Asset Collection Chain White Paper

The Tool of Asset Digitization for Changing The World

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Content

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Chapter One: Statement of Digital Asset Blockchain

When Blockchain first appeared, people were full of fear, some even demonized it, however, it is still existing and developing against all odds. Today, Blockchain has become the attention of the world. Oct 31st, 2008, the date we first learned about Blockchain through Bitcoin, resulted in a series chain reaction like the Butterfly Effect.

Modern society is experiencing a great asset migration, and establishing a digital world. Blockchain technology is building an asset-sharing distributed ledger between different nodes, institutions and industries. After the digitization, tokenization, and symbolization of material assets, all assets
can be mapped and segmented, in order to realize tangible assets registration, issuing, and trading on Blockchain. We will have different understandings of its meaning.
In the name of Blockchain, this White Paper will present you the four main axioms in the digital world. It is time, to leave arrogance, ignorance, parochialism and prejudice behind.

The First Axiom:Obtain Your Seat in Blockchain --DAO Registration and Membership System

Participating in the digital asset ICO and completing the registration is how you obtain your seat in Blockchain, for it's the best way to get started with the journey. Blockchain is the fundamental agreement to ensure value-interconnection through internet, and "Blockchain Registration" provides the grand entrance.

Based on point-to-point collaboration system of Blockchain, it opens to all participants who not only will have the rights to gain all information, but also can share the economic value andverifyall transactions. This will realize an equal and open economic collaborating system for different organizations, individuals andintelligent agents to develop a sharing economy. Through the "Membership" of Blockchain, we can build an equal and open internet economy space in different countries and regions, so all participants can partner with each other and share the achievement of digital technology and digital economydevelopment. This membership functions as the ID for participants, Once the registration in Blockchaincompletes, the membership system will be applied.

The Second Axiom: Obtain DAO, ICO Is The Recognition from The Chain Communities

ICO is one of the ways for token public issuing , it changed the logic and pattern for issuing assets from the source. Digital asset tokenizationincreases the credibility and circulation of assets. The exchange of token-to-token is the core method of ICO. The objects for ICO include but not limited to virtual products, usufruct credentials, fund units, equity shares and other digital assets. Through issuing tokens, ICOseekstrades with other digital assets and obtains approval from existing communities tofully realize the cross - chain transactions, exchanges and circulation functions.

The Third Axiom:DAO is Created in The Success of ICO

Who is managing Blockchain? And who is managing digital asset general ledger? What about token registration, circulation and exercising?

Decentralization does not mean no management. DAO (distributed self-management organization) is the Blockchain self-management organization, which can operate on its own under the rules ofthe minority obeying the majority and social equality. Those rules are existing as smart contract in Blockchain. In virtual space or reality, all social models can join DAO (commercial or non-commercial). For thousands of years, our ancestors have created and evolved a completed social operation system. Today, our mission is applying Blockchain technology through DAO's concept and pattern to rebuild it.

The meaning of DAO is to link billions of people through point to point method in Blockchain community, which makes the new sharing pattern the main economic life, allowing everyone to become a customer, all activities to becomea form of cooperation. This process is how the digital society is built.

DAO is not far from our real life. We are using it and taking part in iteveryday. DAO that based on each token's chain is created in the success of ICO.

The Fourth Axiom:Small Change of Individual changes Overall Situation

With the development of asset digitization, a global ledger (All things ledger) was born at the right time. The AI (Artificial intelligence) system between blockscan self-study and self -improve, and the numbers of new members who will take part in decision making, voting and etc. in Blockchain community is increasing . Even a small change by aindividualhas a significant effect on the Blockchain data.

The asset digitization is the greatest application of Blockchain, which is focusing on the reconstitution of digital era.
Our life demands more digitization, we need to build a distributed general ledger to record asset transactions. In addition, we use encryption and consensus algorithm to build the trust and solve the problems in value transferring from point to point, only when assets can be circulated after digitization, the universal value of Blockchain can be realized.

