Coinversation Protocol

Version 2.0

Introduction

Coinversation Protocol is a synthetic asset issuance protocol and decentralised contract trading exchange based on the Polkadot contract chain. It uses the token CTO issued by Coinversation Protocol and Polkadot(DOT) as collateral, and synthesizes any cryptocurrencies or stocks, bonds, gold and any other off-chain assets through smart contracts and oracles. Users can forge a certain synthetic asset by collateralizing CTO or DOT, such as U.S. dollars, and automatically have a long position in the asset. Users can also convert minted assets into other assets through the trading platform, so as to realize the purpose of shorting the asset and longing other assets. The assets minted by all the users correspond to the liabilities of the entire system, and the proportion of each user's liabilities has been determined at the time of forging, so that their respective profits can be calculated. Because such a collateral pool model does not require a counterparty, it perfectly solves the problems of liquidity and transaction depth in decentralised exchange(DEX).

Coinversation Protocol Token: CTO

Max Supply: 100,000,000

The Coinversation Protocol(CP) token is CTO, with a hard cap of 100 million. Part of it will be issued when the project goes online, and the rest will be generated by liquidity mining.

There are two main functions of holding CTO. The first is to generate synthetic assets through staking CTO as collateral and earn contract trading fees. CTO holders can use CTO as collateral to generate synthetic assets, and according to the number of staked CTOs, the percentage can be calculated. The fees incurred by DEX will be allocated to the fee pool, and proportionally rewarded to users who staked the CTO. The second is that CTO is also the governance token of CP. All the parameters involved in CP, including the increase or decrease of the types of collateral, the adjustment of the collateralization ratio, the types of synthetic assets, etc., can be determined by voting by CTO holders.

The main functional modules of the entire system include: forging synthetic assets(MintC), DEX, collateral pools, fee pools, oracles, and liquidity mining.

Forging Synthetic Assets(MintC)

The synthetic assets issued by the entire system are all produced by users staking certain collateral. The initial collateral includes CTO and DOT, and the collateralization ratio is 800% and 500% respectively. In the future, the collateral and collateralization ratio can be adjusted through community governance. When users stake collaterals and forge synthetic assets, corresponding debts are generated. When the user wants to unlock the collateral, he must repay the debt, that is, destroy the previously generated synthetic assets.

cUSD

At present, it is stipulated that the assets synthesized by direct staking of collateral are the stablecoin cUSD. That is, after users stake the CTO or DOT, the directly generated synthetic asset is cUSD, while other synthetic assets need to be converted by the user through contract trading in DEX. The price of cUSD is always defined as $1 throughout the system. All cUSD generated by all users is the total liability of the entire system, priced in cUSD.

Through contract trading, cUSD can be converted into any synthetic assets supported by the system, such as cBTC, cETH, and even cAAPL, cXAU linked to traditional assets such as stocks and gold, and supports long or short. The types of synthetic assets can be added by community governance. It should be noted that if the user simply holds cUSD after minting, it is equivalent to automatically shorting all other assets in the system.

DEX

It is an exchange that provides conversion of different synthetic assets and contract trading. Due to the design characteristics of CP, this DEX does not require a counterparty, and there is no issue of transaction depth. Users' profit and loss is illustrated by the following example.

Example 1: Suppose two users, A and B, each generate $50,000 cUSD, and their respective debt ratios are 50%, and the total system debt is $100,000 cUSD. Now A converts all cUSD to cBTC, B still simply holds cUSD. Assuming that the price of BTC rises by 50%, the value of cBTC held by A becomes $75,000, and the value of cUSD held by B is still $50,000. At this time, the total system liability becomes $75,000+$50,000=$125,000. Note that because the debt ratio has not changed, A's debt is $125,000*50%=$62,500, and B's debt is also $62,500. Therefore, it can be calculated that A's profit and loss is $75,000-$62,500=$12,500, and B's profit and loss is $50,000-$62,500=-$12,500. The sum of all users' profit and loss in the entire system is 0, similar to a traditional contract trading system. It should be noted that although B did nothing after generating cUSD, he/she still lost money due to the increase in the price of BTC. This is because once cUSD is generated, it is equivalent to having a long position in USD (in this case, it is also equivalent to a short BTC)!

