EOSSuperWallet Community

A super solution for EOS projects (EOSSuperWallet, token code: EOSUP)

Written by Tom, Peter, James, Forrest, Maco

Disclaimer: This EOSSuperWallet white paper (Version 1, September 22, 2018) is an ongoing work and is for informational purposes only. It is not recommended as any investment, nor is it any compensation for investment losses made by any individual or entity.

Contents：

1. the background

Since the EOS main network was launched in June, the ecological development of EOS has developed rapidly, and there have been many DAPPs and some supporting tools. At present, the entire EOS ecology presents such status and characteristics.

1. The development threshold of EOS.IO is too high, resulting in high project investment and long development cycle.

2. ordinary users or investors need to register EOS account, the operation is a bit cumbersome.

3. The existing wallets that support EOS are mostly simple upgrades based on the Ethereum wallet, which implements the basic transfer function and fails to solve the characteristics of EOS personalization.

4. The existing wallet basically exists independently based on the app mode. The EOS project requires multiple desktop versions, and all need to have their own independent wallet function.

We have launched a wallet-based EOS project solution. Her early goal is to serve the EOS project side, and to achieve project cost-effective implementation of the project. In the long run, we are an ecosystem that enriches EOS and provides investors with convenient, safe and efficient investment opportunities. To this end we issued a token, abbreviated as: EOSUP.

2. Introduction to EOSSuperWallet

EOSSuperWallet is a complete solution for the EOS project side. It is the first product developed by EOSAIIOT.IO. The EOSSuperWallet community is the exclusive project implementer of EOSAIIOT.IO, responsible for the sales and implementation of its products. In addition to providing wallet functions such as eos private key, transfer, etc., it also realizes the unique personalization needs of EOS: EOS user registration, CPU, bandwidth mortgage redemption, memory trading, permission change, smart contract release update, etc. At the same time, it also provides the project party with the necessary business functions such as issuing, selling management, scanning and receiving

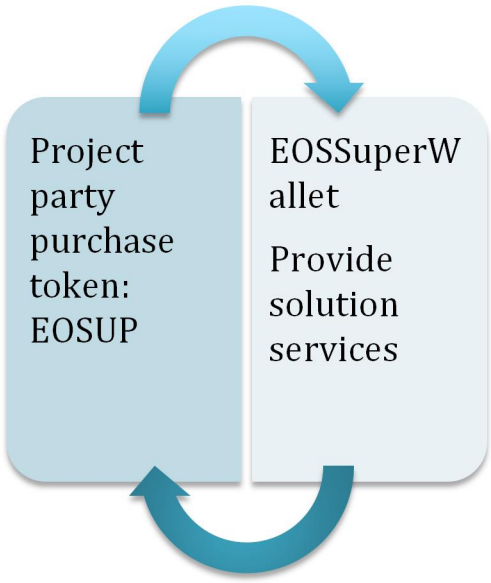
payment. In addition, we can provide basic services such as project consultation, official website production and white paper writing for the project side. As the business develops, we will launch a digital asset trading platform and IPFS-based edge cloud computing services in a community-based manner.

This has gone beyond the level of ordinary wallets, so we call it "EOS Super Wallet", EOSSuperWallet is initiated and operated in a community way.

3, the solution

3.1 Business Logic

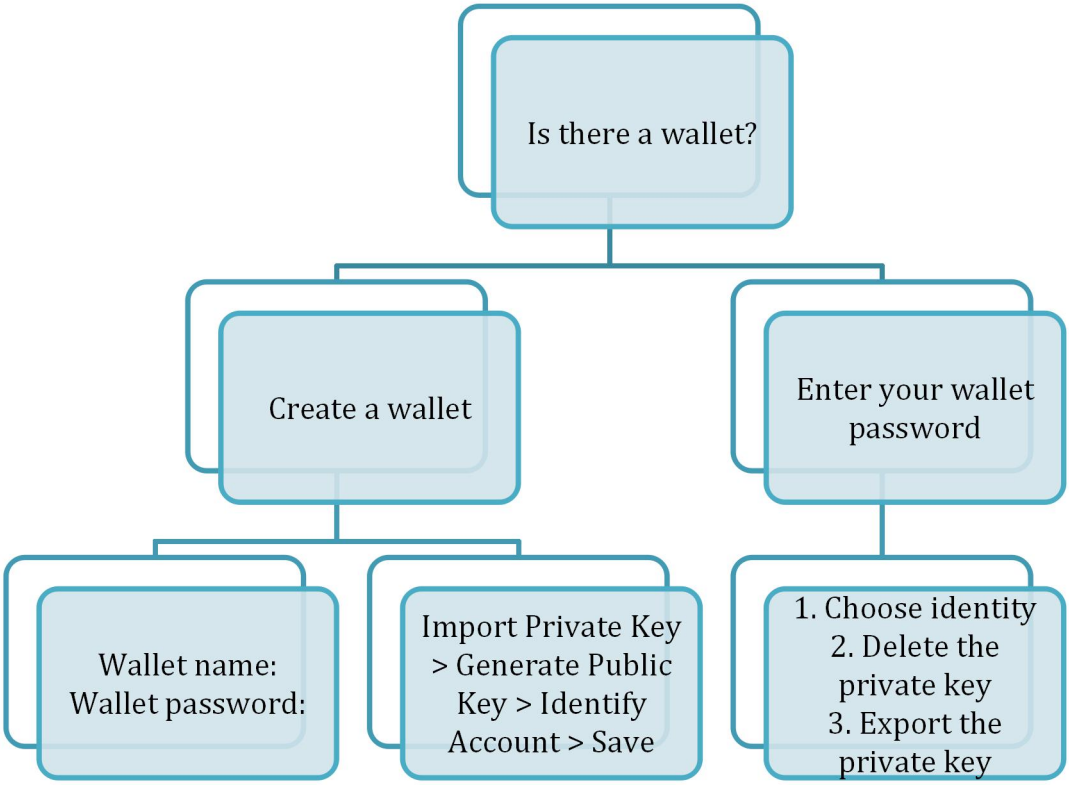
Our business logic is very simple: the project party pays us for the service by purchasing a token (EOSUP).



Business logic diagram

3.2 Basic Functions

3.2.1 Private Key Management

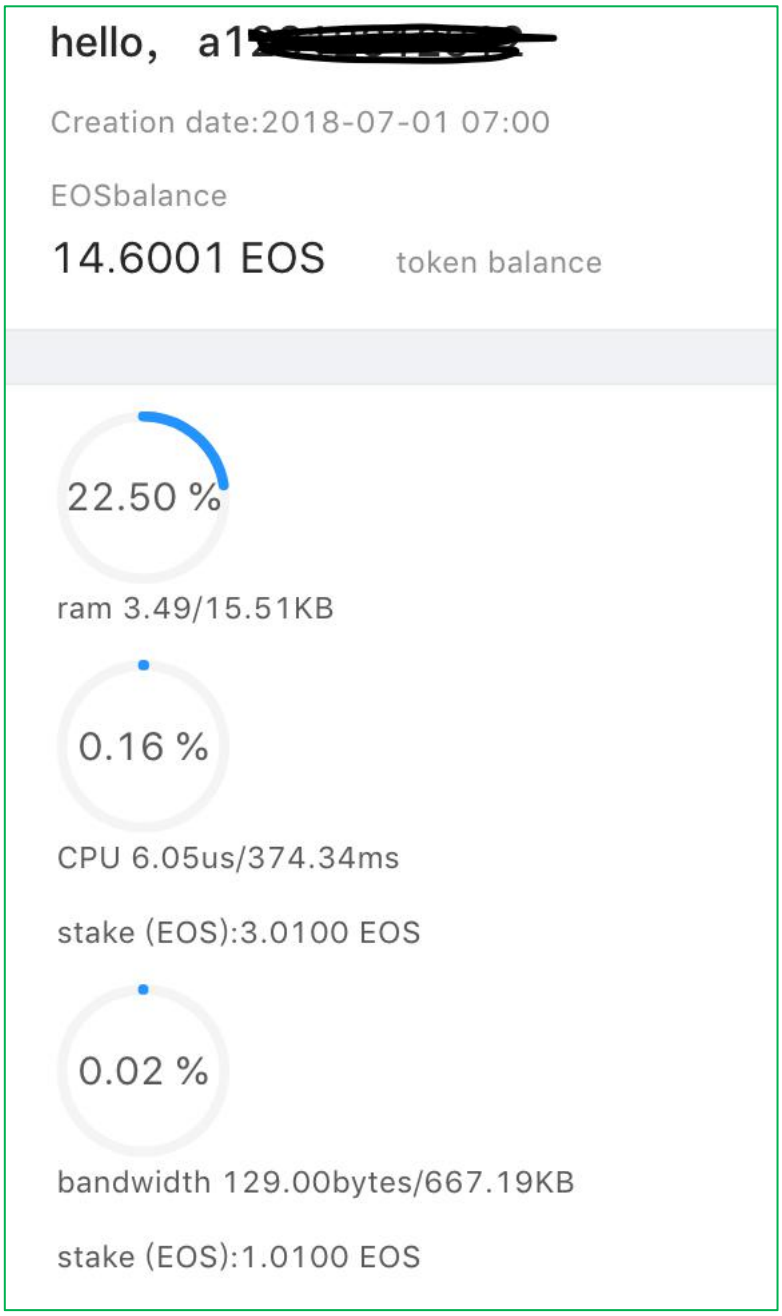


Different desktop versions may have slightly different operational procedures. The Pc version uses a scatter plugin or desktop version to manage the wallet.

