HYPERLEDGER CTK

White Papers of the Hyperledger Ctk

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Summary :

Hyperledger Ctk ultimately extends the vertical and horizontal performance of decentralized applications with a new blockchain architecture. This is done by creating an architecture similar to the operating system on which the application can be built. It provides account, authentication, database, asynchronous communication, and program scheduling across multiple CPU cores or clusters. This technology, in the context of managing blockchains, is sufficient to support tens of thousands of transactions per second, eliminating user fees and enabling easy and rapid deployment and maintenance of decentralized applications. This white paper describes the industry application of blockchains to drive the formation of new blockchain structures. In addition, this white paper introduces the main model of Code Token. Finally, this white paper describes its mission to promote the blockchain boom.

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Disclaimer：Hyperledger Ctk. achieves the vertical and horizontal performance expansion of de-centralized applications through a new

block chain architecture. This is achieved by creating an operating system-like architecture on which applications can be built. It provides accounts, authentication, databases, asynchronous communications, and program scheduling across multiple CPU cores or clusters. The ultimate form of this technology is a block chain architecture, which can be extended to support tens of thousands of transactions per second in the governance block chain scenario, eliminating user costs and achieving easy and rapid deployment and maintenance of decentralized applications. This white paper describes the industrial application cases of block chains to promote the formation of new block chains. In addition, this white paper introduces the main model of Ctk , and the last white paper describes its mission to promote the prosperity of the block chain.

Background

Hyperledger is an open source project designed to drive cross-industry applications across the blockchain. The Linux Foundation led the project in December 2015, with leaders in the financial, banking, IoT, supply chain, manufacturing and technology industries. The goal of the project is cross-industry development and collaboration of blockchain and distributed accounting systems, with a focus on developing performance and reliability (as opposed to similar digital currency designs) to support major technology, finance and supply chain companies. Global business transactions.

The project will inherit independent open protocols and standards, through framework methods and specialized modules, including consensus mechanisms and storage methods for each blockchain, as well as identity services, access control and smart contracts. At present, the various branches of Hyperledger, Intel's Burrow, IBM's Fabric, and 's United Nations Blockchain Foundation's Code Token (Ctk) project are booming.

Hyperledger Ctk is a global blockchain open source project designed to address the current slow pace of transfer and high transfer fees in the blockchain world.

The open source address on GitHub is:

https://github.com/jiqiren2019/Ctk/tree/master。

The Code Token program generates 19 super nodes and an unlimited number of spare nodes. The block data is stored on the devices of the super node and the standby node. Users can download the super node and standby node programs for free on GitHub and set up the running environment. When Ctk encounters a devastating blow, any spare node can restore the Ctk network using the freely downloaded node program.

Hyperledger currently has an absolute leadership and market share in global blockchain applications. Most of the evidence storage users who have a large number of banks' data storage and judicial administrative systems of the judicial system are currently using the underlying technology of Hyperledger. The main users include Intel, ABN AMRO, Accenture and other ten different interests. The goal is to let members work together to build an open platform to meet various user cases from different industries and simplify business. Process. Due to the nature of peer-to-peer networks, distributed ledger technology is fully shared, transparent, and decentralized, making it ideal for applications in the financial industry, as well as countless other industries such as manufacturing, banking, insurance, and the Internet of Things. Virtual and digital forms of value exchange, such as asset contracts, energy

trading, marriage certificates, tracking and trading at a safe,

cost-effective basis, by creating open standards for distributed ledgers.

The Hyperledger Ctk project is the first open source project to address

global financial payments. The project uses an open API interface that

provides better smart contracts and self-programming technical support

for the sidechain. In the issuance mechanism, the manipulation of the

benefit eviction is abandoned, and its unique "community mode"

ensures the stability of the value of the public token Token. The "black

hole annihilation" mechanism of the public chain and the "side chain

support plan" mechanism ensure that the circulation speed is

multiplied and ecological prosperity.

Hyperledger Ctk Introduction

1.1 **Mine Pool Node Introduction**

Ctk generates 24,485,500,500 pieces from the smart contract constants, and all generated Tokens are locked using smart contracts, and are only used for mining in "communication mode". When entering the 1USDT:1Ctk ratio, all the Ctk pools are hollowed out. The annihilation mechanism is carried out from start to finish until the constant deflation reaches 21 million.

1.2 Progressive mode

Progress	Co-in mechanism
10Ten thousand USDT	100usdt:7000Ctk
Accumulated 200,000 USDT	100usdt:6999Ctk
Accumulated 300,000 USDT	100usdt:6998Ctk
......	......
Cumulative exchange of 24498550000 Ctk	1usdt:1Ctk
The accounting fee generated by each application (transfer), issue, deposit certificate, etc. is annihilated by 10%	The final remaining 21 million

When you enter together, the exchange value is 100USDT for 7000

Ctk. For each exchange to 100,000 USDT, the Ctk will be reduced

by one, the exchange value will be changed to 100USDT for 6999

Ctk, and so on. The total number of Code Token will be

24,485,500,500. When the progress is progressed to 1USDT for

1Ctk, all Code Tokens will be mined.

In the side chain for side chain issuance, transfer, API

interface call, smart contract call, chain storage data

application, the consumed public chain Token annihilates 10%

each time, and finally 2100 constants remain.

