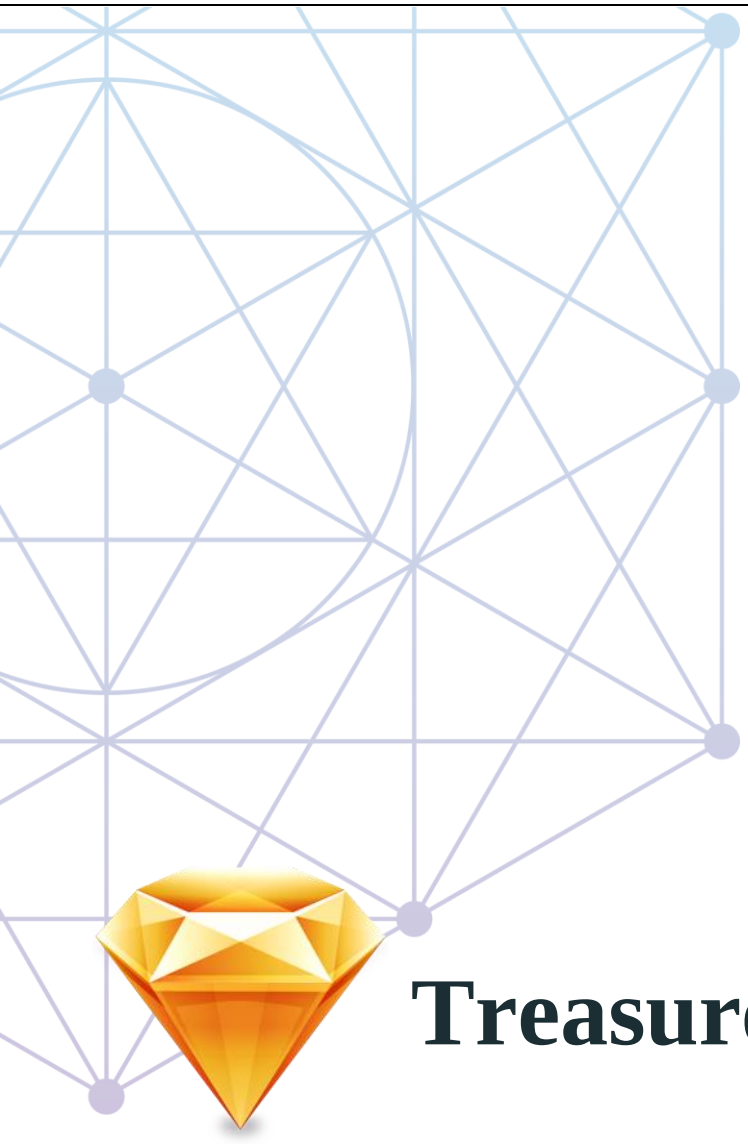
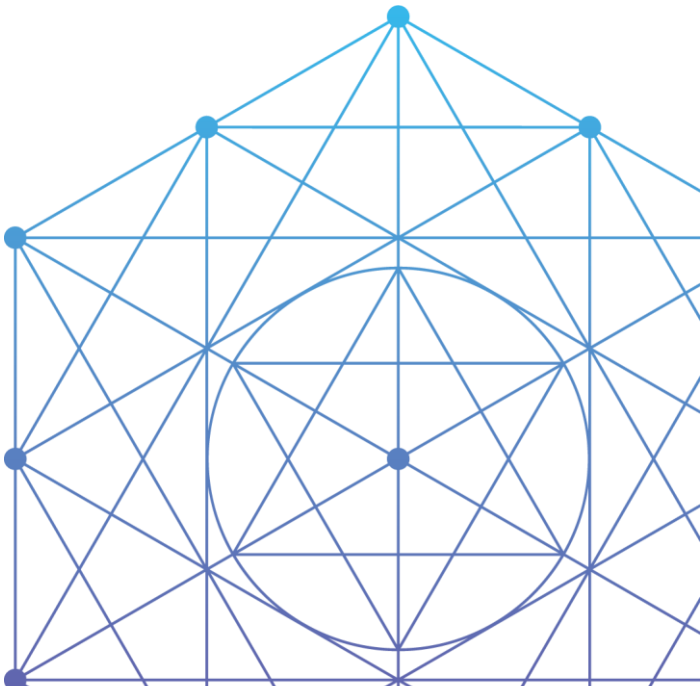


TreasureChain White Paper

——Global Jewelry Industry Blockchain Service Platform



Content

Abstract

TreasureChain is committed to building the world's first blockchain business ecosystem in the jewelry and jade industry. It uses blockchain technology innovation to drive innovation in the jewelry industry model, helping the industry upgrade and globalization.

TreasureChain is the world's first operating system that integrates blockchain , service adapter and big data into the jewelry industry. It is the first open platform in the world that uses the blockchain main and side chain technologies to achieve self-defined industry applications. Blockchains are used as a credit basis, combined with big data and artificial intelligence technologies, to realize the circulation, replacement, transaction, and consumption of digital assets on the main and side chain technology through the mobile terminal, so that all participants (merchants and individuals) in the jewelry industry chain can use them conveniently. The blockchain operating platform implements various business logics.

TreasureChain is the industry chain, the base chain, but also the main chain. TreasureChain is built on an open platform technology. Authorized institutions or individuals can call the mainline API interface to customize the side chain. The side chain is a business chain related to the industry application. It can be a traceability business, an agency business, a crowd funding business, a diamond asset, a gem asset, and so on. The main/side-chain technology will not overload the main chain due to overloaded services, and will not cause chaos in the main chain data due to too much business data, affecting retrieval efficiency, and solving inefficiencies of Bitcoin and the shortcomings of numerous data of Ethereum.

Through the continuous application of blockchain applications in the jewelry industry, the development of side chain has driven the circulation requirements of the main chain, and thus the asset value of the main chain has continuously increased. This is TreasureChain's business ecosystem cycle model.

1 Open platform thinking

TreasureChain is a public service platform for the global jewelry industry.

The jewelry industry chain involves very complex business chains such as raw ore mining, rough drilling of rough diamonds, finishing, jewelry design, jewelry processing, sales channels, retail terminals, brands, auctions, collections, and financial services. A piece of jewelry from raw ore mining to market sales often involves 5-10 service organizations and companies. In the process of processing and selling raw materials and finished products, data is often isolated from each other in various links. This is also the root cause that the price of jewelry industry is not transparent and the uneven distribution of income in the industry.

If there is a platform that can aggregate the data flow and information flow of each link of the industry chain, this will greatly enhance the service level and benefit distribution model of the entire industry. As a consumer of the end of the industry chain, consumers can also use this data platform to understand the purchase. The full traceability of the jewelry or collection of jewelry also facilitates financial or value appraisal organizations to evaluate the value of jewelry.

A blockchain based on Distributed Ledger Technology (DLT) provides a

complete solution for such a data platform.

The participating parties of the industry chain unify the data to the platform, and everyone is both the data provider and the data user. On the TreasureChain platform, each organization and individual are equally positioned.

Now, we ask a few questions: Why do organizations and individuals provide data to the platform? How do organizations and individuals provide data to the platform?

