ETC Cooperative

2022 Retrospective

Apr 30, 2023

etccooperative.org

ETC Cooperative

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Background

What is Ethereum Classic (ETC)?

Ethereum Classic (ETC) is a peer-to-peer payment platform and a platform for decentralized applications. ETC is Ethereum technology with a Bitcoin philosophy.

Like Bitcoin, ETC:

- Is digitally scarce, with a fixed supply monetary policy.
- Uses a Proof of Work consensus algorithm
- Values censorship resistance and trust minimization.
- Values security and safety over throughput.
- Protocol aims for multi-decade stability.
- Is socially scalable within the ecosystem.
- Grassroots movement with no ICO or premine.

Unlike Bitcoin, ETC:

- Has rich statefulness.
- Has a deterministic turing machine bounded by gas (the EVM).

What is the ETC Cooperative?

The Ethereum Classic Cooperative Inc. (“ETC Coop”) is a non-profit legal entity that has held 501(c)(3) public charity status since 2018. Donations to ETC Coop are tax-deductible under IRC Section 170 for US taxpayers, both individual and corporate. Enterprises investing in infrastructure or other “public goods” within the ETC ecosystem can do so in a more tax-efficient manner by donating to the ETC Coop rather than investing directly.

The mission of the ETC Coop is to steward the development of the Ethereum Classic protocol and to support the growth of a mature ecosystem around that protocol. There are three pillars to this mission:

- **Accelerate adoption** of ETC technology by individuals and enterprises through effective branding, marketing, and education.
- **Foster collaboration** between ecosystem participants including developers, miners, investors, enterprises, and end-users.
- **Mature Governance and Transparency** – to operate under an efficient and transparent governance framework, including use of funds.

Overview

The year of The Merge and ETC's POW leadership

After a few turbulent years, 2022 has been a period of consolidation and growth for Ethereum Classic and the ETC Cooperative.

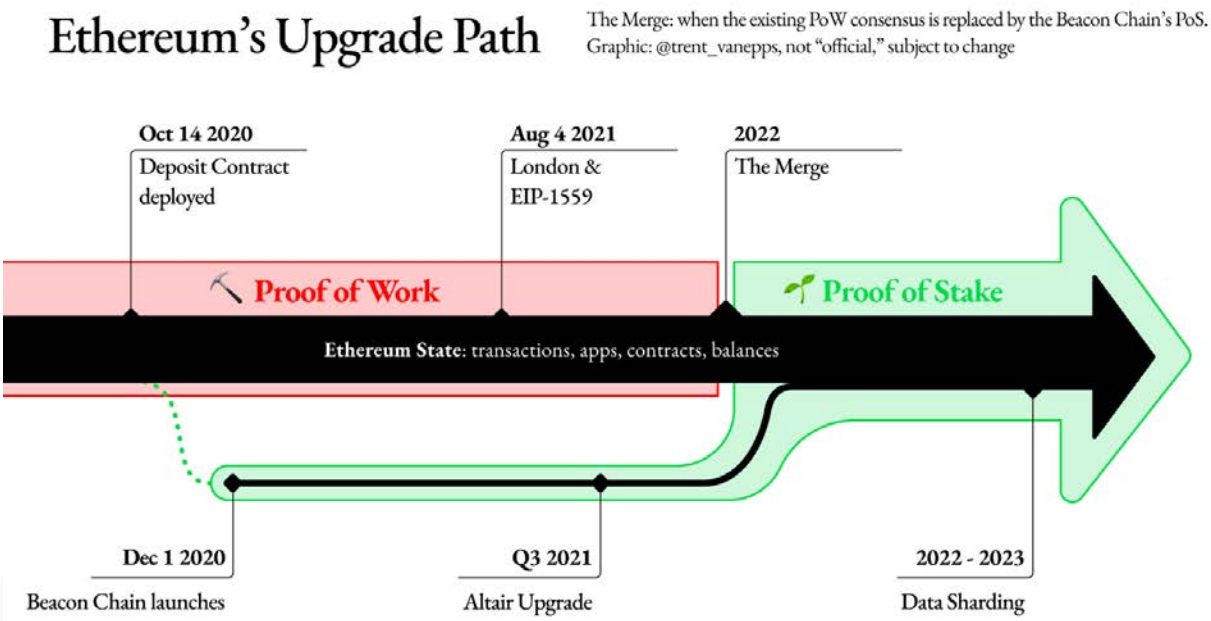
For the entirety of the ETC Cooperative's existence we have only had the resources to employ two or three members of staff. We would do small development projects, make a handful of grants and do some minimal communications and marketing work. That situation changed in 2021 with a windfall of payments from Grayscale before the funding arrangement came to a close in April 2022. We received nearly 10x as much funding in those final 12 months as we had in previous calendar years, leaving the ETC Cooperative sitting on **over $5M USD worth of assets** at the end of the 2022 calendar year (includes ETC tokens at market value).

Due to this increase in funding the ETC Cooperative has been funding three core developers for all of 2022. The core developers have been supporting both Core-Geth and Hyperledger Besu client software, following the exits of ETC Labs and IOHK. Both of those supported ETC clients in previous years. The core developers have worked on a variety of technical projects in addition to the clients. All of the technical projects are detailed in this document.

February saw a smooth network upgrade with the Mystique hard-fork, bringing Ethereum's "London" protocol changes to Ethereum Classic, with the exception of the EIP-1559 fee market change, which was in conflict with ETC's fixed monetary policy.

In July we joined forces with Bitmain and Antpool who pledged $10M worth of investment into the ETC ecosystem. This investment was ahead of ETC's rise in status within the mining industry due to "The Merge". That funding has come to fruition in the form of the [ETC Grants DAO] program which was launched in January 2023.

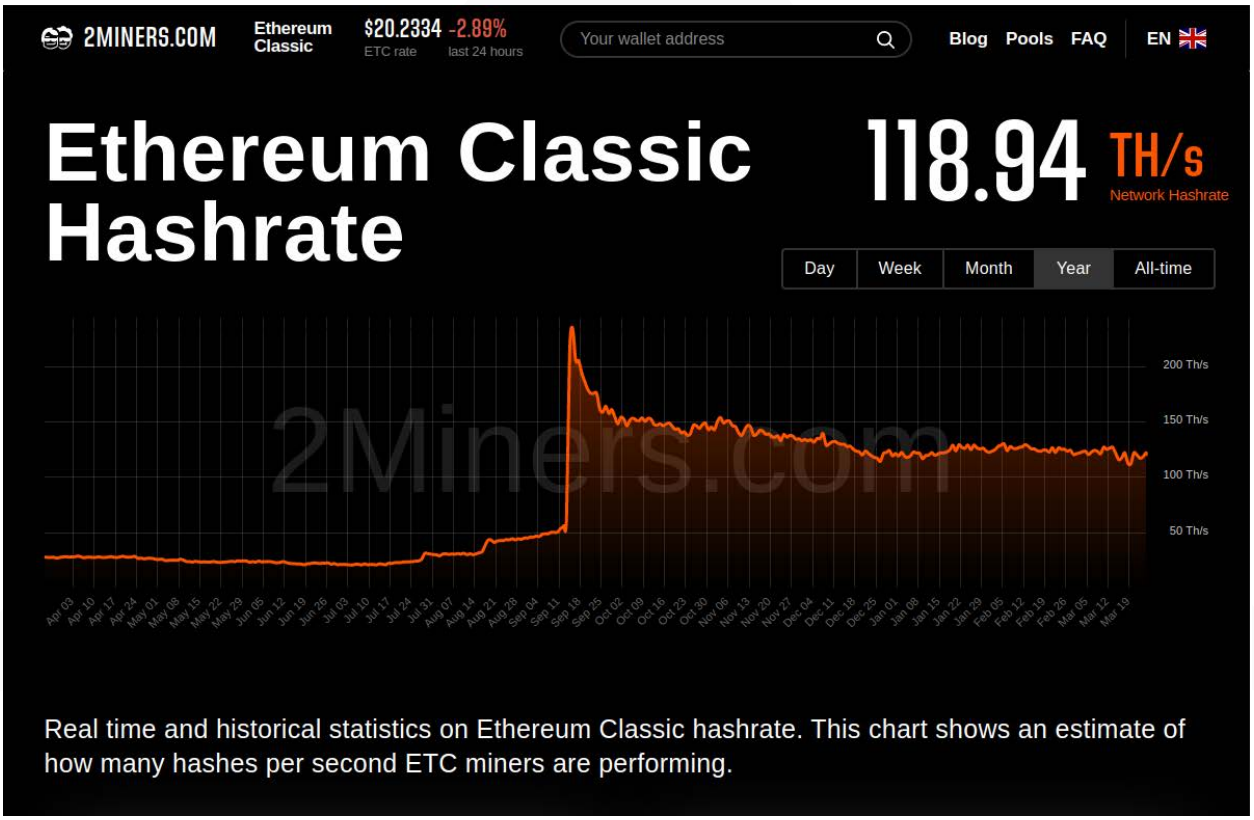
In September, Ethereum made its long awaited transition to Proof-of-Stake (POS) with "The Merge". This transition was planned from the very start of the project but has taken eight years to come to fruition. "The Merge" was the bringing together of two blockchains which have been running in parallel since December 2020 - the legacy Ethereum proof-of-work chain and the "beacon chain", which has been reaching internal proof-of-stake consensus and is now reaching consensus on the full state of Ethereum. Users wishing to run their own Ethereum software now need to run two pieces of client software - an "execution layer client" (the existing clients, like Geth and Hyperledger Besu) and now a "consensus client" (like Prysm or Lighthouse). See this [Client Diversity] website for a better idea of who is running what.



The transition to Proof of Stake was smooth for Ethereum. It was also smooth for the Ethereum Classic network which happily accepted a large slice of the unwanted hashrate of the disenfranchised Ethereum miners.

At one point the spike was as much as a 10x rise in hashrate, but has settled back to a sustained rate in the 115-130 TH/s band. ETC is now the majority hash chain within the Ethash family and the safest it has ever been from 51% attacks.

We now have very clear "product differentiation" from Ethereum as the largest POW smart contracts platform in the world, as a major mining ecosystem, all while retaining extreme compatibility with Ethereum and the EVM de facto standard.



