

Deipool White Paper

WORLD'S FIRST CROSS-CHAIN DEFI ECOLOGY PLATFORM

V 1.0



Overview

Deipool-the world's first cross-chain DeFi ecosystem platform.

Committed to building a global DeFi ecosystem and providing users with a complete cross-chain decentralized financial platform. Deipool is a community governance smart contract platform based on the DAO mechanism to create a decentralized wallet, lending, financing, trading, prediction, asset management brokerage People and other DeFi technology facilities are integrated, cross-chain financial technology service ecology.



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1. Introduction

1.1 Problems of the Traditional Financial System

Traditional finance is a closed, capital-intensive centralized system. This centralized system setting makes financial institutions an ideal target for cyber attacks. The nature of capital-intensive has caused problems such as entry threshold, which limits the convenience of financial services, resulting in billions of people unable to enjoy good financial services. In particular, between cross-border transactions, traditional finance is often accompanied by high transaction costs and inefficiency.

At present, billions of people around the world do not have bank accounts; most people have difficulty accessing cross-border financial services; central institutions such as governments and banks do not have enough self-censorship, transparency, and insufficient information disclosure on the flow and use of funds. Although the traditional financial sector is profitable, by contrast, decentralized finance can resist censorship, low barriers, openness and transparency, disintermediation through block chain technology, and reduce the role of intermediaries. Thus reducing the huge cost of intermediate links is likely to promote or even replace many traditional financial services.

It can be seen that in the decentralized financial system, the privileged institutions in the traditional financial field are replaced by codes and intelligent contracts. With the gradual landing of decentralized finance, the general public will have the opportunity to enjoy the financial value contained in their own financial assets in the future.

1.2 Problems in the Cryptocurrency World

In the world of encrypted digital money, the digital asset trading market is vibrant, forming an ecosystem of investors, speculators and traders, currently exchanging thousands of blockchain assets. When using a centralized exchange, such as Binance, Coinbase or Huobi, users need to send assets to the exchange's internal account. Assets exist in the central exchange and are not kept by users, and the central exchange is easy to be the target of countless attacks. Users need to face huge storage costs and risks, and there is no natural interest rate to offset these costs, so their return on assets is negative. Assets with digital wallets lack liquidity and lose time value, with a return on assets of 0. When using



point-to-point agreements for mortgage and unsecured lending, decentralization brings huge costs and frictions to users. In a point-to-point agreement, the lender must issue, manage and supervise the loan offer and active loan, and the loan performance is usually slow and out of sync.

1.3 Next Generation Financial System

The global financial system has created great wealth, but the centralized management of traditional financial institutions often leads to the unfair distribution of resources, and people with resource advantages have easier access to funds. As global inequality intensifies, is there a way to break the shackles and give everyone an opportunity to achieve equal wealth growth? With the development and wide application of block chain technology, a new decentralized financial system emerges as the times require.

This is an open, distributed financial system, can be automatically traded through intelligent contracts, no entry threshold, no custodian intervention, and absolutely safe, risk-free, can be trusted. With the development of block chain technology, it will gradually replace the decentralization system with the characteristics of higher efficiency, security, transparency, no access, low cost and so on. With the change and application of block chain, the next generation financial system will be decentralized financial system.

1.4 Traditional Finance Combined with Decentralized Finance

In the traditional financial system, financial services generally include financing investment, savings, settlement, trading and other businesses, which are provided by centralized financial institutions for users. Financial institutions use monetary trading means to finance valuable goods and provide users with convenient value circulation and value-added services. To use these services as users, they must go through financial institutions and accept the complex terms of financial institutions, which is also the main drawback of the centralized financial system. Decentralized finance will document all assets and form a global development financial system. In the system, everything is centered on open source smart contracts and code, no dark boxes, no privacy information, no censorship and entry barriers, and everyone can trade fairly at any time and space.

At present, compared with traditional finance, the volume of decentralized finance is extremely small, and its development space is huge. The combination of traditional finance



and decentralized finance is worth looking forward to. On the one hand, traditional finance needs innovation and transformation; on the other hand, decentralized finance also needs real-world cash flow inflow. Traditional finance has a large number of high-quality assets and low-cost funds, decentralized finance is a convenient channel, the cooperation between the two is the future trend. Block chain needs to be combined with the real economy to maximize value.

1.5 Deipool Presentation

in this white paper, in response to traditional financial issues, we propose the Deipool open financial system platform, which aims to develop a complete decentralized financial ecosystem to create a decentralized wallet, lending, financing, trading, prophecy, capital management broker and other DeFi technology facilities as one, cross-chain science and technology financial services ecology. Global users use digital financial ecosystem 365 days and 24 h without entry threshold to maximize the value of encrypted world currency and define the future of digital finance.

Deipool platform will adopt innovative cross-chain intelligent contracts, through the "on-chain settlement, under-chain trading" way to provide global users with a good experience, high security financial system, safe and convenient to borrow and trade. Deipool platform will also provide a variety of tools to connect traditional finance, establish a bridge between digital money decentralization finance and traditional centralized finance, help the development of real economy, and reduce the cost of traditional financial business. Meanwhile, the platform has Deipool tokens (DIP) DIP used to motivate all participants in the ecosystem and ecosystem autonomy, DIP represent the common interests and wealth of the platform.

2. Deipool DAO

2.1 DAO Origin

From the beginning of primitive society, mankind has been constantly inventing new methods through more efficient structures to organize and expand the scale of cooperation, from families, tribes to countries, to today's enterprises and globalized economy. After thousands of years of continuous evolution, the ability of good organizations to coordinate a large number of individuals is one of the greatest forces of social progress. The Internet has realized the interconnection and information sharing among the networks all over the world, and has been fully involved in all aspects of human production and life, driving the rapid development of human society. However, the Internet itself does not support openness, point-to-point value exchange and coordination, thus limiting its potential to promote global cooperation.

Block chain is the second revolution of the Internet, but its value will be ten times that of the Internet. It establishes both a trust mechanism and a fast, secure and untamable underlying technology. By completely eliminating the problems of fault and trust, it realizes the unprecedented level of collective coordination, thus forming the technical foundation of distributed autonomous organization (DAO). It is based on the principle of collective coordination. Distributed autonomous organizations (DAO) operate through intelligent contracts and encode transactions and rules on block chains to achieve open and fair, unattended and autonomous operation. DAO is an open, self-organized collective coordinated through economic incentives and self-executing norms, working around common goals. There is no clear identity between members, such as investors, developers, collaborators, operators, consumers and so on, will become a member of the DAO because of holding certificates, participate in the construction and decision-making of the DAO.

supported by the network effect, DAO provides revenue models and incentives for the production of open, shareable resources such as open source code and music files. As more open resources are built, DAO will be able to expand indefinitely, while maintaining its agility and consistency, and in many cases beyond the existing corporate structure. DAO attracts top talent in the blockchain field to fulfill the commitment of more effective and flexible organizations.

2.2 What is DAO?

DAO is an organization embodied in open and transparent computer code, and its financial transaction records and procedural rules are kept on the block chain. DAO is a fully automatic operation of the company, anyone can join and withdraw at will, and equity (token) becomes the only currency running in the system, so that the concepts of income, profit and so on completely disappear, with the development of organizational ecology, Make participants profit by appreciating tokens.

DAO is to gradually encode the iterative management and operation rules (consensus) of

the organization on the block chain in the form of intelligent contracts, so that without the intervention of third parties, the organization can realize self-operation, autonomy and self-development according to the pre-set rules, and then realize the organizational form of maximum efficiency and value flow of the organization. There is no clear identity between members, such as investors, developers, collaborators, operators, consumers and so on, will become a member of the DAO because of holding a pass (Token), participate in the construction and decision-making of the DAO.

