

ETC Cooperative

2022 Q2 Report

August 23rd, 2022



etccooperative.org

Sections

- 1 Core-Geth development
- 2 Hyperledger Besu development
- 3 Public RPC endpoints billing and usage
- 4 Gnosis Safe for ETC
- 5 Research
- **5** Finance

Development

Core-Geth development

ETC Coop has been funding Core-Geth development since January, following the departure of ETC Labs from the ecosystem.



Merges from upstream, bug-fixes, and three releases (1.12.7, 1.12.8, 1.12.9).



Support for ETC derivation paths on hardware wallets, as it wasn't possible to access ETC funds on a hardware wallet, because the ETH's derivation path was hardcoded.



Tooling and metrics collection for HFC/TABS prospective and evaluation.

Development Hyperledger Besu development

8 releases during Q2

During Q2 Besu development work was focused on three topics.

- Merging IPC support, which added the possibility to connect to the node using UNIX sockets. This new transport is the best candidate to connect to local nodes instead of the regular HTTP interface because it won't have all the protocol overhead.
- Proposing a new DNS resolution stack. Based on EIP-1459, the new DNS stack integrates better with the overall async architecture of Besu and its tooling, it minimizes the queries to the backing DNS servers and also traverses the tree in random batches, better distributing the load of boot nodes. This is still under discussion on GitHub.
- Upgrading libraries. For the epic goal of upgrading JUnit4 to JUnit5, there was decided that it should be performed in stages. On this quarter certain specific JUnit4 usages were removed and whole build cycles have been upgraded (i.e. integrationTests and referenceTests). Also Web3J was attempted to upgrade but let on hold until some issues were get fixed on the upstream. More work is expected on this topic

Development Public RPC endpoints billing and usage

- > The switch to Rivet has pretty much eliminated our reliability issues.
- > The endpoints are getting plenty of usage.

	Rivet		Cloudflare		
	Usage (requests)	Cost	Usage (reqs + gb/s)	Cost	
January	423,525,521	\$4236.00	367M + 8,148M	\$167.55	
February	689,015,118	\$6891.00	307M + 7,756M	\$158.55	
March	551,021,444	\$5511.00	435M + 9,688M	\$202.75	
April	495,508,638	\$4956.00	316M + 14,142M	\$234.90	
May	404,561,906	\$4046.00	303M + 12,664M	\$220.45	
June	436,773,467	\$4368.00	272M + 12,282	\$203.30	

Gnosis Safe for ETC

- In an effort to add missing tools directly for ETC chains, we started working on deploying the Gnosis Safe contracts and services on the Mordor testnet.
- The Gnosis Safe is a multi-signature smart contract wallet that allows users to define a list of owner/signer accounts and a threshold number of signers to approve a transaction before it can occur (M-of-N).
- Gnosis Safes are commonly used to manage pooled DAO funds. Allowing DAOs ecosystem run over ETC Classic will help us grow ETC user base.

Gnosis Safe for ETC

- After the successful deployment of the minimal services on Mordor, we are going to deploy the same setup at ETC Classic chain as well.
- > We have already deployed (on Mordor), the Safe smart contracts which is the fundamental part and we added contract's addresses to the needed JS libraries.
- > The APIs for config and transaction services has been deployed and configured, which allows for devs to get programmatic access to the multisig-wallet.
- > Finally, we deployed the Web application needed for the user to operate a safe.
- Later, we can release whitelabeled Mobile and Desktop applications.

List of forked repos that we had to modify:

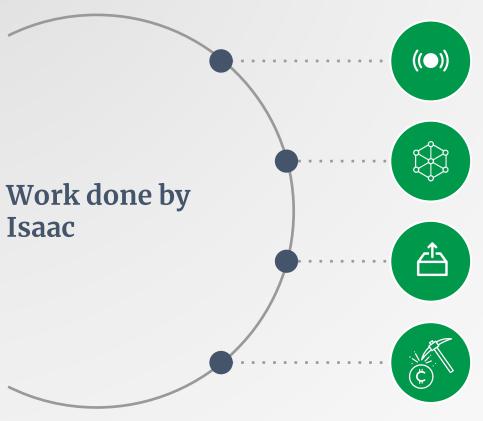
- > safe-global/safe-singleton-factory
- safe-global/safe-core-sdk
- > safe-global/safe-react
- > safe-global/safe-react-apps
- > safe-global/safe-transaction-service

Other libraries had to be updated as well in order to set the updated versions for the above dependencies.

Upcoming tasks:

- Allow modifying owners
- > Add initial Safe modules
- Connect with core-geth's tracer, as
 OpenEthereum's is not viable

Protocol Research



Continued work on ECIP-1105:

Restricted Chain Context Type Transactions ("Defines a new transaction type with constraints on ancestor block hash, block author, and/or block timestamp.")

Finalize work on first paper: ADESS: A Proof of Work Protocol Modification to Deter Double-Spend Attacks. This will be finished and published within Dan's PhD thesis at MIT Econ.