1.3 Side chain support plan

All USDT received in the Common Mode will be used to buy back 100% of the Ctk, repo to the Ctk 100% to support the development of the side chain. The repurchase plan is maintained in the order of the first round of repurchase 100000 usdt at the ratio of 100 to 7000, the second round of repurchase 100000 usdt at 100: 6999, and so on. All the information in the contract is open to the public and no one can move to ensure the fairness and transparency of the project.

Number of Token applications	Apply for support plan conditions	Application fee refund cycle
Fill in by yourself (eg 1 million pieces)	20% mortgage required (ie 200,000)	Returned in 10 months, returning 10% per month (ie returning 20,000 pieces per month)
Note: All Tokens are locked with smart contracts and executed automatically. All applications require a three-day publicity period. Anyone who holds Ctk during the publicity period can use Ctk to vote for democratic decision-making (over 70% of the		

votes must be approved).

Applicants need to fill in the side chain abbreviation of the supported side chain, project briefs and other information. The mortgage application program supports 20% of the number of Tokens, and is supported by more than 70% of the referendum. The voting period can be applied successfully after three days. The Ctk mortgaged by the applicant and the Ctk ticket voted by the voter will return at the original transfer address in the first month after the vote ends. It will be returned 10% per month in ten months, and all the mortgaged tokens will be returned. If the application is unsuccessful, the smart contract will be automatically executed immediately after being rejected, and the Token for which the mortgage is applied will be returned to the application account according to the original transfer address.

Voting ratio	Mortgage time	Return time
1Token is a vote	10 months	Return 10% per month.
Remarks: The voting period is 3 days, and the return of the smart contract begins after the voting.		

Summary: The support plan aims to provide the start-up expenses for the excellent sidechains recognized by the referendum during the start-up period. It is only used to reimburse the billing expenses generated during the side chain operation, and fully implements the smart contract execution to ensure the fairness, openness, and governance of the platform. shared.

1.4 Mine pool accounting output

project name	Accounting reward standard
Side chain release	3000Ctk (automatically adjusted according to the progress of the progress)
Transfer	1Ctk (automatically adjusted according to the progress of the progress)
API interface call	300,000 pledges during use (automatically adjusted according to the progress of the joint progress), refunded after 10 years

Smart contract call	300,000 pledges during use (automatically adjusted according to the progress of the joint progress), refunded after 10 years
IPFS data storage	Full referendum on fees

1.5 Mine pool node plan

Node name	Application conditions	Node revenue	Payment return period
Super node	Pay 30 million Ctk purchase certificate	40% of bookkeeping rewards	Don't return Ctk
node	Mortgage 300,000 (automatic adjustment according to progress progress) Ctk purchase certificate	50% of the bookkeeping reward	Ten years of mortgage, 10% of Ctk returned every month after ten years

Black hole annihilation		10% of the bookkeeping reward	Disappear directly
Remarks: After the mortgage is completed, you will get an encryption certificate. After downloading the open source program configuration environment for free, fill in the encryption certificate.			

1.6 Mine

Mine application criteria: Mine applicants need to mortgage 1 million Code Token to apply for a mine certificate. After the application is successful, the mortgage token will be returned within 10 months, and 10% will be returned every month.

Mine program acquisition: Mine open source programs can be downloaded directly from the Github open source community for free.

Node Mine Hosting: The mine provides data storage hosting services to the nodes, which will be rewarded with 10% of the accounting revenue of the managed nodes. The greater the bandwidth of the mine, the higher the computing power and the faster the speed, it will be more likely to obtain priority billing rights. In order to ensure the high computing power,

the hardware investment of the mine is relatively large compared with the ordinary nodes. Generally speaking, the accounting rewards of the mining pool are mostly better than the ordinary nodes.

Calculation of power rental: It is recommended that the bandwidth occupancy fee for the calculation of the power rental, the electricity fee, and the comprehensive usage fee for the aircraft usage fee should be no less than US$1,000/year to ensure that there is sufficient funds for the mine node to calculate the normal operation.

Ctk chain API development document Function list

1. Create an account

2. Query the balance

3. Batch check balance

4. Query the transaction list

5. Create a transfer transaction

6. Query transaction details

7. Query the token list

8. Query token details

9. Query individual block information based on block number

10. Query individual block information according to block hash

11. Get the transaction ID (txnId)

12. Query the list of transactions contained in the block based on the block number

13. Query token mining revenue list

14. Query the token income that can be collected

15. token mining income receipt

16. Query token mining revenue details

Detailed development documentation can be found on Github's Hyperledger Ctk open source project download:

https://github.com/jiqiren2019/Ctk/tree/master。

Thank

The World Linux Foundation and the World United Nations Blockchain Foundation are committed to the prosperity of the global blockchain and hope to establish a world of blockchain

based on technological innovation. Really realize: co-governance, sharing, and common decentralization The community, the community nodes and the token holders determine the development direction and fate of the project, and the project management of the foundation plays a guiding role. After all the tokens are successfully issued, the foundation will withdraw and the whole community will be handed over to the community personnel and the token holder. Carry out management and advancement, so that blockchain technology can truly benefit the people.

Hyperledgerk Ctk project source code, open API, sample code can be downloaded free of charge through the open source community, community management is completely decided by the users who hold Code Token. All USDT acquired in the "communicative mode" will be used 100% to repurchase Ctk to support ecological development; let each programmer who really loves the blockchain jointly maintain our code token, a code belonging to the common, common , a common blockchain project!

Thanks to the code contributions of the main developers:

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