



# BCH Open-Source Pulse: Vol #5

## Weekly Summary

This is the Fifth Week of the BCH Pulse weekly developer newsletter. Existing projects have been updated.

### *Chris Pacia - BCHD*

#### **Current work:**

- \* Continuing work from previous week
- \* Improving gRPC API

#### **Future work:**

- \* Reusable Addresses

#### **Wants help with:**

- \* Need urgent backports and fixes from the Android-neutrino repo:  
<http://github.com/gcash/android-neutrino/issues>  
<http://github.com/gcash/bchd/issues>
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### *Josh Ellitorpe - BCHD*

#### **Recently completed:**

- \* Deployed new public nodes (bchd.greymh.at, and bchd-testnet.greymh.at) with updated APIs

#### **Current work:**

- \* Prep work to add new indexes to bchd to support reusable address spec started by @imaginary\_username
- \* Finishing up SLPDB support using gRPC interface
- \* Continuing work from previous week

#### **Future work:**

- \* Reusable Addresses

#### **Wants help with:**

- \* Need urgent backports and fixes from the Android-neutrino repo:  
<http://github.com/gcash/android-neutrino/issues>  
<http://github.com/gcash/bchd/issues>
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### *Tyler S. - BCHD*

#### **Current work:**

- \* Continuing work from previous week

#### **Wants help with:**

- \* Implementing CashFusion and contributing to the CashFusion specification
  - \* Reviewing the following Pull Requests:  
<https://github.com/gcash/android-neutrino/pull/31>  
<https://github.com/gcash/bchd/pull/265>
  - \* CashShuffle library for Golang
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## BCH Open-Source Pulse: Vol #5

### *Jason Cox - Bitcoin ABC*

#### **Current work:**

- \* 2017 backports nearly completed and 2018 backports about a third completed.

#### **Planned work:**

- \* Backporting Bitcoin Core patches

#### **Wants help with:**

- \* Backporting improvements to the functional test framework  
<https://github.com/Bitcoin-ABC/bitcoin-abc/blob/master/doc/functional-tests.md>  
<https://github.com/Bitcoin-ABC/bitcoin-abc/blob/master/doc/backporting.md>
- \* Improving Deep linking specification -  
<https://github.com/bitcoincashorg/bitcoincash.org/pull/145>

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### *Tom Zander - Flowee*

#### **Working on:**

- \* Continuing work from previous week

#### **Future work:**

- \* Transaction builder  
<https://gitlab.com/FloweeTheHub/thehub/blob/master/libs/Utils/TransactionBuilder.h>

#### **Wants help with:**

- \* Corresponding about toolkits and languages developers prefer to start new project in.
- \* This would help give focus on which type of bindings to create.
- \* Website translations and rewrite of the about-page with more documentation
- \* Work on docker images and configs
- \* Research on how to be able to quick-start a complex (multiple server) setup

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### *Joshua Green - Bitcoin Verde*

#### **Working on:**

- \* Working on updating the Bitcoin Verde explorer to show the validity of SLP transactions

#### **Wants help with:**

- \* Providing a bloom-filter-like tx-index
- \* Connection-pool quirk
- \* Windows build
- \* Issues:  
<https://github.com/SoftwareVerde/bitcoin-verde/pull/2>

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### *Axel Gembe - Electron Cash*

#### **Working on:**

- \* Improving UI polish
- \* Make emojis consistent to enhance the UX of the user.

#### **Would like help with:**

- \* Finding an NFC library that could be used with Electron Cash
- \* Fixing hardware support issues.



