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Ethereum Community Conference 5 in Paris – Energized Innovation and Accelerating Development

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We virtually attended the Ethereum Community Conference #5 (ETHCC 5) in Paris last week. ETHCC is an annual three-day event dedicated to exploring the intersection of Ethereum technology and community. Outside of the Ethereum Developers Conference (to be held this fall in Bogota, Colombia), ETHCC is one of the larger and more important gatherings for the protocol. This year's ETHCC comprised of over 250 speakers across six separate stages: Builders, developers, and leaders in the Ethereum community gave talks and held workshops that confirmed our bullish thesis on ETH and reaffirmed our confidence in our long-term price targets.

Protocol supporters have treated the multi-stage endeavor of network development like the Tour de France: a lengthy journey conquering rugged crypto terrain, but their persistence has yielded results. Here are the key highlights, plus a few other notable themes that validated our thinking on where the Ethereum ecosystem is headed in the coming years.

PM NOTES:

- 1. Rollups emerged as scaling solution winners and the primary medium for expanding block space on the network. Layer 2 rollups, like Arbitrum and Optimism, are Ethereum-compatible but separate chains that batch activity to decrease the number of transactions happening at the base execution layer. They remain pillars of growth for the Ethereum ecosystem.
- 2. Multiple themes, iterations, and implementations of portable web3 identities via user wallets are beginning to emerge in a notable way.
- 3. Cross-chain messaging applications are in the process of being built and will transform how users communicate in decentralized environments.
- 4. After the Merge occurs, potentially during the week of September 19th, roughly 50% of base-level Ethereum primitives will be complete. Important future milestones like sharding, data availability enhancements, and other data management changes will eventually increase network throughput to 100k transactions per second and lower gas fees (see 'Future Protocol Roadmap' below).

DEEP DIVE:

On-Chain Identity

- "Soulbound" tokens, a.k.a. non-transferrable tokens, create an opportunity for tokenized identity and reputation to
 emerge as a base-layer primitive. It will provide users a way to port information across web3 protocols and separate
 public and private aspects of their identity.
- Civic is implementing identity solutions for any decentralized application use case, and LENS Protocol is taking a social approach, allowing users to own their web3 social media presence and data. Eventually, user data will be accessible across all layers of the network. They will be "borrowed" by applications but still owned by the user, in stark contrast to the present-day web2 model.

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Scalability and Layer 2

- Optimism made the case that the community can fix existing account limitations on the network by using Layer 2. There is a realization that scaling the experience for the next billion users will be required since crypto self-custody is complex, error-prone, and cumbersome. A signature key and account access are one and the same; if a user loses the key, they can lose access forever. Instead, on-chain accounts will take the form of deployable smart contracts on L2 that define a valid transaction and compute the account address via a smart contract, separate from the account signature(s). They will also be recoverable.
- There is a chicken or the egg problem where decentralized applications may be hesitant to launch on Layer 2 since the bulk of liquidity and users remain on Ethereum's Layer 1 execution layer. DAOs, for example, while reluctant to migrate to L2s, would benefit from the move if they have aggressive on-chain treasury management activities that require more on-chain interactions. However, progress is being made, the tides are shifting, and the stage is set for a richer L2 ecosystem. Users are migrating to Layer 2 from a diverse set of environments like centralized exchanges, other L1s and rollups.

Cross-Chain Messaging

WalletConnect created basic chat functionality for crypto wallets via an API. Users can chat and connect with users of enabled wallets, regardless of application, using a simple web3 ETH address (ENS name). Familiar features like the ability to add contacts and encrypted messaging are incorporated. A secondary key keeps wallet keys safe and user information private. We believe this type of basic, yet critical application for the new internet is a necessity and is one of many base cases that will be needed to build out other more complex applications over time.

Decentralized Infrastructure

A decentralized staking solution, SSV Network, provides a one-click infrastructure layer of nodes that can be customized and distributed in different regions and data centers where no single operator holds an entire key. Running a node will become more accessible, freeing node owners from having to worry about uptime and slashing penalties, as well as stolen keys which can now be kept in cold storage. The network will make Ethereum more resilient, focusing on diversification of node infrastructure, software clients and server hardware. The solution is in the process of being tested and is close to going live.

User Interface and Design

Overall, there was a recognition and emphasis on the buildout of friendlier user interfaces, a higher-level abstraction, Layer 3, to create a seamless user experience, like what users are used to with accessible web2 interfaces, but with the benefits of interacting with a decentralized network instead of servers. The emergence of familiar applications built for mass consumer adoption is coming.

Future Protocol Roadmap (Merge, Sharding, etc.)

- The Merge will usher in a new regime of how Ethereum nodes arrive at consensus and process transactions, shifting from a hardware-based mechanism to a software-centric model. After the Merge, scheduled to happen as early as the week of September 19th, developers will implement sharding over a series of phases. It will partition the network into several pieces, splitting the work to process and broadcast transactions amongst nodes, lowering gas fees and congestion.
- Vitalik Buterin, co-founder of Ethereum, gave a talk on a roadmap for the future of Ethereum. He added that the protocol will be 50% complete after the Merge. He noted that Ethereum is in a state of constant iteration and that current builders and users of the network will have to take short-term pain for long-term gain. He said he believes that the pace of change will eventually slow. Still, future releases relating to data availability, node size, and storage optimization will be critical to increasing throughput to 100k transactions per second and reducing network congestion. Eventually, Ethereum will be efficient enough to be staked on a mobile phone. The update fits with our ETH thesis, and while it may take a few years for the protocol to achieve a steadier, mature state, we continue to be bullish on the progress we have been seeing.



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