

COKE FARM

Technical white paper

Provide a professional custom block chain solution for farm games to ensure real security, privacy and stability in block chain game applications.



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directory

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Chapter 1 Preamble and Overview

Blockchain game technology has become increasingly popular in recent years. It provides a new and efficient cooperation mechanism for people to play games with a "decentralized trust" mechanism. Blockchain's use in the gaming space has brought a lot of attention and the greatest expectation. At present, various digital currencies already have the basic functions of value transfer and value distribution, but far from the real world needs a full range of game services, which is why blockchain applications in the game field only smell lightning. In order to realize the blockchain value Internet era as soon as possible, people need a next-generation infrastructure based on blockchain technology that has complete gaming capabilities, the ability to connect different communities and tokens, and the ability to bridge the gap between centralized and decentralized organizations. Convergence is inclusive, it should integrate existing and future push-out cryptocurrencies, connect centralized and decentralized gaming organizations, accommodate authentication mechanisms and anonymous trading mechanisms, and introduce data on and off the game chain.

If you look around the office or home quickly, most of the games you play come through some form, through different regions, countries, and even global supply chains. But you probably don't know how these games flow to you. Not only you, but even the companies and manufacturers that make these games face the challenge of increasing transparency in the supply chain. The fundamental problem with these challenges is that the ability to share data across the entire game chain is very limited.

A few years ago, some game companies adopted a solution that traced the source of each information to game data from all over the country and even around the world. This solution, to a certain extent, improves the transparency of information on the chain. But at the same time, this solution also exposes the game development environment to a crisis of confidence. Because all this can be faked. QR codes can be faked, sources can be faked, and game information can be faked, so this solution is not actually desirable.

Blockchain technology, on the other hand, provides a way to build a public, distributed database or trading group, records or transactions that are inherently encrypted secure and irreversible. They use a distributed consensus mechanism between nodes of the game network to make or validate any changes made to the recorded blockchain to ensure that nodes in the network are synchronized and that the blockchain is always up-to-date. The distributed decentralization characteristics of blockchain networks and their consensus mechanism ensure that there are no central points of failure in the system. It can be seen that there is a close relationship between the evolution of decentralized games and blockchain technology.

But at the same time, a new contradiction has arisen. That is, when a game wants to choose a blockchain technology to solve its own problems, it usually encounters the following questions: Which one should be chosen in the current complex public chain on the market? Which of the complex digital currencies should be used as a means of payment?

Indeed, at present a variety of public chain hundreds of contention, a variety of digital currencies in full bloom. The emergence of blockchain technology itself is to solve the crisis of trust, but in the current blockchain technology market fish and dragon mixed situation, as a member of game development, should choose which chain, which currency, which would have brought a crisis of confidence. Because of the security and stability of a public chain, the security and stability of data are directly determined. At the same time, the smoothness of a digital currency in the payment also directly determines the gold

The security of assets in payment. Therefore, choice is critical.

And in 2014 Ethereum, put forward the concept of ERC20 tokens, making it easy to issue tokens, game companies want to have their own tokens, is no longer difficult to overcome the technological divide. To some extent, Ethereum's ERC20 token solves the problem of game development teams choosing a digital currency as a means of circulation in their respective markets. Because they are already fully capable of issuing their own tokens, using their own tokens as a means of circulation and payment. They no longer have to choose and choose from hundreds of digital currencies on the market, they don't have to worry about the digital currencies of their choice, and there are all sorts of unpredictable problems that may arise in the future. The emergence of the

concept of tokens has greatly increased the control of circulation means.

But at the same time, this solution faces a problem. Although the control of tokens is in their own hands, but tokens are based on third-party public chain issue, in the final analysis or other people's technology, in the use of other people's technology at the bottom, or will face a crisis of confidence.

In the blink of an eye, in 2021, today's blockchain is growing more rapidly, and people's recognition of blockchain technology is increasing. When game development, intended to use blockchain technology to solve their own problems, more want to further improve the control of this technology, closer to the bottom.

At this point, we ATKE FARM, a new solution, came into being , "the circulation of tokens with crop seeds".

In previous blockchain and public chain technologies, only users were allowed to issue their own tokens based on the public chain, and tokens had only circulation functions. Token transfer operations, completely by the public chain processing and manipulation, the user does not have any other permissions. In COKE FARM, users can build and create their own tokens on the network, each of which is the seed of a crop, "seeds" independent of each other, with their own right to consensus. At this point COKE FARM can be compared to the "land" of the agricultural species. Tokens are transferred on the chain, and the analogy becomes seeding on the land. Every player at COKE FARM becomes a node, in which you are both a farmer and a node.

Chapter 2 COKE FARM

2.1 Game Decentralized Technology and Privacy Issues

With the increasing complexity of game development, the level of information asymmetry is further exacerbated, resulting in uneven distribution of game information among the stakeholders in which players participate. When participating stakeholders come from different games, there is no uniform incentive policy to provide complete information, which exacerbates the asymmetry of information. Facebook, for example, lost tens of billions of dollars in market value in just two days because of a massive information breach in March 2018.