In November, the Cooperative strengthened its position further with the addition of a fully fledged communications team (mostly part-time and contracted work). This team has been hugely effective and given us the kind of marketing impact which we had been missing.

That team includes Chinese translation, and as of their November start date all of the Cooperative's communications have happened simultaneously in English and Chinese, finally helping to bridge the Cooperative's part in the East-West divide within Ethereum Classic which was first identified in 2019.

We enter 2023 in a very strong position, with the grants program being a huge milestone.

Development and Infrastructure

The ETC Cooperative continues to fund critical infrastructure for the ETC ecosystem, with these projects being the cornerstones:

- Core-Geth client
- Hyperledger Besu client
- BlockScout block explorer
- Public RPC endpoints

Each node in the ETC network uses either Core-Geth (~99%) or Hyperledger Besu (~1%), with both pieces of software implementing the same ETC protocol.

As of 2022, there have been three full-time core developers working for the ETC Cooperative following ETC Labs exit from the ecosystem at the end of 2021. The core developers work on the client software and on various other technical projects to support the ETC ecosystem.

Two new developers joined our team in 2022 to help take the load off of our lead developer and speed up the development process. They are:

Isaac Ardis (Core Developer, Ethereum Classic) - Isaac has spent the last 5 years working primarily on protocol development and implementation for Ethereum Classic, working with ETCDEV, Ethereum Classic Labs, and finally, the Ethereum Classic Cooperative. In this time he has spoken at conferences, advised for mining pools and exchanges, and made around 20k Github contributions.

Chris Ziogas (Core Developer, Ethereum Classic) - Chris joined the web3 space in 2017 wanting to learn more about the technology and protocols behind it. He has been working on the Ethereum Classic blockchain since 2020 at ETC Labs and is currently working on the ETC Cooperative, mainly on the core-geth client. His prior experience includes backend, frontend as well as mobile development.

Core-Geth

The Core-Geth client was created by ETC Core in 2020 as an alternative to Multi-Geth and took over a super-majority of “market share” when both OpenEthereum and Multi-Geth dropped support for ETC shortly after the Phoenix hard-fork. It is likely used by every ETC miner and by every exchange, due to their familiarity with Geth, which dominates the Ethereum ecosystem, and which is the basis for client software for nearly every other EVM chain.

Core-geth was largely in maintenance mode for 2022 after the Mystique hard fork. Upstream merges via Geth were made through v1.10.26. Only a handful of reports of issues were filed with the client, and we can be proud of the work behind and our stewardship of a remarkably stable, widely-adopted protocol implementation.

Parity-style tracers

ETC Coop has been working to improve the functionality of the Ethereum Classic client, Core-Geth. As part of this effort, we have added Parity-style tracers to Core-Geth.

These tracers have proven to be a valuable tool for developers, providing greater insight into the workings of the Ethereum Classic blockchain. We believe that these tracers could also benefit the wider Ethereum community, and as such, we are committed to contributing them back to upstream Go-Ethereum.

Our goal is to make these tracers available to as many developers as possible. This will help to improve the overall development experience for the Ethereum ecosystem. We believe that this will enable developers to build more advanced and innovative applications on the Ethereum community.

We will also be working to ensure that the tracers are well documented and thoroughly tested. This will ensure that they are easy to use and that they function reliably.

EVMCv10

Core-Geth supports EVMCv7. Work began but remains unfinished in upgrading Core-Geth's EVMC support to its latest version 10. Dubious, contradictory tests hamper assertions of correct implementation. For example, Core-Geth's v10 implementation passes all cross-client state tests with Hera, but fails a few with EVM One.

Hyperledger Besu

Hyperledger Besu is an open-source Ethereum client developed under the Apache 2.0 license and written in Java. Besu is a strategic client for the ETC ecosystem because Besu allows users to develop enterprise applications with high performance and security.

During 2022 the ETC Cooperative was contributing to Besu to assure ETC network compatibility and to its overall quality. A new interface via UNIX sockets was added to interact with the client in environments with low latency requirements. Some other improvements were proposed but not merged, like removing log4j completely after the security breach named *log4shell,* or a new stack for DNS discovery.

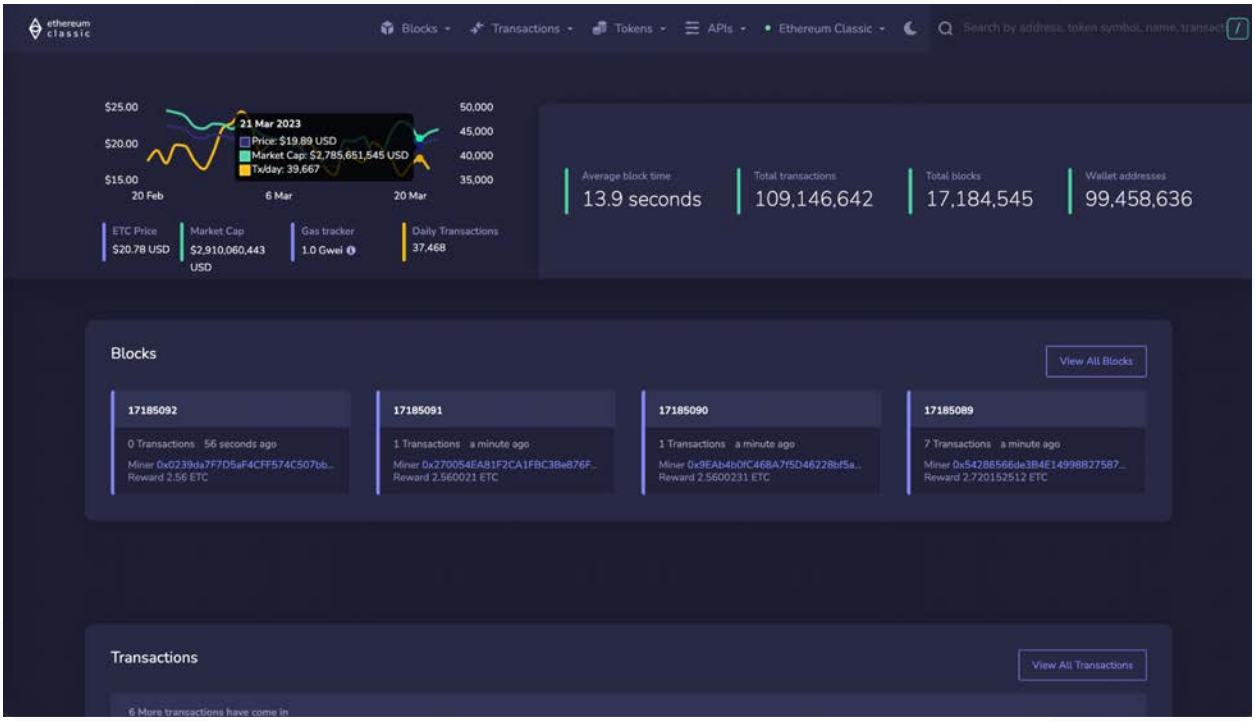
The core developers have been part of the internal conversations about the future of the client. We have submitted proposals for moving towards a more modular client, and which technologies may or may not help for that (e.g. dependency injection frameworks.) We participated in the Ethereum Object Format development process, implementing and testing EIPs that will eventually be part of the ETC network.

On the compatibility side, both Core-Geth and Besu were updated to run and pass the cross-client test suite.

Blockscout Block Explorer

BlockScout by POA Network is the most popular ETC block explorer available with a pleasant user experience. POA ran an ETC mainnet instance as a public service during 2018 and early 2019 before the ETC Cooperative took on that responsibility. We also added instances for the Kotti and Mordor testnets.

We have explored the possibilities of paying POA to operate the ETC instances on a couple of occasions, but the numbers have not made sense yet.



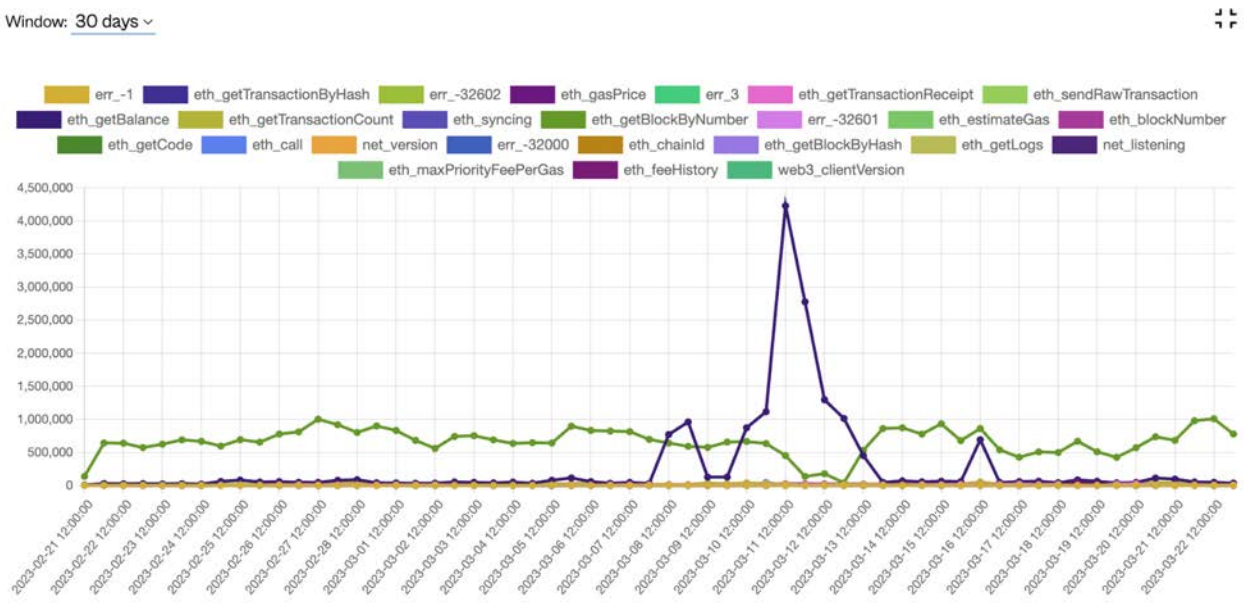
RPC endpoints provided by Rivet

ETC Coop has provided free public RPC endpoints since 2019 which are used by the majority of ETC wallets.

