

A CRYPTOCURRENCY CLEARING SOLUTION BASED ON DISTRIBUTED LEDGER TECHNOLOGY

Non Technical Whitepaper

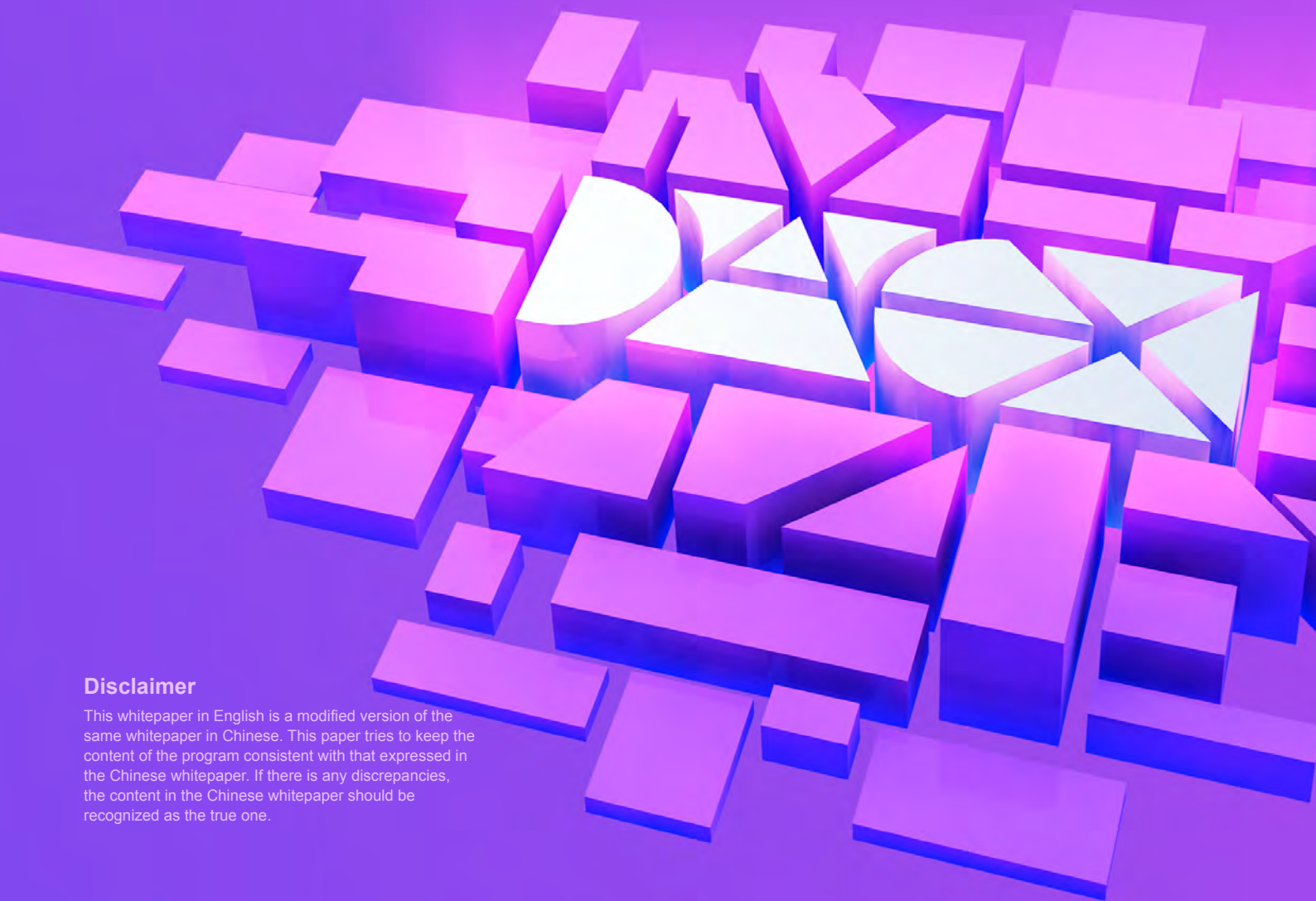
WITNESS VALUE

DAEX thus can effectively address flaws and risks of the current cryptocurrency industry and lay a solid foundation for the healthy development of this industry.

DAEX is a clearing solution for centralized cryptocurrency trading exchanges. Its clearing service is based on distributed ledger technology. Clearing and settlement rules are preprogrammed into clearing smart contracts on the DAEX clearing chain. The clearing process is automatic without people's interference. The objectivity of clearing is guaranteed by the consensus mechanism on the clearing chain. Also, customers' digital assets are registered and stored on the DAEX's clearing chain. No other institutions or individuals can access these assets without the owner's permission.

Disclaimer

This whitepaper in English is a modified version of the same whitepaper in Chinese. This paper tries to keep the content of the program consistent with that expressed in the Chinese whitepaper. If there is any discrepancies, the content in the Chinese whitepaper should be recognized as the true one.



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1. Background

1.1 The Cryptocurrency Market

The current total market value of all cryptocurrencies has far exceeded \$280 billions. Among all of these cryptocurrencies, bitcoin stands out with over 50% of the market share. At the same time, new cryptocurrencies keep pouring into the market. Bitcoin derivatives are also entering the market. Regulated exchanges like CBOE and CME followed each other in listing bitcoin futures.

Until the third quarter of 2017, investment return on cryptocurrencies is as high as 448% which has far exceeded investment returns on other assets like the stock market, gold and real estate. Cryptocurrency trading has been very active. Almost 60 cryptocurrencies boast average daily trading volume of 10 millions dollars. Such active trading leads more and more trading exchanges entering the market.

1.2 Risks with Current Exchanges

There are currently two types of cryptocurrency trading exchanges, centralized exchanges and distributed exchanges. Each type has its advantages and disadvantages.

A distributed exchange is usually based on distributed ledger technology. It runs on its own. It does not need people to maintain its operation. Trader's asset on a distributed exchange is held in his own account. The exchange does not have access to it. Traders trade directly with each other on a distributed exchange. The exchange's underlying technology guarantees the trade go through, and cleared and settled correctly. Such distributed exchanges include BitShare and EtherDelta.