First of all, as the Internet has become widely used today, high-tech technologies such as big data, cloud computing, and artificial intelligence have made everyone aware of the importance of sharing. Each person benefits from sharing with others every day, and at the same time, the sharer also gains in the process of being used. Using this shared, shared thinking, TreasureChain pays dividends to the organizations and individuals that provide the data, and organizations and individuals who use the data pay for the data services.

When everyone is willing to solve the problem of data provision, how to upload data has become a new problem.

TreasureChain uses the Open Platform model to build the TreasureChain data platform.

Open Platform means that the software system enables an external

program to increase the functionality of the software system or use the resources of the software system by exposing its application programming interface (API) or function without changing the software system. The source code of the software system. In the Internet era, encapsulating a web site's services into a series of computer-readable data interfaces is open for use by third-party developers. This behavior is called Open API. The platform that provides open APIs is itself known as an open platform.

Institutions and individuals in all aspects of the jewelry industry chain can connect their own business systems with TreasureChain by calling OpenAPI to achieve data upload and access functions.

The open platform enables Treasure Chain to have the ability to extend the business infinitely and construct a self-recycling system.

2 Free circulation of value

The data on TreasureChain is not the text or digital information transmitted by the traditional Internet, but the various values of jewelry are presented in the form of numbers. On Treasure Chain, this value is free to circulate, replace each other, form value circulation, and realize circulation to generate value.

Today's Internet has nearly solved the problem of information transmission. People can transfer information to and from the site very

conveniently and at low cost. However, the current Internet technology cannot achieve the value-for-point transmission. Different from the reproducible characteristics of information transmission, the value transmission needs to ensure the uniqueness of the ownership. Therefore, the transmission of the current value still needs to rely on the central organization to undertake the accounting function. Simply put, after the information is transmitted, the sender and the receiver can have information at the same time; however, after the value is passed, only the transferee can own the value, and the transferor can no longer own it. The current ownership record of the transfer process is The central agency booked and realized. Then, if the network itself can provide a reliable accounting function, it will make the value transfer no longer completely dependent on the central organization, and can achieve a point-to-point transfer of value.

Blockchain, a Distributed Ledger Technology (DLT), allows participating parties to establish trust on the technical level and has the potential to become an infrastructure for building free-flowing networks of value in the future. Of Value). Although the time for the wide-ranging value of the Internet is still unknown, from the perspective of today's development status, some value-based local area networks have been gradually formed. In fact, in some specific areas, several partners or partners in the industry chain are working together to establish a blockchain trust network, which is

already in the implementation process and is no longer just a concept. A possible evolution path from value LAN to value Internet is: analogy to the development history of the Internet, the previous period is an independent local value distribution network formed by various industries according to their own needs, and is driven by the cross-industry value exchange requirements in the later period. Next, gradually form a large-scale, shared free-flowing network of value.

The core value of the blockchain lies in the construction of a trustworthy multi-centric system, which promotes the decentralized and individualized single-centered multi-centered participation of multiple parties, thereby improving the efficiency of trust transfer and reducing transaction costs.

3 TreasureChain business model

As the world's first big data cloud service platform based on the blockchain technology built by the jewelry vertical industry, TreasureChain is the leader in platform technology.

TreasureChain is the industry chain, is the base chain, but also the main chain. TreasureChain circulates a digital asset - TST. TST can serve as the value accounting medium in TreasureChain's value circulation system. All circulating assets are exchanged in two ways with TST. Through TST, various assets on TreasureChain can be indirectly convertible.

On the main chain of TreasureChain, side chains can be developed through smart contract technology. Each side chain corresponds to a business section. For example, business credits, product traceability, diamond assets, agent rights, etc. Digital assets can also be distributed on the side chains, which we call Tokens. A business credit can be a Token, a diamond asset can also be a Token..., and so on.

The TST of the side chain and the TST of the main chain can set some kind of anchoring rules, ie, the replacement rules, to achieve free conversion on the mobile app of Treasure Chain. Tokens in the side chain can be distributed throughout the entire network or within a partial service.

Tokens based on a certain business model will grow with the development of the platform, and the amount of circulation will gradually increase. Since all Tokens are valued by TST, the sum of Tokens in circulation corresponds to the value of the TST.

TST is based on blockchain distributed general ledger technology (DLT). It is decentralized, and it is used as the TreasureChain's value circulation unit. It has a high degree of impartiality and security.

There are several ways to obtain TST:

1. Replacement of other digital assets on the OTC trading platform;

2. Purchase on a third-party trading platform;

3, Token for replacement;

4. Participate in mining and obtain rewards;

4 TreasureChain architecture

TreasureChain uses cloud computing technology and adopts a multi-level architecture. From the bottom up, TreasureChain uses the data storage layer, application layer, service adaptation layer, and application layer. In order to improve the data security of the platform, the system encapsulates each functional module. With Engine Middleware technology, data access, read-write and other functions are encapsulated in multiple layers, which greatly improves system availability and ensures data security and reliability. As a new type of data storage technology, blockchain is not suitable for recording any data. Therefore, the platform organically integrates blockchain data and centralized database technology, and stores the data with a larger footprint into the central database. Records data index information and accounting data on the chain.

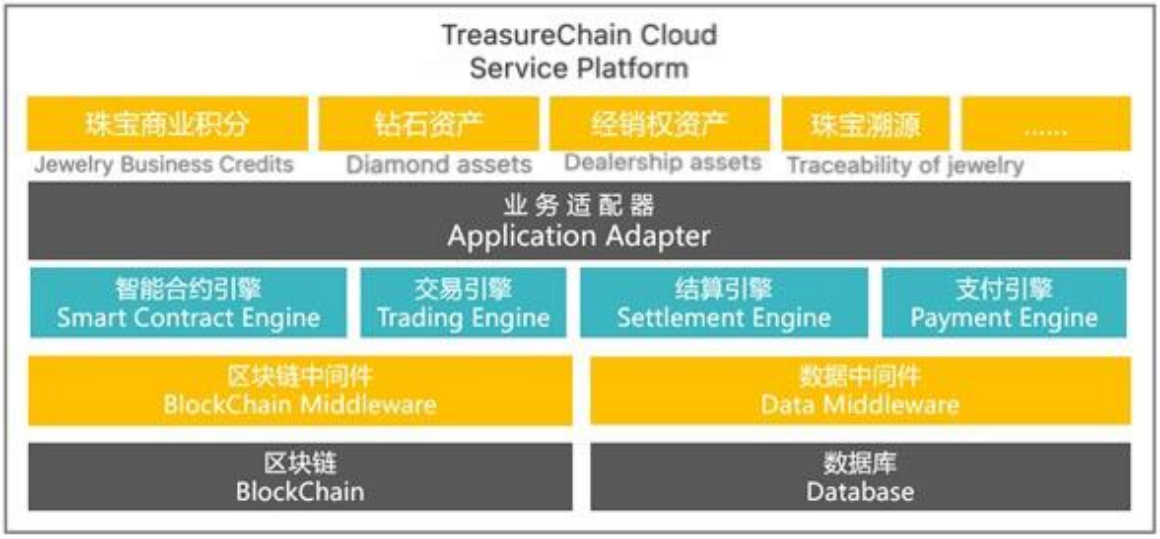


Figure 3-1 TreasureChain Cloud Service Platform

In order to improve TreasureChain's product level, TreasureChain provides strong support capabilities in the following areas:

(1) Rapid application construction: multi-mode account book structure and business model to facilitate rapid construction of applications;

(2) Massive user support: Efficient transaction verification and synchronization, supporting the scale of millions and even billions of users;

(3) Visualized operation and maintenance management: Provides visualized operation and maintenance management from the network, system, and service levels;

(4) Privacy rights policy: rich rights policy configuration, based on application needs for privacy protection;

(5) Built-in smart contracts: Support programmable contract development and provide standardized contract templates;

(6) Blockchain-as-a-Service: Provides configurable enterprise-level blockchain cloud services for all aspects of the jewelry industry.

