What is CyberConnect?

CyberConnect is a web3 social network that enables developers to create social applications empowering users to own their digital identity, content, connections, and interactions.

It creates long-lasting on-chain connections through the power of its network. Developers can build innovative social applications where users own their identities and data, while creators can grow their audiences in a fairer, more direct, and decentralized environment.

CyberConnect V3

CyberConnect V3 is a set of powerful upgrades to the CyberConnect social network protocol to usher web3 social into a new, multi-chain future. It will power the next stage of hyper scalability for web3 social dApps and give users a social networking experience that feels familiar to web2.



V3 has three core components: CyberAccount, an **ERC-4337**-compatible identity infrastructure; CyberGraph, a censorship-resistant database to record users' content + social connections; and CyberNetwork, a gas-efficient and scalable network to bring CyberConnect to the world. Over the course of the next two months, it will be deployed on six EVM networks.

Deploy your CyberAccount today 🔶



CyberConnect Developer Community

The CyberConnect Protocol is built with and for developers. Join our vibrant **Discord community** where you will find channels dedicated to developers and hackathon events.

Stay updated by subscribing to our **newsletter (@ the bottom of page)**, reading our Mirror posts and dev focused <u>Hashnode blogs</u>, and following us on <u>Twitter</u>. Let's CyberConnect!

Why CyberConnect?

The original purpose of web3 social is to forge a digital renaissance, returning identity, content, and social data ownership back to users.

Inspired by that purpose to decentralize social networking on the internet, our team behind **CyberConnect** has been at the frontier of innovating new web3 social primitives, empowering users to maximize the potential of their digital social identities and enabling developers to bootstrap their innovative social products.

Over the past year, building upon and expanding CyberConnect V2, we have learned several invaluable lessons to understand the challenges that lie between where we stand as an industry and truly realizing the original purpose, bringing web3 social to a billion+ users globally.

We are excited to share the breakthroughs our team has made to pave the way for web3 social into its next stage of hyper scalability and a social networking experience that feels familiar. We are honored to present to you CyberConnect V3 - a set of powerful upgrades to the CyberConnect social network protocol to usher web3 social into a new, multi-chain future.

Our Journey So Far

CyberConnect harnesses blockchain technology to empower users with ownership of their identity, content, and social data. In doing so, we enable both users and developers to experience a range of exciting new social networking primitives that are interoperable, censorship-resistant, and decentralized.

When we introduced CyberConnect V2 in August last year, we incorporated a fundamental upgrade to the original CyberConnect social network protocol that deployed a hybrid (EVM + <u>Arweave</u>) scaling architecture for web3 social applications. This scaling solution enabled dApps in the CyberConnect ecosystem to attract over 1.6M profile sign-ups and enable new content tokenization primitives on networks beyond **<u>Ethereum</u>** Mainnet, like **<u>BNB</u>** Chain and Polygon. By utilizing this hybrid solution, dApps could store users' high unit value social data like profile, content, and collects on-chain while utilizing decentralized storage systems like Arweave for the rest. This crucial design implementation enables web3 social dApps to support various use cases without being restricted by limited blockspace.

Over the last 11 months, these upgrades helped engage over 1.3M unique wallets to execute 14.7M on-chain transactions on the CyberConnect protocol. In addition to 2.5M follow actions, 5.8M likes, and over 10.5M NFTs minted, more than 1.6M unique content was created across our rich ecosystem of social dApps, including Link3, <u>Phaver</u>, <u>ReadOn</u>, etc. Thanks to our dedicated community of users and developers, their engagement in the past few months has propelled CyberConnect as a top 10 contender on **DappRadar** across all networks and categories.

CyberConnect V2 also set the stage for soulbound tokens in web3 with W3ST (web3 status token, pronounced as west), enabling over 2,400 organizations, including CoinMarketCap, PoolTogether, Maverick, etc., to recognize and reward their most engaged and loyal supporters as proof of participation in those communities.

Inside a Resilient Web3 Social Network

Since we're building in public, our challenges have been visible far and wide. This has also helped us learn in public

and iterate the CyberConnect protocol in real time to meet the demands of web3 social users and developers.