The advantages of distributed exchange are very obvious. Trader's asset is well protected; trading and clearing costs are low; traders can freely join and leave, and they can trade with anyone in the world as long as the other party also uses the same exchange. Despite of all these advantages, however, distributed exchanges also have serious disadvantages, particularly in terms of liquidity, matching speed and flexibility. Because of these disadvantages, distributed exchanges never become widely used in cryptocurrency trading.

Centralized exchanges are exactly the opposite of distributed exchanges in almost every aspect. It provides a centralized order matching mechanism for traders. It receives trader's cryptocurrencies as deposits, and holds these cryptocurrencies in its own storage. The exchange then issues IOUs to trader's exchange account. Traders effectively trade these IOUs with each other at the exchange. When they want to transfer their cryptocurrencies to other places, they use their IOUs to instruct the exchange to send corresponding cryptocurrencies to specified addresses.

While current cryptocurrency centralized exchanges have strong advantages in providing liquidity, matching speed and flexibility, they are inherently flawed in their current infrastructure. Each exchange maintains its customers' assets. This exposes customers' assets to both serious internal and external risks. The operation of such exchanges is also opaque. There is no way to guarantee an exchange's objectivity in being an unbiased matching mechanism. In fact, security incidents keep happening to centralized exchanges in recent years, from Mt.Gox to the most recent Yubit. Such incidents will for sure keep happening because of the basically flawed infrastructure of centralized exchanges.

1.3 The Goal of DAEX

The goal of DAEX is to provide a better infrastructure for the cryptocurrency trading industry by taking the reasonable parts of the mainstream securities trading industry and by taking advantages of new opportunities brought about by the distributed ledger technology. Specifically, trading and clearing will be separated into different entities. Current centralized exchanges will continue to provide trading service. But the clearing work will be handled over to a common clearing service which is based on the DAEX solution. But, different from current centralized clearing services, the DAEX clearing service is based on distributed ledger technology. The distributed ledger technology guarantees that trades are correctly and safely cleared and settled. By using distributed ledger technology, trader's assets are kept in their own accounts on the blockchain. No one else can access traders' assets without their permissions. This effectively removes trader's asset risks in current centralized exchanges.

The DAEX solution will be an open sourced clearing service based on a public blockchain. Its code is open for public inspection and supervision.

1.4 Terminology

The clearing chain

Cryptocurrency clearing service based on distributed ledger technology. It uses Clearing as a Service (CaaS) method to provide clearing services for cryptocurrency exchanges.

DAEX Wallet

A cryptocurrency wallet that supports multiple signatures and multiple digital assets. It accesses exchanges to trade cryptocurrencies and the clearing chain to manage its assets.

Multiple-part private key

A private key that is broken into several parts. Some parts have to be used together to access assets in the wallet.

Clearing as a Service (CaaS)

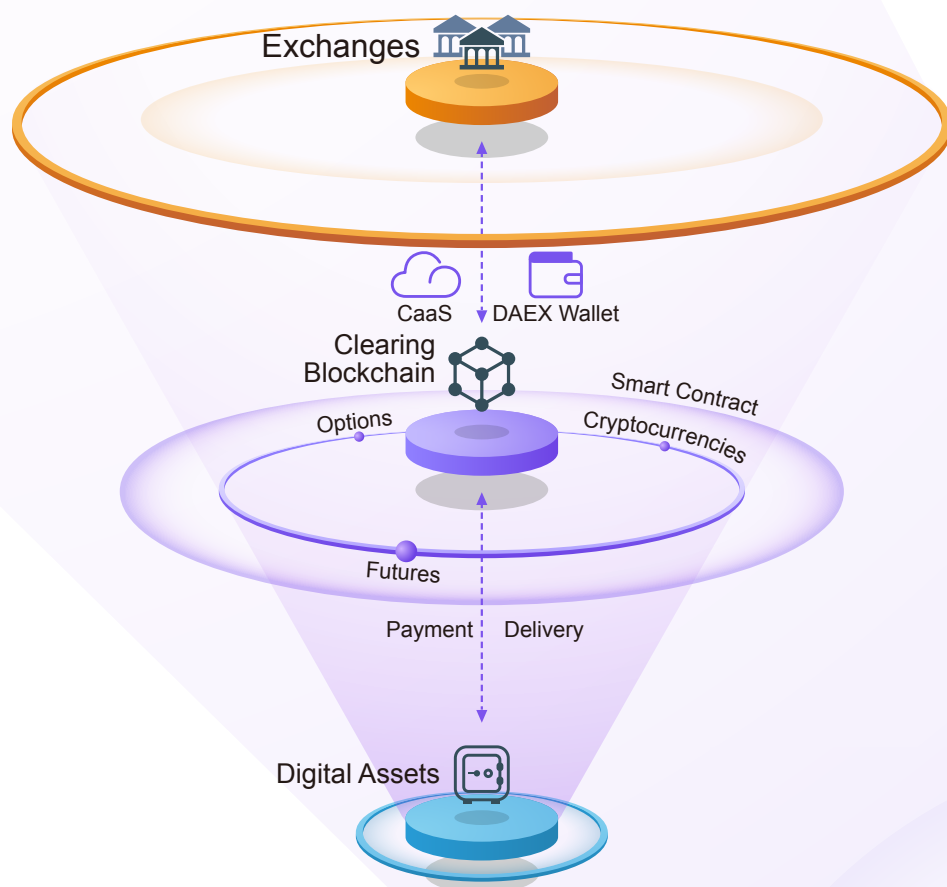
A clearing service that is provided using a cloud mode. The clearing facility is deployed on a public cloud. Exchanges and clearing members obtain clearing related services through APIs or clients.

2. The DAEX Ecosystem

The rapid development of cryptocurrency trading calls for a more effective and secure clearing service. After a series of hacker thefts and security incidents, many exchanges have to come to the consensus that a common clearing and asset custodian service is required to protect the market and to guarantee the sustained growth of the market. DAEX is therefore the answer to this market need.