4.1 Account Center

In TreasureChain's own public and private key system, the account center is responsible for: public and private key generation, public key writing, private key signature and management; preservation of application layer user information and blockchain address mapping; support for real-name authentication and audit regulatory requirements . There are two types of interfaces for the application adaptation layer: unmanaged interfaces and hosted interfaces.

Unmanaged interfaces: Generally applicable to organizations that have the ability to generate and use private keys with a high level of security at the application. For example, in the financial field, the private key generation and management are combined with existing secure client systems such as U-Shield and electronic signatures.

Hosted interface: Applicable to the high degree of Internet-based application scenarios in the jewelry industry. The use of public and private keys as user names and passwords is a poor experience for ordinary users. Most users are accustomed to using mobile phone numbers, emails, and nicknames as user names. Therefore, in the hosted interface, the system of

secure private key generation and management, application layer user information and blockchain address mapping make it impossible for the upper application and the underlying blockchain platform to touch the user's private key.

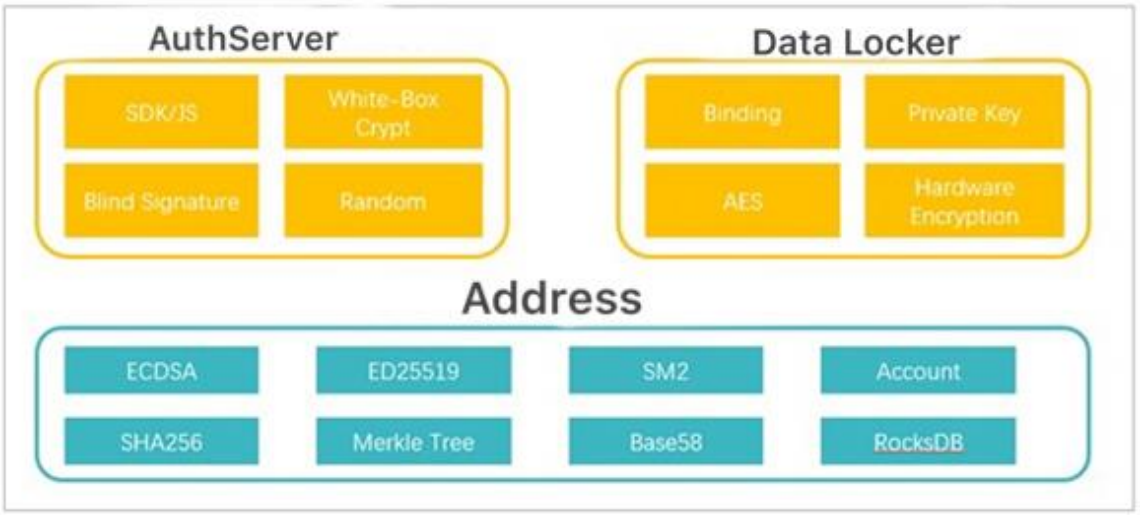


Figure 4-1 Account Center

The hosted interface uses the account center architecture and consists of an Auth Server, a Data Locker, and an Address, as shown in Figure 4-1.

Auth Server

The authentication service mainly solves the security problems of third-party applications and account centers. By adding random numbers and blind signature technology during the interaction process, key security is enhanced and the possibility of brute-force cracking is reduced. At the same time, white-box encryption technology is used to enhance client access security.

Data Locker

Private key writing and reading are transmitted and stored in cipher text in the safe system. There is a one-to-one correspondence between users and keys. The key is generated on the client side and is not saved by the client. Each time the private key signature is required, the client can obtain the encrypted private key and the decrypted key through the blind signature process.

Address

TreasureChain stores a complete account tree. Each leaf node records the asset information and identity information of an account (optional). Each account can support the use of multidimensional assets. Support a variety of encryption and decryption algorithms, choose to use according to different scenarios.

4.2 Distributed book service

TreasureChain adopts a multi-tiered server architecture. The underlying services consist of P2P networking, distributed ledgers, and consensus services. To facilitate application layer understanding and interconnection, application components are abstracted at the distributed ledger service adaptation layer.

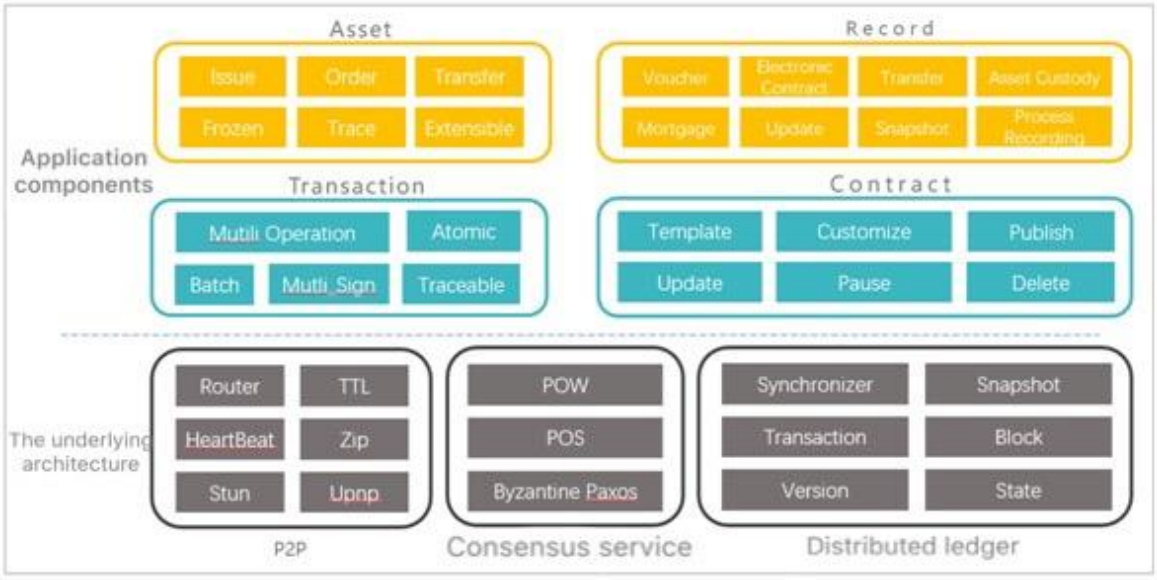


Figure 4-2 Distributed ledger service

4.3 P2P networking and node discovery mechanism

TreasureChain The underlying distributed network, P2P network, uses the classical Kademlia network, referred to as kad. Kademlia, proposed by Petar P. Manmounkov and David Mazieres of New York University in 2002, is a distributed hash table (DHT) technology. It uses XOR operations as a basis for distance measurement and has been applied in BitTorrent, BitComet, and Emule software.

