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Synchain whitepaper

Your blockchain Powered Cryptocurrency Platform



SYNCHAIN

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SYNCHAIN OBJECTIVES

Amid the previous months and years, the energy towards cryptocurrencies and called Blockchain technologies (from the "Block chain" information structure presented in bitcoin as the first principal successful attempt to solve the double-spending problem in an open, decentralized network) has developed and has achieve new statures. New plans of action and applications are by and large continuously proposed by both startups, consortia and enterprises. A large number of the proposed utilize cases for this Technologies, past the straightforward and evident utilizations of permissionless payments and store of value, are indicating extreme restrictions, real downsides, guileless desires, misty objectives. one specific class of utilizations, however, is unmistakably setting up itself as a reasonable market drift, the utilization of blockchain Technologies for the motivation behind issuing, transmitting, putting away and trade custom digital assests, or "token". The general case for digital assests is very self-evident, while the advantages of blockchain Technologies for their administration is a perplexing point, including profound and not trivial exchange off investigation about highlights like security, ease of utilization, control protection, efficiency, security, auditability, permissionless development and rising institutionalization. The streamlining of these exchange off is a driven and troublesome issue, including disciplines as connected cryptography, amusement hypothesis, circulated framework engineering, open source development, client encounter investigation, security-situated gadgets and more. so far endeavors to bring the standard client items that could be utilized as a part of a way that adjusts all the choices and boosts the favorable circumstances and limits the agonies have been couple of, inadequate, underfinanced and unsatisfying.

The synchain project is streamlining the association between clients and blockchain-based assests, without scarifying the primary preferences that this technology can bring. Its output will be a set of products and services giving another natural, simple, reliable and safe client experience, focused around a basic and secure approach to store, purchase, offer, exchange and trade blockchain-based digital assets, including all the major cryptocurrencies and

Token, and in addition purchase or sell any products paying in cryptocurrencies however without depending on any central authority.

The synchain wallet, decentralize HYBRID EXCHANGE and a decentralize End-to-end encrypted, distributed Cloud storage will be the focus in the entire project. It will be natively multi-asset and designed for the mobile world: a single incorporated environment that will be utilized to deal with all tokens intuitively, without the requirement for complex setups, yet at the same time utilizing the best security standards and best practices. Innovative services to exchange cryptocurrencies and tokens will be specifically implanted in the stage.

This incorporated exchange system will never require the transfer of the assets to any centralized custodian third party that could cause financial losses due to bugs, hacks or exit scams. The will always be in full control of his funds. The synchain Wallet will also include a fully decentralized blockchain-based marketplace.

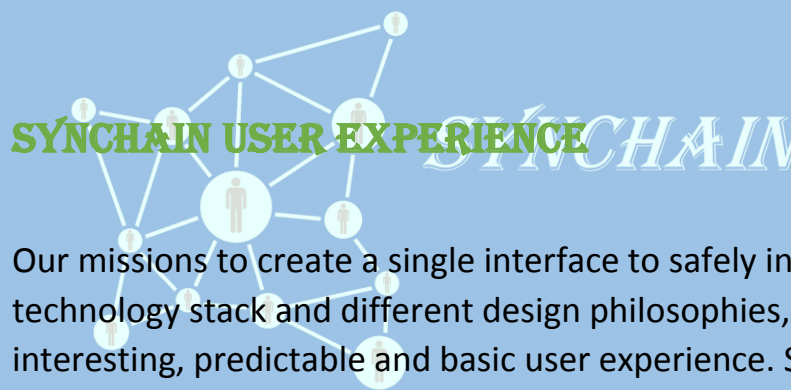
Around these decentralized tools, extra administrations will be made to encourage the utilization of cryptocurrencies, such as the ability to recharge your Synchain debit card directly from the wallet without leaving the application. Synchain will likewise offer Computerized Personality arrangements, utilizing plans, for example, the web of trust for pseudonymous sovereign ways of life and additionally incorporating digital identity cards.

Synchain will be esteem included integrator that unites the demonstrated technologies and established services that already exist, alongside others that as of now must be envisioned. The reason for synchain isn't simply to do things that others don't, yet to reevaluate of things officially proficient through more secure and less difficult strategies, maintaining the attention on the client's experience and offering him the flexibility to choose, while rendering the many-sided quality of the "crypto world" simpler to oversee. We want to build a bridge towards worlds that at today are still far apart. Our consideration is centered around offering to clients a complete product, allowing them to manage complexity intuitively and safely.