The role of the wallet is mainly to save your private key locally, the wallet information including the private key will not be uploaded to the server, the user must protect the private key (preferably handwritten to a paper notebook or U disk), if lost is equal to losing your account On the property.

If you forget your wallet password, you can re-create the wallet and import the private key by uninstalling the plugin or app.

The above operation process is that you already have an EOS account by default, otherwise you can only help create an account by means of a friend.

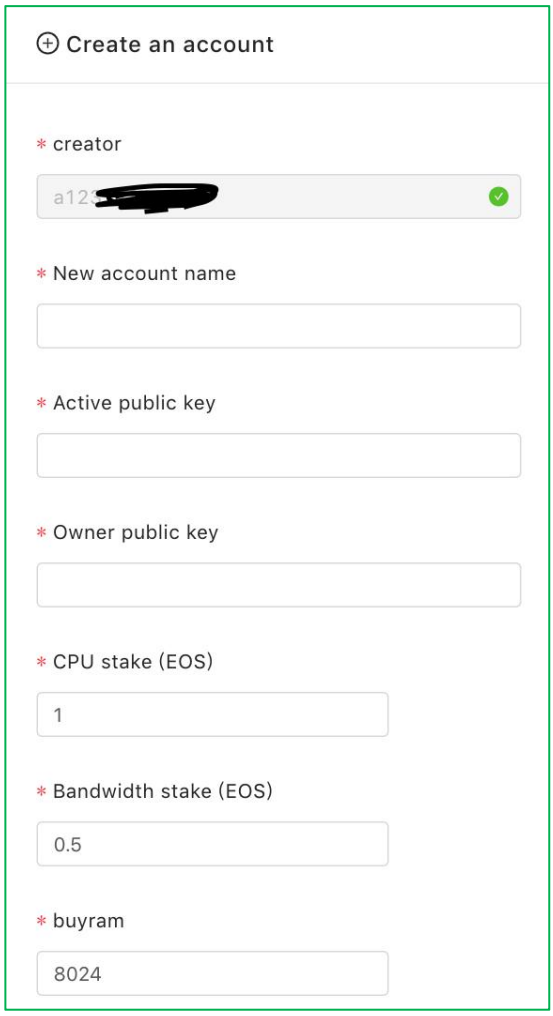


When you log in to the EOS account, it will display information about your account, such as: creation date, asset amount, and CPU, bandwidth, and memory usage.

3.2.2 Creating an Account

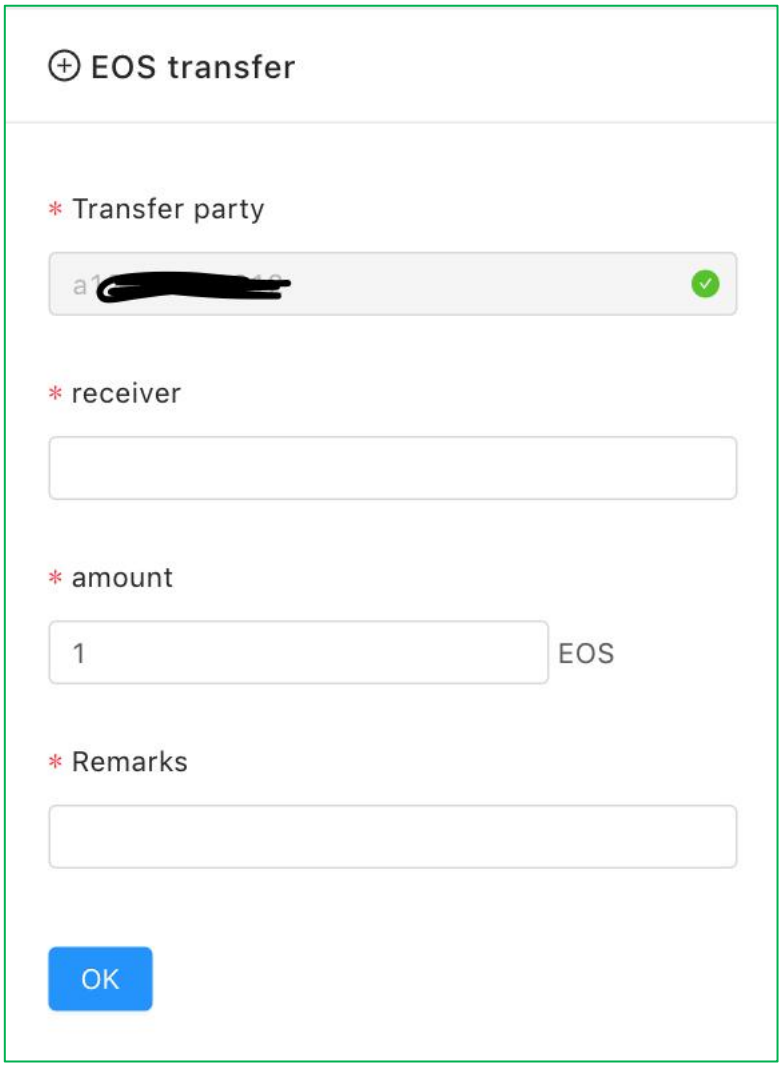
When creating an account, you must first have the creator (this account already exists on the main network), and use this account to log in to EOS (requires the signature of the account). Then enter the name of the new account (26 English letters or a combination of 1 to 5 or a combination

of them, no more than 12 characters in length), active public key and owner public key, and CPU and bandwidth that need to be mortgaged for this new account. And purchased memory.



3.2.2 Token or EOS Transfer

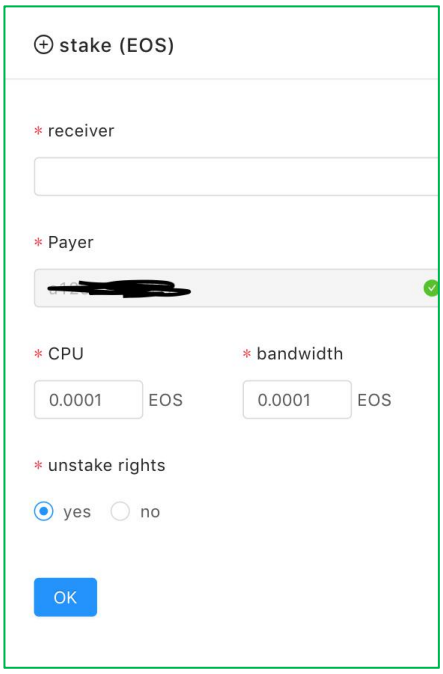
It is necessary to correctly enter the account name of the other party when transferring money. If the account name of the other party does not exist on the main network, the transfer will fail and your assets will not be lost. However, if the account you entered already exists and is not the account you want, then you The assets cannot be recovered.