Even though CyberConnect V2 has been deployed on the Ethereum Mainnet, BNB Chain, and Polygon, it is simply not feasible to operate on multiple chains simultaneously due to the risk of fragmenting user identity. On top of this, it's still remarkably complex to switch between blockchain networks as a user. Not to forget, even if they somehow tread along and become a seasoned web3 user, they need to acquire native tokens through a fiat onramp, CEX, or a bridge for every particular blockchain!

With these challenges top of mind, we returned to the drawing board and re-engaged with the first principles of decentralized social network protocols.

A resilient web3 social network protocol:

1. upholds a user's holistic identity;

2. is multi-chain;

abstracts away the complexities of network switching; and

4. is scalable.

Current Challenges

The primary challenge in introducing CyberConnect to multiple chains is to decouple different functions of a "user identity" to uphold a holistic identity.

The word 'Identity' is often overused but widely misunderstood. At first glance, it is a unique identifier that differentiates one person from another. However, in the added context of social networks, identity serves two crucial functions: authentication and authorization. Much like a username/email and password in web2 help validate a user and their ownership of an account, a web3 identity relies on a private key/seed phrase and cryptographic signatures to do the same. Furthermore, a social identity is like a database of a user's social journey and constitutes important social events/actions like the content they create and engage with. In web3, Identity also needs to have a unique human readable identifier (abhi.cyber or abhir.eth) tied to it. Finally, users' public information, like display name, bio, and avatars, is part of that same identity. While these are all distinct components of a web3 identity, they all have very different functionalities and properties.

CyberConnect V2 coupled them in an all-encompassing non-transferable 'CyberProfile.' Even though CyberProfile holders could change their public information like bio and avatar attached to their profile, they could not change their authentication method (EOA wallet) or username/handles after acquiring their identity.

But, much like updating your username, email, or phone number in web2, users in web3 must be able to change their authentication identity to enhance security or if their original credentials are compromised. Not only this, users must also have the flexibility to change or trade premium usernames without losing the rich history of their social journey.

Unfortunately, this is a much harder challenge to overcome. Then, if you add another difficulty of expanding a modular identity infrastructure to multiple blockchain networks, the complexity of this challenge escalates exponentially.

Fortunately, we've found a solution.

Web3 Social's Multi-Chain Future

CyberConnect V3 consists of a set of powerful upgrades to the CyberConnect social network to usher web3 social into a new, multi-chain future. This upgrade will power the next stage of hyper scalability for web3 social dApps and give users a social networking experience that feels familiar to web2.

V3 has three core components: CyberAccount, an **ERC-4337**-compatible identity infrastructure; CyberGraph, a censorship-resistant database to record users' content + social connections; and CyberNetwork, a gas-efficient and scalable network to bring CyberConnect to the world.

Why Decentralized Social?

Why does the world need a decentralized social graph?

1. Censorship



Centralized control of our social data means that a few large companies have complete control over what social opinions, ideas, and content get propagated. This censorship comes in different flavors; politically driven suspensions by platforms, nation-state pressured

censoring, or unsolicited/unexplained censorships (ex. shadow banning).

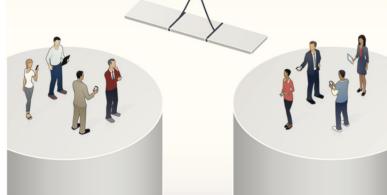
2. Lost Creator Value



Social media content produces so much value for the world, yet in Web 2.0 content creators only capture a sliver of that value.