Characteristics of the DAO:

(1) Distributed and decentralized. Central nodes and hierarchical management architecture do not exist in the DAO. It achieves organizational goals through interaction, competition and collaboration between bottom-up network nodes. As a result, the business transactions between nodes and nodes, between nodes and organizations in DAO are no longer determined by administrative affiliation, but follow the principles of equality, voluntariness, mutual benefit and mutual benefit, driven by each other's resource endowment, complementary advantages and win-win interests. Each organization node will cooperate effectively under the action of the incentive mechanism according to its own resource advantage and talent qualification, thus producing strong synergy effect.

(2) Autonomy and automation. For an ideal DAO, management is codified, programmed, and automated. "Code is law ", organization is no longer pyramid but distributed, power is no longer centralization but decentralization, management is no longer hierarchical but community autonomy, the operation of the organization no longer needs the company but is replaced by a highly autonomous community. furthermore, since the DAO runs under the operating standards and collaboration mode jointly determined by the stakeholders, the consensus and trust within the organization is easier to reach, which can minimize the trust cost, communication cost and transaction cost of the organization.

(3) Organizing and ordering. Depending on the smart contract, the rules of operation in the DAO, the rights of the participants and the reward and punishment mechanism are open and transparent. In addition, through a series of efficient autonomy principles, the rights and interests of the relevant participants are precisely differentiated and reduced, that is, to match the corresponding rights and benefits to those who work, contribute and assume responsibility, so as to promote the division of labor and the equality of rights, responsibilities and interests, so as to make the organization more coordinated and orderly.

(4) Intellectualization and certification. DAO bottom layer is supported by encapsulating



all the infrastructure that supports DAO and its derived applications —— Internet basic protocol, block chain technology, artificial intelligence, big data, Internet of things, etc. With digital, intelligent, chain-down cooperative governance as the governance means, the traditional hierarchical and man-made management mode is changed, and the intelligent management of the organization is realized. As an important incentive means in the process of DAO governance, Tongqi divides and certifies the elements (such as people, organizations, knowledge, events, products, etc.) in the organization, so that the monetary capital, human capital and other essential capital are fully integrated, and the effectiveness of the organization of value circulation are better stimulated.

2.3 What is DDAO?

Deipool distributed autonomous organization (DDAO) is initiated by members of the block chain team, early block chain preachers, and many block chain enthusiasts, following mr. nakamoto's footsteps and practicing mr. nakamoto's spirit. Realize nakamoto and many block chain enthusiasts's dream of using science and technology to benefit mankind. DDAO will gather a group of people who contribute their own value to achieve the common goal through the consensus of values, stand on the shoulders of predecessors, and contribute a force to the value Internet.

DDAO through the realization of the concept of value interconnection, let a group of people from different regions, different industries walk together and strive to achieve common goals. We believe that block chain technology will change the way of human life. In the future, social connectivity will evolve into value interconnection on the basis of existing information interconnection. In the trust system constructed by block chain, A variety of people or things transfer their self-worth through block chain network to form a rich value Internet ecology, which will greatly improve social production efficiency. We respect everyone who gives pertinent advice and good advice to the community and give appropriate rewards. We believe that every contributor is the most important wealth of the community, and every contributor should receive the return he deserves. We will make DDAO achievements and gains in the process of development fair and open, benefit everyone who contributes to DDAO development, and bring wealth, happiness and glory to every contributor. I hope that every enthusiast who is committed to the development of block chain will join us and work together for the development and inclusion of technology to share the joy of DDAO success. We will conform to the general trend of technological development, the change of external environment, the trend of historical development, and ensure that the

development of block chain industry is on the road of virtuous circle.

DDAO will focus on the block chain and its surrounding areas and will not enter any other industry that makes fast money. Any project we involve should be conducive to improving the core management and technical level of the community, giving full play to the comprehensive advantages of community resources, and promoting the development of the community in the field of block chain. The community will conform to the general trend of technological development, the change of external environment, the trend of historical development, and make us ensure that the development of block chain industry is on the road of virtuous circle. We are not shy about pursuing certain benefits. Because there is no stable cash flow, the block chain system supported by the community is difficult to achieve rapid and long-term development. However, the community does not regard income as the most important goal, but as a means to maintain the normal and stable development of the community.

2.4 Welcome to DDAO

DDAO membership plays a vital role in community development. We welcome everyone to join us, regardless of your location, regardless of your age, regardless of your skin color, we are willing to open arms to embrace your arrival. We hope that every enthusiast who is committed to the development of block chain will join DDAO, work together for the development of technology and inclusive, and share the joy of community success.

Block chain development to now, has been a hundred flowers blooming, a hundred schools of thought contend for a good competitive situation. We do not reject any new concept or idea. If you have different technical ideas, even strange ideas, welcome to contact us, we are willing to listen to your voice and fund your bold attempt. Because we think that "tolerance failure, encourage trial" is the best way to treat every brave pioneer. And DDAO willing to block chain, always remember your bold innovation and outstanding contribution to the block chain industry. Development will inevitably encounter difficulties and problems, but we firmly believe that as long as we maintain the yearning for a better life for mankind, unlimited expectations for the future, and firm confidence in building a global block chain network for the benefit of mankind, With the help of block chain enthusiasts, we can reach the other shore. Let us bring the sweat of enthusiasm into the Pentium of time, let history always remember the light we burst out at this historic moment.

We believe that opportunities, talent, technology and products are the main engines for

the growth of the blockchain industry. The cooperation between these four factors can promote the community to form a long-term good development model. Opportunities attract talent, talent creates technology, technology determines products, products bring more and greater opportunities. We do not pursue simple high-speed development, but to make the organizational structure of the community, personnel composition to become better. We therefore welcome the fact that each member has identified various shortcomings in the community and has made pertinent suggestions and improvements. Similarly, we will give each member who makes the proposal an appropriate reward. To the point, the outstanding opinion, will be the community uses the block chain technology to remember forever! We believe that collaboration, knowledge, and capital enable communities to continuously create value. So we will use a certain form to promote the above elements to create value, and let each contributor get a reasonable return, so that contributors become the most solid source of strength for community development.

And we warmly welcome friends from all over the world to join the DDAO family in many forms:

1. Join the DDAO Committee;

2. join our core development team and become our consultant;

3. join or initiate various open source collaboration teams (including user groups, activity teams, etc);

4. we welcome ethernet wallet team, blockchain Dapp development team to reach an open collaboration with us.

3. Cross-chain

3.1 DeFi Not Currently Scalable

Notwithstanding the DeFi fires, block chain projects have attracted attention and layout DeFi projects, but we also found that the development of the DeFi is very limited, and did not go to prosperity because of the fire. This is closely related to the current development of block chain technology. Block chain is currently in its own development link, chain and chain can not achieve interactive connectivity. Accordingly, DeFi ecology becomes an independent



single application that can not be connected with the outside world, and the financial products in the chain can not be circulated and rotated. Most of the current DeFi are above the layout of Ethernet Square, Ethernet Square network congestion and scalability is relatively poor, can not meet the broader DeFi needs.

DeFi take Token assets in the chain as the only way of circulation, and the price fluctuation of the Token is very frequent, DeFi a stable and perfect price mechanism is needed. Therefore, stable currency is the basis of DeFi. At present, stable coins are mainly circulated on Ethernet Square. More widely used stable coins need a collection of public chains or chains that can circulate in a wider range. The state of a single common chain can not meet this requirement, and there is an urgent need for a network structure that can realize interconnection to support a wider range of use!

At Ethernet Square, the amount of assets in circulation is very small, which also limits the development of DeFi. DeFi is mainly realized through intelligent contracts, but smart contracts are not supported in the bitcoin chain, and assets in other chains can not be realized through Ethernet's smart contracts. So the mode that DeFi can use is very limited.