The communication between nodes in the TreasureChainKad network is based on UDP. It consists of the following commands. If the PING-PONG handshake between two nodes passes, the corresponding node is considered to be online.

Kad communication protocol based on UDP			
No.	classify	Functional description	constitute

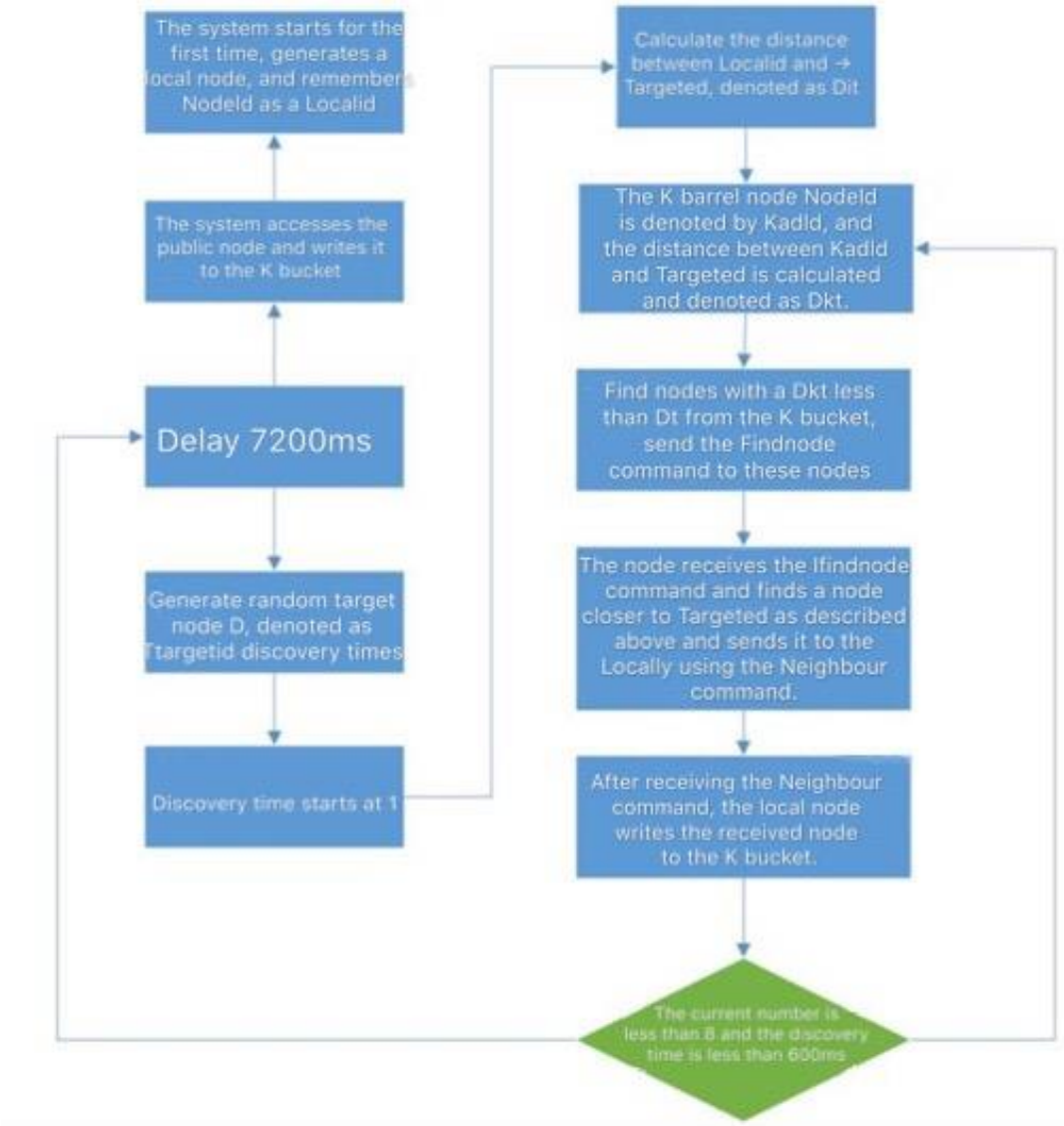
1	PING	Probe a node to determine if it is online	struct PingNode
			{
			h256 version = 0x3;
			Endpoint from;
			Endpoint to;
			uint32_t timestamp;
			};

2	PONG	PING command response	struct Pong
			{
			Endpoint to;
			h256 echo;
			uint32_t timestamp;
			};

3	FINDNODE	Check the node for a node that is close to the target node ID	struct FindNeighbours
			{
			NodeId target; uint32_t timestamp;
			};

4	NEIGHBORS	The FIND_NODE command responds by sending a node in the K bucket that is close to the target node ID	struct Neighbours
			{
			list nodes: struct Neighbour
			{
			inline Endpoint endpoint;
			NodeId node;
			};
			uint32_t timestamp;
			};

Neighbor node discovery method



4.4 Trading and messages

TreasureChain is a transaction-based state machine. The transactions that take place between two different accounts in the TreasureChain digital asset circulation business transform the state from one state to another.

The most basic concept is that a transaction is serialized by a cryptographic signature generated by an externally owned account and submitted to the blockchain.

There are two types of transactions: messaging and contract creation (that is, transactions generate a new contract).

Regardless of the type of transaction, it includes:

nonce: The sender sends a count of transactions

gasPrice: Wei's willingness to pay for each gas needed to perform a transaction

gasLimit: The sender is willing to pay the maximum amount of gas for performing a transaction. After this number is set, it will be deducted before any calculation is completed.

to: The recipient's address. In the contract creation transaction, the address of the contract account does not exist yet, so the value is left blank

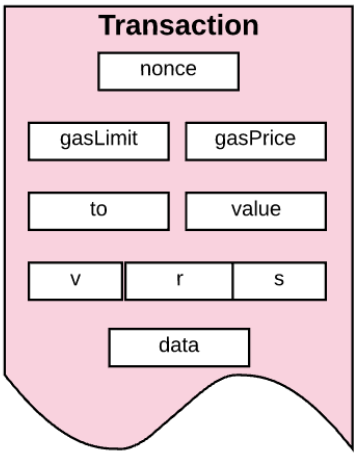
Value: the number of Weis transferred from the sender to the receiver. In the contract creation transaction, value is the starting balance of the new contract account