2.1 The Ecosystem

DAEX ecosystem is composed of a clearing service that is based on distributed ledger technology, centralized exchanges and user wallets. Traders use their wallets to perform trades on exchanges. After trades are matched at exchanges, exchanges send matched trades to the clearing service. The clearing service CaaS is performed by smart contracts on the distributed ledger technology. During the initial phase of DAEX, cryptocurrencies will be serviced. During future phases of DAEX, cryptocurrency derivatives will be serviced. That is, DAEX will provide clearing service for cryptocurrency derivatives traded on exchanges.



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The DAEX ecosystem provides the following advantages to participants in the system:

Secure

Participating exchanges must meet the business and technology requirements of the ecosystem, thus the quality of trading service is maintained. User's assets are all held on the blockchain. Assets cannot be moved without user's admission. Multiple-part private key further protect user's assets and also a safe recovery mechanism in case a user loses his private key. Smart contract and the blockchain technology guarantees the correctness of clearing and settlement.

Trust

Decoupling between trading and clearing is the best way to guarantee the safety of customer trading assets. The insurance fund contributed by participating exchanges provides another layer of safety. The DAEX ecosystem therefore provides a trustworthy environment for exchanges and traders.

Open

First of all, the DAEX ecosystem is open to and welcome new exchanges. Exchanges that participate in the DAEX ecosystem can use all products and services provided by DAEX, including wallets and clearing. Secondly, participating exchanges can expect to use more value added services DAEX is going to provide, including cryptocurrency derivatives trading.

2.2 Participants

(1) The DAEX Foundation

The DAEX Foundation is registered in Singapore. Its mission is to develop the DAEX solution and promote its use among cryptocurrency exchanges in the world. The Foundation also manages the fund contributed by global investors.

The DAEX Foundation's responsibilities include but are not limited to the following:

- Information revelation
- Fund management
- Arbitrage and reconciliation
- Compliance and auditing
- Strategic decisions
- Public relationship

(2) Wallet Users

Wallet users whose identity have been certified can use various functions such as trading and asset delivery.

(3) Exchanges

Provide cryptocurrency and derivatives trading services for wallet users. Counsel member of the clearing union. Provide a node on the clearing blockchain.

2.3 Value

The cryptocurrencies industry is still in its very early stage. Inevitably it has many problems, just like the internet industry in its early stage. But, it has a strong growth potential which is probably many times greater than that of the internet industry. The goal of the DAEX ecosystem is to help the industry grow in a more orderly and secure way by providing a solid infrastructure that benefits many industry players.

(1) CaaS

Current cryptocurrency exchanges all clear their own trades. There are inherent risks in this kind of infrastructure. Customers' digital assets on the exchange are exposed to exchange's internal and external risks. A trader's trading capital also cannot be fully utilized because he has to meet the capital requirements of different exchanges. Also, since each exchange has to do its own clearing work, the whole trading industry is not making good use of its resources.

The goal of DAEX is to provide CaaS for the cryptocurrency trading industry. Since this CaaS is based on distributed ledger technology, its operation is thus objective and transparent. It is not in favor of any type of organization, or a specific organization, or any group of people. It is effectively an infrastructure service to the whole industry. By using this service, the industry becomes unbiased, objective and transparent, industry resources become more effectively used. The industry is thus growing on a more solid foundation.

(2) More effective way to list digital assets

With the booming of ICO events, more and more cryptocurrencies are entering the market everyday. Lots of them are either pure fraud schemes or low quality coins that will never survive. At the same time, because of the low entry barriers and the booming industry, more and more trading exchanges start to provide cryptocurrency trading services. Selecting quality coins to list and make related business and technology work ready become a very burden some work for many exchanges.

As a clearing service, it is DAEX's job to list new clearing products so that participating exchanges can trade. The DAEX wallet can also simplify the work exchanges and users start trading a new cryptocurrency. With DAEX's services, exchanges therefore can significantly expedite the new product listing work and become more competitive in this rapidly growing industry.

(3) Help exchanges to become more competitive

Cryptocurrency exchanges nowadays offer the same service. Trading service is more and more becoming a commodity. DAEX ecosystem offers participating exchanges a new competitive advantage over competitors. First of all, the token rewarding mechanism for everyone-clearing will attract more new users, generate more frequent trades and more trading quantity. Secondly, the DAEX multi-asset wallet lowers the delivering cost. Thirdly, the separation of trading and clearing helps exchanges to focus more on their core competencies, thus maintain their competitive advantages.

2.4 Comparison of Different Modes

The DAEX ecosystem is the best combination of centralized trading and distributed clearing. DAEX users can enjoy the best trading experience provided by centralized exchanges and also at the same time do not have to worry about the safety of their trading assets. DAEX also significantly lowers the technical and business entry barriers for aspiring exchanges, providing a solid foundation for their business growth.

Comparison of Different Trading and Clearing Mechanisms			
	Centralized Exchange	Distributed Exchange	DAEX
Asset custodian by single party	Yes	Yes	No
Customer owns private key	No	Yes	Yes
Private key change	No	No	Yes
Deposit and withdrawal	Takes a long time to approve a withdrawal	No restriction	No restriction
Internal fraud risk	High	Low	Low
Trading cost	Low	High	Low
Trading speed	High	Low	High
Fraudulent trading	Possible	No	No
Trading liquidity	High	Low	High
User experience	Good	To be improved	Good
KYC	Yes	No	Yes
AML	Yes	No	Yes
Punitive measures against exchanges	No	No	Yes

2.5 Future Development

(1) Clearing for margin trading and short

Margin trading is a trading method when a user borrows money to establish long positions on certain cryptocurrency. Short is a trading method when a user borrows certain cryptocurrency to establish a short position. In both methods, the trader hopes that the market will move in the expected direction, then he can make a profit and return borrowed money or cryptocurrency.

During the first development phase of DAEX, the clearing service for cryptocurrency trading will be developed. During the second phase, clearing service for margin trading and short will be developed.

(2) Derivatives clearing

Because of the tremendous profit potential of cryptocurrencies, exchanges are going to provide more financial instruments for their customers to trade or hedge. Cryptocurrency derivatives such as futures and options will be provided to hedge or speculate. CBOE and CME have already introduced bitcoin futures. It is expected that derivatives based on other cryptocurrencies will be gradually introduced.