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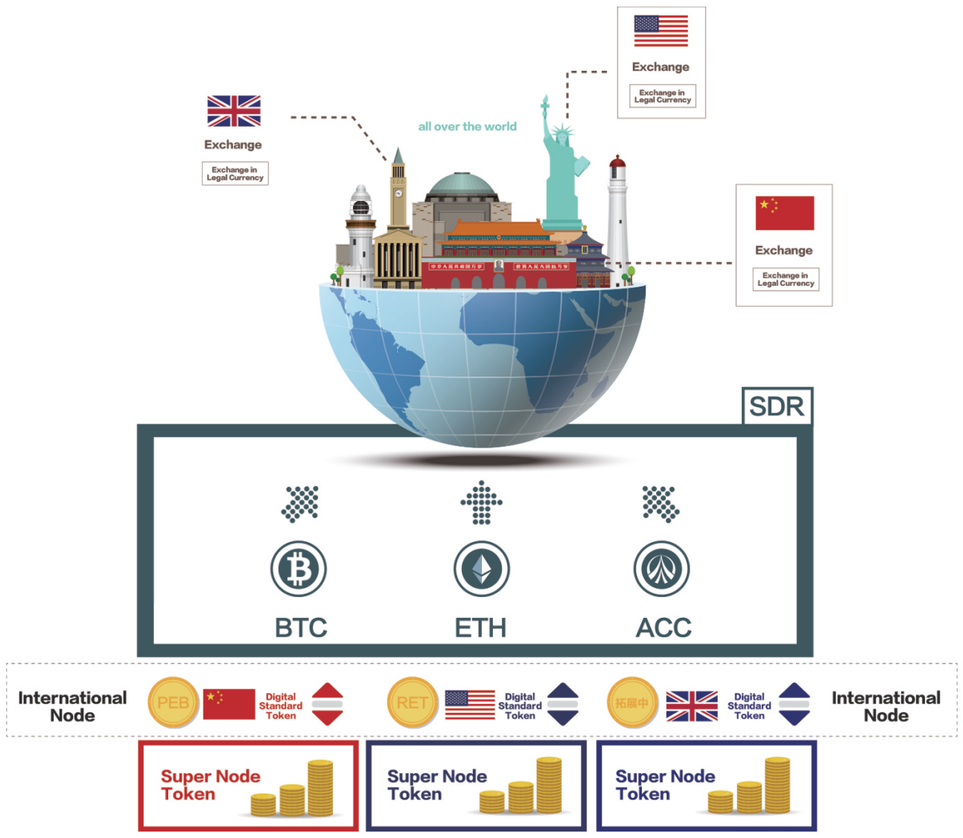
Chapter Two: Tool of Asset Digitization



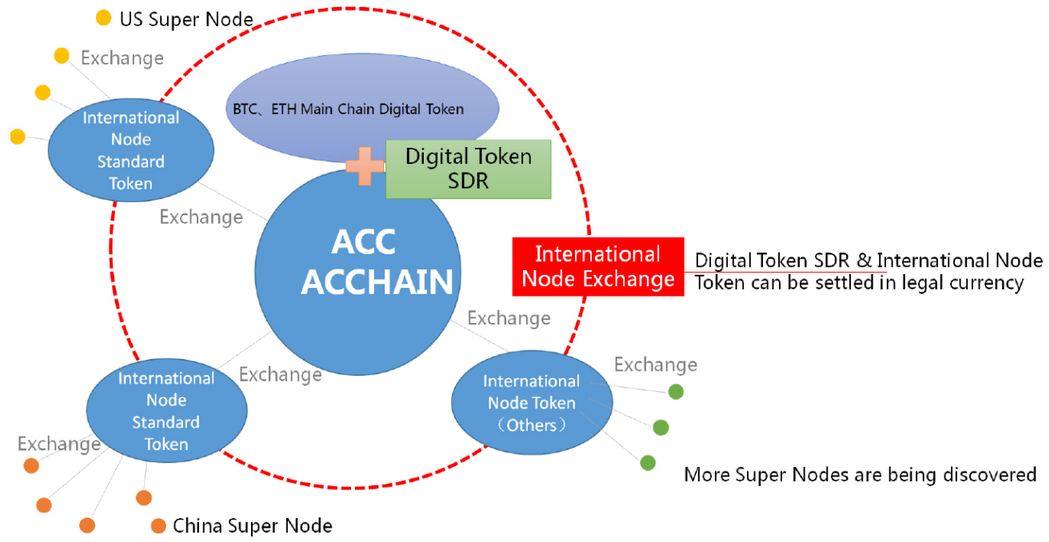
Assets Collection Chain (ACCHAIN) is the platform and the tool of asset digitization.It isa global open source community.

ACCHAIN built a puredecentralized platform for asset digitization, it is the common community of asset tokens, by copying Asset Blockchain general ledgers to implement asset digitization,and using ACC (Asset Collection Coin) as a common exchange medium to realize assets circulation.

ACC is the general ledger token in the ACCCHAIN, and it is the standard token for all token exchange andcirculation. This arithmeticcan help to implement trust and consensus between participants by building up a fair asset circulation system,using limited nodes to operate infinite resources and to implement the "goods exchange" system in the digital world.

ACCHAIN is the tool of asset digitization for the global applications.