v,r,s: Used to generate signatures that identify transactions occurring

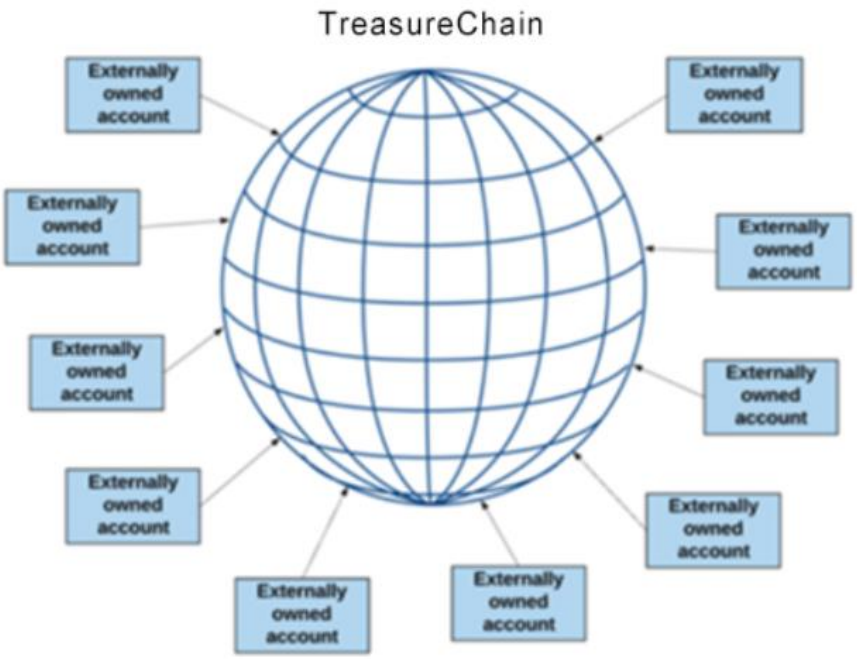
Init (only exists in the contract creation transaction): The code fragment used to initialize the new contract account. The init value is executed once and then it is discarded. When init is executed for the first time, it returns an account code body, which is a piece of code permanently associated with the contract account.

Data (optional field, only present in message communication): Input

data (that is, parameters) in the message call. For example, if the smart contract is a trade settlement service, then calling the contract may be expected to enter the buyer and seller, transaction price and other information.

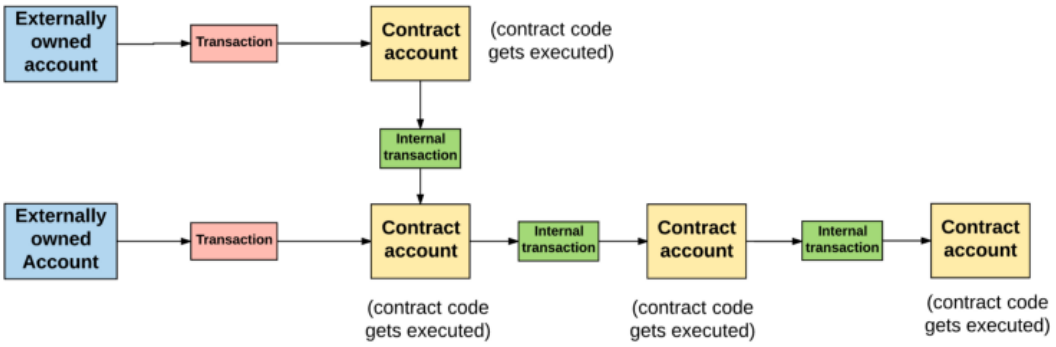


Both transaction-message communication and contract creation transactions are always triggered by an externally owned account and submitted to the blockchain. Trading is the bridge between the outside world and the internal state of Treasure Chain.



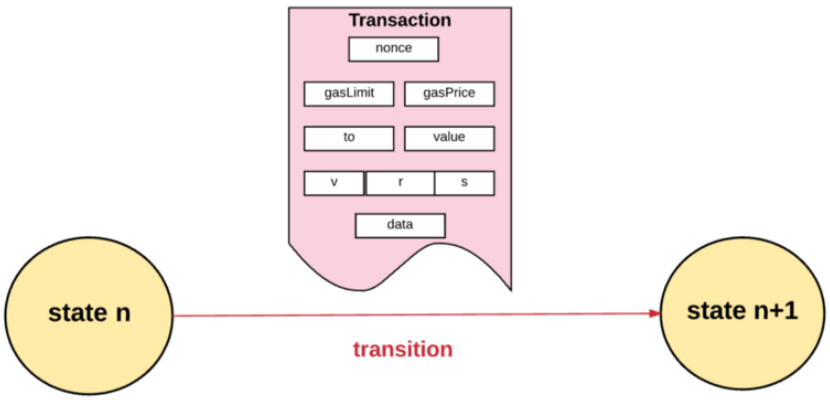
However, this does not mean that one contract cannot communicate with another contract. Contracts in the Treasure Chain state global scope can communicate with contracts in the same range. They communicate via "messages" or "internal transactions." Messages or internal transactions are similar to transactions, but they have the biggest difference from trading - they are not generated by externally owned accounts. Instead, they were contracted. They are virtual objects that, unlike transactions, are not serialized and exist only in the TreasureChain execution environment.

When a contract sends an internal transaction to another contract, the code associated with the recipient's contract account is executed.



4.5 Transaction execution

The execution of the transaction. Suppose you sent a transaction to TreasureChain. What will happen to your transaction?



First of all, in order to be executed, all transactions must comply with the most basic set of requirements, including:

The transaction must be a properly formatted RLP. "RLP" stands for Recursive Length Prefix, which is a data format used to encode a nested array of binary data.

Effective transaction signature.

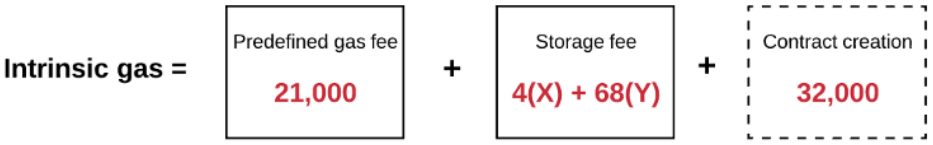
The valid transaction number.

The gas limit of the transaction must be equal to or greater than the intrinsic gas used by the transaction. The intrinsic gas includes:

——-1. Execute transaction booking fee

——-2. The cost of the data sent with the transaction

——-3. If the transaction is a contract creation transaction

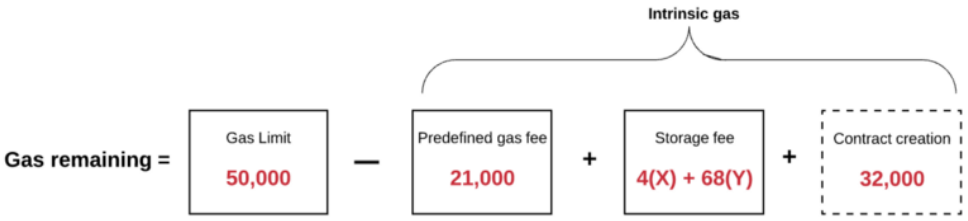


The balance of the sending account must have enough TST to pay for the "pre-stage" gas charges. The calculation of the gas cost in the previous period is relatively simple: First, the gas limit of the transaction is multiplied by the gas price of the transaction to obtain the maximum gas cost. This maximum gas cost is then added to the total value transmitted from the sender to the receiver.

How to trade meets all the requirements mentioned above, then it can continue.

In the first step, we deduct the upfront cost of execution from the sender's balance and increase the nonce in the sender's account by 1 for the current transaction. At this point, we can calculate the remaining gas and

subtract the intrinsic gas used from the total gas of the transaction.



The second step is to start trading. TreasureChain keeps track of "sub-states" throughout the transaction execution. The sub-state is a way of recording the information generated in the transaction and it is immediately needed when the transaction is completed. Specifically, it contains:

Self-destroyed sets: sets of accounts (if any) that are discarded after the transaction is completed

Log Series: Archiving and retrievable checkpoints for code execution of virtual machines

Refund balance: The total amount that needs to be returned to the sending account after the transaction is completed.