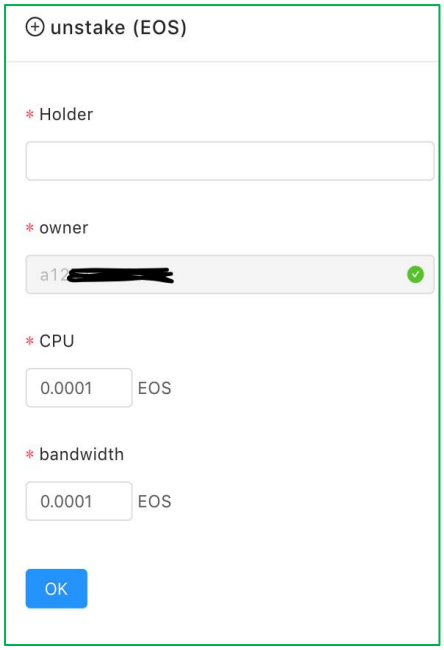
3.2.3 Resource Management

Daily operations such as EOS transfer are free, but users must mortgage a certain amount of EOS to rent resources such as cpu and bandwidth, but they can also redeem them. Memory needs to be consumed, and can be purchased and sold, but a 0.5% commission is required.

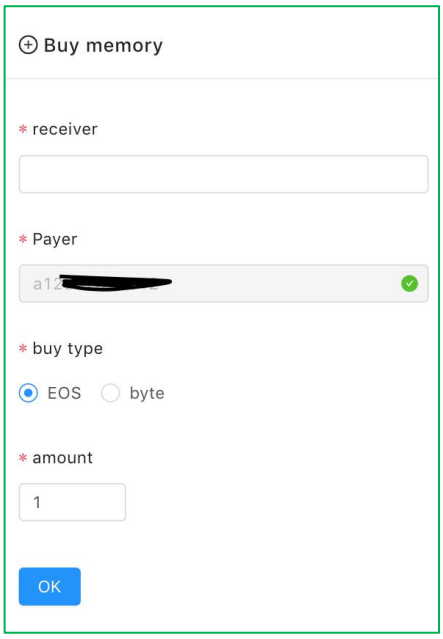
Each user's business usage scenario is different. If it is a smart contract account, you need to purchase more memory and rent more cpu resources. Ordinary users recommend purchasing 1 EOS memory, collateral 1 EOS CPU resource and 0.5 EOS bandwidth resources.



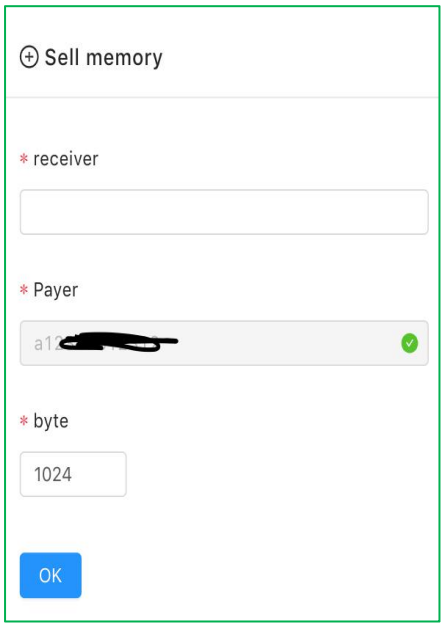
Mortgage CPU and bandwidth



Redeem CPU and bandwidth



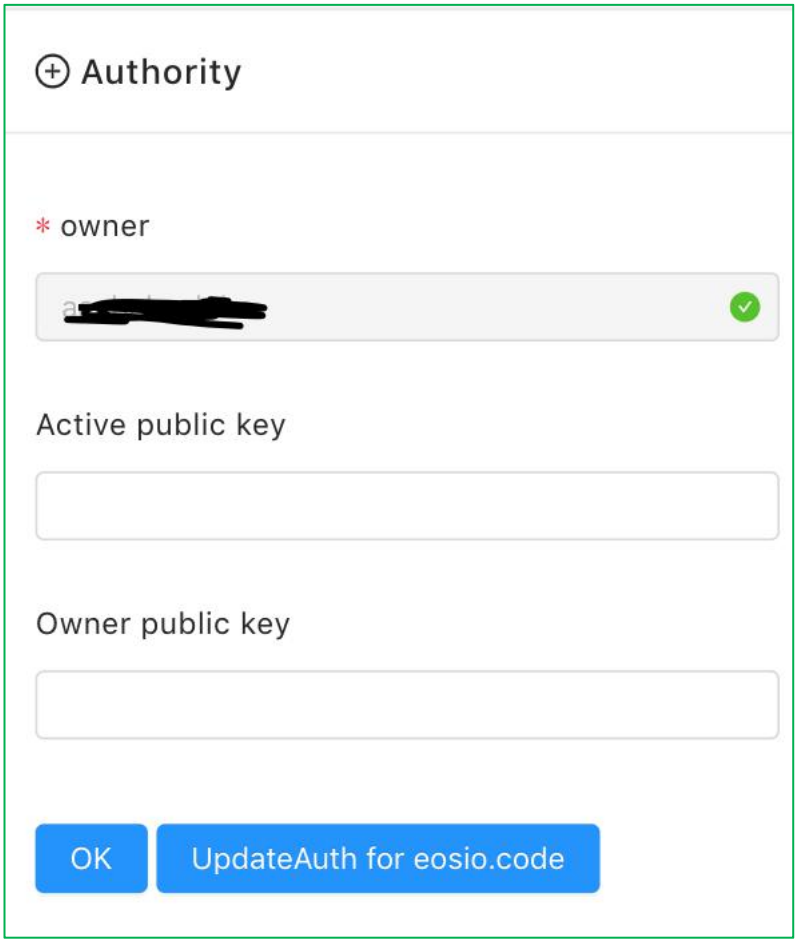
Buy RAM



sell RAM

3.2.4 Authority Management

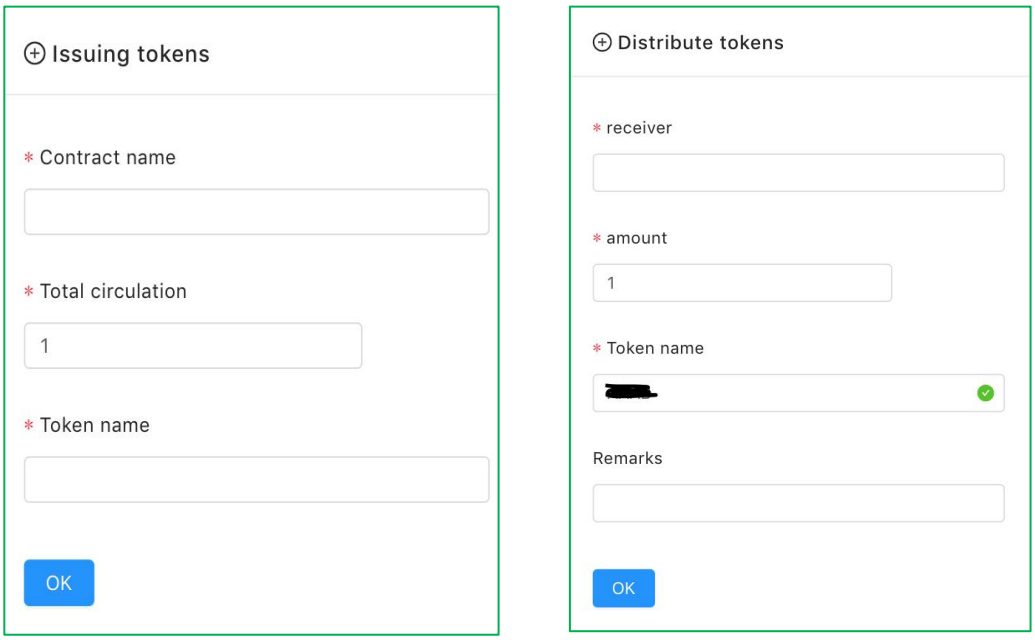
The active and owner permissions of the EOS account can be changed. For the project side, the active permission can also be assigned to eosio.code.



3.2.5 Smart Contract Management

This feature is only available to the project side. You can upload an update contract, create a token, and issue a token.