3.2 DeFi Constraints to Performance

At present, most of the DeFi activities on the market are built on the Ethernet network, and the performance bottleneck of Ethernet Square has always been a prominent problem.

Since 2019, DeFi use cases increase, Popular DeFi projects, represented by Compound,

prophecy, Driven by FOMO emotions, A huge influx of new money and users. Because most of the DeFi products are based in Ethernet, And the heat of the DeFi has greatly contributed to the frequency of Ether Square's sending transactions, Added to the rise in Gas fees. As the number of DeFi participating users grows, Mining projects are coming up, The congestion on the Ethernet network continues to increase, Has reached the "unprecedented" level of congestion. Recently, According to etherscan(ethernet browser), Ethernet network utilization is now over 96%, Approaching the level of the bull market peak in 2018. Usually the Gas unit price in Ethernet network is only 1 Gwei, At most, it rises to single digits. Judging from the Etherscan and ETH Gas Station data, Gas unit price increased to an average Gwei ,200-300 600 Gwei. maximum We observed, Even deals above this unit price are not necessarily packaged by miners.

Clearly, Ethernet performance problems have become a fatal bottleneck in the DeFi risk management system.



3.3 Cross-chains for DeFi

Cross-chain concept can be said to solve the further development of DeFi. The problem that the block chain can not be connected to each other is interconnected through the cross-chain as a bridge, and the block chain is connected into a complete Internet network. The implementation of cross-chain will solve many problems encountered in the development of block chain, especially the problem of large-scale landing application. DeFi, as the most important landing application of block chain, will also enjoy the development opportunities brought by cross-chain.

First of all, the cross-chain can realize the link between each block chain, all the users on the separate chain will be connected, the DeFi application can realize the free circulation and switch between all users, and realize the large-scale growth on the basis of the user. Secondly, the assets in the chain can realize free circulation and trading, and do not need to be converted through the central exchange. The abundant circulating assets can promote the DeFi of more abundant development scenarios and models, which is conducive to the popularization and activity of the DeFi. Third, cross-chain can realize contract level interaction, no matter which mode of ecology will achieve interoperability, achieve DeFi greater value flow, make the transfer between assets, circulation more simple and convenient. The cross-chain technology will play a vital role in expanding the DeFi ecosystem, improving the liquidity of assets, and solving the problem of limited performance of a single block chain system. It can realize the mortgage and mutual recognition of more assets based on intelligent contract, and create a broader ecological development foundation for DeFi.

Cross-chain technology will usher in a DeFi ecological outbreak.

3.4 Deipool Cross-chain Agreements

Deipool cross-chain protocol is designed to allow Deipool to connect DeFi whole ecology seamlessly, and to convert valuable digital assets such as BTC, ETH into standard assets in wave field TRON chain through cross-chain protocol. The purpose is to break the isolated value island of block chain, establish cross-chain asset interaction network, provide more powerful basic support for DeFi application ecology, so that every valuable digital asset can enjoy the ecological service of the whole DeFi of Deipool, and realize real security, freedom and transparency.

Through Deipool cross-chain interaction protocol and standard interface, the block chain

with different structures is converted into a set of common asset types to realize the asset interaction inside and outside the Deipool ecosystem. And for mainstream digital assets (such as BTC) to provide a wealth of DeFi solutions.

The cross-chain interface protocol includes the following aspects: address mapping, creating multiple signature addresses / creating smart contracts, transaction verification, transaction assembly, transaction broadcast, signature verification, additional signature.

The architecture of cross-chain interaction protocol is designed as follows: each block chain docking, it needs to implement a set of interface protocol components to realize the data interaction between the two chains. Provides intelligent contract creation and management of multi-signing addresses, verification and execution of transferred assets.

For example, BTC cross-chain interactions are as follows:

Cross-chain assets:

The user transfers the BTC to the multi-signature account of the bitcoin chain managed by the intelligent contract. The intelligent contract monitors the transactions of the bitcoin network, verifies the confirmation number, and prevents the bifurcation rollback attack. The transaction that creates coins is assembled to the user's DIP-ADDR mapping address and signed. It then broadcasts transactions, collects 66% of signatures from smart contracts, packages transactions into blocks, and updates the ledger. This way, users have BTC assets in the Deipool ecosystem, while ensuring that actual BTC assets on the bitcoin network are not misappropriated.

Cross-chain asset extraction:

Users use the target address of the BTC-ADDR bitcoin address to assemble the transfer transaction and sign and broadcast the transaction. After the smart contract is identified to the transaction, the transaction signature is verified and the transaction is approved and packaged into the block. After confirming the block, each node will combine multiple signature transactions. When the number of signatures is sufficient, the transaction will be broadcast to the bitcoin master network and the BTC will be transferred to the BTC-ADDR. from the bitcoin multi-signature account After that, the transaction was completed.

By cross-chain technology, we are able to transition digital assets from various chains to our Deipool for trading. The cross-chain function has the following advantages: alleviating the congestion of mainstream digital assets trading, solving the liquidity problem of non-mainstream digital assets, meeting the demand of direct rigid exchange of various assets, and solving the problem of large price fluctuation in bulk transactions.

4. Borrowing

Borrowing agreements are one of the most critical functional agreements for Deipool ecosystems, providing interest rate markets that dynamically attract liquidity through interest rates. The interest rate market for cryptocurrencies is a wormhole that connects two parallel worlds (new and old) and allows arbitrage from both systems in and out. Interest rate market is also the most critical infrastructure in modern finance, controlling the allocation of basic capital. Lending agreements have a strong competitive advantage in capital efficiency due to their interoperability and portfolioability of assets and liquidity. Lending creates interest rate markets, which provide returns on capital (i.e. stable coins) and compensate for the opportunity cost of holding capital in open financial networks.

Deipool

4.1 Problems of Decentralized Lending Platforms

Because of the inefficient design, the decentralized lending platform implemented by the Ethernet block chain failed to produce a large number of transactions, which brought high friction costs to borrowers and lenders. In particular, these implementations require users to create and market their loan quotes or request records (ETH Lend, 2018) on the block chain (Libra Credit ,2018), which requires lenders and borrowers to spend money every time they publish, modify or cancel loans. In most cases, lenders and borrowers can not even modify, suspend or cancel loans before reaching an agreement with counterparties. The cost of frequently modifying loan quotations in response to changing market conditions is too high and time-consuming. Apart from the high costs to borrowers and lenders, most decentralized lending platforms can only provide a lending market (ETH Lend, 2018) for digital assets in one block chain (Libra Credit ,2018), and the most popular block chain is Ethernet Square. The lack of cross-chain loan functionality limits the use cases and market size of its platform. Some implementations attempt to provide cross-chain digital asset loan services. But they position themselves as trusted custodians between lenders and borrowers. This centralized approach does not address the risks of custodians and exposes user funds to theft or cyberattacks in high-risk environments.

most decentralized lending platforms do not have decentralized governance structures that can not return the functionality of the platform to end-users (Lending block,2018)(eth lent ,2018)(salting ,2017)(nexo.io ,2017). Although from a technical point of view, blockchain technology is used as its back-end service to generate and deploy loan smart contracts, its governance structure and business model are no different from traditional centralized entities. The value distribution and key parameters of the platform are controlled by the development team, which is contradictory to the decentralized core value, which is to release the seized profits and control rights from the intermediary to the end order to realize the democratization of finance.

Most lending agreements are deployed in Ethernet Square, and persistent congestion in the Ethernet network is a potential catalyst for the Black Swan incident. When the mortgage assets reach a certain number, if too many assets can not be liquidated in time due to network congestion, the whole system will collapse and face a huge liquidation crisis. Because of the crowding of ethernet, traders holding leveraged positions on ethernet-based DeFi platforms face the risk of not reducing leverage during periods of volatility.