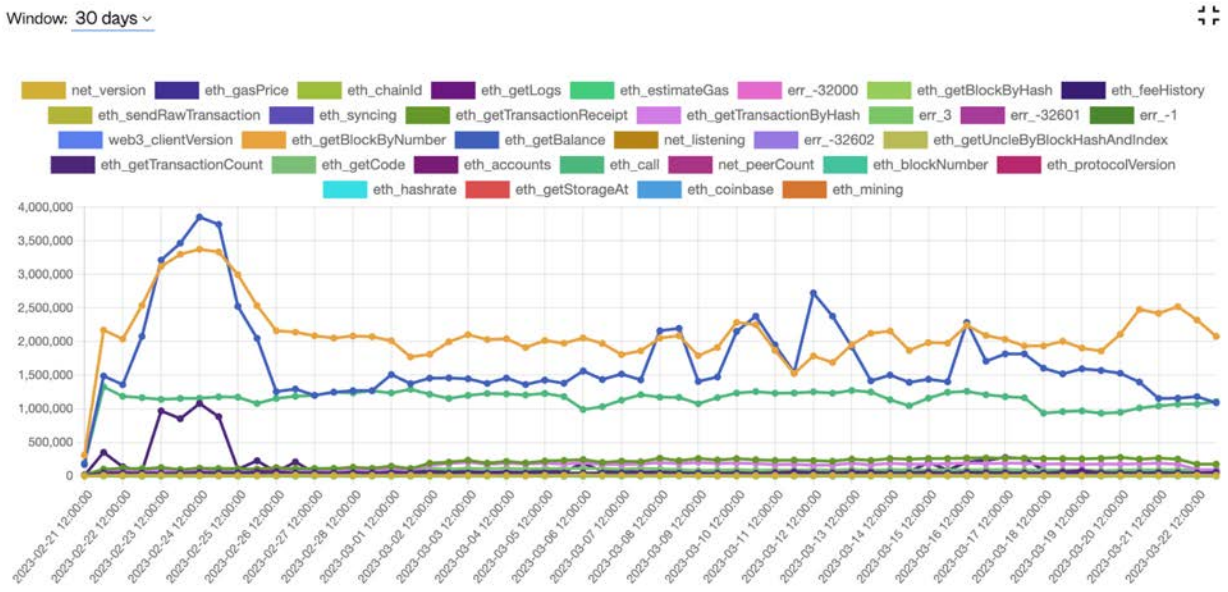
Those endpoints have been provided as a paid service by Rivet since November 2021 for improved reliability and service, but still using URLs matching our earlier Ethercluster service.

We announced in January 2023 that a new endpoint URL was available and that the legacy endpoint would be retired in the coming months.

This was the first instance of Rivet's "Community Funded" services which can be seen at https://rivet.link/. With this switchover the ETC Cooperative will be removing itself entirely from the loop on the technical side of this service. We will only be providing funding with all operations and support falling directly on Rivet.



rivet.link monthly usage.



ethercluster.com monthly usage.

Mystique hard fork

The ETC Mystique hard fork was successfully activated in Q1 2022.

- https://ecips.ethereumclassic.org/ECIPs/ecip-1104

This fork echoed the “London” hardfork on Ethereum, though some EIPs were selectively omitted following discussion. EIP-1559 and its associated EIP-3198 were omitted. The Base Fee economy was rejected by rough consensus, citing concerns for miner revenue and the comparative block-transaction sparsity.

However, gas price modifications were introduced (around refunds for SSTORE operations): EIP-3529. EIP-3541 introduces a reservation in contract definition validity looking forward toward EOF specification plans.

There was no significant contention around the hard-fork and activation was a smooth process.

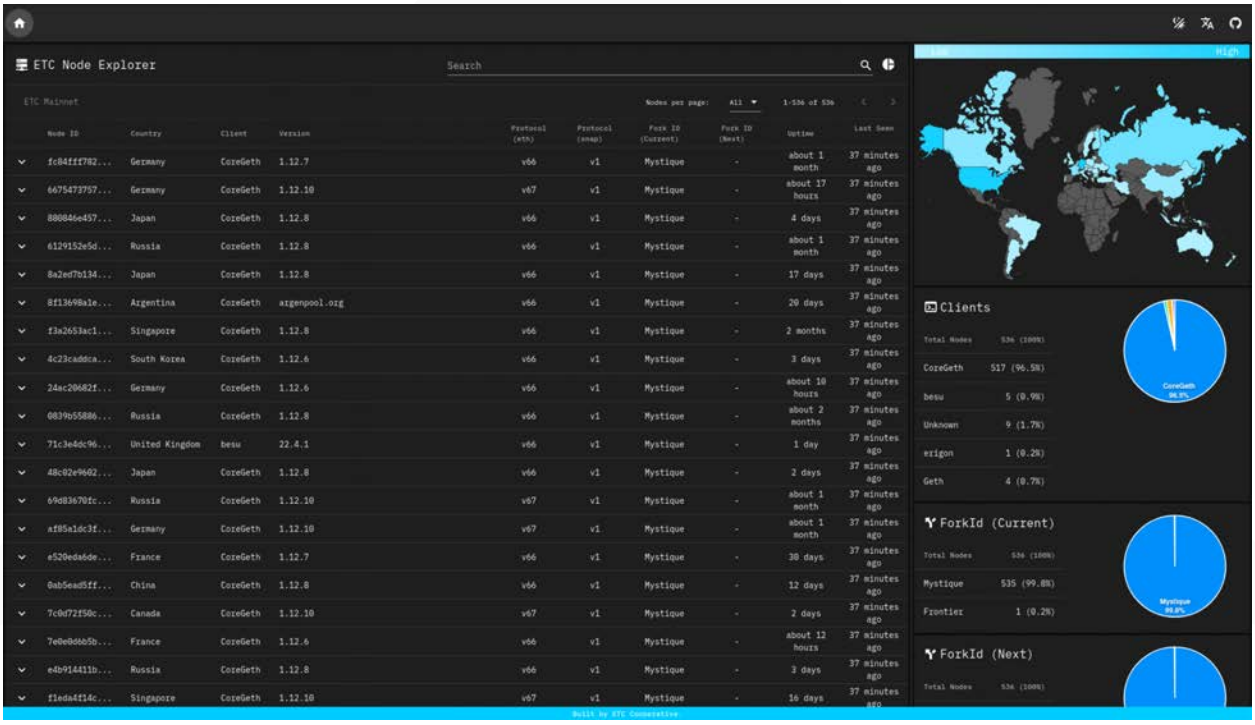
Gnosis Safe deployment for both Classic and Mordor chains

The ETC Coop recognizes the value of providing robust and secure infrastructure to the Ethereum Classic community. As part of our ongoing efforts to improve the capabilities of the Ethereum Classic blockchain, we were excited to deploy Gnosis Safe on our network this year on both mainnet and Mordor testnet.

The Gnosis Safe is a popular smart contract wallet that provides users with enhanced security features and multi-signature functionality. By deploying the Gnosis Safe on the Ethereum Classic blockchain, users benefit from a secure and reliable platform for managing their digital assets.

The Ethereum Classic Safe multisignature wallet (ETC Safe) is an implementation of Safe on the ETC chains.

ETC Node Explorer



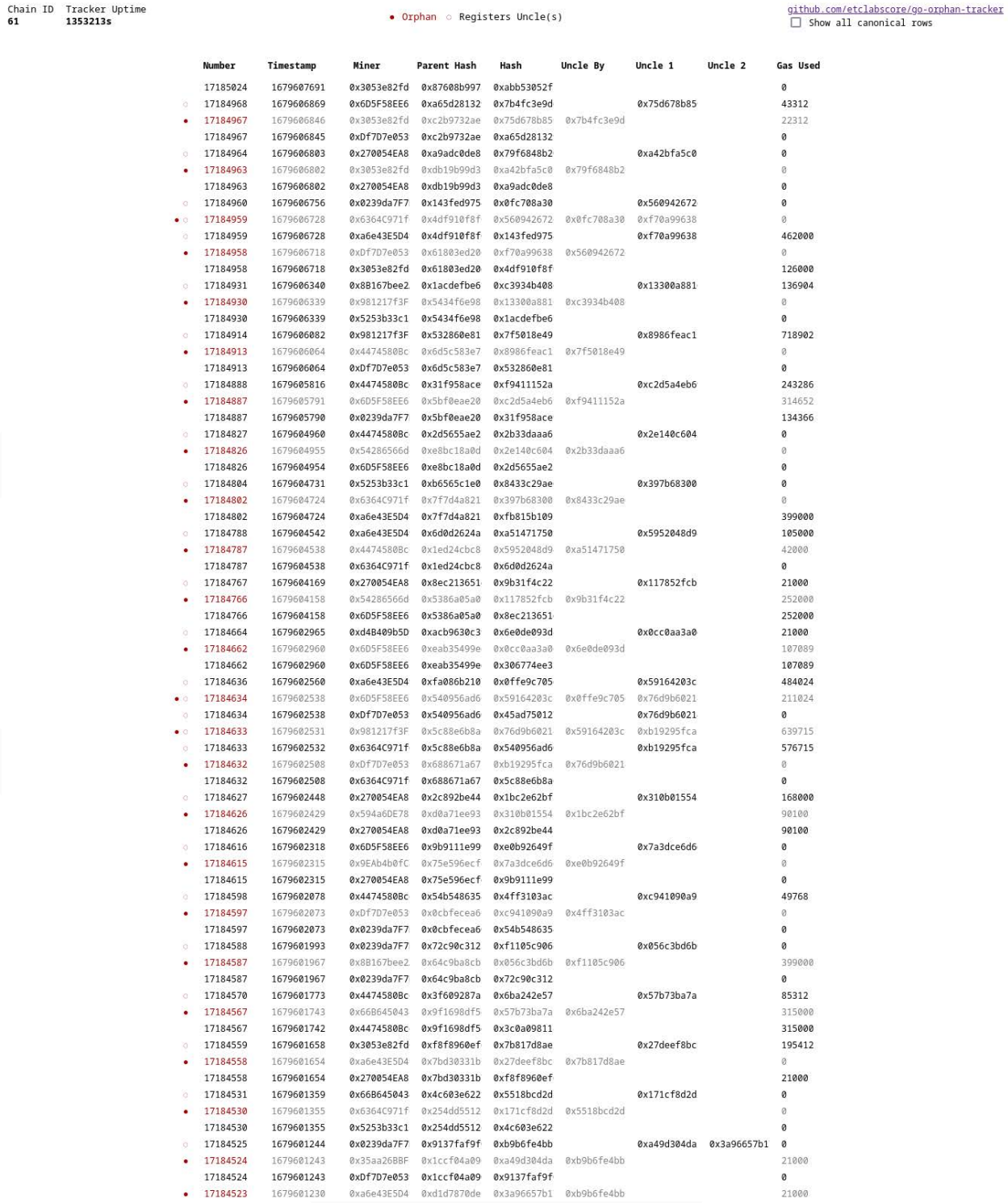
The ETC node explorer attempts to draw a categorical map of the Ethereum Classic network.