Although the introduction of bitcoin futures met the market demand in a timely manner, it however has some serious drawbacks. The most obvious one is that both future products are cash settled, not with the underlying asset. Traders still cannot use bitcoin derivatives to obtain bitcoins.

DAEX will address this issue by supporting the underlying asset delivery in cryptocurrency derivatives trading. Also, by using smart contract technology, DAEX will use trader's digital assets on the blockchain as collaterals, raising trader's capital efficiency and controlling risk at the same time.

The DAEX clearing solution also offers the following advantages:

- The distributed ledger technology guarantees the objectivity of the clearing process and protect the safety of customers' assets.
- The settlement price is based on a composite price of the underlying asset of participating exchanges. The blockchain technology guarantees the authenticity of these prices. The weighted price also guarantees the objectivity of the settlement price.

(3) Smart inclusive financing

The blockchain technology creates a brand new form of asset. This new asset form, which we call smart digital asset, is represented by bits and bytes in computer code and programs, registered on the blockchain, exchanged from account to account, and can run automatically without human participation. With this smart digital asset, we can create all kinds of assets defined by the current legal framework, from tangible assets such as car and real estate to intangible assets like stock, savings and intellectual properties.

The essence of smart digital asset is the control of asset ownership. The DAEX system gives every user the right to issue smart digital asset using DAEX tokens. A user can create new smart digital asset such as commercial paper and personalized asset by collateralizing certain highly liquid digital assets. After it is recognized by certain users and exchanges in the DAEX ecosystem, it then can be traded among approving users and exchanges, and cleared by the DAEX clearing chain objectively and transparently.

3. The Clearing Solution

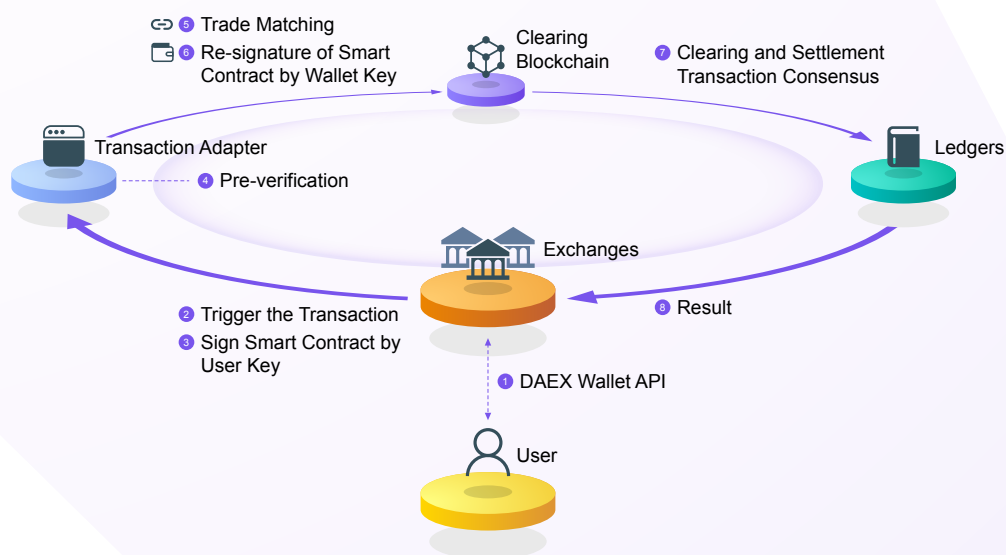
3.1 The Clearing Chain

The clearing chain is the core of the DAEX clearing ecosystem. It is an open sourced cryptocurrency clearing solution based on distributed ledger technology. It provides clearing and settlement services to both individual and institution users. This chain is deployed on multiple nodes on a public cloud. It uses one kind of POS consensus mechanism to validate transactions.

3.1.1 Clearing Contract

A clearing smart contract that is based on the smart contract technology plays a pivotal role in this clearing service. All clearing and settlement business rules are preprogrammed into this clearing contract. This smart contract finishes the whole clearing and settlement cycle of a matched trade.

After a matched trade is formed in a DAEX participating exchange, it is sent to the clearing chain. A clearing smart contract is then formed for this matched trade. This clearing smart contract will first validate the matched trade to make sure that it meets all the business requirements. After the validation, the smart contract goes through the consensus mechanism and then updates corresponding accounts on the ledger.



3.1.2 The Clearing Mechanism

DAEX customizes a specialized consensus mechanism based on clearing value factor (CVF-POS). It is a governance standard of distributed digital clearing ledger, its purpose is to prevent the malicious sabotage behaviors through strict clearing responsibility arrangements.

The high performance of CVF-POS will avoid the centralization of computing power and clearing power through technology democratization, expanding network effect with relatively low network cost, reaching relative decentralization. Every wallet user with digital asset can participate in the clearing process, becoming witness of clearing. “Everyone participate” clearing mechanism provides an effective way for DAEX wallet users to obtain real financial reward. At the same time, the clearing responsibility mechanism can identify a process that leads to mistakes in consensus, and perform punishments according clearing rules.

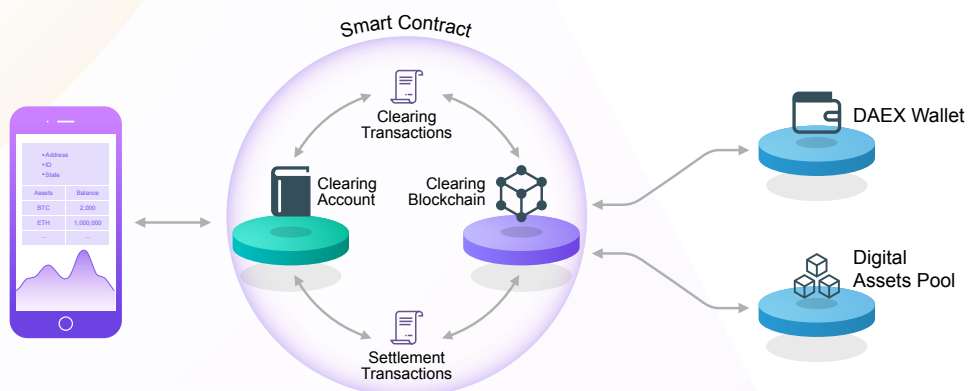
In the classic POS mechanism, the weight of every node is linked to the capital on this node. This can lead to Matthew Effect which makes the rich richer. In the DAEX clearing ecosystem, every DAEX wallet user has equal accounting power but different accounting scores. The accounting power is determined by the ecosystem, it acquires specific number of accounting scores through value factor evaluation and exchange. Those nodes with a certain number of accounting scores can be defined as a validator. Validator on the clearing chain is similar to miner. Wallet users can select a validator to delegate their accounting scores. Validator is a safe machine that is delegated responsibility to generate blocks, carrying out accounting and consensus through broadcasting encrypted signatures.