ACCHAIN Community is launching a global ICO for tokens that made on ACCHAIN, structuring international supernode networks, the process of the first supernode network is also the process of the exchange between mainstream tokens in the market with Asset standard token -- ACC, they will jointly form the digital asset interchange object -- SDR digital currency. In the meantime, each node will establish regional “general ledger token” (GLT) for regional circulation, thus, the digital currency SDR will be the main exchange tokenalong with tokens of each international node’s general ledger token in the international exchange. In this ecosystem, each node’s token can use GLT to realize regional circulation, and each GLT and use ACC to realize international circulation. Those who control the international supernodes, win the market.



By establishing ACCHAIN and ACC, we are changing the world by building an integrated ecosystem and a social value system. In this system, the owner of the assets, is also the owner of the token, and the infinite assets are managed by an open, trustworthy and decentralized organization-DAO.

Chapter Three: DAO Registration and Membership System

The DAO of ACCHAIN community is based on the global distributional autonomous organizations in Blockchain ecosystem, it is constituted by the "peerage" members,the "peerage" is created by all ACC blocks. With more and more ACC blocks being made, the AI system between blocks will proceed the process of self-studying and completing,more and more members will become “peerage” and participate in community’s decision making and voting. ACCHAIN community’s DAO will become a global distributional autonomous organization. DAO is managed by all “peerage” members, and in the form of DAO to implement an opening management. Through the incentive mechanism, it can attract more “peerage” to join DAO. “Peerage” members can be rewarded by fulfill his duties as a member.

ACCHAIN is the tool of asset digitization, constantly optimized in the process of asset digitization. All the nodes in the Blockchain are DAO's members who will maintain and manage the digital kingdom.

Chapter Four: The Application of Asset Digitization

ACC is the standard token in ACCHAIN for token circulation and interchanging. It is the incentives for the member who works in the DAO . ACC, as the tool of assets digitization, rewards all participants, including: token issuers, operate institutions and investor to build a healthy operation system, to successfully deploy global supernodes and to build an exchange platform as thecenter of global Blockchain digital asset. ACC can be used to exchange with the mainstream digital currencieslike BTC, ETH, forming up the "digital coin portfolio" and becoming one of the standardtokens.

ACCHAIN is a distributed general ledger with self-improving ability. Each node can create a new block by working on the chain and to form an asset chain. The asset owner (Issuer), developer, trader can create the token by copying the asset general ledger, and implement the acceptance and circulation through ICO. The efficient of asset circulation will increase significantly by asset digitization, and break the barriers which restrict the economic development. The asset digitization is the international trend.

ACCHAIN, as the tool of asset digitization, is the greatest application of Blockchain. It applies widely in almost all industries such as the finance, insurance, logistics, e-business, warrant and date companies. We are creating a new theory and system for asset exchange to free assets from current restrictions.

Chapter Five: Ecosystem of Asset Digitization

5.1 Token Circulation in ACCHAIN

"Token" is the digital assets in the Asset Collection Chain (ACCHAIN) used for transaction, payment and exercisingownership rights of the underlying object.

The token can be defined as Equity Token, Application Token and CommodityToken, based on different kind of underlying objects.

1. Equity Token: The characteristic of Equity Token is investment with potential profit sharing,the underlying object of Equity Token is corporate stocks, shares, property rights, and other copyrights.
2. Application Token: The token is used to paycertain functions in the application, also being called "fuel token".
3. Commodity Token : Commodity Token is based on real commodities, for exercise ownership rights, it is the most typical digital standard token, it has stronger ties with underlying commodities.With the help of Blockchain’s mechanism -- decentralization, publicity and tractability, Commodity Token is exclusive to the underlying commodity.

5.2 Three Stages of Producing Asset's Tokens

1.Asset selection, conditions for token producing should fit the following criteria:
A.All qualifications of the assetsshould be easy to beinquired;
B.Information on the property rights is integrated;
C.For specialties, the authenticity and provenance can be approved;
D.Higher demand in the market and long-term redemption period.
To generate tokens, all conditions above must be met.
2. The publicity period: All the information about the assets from a thorough due diligence will beuploaded onto the chain for the entire community to review, after being confirmed by the community, the procedure goes to the next step.
3. Voting in DAO: Members of DAO will determine whether or not the assets should be upload onto the chain, and only with the approval from at least 2/3rd of the members, the assets will be allowed to be written onto the chain for token generating.

5.3 Standard Token ACC Exchange with Other Tokens

ACC is the standard digital general token on the Asset Chain, individual token is the digital token that based on individual’s assets, ACC can be interchanged with individual tokens through ICO, Chain Exchange Platform and other Exchange systems.