This tool finds regular use in its role in understanding the network's hard fork upgrade status, geopolitical, client, and infrastructure distributions, and node uptime/syncing measurements.

Node peerset data is collected by a single node configured with a very high maximum allowed-peers value and then aggregated, refined, and "churned" to eliminate stagnant or otherwise potentially invalid peers. The data is then made available to the website user interface by a simple adhoc API. The website lists the nodes in a table, sortable on fields in the data.

While this pattern works well enough for the time being, its simplicity will limit its ability to scale if and when the ETC network were to grow significantly. In this case revisiting this application design to move toward a decentralized neighbors-reporting system would be desirable. Other improvements might include a GraphQL API and a more robust data processing and persistence program.

ETC Orphan Tracker



Chain ID 61 | Tracker Uptime 1353213s | • Orphan ○ Registers Uncle(s) | github.com/etclabscore/go-orphan-tracker | Show all canonical rows

	Number	Timestamp	Miner	Parent Hash	Hash	Uncle By	Uncle 1	Uncle 2	Gas Used
	17185024	1679607691	0x3053e82fd	0x87608b997	0xabb53052f				0
○	17184968	1679606869	0x6D5F58EE6	0xa65d28132	0x7b4fc3e9d		0x75d678b85		43312
•	17184967	1679606846	0x3053e82fd	0xc2b9732ae	0x75d678b85	0x7b4fc3e9d			22312
	17184967	1679606845	0xDf7D7e053	0xc2b9732ae	0xa65d28132				0
○	17184964	1679606803	0x270054EA8	0xa9adc0de8	0x79f6848b2		0xa42bfa5c0		0
•	17184963	1679606802	0x3053e82fd	0xdb19b99d3	0xa42bfa5c0	0x79f6848b2			0
	17184963	1679606802	0x270054EA8	0xdb19b99d3	0xa9adc0de8				0
○	17184960	1679606756	0x0239da7F7	0x143fed975	0x0fc708a30		0x560942672		0
•○	17184959	1679606728	0x6364C971f	0x4df910f8f	0x560942672	0x0fc708a30	0xf70a99638		0
○	17184959	1679606728	0xa6e43E5D4	0x4df910f8f	0x143fed975		0xf70a99638		462000
•	17184958	1679606718	0xDf7D7e053	0x61803ed20	0xf70a99638	0x560942672			0
	17184958	1679606718	0x3053e82fd	0x61803ed20	0x4df910f8f				126000
○	17184931	1679606340	0x88167bee2	0x1acdefbe6	0xc3934b408		0x13300a881		136904
•	17184930	1679606339	0x981217f3F	0x5434f6e98	0x13300a881	0xc3934b408			0
	17184930	1679606339	0x5253b33c1	0x5434f6e98	0x1acdefbe6				0
○	17184914	1679606082	0x981217f3F	0x532860e81	0x7f5018e49		0x8986feac1		718902
•	17184913	1679606064	0x4474580Bc	0x6d5c583e7	0x8986feac1	0x7f5018e49			0
	17184913	1679606064	0xDf7D7e053	0x6d5c583e7	0x532860e81				0
○	17184888	1679605816	0x4474580Bc	0x31f958ace	0xf9411152a		0xc2d5a4eb6		243286
•	17184887	1679605791	0x6D5F58EE6	0x5bf0eae20	0xc2d5a4eb6	0xf9411152a			314652
	17184887	1679605790	0x0239da7F7	0x5bf0eae20	0x31f958ace				134366
○	17184827	1679604960	0x4474580Bc	0x2d5655ae2	0x2b33daaa6		0x2e140c604		0
•	17184826	1679604955	0x54286566d	0xe8bc18a0d	0x2e140c604	0x2b33daaa6			0
	17184826	1679604954	0x6D5F58EE6	0xe8bc18a0d	0x2d5655ae2				0
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•	17184802	1679604724	0x6364C971f	0x7f7d4a821	0x397b68300	0x8433c29ae			0
	17184802	1679604724	0xa6e43E5D4	0x7f7d4a821	0xfb815b109				399000
○	17184788	1679604542	0xa6e43E5D4	0x6d0d2624a	0xa51471750		0x5952048d9		105000
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○	17184633	1679602532	0x6364C971f	0x5c88e6b8a	0x540956ad6		0xb19295fca		576715
•	17184632	1679602508	0xDf7D7e053	0x688671a67	0xb19295fca	0x76d9b6021			0
	17184632	1679602508	0x6364C971f	0x688671a67	0x5c88e6b8a				0
○	17184627	1679602448	0x270054EA8	0x2c892be44	0x1bc2e62bf		0x310b01554		168000
•	17184626	1679602429	0x594a6DE78	0xd0a71ee93	0x310b01554	0x1bc2e62bf			90100
	17184626	1679602429	0x270054EA8	0xd0a71ee93	0x2c892be44				90100
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	17184615	1679602315	0x270054EA8	0x75e596ecf	0x9b9111e99				0
○	17184598	1679602078	0x4474580Bc	0x54b548635	0x4ff3103ac		0xc941090a9		49768
•	17184597	1679602073	0xDf7D7e053	0x0cbfecea6	0xc941090a9	0x4ff3103ac			0
	17184597	1679602073	0x0239da7F7	0x0cbfecea6	0x54b548635				0
○	17184588	1679601993	0x0239da7F7	0x72c90c312	0xf1105c906		0x056c3bd6b		0
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	17184587	1679601967	0x0239da7F7	0x64c9ba8cb	0x72c90c312				0
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○	17184559	1679601658	0x3053e82fd	0xf8f8960ef	0x7b817d8ae		0x27deef8bc		195412
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○	17184525	1679601244	0x0239da7F7	0x9137faf9f	0xb9b6fe4bb		0xa49d304da	0x3a96657b1	0
•	17184524	1679601243	0x35aa26BBF	0x1ccf04a09	0xa49d304da	0xb9b6fe4bb			21000
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•	17184523	1679601230	0xa6e43E5D4	0xd1d7870de	0x3a96657b1	0xb9b6fe4bb			21000

The [ETC orphan tracker] provides a read-only user interface for an application tracking orphan blocks on Ethereum Classic. An analogous tool runs on Mordor.

The orphan tracker application stores orphan blocks and their respective canonical competitor blocks and makes them available via a simple API.

An orphan block, otherwise known as side blocks or sidechain segments, is a block which, while being a valid and legitimate candidate for the canonical state, was not ultimately included in the canonical chain. When valid blocks are available to the network but not considered canonical, reports of these blocks are included in chain data, where they are known as uncle blocks and are associated with a financial reward for the reporter. This strategy is a facet of the GHOST protocol.

Since these blocks are not canonical, aside from validating uncle reports, there is little incentive for clients to maintain long-term persistent stores of these block data, and, commonly – as is the case with Geth and CoreGeth – these stores are eventually pruned and the blocks forgotten, or hard to access (ie. not exposed to any API).

In the event of a malicious chain growth (eg. a 51% attack), access to records of sidechain data becomes highly desirable in understanding the scope and details of the situation.

The orphan tracker works to provide that tooling for use in monitoring, debugging, and providing data availability in case of incident. As well as being generally interesting for other research reasons.

Cross-client testing

- https://github.com/etclabscore/tests/tree/etcversion_filled

Work was done in partnership with Ethereum Foundation's lead on cross-client testing, Dimitry. With Dimitry's help, we have developed an organically, locally, and sustainably sourced Ethereum Classic cross-client test suite. Using only ethical native procurement methods. These tests have been successfully adopted by Core-Geth, Hyperledger Besu, Erigon for ETC, and Geth+ETC.

The cross client tests are a suite of around 100,000 tests which cover primarily state and other consensus-relevant expectations. Many EIPs (via their forks) have dedicated tests within this suite. They are as near to a gold-standard as possible for assertions about client correctness, most generally in regard to the EVM or its rules context. The exciting part about working with Dimitry on this was that he was able to help us audit and resolve cases where the tests (largely inherited from Ethereum) were inapplicable or otherwise not useful for Ethereum Classic.

Tests like this are useful because they test cases which may not exist on-chain, because they run faster than syncing the whole chain, and because they establish state correctness assertions that are not interdependent with networking.

DiscV4 DNS Registry

The DiscV4 DNS Registry is a decentralized service that provides Ethereum Classic nodes with access to the IP addresses of other nodes on the network. This helps to facilitate peer-to-peer communication and ensures that the network is able to operate effectively.

By running the DiscV4 DNS Registry for Ethereum Classic nodes, we are helping to ensure the continued stability and reliability of the network. Our goal is to make it easier for developers and node operators to access and connect to the Ethereum Classic network, while also improving the overall performance of the network.

An automated DNS service is maintained and used as the default for Core-Geth on ETC and its testnets. Robots crawl the network, collect addresses of nodes, and store their aggregated information as TXT DNS records at a Cloudflare service handling traffic for `all.classic.blockd.info`, for example. When Core-Geth joins the network, it selects its initial peers using a query for these lists.

Supporting implementation and testing of EVM Object Format (EOF) for the Cancún hard-fork

The ETC Coop is committed to helping the Ethereum EVM Standard community improve the efficiency, execution, and security of the Ethereum Virtual Machine (EVM). As part of this commitment, we have been actively involved in supporting the implementation and testing of the EVM Object Format (EOF) for the Cancún hard-fork.

Contributions have been made for the EIPs related to EOF, with a focus on helping clients and compilers be ready for the Shanghai fork. ETC's core developers have played key roles in making pull requests (PRs) for upgrading Hyperledger Besu and Erigon software clients. Additionally, the ETC Cooperative has provided support to the Vyper team through contracts with engineers Charles Cooper and Harry Kalogirou, providing another way for testing EOF. Vyper is a Python-based programming language that is specifically designed for developing smart contracts on the Ethereum network.