Collateral Pool

The collateral pool is the sum of synthetic assets generated by all users, and is priced in cUSD. According to the amounts of synthetic assets generated by each user, the debt pool also records the proportion of each user's debt. Whenever a new synthetic asset is generated, the debt ratio of the system must be recalculated. Examples are as follows.
Example 2: Suppose that following the assumption in Example 1, now A holds $75,000 of cBTC and B holds $50,000 of cUSD. Now suppose there is a new user C, who generates $50,000 cUSD, and we can calculate the new debt ratio. Note that the total debt of A and B is now $125,000 instead of $100,000 in the initial state! Therefore, after C's operation, the total debt of the system becomes $175,000. The ratio of A is $62,500/$175,000=35.71%, the ratio of B is $62,500/$175,000=35.71%, and the ratio of C is $50,000/$175,000=28.57%.

Fee Pool

Users trading or converting synthetic assets on the DEX will incur transaction fees. The fee ratio is tentatively set at 0.3%, and these fees all enter the fee pool. The fee is collected in cUSD, and all the fees are distributed to users in proportion to the debt. The system stipulates that only users whose collateral is the CTO can receive rewards, as an incentive for CTO holders. Because the CTO price fluctuates, it is stipulated that only users who meet the collateralization ratio are eligible to receive rewards.

Oracle

Since the price of contract trading needs to be read from outside sources, the oracle is a very critical part of this project. In the initial stage, the system will use the centralized oracles provided by the project team, and in the future, it will introduce more secure decentralized oracles.

Liquidity Mining

Liquidity mining is the module of issuing CTO tokens. Users can lock CTO or DOT here to get the rewards of CTO. The proportion of rewards obtained by CTO and DOT is different. It also stipulates that users who lock their tokens for liquidity mining must also put a corresponding proportion of CTO or DOT in the collateral pool to mint synthetic assets, to provide more liquidity for the entire system.

System core products

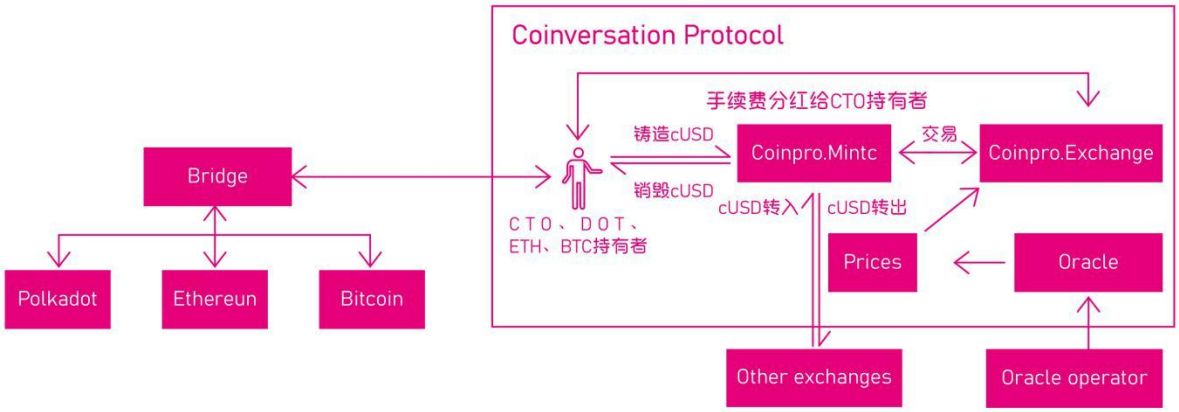
1. Coinpro.MintC: the minting center for minting and destroying cUSD
MintC supports operations including: minting and destroying cUSD, managing collateralization ratio, checking account balance and MintC historical ledger, unlocking collaterals CTO or DOT, etc.

2. Coinpro.Exchange: a decentralized exchange for trading synthetic assets

Unlimited liquidity: no order book, no need to worry about liquidity or slippage.
Point-to-Point contract transactions: seamless transactions between various synthetic assets.
Distributed collateral pool: trading assets are supported by a distributed encrypted collateral pool, which can resist censorship.

System workflow

The life cycle of synthetic assets can be divided into three stages: forging - trading - destruction. The flowchart is shown below.



1. Forging
The user stakes CTO or DOT in Coinpro.MintC to mint the system's default stablecoin cUSD. The collateralization ratio of CTO is 800% (tentative), and the collateralization ratio of DOT is 500% (tentative), that is, $800 of CTO or $500 of DOT can mint $100 of cUSD. The user's collateralization ratio should be as high as possible than this prescribed ratio, that is, when the price of the collateral drops, the collateralization ratio may be insufficient. At this time, the user should replenish the collateral or return (destroy) a part of cUSD. The system stipulates that users who are greater than or equal to the specified collateralization ratio will receive rewards from the trading fees in the fee pool as an incentive.