The Internet causes information disclosure because all of the user's data is stored on the central server of the company that provides the game website or APP. And these games are stored and processed by the company's own servers. The birth of the blockchain network was designed to create a central platform to store and process game information to protect player privacy. But in a blockchain network like Bitcoin or Ethereum, where there is no way for game developers to use these networks, there is no way to tailor functionality entirely to their needs, which in itself can lead to user privacy breaches.

To give the simplest example, if you use a less customizable blockchain network such as Bitcoin or Ethereum to solve a payment problem, perhaps every game item you buy, recharge, is published directly on the block browser, and anyone can see how much money you spend on what items. This in itself is in itself a kind of disclosure of user information.

Blockchain network games Digital assets and their transactions, which in fact belong to the more private and sensitive information, if transparent to all, and can not be deleted, then imagine that when blockchain in life a large number of applications landing, for the vast majority of the ordinary life scene needs, their own transactions and payment information is made public, which is undoubtedly unacceptable.

Therefore, we can draw such a conclusion. We have only specific needs, we need blockchain technology to solve them, we need to be transparent and tamper-free. At the same time, there are some scenarios where we do not want to be transparent about information, such as the following.

A farm player doesn't want competitors in the game to know about their warehouse props;

Some rich people in farm games don't want to be told about their specific wealth;

The game involves rare seed trading, etc., do not want to be seen by others their specific transactions, to prevent others from predicting their trading intentions, affect trading and profitability.

In the traditional blockchain network, all information is transparent and non-deletible, which is obviously contrary to the actual application of the game, hindering the further development of blockchain technology application.

2.2Blockchain games The limitations of the means of payment

Game development teams use digital currency as a means of payment, which can solve the above problems to some extent, but also introduce other problems. For example, digital currencies are also extremely diverse, and the vast majority cannot be transferred across chains. Also such as: digital currency price volatility, if the trading time is longer, easy to dispute the amount and so on.

COKE FARM improves on interoperability, scalability, and availability in order to address these limitations. The first is interoperability. Different blockchains, central organizations, and data centers have different definitions of the value of something. And if you want to unify values, you need public chains that can communicate different blockchains, different central organizations, different data sources, and not only deliver value, but also run other smart contracts. The second is scalability, which needs to be able to be used in different game scenarios, including opening seed blind boxes, trading between rare seeds, and so on. Finally, availability requires a resource-rich ecosystem, and multiple DAPP runs smoothly, allowing developers to efficiently

develop apps and make it easy for users to use them.

1. COKE FRAM Seed Trading.

Farm trading networks require not only cross-chain communication, but also communication with existing central institutions and external data sources. The current blockchain cannot interoperate with other blockchains (blocks that synchronize other networks), and tokens on different blockchains cannot trade with each other. At present, blockchain cannot interoperate with external centralization institutions, making it difficult to map off-chain assets to chains. Because the current blockchain cannot read out-of-chain data, this makes the current blockchain "smart" contract difficult to apply on the ground. In the case of cross-chain technology, cross-chain trading is currently extremely difficult, not to mention the development of cross-chain smart contracts. There are already thousands of tokens, but each token can only move freely on a single blockchain, can only form their own wallets, their own smart contracts and other ecosystems, the existing game blockchain ecosystem is actually an island ecology, far from achieving real interoperability.

2. The increase in smart engagement

With regard to scalability, it is still difficult for many scenes of off-the-chain actions to map to blockchain. Previously, ICO projects could be carried out on the public chain through agreements such as ERC20. But assets such as seeds, harvested crops, and other investments in derivatives are still difficult to map to blockchain. And many off-chain trading scenarios, as long as heavy computation is involved, the requirements of off-chain data still cannot be mapped to the blockchain. Many projects are working on this, but this process is seriously hampered by the lack of efficient cross-chain communication solutions.

In this regard, COKE FARM enhances smart contracts on the main network, enables applications between multi-party digital assets, and has a variety of trigger mechanisms to effectively obtain out-of-chain data input, nested or parallel way to invoke a variety of other smart contracts, improving scalability.