4.2 Deipool Advantages

Cross-chain compatibility allows integration with different block chains through intelligent contract technology, which is another major competitive advantage for Deipool platforms. This is important because it allows us to provide more types of encrypted assets to borrow (rather than just one encrypted currency like ethernet). Also, Deipool platforms will not become custodians of users, and their assets will be stored on the block chain in the form of smart contracts. This means that no one has access to these assets until certain pre-agreed conditions are met, thus eliminating the risk of custodians, avoiding cyberattacks and reducing transaction costs.

Deipool communities introduced premium proof (POP) as reward and wealth redistribution mechanisms. This is the competitive advantage of our platform, which can better motivate and attract users to participate more in the Deipool ecosystem, because they will use token DIP to reward according to the value of the premium generated. DIP token holders will also be granted governance authority to determine key parameters of loan networks and wealth redistribution mechanisms to foster a culture of ownership for DIP token holders. Deipool platform aims to become the first truly architectural and political decentralization platform and make its own contribution to the achievements of capital market automation to better serve the future digital economy.

4.3 Borrowing Structure



The core of the lending pool. The core contract of the loan pool is the center of the agreement, holding all reserves and the status of all assets, dealing with the basic logic (accumulation of indexes, calculation of interest rates).

Loan pool data provider. loan pool data provider contracts perform calculations on an abstraction layer higher than the core of the loan pool and provide data for the loan pool; specifically: calculate user balances (loan balances, collateral balances, liquidity balances) to assess how much users are allowed to borrow and health factors. Summarize the data from the core of the loan pool to provide a high level of information for the loan pool. Calculate the average loan value and average liquidation ratio.

Loan pool. The loan pool contract uses the loan pool core and the loan pool data provider to interact with the reserve through the following operations: deposit, borrow money, interest rate swap, liquidation. A high-level feature realized in loan pool contracts is the tagging of loan positions. When a user deposits in a particular reserve, he receives a corresponding number of tokens that map the liquidity stored and accumulate the benefits of the underlying assets deposited. Loan pool configurator. The loan pool configurator provides the main configuration functions for the loan pool and the core of the loan pool: reserve initialization, reserve configuration, allowing / prohibiting borrowing on reserves, enabling / disabling the use of specific reserves as collateral. Loan pool configurator contracts will be integrated into loan agreement governance.

Interest rate strategy. The interest rate strategic contract holds the information needed to update the specific reserve interest rate and implements the interest rate update. Each reserve has a specific interest rate strategy contract.

Governance. Agreement permissions are controlled by DIP tokens. initially, Deipool will be initiated with decentralized chain governance based on a DAOStack framework that will evolve into a fully autonomous protocol. The chain means that all votes are binding: post-vote actions are hard-coded and must be executed.

4.4 Loan Contracts

4.4.1 Deposits

The Deipool loan agreement is established on the wave field block chain, which can directly run the wave field assets to enter, and other chain assets can also enter the Deipool money market through the cross-chain agreement. The money market calculates the interest rate according to the algorithm, and the depositor of the asset interacts directly with the agreement to earn the floating interest rate. Money markets record all historical interest rates and historical records. Different from the point-to-point lending platform, the Deipool collects the deposits of all users, and the borrowers operate directly from the fund pool, which has more liquidity than the point-to-point borrowing method. Deipool will reward the corresponding proportion of tokens DIP to each user according to the deposit time and quantity.

4.4.2 Loans

Deipool allows users to use multi-chain assets into the system as collateral to easily borrow assets from the lending pool. Different from the point-to-point agreement, borrowing from the Deipool requires only the user to specify the required assets; there is no clause, term or financing period to be negotiated; the loan is immediate and predictable. Like providing money assets, each money market has a floating rate set by market forces, which determines the borrowing cost of each asset. Each market has a mortgage factor from 0 to 1, representing



the mortgage factor of the value part of the underlying asset that can be borrowed. illiquid small-cap assets have lower mortgage factors, while liquid high-value assets have high mortgage factors. The sum of the account value on the basis of the token balance multiplied by the collateral factor is equal to the user's borrowing capacity. Users can borrow at most but not exceed their borrowing capacity, and the account can take no action, which will increase the value of their borrowing capacity in the total assets; this will protect the agreement from default risk.

4.4.3 Liquidation

If the outstanding loan value of the account is about to exceed its borrowing capacity, a portion of the outstanding loan can be repaid at the current price of liquidity to protect the funds of the lending pool. Liquidation is friction-free and does not rely on anything other than any system or order.

5. DEX

5.1 DEX Implications

Many people must be familiar with the problems of centralised exchanges, whether practitioners or investors, can only shake their heads, sigh, powerless. Industry technology is not mature, even if you know where the symptoms, but also continue to use.

Hackers steal, investors suffer losses; exchanges themselves do evil, investors suffer losses; founder small accident, investors can only admit bad luck..... In a word, using a central exchange, your assets at any time there are security risks, at any time missing.

A series of bad phenomena in centralised exchanges:

First, the cost of centralizing evil is small.It faces the risk that including internal operation risk, business moral hazard, asset embezzlement and so on seriously affect the security of user assets. GBL the Bitcoin exchange suddenly closed in October 2013, The man in charge, The user lost \$20 million in assets. February 2014 Mt.Gox85 ten thousand bitcoins, The famous Mentougou incident. In January 2017, Bitcoin Asia Lightning Trading Center rolled out, Take hundreds of millions of dollars...

Second, the third-party centralized custody of assets. To incur a huge risk of hacking,

Equivalent to testing the technical and emergency response capabilities of the website, Well - known cases abound, For example: on August 15,2014, the encrypted currency exchange biter was stolen 50 million NXT, by hackers The value is about 10 million yuan. Hong Kong Bitfinex in August 2016 due to a security breach, 120,000 bitcoins stolen, It was worth \$65 million. On January 26,2018, a large number of NEM, were stolen Coincheck an encrypted currency exchange The loss is about 3 billion yuan. Encrypted currency exchange Binance hacked on March 7,2018, Without losing money, But hackers are also using the mechanism to cash in, Many investors have lost a lot.

In contrast, on security issues, decentralized exchanges have a lot of room for development.

Unlike centralized exchanges that store and control customers' assets, decentralized exchanges do not control customers' assets. Instead, assets are stored in a distributed way, usually by the user or the exchange software itself. In this way, there will be no single entity as the owner of all encrypted currencies in the exchange, and the risk of loss will be much lower. It has two main features: anonymity. Using a centralized exchange requires only one public key. Meanwhile, the founders of some centralised exchanges say they release only open source software and are not responsible for community use of the software, avoiding KYC and AML problems. Security. Over the past 10 years, more than 30 centralised exchanges, such as Mt.Gox and Coincheck., have been hacked Until now, hackers' attempts to steal have never stopped, and every day hackers are trying to find vulnerabilities in intrusion-centric systems in various ways. Since decentralized exchanges. There is no single entry point or failure point. This makes decentralized transactions safer.

5.2 DEX Current Problems

1. low liquidity and adoption rate. Decentralized exchanges are still not as popular as centralized exchanges. As a result, they have fewer customers, trading volume and liquidity, and the transaction settlement time is much longer.

2. no professional transactions. Due to the lack of advanced trading options, it is more inconvenient for professional traders to use decentralized exchanges. In a distributed environment, algorithmic trading and high frequency trading are very difficult.

3. lack of ease of use. A decentralized exchange usually needs to be connected to DApp, or even installed with an offline decentralized exchange client. You may need to configure a

separate node and stay online for a long time to complete the transaction.

