches of that trust."

Learning about Bitcoin was an eye-opener for me. I read that quote back then and I didn't understand what was meant with it. There are two distinct periods of my life, one before Bitcoin and one after Bitcoin. I see things completely differently today. In my goal, to understand Bitcoin, I

(L)earn Bitcoin

6% COMPLETE

- How Money Is Created
- How Money Is Created Through Debt
- Central Banks Lenders of Last Resort
- Money Supply Inflation
- Ponzi Scheme
- Bitcoin's Limited Supply
- The Petrodollar

Quiz 1

The History of Bitcoin

Quiz 2

The Bitcoin Blockchain

Mining

Quiz 3

Arguments Against Bitcoin

Arguments for Bitcoin

CRACK THE  
**ORANGE**

Apply for Scholarship

Send E-Mail to  
[support@cracktheorange.com](mailto:support@cracktheorange.com)

# Free Newsletter

<https://anita.link/weekly>