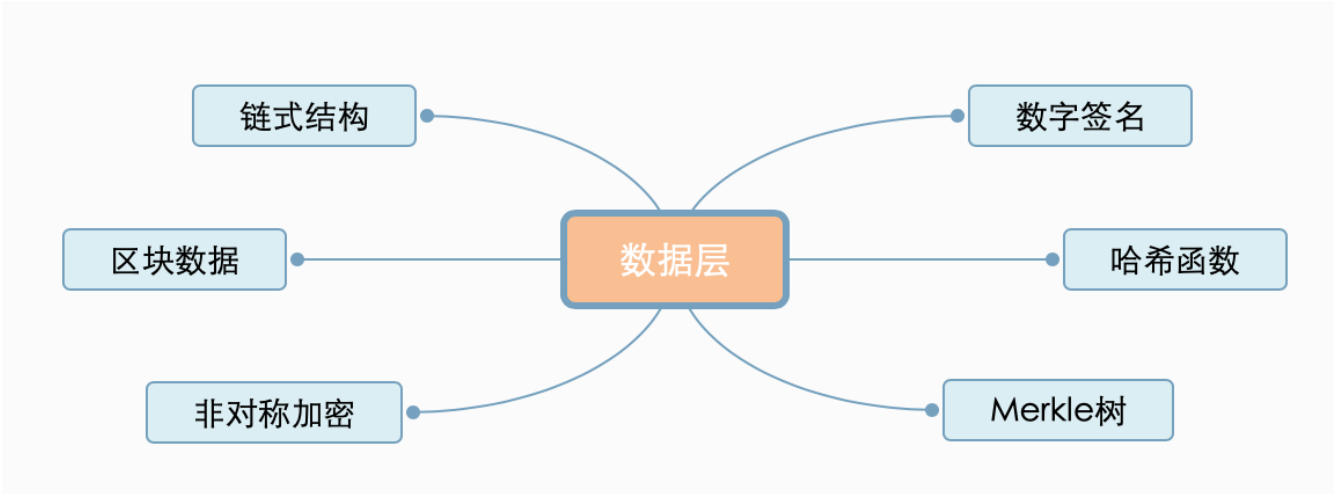
3. Game module pluggability

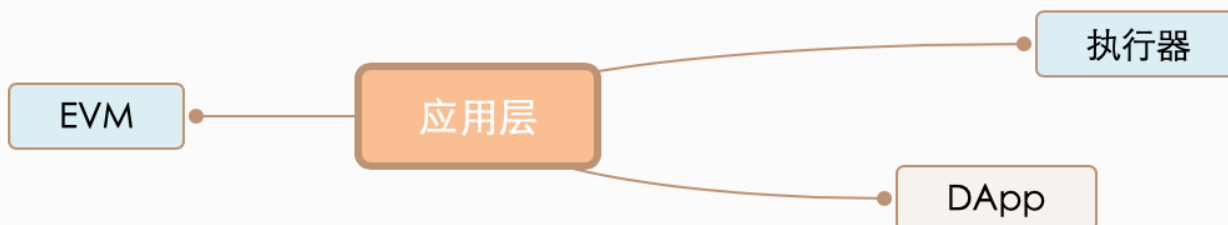
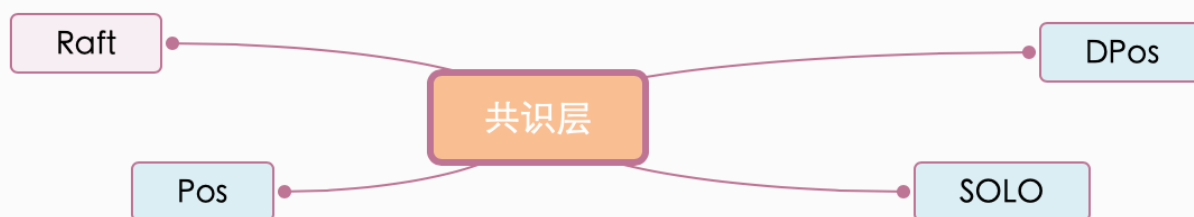
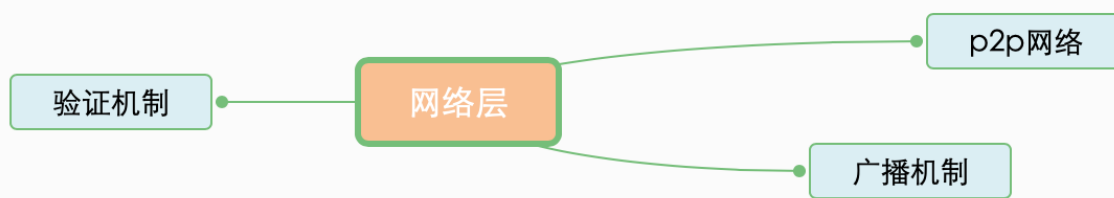
According to the previous chapter, in order for blockchain technology to be truly applied to real life, the game's blockchain network must have a high degree of customization, must be based on specific application scenarios for specific analysis and specific development. In the COKE FARM network, the game is divided into six modules: wallet, p2p, block, store, mempool, and rpc. Game developers can select and combine on demand to achieve their actual needs, greatly increasing the availability of blockchain technology in the game.

2.3 COKE FARM Framework Overview

The schema is shown in the following image

The layer should be used
Exciting layer
Common knowledge layer
Network layer
The number of layers





Chapter 3 The design of COKE FARM

3.1 Design principles

Our project is a BSC chain-based game class DAPP. Over the past two years, our team has undergone extensive research and modeling, summarized and analyzed nearly a hundred kinds of play and patterns on the market, based on the current hottest dividend model in the global market to subvert innovation and improvement, and developed a new farm game into the dividend mechanism -COKE FARM.