4. least customer support. Most decentralized exchanges can not provide customers with any appropriate support services, or accessible channels to influence transactions or user accounts.

The types of digital assets that can be traded in decentralized exchanges are also very limited, for example, for ETH decentralized exchanges, they can only trade digital assets in the ETH chain, because asset operations occur in the ETH chain. You can only trade assets on the ETH. But for users, other chain assets also have a lot of transaction value, such as BTC, TRX.

5.3 Deipool DEX Solutions

Asset exchange will be an essential infrastructure in a complete DeFi application ecosystem. DEX will have a better future as a more fair and transparent solution than a centralized exchange. Deipool DEX (DDEX) is designed as an open exchange that anyone can participate in and is designed as a balance pool for direct exchange.

• Asset entry

Anyone in the DDEX can create transaction pairs on the DDEX by cross-chain agreements that will have valuable assets.

• Transaction pair creation

on the DDEX, there is no audit permission and approval to create transaction pairs. For higher value trading pairs, liquidity mining incentives will be decided by community voting.

• Transaction fees

DDEX transaction will charge a certain transaction fee, transaction fee and gas fee. Transaction fees are determined by community voting, gas by the network. 50% of the transaction fee is repurchased and destroyed DIP 50% will be collected in community funds and publicly used.

• Order opening and cancellation

DDEX order opening and cancellation operations need to be executed through the



transaction, the transaction will be sent by the user. Subsequent matching or cancellation operations will only take effect after the transaction is successfully packaged into the block. Assets are locked in the process of buying and selling orders. For outstanding outstanding orders, the assets in the outstanding orders can be unlocked by canceling the orders to restore the normal use of the assets. The transaction of opening an order and canceling an order requires a basic transaction fee to be paid to the miner.

Balancer Exchange Function

The cornerstone of the balancer exchange function is determined by a complex function:

$$price = \frac{e^{\frac{a_1}{b}}}{e^{\frac{a_1}{b}} + e^{\frac{a_2}{b}} + e^{\frac{a_3}{b}}}$$

 a_1 Pricing of a digital asset

The constant parameter b is related to the liquidity size that the market maker can provide, and can be any constant: if the b is too small, the price change is sensitive, that is, very small trading volume can cause the price change to be obvious, and the b is too large. Therefore, for a small infrequent trading market, b generally take small value, for large trading market, b take large value. a_1a_2 The number of currencies in the trading market, if there are multiple currencies, can continue to increase, a_3a_4 ...

6. Prophecy

6.1 Introduction

Intelligent contracts are applications executed on decentralized infrastructure, such as block chains. they are non-tampering, and no party (or even their creator) can change their code or interfere with their execution. Contracts contained in previous code run in a centralized manner, which makes them subject to changes, terminations or even deletions by privileged parties. In contrast, the execution guarantee of intelligent contract, which binds the parties to the written agreement, creates a new and powerful trust relationship that does not depend on the trust of either party. since they are self-verified and self-executed (i.e., non-tampering as described above), smart contracts provide a superior tool for implementing and managing digital protocols.

The powerful new trust model embodied in intelligent contracts also brings a new technical challenge: connectivity. Most interesting smart contract applications rely on real-world data from key resources (especially data transmission and API) outside the block chain. Because of the mechanism of consensus mechanism supporting block chain, block chain can not directly obtain such key data.

A scheme to solve the problem of intelligent contract connectivity is proposed to establish a secure Oracle network and run as a completely decentralized network. this decentralization approach limits trust in either party, allowing non-tampering quality in smart contracts to extend to end-to-end operations between smart contracts and the API they rely on. If the smart contract is to replace the current digital protocol, it must have an external consciousness, that is, it can interact with the resources outside the chain.

At present, a large part of the traditional contract protocol of digital automation uses external data to prove the performance of the contract, and requests to push the data output to the external system. When smart contracts replace these old contract mechanisms, they will require high guaranteed versions of the same type of data input and output. Potential next-generation smart contracts and their data requirements include:

Smart securities contracts, such as bonds, interest rate derivatives and many other contracts, will require access to API. reporting market prices and market reference data such as interest rates

Insurance smart contracts will require Internet of things data related to insurance events, such as whether the magnetic door of the warehouse is locked in case of failure, whether the company's firewall is online, or whether your flight has arrived on time.

Trade finance smart contracts will require GPS (GPS) data on shipments, data from supply chain ERP systems, and customs data on goods being shipped to confirm compliance with contractual obligations.

Another common problem with these examples is that smart contracts can not output data to off-chain systems. this output is typically in the form of payment messages routed to the traditional centralized infrastructure where users already own accounts, such as bank payments, PayPal, and other payment networks. Deipool prophecy machine can safely push data to API and traditional systems on behalf of intelligent contracts, which allows the creation of externally perceived non-tampering contracts.



6.2 Prophet Structure

The core goal of the prophecy machine is to become a bridge between the two environments on and under the chain. Below we describe the architecture of each Prophet component. The prophecy will initially be built on wave field networks and will support all advanced intelligent contract networks for offline and cross-chain interactions in the future. Modularization is taken into account in the design of the Prophet both on and off the chain. Each piece of the prophecy system is scalable so that different components can be replaced as better technology and competitive implementations emerge.

6.2.1 Chain Architecture

As a oracle service, the prophecy node returns a data request or query response initiated by or on behalf of a user contract, which we call a request contract and USER-SC. An on-chain interface for the Prophet request contract is itself a on-chain contract, which we use the Prophet-SC.

After the Prophet- SC, the Prophet has a chain component consisting of three main contracts: credit contracts, order matching contracts, and aggregate contracts. Credit contracts track performance indicators Oracle service providers. The order matching intelligent contract adopts the recommended service level agreement, records the service level agreement (SLA) parameters, and collects the order information from the oracle supplier. After that, it uses credit contracts to select orders and finalize oracle SLA. Aggregation contracts collect Oracle provider responses and calculate the final aggregation results of the prophecy query. and it also feedback the indicators of oracle suppliers into the credit contract. Prophecy contracts are designed in a modular manner, allowing users to configure or replace them on demand. chain workflow has three steps :1) oracle selection ,2) data reporting, and 3) aggregation results.

oracle selection: oracle service buyer specifies the requirements for forming a service level agreement (SLA). The service level agreement is specified. SLA include query parameters, the number of oracle required by the purchaser and other details. In addition, the purchaser specifies the reputation and aggregation contract used for the remainder of this Agreement.

By using the credibility maintained on the chain and the more robust data sets collected from past contract logs, buyers can manually sort, filter, and select Oracle. through the offline list service A goal is for the Prophet to maintain such a listing service, collect all the logs associated with the Prophet and verify the binary files of the listed oracle contracts. we will further detail the list services and reputation systems in section 5. Data used to generate lists will be extracted from the block chain so that other Oracle list services can be constructed. The purchaser will submit the service level agreement (SLA) to the sub-chain Oracles and reach agreement before the on-chain service level agreement is determined.

Not all cases can be matched manually. For example, a contract may need to dynamically respond to a Oracle service based on its request load. Automated solutions solve this problem and enhance availability. For these reasons, the Prophet provides automatic matching by using oracle order matching contract.

Once the buyer has appointed them SLA, they will submit the SLA to the order matching contract instead of contacting oracle. directly Protocols submitted to order matching contracts trigger logs so that Oracle providers can monitor and filter according to their capabilities and service objectives. After that, the prophecy node selects whether to bid according to the agreement, and the contract only accepts bids from nodes that meet SLA needs. When Orale service providers bid for the contract, they promise, in particular, the amount of fines lost due to their misconduct as defined in the SLA.