ICO of Token: The token issuers can broadcast token ICO through ACCHAIN, and others can use ACC to take part in the ICO.

Chain Exchange: After users obtain tokens from ICO, userstrade their tokens in the Chain Exchange using ACC, and ACC can be redeemed into cash from the Exchange, like other mainstream tokens.

Exchange system: Different tokens can be exchanged with each other via ACC based on real time exchange ratio,
The system can complete the transaction of different tokens, basing on the exchange rate with ACC.

The asset digitization can increase the speed of asset circulation, once entered the digital assets kingdom, you can share the market resource, by adopting asset digitization tool to reduce the transaction cost, and increase the transaction efficiency. "Goods exchange" , it provides a financial solution for companies in need.

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Chapter Six : The Core of Technology

6.1 ACCHAIN General Ledger

The “point to point” method is the distinctive feature in ACCHAIN. Eachblock needs to be submitted andaccepted to be synchronized with the general ledger. The consensus mechanism can be realized and optimized though DPOS and PBFT algorithms, which creates the irreversible and inalterable Blockchain.

6.2 Token of ACCHAIN's General Ledger

The creation of ACC is based on the token’s exchange on the chain. ACC can obtain chain tokens like BTC, ETH through ICO. The total number of ACC is calculated from the amount of token and the exchange rate of token to ACC, ACC from the exchange will be deposit into DAO’s public account, token will be transfer into DAO and be managed there, DAO members will distribute ACC to issuer’s account.

6.3 Token of Asset Digitization in ACCHAIN

Token can be exchanged with ACC. The issuer can issue their tokens, and after being confirmed by DAO, token can apply for ICO to ACC, the ACC that raised will be locked in the provisional account by contract. When the number of ACC reaches a certain point, token will besuccessful issued. And the locked ACC will be transferred to issuer's account, token will be transfer to the ICO participators' accounts to for tokencirculation.

6.4 Private Key, Public Key, Address, Account, Account Address

Each Asset account is made up by a "Passphrase", a pair of Pubic keys and an address. The user can set up a second password. Please noted that the difference with the Bitcoin is that each account in Asset Blockchain only correspond to one address.

The passphrase is used to product the wallet mnemonic which fits the BIP39 standard. The passphrase, as the primary password, will be kept by the user and won’t be disclosed to the public. Once the user loses the password, they will lose the account. The example of passphrase as follow:

"person supply quality flight service clean firm gorilla aim wood lemon slight"

The secret key includes private key and public key, which created by the "sha256 Hash seed" and "ed25519 Edwards curve" algorithm. The example as follow:

Public key "2233523d2175b4c26c02c76b8dbce40cd6512abd5a29adfe030347ff5c7 d4492"

Private key "fa8d526ea19785336757eb94e436e22ab9d92dbce991c13775474707059c94c02233523d2175b4c26c02c76b8dbce40cd6512abd5a29adfe030347ff5c7 d4492"

The account address uses the same way with Bitcoin, which is two times of "sha256" and "repemd160" Hash, and created by coding "bas58check". The example as follow:

"A5yG9avHsC42vF5Z5SjbbyVjgsSkHQHe9F"

6.5 The Creation of Block

When the "delegate" packages the block, the random block number will be created and broadcasted in the community, whenother "delegates" hear this broadcast, they will check if they have the"hashed value" which correspond to dealing data, if no data found, they will ask other nodes. After creating a random number of the block, all "delegates" gather the deals from the first step of broadcast (except for the deal have "hashed value" but have no dealing data), and signing. With 2/3 of members signing, the block will be created, and will be written into the ledger, otherwise, this block fails to be created in consensus, and go for the next round.

6.6 Working And Incentives

i.The incentive of creatingnewblock

Every "delegate" will obtain a certain amount of AAC as the incentives after finishing each block’s accounting, and the incentives reduces in half in the next year. When the number of incentives is lower than certain value, the incentives will be canceled. The following "delegate" can charge handling fees for each transaction as the incentives ofaccounting. The handling fees will not be transferred into delegate’s account after each real time transaction, instead, in order to ensure the justification of the deal, the total amount of the handling fees will be evenly divided and transferred into delegate’s account after the completion of each round of accounting.

ii.The Incentives of Asset Issuing

The issuer can obtain the incentives of ACC and the token of issuing after the successful issued with assetsbeing authenticated, assessed and insured by third parties.

iii.Voting Incentives

The members take part in the “DelegateElection”, and when this user becomes the " delegate", memberswhoparticipated and voted for this delegate can obtain ACC incentives.