In each digital currency transaction, 7% of the fee is mapped to the play planting dividend. You can buy seeds in the mall with Coke Farm's built-in tokens, which are opened in the form of lottery tickets and blind boxes, with a 30% chance of usdt seeds, 30% chance of bnb seeds, 30% chance of eth seeds, 10% chance of BTC seeds.

The yield is influenced by the water resources in the game, and water resources can also be purchased through tokens, with yields ranging from 3% to 15%. In each planting, the player also has the probability to obtain rare seeds, rare seeds can be planted directly to obtain high returns, can also be consigned to the trading market, by the player to bid. Of course, these games are only a small part of COKE FARM, more exciting games and lucrative returns, waiting for you to join the farm in person to experience.

The gaming world is ideal for solving pain points with blockchain technology, such as farm land properties, parcel amounts, numerical values of seed output, etc. It is very suitable for chaining to ensure the transparency and openness of data and improve fairness to all gamers.

Once the complete farm blockchain ecology is formed, the data on the chain becomes more diverse. Just design the token for circulation on COKE FARM, and more data can be mapped to the game blockchain network. A great deal of valuable things, such as land, houses, works of art, intellectual labor, etc., are still not well represented in the chain today. With the continuous development of COKE FARM, asset tokenization will become a brand-new industry, more and more value will flow in the chain.

3.2 Implementation scenario

In the case of seed trading, cross-chain interoperability is currently extremely difficult, not to mention the development of cross-chain smart contracts. There are already thousands of tokens and coins, but each token can only be transferred freely on a single public chain, forming its own ecosystem of wallets, smart contract development tools, and more.

Existing blockchain ecosystems are virtually island ecosystems, and the value of blockchain networks is far from truly interoperability.

1. Cross-chain seed trading (in the case of cross-BSC networks).

(1) Start the lock request

User A initiates 10 BSC lock requests to COKE FARM by using the lock interface in the wallet.

(2) Start the private key

The lock request action triggers the start of the lock smart contract for the private key initialization process. The so-called private keying is the distributed generation of a private key. During this process, the smart contract completes the distributed storage of key sharding and key fragmentation. The initialization of the private key lays the foundation for the storage and use of the key in the future.

(3) The bookkeeping authority is delegated to the node management

After that, an address is generated on the BSC network, and User A will transfer his BSC to this address. The user transfer operation will be initialized by the interface of COKE FARM, and the COKE FARM node will check the completion of the transfer.

Upon receipt of the transaction broadcast, the node checks through the interface whether the transaction is confirmed on the BSC network. If the results show that 10 BSCs were successfully transferred to the locked generated address, the billing rights are transferred to node management.

(4) Map token

After confirming the transfer of billing rights, the smart contract updates user A's account status on COKE FARM. Locked records are packaged by nodes and recorded in the block. At this point, the 10 seed lock requests for User A are completed.

Similarly, user lock requests are initiated in the wallet by calling the relevant program interface. The user's experience with wallets is similar to any token transfer.

The specific steps of the lock implementation process are as follows:

(1) User A Action Wallet initiates a 10BSC transfer transaction to a BSC address outside COKE FARM, which will be considered a lock request.

(2) Check, lock, generate transactions

The transaction triggers a locked smart contract on COKE FARM. The contract will first check the status of User A's assets on COKE FARM and lock the status of the 10 BSCs that User A maps in the account, and then generate a transaction request with User A signature for addressing.

(3) Node Signature

The node on COKE FARM receives a transaction request and begins to calculate and compare based on the key fragmentation it stores. If the result is positive, the node signs and broadcasts the result.

At the same time, each node collects signatures. When the transaction signature reaches 3, the transfer of the 10BSC transaction is completed when the transaction is sent from the node to the BSC network.

(4) Decomposing node control

The node on COKE FARM checks the transaction for confirmation on the BSC blockchain through the corresponding interface in Bitcoin. After the deal consensus is confirmed, user A's 10BSC takes control of the node and is disassembled.

(5) Release the token map and destroy

Smart contracts synchronize the user's status on the COKE FARM account, release the locked 10 BSC maps, and destroy the maps. At the same time, the locked records are packaged into the block. At this point, the user's lock request is complete.

Nodes that participate in cross-chain initiation of trades, confirmation of trades, and verification of trade signatures will be rewarded according to the incentive mechanism given .

3.3 COKE FARM security measures

Account system

The use of the account system private key is achieved through distributed cryptographic calculations. When a transaction signature validation is broadcast, the node

can calculate and compare it based on the fragments it saves. When validation is successful, the node signs and broadcasts the validation results of its sharding.