The whole tender window accepts the tender. Once the SLA receives sufficient qualified bids and the tender window ends, the required number of oracle. will be selected from the tender pool The penalty provided during the bidding process of the unchecked oracle will be returned and the final SLA record will be created. When the final SLA is recorded, it triggers a log to notify the selected oracle. These oracle then perform the tasks detailed SLA.

Data reporting: once a new Oracle record is created, the oracle under the chain will execute the protocol and report to the chain. see sections 2.2 and 4 for more details on interactions under the chain.

Results aggregation: once oracle reveal their results to oracle contracts, their results will be fed back to aggregate contracts. The aggregate contract calculates the aggregate results and calculates the weighted results. and then report the validity of each Oracle response to the credit contract. Finally, the weighted result is returned to the specific contract function in the USER-SC.

detecting boundaries or incorrect values is a problem specific to each data feed and application. for example, for numerical data, detecting and rejecting boundary answers before averaging may be necessary, but not boolean. Therefore, there will be no definite aggregate contract, but a configurable contract address specified by the purchaser. Prophets will include a set of standard aggregate contracts, but custom contracts can also be specified, provided



they meet the standard computing interface.

6.2.2 Chain Architecture

A sub-chain oracle was originally composed of a network of Oracle nodes connected to the ethernet network, which we hope will support all advanced smart contract networks. These nodes independently respond to under-chain requests. as we explain below, their independent responses are aggregated into a global response via one of several possible consensus mechanisms that returns the request contract USER-SC.. e.g., the Prophet nodes are supported by standard open source core implementations that handle standard block chain interactions, scheduling, and connections to public external resources. Node operators can choose to add software extensions, called external adapters, allowing operators to provide additional specialized under-chain services. In the enterprise setup, the prophecy node has been deployed in both the public block chain and the private network, so that the node runs in a decentralized way is the goal of the prophecy network.

Prophet Core: The core node software is responsible for connecting, scheduling and balancing its various external services with the blockchain. The work done by the prophecy node is formatted and assigned. each task is a set of smaller job specifications, called sub-tasks, treated as pipes. Each child performs a specific operation before passing the result to the next child and reaching the final result. Prophet node software has built-in sub-tasks, including HTTP requests, json resolution, and conversion to various block chain formats.

External adapters: In addition to the built-in sub-task types, self-defined sub-tasks can be defined by creating adapters. Adapters are external services with minimal REST API. Adapters are modeled in a service-oriented manner, and programs in any programming language can simply be implemented by adding a small intermediate API in front of the program. similarly, complex multistep API interactions can be reduced to a single sub-task with parameters.

sub-task structure description: we expect that many adapters will be open source so that services can be audited and run by various community members. Since many different developers are developing different types of adapters, ensuring compatibility between adapters is critical.

Forecasters are currently running with JSON mode-based schema systems to specify what inputs each adapter needs and how they should be formatted. Similarly, the adapter specifies an output mode to describe the output format of each sub-task.

Deipool

7. Guessing Game

7.1 Global Guessing Game Industry Pain Points

1. the qualification and reputation of the traditional centralized Internet guessing game platform is worrying.

At present, the Internet guessing game platform on the market adopts a centralized business model-run by an organization or a company, which means that users of the game need to transfer their assets to the centralized platform. However, in fact, the qualification and reputation of many Internet platforms are worrying. There are technical loopholes, hidden box operation, illegal guarantee, setting up fund pool, platform fraud, non-real name authentication, information insecurity and lack of legal protection for investment, which bring great risks to guessing game users.

From the technical point of view, after five security tests based on code security, data storage security, data transmission security, network service interface security and multi-party interaction process security, the APP end and client of most Internet guessing games have the situation of misuse of encryption algorithm, incorrect or incomplete implementation of encryption protocol, and do not perform well in protecting user transaction information, ensuring user funds security, preventing transaction tampering and preventing user identity embezzlement. Therefore, in this process, hackers have a large number of opportunities.

From the platform itself, most of the platform reputation is worrying. A variety of business guessing game business platform running events emerge in endlessly. These platforms often do not have sufficient funds to offset the risk themselves, so losses are not seen at any time, and even have not lost money to run away with the funds. In addition, eating tickets, black color, fraud, rules of the game opaque and other dark box operation means also let the majority of color people worry.

2. traditional guessing game industry market regulatory restrictions.

At present, national authorities have different attitudes towards guessing game activities. Some countries view guessing games as financial activities, others view guessing games with gambling. In short, guessing game activities are regulated very strictly and cumbersome. This greatly limits the development of guessing games and their ability to innovate.

3. the traditional guessing game platform high draw.

Because of the high risk of centralized guessing game activities or events, the operators of traditional guessing game platform will require high enough income to hedge the existing risks of the platform. Therefore, participants in guessing games are forced to bear this part of the cost. Moreover, the legal compliance costs based on regulation also reduce the return on guessing games available to users in disguise.

In addition, the total return on domestic sports guessing games is usually about 70%, and a few illegal platforms can provide 80-90% return. However, for the market, this is far from enough, because in probability, no one can make a long-term profit in this distorted market.

4. niche in the traditional guessing game market

On the one hand, due to the legal supervision of the traditional guessing game market, most of the guessing game platforms are hidden in the underground market, the outside world has little information to know, and the market demand has not been effectively satisfied. Therefore, the seller, the operator of the traditional guessing game platform, has greater bargaining power, which can further squeeze the profits of the buyer's investors.

On the other hand, the hidden characteristics of traditional guessing game providers will make it more difficult for them to gain the trust of users, because it is difficult for game users to distinguish the qualifications of operators in this hidden market. And users will worry about the risk of trust default of traditional guessing game platform. Thus further eliminate the enthusiasm of participants in guessing games, but also hinder the entry of new users.

5. traditional guessing game platform product types are scarce

In the traditional business model of centralized guessing game platform, operators need to act as opponents of guessing game participants and bet on the opposite opinions of participants. In other words, the operator can make a profit only if the game participant misjudges. Therefore, most of the traditional guessing game platforms will have their own wind control system and product research departments. If the participants can get a certain advantage by judging the game of a certain event, then the event guessing game will not be adopted and published by the operator.

This raises the philosophical question that only products and events that operators consider beneficial to them will be released to the platform, and those that have been released for users to participate in guessing games must have been proved by operators to have an advantage for them. Therefore, the events available for users to participate in guessing games in the market are very limited, and most of the results are adverse to participants.



7.2 Decentralized Guessing Game Applications Business Solutions

Deipool build the application of decentralized guessing game through intelligent contract, it inherits the characteristics and advantages of block chain technology. It will solve the irrationality of the current guessing game industry perfectly: including the low rate of return that the traditional guessing game platform has been criticized; the lack of products for participating in the guessing game; the opacity, legal risk, potential platform escape risk, capital security problem and doubt about the operator's cheating.

Because the guessing game application built on the Deipool is decentralized, it is not controlled by any direct interest group. Deipool the game application uses distributed account book to record the guessing information, no one can tamper with the game record on the application, and it is more impossible to operate the false game result.

Each user can view all recorded guessing game records in real time through the block chain browser. Any fraud or other illegal malicious acts will be detected and stopped in time. For example, football guessing games will collect and check data in real time based on official (or publicly accepted and credible) results. All users will get a consensus result, and then the Deipool smart contract will automatically execute the income distribution according to the calculated game rate of return.

Because the execution of intelligent contracts is preset in advance, and everyone's guessing game information is recorded on the block chain can not be modified. Therefore, it can ensure that all users are in a fair, open and fair game environment. Block chain technology itself has become the most powerful credit endorsement of guessing game applications.