The driven test of this project is also to give a common home and common goals to tech communities defending very different visions, prompting a solid rivalry of methodologies, systems, plan rationalities. exchange offs in blockchains space are troublesome and complex: a simple "compromise" is often just a way to get the

worst of the two worlds, while the best decision is at times to broaden the ways, to get a similar last destination, under the same worldwide client encounter. This is also a risk management strategy: investing in a project that is not relying on a single paradigm, allows us to mitigate the exposure to technological risks, very high in an innovative industry full of financial and security implications. In a dynamic world, no good solutions stay that way if it doesn't evolve: as a methodological approach, synchain will continue to improve technological efficiency, security and user experience.

In a not shell, our primary objectives are to create a blockchain Powered Cryptocurrency Platform for the new economy services company that makes the cryptocurrency market accessible and trustworthy to the average user, accelerating adoption of blockchain technology and democratizing ownership of both digital and traditional assets.

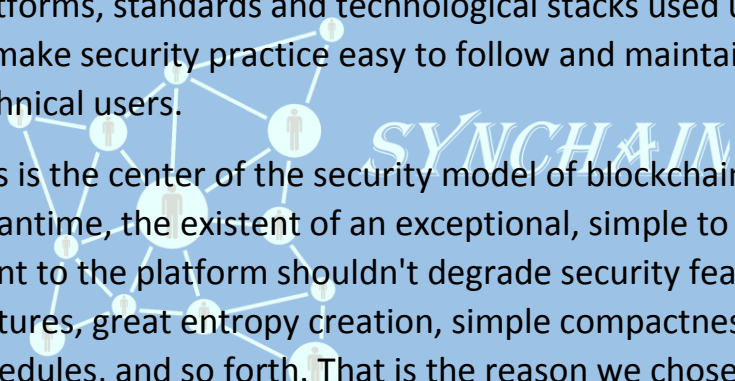


Our missions to create a single interface to safely interact with different technology stack and different design philosophies, continually giving an interesting, predictable and basic user experience. Synchain team include vertical expert in this field, working in conjunction with the technology designers to accomplish this mission. The present arrangements are frequently isolated between two inverse extremes: on one hand, strong and secured and secured tool that are conceived and designed "for geeks only", without much push to give any effectiveness of utilization; then again, straightforward "glossy" and good-looking products that can mislead the user, encourage or even force unsafe practices and put his financial asset at risk. it's very regular for blockchain-related project to make utilization of terms and ideas without stressing over their full understanding. while a portion of the exchange offs are intrinsically difficult to get away, we trust that technological state-of-art and security best practices should benefit all users, not just "specialists", because the regularly unreliable employments of technology could contrarily influence every other person, and user's mindfulness is expected to make a trusted association with the tools he manages.

We trust that it's occasionally important to acknowledge the intrinsic complexity of designing the tools of the future. rearranging what is mind boggling is frequently only a hallucination. We take a stab at our work to help standard selection of these technologies, yet advancing a mindful, maintainable and watchful utilization of them dealing with the security of digital assets in the context of decentralized system has different implications in respect to the traditional world of finance. it requires more consideration, practice, and mindfulness from users.

The ability to "be our own bank" accompanies incredible obligations. security, straightforwardness, and comprehensibility are the starting points for which we want to design our user-centric solutions.

A solitary security passphrase, independent from the specific type of blockchain platforms, standards and technological stacks used under the hood, is important to make security practice easy to follow and maintain, even for not strictly technical users.




This is the center of the security model of blockchain technologies. In the meantime, the existent of an exceptional, simple to ensure get to protect access point to the platform shouldn't degrade security features as modular privacy features, great entropy creation, simple compactness, safe reinforcement schedules, and so forth. That is the reason we chose to utilize the "Progressive Deterministic Wallet" way to deal with make our application safe, enabling users to have considerably more control over their assets as well as easy processes to adopt. with it, user can secure all their multi-asset accounts and addresses, as well as their signing keys, with a single secret phrase, conveniently encoded in twelve common words. Perceiving and regarding private property of individuals likewise implies, according to us, to empower them with the ability to organize it in the way they believe is best. That's why we provide a special tool that, without the need for central servers, allows our user to retrieve and recovery blockchain assets wherever necessary. The Synchain recovery tool is designed to provide user with full availability of their tokens in a simple way, if needed in emergency scenarios as well.