Currently, the COKE FARM team has concluded through code analysis that hash256 and elliptic curve algorithms can support private key sharding and distributed computing. For some original chains, where the algorithm does not support sharding, homomorphic encryption is considered to implement the key calculation without disclosing the key.

Seed Blind Box System

The security of the blind box algorithm depends on the randomness of the nodes that generate each block. The security of the consensus algorithm is guaranteed when a malicious node cannot obtain the generation rights of a continuous block by controlling the calculation force.

COKE FARM's randomness design for blind boxes is similar to a "lottery", in which a large number of "draw" randomness is assigned to the "winning" node by a certain algorithm, ensuring that the results of each node are unpredictable. This consensus mechanism is known as "PoS".

Here's how to choose a bookkeeping node to use:

First, if you want to be a node with bookkeeping rights, you must have COKE Coin in your node account. The nodes participating in bookkeeping are generated based on the Pos consensus algorithm, and nodes with more coins and longer holding times are more likely to become bookkeeping nodes.

The nodes are then grouped, the results are generated by calculating the hash value of the previous chunk and another input value, and then grouped by a preset function. The grouping process is a random process that is independent of the amount of money held and the age of the currency.

Finally, the packaging node is selected according to the calculation. The PoS mechanism encourages bookkeeping rights competitors to have some amount of nuffacy, but does not encourage them to have too much. At the same time, this mechanism

ensures the randomness of the package node generation. Of course, nodes with the highest network arithmetic will have more opportunities, but randomness is still difficult to guarantee frequent "winnings".

In summary, although a node spends a certain amount of money to maintain its equity or increase its equity in order to realize more bookkeeping opportunities, there is no guarantee that its chances of winning will remain at a fixed value. At the same time, by adjusting the number of groups, through our randomization and distributed mechanisms, we still have ample opportunity to obtain bookkeeping rights for nodes that do not have a large number of interests or have an absolute numeracy advantage. In this way, more nodes tend to be treated more rationally, and eventually, most of the nodes are in an average state. And as the number of network nodes increases, there will be no significant change in this balance.

As a result, COKE FARM's seed blind box will always remain highly random.

A high degree of randomness can also be reflected in the grouping of the second step. Suppose a node in Group A wants to get the packaging rights for a Group B transaction. Then first it will face competition with the Group B node, and there is no guarantee that the node will win in the competition. And even if the node succeeds in becoming the winning node for Group B, when a Group B transaction is submitted to Group A, it is submitted to a specific smart contract, kicked out of the contract and discarded.

So, in this case, nodeA makes a useless effort. Similarly, a malicious node cannot be controlled in this way
two blocks in a row to perform a malicious fork.

At the same time, COKE FARM's seed blind box system further increases randomness. A specific smart contract sets one group of n groups as a walk-away node, dividing all transactions into n-plus-one groups. The so-called walk nodes, is that these nodes are given the right to choose any group to join.

Assuming that the nodes in the entire network are honest nodes in themselves, the presence of walking nodes will inevitably further increase the randomness of the node's bookkeeping rights, resulting in greater uncertainty about the outcome.

These uncertainties increase the cost of a malicious node attacking the node to gain packaging rights, even if it is obtained
The packaging rights of the previous block are not guaranteed to be available for the next

block. It is very difficult to attack and control too many nodes because the number of nodes is at least equal to the number of groups, which is already a very large number and will cause concern throughout the monitoring system.

A hierarchical system

A layered system is reflected in the work of packaging blocks. It divides it into two phases, corresponding to two layers of processing.

The first layer is the game program execution layer, which records the results of the game program execution and submits to the second layer. The second layer is the block generation layer, which packages the results submitted by the first layer to form a block record on the chain.

At the first layer, the game compute layer, the node completes the processing of all current transactions to achieve parallel calculations of all current transactions. In addition, the processing power of things is packaged by randomly selected nodes per round, increasing the security and scalability of the algorithm.

3.4 Smart Contract 3.0

Game Asset Tokenization is actually the process of converting off-chain value into digital assets while making these assets more central, digital, and programmable. The process of tokenization and the overall transaction of tokens on blockchain networks fall into the category of crypto finance.

Encryption The most important feature of finance is that assets and values are mainly represented in blockchain, whose property rights are mainly controlled by private keys, and transaction activity is mainly done through smart contracts on blockchain.

Because of the advantages of smart contracts, it will have an impact on how existing game assets operate. Off-chain assets will be tokenized into encrypted financial assets, and smart contracts can invoke "encrypted data (balances)" in different addresses, so smart contracts can nest each other to express complex financial logic and create applications that traditional finance cannot achieve.

Cross-chain smart contract call rules

In the code of smart contracts in the COKE FARM network, preset condition judgment and preset condition rules for calling other male chain smart contracts are added, and parameters for the target smart contract address index are created. Conditional judgment is based on the input of data when the COKE FARM smart contract is triggered and the result of the calculation of game data. If preset conditions are met, the node downloads the other male chain smart contracts and executes .