Through these efforts, ETC has demonstrated a commitment to improving the efficiency, execution, and security of the EVM, while also maintaining compatibility with the wider Ethereum ecosystem. We believe that EOF will play an important role in enabling new use cases and applications on the Ethereum network, and we are committed to doing our part to support its implementation and testing.

We believe that our contributions to the implementation and testing of EOF for the Cancún hard fork helped improve the overall efficiency, execution, and security of the EVM, while also ensuring that the EVM standard ecosystem remains robust and interoperable.

The EOF implementation didn't make it into the Shanghai hard fork, but we are confident that it will be included in Cancún, the next hard fork..

We look forward to continuing to work with the EVM Standard community to support the ongoing development and evolution of this exciting technology.

Experimental work on Erigon for ETC Client

As part of our ongoing efforts to support the Ethereum Classic (ETC) community, we have been experimenting with adding support for the ETC chain to the Erigon client. Erigon is a fast and reliable Ethereum client that is used by a number of projects within the blockchain ecosystem.

The addition of ETC support to our forked version of Erigon is an important step forward for the Ethereum Classic community. By adding another high-quality client to the ETC ecosystem, we are increasing the diversity and resilience of the network. This is particularly important given the recent growth in the overall size and complexity of the EVM ecosystem.

This forked Erigon for ETC version is still under testing by us and some community members. After our evaluation we will decide if we are going to make it publicly available and if we will commit to maintaining it.

Experimental work on Geth+ETC client

- https://github.com/etclabscore/ethereum.go-ethereum/tree/etc-lite-patch

Support for Ethereum Classic has been successfully – albeit experimentally – added to Geth. This patch intends to do two things:

1. Establish another reference client for validation of cross-client tests and Ethereum Classic specification implementations. This is useful both as an additional indicator in case of logical or implementation failure, as well as establishing a “shortest-possible path back” to upstream, particularly in context with Core-Geth, which also considers Geth an upstream, and which has significantly and occasionally, annoyingly diverged in non-necessary ways.
2. Establish another client for the ecosystem, a near-pure distillation of project-critical logic for Ethereum Classic expressed in the Go language.

VHC/TABS Research

- VHC = Validated Header Context (for Transactions)
- TABS = Total Active Balance Synthesis
- https://ecips.ethereumclassic.org/ECIPs/ecip-1108

Isaac pursued research in collaboration with MIT graduate student Daniel Aranoff. This research was focused on development of low-impact, practicable designs for improving finality expectations for PoW consensus systems. The resulting research sketches a 2-dimensional

consensus game, which, along with a requisite specification for transaction/subchain exclusivity, forms a kind of PoW-PoS hybrid.

In short, the balances of unique transaction senders for some blocks are aggregated and used as a (mathematical) product with difficulty to compose the fundamental quantification of the canon competition. Assuming sufficient adoption of chain-exclusive transactions, this would suggest a game where measurements of represented capital (ie. the available wealth of transaction senders) coexist with the influence of total difficulty, together defining and driving chain growth.

Grants Program

Our plans for 2022 included the launch of an ecosystem grants program with $250K budgeted for that work, plus budget for a project manager for that program for part of the year.

Before that program came to fruition, Antpool approached the ETC Cooperative to announce their intention to invest $10M into the ETC ecosystem. This happened in July 2022 and a fruitful and more general partnership has arisen with Bitmain and Antpool as a result. Bob has spoken at two Bitmain conferences and at multiple community calls which Bitmain has organized.

The ETC Grants DAO program launched in January 2023 and will be detailed in future quarterly reports and the 2023 retrospective.

Learn more here https://etcgrantsdao.io.

Comms and Marketing

The marketing and communications strategy for ETC Cooperative in 2022 focused on raising awareness about the benefits of using Ethereum Classic (ETC) and the cooperative's role in supporting the ETC ecosystem.

Communication and Marketing was an area where we significantly underperformed during 2021 and in the beginning of 2022. However, in late 2022 we took steps to resolve this situation by hiring a communications team.

In the second half of the year the cooperative leveraged its website, social media channels, and partnerships with industry influencers to promote ETC and engage with the community.

The cooperative prioritized thought leadership through blog content to position itself as a leading authority on ETC and blockchain technology. This involved publishing blogs and videos, and sharing reports that offer insights into the industry.

Overall, the marketing and communications strategy for ETC Cooperative in 2022 was geared towards strengthening ETC’s brand, increasing awareness about the benefits of ETC, and fostering a vibrant and engaged community around the platform.

Next year's plans are outlined in the 2023 Goals document, but below we will summarize the activity of the marketing and communications team before and after they started work on November 1st, 2022.

The New Comms Team

The communications and marketing team is made of four new additions to the staff who will be in charge of editorial, marketing, communications, and events.

Donald McIntyre is an active member of the Ethereum Classic project, has previously worked at ETCDEV, a previous ETC core development team, founded Etherplan, a website dedicated to ETC research and analysis, and worked at Emerald, an ETC, Bitcoin, and Ethereum blockchain wallet.

Donald will be managing our editorial effort, producing content in video, text, and live stream formats, both for the ETC Cooperative online channels and the Ethereum Classic community resources at large.

Andrew Dick has worked in the blockchain industry for over ten years and has over 22 years of experience in the online media, marketing & software industries. He has led and supervised the conception, development, strategy, and marketing of numerous websites and over ten applications.

Andrew will be responsible for managing the marketing and communications activities at the ETC Cooperative.

Angelah Liu has a Masters of Global Affairs degree from the University of Toronto, and experience in Web 3 and the cryptocurrency OTC industry. She is fluent in the Chinese language both simplified and traditional.

Angelah will be managing our communications strategy and channels in addition to translating our editorial and communications content into Chinese.

Emma Todd is a mining expert, public speaker, and CEO of MMH Technology Group, a firm that focuses on Data Systems, Blockchain Consulting, Communication, and Events for emerging technology organizations. She is Chair of the Canadian Blockchain Consortium's Mining Committee and a board member of the Canadian Blockchain Consortium.

Emma will be responsible for event management at the ETC Cooperative.

Content From January to October of 2022

In this period the ETC Cooperative put out several articles and a video.

- Mystique Hard Fork Is Coming—February 13th, 2022 (Medium) - January 27, 2022
- Mystique Hard Fork Is Coming—February 13th, 2022 - January 27, 2022
- 2021 Retrospective, 2022 Budget and Roadmap - April 12, 2022
- ETC Cooperative Q1 Package - May 26, 2022
- An Open Letter to Chandler Guo - August 8, 2022
- ETC Cooperative Discord server - August 15, 2022
- Insider's Guide to Ethereum Classic (YouTube) - August 20, 2022
- ETC Cooperative 2022 Q2 Report - August 24, 2022
- History of the Ethereum Classic Cooperative - September 26, 2022

Content From November to December of 2022

With the communications team in place there were 44 content units produced, 12 of which were published in the ETC Cooperatives channels, such as the website blog (8) and its YouTube channel (4). 32 were published in the Ethereum Classic community website (16) and the YouTube channel (16) that was created for the community for these purposes.

To further expand our reach into the asian market the 24 articles published were all translated to Chinese and promoted on Chinese social channels.

Below is the editorial content calendar of content units that were published for November of 2022.

Date	Format	Theme	Title	Channel	Target	Call to Action
12/1/22	Video/Text	Infrastructure	Are There Software Clients and Servers in a Blockchain?	ETC YouTube/ETC Blog	Users/Miners	Use ETC
12/2/22	---	---	---	---	---	---
12/3/22						
12/4/22						
12/5/22	---	---	---	---	---	---
12/6/22	Video/Text	Infrastructure	Ethereum Virtual Machine Blockchains and Ethereum Classic	ETC YouTube/ETC Blog	Users/Miners	Use ETC
12/7/22	Video/Text	Philosophy	The Three Pillars of Ethereum Classic	ETC YouTube/ETC Blog	All	Evangelize
12/8/22	Video/Text	News/Opinion	The Pemissionelss Paradox in Ethereum Classic	ETC YouTube/ETC Blog	All	Evangelize
12/9/22	---	---	---	---	---	---
12/10/22						
12/11/22						
12/12/22	---	---	---	---	---	---
12/13/22	Video/Text	Philosophy	Ethereum Classic Is Bitcoin's Philosophy With Ethereum's Technology	ETC YouTube/ETC Blog	All	Evangelize
12/14/22	Video/Text	Philosophy	What Is Ethereum Classic?	ETC YouTube/ETC Blog	All	Evangelize
12/15/22	Video/Text	ETC Course	Ethereum Classic Course: Introduction	ETC YouTube/ETC Blog	All	Evangelize
12/16/22	---	---	---	---	---	---
12/17/22						
12/18/22						
12/19/22	---	---	---	---	---	---
12/20/22	Video/Text	Tutorials	How to Contribute to ETC: The Imporvement Proposal Process (ECIP)	ETC YouTube/ETC Blog	Developers	Make ECIP proposals
12/21/22	Video/Text	Tutorials	Using Ethereum Classic With MetaMask	ETC YouTube/ETC Blog	Users	Use ETC with Metamask
12/22/22	Video/Text	ETC Course	Ethereum Classic Course: 1. Public Key Cryptography	ETC YouTube/ETC Blog	All	Evangelize
12/23/22	---	---	---	---	---	---
12/24/22						
12/25/22						
12/26/22	---	---	---	---	---	---
12/27/22	Video/Text	Infrastructure	Core Geth Explained	ETC YouTube/ETC Blog	Users/Miners	Run a Core Geth node
12/28/22	Video/Text	Infrastructure	Core Geth Explained With ETC Core Developer Isaac Ardis	Coop YouTube/Coop Blog	Users/Miners	Run a Core Geth node
12/29/22	Video/Text	ETC Course	Ethereum Classic Course: 2. Cypherpunks	ETC YouTube/ETC Blog	All	Evangelize
12/30/22	---	---	---	---	---	---
12/31/22						

Below is the editorial content calendar of content units that were published for December of 2022.