Compared with the traditional guessing game platform, the other advantage of the Deipool game application is the operating cost. Because the Deipool is run by all nodes and users, there is no traditional operator-like organization to divide the benefits of guessing game participants. Individuals with great confidence in an event can also freely publish guessing games on the platform. Publishers can use smart contracts provided by Deipool to write down events they have confidence in Deipool, and return the game by mortgaging Deipool with the amount of assets they set. Users who are interested in the event and disagree can participate in the guessing game, and the rate of return is determined by the proportion of investment funds of the participants in the final event. Smart contracts will help solve the biggest trust barrier

between strangers without incurring high third-party witness fees.

7.3 Decentralized Guessing NFT

Deipool can solve a problem that has not been solved in forecasting markets :" low liquidity ", and the solution is to creatively combine NFT、 " forever for sale "with forecasting markets, not a" gambling "model. It will use NFT to represent the forecast results and settle returns on currency-holding dates.

For example, if you think Biden will win the U.S. presidential election, you can participate in the forecast market by "betting" on a NFT, of "Biden wins the presidential election" on a daily basis, betting on the result and making a profit.

The user needs to pay a certain premium to obtain ownership of the event NFT, which is time-limited, and when there are other users who pay a higher premium than you pay, ownership changes. All related funds about the NFT gather into a pool of funds, the more popular the forecast event, the more it accumulates. When the result is announced, participants who once had the right result NFT will divide the pool according to the length of money held, which means that even when the final result is produced NFT, you no longer have the result of the event. The longer you hold the reward, the more you get.

8. Derivatives

8.1 Deipool Application Prospects in Derivatives Markets

The financial derivatives market is the largest in the world. And it is estimated to be more than \$1.2 trillion ,10 times the world's GDP. For centuries, financial markets have been controlled by large investment banks and other trusted agents that provide for the liquidation, settlement and trading of derivatives. With the maturity of block chain technology, it is possible to transfer the traditional functions of banks and intermediaries to distrust, distributed and invariant systems. This has reduced costs, increased security and enabled some 1.7 billion people without bank accounts to participate in the world financial system.

Block chain is a distributed accounting structure with certain chain mechanism, which has the characteristics of complete decentralization, disintermediation and cost reduction. The

original exchange mechanism is a typical centralized mode, all transactions need to be completed through a centralized place, sometimes brokers (intermediaries) to match the supply and demand of both sides, promote market liquidity (such as interbank market, bill market, bond market, foreign exchange market). The advantages of the centralized model are obvious and the supervision is smooth. As long as the system runs smoothly, the centralized mode can adapt to the characteristics of high frequency, fast speed and strong volatility of derivatives trading. After the decentralization of block chain technology, the trading subject no longer needs the central exchange and centralized liquidation, and the point-to-point can be completed directly, which can reduce the cost and improve the efficiency. In addition, for the derivatives market, block chain can enhance the security and recognition of derivatives trading, and may reduce part of the transaction costs.

8.1.1 Deipool Credit Role and its Application in Derivatives Market

Under the centralized accounting system, once the exchange system is paralyzed, the backup system will also have problems, so it is difficult to guarantee the security of the data in theory. Moreover, it does not rule out the possibility of an exchange making mistakes as a central bookkeeper, and once such errors occur, only the exchange itself can be checked and changed, which is a completely closed box. Block chain bookkeeping for each step to achieve multi-person bookkeeping and archiving, if you want to change, everyone will record again, so that each step of the operation can be followed. In the derivatives market, most of the contracts are traded, and the contracts can be registered by using the characteristics of block chain distributed bookkeeping, thus increasing the reliability of the contracts and reducing the risk aggregation of the central counterparts. Traditionally, when two strangers make a transaction, it has to be done with the help of an exchange or intermediary. Even in such a high credit rating market, there is still a credit limit for the counterparty. Alipay and other third-party payments also solve the problem of distrust in the transaction, while block chain can achieve mutual trust without any intermediary or third party. This makes it widely used in derivatives market, especially over-the-counter market. Taking interest rate swaps and forward transactions as an example, in most cases, the trading standard is large, the liquidity is weak, and the contract is not standardized. Therefore, the participation of brokers or market makers is needed to improve efficiency. After the introduction of block chain, it greatly facilitates the transaction between customers and reduces the dependence of transactions on intermediaries.



8.1.2 Deipool Tamper-proof and its Application in Derivatives market

The central trading mechanism needs multi-layer backup and multi-layer audit to control financial risk. In other words, as long as there is a problem in the trading center, the impact on the entire system will be fatal. Therefore, it is necessary to invest a huge cost to maintain the operation of the system, at the same time, in order to prevent risks, the system also needs to continue to backup in the same city, remote backup investment. Through messages like SWIFT1, which are secure, low-cost, and high-speed, financial institutions rely on central clearing for clearing, there are obvious loopholes, such as hacking of the Bangladesh Central Bank system in April 2016, hacking into SWIFT communications platforms in an attempt to transfer the Bank of Bangladesh's \$951 million overseas and delete records. The basis of block chain technology is continuous chain backup, settlement and liquidation is completely decentralized, so it can greatly improve efficiency, save cost and cost, and no longer need to maintain so many backup systems. In the process of distributed accounting backup, if hackers want to delete records, they need to trace back to the whole network and form a chain block, and tamper with more than 51% of the calculation power of the whole network, so it is almost difficult to complete. In view of this, block chain technology has great potential in the non-repudiation and security of derivatives trading, especially in the confirmation and liquidation of derivatives trading, the security and tamper-proof of block chain, can effectively play a role.

8.1.3 Application of Deipool Intelligent Contract in Derivatives Market

Intelligent contract makes block chain form multi-database application, which can be completely paperless archiving and prevent responsibility from evading. Most financial derivatives are standardized contracts. If intelligent contracts with block chain can be used, contract efficiency and security can be improved. Trading margin replenishment and market risk assessment can also be incorporated into the block chain system to make standardized contracts more standardized. The introduction of non-standard product contract block chain technology can play the role of endorsement and credit risk prevention. The formation of block chain intelligent contract will make great changes to the derivatives themselves. Each contract can even fine-tune the parameters according to the actual situation to adapt the corresponding customers. The whole process of contract from generation to transaction will be recorded in the block system.

8.2 Deipool Solutions in Derivatives Markets

As in the classic derivatives market, Deipool users can be: investors, speculators, margin traders or arbitrageurs. Unlike classical markets, there are repeaters, product designers, contract executors, members, and front-end developers. With the support of repeaters, the designed ecosystem transfers clearing, clearing and trading functions from centralized agents to block chains. the core and sensitive functions are stored on the chain. all computation-intensive processes run on the superposition layer of the repeater, but have been verified on the chain. Relay agents are encouraged by commissions and can perform arbitrage functions between different orders, markets and ecosystems.

Deipool allows anyone to create, settle and trade almost all derivatives and financial instruments in a professional and distrustful manner. Encourage participants to match orders, execute contracts, design products and improve market efficiency. Product transactions can be carried out at very low cost and contracts can be created entirely according to the wishes of the buyer and seller. Financial products consist of two parts: derivative formula and prophecy formula. Derivative formulations are a set of logic that defines how certain margin inputs are recalculated as expenses at the end of the contract. oracle recipe describes how to obtain data from under-chain or over-chain sources, exactly what data will be extracted, and how to process the data. derived and oracle formulations are registered in their derived or oracle registers, respectively. The data about position margin input is stored in the derived register, and the data obtained from the oracle formula is stored in the oracle register. Deipool core obtains data input from the oracle recipe of the oracle register to run the calculation in the derived recipe. as derived and Oracle formulations have been completed turing, they can contain any possible logic. For example, products can be created in price changes, bankruptcy, and political or sporting events. users can create many combinations of derivative formulations using Oracle formulations and create contracts. The smart contract on the chain checks whether the input parameters (for example, maturity date, margin and execution price) are suitable for derivatives and prophecy formulations, and then the token caster creates long or short tokens. Long and short are represented by Deipool derivative tokens, which can provide users with professional trading experience. Users can trade multiple positions at the same time, forming, decomposing and reorganizing Deipool portfolio tokens. For example, this allows users to create and trade spreads, indices, portfolios and other financial products without risking unexecuted execution of a branch of the product while saving gas costs.