There are two parts to the description of the call condition: rule and timing. Rules are calculated functions written in advance in game smart contracts. Timing conditions can be preset conditions in smart contracts, or real-time conditions that periodically check the status of smart contracts.

Cross-chain smart contract call procedure

Suppose the smart contract in the COKE FRAM network is A, and only the contract in the other male chains is B.

- i. When Smart Contract A is triggered, it determines whether Smart Contract B needs to be executed based on preset calling conditions.
- ii. When the calling conditions are met, a preset calculation function is executed, and the result of the calculation is used as input to smart contract B.
- iii. The node that executed smart contract A downloads smart contract B locally, enters the data calculated in the previous step as data entered by smart contract B, and starts executing smart contract B.

These steps can complete the call of smart contract A to contract B, because smart contract B is based on the state of smart contract A as a trigger and input data, so we call the game logic relationship between them smart contract bridge call.

COKE FARM's Smart Contract 3.0 not only makes its own logical judgment within its contract, but also invokes other smart contracts under preset conditions. In this way, you

can build network-like invocation relationships between different smart contracts, which provide the possibility of building interconnected game applications and other complex applications, and build complex game services through bridge calls between smart contracts.

3.5 Take out-of-chain game data sources

Out-of-chain data source interface calls

Smart Contract 3.0 can also use out-of-chain game data on trigger conditions. Typically, this data acquisition is done through standard http or SOCKS-based APIs provided by third parties. For example, a third-party game interface calls a function, gets the address of the target URL through http, and gets a JSON packet.

This interface method also applies to COKE FARM to obtain information on other game blockchains, such as querying and confirming whether a transaction on another chain has been confirmed by the block in which it is located. It can also be used to transfer third-party data such as seed ra rasmence, seeding proceeds, land grade, and so on.

COKE FARM Smart Contract 3.0 will use the underlying data to identify third-party game interfaces and form appropriate third-party interfaces for smart contract calls.

In previous blockchain landing applications, the following core issues need to be addressed:

How can I ensure the truth and consistency of my game's data? Whichever is the case when inconsistencies arise? When data needs to be read, is it on or under the chain? What game data chain, what game data not chain?

Based on the above questions, in the COKE FARM network, data is made once on both sides of the game, allowing you to quickly compare whether the data is consistent. At the same time the front end through the chain, background through the game

database, the front end is for the user to provide services, so to go on the chain of data, background is managed, can go directly to the database, and then ensure that the game database and blockchain data consistent.

Finally, the sharing of data chain, private data is not chained, in the system, need to share data to other members, before only the use of API interface, and with blockchain technology, it is better to solve the problem of resource sharing.

To record user farm information, such as rank, number of blocks of land, etc., you can integrate it into the acquisition terminal and upload it asynchronously to a decentralized distributed file system. A decentralized distributed file system can be implemented, with each information corresponding to a unique hash value. If the information is modified, the hash value changes and the data is invalid.

Multiple types of trigger recognition

Existing game smart contracts can only passively wait for the triggering of game trading and can only be executed by chain trading. COKE FARM adds keyword recognition triggering for off-chain game information, and the relevant smart contracts will be automatically run by multiple triggers, enabling smart contracts to be activated without human need. As a result, multiple parties can trust each other through the code of smart contracts to accomplish a variety of complex game functions. In rare seed trading, for example, COKE FARM smart contracts can be programmed to automatically record player bid history, generate management fees, pay dividends, etc., while accepting margin, and through triggers from external data sources to achieve adjustment margin, settlement and other functions.

3.6 The use of virtual machines

In terms of programming languages, COKE FRAM uses the go language, which developers can use for fast porting of existing smart contracts.

In the future, we will also provide compilers in different languages to support more smart contracts.

In terms of virtual machines, SINCEity is by far the most common language for developing smart contracts, COKE FARM initially used EVM to accommodate

compatibility.

In the long run, we will use more development resources in JVM. At the same time, for developers who are temporarily unskilled in blockchain virtual machines, we also provide interfaces in common languages such as java, php, and python that developers can call up front to get started faster. In this way, more and more developers are attracted to the open source community of COKE FARM to work together to create an app ecosystem.

Chapter 4 The economic model

4.1 The current situation is summarized

If the vast majority of public chains on the market are compared to a business circle, the first thing they do is to delineate the scope of their own commercial areas. But after a while, there are no buildings, shopping malls or recreational facilities on the land, very desolate.

CoKE FARM's economic model is to first build buildings, shopping malls and various recreational facilities on the land, and when these facilities are built, the scope of the business circle will naturally form, or even extend indefinitely.

4.2 COKE FARM's economic network structure

An ideal blockchain economic model should include a main chain and Coin and be composed of multiple levels. COKE FARM is committed to creating a trusted network using the concept of "seed circulation token circulation". COKE FARM's network structure is divided into three layers, namely, the trust layer (the ledger layer), the build layer and the contract layer, each layer has a corresponding economic model.