Individuals tend to evaluate the quality of a service based on their past experience, and this likewise applies to the trading of digital assets. The exchange

history of a wallet for digital assets should be always easy to read and navigate, consistent, detailed, intuitively organized. We designed a solution that optionally allows to outsource from the local app to the servers much of the complexity needed to process and organize the information stored on blockchain systems, without sacrificing privacy and security. New sort of custom tokens will be consequently distinguished by the wallet and made accessible for use, with a simple and secured Naming system, design to avoid phishing attempts and frauds. optimal management of identities, reputation and addresses is another crucial part of a well-designed user experience. The synchain wallet will center around this conjugating security best practices with effectiveness of utilization.

The Synchain platform is designed to offer specific solutions for the New Economy: An intuitive, self-custodial universal wallet, build in exchange and cloud storage that allows you to safely store, manage, leverage and further monetize your Blockchain assets in one place while maintaining complete control of your private keys, A social trust ecosystem for choosing, sharing and navigating the ever-growing array of cryptocurrencies that unifies all of your financial assets to apply powerful investment models and structures to build your financial knowledge and wealth.



A social gamification displays that boosts swarm knowledge and makes taking an interest in the New Economy fun, social and fulfilling while at the same time expanding your monetary proficiency Simple and safe expansion crosswise over advanced and conventional resources. Scalable and compliant API services to empower businesses, developers and entrepreneurs to build their own powerful crypto services and product offerings.

SYNCHAIN BACKGROUND

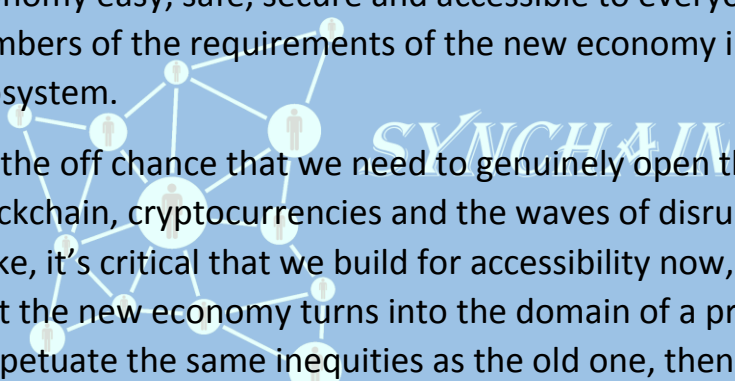
The Digital Revolution really changed the way we treat data and computation. We saw the rise of the modern internet in the Dot-com boom and more recently we've begun to experience the Internet of Things. Cryptocurrencies and blockchain technology are now making way for the "Internet of Value" and Fine

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tech companies are paving the way to a decentralized, unencumbered financial future.

synchain expects aim to make a blockchain-powered cryptocurrency services company to demystify blockchain technology and break down traditional barriers to entry by removing obstacles for consumers and businesses that have existed for decades. Synchain's Main goal is to influence the cryptocurrency market accessible and trustworthy to the average user, accelerating adoption of blockchain technology and democratizing ownership of cryptocurrencies and traditional financial assets. By enabling the normal member to effectively and securely store, buy cryptocurrency and other financial assets, and have an environment to learn and socialize with others, Synchain helps make the new economy easy, safe, secure and accessible to everyone. We want to blend huge numbers of the requirements of the new economy into a solitary, user-friendly ecosystem.



On the off chance that we need to genuinely open the transformative energy of blockchain, cryptocurrencies and the waves of disruption that will be left in their wake, it's critical that we build for accessibility now, not later. On the off chance that the new economy turns into the domain of a privileged few and continues to perpetuate the same inequities as the old one, then its vision for the future will have failed. The world is prepared for another monetary future. At Synchain, we will construct precisely what is required.