## BCH Open-Source Pulse: Vol #5

### *Jonathan Silverblood - Cashual Wallet*

#### **Working on:**

- \* An improved coinmap (gitlab coming out soon)

#### **Future work:**

- \* Cloud backup
- \* Reusable Addresses

#### **Wants help with:**

- \* Would be happy to help other projects with user interface reviews
  - \* Testing Cashual and giving actionable feedback
  - \* 3rd party BWC/BSW dependency libraries
  - \* Resolve bugs in bitcoincom fork of bitcore in order to get BIP70 working
  - \* There is an open issue at bitcore insight to add raw transactions:  
<https://github.com/bitpay/bitcore/pull/1881>
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### *Pokkst - Crescent Cash*

#### **Recently completed:**

- \* Released new UI design for Crescent Cash with links to other applicable services
- \* Released v1.7.0 which polishes the UI up and replaces the send button with a slide-to-send button

#### **Working on:**

- \* Social features
- \* Implementing the CoinText pay-to-phone-number BIP70 API feature into bitcoincashj

#### **Wants help with:**

- \* A better PHP library for Bitcoin Cash. Potentially look at forking bitcoin-lib-php
  - \* Java based wallet library akin to bitcore-wallet-client and bitcore-lib
- 

### *Calin Culianu - Electron Cash*

#### **Current work:**

- \* SLP bugfixes and performance tuning
- \* Continuing work from last week

#### **Future work:**

- \* Reusable addresses

#### **Would like help with:**

- \* Replacing Electrum backend for Electron Cash with something better and more performant
  - \* BCH UX Fix: Mandatory CashAddr for P2SH.  
<https://github.com/Electron-Cash/Electron-Cash/issues/1225>
  - \* Reviewing zero confirmation forfeit from Awemany  
<https://github.com/Electron-Cash/Electron-Cash/pull/964>
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## BCH Open-Source Pulse: Vol #5

### *Imaginary\_Username - Electron Cash Development*

#### **Current work:**

- \* Continuing work from last week  
[https://github.com/imaginaryusername/Reusable\\_specs/blob/master/reusable\\_addresses.md](https://github.com/imaginaryusername/Reusable_specs/blob/master/reusable_addresses.md)
- \* Product design
- \* Quality Assurance
- \* Community needs
- \* Create long-term strategies for the wallet
- \* Assists in cashshuffle development
- \* Runs various nodes for DevOps. (append .imaginary.cash after)
- \* rest (providing full services with an almost completely independent backend)
- \* bch bitcoin-abc, electrumx, p2pool
- \* electrum BU, electrumx, cash-account
- \* insight bitcore-insight, bitcore-insight-testnet, bitcore-wallet-service
- \* cashacct cashaccount
- \* slpserve SLPserve endpoint for SLPDB
- \* bchd bchd
- \* p2pool BU, p2pool
- \* testnet bitcoin-abc-testnet, testnet explorer
- \* sync EC labelsync, cosigner pool

#### **Future work:**

- \* Double-spend proof (on hiatus until BIP62 is in).

#### **Would like help with:**

- \* Looking to recruit developers who are interested in doing toy implementations.

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### *Jonald Fyookball - Electron Cash Development*

#### **Working on:**

- \* Continuing work from last week

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### *AlwaysAn0n - CashShuffle.js*

#### **Working on:**

- \* Continuing work from last week

#### **Would like help with:**

- \* Review the behaviour of the ShuffleRound class using tests  
<https://github.com/alwaysAn0n/cashshufflejs-web/pull/7>



## BCH Open-Source Pulse: Vol #5

### *Chris Troutner*

#### **Working on:**

- \* Slp-sdk for working with SLP UTXOs  
<https://github.com/Bitcoin-com/slp-sdk/pull/56>
- \* Continuing work from last week

#### **Would like help with:**

- \* Adding SLP token support to bch-cli-wallet
- \* Add support for SideShift.ai
- \* Add support for Cashshuffle
- \* troutsblog.com/about to explore the way IPFS and BCH can be used together.