3. Data is siloed and redundant





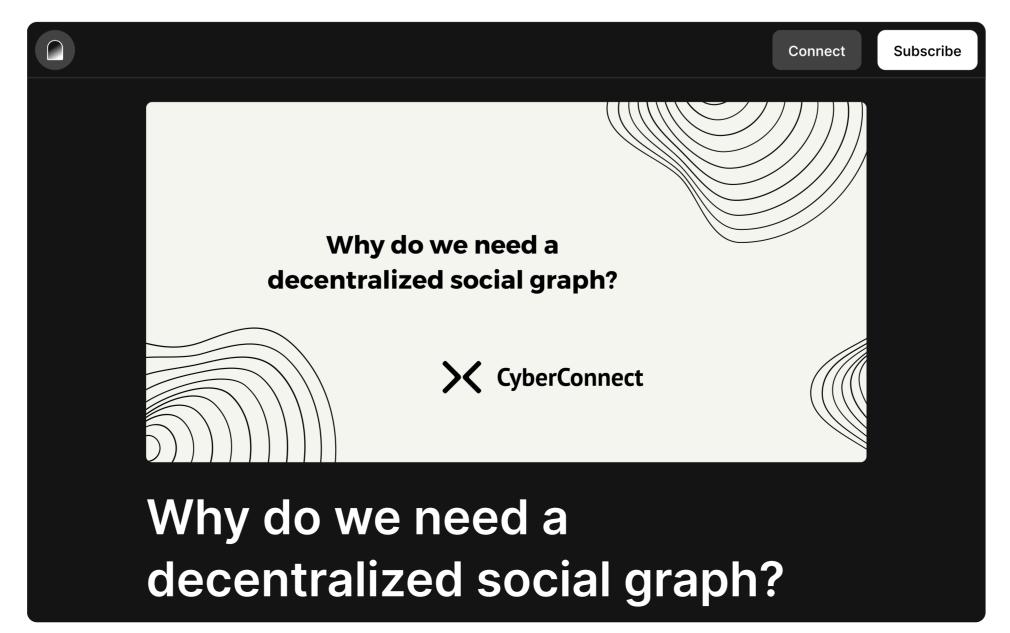
In the centralized structure of Web 2.0, our social data/graphs are "walled gardens". Moving your data between systems is incredibly difficult and usually not possible. This creates a high switching costs; it adds friction for users and wastes time as users repeatedly build and declare connections whenever onboarding a new application.

4. Stifled Innovation

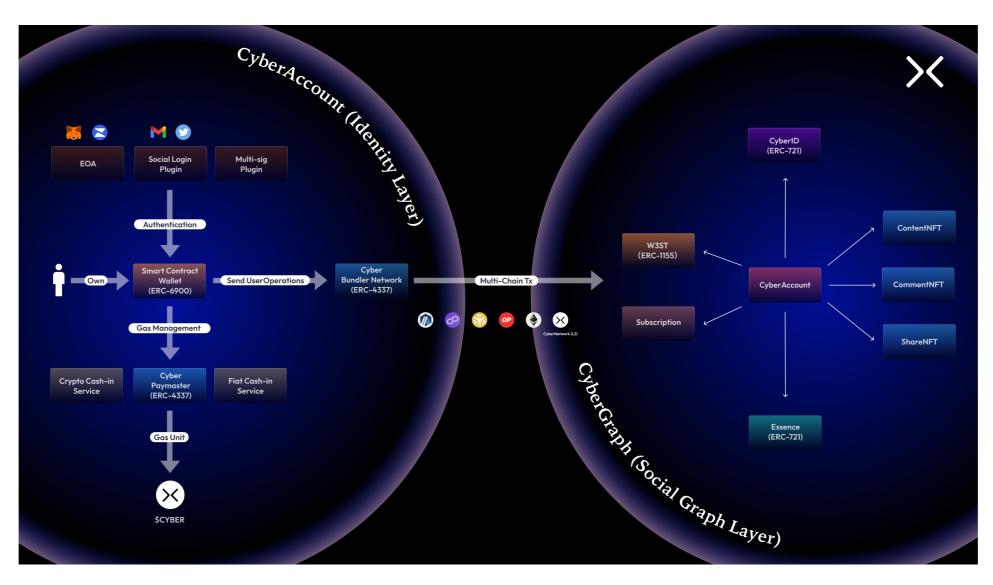


Siloed data also means reduced innovation. With only a few players having access to all our data, independent developers are unable to explore that data and build useful products on top of it. If someone has an idea for a better Instagram frontend, or a better feed algorithm, they don't have the ability to leverage all the data that's been generated by users to build out their idea; even with consent from those users. Discord is an example of a Web2 that is slightly opening up this with their developer SDK for bots, but it's still limited and only exposes what the company decides it wants to share

Read more about why we think the world needs a decentralized social graph in our blog post:



Core Concepts



CyberAccount

With CyberConnect V3, CyberAccount is introduced to help users onboard to multi-chain Web3 social experiences leveraging ERC-4337 Account Abstraction. Users could pay gas on any network with CYBER on one network. Track CyberAccount stats here.