Deipool

9. Insurance

9.1 Insurers

If you want to be an underwriter, you don't have to KYC or anything, just deposit a specific fund into the underwriter's bank. The first insurer's fund bank is the diUSDT bank, the user deposits the USDT, to obtain the diUSDT. Anyone who deposits the USDT in the bank of funds can become an insurer. What are the benefits of being an underwriter? Can earn the insurance start-up fee and the insured weekly payment fee. Certainly, the insurer gains the proceeds and also assumes the obligation: if the claim is approved, the USDT will be deducted from the fund bank and paid to the claimant. i.e., diUSDT represents both the insurer's proceeds and the insurer's obligations.

9.2 Insured

Also, do not need to KYC, the insured to deposit the insured funds into the "insured fund bank ", can become the insured, access to insurance services. The user, for example, wants to insure his DIP assets, so the user deposits them in the insured's money bank and then generates the diDIP. In the deposit of "insured funds ", need to pay 0.1% of the start-up fee, at the same time, a weekly deduction of 0.01% of the fee. The insured may withdraw DIP, or deposit more DIP. at any time Customer insurance is the amount of DIP deposited. This insurance service has no fixed term and has greater flexibility.

9.3 Claims

In the event of a claim, Then need to carry on claim management. For example, Insured claim by pledge diDIP. Insurers use their diUSDT to vote. Three days of voting, 33 per cent were approved, 25% vetoed. Assuming the claim is approved, So, diDIP will be assigned to diUSDT insurers, and USDT will be paid to the insured. The design of this mechanism is relatively flexible, It can cover all kinds of assets, Can be base assets (DAI), can also be compound assets (dDAI). Insurers have access to insurance start-up fees and weekly fees, They are also responsible for claims management. If the insurer refuses a valid claim, The insured will remove its funds. This means that the insurer is not profitable. USDT, is the first insurer's fund bank. The first insured fund bank is from the dVault dUSD (the dDIP of the package).



10. Governance

10.1 Deipool Communities

Deipool community consists of borrowers, traders, platform contributors and platform token DIP holders involved in the Deipool system platform. Loans include depositors, borrowers, and loan agreements. Depositors provide assets, deposit them in the pool of funds to obtain income; borrowers borrow from the pool of funds; the platform compiles and deploys intelligent lending contracts on the block chain to decentralize services for borrowers through loan agreements. The corresponding premium profit flows into the platform token DIP, system to automatically issue incentives to borrowers. The decentralization transaction adopts the liquidity agreement, the trader deposits the corresponding currency transaction pair to carry on the carry trade, the transaction fee flows into the platform token DIP, the platform provides the liquidity contribution to carry on the token DIP reward. DIP tokens will be used in the early days to raise funds, all for platform development and early operation. DIP token holders can decentralize the Deipool platform through the process of proposal, voting, execution and so on, and get the corresponding return while contributing to the platform.

10.2 DIP Tokens

DIP tokens are the core of Deipool ecosystems. Deipool aims to create a complete cross-chain decentralized financial system network for global users. Through the DIP of tokens, the Deipool ecosystem reasonably distributes the rights and interests to the community (including all participants, such as developers, investors, users, etc.), realizes the value interconnection, and achieves real mutual benefit and mutual win.

DIP Role

DIP have an appreciation effect, Deipool profits will flow into DIP. automatically through smart contracts in the future meanwhile, DIP have the governance right to the community, the token holder can propose and vote to change and upgrade the Deipool ecosystem and other governance work.

Deipool

99.9% aggregate liquidity mining

0.1%, illiquid mining test, used for Uniswap pricing, transaction testing of other trading platforms, collateral and other functions. Within 5 days after the smart contract goes online, all 0.1% of the coins will be destroyed to achieve 100% aggregation Liquidity mining.

Trading Mining

Miners (liquid trading providers) get their nascent DIP. by depositing currencies into the Deipool financial system into liquid trading pools According to the amount and duration of capital provided by miners, the system network automatically calculates the amount of DIP obtained by lenders and borrowers.

10.3 DIP Token Distribution



The total number of DIP tokens is 21 million. DIP is the core of the Deipool ecosystem. Through DIP tokens, rights and interests are reasonably distributed to all participants in the community to achieve value interconnection and achieve true mutual benefit.

DIP has the right to govern the community, and token holders can propose and vote for governance work such as changes and upgrades to the Deipool ecosystem..



Deipoool implements a 100% liquidity mining reward mechanism, aiming to encourage the community of early mining volunteers, volunteer investment institutions, Defi mining pools, Defi loan wallet users, etc. who have truly made outstanding contributions to Deipool.

11. Team



Grant Bellinger

CEO

Grant was appointed Deipool president and ceo in july 2020 as chairman of its a member of the company's executive committee. Grant has more than 25 years of experience in the financial industry and has held important positions in BHP Billiton, Anglo Gold Ashanti, ELKO and WMC Limited. Grant holds a bachelor's degree in financial engineering and a graduate diploma in financial economics. Grant plays an important role in promoting the rise of global decentralized sustainable finance and has recognized significant achievements in bringing significant value to shareholders.





William Jacobs

COO

Over the past 30 years, Willem has served as chief executive officer, chief operating officer and director of listed and private companies in the financial, engineering and manufacturing fields of the south, central and eastern Africa, with BPL(honours) and DCom status. He is also a professor at the Faculty of Law of the University of Pretoria, specializing in financial-related public law. He joined the Deipool, in July 2020 to establish Deipool strategic global operations.



Graham Shuttleworth

CFO

Graham joined Deipool, as chief financial officer and chief financial officer in august 2020, but has been in contact with the company since its inception, initially as part of its management team and subsequently as a consultant. As head of american metals and finance at hsbc in new york, he has advised many financial companies on listing, access to capital



markets and mergers and acquisitions. Graham graduated from the University of Cape Town, South Africa, with a bachelor's degree in business and an honorary degree from the University of South Africa.



Darion Richie

СТО

Darian joined Deipool. in July 2020 He has 28 years of experience in Internet and software development, a master of science degree, and a number of professional certificates. He has been in charge of Oracle (Oracle) technology. Deep understanding of software, front/back end system architecture, familiar with distributed computing, high availability cluster, big data analysis and other architectures. Bitcoin, Ethernet Square, Super Books and other mainstream public chains have a deep technical understanding, keen on cryptography, understand the advantages and disadvantages of different algorithms and timely selection. The core problems of distributed financial system include consistency, consensus, atomicity, reliability index, Byzantine problem and so on.

12. Statement

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Participants are requested to adjust their decisions according to the updated content. Deipool DAO made it clear that investors are invited to consider investment matters prudently, comprehensively, voluntarily and independently. The information of this platform is imperfect and one-sided. It is only for the reference and communication of enthusiasts, researchers and other groups, and does not bear the loss caused by the participants' dependence on some attribute guidelines of this document, the incomplete information of this article, and any behavior caused by this article.

Deipool DAO clearly stated that it will not bear any direct or indirect losses caused by participating in the project, including: 1. Economic losses caused by user transaction operations; 2. Any errors, negligence or inaccurate information arising from personal understanding; 3. Individuals Losses caused by trading various blockchain assets and any behaviors caused by them.

By purchasing DIP, the purchaser hereby acknowledges that he has read and understood all the contents of the above notice and disclaimer.