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### *James Cramer - Simple Ledger (SLPDB - Electron Cash SLP)*

#### **Current work:**

- \* Begin merging SLP into mainline version of Electron Cash

#### **Future work:**

- \* Coordinate security audit for SLP code/protocol

#### **Wants help with:**

- \* Token document standards for NFTs and fungible tokens

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### *Jason Dreyzehner - Bitauth-ide*

#### **Recently completed:**

- \* Schnorr signature support for JS:  
<https://blog.bitjson.com/schnorr-signature-support-for-javascript-using-webassembly-d11c9613e785>

#### **Current work:**

- \* Continuing work from last week

#### **Future work:**

- \* Build bitcoin-ts into a fairly complete library of BCH utilities for creating/debugging transactions. (A lot like bitcore-lib-cash, but a more FP approach rather than the object-oriented style, and without dependencies)  
<https://github.com/bitauth/bitcoin-ts>

## BCH Open-Source Pulse: Vol #5

### *Karol Trzeszczkowski - Inter-wallet Transfer Plugin*

**Current work:**

- \* Continuing work from last week

**Future work:**

- \* Custom icon

### *Mecenas Recurring Payment Plugin*

**Recently completed:**

- \* Major bugfix: Some of the contracts inaccessible for protege due to wrong encoding of numbers; assistance from Tendo Pein and Mark Lundeberg.

<https://github.com/KarolTrzeszczkowski/Mecenas-recurring-payment-EC-plugin/commit/53251c014c55f2024003bced47d30110a79523c9>

**Current work:**

- \* More precise time estimation

**Future work:**

- \* Increase performance when loading contracts
- 

### *Shammah Chancellor - Cashweb Keyserver*

**Current work:**

- \* Continuing work from last week

**Future work:**

- \* Relay network support for keyserver nodes
- \* Proof of Concept integration with Electron Cash

**Would like help with:**

- \* Corresponding on wallet integrations, and other possible uses.
  - \* Code reviews, and pull requests for:
  - \* Node peering
  - \* Banning and rate limiting
  - \* Real payment support (right not the server does not specify a payment as part of the BIP70 invoice)
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### *BCHan*

**Current work:**

- \* Started BCHan a tutorial project, and proof of concept, for an \*off-chain\* service using micropayments to pay for accounts and other service usage. The tutorial service is a simple image board.
- \* Found a frontend developer and a designer

**Future work:**

- \* Implement backend API

**Would like help with:**

- \* Implementing a CashID Library for Golang
  - \* Any other interesting backend or frontend development.
-



## BCH Open-Source Pulse: Vol #5

### *Tendo Pein - Spedn*

#### **Current work:**

- \* Continuing work from last week

#### **Future work:**

- \* Schnorr multisig support
- \* Optimization techniques so the compiler could produce shorter scripts
- \* Improved support for covenants
- \* Macros

#### **Would like help with:**

- \* Feedback and proposals about Spedn syntax.
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### *BCHD - Node Software*

**Website:** <https://bchd.cash/>

#### **Repo:**

<http://github.com/gcash>

<https://github.com/gcash/android-neutrino>

<https://github.com/gcash/bchd>

<https://github.com/gcash/bchwallet>

#### **Workspace:**

[https://join.slack.com/t/bchdhq/shared\\_invite/enQtNzAyODMzNTYyMDU1LTRkNTk5YWVvZDZkZGEzMzlkODIyZjRjOTBlZjgzNGE1ODhmNGYxYzcxMzZkNWl2YjRjZWVhMjg2Njc1NGZjYjE](https://join.slack.com/t/bchdhq/shared_invite/enQtNzAyODMzNTYyMDU1LTRkNTk5YWVvZDZkZGEzMzlkODIyZjRjOTBlZjgzNGE1ODhmNGYxYzcxMzZkNWl2YjRjZWVhMjg2Njc1NGZjYjE)

**Language:** Golang

**License:** copyfree.org ISC license

#### **Overview:**

- \* Work to provide an excellent API experience to BCH developers
- \* Combine full node, indexer, SLPDB, electrumX into one software app — BCHD
- \* BCHD provides an address index for app developers + JSON-RPC and gRPC interfaces
- \* BIP 157/158 to power Neutrino based wallets
- \* Built a Neutrino android wallet beta and a command line wallet backend