CyberGraph

CyberGraph is a censorship-resistant smart contract to record users' content and social connections, with built-in monetization tools. It is a set of smart contracts that links user identities (CyberAcconts) to their content and social connections and enables the recording of that rich social data onto multiple EVM-compatible blockchains. Through CyberGraph's unique, customizable middleware design, storing users' high-unit value social data on blockchain databases unlocks several novel social networking and community-building primitives, including monetization through tokenization.

CyberID

Much like your username on Instagram or Twitter, CyberID is an ERC-721 token that represents a unique handle for your account in the CyberConnect social network. Previously registered CyberProfiles in CyberConnect V2 will be able to upgrade to CyberIDs soon. Track CyberConnect V2 stats here.

W3ST(Web3StatusToken)

W3ST is a non-transferrable NFT with an on-chain issuer reference that acts as a digitally verifiable indicator of a user's status in their community. It is a powerful instrument for users to find their tribe in Web3. Organizations use W3ST to recognize their most engaged and loyal supporters and build a digitally verifiable, immutable, and contextually meaningful contribution-based value system in their communities.

Introducing CYBER, The Governance Token

Governance

CYBER token holders have voting power and can delegate their voting power to others. Protocol improvements are decided based on voting power.

Payment for CyberID

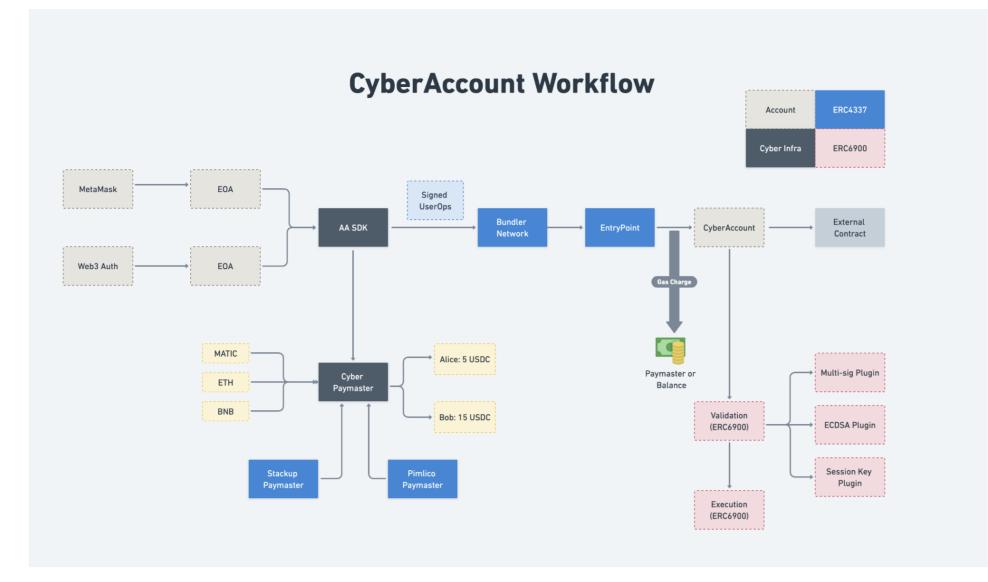
CYBER could be used for payment when purchasing CyberID.

CyberAccount gas token

CYBER could be used as the price meter and means of payment for gas fees for all transactions within CyberAccount across EVM-compatible chains. More CYBER use cases shall be introduced by CyberDAO in the future.

CyberAccount

CyberAccount is a suite of smart contracts that collectively represent a user's self-sovereign digital identity, linking it to their content and social connections. This web3 account infrastructure comprises 4 key components, each with a different purpose:



1. Authentication & Authorization

CyberAccount is commissioned with defining the workflow for user authentication and authorization on the CyberConnect protocol.

Each CyberAccount is controlled and managed by one or more cryptographic key pairs, thus enabling a clear distinction between a user's account and their web3 wallet. Through our collaboration with **ZeroDev**, we incorporated this crucial design implementation that sets the stage to power several powerful primitives. This includes social recovery for cases of identity/private key loss as well as email, social, or phone login options for a seamless and familiar onboarding experience devoid of the need for seed phrase management.

Our team at CyberConnect is passionately committed to empowering users' rights to privacy. We will therefore introduce an additional upgrade to CyberAccount in the coming months utilizing zero-knowledge proofs and privacy computing technology.