2. Trading
cUSD is a synthetic asset and the functional currency of the entire system, that is, all debts are converted into cUSD. At the same time, cUSD is also a stablecoin, and its value in the system is always defined as $1. cUSD can be converted into other synthetic assets in Coinpro.Exchange, e.g. cryptocurrencies such as cBTC, cETH, and cDOT, foreign exchange such as the euro, yen, renminbi, and even gold and various stocks. It supports both long and short. All these assets

are systematically synthesized, not real assets, and their conversion rate is determined by the external real price provided by the oracle. This conversion process does not require a counterparty, and users can always convert all their cUSD into any synthetic assets supported by the system.

When performing synthetic asset conversion (ie, transaction) in Coinpro.Exchange, users need to pay a 0.3% (tentative) handling fee, which enters the system fee pool. The fee pool distributes rewards to users who meet the specified collateralization ratio in the entire system every two weeks (tentatively), and the reward ratio is determined by the debt ratio. For new users, they need to hold debts for more than a certain number of days or accumulatively use them for more than a certain number of days (to be determined) to be eligible for the fee pool rewards.

The prices or conversion exchange rates of all synthetic assets in this system are provided by the oracle machine reading external exchange data, and future planning can introduce decentralized oracles.

3. Destruction
When a user who stakes CTO or DOT wants to exit the system or reduce debt and unlock the staked CTO or DOT, the debt must be repaid first. For example, if a user mints $100 of cUSD through staking CTO, he needs to destroy $100 of cUSD to unlock the locked CTO.

It should be noted that the respective debt ratios of all users in the system are determined by the minted cUSD, and have nothing to do with the price of other synthetic assets after the conversion. The debt ratio will only change when users mint or destroy cUSD. The sum of all user debts is the collateral pool, because changes in asset prices will cause changes in debt. Through a constant debt ratio, each user's profit can be calculated.

Future Plan

There is still a lot of space for growth in the future, including:

At present, the type of synthetic assets of the project is determined by the project team or community governance. In the future, it is planned to upgrade so that different investors can independently sign any type of contract on this system.

At present, the stablecoin cUSD or other synthetic assets produced by the project are limited to the system. When there are standardized tokens similar to Ethereum ERC-20 on the Polkadot in the future, all synthetic assets of this project can be circulated outside the system in the form of standardized tokens, and even enter other exchanges. Among them, cUSD can become an important stable currency in the Polkadot ecology.

Objectives

Realize a decentralized virtual asset issuance platform and decentralised contract trading exchange, which can not only replace the perpetual/futures contract functions of major centralized exchanges in the long term, but can even realize the issuance of any type of assets on the protocol, and play an important role in the traditional financial market.

Benefits

Centralized contract exchanges have exposed more and more issues, and the entire industry needs a solution for decentralized contract exchanges. The decentralized contract trading program of this project not only has the characteristics of general DEX, such as openness and transparency, anti-censorship, and does not require KYC, but also because there is no counterparty, it perfectly solves the problems of general DEX in transaction depth and liquidity. . Therefore, we believe that the prospect of CP is very broad and it is a real DEX solution.

Roadmap

1. 2020 Q4

(1) Determine the type of the first batch of synthetic assets.
(2) Determine the data source of synthetic assets, establish a whitelist mechanism, and realize data collection.
(3) Complete the oracle function.
(4) Realize the functions of staking DOT and CTO, forging synthetic assets, including cUSD, cBTC, cETH, cAAPL, cXAU, etc.

2. 2021 Q1

(1) Realize the collateral pool function: When a user newly generates or destroys cUSD, the debt ratio is re-determined, and the user's profit is calculated based on the change in asset prices.
(2) Realize the function of fee pool: transaction fees are included in the fee pool to complete the benefit distribution of CTO users.
(3) Realization of decentralized contract exchange v1.0 version:
1) Realize the trading function on the Web end, allowing users to freely trade various synthetic assets.
2) It is convenient for users to stake CTO or DOT to mint cUSD and destroy cUSD.
3) Allow users to view the debt ratio, total system debt, balance of personal synthetic assets, rewards income, etc.