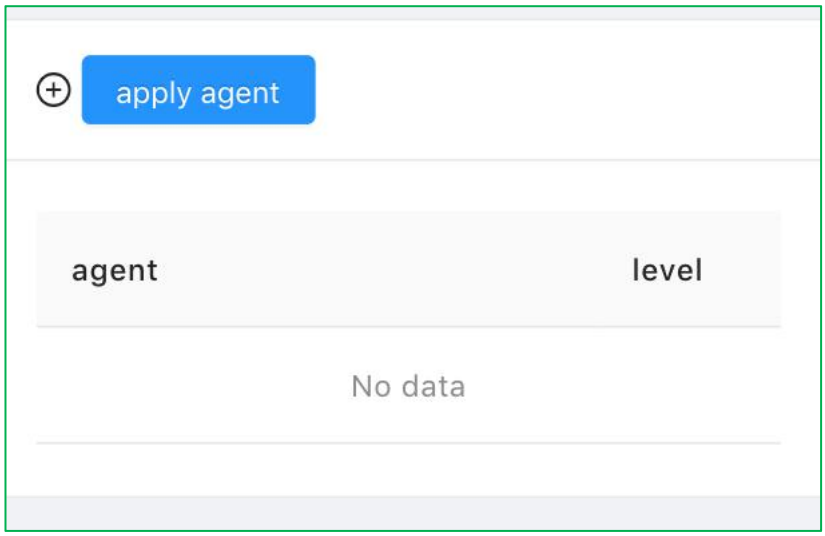
Upload and update contract



Create and issue tokens

3.2.6 Application Agent

The sales model of token is privately funded and is only open to some people.



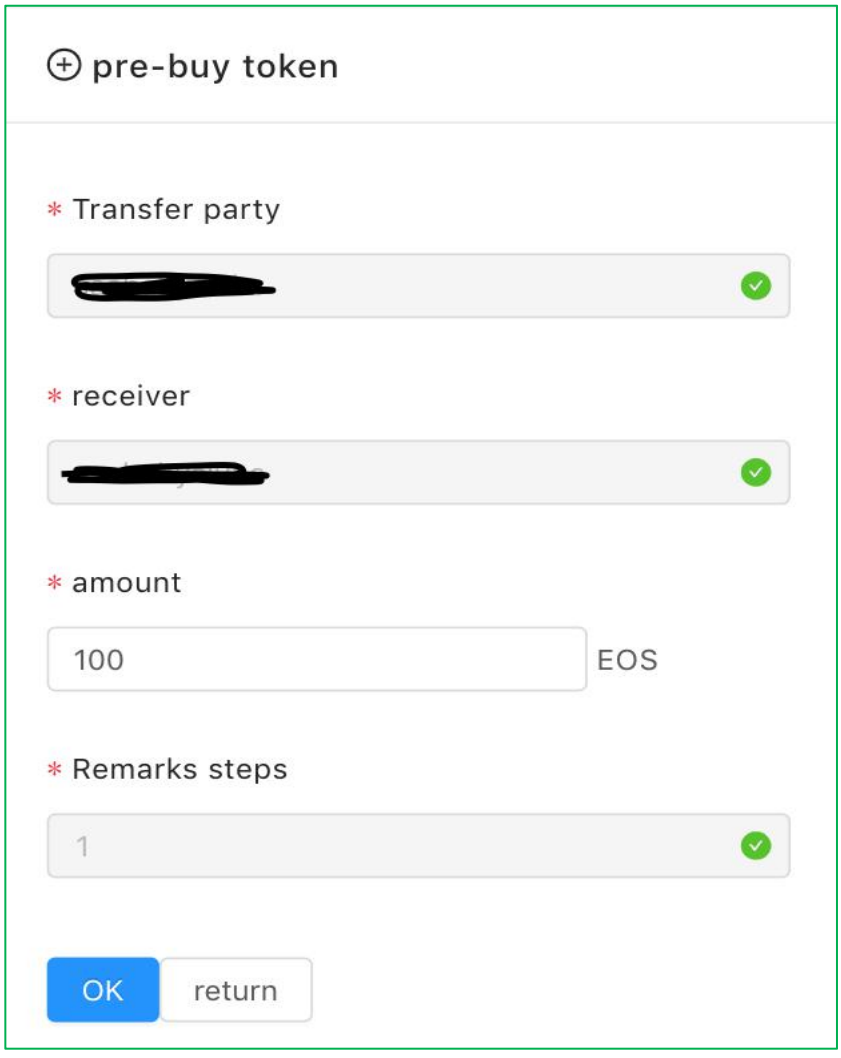
Apply for an agent

3.2.7 Agent purchase token

There are two options for the agent to purchase the token, and the project party can only choose one of them.

1. After the agent pays EOS, the price is set according to the smart contract, and the corresponding number of tokens are automatically obtained in real time. Since the price of EOS changes from time to time, the price of the token needs to be updated every day.

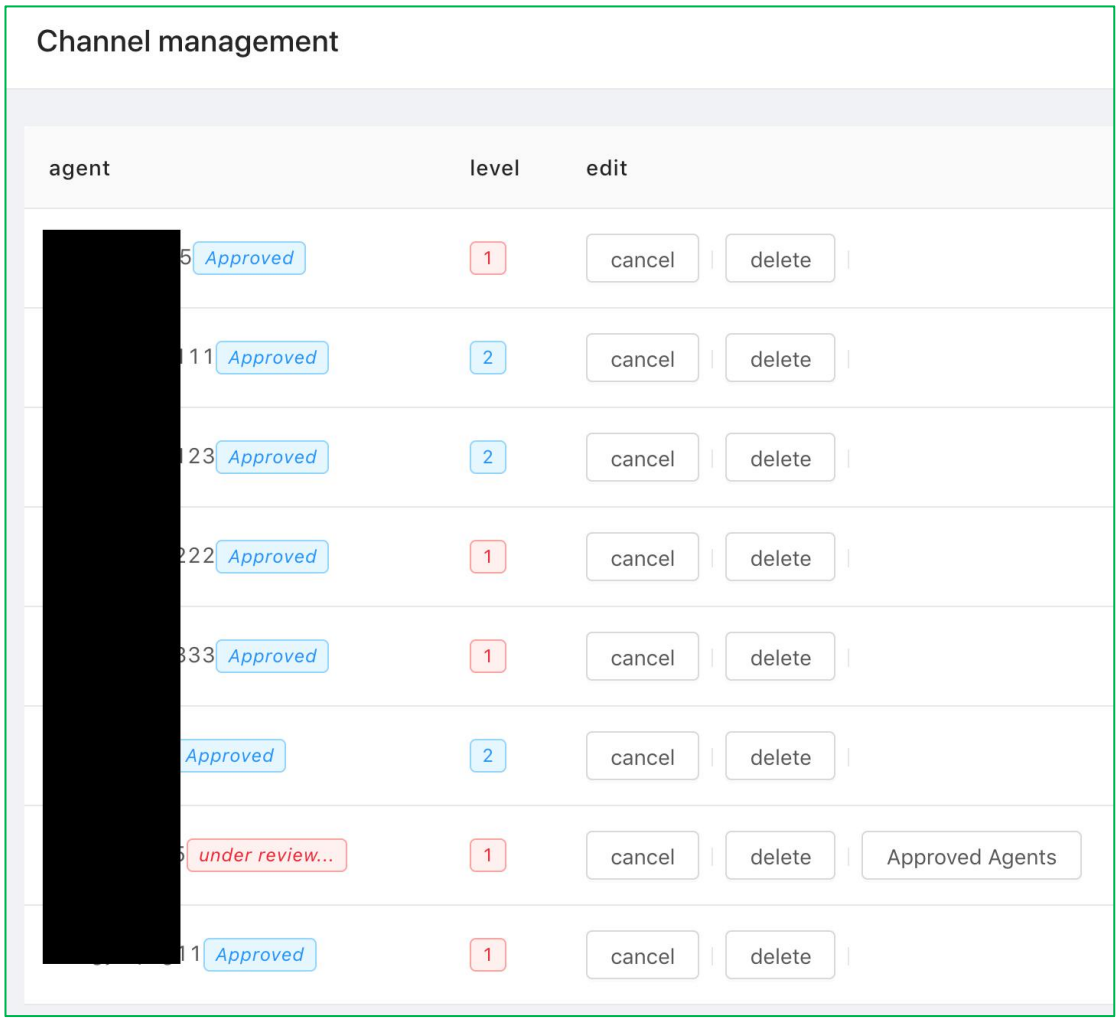
2. The agent prepays a certain amount of EOS. The project party sets the quota of the token for the agent according to the specific situation. The token sales price can synchronize the price of the EOS in real time, and the redundant EOS will be automatically returned to the agent at the same time.