2. ERC-4337 Compatible

CyberAccount is ERC-4337 compatible, meaning it abstracts away the complexities of network switching and gas payments for end users. We worked closely with **StackUp** & **Pimlico** to deploy an in-house bundler and paymaster solution, allowing us to improve the clunky user experience of web3 wallets and implement third-party-designed mechanisms to pay for users' transactions. These kinds of transactions may also be called gasless transactions, and they're crucial to level up the end-user experience. Without a bundler and paymaster, users would need to manually change networks every time they interact with a profile or content from another blockchain and acquire the blockchain's native token in their account to pay for transactions.

The paymaster allows CyberConnect protocol, the underlying network, or any given web3 dApp to pay for transactions on users' behalf, thus opening up a whole new level of possibilities for mass user onboarding and supercharge platform bootstrapping.

On CyberConnect, users will also be able to top up their gas credit from a network of their choice and use that credit on any other chain CyberAccount is deployed on, truly taking web3 social multi-chain.

And yes, **<u>\$CYBER</u>** will eventually be used as the gas token across the protocol.

3. CyberID

Much like your username on Instagram or Twitter, CyberID is an ERC-721 token that represents a unique handle for your account in the CyberConnect social network.

Unlike most ERC-721 tokens, registering/minting a CyberID does not imply perpetual ownership. CyberID functions upon a demand-based recurring fees model. If you forget to extend the registration of your handle, it is released to an auction process.

During the growth phase of the CyberConnect social network, a portion of the CyberID registration fees will be refunded to the CyberAccount as \$CYBER token in the form of gas credit.

4. Organization Account

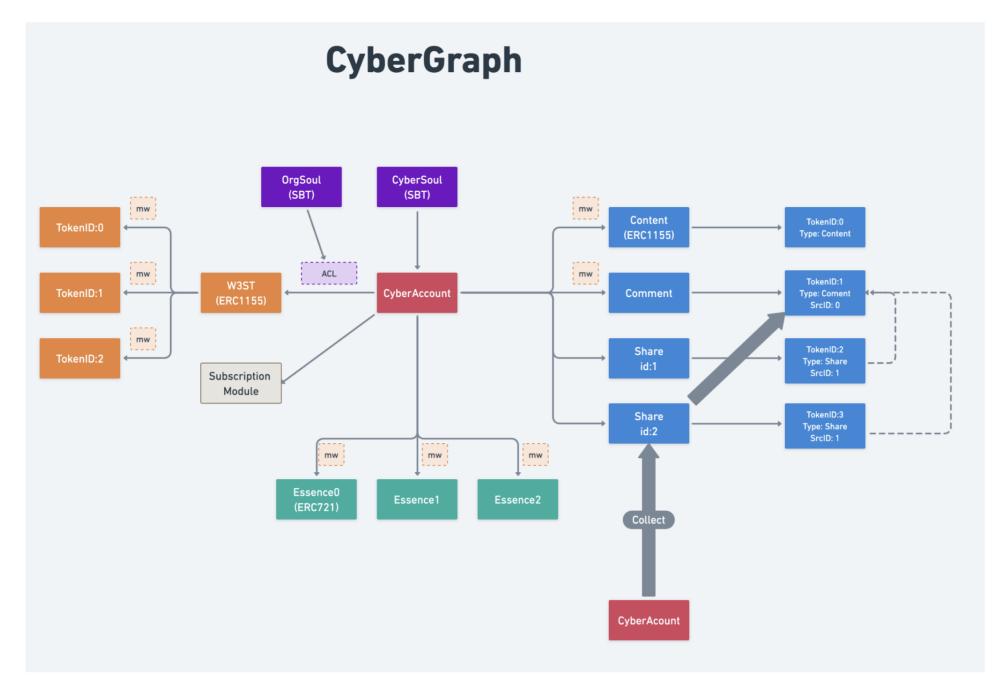
Web3 social is not just for individual users. It's also for teams, organizations, and brands to connect with their audiences and build meaningful, contribution-based communities. Link3, a web3 social network to build and discover new communities, is the biggest dApp within CyberConnect by user activity. It is loved by web3-native teams across blockchain networks for their community management needs. To push the potential of CyberAccount one step further, we've designed a powerful new way for organizations to embark on their web3 social journey. The organization account is a special kind of CyberAccount that provides advanced account management features such as multi-sig and customizable access control rules.