Propose ECIP-110x: **TABS: An Experiment with a 2- Dimensional Consensus Scoring Protocol**, outlining the general shape of the strategy.

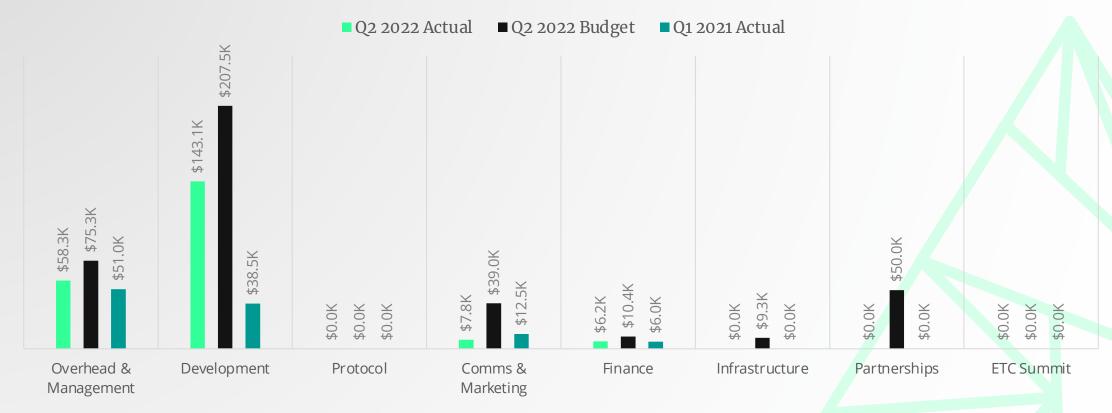
HFC/TABS proposes a strategy where, together with chainrestricted transactions, the cost of an intentional private reorg is raised by the aggregated balance values of all transaction senders for the considered period.



Expenditures in \$US

	Q2 2022 Actual	Q2 2022 Budget	Variance \$ Q2 2022 vs Q2 2022 Budget	Q2 2021 Actual	Variance \$ Q2 2022 vs Q2 2021
Overhead & Management	\$58,292	\$75,269	\$(16,977)	\$50,975	\$7,317
Development	\$143,106	\$207,500	\$(64,394)	\$38,488	\$104,618
Protocol	\$0	\$0	\$0	\$0	\$0
Comms & Marketing	\$7,781	\$38,963	\$(31,181)	\$12,500	\$(4,719)
Finance	\$6,217	\$10,375	\$(4,158)	\$6,000	\$217
Infrastructure	\$0	\$9,300	\$(9,300)	\$0	\$0
Partnerships	\$0	\$50,000	\$(50,000)	\$0	\$0
ETC Summit	\$0	\$0	\$0	\$0	\$0
Total Expenditures	\$215,397	\$391,406	\$(176,010)	\$107,963	\$107,434
Non-cash Items	\$0	\$0	\$0	\$0	\$0
Total Operating Expenses	\$215,397	\$391,406	\$(176,010)	\$107,963	\$107,434

- > Q2 expenses are lower than budget due to differences in headcount and grant program that was budgeted but not deployed in Q2.
- > Q2 expenses are substantially higher than in 2021 due to increased headcount, which was the addition of 2 core devs.