#### **Primary roadmap items:**

- \* Working with ElectrumX Protocol
  - \* Enhancing gRPC interface to support SLPDB
  - \* Finish and release neutrino android
  - \* CashAccount integration
  - \* Reusable Addresses
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## BCH Open-Source Pulse: Vol #5

### *Bitcoin ABC - Node Software*

**Website:** <https://www.bitcoinabc.org/>

**Repo:** <https://reviews.bitcoinabc.org/>

**Mirror:** <https://github.com/Bitcoin-ABC/bitcoin-abc>

**Workspace:** <https://t.me/joinchat/HCYr50mxRWjA2uLqii-psw>

**Language:** C++

**License:** MIT

#### **Overview:**

- \*Implementing a series of optimizations and protocol upgrades enabling p2p cash at scale
- \*Refactor various parts of the codebase and maintain infrastructure for the ecosystem
- \*Primary roadmap items
  - \* Build out QUIC infrastructure
  - \* Implement Schnorr multisig

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### *Bitcoin Unlimited - Node Software*

**Website:** <https://www.bitcoinunlimited.info>

**Repo:** <https://github.com/BitcoinUnlimited>

**Workspace:** <https://bitcoinunlimited.slack.com>

**Language:** C++

**License:** MIT

#### **Overview:**

The Bitcoin Unlimited organization maintains an open source full-node client for the Bitcoin Cash network in order to provide more choice to node operators and to add robustness to the network.

The organization supports continued growth and adoption of Bitcoin as a peer-to-peer electronic cash system as described in Satoshi Nakamoto's white paper.

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### *Flowee the Hub - Node Software*

**Website:** <https://flowee.org/>

**Repo:**

<https://gitlab.com/FloweeTheHub/thehub>

<https://gitlab.com/FloweeTheHub/devs/bitcore-proxy>

**Workspace:** <https://discordapp.com/invite/WXPcf6G>

**Language:** C++

**License:** GNU GPLv3

**Maintainer:** Tom Zander

#### **Overview:**

Flowee is a suite of servers that provide infrastructure that connects to a node hub. Basic infrastructure has been created for the hub and indexer. The current direction is to extend that but create something directly usable by app-developers.

#### **Primary roadmap items**

- \* Develop a Bitcore-proxy insight server that reuses existing Flowee Infrastructure
- \* Refractor bitcore into library functions
- \* Create bindings from current C++ code to for a transaction building library
- \* Design a double spend proof concept





## BCH Open-Source Pulse: Vol #5

### *Bitcoin Verde - Node Software*

**Website:** <https://bitcoinverde.org/>

**Repo:** <https://github.com/SoftwareVerde/bitcoin-verde>

**Language:** Java

**License:** MIT

**Maintainer:** Joshua Green

#### **Overview:**

Bitcoin-Verde is a ground-up implementation of the Bitcoin (Cash) (BCH) protocol. This project is an indexing full node, blockchain explorer, and library. They are continuing to improve database indexing from both an informational, disk-space, and performance perspective. They are also focused on increasing stability, which includes improving handling misbehaving nodes.

#### **Primary roadmap items**

- \* SLP transactions indexes
- \* Preparing the SLP/SPV libraries for release

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### *Crescent Cash - Wallet Software*

**Website:** <https://crescent.cash/>

**Repo:** <https://gitlab.com/pokkst/crescentcash>

**Language:** Java

**License:** MIT

#### **Overview:**

- \* Non-custodial wallet
- \* CashAccounts

#### **Features:**

- \* SLP tokens,
- \* BIP70
- \* Cointext SMS

#### **Primary roadmap items:**

- \* Refining the UI
  - \* Optimize and clean up the codebase
  - \* Social features
-

