BitcoinCash

BCH Open-Source Pulse: Vol #1

Weekly Summary

This is the first week of the BCH Pulse weekly developer newsletter. The goal of this newsletter is to provide developers with better visibility into what is being worked on. This is to enable the consolidation of efforts and better prioritization on what is most sorely needed. We've done our best to contact maintainers from well known open source projects, and get a pulse on what they're currently working towards.

Jason Cox - Bitcoin ABC

Recently Completed:

* Added 'spentby' field to various RPCs
* Renamed script for creating JSON-RPC credentials
* Discontinued support for Python 2

Current work:

* JSON-RPC Calls
* Optimizing Code

Planned work:

* Backporting Bitcoin Core patches

Wants help with:

* Improving Deep linking specification
  https://github.com/bitcoincashorg/bitcoincash.org/pull/145

Chris Pacia - BCHD

Current work:

* Downstream peers get new blocks on reorg event
* Script package to pass the full set vectors found in Bitcoin-ABC to prevent forking

Future Work:

* Reusable Addresses

Wants help with:

* Need urgent backports and fixes from the Andriod-neutrino repo -
  http://github.com/gcash/android-neutrino/issues and http://github.com/gcash/bchd/issues

Josh Ellithorpe - BCHD

Recently Completed:

* Release neutrino android wallet and add support for smaller screens
* Add RPC calls to gRPC API to service Electron-Cash
* Build an SLP index and RPC

Future work:

* Reusable Addresses

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Tyler S - BCHD

Recently Completed:

* Reviewed a bug fix, now when scanning block files, ignore files that don't end in .fdb

Current work:

* Experimenting with adding checkdatasig-enabled features to OB transactions
* Blind escrow
* Payout covenants
* Expand BCHD Avalanche demo to include post consensus
* Allow anyone to become a participant permissionlessly.

Wants help with:

* Implementing CashFusion and contributing to the CashFusion specification
* Reviewing the followign Pull Requests:
* https://github.com/gcash/android-neutrino/pull/31
* https://github.com/gcash/bchd/pull/265
* CashShuffle library for Golang

Calin Culianu - Electron Cash

Recently Completed:

* Developer pre-releases that will push out Integration of CashAccounts

Current work:

* Integration of CashAccounts
* Improving the UX
* Tools, menu options, tabs, and small fixes

Future work:

* Integrating the SLP edition into main client
* 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)

Jonald Fyookball - Electron Cash

Working on:

* CashFusion v2.0 specification

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Imaginary_Username - Electron Cash Development

Current Work:

* Reusable address spec
* 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)
* 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).

Axel Gembe - Electron Cash Development

Recently Completed:

* Icons for Electron
* System tray icon
* Windows icon

Current Work:

* 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.

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Jonathan Silverblood - Cashual Wallet

Working on:

* Integrating BIP70/JPP payment support
* OP_RETURN metadata (CashIntents)

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

Pokkst - Crescent Cash

Recently Completed:

* Update bitcoincashj for more CashAcct servers
* Fix text field for creation/restore screen, only allowing certain characters now specified in the Cash Account specification.

Working on:

* Refining the UI
* Optimizing and cleaning up codebase

Future work:

* Social features
* 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

AlwaysAn0n - CashShuffle.js

Working on:

* Maintaining and improving library

Would like help with:

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

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Tom Zander - Flowee The Hub

Recently completed:

* Simplifying mempool-acceptance

Working on:

* Beta for a JSON generating BitCore compatible server which from the outside is indistinguishable from a bitcore one, but it is very low resources as it just reuses existing Flowee infrastructure.

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

Shammah Chancellor - Cashweb Keyserver

Recently completed:

* Minimal MVP for setting/gettings pubkeys and other metadata for an address

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)

BCHan

Recently Completed:

* 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.

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Software List - Wallet Software

Electron Cash

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

Cashual Wallet

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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Crescent Cash

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

Miscellaneous Software Projects

Cashshuffle.js Library

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.

Cashweb Keyserver

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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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

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/
enQtNzAyODMzNTYyMDU1LTRkNTk5YWVkZDNkZGEzMzlkODIyZjRjOThlZjgzNGE1ODhmNGYxYzcxMzZkNWI2YjRjZWVhMjg2Njc1NGZjYjE
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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FloweeTheHub - 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