1. SYNCHAIN PLATFORM

There are hundreds, if not thousands, of various wallets out there for most of the distinctive digital assets and managing multiple wallets for each of your currencies is difficult. We are making a platform that will provide a powerful single point of interaction with the new Technology while also building a dynamic bridge to the old Technology to ensure nobody is left behind. This next generation digital wallet will be the backbone for our asset management and investment services platform. Our decentralized Universal Wallet will allow us to aggregate people

and transactions together in dynamic ways to increase liquidity and keep costs down for blockchain users. This infrastructure also allows us to create a universal mobile payment system for users who wish to transact in any currency, instantly breaking down barriers towards mass adoption in the industry. In this area we will layout the bits of the SynChain Platform that will make it the most user-friendly way of storing, buying and sharing Blockchain assets on the market.

The Synchain platform has three main components:

SYNCHAIN DECENTRALIZED UNIVERSAL WALLET

This includes a decentralized wallet management system allowing for the easy transfer of value anywhere in the world. The Synchain Universal Wallet links flawlessly with the fiat and broadening layer.

SYNCHAIN DECENTRALIZE HYBRID EXCHANGE

The coming of cryptocurrencies has seen a great push towards the decentralization of services, allowing for greater transparency and security towards the user-base, as it keeps away from a solitary purpose of disappointment and everybody can have a full bookkeeping log of what is going on.

SYNCHAIN DECENTRALIZE CLOUD STORAGE

A peer-to-peer cloud storage network implementing client-side encryption would allow users to transfer and share data without reliance on a third-party storage provider. The removal of central controls would mitigate most traditional data failures and outages, as well as significantly increase security, privacy, and data control. Peer-to-peer networks are generally unfeasible for production storage systems, as data availability is a function of popularity, rather than utility. We propose a solution in the form of a challenge-response verification system coupled with direct payments using the Synchain Token. In this way we can periodically check data integrity, and offer rewards to peers maintaining data. We further propose a model for addressing access and performance concerns with a set of independent or federated nodes.

1.1 THE SYNCHAIN DECENTRALIZED UNIVERSAL WALLET

The Synchain Decentralized Universal Wallet is a wallet management system that allows users to quickly and easily interact with their coins that is store, purchase and exchange, while tracking and monitoring diverse assets. The Universal Wallet will allow users to view, send and receive balances of any supported cryptocurrency. The wallet manager is entirely decentralized meaning that consumers have complete control over their private keys always and Synchain can't access funds without direct user authorization. All changes in balance are completely user-directed and there are no locks or limits. The objective is to make a protected and simple wallet that works using the total client self-sufficiency and control that digital currencies bear. The Synchain decentralized All-inclusive Wallet works much like a watchword vault making protected and secure key administration significantly less demanding than previously. The Synchain decentralized Universal Wallet operates much like a password vault making safe and secure key management much easier than before. The Synchain decentralized Universal Wallet offers users a variety of features not afforded by other wallets, leveraging the unique capabilities of the Synchain platform. Mobile support is a priority for Synchain so that consumers can have access to their coins wherever they go.

The same vision of an easy, secure wallet for blockchain-base smart asset, will be embodied:

A Quick, easy to use, disruptive, flexible, rich features, turn-key Ethereum implementation, based on ERC20 standard and EVM contracts, with an embedded token system to fund the development.

A safe, scalable, long-term oriented, privacy-compliant bitcoin implementation, based on the new asset protocol RGB and off-chain trusted computing, with a traditional non-profit open source funding approach.

The Synchain wallet will be able to manage generic assets on bitcoin's blockchain, in a secure and user-friendly way. We have chosen to build the decentralized wallet according to the best practices currently available in Bitcoin and Ethereum

ecosystem to exploit not only a higher level of security, as well as a more noteworthy level of interoperable and similarity with the existing solutions and services.

1.2 SYNCHAIN DECENTRALIZE HYBRID EXCHANGE

Lighting Network will be heavily exploited for the development of a Decentralized Exchange, which will empower Synchain users to exchange, in a more secure, less expensive and more private environment, A generic asset or cryptocurrency. One of the biggest and underrated problem of existing exchanges is the fact that users need to trust the counterparty, given them full control of your own blockchain asset. Counterparty risks, even when dealing with generally reliable and trusted ones, have always to be taken in consideration since casualties are always behind the door. leveraging lightning Network, we can get rid of any counterparty risk, as transactions are happening between users which are not able to cheat in any way. Another huge change is the way that user will enjoy a better privacy due to exploiting off-chain transaction, in a peer-to-peer decentralized environment.