DAEX token is like chips on the clearing chain. Users are responsible for selecting trustworthy validators. The clearing union will keep raising validators' judging ability and the also binding power of the ecosystem in order to protect user's benefits. When wallet users trust their DAEX tokens to any validator to earn some DAEX token rewards, if the validator is hacked or it violates any agreements, then the collateralized tokens will be penalized. The CVF-POS provable security mechanism and the collateralized assets of concerned parties provide node and even light clients measurable security. The administration system of the clearing chain can solve temporary trading exchange problems. For example, when detecting malicious attacks, it can suspend clearing requests. DAEX can support enough number of validators to achieve global distributed blockchain, and also within a very short period of time. With the development of bandwidth, storage and parallel computing, the DAEX clearing chain can support the scale of more validators.

The accounting power in the DAEX ecosystem is determined in the early stage, including accounting range and ecosystem parameters. But, with the development of the ecosystem, users can propose to make amendments to change ecosystem parameters. Users can also propose to make amendments to ecosystem rules. These rules bind related parties together to solve asset theft and contract loophole problems, reaching better and clearer solutions.

3.1.3 Clearing Account

A dedicated clearing account will be opened for each user. This account is used to register digital assets, keep asset balances and clearing history.



Since all DAEX participating exchanges use one clearing ledger, customer accounts are created and managed on the same ledger. Customers' trading assets are also managed on the same ledger. The same underlying technology and clearing rules significantly reduces exchanges' costs and errors. The technology as well as the business rules DAEX uses are open and transparent to exchanges and traders, DAEX thus provides them with a reliable and trustworthy clearing and settlement service.

The DAEX clearing chain will accommodate the existing infrastructure of exchanges. Adapters that make sure the matched trade meets the DAEX clearing protocol will be provided to exchanges to facilitate their adoption of DAEX service. End users can use wallets that meet DAEX specification to access and manage their trading assets on the clearing chain.

The DAEX clearing service is different from existing clearing services. Its service is accessible to all regions of the world and it is not regulated by any regulation body in the world. It relies only on the distributed ledger technology to guarantee an objective and correct clearing service. This nature makes it more appealing to cryptocurrency traders and exchanges in the world.

3.2 Clearing Protocol

In the DAEX ecosystem, business standards and protocols such as clearing protocol, data structure, and encryption standard are made collectively and implemented by technology. The clearing protocol specifies the communication mechanism between exchanges and the DAEX clearing service. It is a critical element of the DAEX ecosystem.

The clearing protocol uses lightweight stateless remote communication mechanism. The protocol may be in the form of the following examples.

Data structure of clearing request		
Mode	Element	Note
Header	Version	Version number of the protocol
	Channel	Channel specification
	Requester	Requester's ID
	Timestamp	Request timestamp
	Business ID	Message ID to identify one clearing process
	Module	Clearing chain service element: exchange or wallet
Body	Method	Clearing method such as spot trade, option or future
	Params	Structured parameters containing user identification, type of matched trade, trade time, quantity, etc.
	Encryption	Encryption parameters specified by connecting parties
	Nonce	Random number
	Tag	Extension field for length control

To protect the security of sensitive message on the public network and user's clearing autonomy, transmitted messages use smart contract as carrying body. Messages contain elements such as signature of public keys, address of smart contracts, clearing message, random number and signature. The clearing message is a binary string specified in the form of the above protocol and the signature is the ECDSA result through calculating the clearing message through hash calculation.

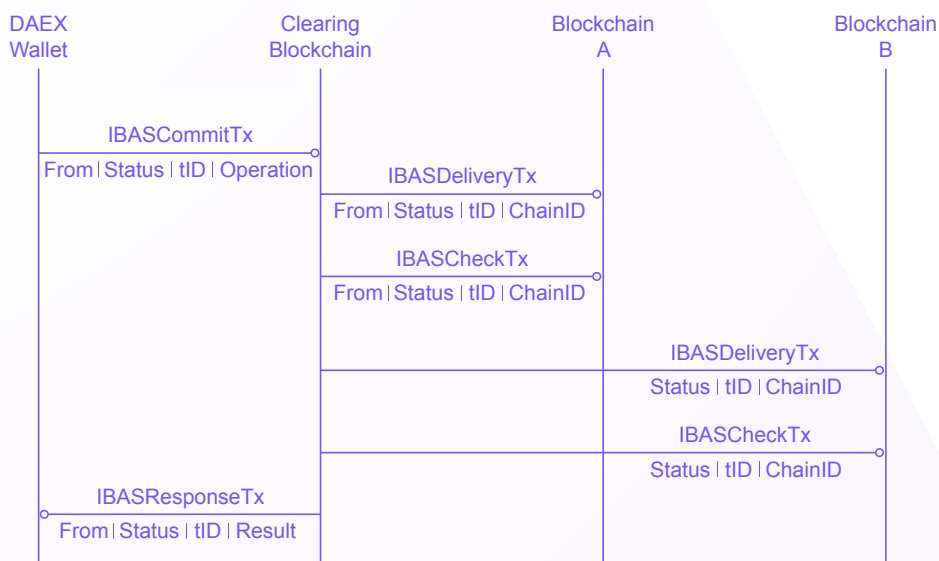
Data structure of clearing reply		
Mode	Element	Note
Header	Version	Version number
	Channel	Channel specification
	Requester	Requester ID
	Timestamp	Clearing process finish timestamp
	Business ID	Clearing request ID
Message	Code	Clearing return code
	Message	Clearing return message

3.3 The Atomic Settlement

The clearing chain supports multiple assets. These assets can be transferred between different chains via IBAS (Inter Blockchain Assets Settlement) protocols. Based on the clearing chain, the atomic settlement supports the settlement of asset transactions between different chains. Using the atomic settlement, DAEX wallet users can safely and directly transact different types of digital assets, the underlying clearing chain perform all the necessary work such as encrypting and consensus reaching. The atomic settlement on the clearing chain solves the current digital asset isolated islands situation, making digital asset exchanges safe and convenient.