## BCH Open-Source Pulse: Vol #5

### *Cashual Wallet - Wallet Software*

**Website:** <https://play.google.com/store/apps/details?id=org.monsterbitar.wallet>

**Repo:** <https://gitlab.com/monsterbitar/cashual-wallet>

**Maintainer:** Jonathan Silverblood

**Languages:**

- \* Javascript
- \* CSS
- \* HTML
- \* Cordova

**License:** MIT

**Overview:**

- \* User friendliness
- \* CashAccounts and UX
- \* Non-custodial Wallet

**Primary roadmap items:**

- \* Integrating BIP70/JPP payment support
- \* OP\_RETURN metadata (CashIntents)
- \* Cloud backup
- \* UI for the backup/restore process
- \* Reusable Addresses

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### *Electron Cash - Wallet Software*

**Website:** <https://electroncash.org/>

**Repo:** <https://github.com/Electron-Cash/>

**Workspace:** <https://t.me/electroncashwallet>

**Language:** Python

**License:** MIT

**Overview**

Improve privacy, features, and performance

**Features:**

- \* Cash Shuffle
- \* SLP Edition
- \* BIP70
- \* Cold storage
- \* Schnorr signatures
- \* HD wallet integration
- \* Plug-in support is available.
- \* There are also versions supported by iOS and Android.

**Priorities:**

- \* CashAccount integration and registration into the client
  - \* Improved UI polish
  - \* Merging the SLP edition into the main client
  - \* Reusable address specification
  - \* CashFusion protocol
-

## BCH Open-Source Pulse: Vol #5

### *Bitauth-ide - Misc Software Projects*

**Repo:** <https://github.com/bitauth/bitauth-ide>

**Language:** JavaScript

**Maintainer:** Jason Dreyzehner

**Overview:** Bitauth-ide is an integrated development environment for Bitcoin authentication.

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### *Bitcoin Mining Parliament - Misc Software Projects*

**Website:** [https://virtualpol.com/BMP\\_EN.pdf](https://virtualpol.com/BMP_EN.pdf)

**Repo:** <https://github.com/JavierGonzalez/BMP>

**Language:** PHP

**Maintainer:** Javier Gonzalez

**Overview:** Hashpower voting software. Allows Authentication with hardware-wallet, real time chat, vote creation and rectifiable votes.

**Primary Roadmap Items:**

\* Connect BMP to multiple blockchains

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### *Cashshuffle.js Library - Miscellaneous Software Projects*

**Repo:** <https://github.com/alwaysAn0n/cashshufflejs-web>

**Language:** Javascript

**Maintainer:** AlwaysAn0n

**Overview:**

A javascript Cashshuffle client for use in front-end web applications and the browser.

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### *Cashweb Keyserver - Miscellaneous Software Projects*

**Repo:** <https://github.com/cashweb/keyserver>

**Language:** Golang

**License:** MIT

**Maintainer:** Shammah Chancellor

**Overview:**

Provide a simple-to-use and cryptographically verifiable way to look up pubkeys, and other metadata, from their hashes. Enabling wallets to query a distributed network of metadata nodes to find out various information for contacting or paying the owners in a secure and private manner. Enabling off-chain correspondence for Stealth Transactions. Additionally, wallets managing a key can advertise special capabilities they support.

**Primary roadmap items:**

\* Get experimental support into a branch of Electron Cash

\* Peer 2 Peer relay network for keyserver nodes

\* Banning and Rate limiting

\* Validating BIP70 transaction data

\* Specification for key revocation

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## BCH Open-Source Pulse: Vol #5

### *Consolidating Coinjoin - Misc Software Projects*

**Repo:** <https://gist.github.com/chistroutner/8d54597da652fe2affa5a7230664bc45>

**License:** MIT

**Maintainer:** Chris Troutner

**Overview:** A trusted, central wallet, combining its UTXOs is equivalent to a CoinJoin. Consists of a command-line wallet, a mirror which is a type of node that wallets connect to download from p2p servers, and the servers that can transfer data between clearnet and dark web.