In the third step, various calculations required for the transaction begin to be processed.

When all the steps required for the transaction are completed and it is assumed that there is no invalid state, the final state is determined by determining the unused amount of gas returned to the sender. In addition to the unused gas, the sender will receive some of the allowances refunded

in the "Refund balance" mentioned above.

Finally, we have a new state and a series of logs created by the transaction.

4.5.1 The underlying architecture

P2P networking: Peer-to-Peer protocol implements basic networking and communications. Each node maintains a neighbor list and implements a dynamic self-organizing network. It can be used with existing security facilities to ensure Commercial network security.

Distributed ledger: Solve the data format, data records, data storage problems, the popular saying is "remember what accounts and how to book." Therefore, the design of distributed ledgers determines the ability of the bottom of the blockchain to provide services.

Consensus service: It is the core of TreasureChain and the biggest difference between TreasureChain and traditional distributed systems. It protects the strong consistency of the underlying data and at the same time resists the influence of "bad" bad people. TreasureChain's consensus service provides a set of abstract consensus interfaces for connecting consensus algorithms and other sidechain business modules.

It is responsible for accepting and processing Transaction and gives consensus results. The consensus service uses an open framework that can

support different kinds of consensus algorithms.

4.5.2 Application components

To facilitate application layer understanding and docking, various components such as assets, records, transactions, and contracts are abstracted at the distributed account adaptation layer.

Asset: Support assets that are currently digitized and assets that can be passed through asset securitization and asset digitization in the future.

Record: The need to use blockchain to increase the authenticity and trust of information records, such as: financial vouchers, supply chain traceability information, etc.

Transaction: Atomic level interaction with the bottom of the blockchain, an upper application can correspond to a transaction, can also be completed by a group of transactions.

Contract: Provides two kinds of contracts - standardized contracts, programmable contracts. Standardization contract, which mainly focuses on business requirements that are relatively simple and have a high degree of standardization, and have high requirements on execution efficiency. For example, the protection of transaction consistency at the time of asset exchange, the ordering and closing of asset transactions, etc. Standardization contracts can be generated directly on the chain through configuration generation, without programming and without virtual

execution, which reduces the cost of upper-layer applications and improves the efficiency of contract execution. In response to the user's complex business logic, TreasureChain also supports user self-programming, and provides a wealth of components for users to quickly build applications for specific needs, such as encryption components, rights management components. At the same time, TreasureChain provides corresponding templates for common scenarios such as assets and certificates. Users do not need to write code from scratch. They only need to change the key parameters of the template and add the characteristics of their own business to build a mature contract application.

Application components provide public service modules in the form of plug-ins, package and package the basic functional modules of business systems, and can be freely combined and called when building business systems, which reduces coupling between modules and improves the utilization of software codes.

5 TreasureChain application case analysis in various scenarios

5.1 Business credits

The 2017 global jewelry industry turnover is approximately US$290 billion. The 2017 global art auction totaled about 15 billion U.S. dollars. In addition, the volume of used high-end consumer goods in the world is also

very large. According to statistics, second-hand transactions will reach more than 20% of new product transactions.

There are more than 10,000 global jewelry retail brands, with more than 5,000 physical retail stores. More than 70% of jewelry retail stores have issued their own business points for the rebate of membership spending.

The drawback of traditional business credits is that they can only be circulated within the same chain retail system and cannot be transferred between them. This greatly limits the consumer experience that business points bring to members, and even the vast majority of membership cards only consume for a single time. Loss of 80% of business points will not serve the purpose of reinstating and targeting customers, and it will lose the value of commercial points.

On TreasureChain's business application platform, we can customize a commercial score side chain for a global or a country, and issue a token-sized digital asset-commercial counterpart, which we will name as "Treasure Points" for the time being. The initial conversion ratio of "Treasure Points" and TST is set to 100:1, that is, 100 Treasure Points for one TST.

Treasure Points can be used by jewelry retailers to distribute to members as a consumer rebate. After the member purchases jewelry merchandise at the sales terminal, the merchant pays a certain number of Treasure Points.

Consumers can replace the acquired treasure points with TST, become cash, and convert them into other Tokens and participate in other jewelry businesses.

The following is a schematic diagram of the application scenario circulation of commercial points:

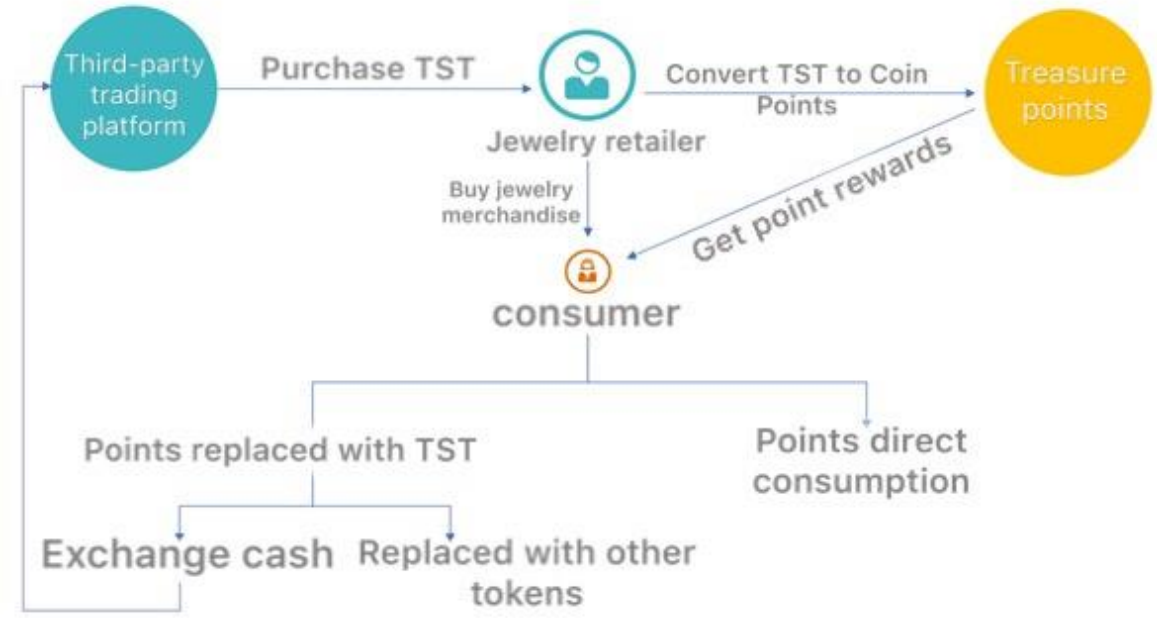


Figure 5-1 Circulation of the Business Credit Application Scenario

On the TreasureChain platform, Tokens such as Business Points can support the payment and transfer functions within the system and can be used directly for consumption.

Commercial credit is a very effective marketing tool. It can be used well to stimulate consumption, increase loyalty, and bring tangible benefits to members.

Commercial points also have certain financial attributes. Businesses can

use business points to plan a series of business models to solve business financing, capital turnover and other issues.