The internal network of IBAS will speed up the final confirmation speed without compromising integrity. To guarantee the synchronization of transmission of digital asset packets among different blockchains, the clearing request party needs to publish a proof on the clearing chain, showing that it has issued a trustable IBAS request.

The clearing chain validates this proof and produce a send/request data packet with consistent block header. This mechanism needs to insert a clearing chain based connector between different asset chains. The connector confirms clearing operations by proving the existence of assets sent from related chains.



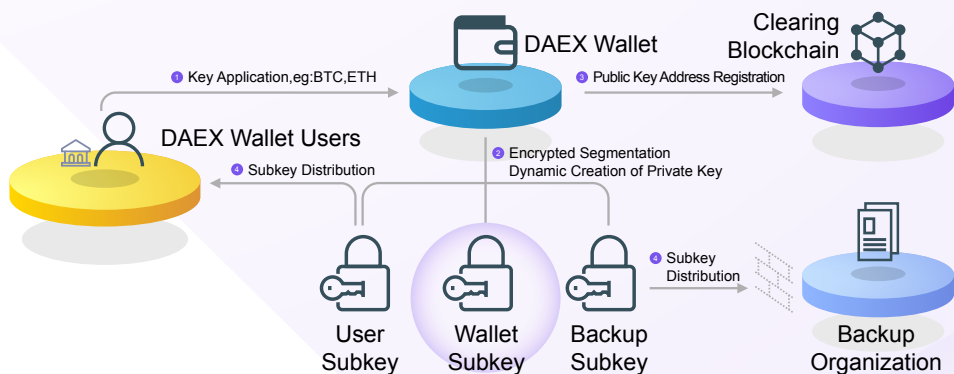
3.4 The DAEX Wallet

The DAEX wallet is the client system of the clearing chain. It is an unmanaged and distributed wallet that supports multiple types of cryptocurrencies. It has the following characteristics:

- Multiple-part private key: Uses three parts private key. Needs any two parts to be used together to access assets in the wallet;
- Private key can be restored: A private key can be restored if a user loses his part of the private key;
- Complete autonomy: User has full autonomy over digital assets in his own wallet.

After a user goes through a KYC process and become registered on the clearing chain, a unique public address on the clearing chain will be assigned to him. His trading digital assets will be managed in this address. He uses digital assets in this address to trade in all participating exchanges. At the time this DAEX wallet is produced, a three-part private key also generated. These three parts are kept at different places to provide a safe and recoverable mechanism for private key management.

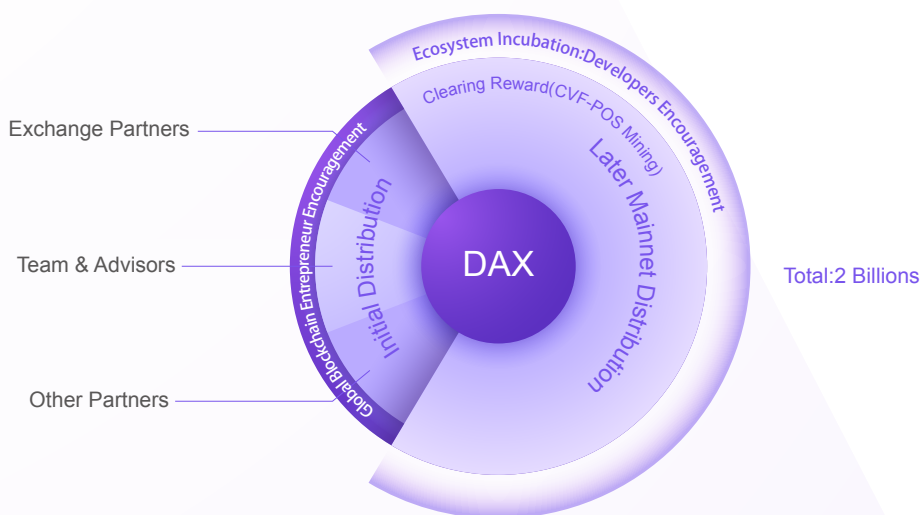
- User part: Stored on user's mobile client. It is not stored in a readable format, and cannot be copied or exported. It is usually kept in a cold wallet state. It only finishes level one signature when user moves assets in the wallet.
- Wallet part: It is stored in hot wallet mode on DAEX servers in the internal network separated by DMZ zone. It supports level two signature on top of user's level one signature.
- Backup part: Stored on the clearing chain in the cold state. It does not participate in any transaction. It is only used for recovery purpose.



4. The Usage of Token

The DAEX ecosystem uses token DAX to facility the cooperation among different parts in the system. The DAEX Foundation issues DAX to raise fund for the development of the DAEX solution. The fund raising plan and the usage of DAX is stated below.

4.1 Token Allocation Plan



During the initial offering phase, accepted cryptocurrencies include BTC, ETH, QTUM and NEO. We will issue corresponding ERC20 coins. Received cryptocurrencies will be managed by the DAEX Foundation, and supervised by exchanges collectively.

We will also make a comprehensive token repurchase program to avoid inflation and a phased lock in program on some assets issued during the initial offering phase. The goal of these programs is to maintain a reasonable amount of tokens in the market.