To be totally said the fact that lightning will bring a huge improvement regarding fee costs and waiting time, two of the biggest weakness of Bitcoin and Ethereum, Thanks to a technology called off-chain transactions. Taking advantage of the mechanism, we can create a market almost free of transactions fee with a confirmation time reduced of more than 10 times.

In addition, lightening Network indirectly brings others important features improving both security, and privacy. In fact, lightening transactions are atomic by default, meaning that either the exchange of fund well or you get your money back.

There is no way for a counterparty to either steal your money or even block them for an undefined amount of time.

The decentralized universal wallet will take care of opening and managing a lightening channel with a specific asset, giving the user full control over the configuration. In the meantime, it will use the amazing course discovering

calculation which will be accountable for looking for the best cost to trade the user assets for the wanted one according to time, rate/cost and fee trade-offs.

1.3 SYNCHAIN DECENTRALIZE CLOUD STORAGE

Distributed Cloud storage has come to depend only on large storage providers acting as trusted third parties to transfer and store data. This system suffers from the inherent weaknesses of a trust-based model. Because client-side encryption is nonstandard, the traditional cloud is vulnerable to a variety of security threats, including man-in-the-middle attacks, malware, and application flaws that expose private consumer and corporate data. Moreover, because many storage devices rely on the same infrastructure, failures are correlated across files and systems.

A decentralized distributed storage network offers many advantages compared to datacenter-based cloud storage. Information security can be kept up utilizing client-side encryption, while information trustworthiness will be kept up by means of a proof of retrievability. The effect of foundation disappointments and security ruptures will be enormously diminished. An open market for data storage may drive down costs for various storage services by enabling more parties to compete using existing devices. Data on the network will be resistant to censorship, tampering, unauthorized access, and data failures. This paper describes a concrete implementation of such a network, and a set of tools for interacting with that network.

1.3.1 DECENTRALIZED CLOUD STORAGE DESIGN

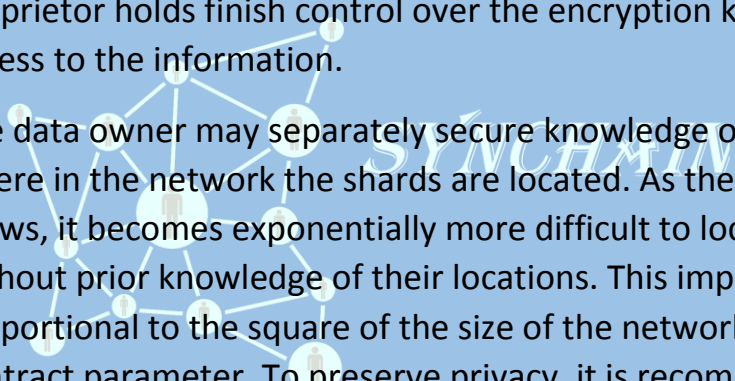
Synchain will outline a convention that makes a distributed network for the formation and execution of storage contracts between peers. The synchain protocol enables peers on the network to negotiate contracts, transfer data, verify the integrity and availability of remote data, retrieve data, and pay other nodes using the SYN Token. Each peer is an autonomous agent, capable of performing these actions without significant human interaction. Full protocol

documentation will be published one month before the Decentralized exchange is lunch.

1.3.2 FILES AS ENCRYPTED SHARDS

A shard is a segment of an encrypted file to be stored on the network. Sharding has various points of interest to security, protection, execution, and accessibility.

Files should be encrypted client-side before being sharded. The reference implementation uses AES256-CTR, but convergent encryption or any other desirable system could be implemented. This protects the content of the data from the storage provider, or farmer, housing the data. The information proprietor holds finish control over the encryption key, and in this way finished access to the information.



The data owner may separately secure knowledge of how a file is sharded and where in the network the shards are located. As the set of shards in the network grows, it becomes exponentially more difficult to locate any given shard set without prior knowledge of their locations. This implies that security of the file is proportional to the square of the size of the network. Shard size is a negotiable contract parameter. To preserve privacy, it is recommended that shard sizes be standardized as a byte multiple, such as 8 or 32 MB. Smaller files may be filled with zeroes or random data. Standardized sizes dissuade side-channel attempts to determine the content of a given shard and can mask the flow of shards through the network. Sharding large files like video content and distributing the shards across nodes reduces the impact of content delivery on any given node. Bandwidth demands are distributed more evenly across the network. In addition, the end user can take advantage of parallel transfer, like BitTorrent or other peer-to-peer networks.