Additionally, the CyberConnect social network protocol provides a robust verification infrastructure that allows any third party to verify external accounts (e.g. Twitter, Discord) associated with the org account.

CyberGraph

In web2, social graphs represent the connections between users, their content, and interests. They are a key data set social network platforms use to capture attention and increase user engagement. However, social graphs have recently become more of a limitation for users and developers due to their rampant centralization by big tech. To offer an alternative, we're introducing CyberGraph, a decentralized, censorship-resistant, and user-owned alternative to power the next generation of social networking platforms on the internet.

CyberGraph is a set of smart contracts that links user identities (CyberAcconts) to their content and social connections and enables the recording of that rich social data onto multiple EVM-compatible blockchains. Through CyberGraph's unique, customizable middleware design, storing users' high-unit value social data on blockchain databases unlocks several novel social networking and community-building primitives, including monetization through tokenization.



Content

Every user with a CyberAccount is already equipped with creator capabilities and can publish monetizable content. When a piece of content like a post, image, or video is first created on a dApp on the CyberConnect protocol, it is uploaded to a decentralized storage system like IPFS or Arweave, following which a link between the URL of the content and the creator's account is recorded on the CyberGraph smart contract. This decentralized account-to-content linking is foundational in guaranteeing true user ownership and removing centralized control from any one platform. It is a critical step in facilitating online communication on the open web to prevent a corrupted/disincentivized platform from monopolizing and manipulating content distribution.

CyberGraph also sets the stage for the next stage of growth for the creator economy, empowering artists and creators to offer new experiences to their fans/audience by making their content collectible. Each collect signals a fan's support of a specific piece of content or creator with a permanent record on the blockchain. Creators can use this engagement information to identify their earliest or their most engaged supporters and tailor their rewards or growth campaigns accordingly.

Additionally, every time a user comments on a piece of content on the CyberConnect social network, a link to the original content is established on the smart contract, ensuring content sovereignty and provenance. Users can also amplify the original content by sharing posts, images, videos, etc., much like in web2.

W3ST

One of the most community-loved features of CyberConnect V2 is W3ST (Web3 Status Token, pronounced as West). It is a non-transferrable NFT with on-chain issuer reference that acts as a digitally verifiable indicator of a user's status in their community. It is a powerful instrument for users to find their tribe in web3. Organizations use W3ST to recognize their most engaged and loyal supporters and therefore build a digitally verifiable, immutable, and contextually meaningful contribution-based value system in their communities. W3ST is also instrumental in growing communities because it helps identify potential members with similar interests, affiliations, and past experiences.

We are thrilled to share that W3ST is now more gas efficient and even more discoverable. Instead of every W3ST as its unique ERC-721 contract, organizations will now utilize a singular ERC-1155 smart contract to save gas and empower their members with better discoverability on NFT platforms.

Subscription

Connections are the fabric that weaves online social networks; creators should be able to monetize the relationships and friendships they've garnered from their content and social capital. On CyberConnect protocol, subscriptions are designed to enable self-sovereign monetization of creators' communities.

In V3, users must set up their subscription logic with a predefined monthly fee to enable subscriptions. When your audience subscribes to you, they would need to prepay at least one month of subscription fee. With Subscription, creators can easily monetize their exclusive pay-to-reveal content.

Middleware

CyberGraph follows a middleware architecture to create more design space for customized logic. Middlewares are plug-and-play custom execution logic codes that run before and after an action trigger to extend the default behaviors in social networks.

CyberConnect provides a repository of middleware for developers to use by generalizing common computational patterns. For example, imagine that dApp *A* wants to build a social network for **Bored Ape Yacht Club** by setting the condition that only BAYC holders can mint their app-specific ContentNFT, and dApp *B* wants to do the same thing for RTFKT's **CloneX** holders. The underlying pattern here is the same; the only difference is the gated ERC-721 contract address.

We invite the developer community to contribute to this repository and help us build a wide range of reusable middleware together. Dapp developers can pick and choose the relevant ones to plug into their dApp easily.