Date	Format	Theme	Title	Channel	Target	Call to Action
12/1/22	Video/Text	Infrastructure	Are There Software Clients and Servers in a Blockchain?	ETC YouTube/ETC Blog	Users/Miners	Use ETC
12/2/22	---	---	---	---	---	---
12/3/22						
12/4/22						
12/5/22	---	---	---	---	---	---
12/6/22	Video/Text	Infrastructure	Ethereum Virtual Machine Blockchains and Ethereum Classic	ETC YouTube/ETC Blog	Users/Miners	Use ETC
12/7/22	Video/Text	Philosophy	The Three Pillars of Ethereum Classic	ETC YouTube/ETC Blog	All	Evangelize
12/8/22	Video/Text	News/Opinion	The Pemissionelss Paradox in Ethereum Classic	ETC YouTube/ETC Blog	All	Evangelize
12/9/22	---	---	---	---	---	---
12/10/22						
12/11/22						
12/12/22	---	---	---	---	---	---
12/13/22	Video/Text	Philosophy	Ethereum Classic Is Bitcoin's Philosophy With Ethereum's Technology	ETC YouTube/ETC Blog	All	Evangelize
12/14/22	Video/Text	Philosophy	What Is Ethereum Classic?	ETC YouTube/ETC Blog	All	Evangelize
12/15/22	Video/Text	ETC Course	Ethereum Classic Course: Introduction	ETC YouTube/ETC Blog	All	Evangelize
12/16/22	---	---	---	---	---	---
12/17/22						
12/18/22						
12/19/22	---	---	---	---	---	---
12/20/22	Video/Text	Tutorials	How to Contribute to ETC: The Improvement Proposal Process (ECIP)	ETC YouTube/ETC Blog	Developers	Make ECIP proposals
12/21/22	Video/Text	Tutorials	Using Ethereum Classic With MetaMask	ETC YouTube/ETC Blog	Users	Use ETC with Metamask
12/22/22	Video/Text	ETC Course	Ethereum Classic Course: 1. Public Key Cryptography	ETC YouTube/ETC Blog	All	Evangelize
12/23/22	---	---	---	---	---	---
12/24/22						
12/25/22						
12/26/22	---	---	---	---	---	---
12/27/22	Video/Text	Infrastructure	Core Geth Explained	ETC YouTube/ETC Blog	Users/Miners	Run a Core Geth node
12/28/22	Video/Text	Infrastructure	Core Geth Explained With ETC Core Developer Isaac Ardis	Coop YouTube/Coop Blog	Users/Miners	Run a Core Geth node
12/29/22	Video/Text	ETC Course	Ethereum Classic Course: 2. Cypherpunks	ETC YouTube/ETC Blog	All	Evangelize
12/30/22	---	---	---	---	---	---
12/31/22						

Twitter Activity From January to October of 2022

Throughout 2022 we had to contend with an ownership dispute for the @eth_classic Twitter account. The community account was commandeered by Charles Hoskinson, a former ETC collaborator.

- Details of the fallout as recounted by Bob Summerwill can be found in this thread.
- Istora, a prominent ETC community member, wrote his summary of the incident here.

What transpired was that the original @eth_clasic account was hijacked and transferred to another blockchain community. This prompted Bob Summerwill to take control of a remnant account with the same handle that was created by a member of that community, as a replacement for the one that was appropriated.

During this time the ETC community created another account with the handle @etc_network as well as a system for generating tweets in a crowdsourced manner called “Twitter Together.” Both the @eth_classic and @etc_network accounts are operating under the new format.

As a consequence of this the general Twitter activity sponsored by the ETC Cooperative for the community account @eth_classic was very low. However, the ETC Cooperative’s Twitter account @ETCCooperative maintained active participation on the platform and received a high level of engagement during all of 2022.

In November, Bob Summerwill engaged a lawyer - Jason Gottlieb of Morrison Cohen LLP - to write a letter to Twitter highlighting the breach of the terms of service and request return of the account to the ETC community. This letter was sent both electronically and by paper mail. When we received no reply the letter was sent again twice more, this time with recorded delivery via FedEx. We have a record of receipt for the second time on 20th December 2022 by “K Luis” and for the third time on 6th February 2023 by “A. Alfonso”.

It was unfortunate that this series of events was happening while Twitter were undergoing mass layoffs. The "new Twitter" evidently has neither capacity nor concern about enforcing their own terms of service. This is very regrettable, but at this stage it seems that there is little more we can do with regard to this lost account, its history and followers.

MorrisonCohen LLP

Jason P. Gottlieb
Partner
(212) 735-8837
jgottlieb@morrisoncohen.com

November 15, 2022

VIA EMAIL & TWITTER

Twitter Customer Service
@TwitterSupport
support@twitter.com

Re: *Account @eth_classic now @Ergo_Platform*

Dear Twitter Support:

I represent a member of the Ethereum Classic community: Bob Summerwill, the Executive Director of the ETC Cooperative, a non-profit organization supporting the Ethereum Classic ecosystem. Ethereum Classic is an open-source, blockchain-based platform (not to be confused with the Ethereum network). Ethereum Classic is governed and operated by its community of users. Ethereum Classic used the Twitter handle @eth_classic from July 2016 to October 6, 2022. On October 6, 2022, a former member of the Ethereum Classic community usurped the handle @eth_classic, and transferred it to another project in which he has an investment, renaming it @Ergo_Platform (the "Account"). We seek return of the Account to the Ethereum Classic community.

Twitter Activity From November to December of 2022

With the new communications team in place, a strategy to contribute Tweets to the community accounts @eth_classic and @etc_network was initiated in December of 2022.

Below is the Tweet calendar for December of 2022 per account.

	@eth_classic		@etc_network	
Date	Item	Content	Item	Content
12/1/22	---	---	---	---
12/2/22	---	---	---	---
12/3/22				
12/4/22				
12/5/22	---	---	---	---
12/6/22	---	---	---	---
12/7/22	---	---	---	---
12/8/22	---	---	---	---
12/9/22	Link to post	Ethereum Virtual Machine Blockchains and #EthereumClassic	Link to post	The Permissionless Paradox
12/10/22				
12/11/22				
12/12/22	Link to post	Proof of work enables consensus by merit, free choice, and adoption, not by voting.	Link to video	The Ethereum Classic Safe Multisignature Wallet Explained
12/13/22	Link to post	The Difference Between a Network, a Blockchain, and a Cryptocurrency	---	---
12/14/22	---	---	Link to video	Proof of Work Is Not Voting
12/15/22	---	---	Link to video	Are There Software Clients and Servers in a Blockchain?
12/16/22	---	---	---	---
12/17/22				
12/18/22				
12/19/22	---	---	---	---
12/20/22	Link to post	The Difference Between Blockchain Software and Blockchain Protocol	---	---
12/21/22	---	---	Link to video	The Difference Between a Network, a Blockchain, and a Cryptocurrency
12/22/22	---	---	Link to video	The Difference Between Blockchain Software and Blockchain Protocol
12/23/22	---	---	---	---
12/24/22				
12/25/22				
12/26/22	---	---	---	---
12/27/22	Linkt to post	Proof of Work Is Not Voting	---	---
12/28/22	---	---	Link to video	Ethereum Virtual Machine Blockchains and Ethereum Classic
12/29/22	---	---	Link to video	The Three Pillars of Ethereum Classic
12/30/22	---	---	---	---
12/31/22				

The above tweets received ample engagement from the social media platform.

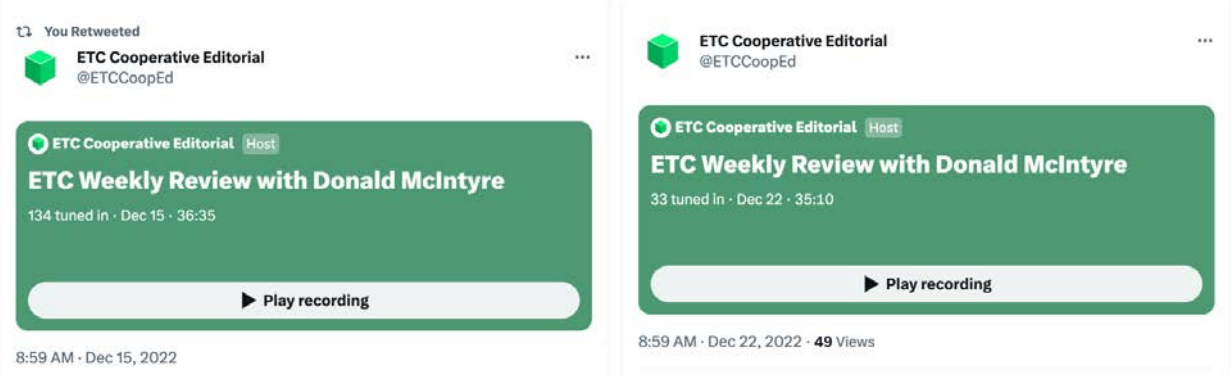
As mentioned in the previous section, the ETC Cooperative's Twitter account kept a steady pace with a high degree of engagement.

The most frequent Tweets by the Coop have been promotions of the new comms team's articles and videos about ETC. Below is an example of a promotional Tweet of a content unit that was published on the ETC community website by the ETC Cooperative's account on twitter.

New Twitter Spaces Show: ETC Weekly Review

In December of 2022 a Twitter Spaces show called "ETC Weekly Review" was launched to talk about the 6 content units usually published during any given week.

The show is on every Thursday at 10 AM EST / 15 Hours UTC. During December of 2022 there were two shows, the launch on December 15th and the second episode on December 22nd. The ETC Weekly show has been running every week since its launch.



ETC Weekly Newsletter

With the arrival of the new communications team the ETC Weekly newsletter was restarted in November of 2022. Below is the list of 8 newsletters sent in English and Chinese between November and December of 2022.

- ETC Cooperative Is Attending the World Digital Mining Summit (WDMS) - November 8, 2022
- Ethereum Classic Safe Multisig Wallet Review - November 10, 2022
- Announcing the New ETC Cooperative Communications Team - November 15, 2022
- Outline of Xmei Lin's and Bob Summerwill's Speeches at BITMAIN's WDMS Global 2022 - November 16, 2022
- ETC Cooperative 2022 Q3 Report - November 17, 2022
- ETC Cooperative's Mission and Projects With Bob Summerwill - November 22, 2022
- The ETC Cooperative's Communications Plan - November 23, 2022
- Core Geth Explained With ETC Core Developer Isaac Ardis - December 28, 2022

After the ETC Cooperative branding and website projects are completed we will be relaunching our newsletter to better serve the community.