Since peers for the most part depend on discrete equipment and framework, information disappointment isn't associated. This suggests making excess reflections of shards or applying an equality plot over the arrangement of shards is a to a great degree powerful strategy for securing accessibility. Accessibility is corresponding to the number of nodes storing the data.

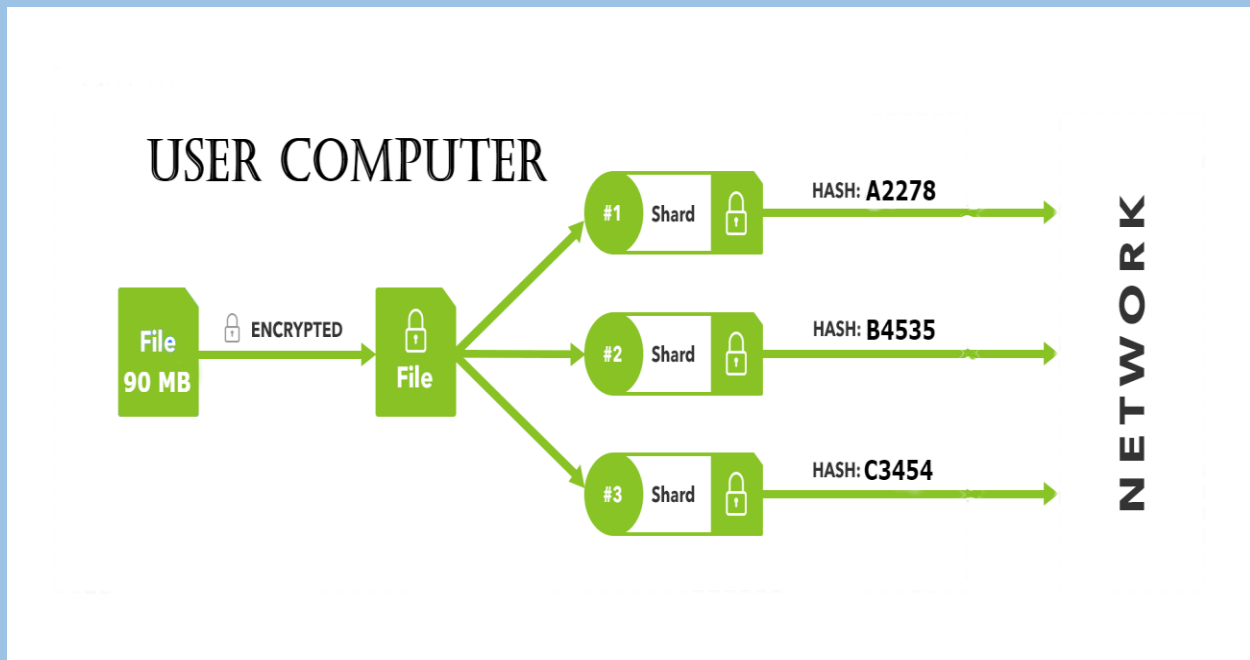
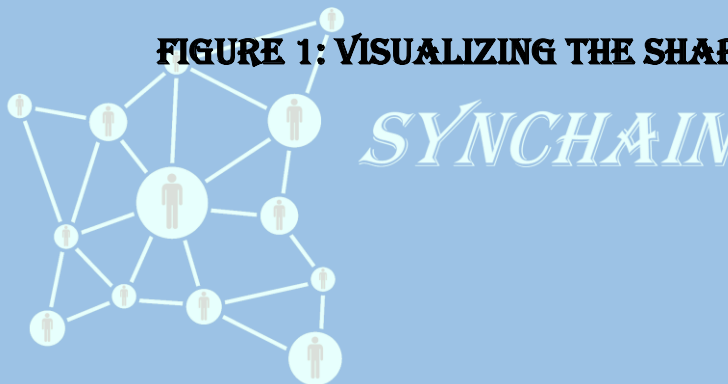


FIGURE 1: VISUALIZING THE SHARDING PROCESS



1. Files are End-to-end encrypted.
2. Encrypted files are split into shards, or multiple files are combined to form a shard.
3. Audit pre-processing is performed for each shard.
4. Shards may be transmitted to the network.