5.2 Traceability and identification of jewelry products

By building a centralized server to form an infrastructure for identifying data clouds and maintaining high costs, the mobile terminals provided by TreasureChain will create separate nodes for each agency, jewelry store and appraisers, which will greatly reduce connection costs.

TreasureChain provides services that enable high-end commodity transactions:

(1) Full traceability of jewelry merchandise information;

(2) High integrity of information sharing and exchange;

(3) Convenient identification methods and low cost of identification;

(4) Create a mobile and transparent jewelry consumer market;

TreasureChain will establish such a decentralized identification ecosystem around the world: Any Treasure Chain Foundation accreditation body can choose to connect the database to Treasure Chain and receive the user's TST GAS Token revenue without worrying about data leakage and tampering. In the first phase of the development of Treasure Chain, TreasureChain will horizontally integrate accreditation bodies in various luxury fields, so that more data providers can participate in this platform.

Due to the current lack of authoritative endorsements in the jewelry market, it is difficult for users to quickly sell or mortgage high-end consumer products. Most users cannot find the right counterparty. The features of multi-party confirmation, account transparency, and historical records that cannot be tampered with in blockchain technology fully meet the needs of real-life scenarios for information tracking and verification. After jewelry products are identified by the TreasureChain mechanism, they have independent blocks that can achieve:

(1) Fast transaction verification: Through the key transaction links provided by TreasureChain, such as signature algorithm, consensus mechanism, and account book storage, the second-level rapid transaction verification can be realized.

(2) Trading smart contracts: Smart contracts are a set of commitments defined in digital form. Treasure Chain can generate smart contracts based on different scenarios. The blockchain acts as a contract participant, maintains and saves contracts, and executes automatically.

Based on the above-mentioned large demand and pain points, TreasureChain's team firmly believes that the above problems can be fully solved through the blockchain.

5.3 TreasureChain luxury deals

TreasureChain will link high-end jewelry quality, second-hand

transactions, consumer finance and other areas.

Both buyers and sellers can query the TreasureChain system for product information. Pay TSTGAS Token at the time of inquiry. Only authorized agencies have permission to upload information. Upload information needs to pay TST GAS Token. Whoever uploads the content to be queried, whoever receives the TST Token award.

Through the blockchain platform, a large amount of jewelry luxury goods information is released, becoming a reference standard for other certification organizations, and at the same time reducing the compliance risk of the team of appraisers. For the buyers and sellers of the transaction, the transaction behaviors of both parties are also uploaded to the blockchain platform, which has greatly improved the reliability of transaction security. In the future, when there are two rounds of transfer and three rounds of transfer, there will be traces that will make it easier for the next buyer to make judgments, and at the same time facilitate the evaluation and pricing of other agencies.

5.4 TreasureChain jewelry alliance and luxury bond loan

Borrowers use TreasureChain as intermediaries and accreditation bodies to apply for luxury and luxury jewelry loans to other financial institutions or individuals. In this process, access to the TreasureChain system will increase efficiency and reduce costs.

The borrower's pledge information is compared with the same item of TreasureChain, and the authenticity and circulation of the item are verified based on the historical transaction data and the identification result of TreasureChain.

The borrower can also base on the TreasureChain's historical transaction and appraisal records to make a nuclear assessment report. It makes the borrower not object to the evaluation price and authenticity of the pledge.

The appraisal report given by the financial institution will also be checked on the blockchain platform of Treasure Chain to determine the risk level of assessment, reduce the bad debt ratio, and improve the disposal efficiency of non-performing assets.

5.5 More jewelry industry institutions access TreasureChain Program

In the future, TreasureChain will have access to more merchants or institutions. Due to the need for authoritative certification of product information, the access agency must be approved by the Treasure Chain Foundation. Can upload information. It is expected that the access agencies will include: brand manufacturers, accreditation agencies, auction houses, high-end consumer goods transaction agencies, and art research institutions, etc., and at the same time they will bundle appraisers or appraisers. Everybody who can upload information is also certified by the TreasureChain Foundation.

Ordinary individuals or non-certified agencies can only search product information through TreasureChain's public version of APP. If you want to upload your personal products to TreasureChain, you can upload information through the certification body that has passed. TreasureChain's APP provides information on the nearest certification.

6 TreasureChain Foundation

The vision of the TreasureChain ecosystem is to become a partner community. These partners include blockchain node operators, transaction users, service providers, intermediaries, and financial institutions. They can provide or use internet services and exchange TSTs on the TreasureChain platform. The TreasureChain Foundation aims to maintain and promote democratic management for members of the ecosystem. The mission of the TreasureChain Foundation is to make the global consumer market more transparent and fair through blockchain technology.

6.1 Structural principles of the TreasureChain Foundation

6.1.1 Justice

Separate management to develop TreasureChain and legal entities of the App and Jewelry Alliance and its member companies Separate managers Independent of TreasureChain.

6.1.2 Management

To meet the interests of TST holders, to develop a solid and scalable system. To cooperate with the Jewelry Alliance under a fair commercial agreement. To manage the issuance and distribution of tokens by the Treasure Chain Foundation. The Treasure Chain Foundation is an independent legal entity with a unique operating model. With its own management structure, consulting is provided by top professionals.

6.2 The main functions of the TreasureChain Foundation

• Openly manage their resources with other ecosystem partners;

• Support and promote technical implementation related to the Treasure Chain blockchain network;

• Handle all matters related to ecosystem members.

The mission of the TreasureChain Foundation is to develop an open ecosystem of Internet services in which consumers can easily explore and discover value, while also providing an open and sustainable platform for developers to develop, deliver and enhance these services. And attract users. To fulfill its mission, the TreasureChain Foundation will devote its resources to three specific goals related to research, development and management. The following will explain separately.

(1) Management objectives

The Foundation plans to invest resources to establish a fair and

transparent management process and take into account the opinions and needs of all participants in the ecosystem. This open management model will supervise decisions related to membership processes, participation rules, token issuing, pricing rules, legal matters, and content and compliance criteria. The TreasureChain Foundation will be responsible for managing and supervising the security of TST preservation, as well as the transparency of the use of TST and any token income.

(2) Research objectives

The TreasureChain Foundation aims to foster an innovative environment by working with partners. Collaboration includes testing new ways to participate in the ecosystem, promoting value creation and networking effects. Can fund research and development to support an autonomous network that is safe and effective and provides business transaction services.

(3) Development goals

The TreasureChain Foundation plans to direct and fund the development of the Treasure Chain blockchain itself, as well as tools that empower ecosystem partners to build, develop, and create value for each other. This will be further developed by participating in the development team and continuing to improve the technology suite that supports the TreasureChain ecosystem and maintains an open source library that can be used by ecosystem participants.

7 TreasureChain capital plan

TreasureChain Foundation issues and distributes TreasureChainTST currency. TST is the value accounting unit of TreasureChain's assets.

TreasureChainTST Release size: 100 million

7.1 TreasureChainTST allocation scheme

First, angel investment (2%)

Privately raised and international ICO platform publicly raised.

Second, founder, core development team (5%)

The founders, co-founders and core team members are encouraged to work hard to ensure the stable operation of the platform.

Third, institutional investors (18%)

In order to ensure adequate liquidity for the application of the initial application, taking into account the equality of the participants and their credibility, 10% of the total amount of TST will be placed on the capital market by means of public offerings and absorb the investment of institutional investors.