4.2 Usage of the Fund

Fund and cryptocurrencies received from private and community donations will be managed by the DAEX Foundation in accordance with open and transparent principles. The usage of fund can be traced and audited, and will be periodically publicized to the community through multiple social media. The fund will be used in, but not limited to, the following fields: operation of the foundation, development of product and technology, community building, reward for the clearing ecosystem, team building, global strategy development, sales and marketing, asset custodian, and other specialized expenses.

4.3 Value Factor

In the DAEX ecosystem, every asset owner can create digital assets based on DAEX tokens. These digital assets should meet current legal requirements. Such assets may be tangible assets or intangible assets such as commercial paper and customized assets.

With the development of the DAEX ecosystem, the types and quantities of digital assets registered on the clearing chain will grow rapidly. But people's ability to estimate the value of smart digital assets on the clearing chain is still at an early stage, users and exchanges in the ecosystem need a tool to reach a consensus on the value of these assets so that these assets can be traded freely.

To help members of the ecosystem, we introduce factors in the following five dimensions to evaluate user clearing ability and smart asset value:

- Clearing Value: Measure user’s clearing contribution by calculating user’s accumulated clearing contract numbers and total clearing quantities within the most recent sliding time window;
- Capital Value: Calculate user’s total digital asset value in the clearing ecosystem based on factors like ranking, market value, circulating ratio, and daily transaction volume;
- Transaction Value: Calculate transaction values based on the scientific combination of periodic peaks and clearing time, trade components, trade channels, and other factors;
- Active Value: Based on user’s clearing participation time, trade influence ability, and new customers developed as well as other factors to form a clearing activeness profile.
- Identity Value: Calculate the clearing identity levels based on user’s participation in the exchange’s business range, debt ratio of digital assets, DAX coin age, etc.



4.4 Token Reward Plan

When the DAEX solution is in production, those original ERC20 tokens will be repurchased and destroyed. The clearing chain's new native tokens will be issued with a 1 to 1 ratio. The remaining DAEX tokens will be distributed to reward virtual computing power's contribution to clearing booking. The main clearing booking will be performed by the full nodes of the clearing chain, which include DAEX public nodes, exchange nodes, and super nodes. The difficulty level of all these nodes are the same, but their respective numbers are controlled in proportion in order to protect individual user's income rights.

- **DAEX public nodes**

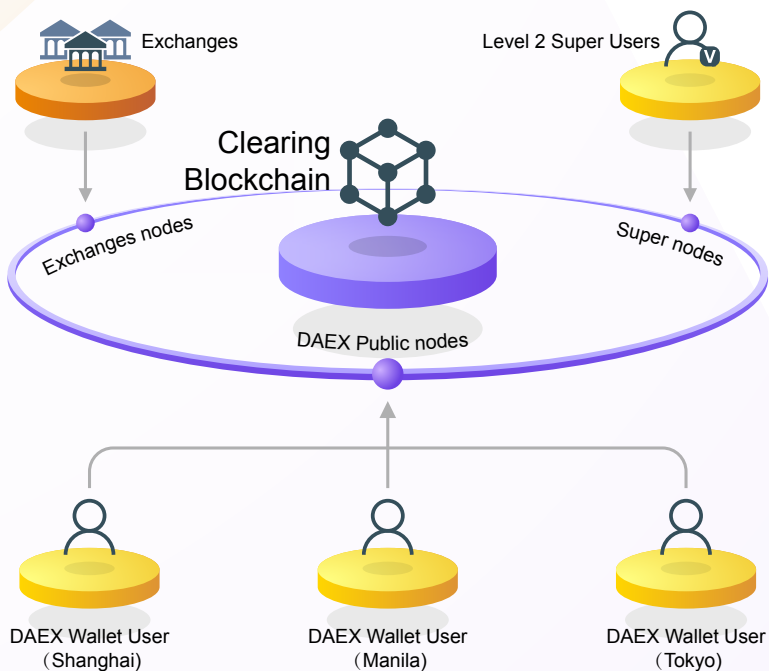
Public nodes deployed on the DAEX public chain. They provide the infrastructure to maintain the stable operation of the clearing chain, and also the virtual computing power for "everyone clears" of DAEX wallet users, lowering the resource cost of individual's participation, and raising clearing efficiency at the same time.

- **Exchange nodes**

Nodes deployed at participating exchanges. It is one source of exchange's income. The number of nodes deployed at one exchange is correlated with its clearing contribution, and an upper limit is specified.

• **Super nodes**

when the clearing power of individual DAEX wallet user reaches certain level, this individual can apply to become a super node. Different grade will be assigned to this node depending on the “the effective time DAEX holding”. Higher grade can obtain more reward income.



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4.5 Incentive for Users

DAEX tokens will be rewarded to those who make contributions to the clearing work in the DAEX ecosystem.

(1) Reward for witnessing clearing

Wallet users can delegate accounting scores to DAEX public nodes so as to get reward for witnessing clearing. There are two preconditions for winning this reward:

- ① Holding DAX and with a clearing energy greater than zero;
- ② Link wallet to a public node so as to make accounting contribution.

(2) Reward for user participation

The participation of users is the foundation of this ecosystem and is also the demonstration of its value. User participation will be rewarded in the following ways:

• Opening an account and invitation to open an account

Opening an account or invitation to open an account will be rewarded with DAEX tokens. The total opening accounts award will gradually decrease after DAEX is online. The total invitation award will decrease with increasing number of invited people.

• Effective clearing and settlement

Users will be rewarded with DAEX tokens when they use clearing and settlement services through trading or delivery.

4.6 Token Usage Scenarios

DAX can be used in the following scenarios:

- Clearing fee
- Exchange trade matching fee
- Settlement fee
- Derivatives clearing fee

5. Roadmap



- 2019.Q4 ● 2.0 release
- 2019.Q2 ● 1.0 release and start in production
- 2018.Q4 ● Beta release and start testing
- 2018.Q2 ● Publish DAEX technical whitepaper
- 2018.Q1 ● Publish DAEX whitepaper

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6. The DAEX Community

6.1 Core Team



Benjamin Gu
Foundation Chairman

Mr. Benjamin Gu has a successful and extensive management and professional experience in Chinese and US financial service firms and enterprise software companies. He used to work as an associated CIO at Hua Tai Lian He Securities Corporation and held COO positions in several financial service companies. When he worked at the Options Clearing Corporation, he worked directly on the development and operation of the US options trading market's clearing system ENCORE. Mr. Gu has a MBA degree from the University of Texas at Austin, a MA degree from the University of Notre Dame, master graduate from the University of Science and Technology of China, and BS degree from Shandong University.