CyberNetwork

Blockchains were designed for a decentralized, transparent, secure, and immutable system for recording and verifying information. However, actually storing data on existing blockchains is expensive. So, even though representing social data on the blockchain is good for programmability and interoperability, high gas costs are an incredibly challenging bottleneck for scaling web3 social networks to a billion users. In the last 11 months, over \$2M in gas fees was paid by 1.3M users on CyberConnect V2 alone. Users need a better alternative that is dramatically scalable without compromising their data ownership.

In the coming months, we will introduce additional upgrades to the CyberConnect social network to make all social interactions/transactions much cheaper.

Deployed contracts

Deployment Addresses

The following are deployed smart contracts addresses for CyberConnect V3 protocol.

() INFO

We are still undergoing the final stages of audits but the ABIs/source code will be available in August.

Mainnet

Polygon Linea	
Contract	Address
Soul	0x14a725839184f879f3c09ce3d707e5a3e4c5869d
MiddlewareManager	0x72c837fe8ba6c7fd69cef66b6e85c0d7eabf1f9b
Deployer	0x22d4843df1836f12b02b69ca6ad90575bbc03897
SubscribeDeployer	0x1f74f30a7f62cd97f58ceb1f93e6bb253d096991
CyberEngineImpl	0xea782d8c5afd404ac74f048ef34273217f7f6fc8
CyberEngine	0x4bc54260ec3617b3f73fdb1fa22417ed109f372c
Essence	0x189a56caa3e2d2eb034d1ddc102f4f6bf822b811
Content	0xa1358d699dbbe6438f488d4cc8480eeddc7528d0
W3ST	0x5728b1f3702a982205dbaef4594d4a3760854db0
Subscribe	0x72e1209a6cf91399066b1145548347ffa85282b7
Treasury	0xf6ec6dfef73d6623f24cd9ff888e76725da32773
PermissionMw	0x414cb5822ca5141aedaea9d64a12f511071f7613
ECDSAValidator	0x417f5a41305ddc99d18b5e176521b468b2a31b86
CyberAccount Factory	0xaee9762ce625e0a8f7b184670fb57c37bfe1d0f1
TokenReceiver	0xcd97405fb58e94954e825e46db192b916a45d412
Timelock	0xcd78e2ab0f5363a5c3835c0423fa4055bacf91d6

Testnet

BNB Testnet Lir	nea Testnet
Contract	Address
Soul	0x04ad9332fe13c61ef9c58cd8a7fff77230dd6e77
MiddlewareManager	0x2e0fa762fb63a2df1ed76f20e776e291f777fa6f
Deployer	0x319fd4bb842e7bc0c8060733036a02042964ba85
SubscribeDeployer	0xdbdbd54c27b4f3e86b47538bf6172f485c4b96b8
CyberEngineImpl	0xb2dbc2e7e189913084f19cb6b1efe0d446df4cbe
CyberEngine	0x72ca12e2aae0c1c12d9796d9974a5f1204cf51f3
Essence	0x993b5ea6f4b9a356b6165f87dfbe42a163b65f09
Content	0x42809bb1f615ca7ce847a78d71d35f20d6dbe799
W3ST	0x97b250cb4778b105e4a00d5841e06bcd6aa0703f
Subscribe	0xd3d97776d651fe30897eeb6c956427b999b6cb26
Treasury	0x8dbe34d06f02ee20be036c87867c03e40aa39d41
PermissionMw	0x17477f95b791627846c397fa2a890883f2922882
ECDSAValidator	0x1a062d6105612570e86cba4ed43da69371ea4755
CyberAccount Factory	0x70efb7410922159dd482cd848fb4a7e8c266f95c
TokenReceiver	0x52b90f8e69ac72fe0f46726eadda13835cbb01fa

FAQs

Roadmap

CyberConnect V3 will be available for use in the coming days, beginning with Link3.

In the coming weeks, we will officially roll out the upgraded CyberConnect social network to multiple L1 and L2 blockchain networks through an exclusive launch campaign with Link3 called, **CyberVoyage**. We invite web3 teams across ecosystems to join us. More details will be shared soon.

Collect this post and unlock limited-edition early supporter benefits to commemorate this monumental upgrade to CyberConnect and usher web3 social to its new, multi-chain future. More details about the benefits will be announced next week, along with more information on CyberVoyage.

Additional developer toolkits with an updated indexer and API server will be made available in August.