2. THE SYNCHAIN TOKEN (SYN TOKEN SYMBOL)

The Synchain Token (SYN) is essential to the function of the Synchain platform. synchain is an Utilitarian Token that will be utilized on the platform to access

various features, incentivize community building and value creation through a dynamic reward system, and pay for fees etc. It's the fuel of the synchain Blockchain community. Besides, as synchain turns out to be more fluid after some time, it will be utilized to rebalance singular portfolios. As we develop, the liquidity produced by synchain from fee conversions and synchain trading pairs will form a “liquidity network,” enabling users to shift allocations between various currencies quickly and easily and transact with each other or send value outside the platform.

In short Synchain Tokens will:

- Reduce costs for consumers for crypto-related transactions.
- Empower low-cost blockchain applications for developers.
- Make a scalable micropayment transfer mechanism for all platform services.
- Support an open financial ecosystem that bridges traditional and crypto assets.
- Enable verified source of funds and identity for transactions through the synchain ecosystem.

Be that as it may, synchain Tokens won't:

- Pay profits or benefits of any sort
- Empower holders to vote on organization matters.
- Control the organization or infer proprietorship in any capacity

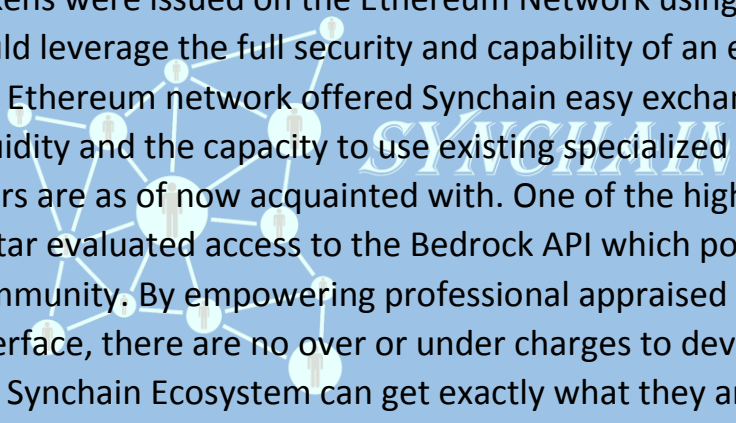
2.1 SYNCHAIN TOKEN SALE AND EARLY FUNCTIONALITY

Synchain has launched a token which started in March 2018 to distribute functional tokens to the public. Before conducting the sale, Synchain had a functioning internal alpha (Tested by selected participants) to demonstrate the viability and function of the Synchain Ecosystem before any tokens were sold.

This is vitally important because Synchain strives to run a transparent and trustworthy ecosystem that advances blockchain technology and accelerates the

creation of a healthy, open and compliant financial system. Synchain is a collaborative effort and open-source initiatives source feedback and contribution from people around the world making Synchain a movement with intent to disrupt the way that the financial system and Storage industry operates. Synchain disheartens any theory on token cost and keeps up that tokens should just be acquired for their practical utility inside the Synchain Blockchain community. For user who are looking for the financial revolution and want to participate in making it a reality they've come to the right place.

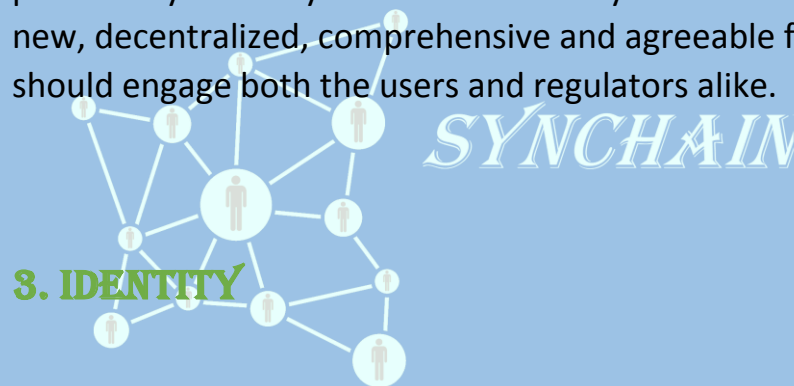
2.2 SYNCHAIN TOKEN UTILITY AND OPEN STANDARDS