Community Calls

There were 31 community calls during 2022. The topics addressed ranged from current affairs in ETC, the fifthening in April, the mining boom when Ethereum migrated to proof of stake, the Twitter account debacle, price and markets, to new dapps and infrastructure.

ETC Community Call 035 2022-12-13

75 views • Streamed 2 months ago

ETC Community Call 034 - 2022-12-06

87 views • Streamed 3 months ago

ETC Community Call 033 - 2022-11-29

91 views • Streamed 3 months ago

ETC Community Call 032 - 2022-11-22

61 views • Streamed 3 months ago

ETC Community Call 031 2022-11-15

142 views • Streamed 3 months ago

ETC Community Call 030 2022-10-25

145 views • Streamed 4 months ago

ETC Community Call 028 2022-10-11

87 views • Streamed 4 months ago

ETC Community Call 027 2022.10.04

85 views • Streamed 5 months ago

ETC Community Call 025 2022.07.05

147 views • Streamed 8 months ago

ETC Community Call 024 2022.06.28 `Q&A with Bob Summerwill

218 views • Streamed 8 months ago

ETC Community Call 023 2022.05.03

246 views • Streamed 10 months ago

ETC Community Call 021 2022.04.12

337 views • Streamed 10 months ago

Transparency Reports

Throughout 2022 the ETC Cooperative have been publishing reports on our activities quarterly.

- 2021 Retrospective Report
- Q1 Transparency Report
- Q2 Transparency Report
- Q3 Transparency Report

All of these reports and regulatory filings can be found in the Filings page on the ETC Cooperative website.

Financials

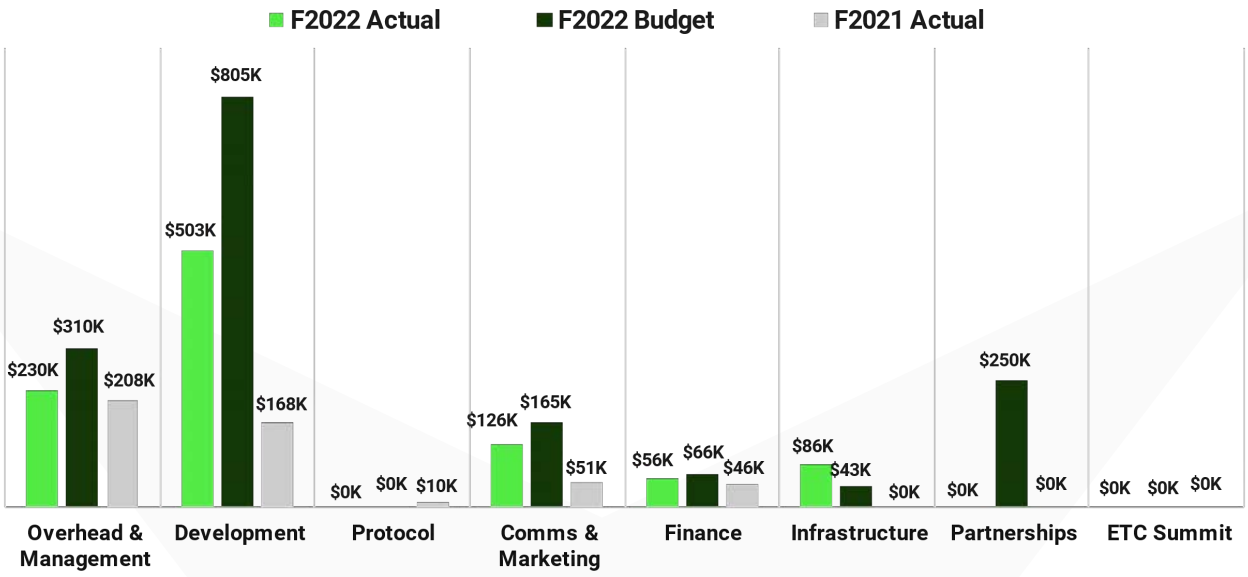
For the year ended December 31, 2022 ("F2022")

While following general accounting principles, these figures and charts may not be in strict compliance with IFRS ("*International Financial Reporting Standards*") or FASB "*Financial Accounting Standards Board*").

Fiscal 2022 Financial Results

Expenditures in $US

	F2022 Actual	F2022 Budget	Variance $ F2022 vs F2022 Budget	F2021 Actual	Variance $ 2022 vs F2021
Overhead & Management	$229,853	$309,875	$(80,022)	$207,884	$21,969
Development	$502,868	$805,000	$(302,132)	$167,856	$335,012
Protocol	$0	$0	$0	$10,000	$(10,000)
Comms & Marketing	$125,652	$165,250	$(39,598)	$51,429	$74,223
Finance	$56,176	$65,500	$(9,324)	$45,908	$10,268
Infrastructure	$86,393	$42,880	$43,513	$0	$86,393
Partnerships	$0	$250,000	$(250,000)	$0	$0
ETC Summit	$0	$0	$0	$0	$0
Total Expenditures	**$1,000,943**	**$1,638,505**	**$(637,563)**	**$483,077**	**$517,866**
Non-cash Items	*$0*	*$0*	*$0*	*$0*	*$0*
Total Operating Expenses	**$1,000,943**	**$1,638,505**	**$(637,563)**	**$483,077**	**$517,866**



Overall, F2022 actual costs were $640K less than budgeted. The main differences were lower development costs (by $300K) and delaying the grant program to 2023 ($250K). Budgeted development costs consisted of 2 more developers; however, it was determined that a core team of 3 developers, with added contractors would meet the current needs of the Coop. A Grant program was launched in January 2023, with the Coop committed to contributing $250K.

F2022 costs were significantly higher than F2021 due to the hiring of 2 core developers, as well as a new communications team near the end of F2022. Conferences and travel resumed in 2022, with several of the team members representing the ETC Cooperative and ETC Community

at various events during the year. Most of the team traveled to DevCon 2022 in Colombia, which allowed the remote team to collaborate altogether in person for the first time.

The following is a breakdown of what is generally allocated to each category:

Overhead & Management
This category includes salaries and payments for the Executive Director as well as all overhead, office, legal, and related expenses. It also includes any general costs that cannot be allocated to specific departments.

Development
This includes salaries for the development team and any development related costs.

Protocol
We did not allocate anything to this section for 2022.

Communications & Marketing
This includes salaries for the comms team and all advertising, promotional work, marketing, conference sponsorship, website costs, and all travel related expenses for the entire team.

Finance
This includes costs related to tax filings, tax and accounting professional consulting, accounting software, and finance salaries.

Infrastructure
This covers costs of hosted services which we provide to the ecosystem.

Partnerships
There were no partnership costs in 2022.

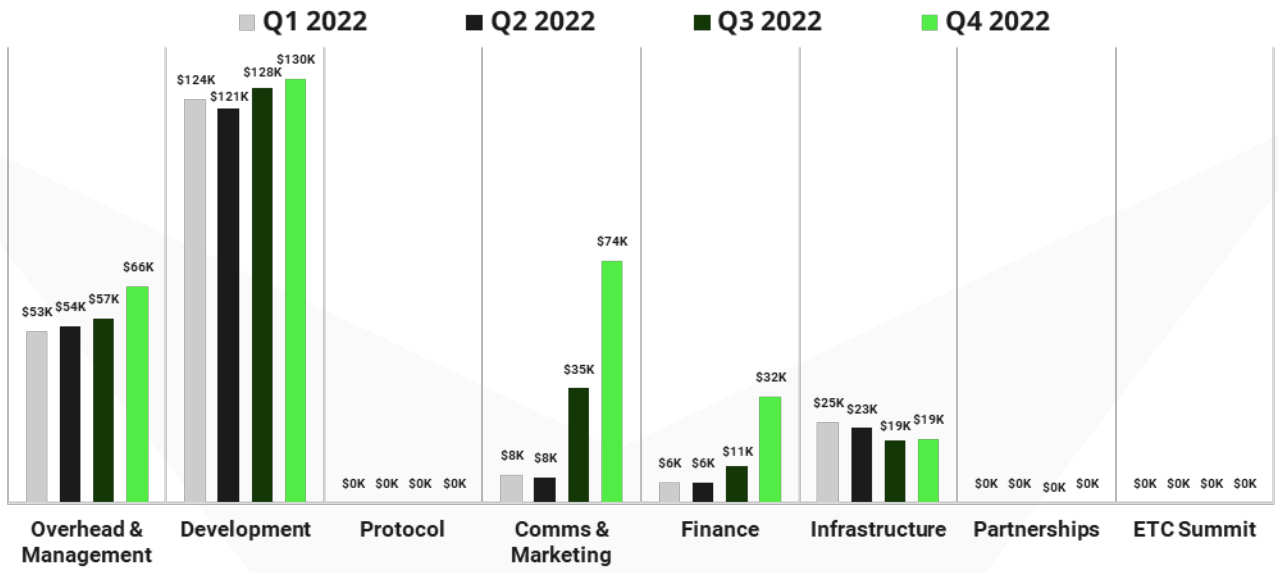
ETC Summit
There was no ETC summit in 2022.

Non-Cash items
This consists of accounting items that are not considered cash-costs, such as gain/loss on foreign exchange, gain/loss on sale of cryptocurrencies, and direct write-off of prior year receivables.