Agent pre-order or purchase token in real time

3.2.8 Audit Approval Agent

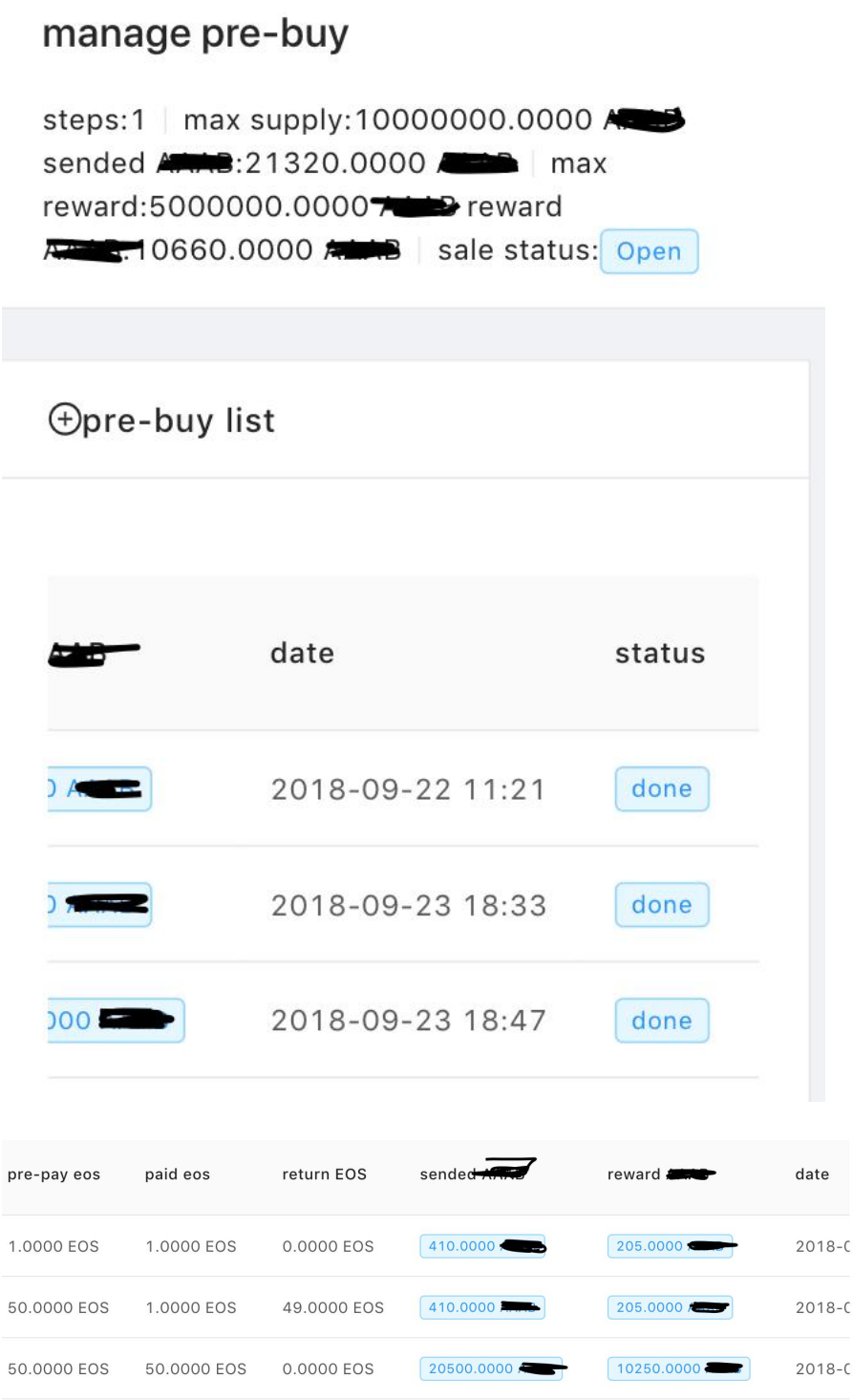
Only open to the project side.



The project party can approve, cancel and delete the channel dealers (agents), and there are first-level and second-tier channel vendors. The second-tier channel vendors are automatically created by the first-tier channel providers when the token is transferred, without application and approval.

3.2.9 Pre-sale management

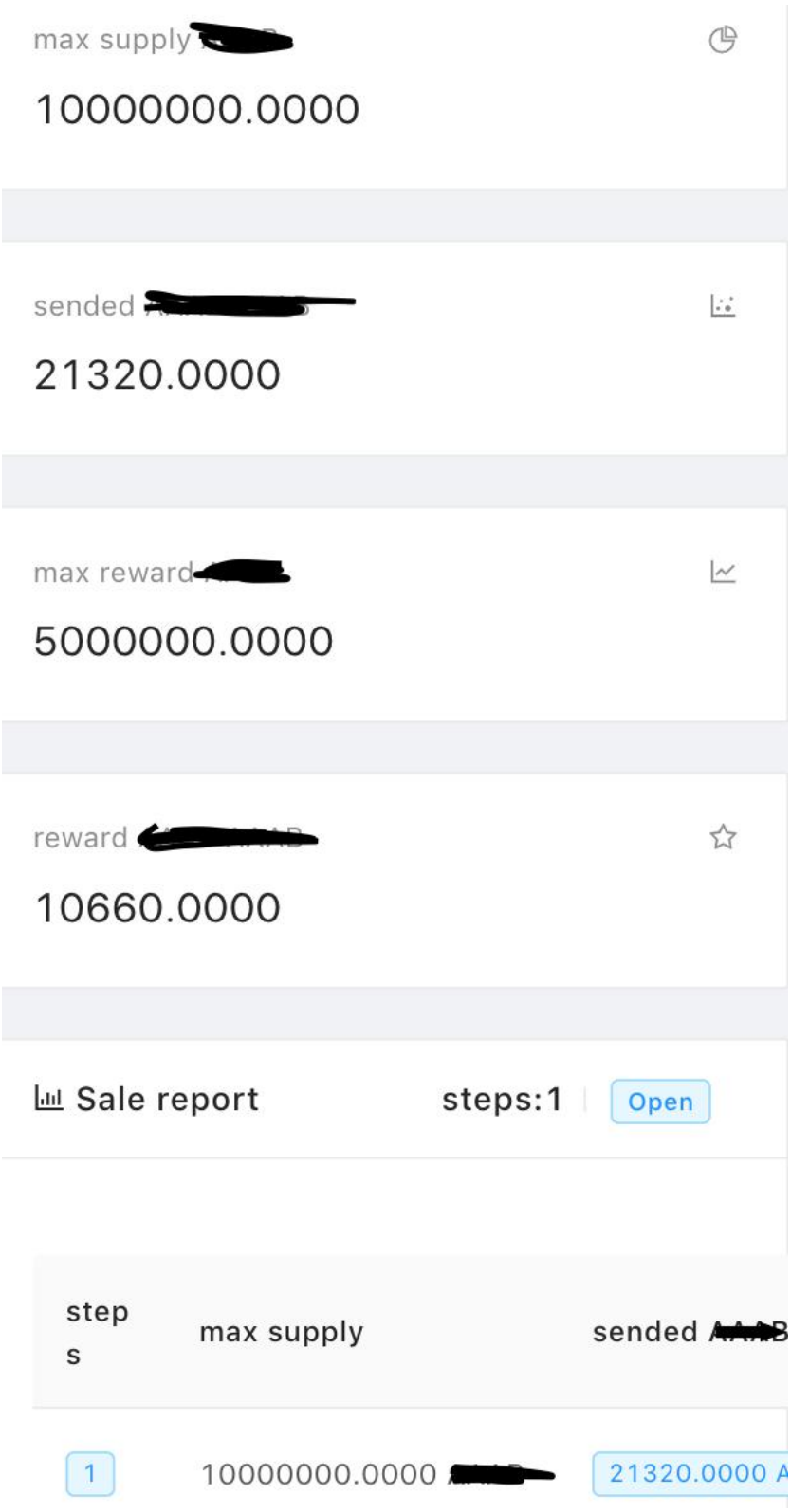
Only open to the project side.



The project party can process the pre-sale order, and the amount of paid EOS can be adjusted. The excess EOS will be automatically returned.

3.2.10 Sales Report

Only open to the project side. For each stage of token sales statistics, reward statistics.



3.3 scan code payment system

3.3.1 Individual users

The QR code information mainly includes:

{from:fromname,to:toname:amount: payamount,memo:’’ }

3.3.2 Merchant User

1, the merchant can add product information

2. When the merchant scans the payment or the user scans the payment, the order will be generated temporarily.

3, QR code information In addition to the payment information and callback URL callbackurl, the system will process the payment status of the order and the paid token.

3.4 Decentralized Exchange

The decentralized digital asset trading system is the project we are researching, and this white paper will be updated accordingly based on the progress of the research.

Option A: The token transaction is performed using the token transaction, and the token is managed by decentralization and processed by the smart contract account.