Tokens were issued on the Ethereum Network using ERC20 standards so that they could leverage the full security and capability of an established blockchain. Using the Ethereum network offered Synchain easy exchange integration, upgraded liquidity and the capacity to use existing specialized foundation that numerous users are as of now acquainted with. One of the highlights of the Synchain token is star evaluated access to the Bedrock API which powers the Synchain blockchain community. By empowering professional appraised access to a Programming interface, there are no over or under charges to developers, and participants in the Synchain Ecosystem can get exactly what they are entitled to. This is like Web Services model you know of such as IBM, Amazon ETC, but even more thinly sliced to the API level, like how Ethereum uses Ether gas to power Smart Contracts with the added benefit of eliminating payment risk from the business and the consumer. This enables the Blockchain community to work substantially more proficiently essentially at the most reduced conceivable cost the environment will permit and is beneficial to both businesses and consumers. market has shown the power and potential of a computer system that can be “rented out” on a microscopic scale.

2.3 VERIFIED SOURCE OF FUNDS FOR THE BLOCKCHAIN

A noteworthy wellspring of migraines for controllers is the recognition that digital currency can be utilized for tax evasion, psychological militant financing, mediate exchanges and so forth. Even though there exists this recognition, numerous examinations have demonstrated that unlawful performers still want to utilize fiat over cryptocurrency because of the link ability and straightforwardness of the blockchain. The blockchain is frequently more straightforward than the current fiat budgetary ecosystem system and can be utilized to make a protected and clean computerized monetary environment. Synchain is building measures that will enable individuals to remain on the "light side" with crypto and control all the transformative conceivable outcomes that crypto guarantees while in the meantime keeping up the honesty of a clean financial system. This incorporates personality for all Synchain members. Synchain is a digital asset that powers a new, decentralized, comprehensive and agreeable future is something that should engage both the users and regulators alike.



During the most recent years, a ton of exertion has been put towards the subject of Digital Identity, the set of information from which a system is able to describe an external agent.

Right now, existing production-ready solutions either:

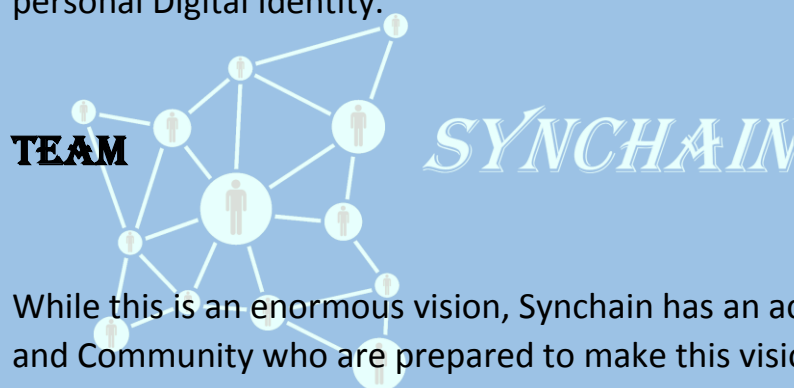
- Incorporate centralized authorities, which have a few disadvantages, for example, single purpose of disappointment, censorship prone and privacy deficient.
- Give user disagreeable experience that lead the user in settling on poor choices and trade off his security.

Therefore, we will give an answer in light of the magnificent work of numerous well-known specialist and is based on the idea of self-sovereign identity.

Self-sovereign personality is a development of the past arrangements, which does not depend on any brought together foundations and it is based on three fundamental ideas: user control, security and portability, likewise key ideas of the synchain venture.

The above idea can be additionally extended with project like smart signature and Decentralize public key infrastructures. The first is another framework planned to enhance the restricted customary cryptographic mark framework with the capacity to characterize and program condition for verification.

Instead, the latter describe an approach to fix several usability and security challenge of the old public key infrastructure, exploiting a decentralized environment. Synchain will follow the researches of Rebooting web of trust, to integrate into the wallet a working solution for the user to create his own, personal Digital Identity.



While this is an enormous vision, Synchain has an accomplished and eager Team and Community who are prepared to make this vision a reality. The Synchain Team unites a one of a kind accumulation of specialists crosswise over cryptocurrency, financial services, distributed computing, mobile technology, modern marketing and design-thinking.

SYNCHAIN ROADMAP



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