Hana Zhang
Co-Founder

Ms. Hana Zhang is an investor of several exchange platforms, initial member of IDEL (International Digital Economic League). Started to be an entrepreneur in blockchain and digital assets since 2014. Opinion leader in blockchain applications and technology development in digital assets trading, "Best Female CIO" Award in 2016. Graduated from Shanghai Jiao Tong University. Used to work in A.T.Kearney, Dun&Bradstreet and Euromonitor International as strategic consultant. She's been engaged in consulting work for fortune 500 enterprises in the field of finance, payment and engineering.



Jason Tang
Co-Founder & Chief Architect

Mr. Jason Tang has been focusing on Fintech products design and application research for years. He used to work as a product manager in China Zheshang Bank Fintech Application Research Center and took charge of the first blockchain project which applied to the core system in domestic commercial banks, and the first enterprise account receivables platform based on the blockchain technology. He has two patents of blockchain. Mr. Tang has a master degree in software engineering from Zhejiang University.



Stone Zhou
Wallet Architecture Scientist

Mr. Stone Zhou has more than 10 years of internet project management and development experience. He is also a full stack developer and proficient in all kinds of database cluster building and all mainstream blockchain and digital assets wallet architecture.



Lois Shen

Partner (Brand Strategy & Marketing)

Ms. Lois Shen has rich experience in Fintech and SaaS industries. She worked in Tencent as a senior business development manager and awarded the prize of "Outstanding Employee in Tencent". She was responsible for strategic cooperation between WeChat Pay, TenPay and Fintech enterprises, and She helped many Fintech clients enter APP Store Top 10 successfully. Ms. Bingliu Shen graduated from East China University of Political Science and Law.

6.2 Advisors



Justin Shi

Dr. Justin Shi is a professor of Temple University and a member of the IETF (Internet Engineering Task Force). His main research focus is on high concurrency processing. He is also an expert of exchange framework and performance improvement.



Jianhua Huang

Mr. Jianhua Huang has a Ph.D. degree of East China University of Science and Technology. He is now an Associate Professor and master's tutor in his university. He has been engaged in scientific research and 30 years of teaching His main research direction is computer network and information security. He has participated in or hosted more than 20 scientific research projects, involving distributed parallel intelligence processing, information security, next-generation network technology and big data quality, and issued more than 40 papers in various academic publications and international conferences.



David Nealis

David Nealis is the President of Ceres Ltd, with more than 20 years working experience focusing on global capital market, including brokerage business on stock and future tradings, merger&acquisition consulting services. Mr.Nealis used to be the member of board of directions of Research&Development committee of ShenYang Huatie Corporation Group. Mr Nealis graduated from DePaul University, holding a number of Microsoft Technical Certifications issued by Hawaii university.



Leo Shen

Mr. Leo Shen is the Founder & CEO of Radarwin Technology, director of China Blockchain Application Research Center, Member of the blockchain committee on Chinese Institute of Electronics, DAEX strategy advisor, distinguished teacher of Suzhou Fintech Research Institute Tongji University. He is also an expert of asset digitization, blockchain application research and quantitative risk management. He has an in-depth study for the application of blockchain technology in the field of medical information. Mr. Shen has dual bachelor degrees in economics and computer science. He is also an MBA candidate of United States FOX School of Business.



Patrick

Founder of Qtum. Patrick graduated from Draper University and Chinese Academy of Science. He has extensive experience in the area of development and management of blockchain technology and he has been dedicated to driving blockchain technology to mainstream at an early date. He was nominated for the 2017 Forbes China Top 30 Under 30 List.



Ling Tang

Graduate Select of Xi'an Jiaotong University; Founder & CEO of Ziggurat Tech; President of Ink Labs Foundation; Managing partner of Jenga Blockchain Capital; Initiator of Blockchain Technology and Law Innovation Research Lab of Xi'an Jiaotong University; Member of the advisory committee of APEC Future College; Senior member of Silk Road Innovative Design Alliance.



Yang Lin

Regtech Foundation Ltd Chairman, the Founder of DRC. Ms Yang Lin has 20-year career experience in finance industry. And she advocates innovative "Regtech", and actively seeks solutions to apply Fintech in regulation, compliance and risk management areas. Ms Yang Lin was previously a partner of EY in financial transformation and innovation. Before IBM, Ms Yang Lin worked in IBM for 8 years and was the head of credit and risk solutions.



Jason Fang

Jason is the Managing Partner at Sora Ventures, Asia's first crypto-backed venture capital firm and CEO at Sora Foundation, a platform for bridging resources in the blockchain investment space. Prior to Sora, he was the Head of Global Business Development at Juzix, a leading blockchain company led by Wanxiang Holdings. Jason joined the blockchain industry in early 2016 as an Associate at Fenbushi Capital, Asia's first blockchain venture capital firm where he managed deal-flows and post management of companies in North America.



Grant Tao

Grant is a licensed lawyer in Canada. He served as General Counsel for several multinational companies in Asia including Thomson Reuters, Computer Associates, Motorola, Nokia Siemens since 1999. Grant started his Fintech investment venture since 2013 and now he is the Chairman of global Blockchain Patent Sharing Alliance and Secretary General of International Digital Economy League. Grant is a BA in Arts from Beijing Univ, a MA in philosophy from McMaster Univ, and law degree LLB from Queen's Univ.



Wilson Shi

Mr. Wilson Shi has been designing Creative branding for 40,000 hours in last 16 years, involving real estate, finance, medicine, technology and space design, and has provided excellent services to global clients. He entered the field of blockchain in 2015 and completed representative brand works: FBG, BUGU, Fourier, Radarwin, DAEX, etc.

6.3 Partners

EXCHANGES



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Non Technical Whitepaper
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