6.7 Consensus System - DPOS (Delegated Proof-of-Stake Consensus)

ACCHAIN system is adopting the DPOS as the consensus system, as well as the Delegate Election mechanism -- randomly sorting the delegates’ order of recent round (Make sure every round of delegate is in different position and the position of next round remains unknown), and using round - robin’s method to let the delegateto create the

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block.

The gap time between each creation of block is 10 seconds, the new block will be broadcasted to the network and add to the Blockchain. When each new block being added to the Blockchain, the number of deals that confirmed will plus one, after 6 confirmations, the deal can be considered as secured. If the value of the deal is low level, the requirement for number of deals confirmedcan be reduced. Oppositely,dealswith higher value requires bigger number of confirmations for being considered assecured.

6.8 Practical Byzantine Fault Tolerance

To solvethe issue of double payments in DPOS, we adopted the PBFT (Pratical Byzantine Fault Tolerance) algorithm. PBEF algorithm also adopts the "round-robin" to select the delegate, however, the "propose" will be pointed out rather than setting up a block after selectingdelegate. And the purpose of "propose" is confirming the "hash" of next block. If 2/3 of nodes agree with the "propose", the block will be created by proposer andwill be accepted. The "hash" of next block must match with the" hash" of the present block. Essentially, the issue of abuse of right by the delegates could be solved by adding PBEF algorithm, which makes the delegate's ability of accounting become more controllable.

6.9 The delegate election and expansion

The election of delegate in ACCHAIN system is similar to DPOS. The core of the system is made up by 101 delegate nodes who are the truthfully elected members in the community. The most voted 101 delegates are responsible forcreatingblocks. Memberswho have less votes will become candidates, only when obtain enough votes to be one of the highest 101 members, can candidates become delegates.

Every ACCHAIN user has the right to vote for the 101 delegates, the weight of the vote is depending on the ACC number.

With the increasing number of operating nodes, the original delegate's number will become the main factor to restrict fairness and security. The delegates can apply for expanding the number ofdelegates. With the approval of at least 2/3rd of delegates, the new number of "delegates" can be updated and the new nodescan become new delegatesthrough voting.

6.10 Transaction

The level of abstraction was built in the Asset system, and most of functions in the core system are built in the transaction, such as transfer, vote, the application store, top up and withdraw. The secondary chain also can complement the different type of functions in transaction.

The level of abstraction was built in the ACCHAIN system, and most of the functions in the core system are built in trading process, such as transferring, voting, the application store, top up and withdraw. The secondary chain also can implement different types of function in trading.

```
Transaction {
required VARCHAR(20)          id;
required VARCHAR(20)          blockId;
requiredTINYINT       type;
requiredINT     timestamp;
required VARCHAR(21)      senderId;
optional VARCHAR(21)      recpientId;
required BIGINT           amount;
required BIGINT           fee;
 requiredBINARY(64)    signature;
optional BINARY(64)     signSignature;
 optional TEXT            signatures;
requiredBINARY(32)    senderPublicKey;
}
```

The main difference in transaction is transaction types and underlying assets.

The basal data structure as follow, the expanding part will be based on the different types of model in the different assets lists.

```
Transaction {

requiredVARCHAR(20) id; requiredVARCHAR(20)
blockId; required TINYINT      type;
required INT    timestamp; requiredVARCHAR(21)
                senderId; optionalVARCHAR(21)
                recpientId; required BIGINT
amount;
required BIGINT                fee; required
BINARY(64)     signature;
optionalBINARY(64)
signSignature; optional TEXT           signatures;
required BINARY(32)    senderPublicKey;
}
。
Asset_Votes {
required VARCHAR(20)          transactionId;
optional TEXT votes;
}
```

Voting transaction as an example, the voting entity will be linked with the basal transaction by transferring theID.

```
Asset_Votes {
required VARCHAR(20)          transactionId;
optional TEXT votes;
}
```

6.11 The Secondary Chain and Dapp

The ACCHAIN system provides a command tool, which can create a secondary chain system for asset holder. The developer of secondary chain can design their secondary chain, owning the data base, consensus system, trading types and account system. The secondary chain can be collocated in the groups of delegate nodes. And the separate piece can naturally form in the system, which reduces the pressure of mainchain.

Each Dapp(Decentralized application) is corresponding with a secondary chain. It can ensure the main chain's stability and efficiency, regardless of what happens toDapp. In order to achieve the simplification of platform, only those who are interested in Dapp will be responsible for the maintenance of secondary chain.

The end

ACCHAIN will be the common community of asset tokens.Asset digitization, with ACCHAIN linking billions together, will create global circulation of assets. Together, we can build a future: a shared economic communality and a digital kingdom for all.