<https://gist.github.com/chistroutner/457b99b8033fdea5ae565687e6360323>

**Primary roadmap items:**

- \* Build cloud infrastructure
- \* Integrate IPFS blob or .onion hidden service

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### *Inter-wallet Transfer Plugin - Miscellaneous Software Projects*

**Repo:** <https://github.com/KarolTrzeszczkowski/Inter-Wallet-Transfer-EC-plugin>

**Language:** Python

**Maintainer:** Karol Trzeszczkowski

**Overview:** A plugin, that sends your coins to another wallet one by one, to a fresh address every time.

**Primary roadmap items:**

- \* Optimization
- \* Fixing issues as they appear

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### *Mecenas Recurring Payment Plugin - Miscellaneous Software Projects*

**Repo:** <https://github.com/KarolTrzeszczkowski/Mecenas-recurring-payment-EC-plugin>

**Language:** Python

**Maintainer:** Karol Trzeszczkowski

**Overview:** A recurring payment plugin for Electron Cash designed as a solution for noncustodial patronate.

**Primary roadmap items:**

- \* Increase usability for recurring donations
  - \* Command line version to serve as backend.
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## BCH Open-Source Pulse: Vol #5

### *P2PVPS - Miscellaneous Software Projects*

**Website:** <https://p2pvps.org/>

**Repo:** <https://github.com/P2PVPS/p2pvps-client>

**Language:** JavaScript

**License:** MIT

**Maintainer:** Chris Troutner

**Status:** Offline

**Overview:** P2P VPS aspires to create a peer-to-peer (P2P) marketplace offering Virtual Private Servers (VPS), the P2P VPS marketplace will never have the speed or reliability of the commercial outfits linked above. Instead, the focus of P2P VPS is to create a decentralized network of anonymous web servers, capable of delivering websites or web apps, in order to prevent censorship and promote free speech.

**Primary roadmap items:**

- \* Automated payments
- \* Refunds
- \* ERC20 native token

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### *Simple Ledger (SLPDB - Electron Cash SLP) - Miscellaneous Software Projects*

**Website:** <https://simpleledger.cash/project/slpdb/>

**Repo:** <https://github.com/simpleledger/SLPDB>

**Workspace:** <https://t.me/slpdb> & <https://t.me/simpleledger>

**Language:** TypeScript

**License:** MIT

**Overview:** SLPDB has all SLP token data stored in one database.

**Primary roadmap items:**

- \* Add additional token graph properties to enhance graph search for light clients
- \* Add collection for storing token document metadata

### *Spedn - Miscellaneous Software Projects*

**Website/Documentation:** <https://spedn.readthedocs.io/en/latest/>

**Repo:** <https://bitbucket.org/o-studio/spedn/src/master/>

**Workspace:** [https://t.me/bch\\_compilers](https://t.me/bch_compilers)

**Maintainer:** Tendo Pein

**Overview:** Spedn is a high level smart contracts language for Bitcoin Cash. It is designed for explicitness and safety.

**Primary roadmap items:**

- \* Create a VS Code plugin for working with Spedn -syntax highlighting first, then debugging.
- \* Lower barrier to entry for developers interested in smart contracts, but in a safe manner to prevent something like a DAO hack.



## BCH Open-Source Pulse: Vol #5

### *Tipbitcoin.cash - Miscellaneous Software Projects*

**Website:** <https://tipbitcoin.cash>

**Repo:** <https://github.com/pokkst/tipbitcoin.cash>

**Language:** Python

**License:** MIT

**Maintainer:** Pokkst

#### **Overview:**

Users can make an account and accept tips by adding an extended public key. Tipbitcoin.cash works on Twitch, D-live, and other alternative platforms for streamers also.

#### **Primary roadmap items:**

- \* Add more SLP tokens
  - \* Add more stream customization features
  - \* Design an upload system for the site so users can upload their images/gifs, sounds, etc. directly to the site and to use for their streams rather than having to use a link from a third party.
-