Option B: Using the bancor theory, there is no opponent disk, and the ratio between the total EOS pool and the number of tokens is always greater than 0 and less than 1. The transaction fee for the sale of the token is gradually reduced, and the token held by the project party sets the lock cycle. This scheme will completely change the ico mode of the traditional token. We call it IBO (Initial Bancor Offering).

As for which solution to adopt to launch the market, it will continue to improve as it is still in the research stage. So it is not certain for the time being.

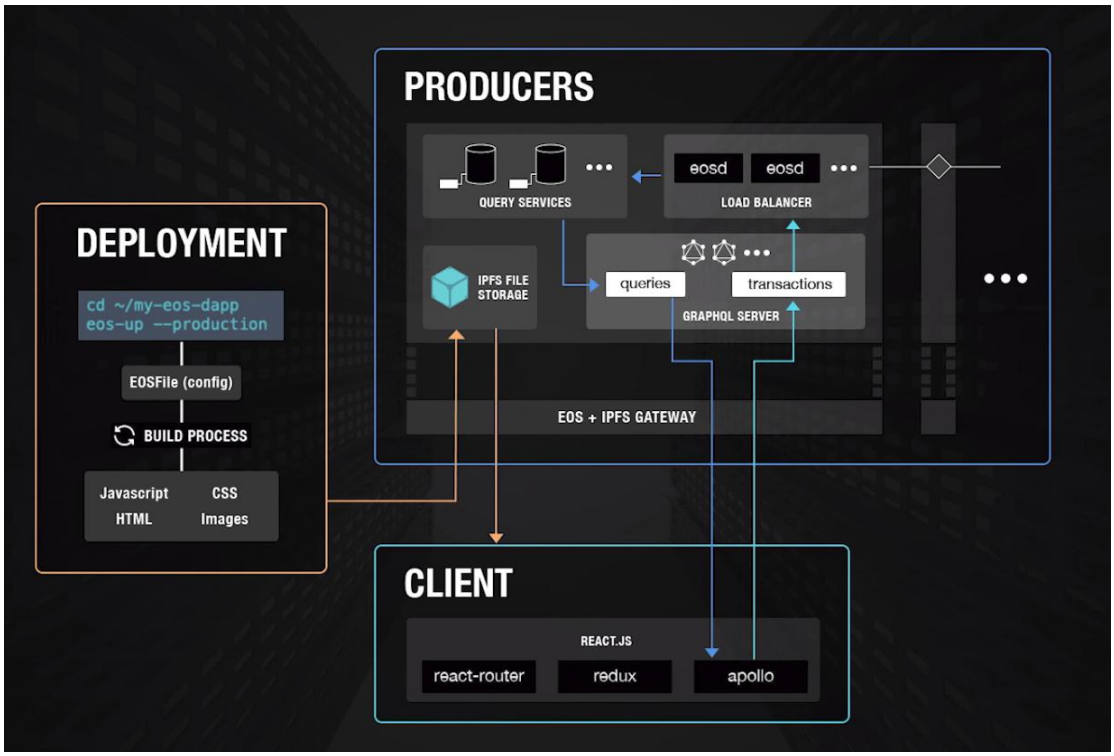
3.5 IPFS-based edge cloud computing

IPFS is a decentralized point-to-point distributed file system. The EOS project needs to store and access a large number of files, videos and other files. The token mechanism is used to set up incentive mechanisms for investors to invest in resources such as computing power, storage and bandwidth. Purchase a token to get a resource service. Thus creating a

safe, efficient and inexpensive EOS computing ecosystem.

4. technical solutions

The overall blockchain technology uses the EOSIO sidechain + EOS backbone + IPFS scheme. The deployment of smart contracts on the EOS main network is mainly responsible for the management of EOSUP tokens, including the issuance of native tokens, token ICO, token transfers and additional tokens. The side chain runs the storage of the basic information of the complete project, including community member registration, publishing content, voting, incentive records and other storage. The content published in the sidechain involves large files (such as pictures, videos) and detailed text content, which are stored in the IPFS node, and the returned hash value is saved in the field related to the side chain.



EOSSuperWallet basic technical architecture diagram

4.1 Identity Certification System

As one of the basic services of the community, the EOSSuperWallet identity authentication system uses the trust mode of the EOS main network account

(the user only needs a set of public and private keys of the EOS main network), and we set up between the side chain and the main network. The distributed gateway, therefore, as long as the EOS account holding the EOSUP token is loaded with the private key after the client completes the signature, the gateway implementation can include the automatic registration of the community user account, content confirmation, identity authentication, and rights management. service. Users with our community identity will have more privileges, such as: participation in community building, voting, shopping, transfer, etc.

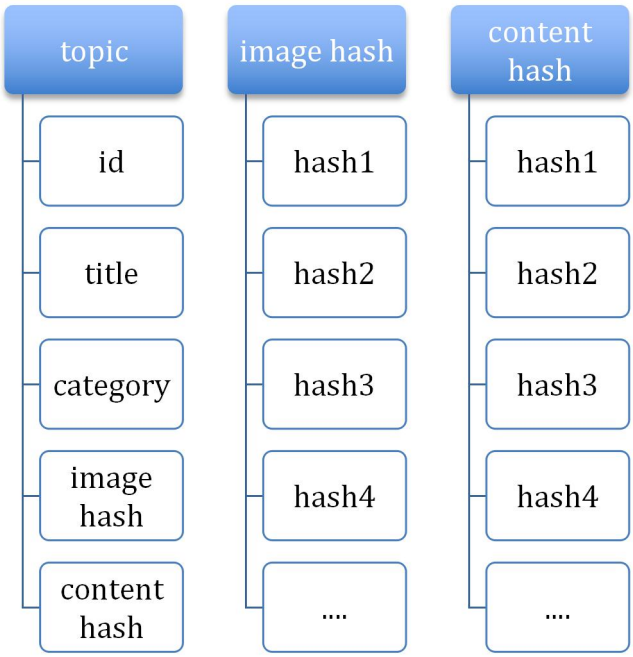
Identity authentication system flow chart

4.2 Content Storage System

The content produced by members is the most important source of the current value of the community, and it must be ensured that the content is stored safely and reliably.

In order to ensure high-performance sidechain operation, only smart contracts and main basic information are saved to the sidechain, large files (multimedia such as pictures and videos) and large text content (such as detailed text content in a record) are stored in the decentralized DHT. In a distributed storage network, for example: IPFS. The hash of the data will be stored as a reference, stored in the blockchain, and users with permissions can get references through smart contracts to address the data.

IPFS is a decentralized point-to-point distributed file system that wants to connect all computing devices to the same file system. IPFS uses content-addressing technology, so users don't need to care about the location of the server, regardless of the name and path of the file store. Each file is placed in an IPFS node and gets a unique cryptographic hash value calculated based on its contents. The hash value directly reflects the contents of the file. Even if only 1 bit is modified, the hash value will be completely different. When IPFS is requested for a file hash, it uses a distributed hash table to find the node where the file is located, retrieves the file and validates the file data. The network of IPFS is an unfixed, fine-grained, distributed network that can adapt well to the requirements of content distribution networks. At present, the IPFS technology is in the process of being improved, and the incentive mechanism is not yet clear. As a result, some cold data may be inaccessible. In order to protect the user experience, IPFS+EOSUP token incentives will be used in the early stage to deploy private peer nodes (limited static nodes). The degree ensures the stability of file access.



Storage data structure diagram

(image and content are saved to IPFS, topic base content and hash values are saved in the sidechain)

4.3 Based on DPOS+BFT consensus mechanism

There is a huge amount of data concurrency in the community ecosystem that EOSSuperWallet is building. Assuming that the community has 5 million daily users, the predicted blockchain needs to calculate about 600 times per second.

The formula is as follows:

If the number of active users is 1 million:

1 million users X 10 times per user per day (post, comment, vote) = 10 million

call / daily = 1000W / 24 / 3600 / second = 116 times / sec

If the number of active users is 5million: = 580 times / sec

The existing POW (Proof Of Work) and POS (Proof Of Stake) consensus mechanisms obviously cannot meet the efficiency requirements. In order to meet the user experience and decentralization features, DPOS+BFT is currently an excellent solution.