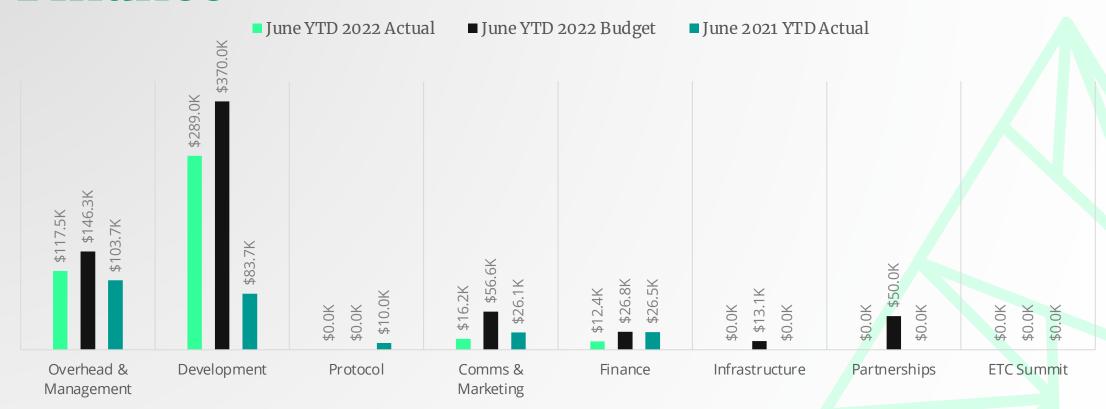


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Expenditures in \$US

	June YTD 2022 Actual	June YTD 2022 Budget	Variance \$ June YTD vs June YTD Budget	June 2021 YTD Actual	Variance \$ June 2022 YTD vs June 2021 YTD
Overhead & Management	\$117,490	\$146,338	\$(28,847)	\$103,743	\$13,747
Development	\$288,983	\$370,000	\$(81,017)	\$83,658	\$205,325
Protocol	\$0	\$0	\$0	\$10,000	\$(10,000)
Comms & Marketing	\$16,220	\$56,596	\$(40,377)	\$26,069	\$(9,849)
Finance	\$12,434	\$26,750	\$(14,316)	\$26,511	\$(14,077)
Infrastructure	\$0	\$13,080	\$(13,080)	\$0	\$0
Partnerships	\$0	\$50,000	\$(50,000)	\$0	\$0
ETC Summit	\$0	\$0	\$0	\$0	\$0
Total Expenditures	\$435,127	\$662,764	\$(227,636)	\$249,981	\$185,146
Non-cash Items	\$0	\$0	\$0	\$0	\$0
Total Operating Expenses	\$435,127	\$662,764	\$(227,636)	\$249,981	\$185,146

- > YTD expenses are lower than budget due to differences in headcount and grant program that was budgeted but not deployed in Q2.
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Net (Loss)/Income in \$US

	Q2 Actual 2022	Q2 Budget 2022	Q2 Actual 2021
Income	\$0	\$0	\$1,684,497
Operating Expenses	\$215,397	\$391,406	\$107,963
Net (Loss)/Income	\$(215,397)	\$(391,406)	\$1,576,534
Non-cash items	\$0	\$0	\$0
Adjusted Net Income	\$(215,397)	\$(391,406)	\$1,576,534

Net (Loss)/Income in \$US

	June YTD Actual 2022	June YTD Budget 2022	June YTD Actual 2021	
Income	\$945,699	\$878,485	\$2,004,697	
Operating Expenses	\$435,127	\$662,764	\$249,981	
Net (Loss)/Income	\$510,572	\$215,722	\$1,754,716	
Non-cash items	\$0	\$0	\$0	
Adjusted Net Income	\$510,572	\$215,722	\$1,754,716	

- March 2022 was the last month that the Coop received monthly income from Grayscale, therefore income in Q2 was nil. Expenses were lower than budget for both Q2 and YTD, mostly due to headcount differences and grant program timing differences.
- > Compared to 2021 operating expenses were higher due to the addition of the Core Devs.
- As at June 30, 2022, the ETC Coop held 8,163 ETC.

Financial Positions in \$US

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	30-Jun-22	31-Mar-22	31-Dec-21	31-Dec-20	31-Dec-19	31-Dec-18
Assets						
Cash & Cash Equivalents	\$5,592,352	\$5,446,437	\$4,689,209	\$303,313	\$146,318	\$530,268
ETC (at book value) ¹	\$78,115	\$78,115	\$78,115	\$78,115	\$154,363	\$154,363
Accounts Receivable	\$0	\$0	\$0	\$0	\$12,057	\$7,057
Due from Grayscale	\$(0)	\$356,004	\$377,733	\$51,914	\$18,808	\$(6,729)
Prepaid Expenses & Deposits	\$0	\$0	\$0	\$0	\$2,250	\$0
Total Assets	\$5,670,466	\$5,880,555	\$5,145,057	\$433,341	\$333,796	\$684,960
Liabilities						
Accounts Payable & Accrued Liabilities	\$37,383	\$25,046	\$22,208	\$18,507	\$44,393	\$20,305
Due to Grayscale	\$57,565 \$0	\$25,040 \$0	\$22,200 \$0	\$10,507	\$(1,000)	\$3,022
Total Liabilities	\$3 7,383	\$25,046	\$22,208	\$18,507	\$43,393	\$23,328
Equity						
Retained Earnings	\$5,122,541	\$5,122,541	\$414,834	\$290,403	\$661,632	\$239,640
Net Income/(Loss) for the year	\$510,543	\$732,968	\$4,708,015	\$124,431	\$(371,229)	\$421,992
Total Equity	\$5,633,084	\$5,855,509	\$5,122,849	\$414,834	\$290,403	\$661,632
Total Liabilities & Equity	\$5,670,466	\$5,880,555	\$5,145,057	\$433,341	\$333,796	\$684,960
ETC at Market Value ¹	\$121,792	\$385,946	\$278,521	\$46,284	\$72,540	\$81,430
Liquid assets ²	5,714,143	5,832,382	4,967,730	349,597	218,858	611,698

¹Book value is the value when the ETC was originally purchased. Market value is the value at the end of the reporting period (prices from Yahoo finance) ²Liquid assets consists of Cash & Cash equivalents plus ETC at market value.

- > There have been no significantly changes in the balance sheet from December 31, 2021.
- > Accounts payable and accrued liabilities consist of some staffing costs and their reimbursable expenses.
- > ETC at Market value has increased significantly, due to rising crypto prices, however prices remain very volatile