1. Layer of trust: The trust layer is the ledger layer, providing the most basic consensus service to the outside world, each transaction will consume CFC as withholding fees and fuel, which will increase the scarcity and demand for CFC.

2. Build Layer: The build layer consists primarily of virtual machine services and smart contract building services. Smart Contracts At the time of issue, a certain amount of CFC collateral needs to be submitted to prevent malicious forking in the future.

3. Application layer: The application layer mainly includes a variety of smart contracts and decentralized PaaS, while providing a packaged trading interface to accelerate the flow of CFCs and transaction frequency.

The COKE FARM network provides players and game developers with a trusted service platform and ecosystem through the above three-tier architecture.

4.3 Eco-design of COKE FARM

Coin name:Coke-Farm coin

Coin short: CFC

Consensus mechanism: PoS

Total issues:100 billion

From the point of view of COKE FARM ecological construction, because the platform provided by blockchain is a fair value circulation platform, the cost of generating economic behavior on the platform is only transaction cost, and when economic behavior is generated on COKE FARM, CFC is consumed.

Chapter 5 Route Map

We released the code name for the most famous philosopher of ancient times. They have made great contributions to the world in their own fields, with their spirit of concentration and dedication.

5.1 Socrates

This phase is the first phase of COKE FARM and revolves around the development of underlying and male chain technologies.

2020.5 COKE FARM Network Development

1. Complete the COKE FARM underlying architecture
2. Supports blockchain, consensus, logic actuators, p2p, Mempool, state tree storage, list storage, rpc and other blockchain underlying support modules
3. Support consensus agreements can be plugged in, making COKE FARM both a public chain system and a federation chain and a private chain
4. Supports a variety of actuators, system customization, and user-scalable

2020.11 COKE FARM Network Update

5. Supports the fusion of BSC EVM virtual machines into the COKE FARM system, supports multiple storage methods, and the database is pluggable
6. Support for transaction privacy

2021.3 Test network release

7. Supports planetary chain technology and supports cross-chain trading of main

chains and planetary chains, as well as cross-chain assets between planetary chains.

8. Smart contracts pay farm fees

2021.10 Official Web Launch

9. Supports the integration of wasm virtual machines into the system
10. Implement the basic framework for Saas and Lass

5.2 Plato

This phase is the second phase of COKE FARM, which revolves around ecological construction and community building.

Global node deployment

11. The core code github open source
12. Mineable wallet uploads github for users to download and deploy
13. Initial formation of a global farm scale

The open source toolkit is online

14. Supports visual guided publishing token
15. Supports user-led deployment of smart contracts
16. Atomic trading (decentralized flash) function goes live
17. Decentric chat is online

Eco-software is online

Supports the implementation of supply chain finance SaaS platform and IaaS system,

to create game development complete ecological software

Realize and mine the commercial value of COKE FARM, work with a number of central organizations and data sources, write data from multiple out-of-chain data providers to the chain, so that more and more value can run on the platform

Game interface standardization

Solve the bottleneck of interoperability of COKE FARM network by launching the "Game Block Link Port Standardization Campaign".

Through interface standardization, COKE FARM can be fully realized cross-chain interaction with other male chains, and coKE FARM smart contracts and other blockchain network smart contracts can be invoked, greatly improving the availability and scalability of COKE FARM in practical landing applications.

5.3 Aristotle

This phase is the third phase of COKE FARM and revolves around the prospects for future blockchain technology development.

Game Title Registration Platform

1. CoKE FARM's greatest advantage in the use of blockchain technology lies in its technical convenience and low cost of registering information. Each type of information and property rights that need to be registered can be set up smart contracts to register and record. The type of property rights in society has been severely restricted by the existence of registration costs. If through COKE FARM, the cost of registration to a very low or even reduced to 0, after which there will be a lot of new types of property rights appear and registered in the chain, property rights types continue to enrich and expand, improve the further promotion of human "intellectual" labor status, not only to contribute to human society, and may even change the mode of economic operation.

Hybrid blockchain architecture

2. The COKE FARM hybrid architecture builds on the example of federation blockchain, which differs from traditional private/alliance blockchains and public blockchains. The public state of the COKE FARM hybrid network has different types of components that are shared by all participating nodes. A node group can further form a network with its own private state, which is accessible only to authorized members. Private network state is maintained in their respective networks, but records (hash) of transactions and smart contracts are stored in the common state of the blockchain. Public state can be used to transparently share additional data across COKE FARM network security, while private state can be used to protect sensitive and financial data from outside interference. The COKE FARM hybrid architecture can completely resolve the contradiction between blockchain transparency and anonymous privatization.

Chapter 6 Start-up Team

Bernoulli Blockchain Smart Lab

Bernoulli Blockchain & Intelligence Lab.