2022 Expenditures

Expenditures in $US

	Q1 2022	Q2 2022	Q3 2022	Q4 2022	F2022
Overhead & Management	$52,550	$54,242	$56,582	$66,478	$229,853
Development	$123,890	$121,234	$127,518	$130,227	$502,868
Protocol	$0	$0	$0	$0	$0
Comms & Marketing	$8,438	$7,720	$35,160	$74,333	$125,652
Finance	$6,217	$6,217	$11,247	$32,495	$56,176
Infrastructure	$24,807	$22,909	$19,179	$19,499	$86,393
Partnerships	$0	$0	$0	$0	$0
ETC Summit	$0	$0	$0	$0	$0
Total Expenditures	**$215,903**	**$212,321**	**$249,686**	**$323,032**	**$1,000,943**
Non-cash Items	*$0*	*$0*	*$0*	*$0*	*$0*
Total Operating Expenses	**$215,903**	**$212,321**	**$249,686**	**$323,032**	**$1,000,943**



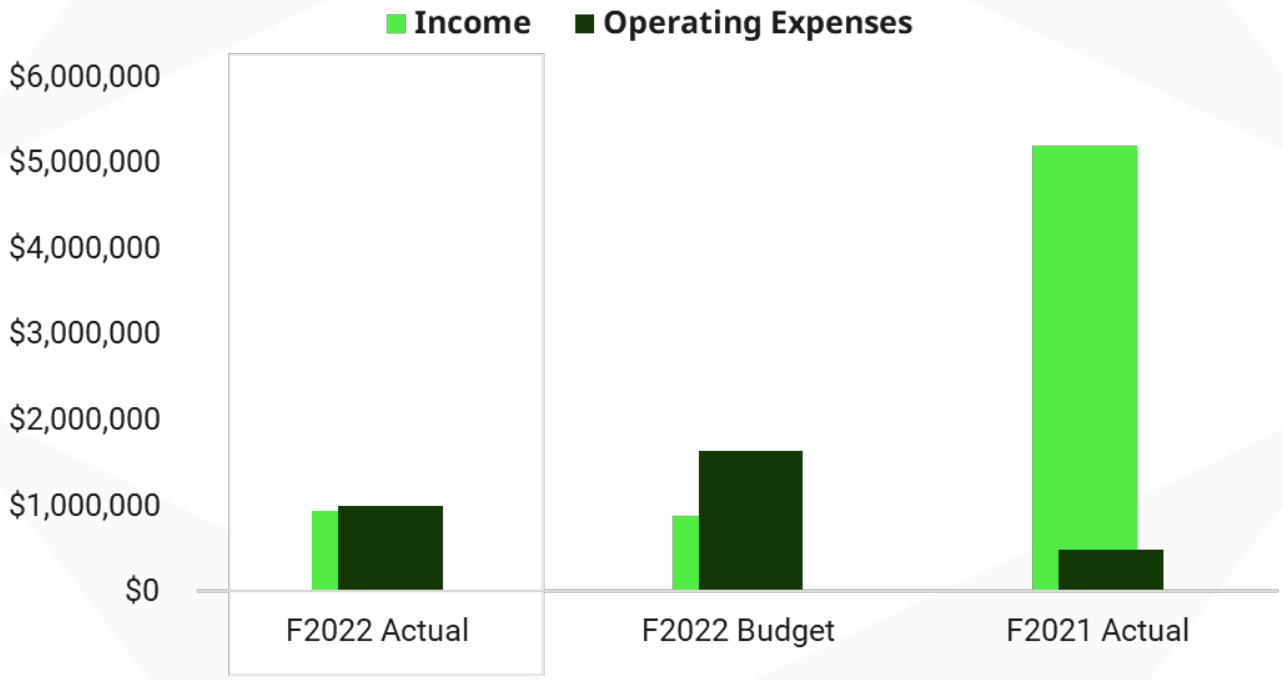
Each fiscal quarter in 2022 was relatively consistent except for Q4. Most variances relate to timing of specific projects or regulatory filing requirements. Q4 2022 had additional costs for tax filing and the comms & marketing category. Comms & marketing costs relate to new team members and contracted team members, as well as DevCon costs.

Overall, F2022 has had the highest costs of any operating year for the ETC Cooperative. This was expected due moving the core developers from ETC Labs to ETC Cooperative, as well as increased infrastructure and comms & marketing costs.

Net Income/(Loss)

Net Income/(Loss) in $US

	F2022 Actual	F2022 Budget	F2021 Actual
Income	$945,699	$878,485	$5,191,092
Operating Expenses	$1,000,943	$1,638,505	$483,077
Net (Loss)/Income	$(55,244)	$(760,020)	$4,708,015
Non-cash items	*$0*	*$0*	*$28,686*
Adjusted Net Income	**$(55,244)**	**$(760,020)**	**$4,708,015**



Note that the net income/(loss) and adjusted net income/(loss) does not include the unrealized gain/loss on the re-evaluation of ETC at market rates. See description of non-cash items above.

Income

Historically, the ETC Cooperative earned income from the arrangement with Grayscale LLC as well as donations and sponsorships. Under the Grayscale arrangement, 1/3 of fees collected by Grayscale, related to their Grayscale Ethereum Classic Trust, were contributed to the Cooperative. Sponsorships related to any conferences held are either included in income, if they are general purpose, or offset to expenses, if they are for a specific event/activity. In 2022, there was no ETC Summit and thus no sponsorship income.

March 2022 was the last month in which the ETC Cooperative earned fees from Grayscale as the 2-year agreement came to an end. The crypto bull run left the Coop with $5.2M to start F2022 (including ETC tokens at market value), which provides us a few years of runway. At the end of F2022 and into early 2023 the ETC Cooperative began to invest some of its cash reserves into ETC, as we consider the prices depressed, in hopes of extending the runway.

Even with several years of cash runway and ETC investment, the ETC Cooperative will not be able to be sustained long term without new donors/sponsors.

Unrealized (Loss)/Gain on ETC

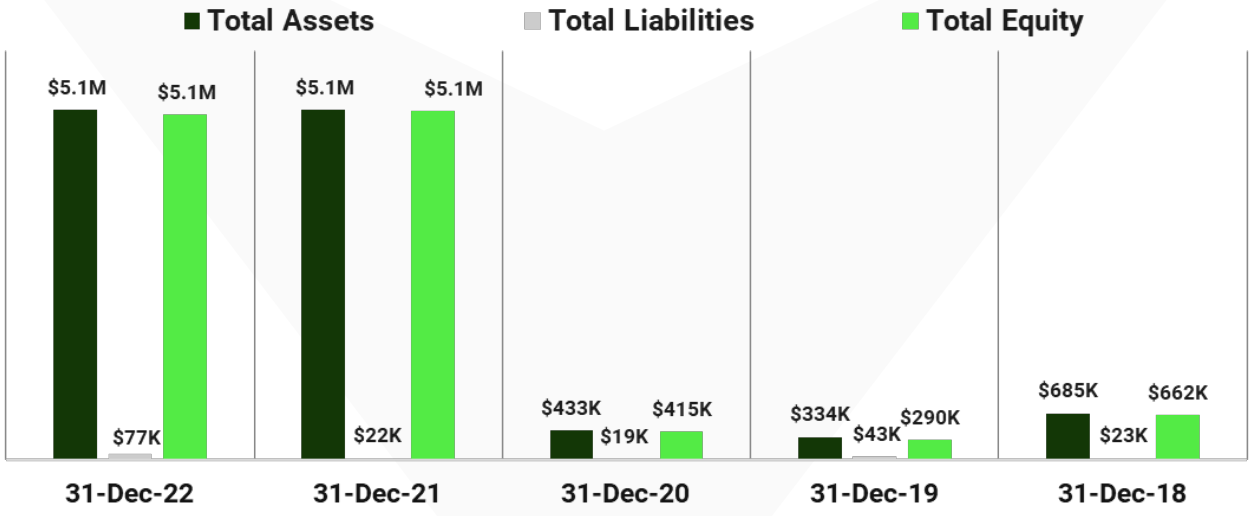
These figures represent the difference between the book value of ETC, included in the financial information and the market value as of a certain date. The book value is the value or exchange rate at which the ETC was purchased and recorded to the financial records, in US dollars. This value will remain on the books until the ETC is sold. However, it over or understates the actual value of the ETC held at a certain point in time and thus the liquidity of the ETC Cooperative. To present a more accurate picture the unrealized gain or loss is presented, which shows what would have been reported if the ETC held had been sold. This will change each period to reflect the current rate at the end of the reporting period (i.e. September 30, 2022 for Q3 2022).

As of December 31, 2022 the Coop held 23,337 ETC with a book value of $328,265 and a market value of $366,155.

Financial Position

Financial Positions in $US

	31-Dec-22	31-Dec-21	31-Dec-20	31-Dec-19	31-Dec-18
Assets					
Cash & Cash Equivalents	$4,816,320	$4,689,209	$303,313	$146,318	$530,268
ETC (at book value)[1]	$328,265	$78,115	$78,115	$154,363	$154,363
Accounts Receivable	$0	$0	$0	$12,057	$7,057
Due from Grayscale	$(0)	$377,733	$51,914	$18,808	$(6,729)
Prepaid Expenses & Deposits		$0	$0	$2,250	$0
Total Assets	**$5,144,585**	**$5,145,057**	**$433,341**	**$333,796**	**$684,960**
Liabilities					
Accounts Payable & Accrued Liabilities	$77,288	$22,208	$18,507	$44,393	$20,305
Due to Grayscale	$0	$0	$0	$(1,000)	$3,022
Total Liabilities	**$77,288**	**$22,208**	**$18,507**	**$43,393**	**$23,328**
Equity					
Retained Earnings	$5,122,541	$414,834	$290,403	$661,632	$239,640
Net Income/(Loss) for the year	$(55,244)	$4,708,015	$124,431	$(371,229)	$421,992
Total Equity	**$5,067,297**	**$5,122,849**	**$414,834**	**$290,403**	**$661,632**
Total Liabilities & Equity	**$5,144,585**	**$5,145,057**	**$433,341**	**$333,796**	**$684,960**
ETC at Market Value[1]	*$366,155*	*$278,521*	*$46,284*	*$72,540*	*$81,430*
Liquid assets[2]	**5,182,475**	**4,967,730**	**349,597**	**218,858**	**611,698**



Assets

There have been no significant changes in balance sheet accounts for 2022, as the final three months of Grayscale revenues offset F2022 expenses. Total assets were $5.14M for both F2022 and F2021 (ETC tokens at book value, included in this calculation).

Accrued liabilities were slightly higher due to timing differences of payments. These liabilities were mostly paid out in January 2023.

An additional $250K was invested in ETC in December 2023, bringing the total to 23,337 ETC.

As of April 27, 2023, the ETC Cooperative holds 60,880 ETC at an average cost of $17.68. This includes the $250K USD in ETC tokens, that will be allocated to the grant program.

Liabilities & Equity

Accounts payable and accrued liabilities were predominantly composed of accrued accounting expenses and consulting fees.

In F2022 there was a small loss of $50K.

ETC Cooperative