DPOS (Delegated Proof Of Stake) is a consensus mechanism based on the principal's proof of equity, which is mainly used to achieve the

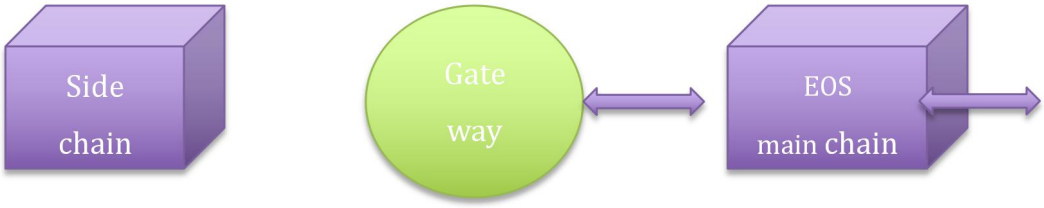
consistency of distributed ledgers. Under the DPOS mechanism, the node votes to generate N witnesses who can sign the block. Thanks to the decentralized voting mechanism, DPOS ensures that witnesses are honest and unbiased, and each block can prove that the previous block was correctly confirmed by the witness.

BFT (Byzantine Fault Tolerance) is a model for the degree of error tolerance of distributed systems. If a distributed system can tolerate the occurrence of arbitrary errors (these errors may include hardware errors, network congestion and delay, hacker attacks, node mutiny), we say that this system has reached Byzantine fault tolerance. Although as early as the 1980s, lamport proved the feasibility of Byzantine fault tolerance in the paper, there was no practical and efficient algorithm implementation until Castro and Liskov published PBFT (Practical Byzantine Fault Tolerance) in 1999. [2.2], for the first time, the BFT theory became a practical solution.

The EOSSuperWallet community uses a consensus mechanism of DPOS+BFT to enhance the security of DPOS and tolerate Byzantine errors. This is a powerful and decentralized solution that effectively addresses the technical issues facing the system.

The emergence of EOSIO allows the EOSSuperWallet community vision to be implemented. EOSIO is a distributed intelligent blockchain operating system that supports programmable intelligent contracts. The underlying architecture logic is based on DPOS+BFT. The throughput per second can reach millions, while the performance of distributed applications can be extended. Business logic can be perfectly applied to the EOSSuperWallet community.

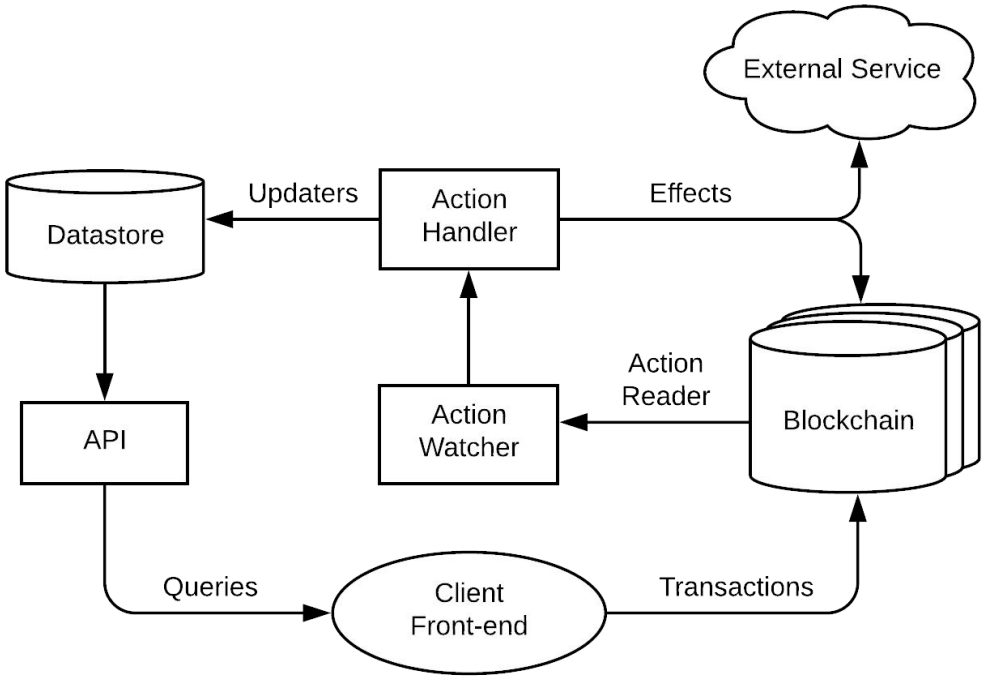
However, because the EOS main network uses economic algorithms such as bancor in the use of RAM, CPU and network bandwidth, the deployment and operation cost of smart contracts in practical applications is extremely high. So we take a flexible approach: sidechain + transit gateway + EOS main network.



Blockchain deployment diagram

4.4 The perfect backend solution

It is expensive to run business operations such as responsible queries or store large amounts of data on the EOS backbone. To this end we have used the Demultiplexer Demux.js library. Demux is a back-end infrastructure model. She implements the logic diagram:



1. Client sends transaction to blockchain
2. Action Watcher invokes Action Reader to check for new blocks
3. Action Reader sees transaction in new block, parses actions

4. Action Watcher sends actions to Action Handler
5. Action Handler processes actions through Updaters and Effects
6. Actions run their corresponding Updaters, updating the state of the Datastore
7. Actions run their corresponding Effects, triggering external events
8. Client queries API for updated data

5. EOSSuperWallet ecosystem

Depending on the development of the EOS project we serve, it is necessary to have a certain brand effect in order to play an ecological role. This program will update this part according to the specific project progress.

6. EOSUP token

Token Name: EOSSuperWallet TOKEN

Token symbol: EOSUP

Type: EOS Native Token

Total supply: (2 billion)

Token sales: 800,000,000 (800 million, including rewards)

Listing price: $0.50

Soft cap soft top: $10 million

Hard cap hard top: $80 million

Raise cryptocurrency: EOS

Distribution:

1: Channel sales

70 million - $0.015 to $0.03, Stage 1

65 million - $0.03 to $0.06, Stage 2

70 million - $0.06 to $0.12, Stage 3

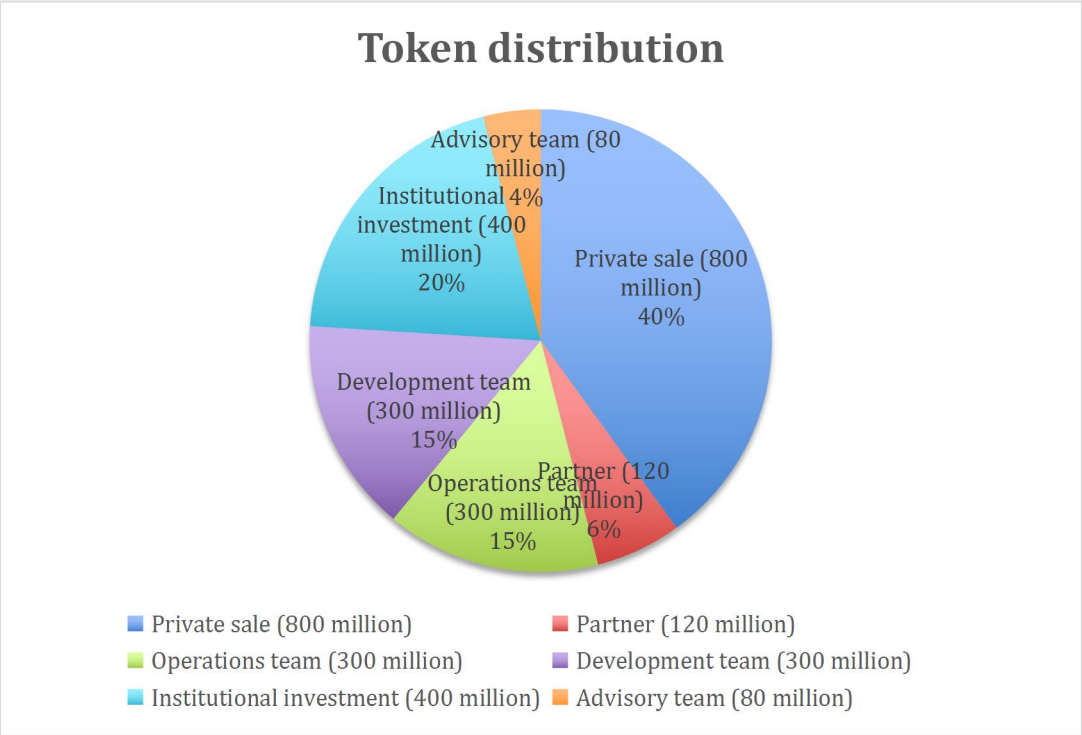
200 million - $0.12 to $0.24, Stage 4

200 million - $0.24 to $0.48, Stage 5
Total sales: 650 million

195 million tokens - bounty and referral plan (for the fourth and fifth sales stages)
After the end user purchases, the amount of debits is 20% per 30 days, and the primary and secondary channels are not locked.