Fourth. Commercial Community Cooperation (20%)

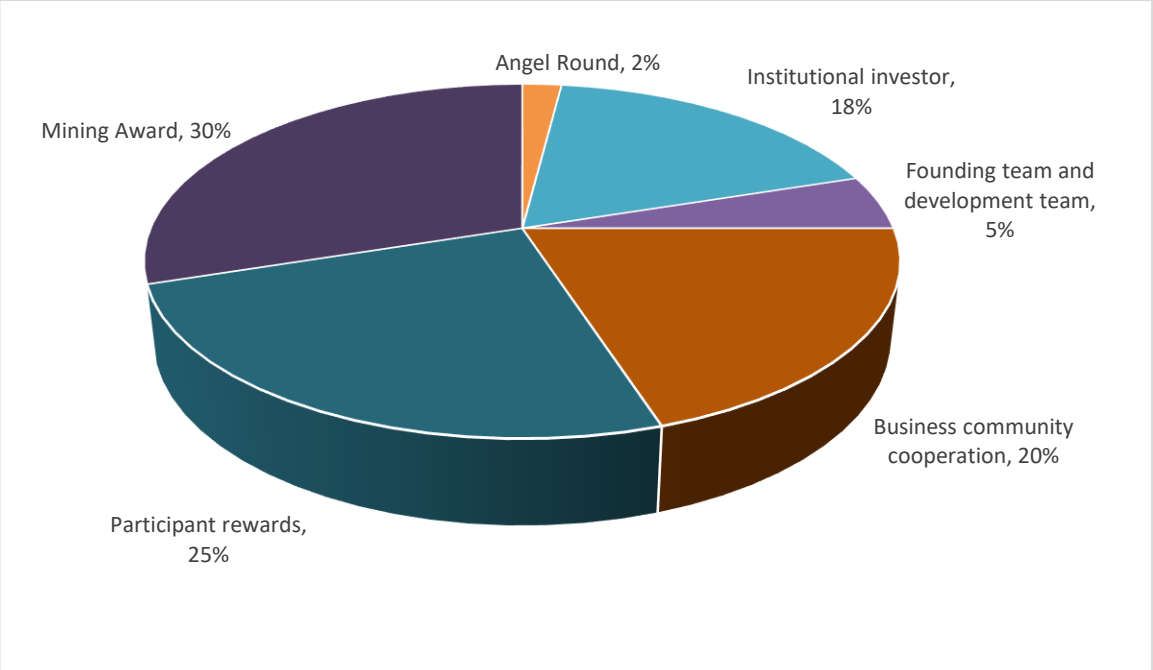
In order to encourage the landing of the project, it is mainly used for cooperation with commercial organizations and communities, and a 20% incentive is reserved.

Fifth. Participants' rewards (25%):

In order to encourage business users to connect their business systems to the chain, 20% of business promotion incentives are reserved. Assist in the development of TreasureChain application scenarios and encourage participation in the ecosystem. TSTs to be allocated are used to facilitate the adoption of various TreasureChain processes and application interfaces and to distribute to business organizations contributors of providing business data.

Sixth. Mining incentives (30%):

In order to encourage all parties or individual users to actively participate in bookkeeping, 30% of TST is reserved for consensus incentives for organizations and individuals participating in the consensus mechanism.



7.2 Angel financing

TST Angels' financing accounts for 2% of the total, which is 2 million TST.

Remarks:

1. Please pay attention to the TST official website and major media platform announcements for the angel round recruitment venue and start time;

2. The number of TSTs per ETH replacement may be adjusted. Please pay attention to the official announcement;

7.3 Use of angel round financing capital

The funds raised by the angel wheel TST offering will be used for the following purposes:

1) to fund the development and establishment of the Treasure Chain blockchain platform;

2) TreasureChain's blockchain network requires marketing, operating, and promotion costs.

8 TreasureChain core team & advisor

Robert Gentz- CEO

As Chief Technology Officer Robert plays a key role in the R&D direction of the Foundation, Robert' s background as innovation leader in software development, system design and implementation, throughout his career makes him a perfect fit for this project. Robert is an honorary member of the IBM Academy of Technology.

Mrs Elizabeth Westhead – Director COO

As one of the founding directors, Mrs Westhead has a passion for innovation and giving back to the community,she has been in the sector for over 20 years and has a natural talent for bringing people together, not to

mention her impressive track record as a company Director.

Pierre Durand – Big Data Expert　CTO

Mr Durand is our Data Science expert, there is hardly anyone that see’ s data the way he does. Pierre has written some of the most intuitive algorithms that makes it easy to make sense of Big Data, his core skills are Python, R, Hadoop and Java.

Joshua Reeds – BlockChain Expert

Joshua is our in house BlockChain expert, he has a unique way of seeing business transactions and how the blockchain can revolutionise these, since the blockchain and its most popular product, the cryptocurrency,are difficult for most people to understand,we really appreciate Joshua’ s ability to

describe it in simple terms. Joshua is also developing our very own BlockChain and together with Pierre and the rest of the team will be launching our own coin.

Mr Craig Aspinall – Director

Craig worked as a Stockbroker for almost 20 years before joining the team as an Executive Director, his experience and network of contacts put him at an advantageous position for developing the foundation.

9 Future plans

March 2018 Released by TreasureChain TST.

March 2018 TreasureChainTST will land more than 5 international trading platforms.

In April and May 2018, TreasureChain’ s “Smart Contract” will be launched.

September-October 2018 TreasureChain's "Smart Contract" version 2.0 go live.

November 2018 TreasureChain to open access to compliance partners

10 Disclaimer

This document is for informational purposes only and does not constitute a reference to the purchase or sale of TreasureChainTST. Any similar proposal or suggestion will be made under a trustful clause and subject to applicable laws. The above information or analysis does not constitute investment decision or specific suggestion.

This document does not constitute any investment advice, investment intention or investment in Treasure Chain. This document does not constitute or understand to provide any sale or purchase, or any invitation to buy or sell any form of Treasure Chain, nor is it any form of contract or commitment. The Treasure Chain Foundation does not bear any direct or indirect damages caused by participation in the Treasure Chain project, including but not limited to:

1) This document provides the reliability of all information;

2) Any resulting errors, negligence or inaccurate information;

3) Or any resulting behavior;

In addition, those who do not use their TreasureChain correctly, such as losing the wallet private key, may lose all rights to use TreasureChain and may even lose their TreasureChainTST.

TreasureChain is not a type of ownership or control. The possession of TreasureChainTST does not represent the ownership of TreasureChain related personnel and TreasureChain does not grant any person any right to participate, control or make any decision regarding TreasureChain.

TreasureChainTST is used as a guide only for internal applications of the TreasureChain platform and should not be understood as:

1) A currency;

2) Rights to the company, voting rights or non-voting securities (or its equivalent), or any claim against the company;

3) Any kind of equity or debt investment in any company;

4) Any securities, any form of financial derivatives, any commercial paper with intrinsic value or market price;

5) Any form of investment contract;

6) Any goods or assets that anyone is obliged to redeem or purchase;

7) IOUs, bonds, warrants or other certificates that give the holder interest, dividends or any returns.

11 Right of interpretation

The TreasureChain Foundation reserves the right of final interpretation of this plan.