The laboratory is a research team of academic and industry-leading people. Founded in 2015, the lab has long been dedicated to research and development of blockchain-based security solutions and blockchain-based applications, while serving as a number of enterprise network computing and Internet of Things design work, has landed a number of blockchain applications and accumulated a wealth of blockchain technology implementation experience.

Bernoulli Blockchain Smart Labs successfully combined intelligent parking systems with blockchain technology in 2018 to chain parking data in a decentralized way, ending the disadvantages of storing and calling data only through third-party agencies. It ensures the authenticity of parking spaces and the accuracy of parking success on the platform, and makes parking data traceable. The lab created the first "multi-chain parallel" game parallel chain in 2020.

The laboratory takes into account both academic scientific research and technology availability in the industry, and completes the realization of practical application on the basis of in-depth theoretical research. The lab uses big data and blockchain technology to drive long-term exploration of changes and innovations in finance and data technology.

Chapter 7 What to Know

7.1 Risk Tips

Systemic risk: refers to a possible change in returns due to a global common factor that affects the returns of all securities in the same way. For example, policy risk, the current national regulatory policy on blockchain projects is not clear, there is a certain degree of policy causes the possibility of loss of participants; Market risk In market risk, if the overall value of the digital asset market is overvalued, the investment risk will increase and participants may expect the project to grow too much, but these high expectations may not be met. At the same time, systemic risk also includes a series of force majeure factors, including but not limited to natural disasters, large-scale failure of computer networks on a global scale, political instability and so on.

Regulatory absence risk: digital asset transactions, including CFCs, are highly uncertain, because the field of digital asset trading is currently lack of strong supervision, so e-tokens have the risk of soaring and plummeting, being manipulated by the dealer, etc., if individual participants enter the market without experience, may be difficult to resist the impact of market instability and psychological pressure. Although academic experts, state media and so on from time to time to give prudent participation in the proposal, but there is no written regulatory methods and provisions, so the current risk is difficult to effectively avoid.

Regulatory risks: There may be regulations in place in the future to regulate the blockchain and electronic tokens. Purchases of tokens may be affected if regulated by the regulatory body in this area, including, but not limited to, fluctuations or restrictions in price and ease of sale.

Inter-team risk: There are many teams and projects in the field of blockchain technology, the competition is very fierce, there is strong market competition and project operation pressure. CoKE FARM project can break through in many excellent items, is widely recognized, not only with their own team competence, vision planning and other aspects of

the link, but also by the market many competitors and even oligarchs, there is the possibility of facing vicious competition.

Project technical risk: First, this project is based on cryptography algorithms, the rapid development of cryptography is bound to bring potential cracking risk;

Hacking and crime risk: In terms of security, the amount of individual supporters is small, but the total number is large, which also puts high demands on the security of the project. Electronic tokens are anonymous, difficult to traceability and so on, easy to be used by criminals, or by hackers, or may involve illegal asset transfer and other criminal acts.

Other risks not known: COKE FARM may face some unexpected risks as blockchain technology and the overall industry landscape evolve. Participants are invited to know the overall framework and thinking of the project, adjust their vision, and participate rationally before making decisions.

7.2 Disclaimer

This document is for informational purposes only and is for informational purposes only and does not constitute any investment buying or selling recommendations in COKE FARM.

The content of this document may not be construed as forced participation. Any conduct related to this white paper shall not be construed as participation, including requests for a copy of this white paper or sharing it with others.

Participation in the project represents that the participant has reached the age criteria and has complete civil capacity.

The community will continue to make reasonable attempts to ensure that the information in this white paper is true and accurate. During development, the platform may be updated, including, but not limited to, platform mechanisms, tokens and their mechanisms, and token distribution. Parts of the documentation may be adjusted as the project progresses in the new white paper, so be sure that participants get the latest white paper in a timely manner and adjust their decisions based on the updates. The Team shall not be liable for any loss

incurred by the participants as a result of reliance on the content of this document, the inaccuracies of the information herein, and any actions resulting from this document.

The team will spare no effort to achieve the goals mentioned in the documentation, but due to force majeure, the team cannot fully commit to accomplishment.

CFC, as the official token of COKE FARM, is an important tool for platform performance and is not an investment. CFC, as an encrypted token used in COKE FARM, does not fall into the following categories: (a) any kind of currency; (c) Equity in legal entities;

The value added of CFCs depends on the laws of the market and the needs of the application after landing, and it may not have any value, and the team is not committed to its value added and is not responsible for the consequences of its increase or decrease in value.

To the maximum extent permitted by applicable law, the Team shall not be liable for damages and risks arising from participation in the Project, including, but not limited to, direct or indirect personal damage, loss of business profits, loss of business information or any other economic loss.

The COKE FARM platform clearly communicates possible risks to participants, who, once involved in the Project, accept the potential risks of the Platform at their own risk on behalf of the Participants who have confirmed their understanding and endorsement of the terms and conditions of the Rules.