(The above US dollar is only used as a price reference for Eos, there is fluctuation, the actual price per day. Any unsold EOSUP token will be added to the partner pool or other pool, the founding team decides at its own discretion.)

2: Partner - 120 million EOSUP tokens as an incentive pool to attract partners' supply chain, no locks
3: Operations team - will reserve 300 million EOSUP tokens for the team, no locks
4: Advisory team - will retain 80 million EOSUP tokens for the consultant, locked for 90 days.
5: The development team - 300 million EOSUP tokens will be used to pay for technology development costs, locked for 180 days.
6: Institutional investment - The remaining 400 million EOSUP tokens will be sold to institutional investors, and the lockout situation will be based on actual conditions.



7、Team

Consultant Dr. Chris Ning

Dr. Ning graduated from a prestigious university in finance, and is currently the CEO of a block-based technology-based investment company. He has experience in the securities industry and was the chief strategic economic analyst of any of the world's top 500 companies. Relevant departments provide various Internet finance and blockchain research reports for think tanks.

It has been three years since the economic theory research and project practice in the blockchain. He has advised on a number of blockchain projects and has already launched an online exchange.

Consultant Victory Hong

Victory Hong has more than 15 years of experience in the Internet. He has founded several Internet companies. He is currently Chairman of the Victory Foundation in Singapore and the founder of the Malaysian UFO Cryptographic Exchange. It has been a practice in the blockchain for five years. He has provided consulting services for a number of blockchain

projects, and several projects have been launched on the exchanges they founded.

Consultant Shangki

It is one of the most important EOS evangelists in Korea. He is also a well-known blockchain media person with his own column. He worked in Samsung for 7 years before and was the head of the relevant department of science and technology information.

Consultant Hansam

The technology startups in Singapore have extensive experience in setting up incubators for top universities in Singapore. He is familiar with the venture capital investment field and has helped create multiple technology startups for more than 8 years. Currently, he is the managing partner of BGTP Ventures in Singapore, investing in blockchain, artificial intelligence, financial technology and cryptocurrency. He has a great interest in financial technology companies and selectively provides promising technology companies with advice for ICO. He holds a bachelor's degree from top universities in Asia - National University of Singapore and an MBA from Hull School of Business.

Chairman of the Tom Foundation

After earning a master's degree in accounting, Tom founded a number of companies, including accounting firms. He was employed as an accounting audit consultant for five listed companies and invested in a number of companies as board members. His interests are angel investment, financial services and food.

Andy CEO and founder

Andy is the founder and CEO of EOSSuperWallet. He has more than 20 years of experience in IT. After graduating from university, he has been engaged in R&D and implementation of ERP systems for more than two years, and has been successfully operated. He has since entered the Internet industry and created many Internet companies, including e-commerce online malls and community networks. Management, web video, web conferencing, online education, social networking platforms, and online community incubators. There have been three years of research and development and

practice of blockchain projects. It is particularly advocating the ecosystem of the EOS system and is an active evangelist and practitioner of its ecosystem.

Peter COO Chief Operating Officer

As Chief Operating Officer of EOSSuperWallet, Peter is planning, coordinating and working to manage the strategic business operations of EOSSuperWallet. Prior to joining, Peter served as the coo of the exclusive Internet company and successfully helped the company achieve impressive operational results and obtain financing in rounds A and B. He specializes in market operations, resource integration and advertising docking.

Hali wei CTO Chief Technology Officer

Hali wei is a senior technical expert with more than 15 years of experience in IT R&D and management. He used to design a backbone data exchange system in Huawei. He is a C-language expert and an excellent network communication expert. The CTO of the home technology company also has experience in hardware products and IoT systems. More than three years of experience in R&D in blockchain.

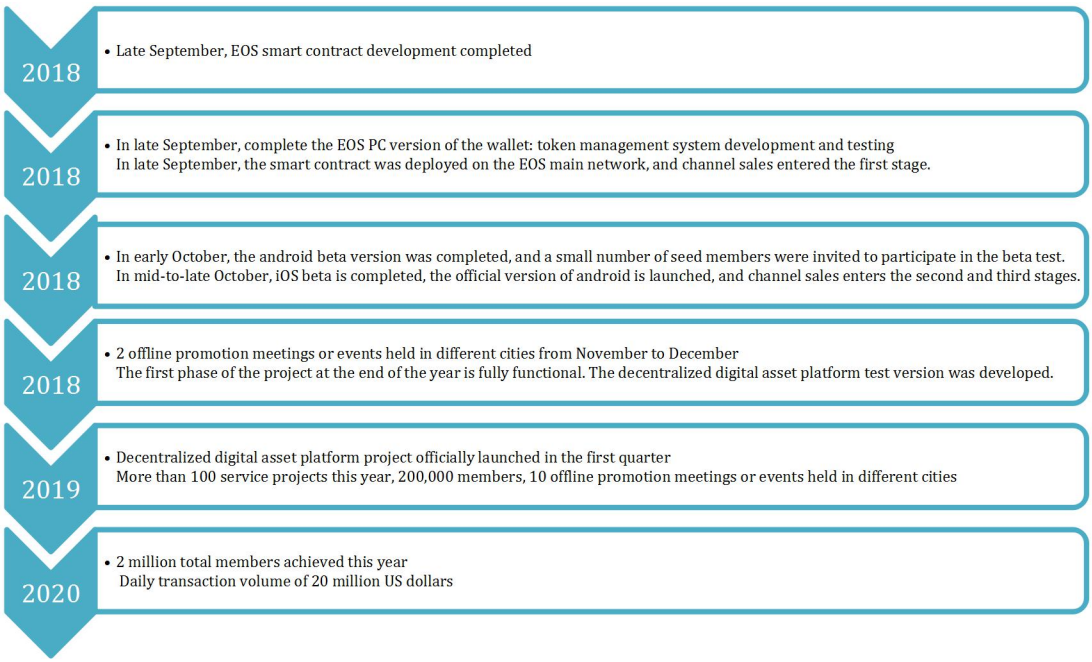
Kelly Head of Global Brand Marketing and Communications

As the head of EOSSuperWallet's global brand and communications, Kelly is planning, coordinating and managing the marketing communications activities of the EOSSuperWallet project and maintaining a consistent brand image across all platforms.

Jenny Social Media Supervisor

Jenny is the head of EOSSuperWallet on social media. Prior to joining EOS SuperWallet, she had experience in digital marketing and financial public relations. She holds a Master's degree in Strategic Marketing from Imperial College London, Jenny and a Bachelor's degree in Psychology. She is very good at communicating with netizens.

8. Time Map



9、Contact us

Official website:

Twitter:

Reddit:

github:

Telegram:

Steemit:

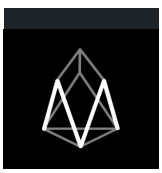
Medium:

Facebook:

10、Partner

Global
Blockchain
Foundation

TRUST ACCOUNTABILITY EQUALITY



Reference

[1] Buterin, V., & Poon, J. (August 11, 2017). Plasma: Scalable, autonomous smart contract. Searched on September 12, 2017 from http://plasma.io/plasma.pdf

[2] Poon, J. (June 17, 2017). OmiseGO: Decentralized trading and payment platform. Searched on November 3, 2017, from https://cdn.omise.co/omg/whitepaper.pdf

[3] Larimer, D. (Bytemaster), & Lavin, J., (hkshwa). (June 3, 2017). EOS.IO Technical White Paper. Searched on April 11, 2018, from https://github.com/EOSIO/Documentation/wiki/Whitepaper-Test

[4] Buterin, V. (November 9, 2017). STARKs, Part 1: Polynomial proof. Searched on May 10, 2018,from http://vitalik.ca/general/2017/11/09/starks_part_1.html

[5] Larimer D., Scott N., Zavgorodnev V., Johnson B., Calfee J., Vandeberg M. Steem: A blockchain-based incentive social media platform. March 2016. Search for June 1, 2018 from https://github.com/steemit/whitepaper/commit/da16f36bf23bc53d30b57787d7b9044d9c07399c.