Aquila Protocol

Harmonious, next-generation, highly scalable decentralized financial protocol network

Ⅰ.The future of the open financial world and our long-cherished wishes

Our purpose is to build a comprehensive protocol matrix for open finance and value transfer protocol applications developed based on blockchain technology. The combination of digital assets and blockchain cutting-edge technology is expected to change the monopoly pattern of classical finance. As we all know, the operation of traditional finance is subject to the management of the administrative system, and these artificially divided worlds have also greatly prevented the effective circulation of value. The way of operation we believe in is to abandon the present and take a glance at the current world, the current high-cost, centralized, powerful and centralized financial world, her presentation includes but is not limited to financial activities such as credit creation, debit and credit, payment, securities underwriting, IPO, etc, which all must be executed by a trusted centralized third-party organization.

While in centralized finance, trust comes from authority and the authorization of centralized agencies. As the authority, the administrative agency controls the pricing power of assets. However, in different administrative regions, the circulation of value is more dependent on the relationship among regions. In terms of specific presentation, individuals must rely on their own labor to obtain equivalents recognized by the administrative agencies, i.e, assets, and these assets will change in value with the fluctuation of the administrative agency. From the perspective of liquidity, the circulation of assets must rely on the traditional financial channel, which lead to huge losses in it.

Since the creation of Bitcoin, the greatest achievement of digital currency or blockchain is the realization of value transmission on the network under the premise of minimizing trust. It eliminates the bottleneck of capital flow and allows currency and value to return to their origins——i.e value is information, and the instantaneous flow without friction can be achieved through Bit (the smallest unit of information).

The combination of the unlicensed and trust-free features of digital currency and blockchain technology, which gives it the opportunity to reshape the current financial and monetary system.

The birth of Ethereum has greatly expanded the capabilities of Bitcoin as a currency and settlement network. For the first time, we have witnessed the rise of an expanding and self-improving financial protocol network.The Ethereum network has become a hotbed that nurtures a new financial and monetary system with strong vitality. We can carry out activities such as token sale, stable currency, decentralized trading, currency market, lending market, insurance, forecasting, games, etc. within a global range without permission, trust-free, and non-friction, thus starting the new historical chapter for open finance.

In an open financial system, users always have control over their assets and do not need to rely on counter-parties (such as custodians or national sovereignty) to make financial decisions. The open financial system will promote faster and better innovation and iteration of financial protocols in order to provide better products and services to billions of people around the world.

Ⅱ.Consensus matrix

If the liquidity is calculated according to the amount of lock-up of the open financial agreement on Ethereum, it has reached 1.5 billion U.S. dollars as of the end of June 2020, which is a 30-fold increase from the beginning of 2008. On-chain liquidity is constantly circulating and extending between different protocols, from lending protocols, liquidity protocols to asset protocols. The on-chain liquidity pool enables open financial protocols to provide loans with lower interest costs. Liquid galaxies are expanding at an unprecedented rate. Although liquidity can make funds flow effectively, it is also easier to get rid of the gravity of any vertical protocol. Because liquidity pursues the maximization of benefits, it is difficult for vertical protocols to achieve liquidity retention and capture network value in a single protocol.

With the rapid advancement of product innovation and iteration, we need to achieve liquidity retention and capture network value through the protocol matrix. Among them, the three types of protocols are critical to open financial networks and play the role of infrastructure, including asset protocols, liquidity protocols, and lending protocols.

In each of the above categories, there are currently some projects on the market that have emerged, such as asset-type protocols DAI, USDT and USDx, transaction-type protocols Uniswap and Swap, and lending-type protocols Compound and Aave.

Our vision is to establish a core protocol in each category, and finally create a protocol matrix with collaboration and interconnection, to form intercommunication and collaboration at the level of liquidity and assets, and to interact and integrate freely with other open financial protocols in the three major categories. Our objective is to share liquidity and network effects through core protocols, while retaining full openness for free interaction and integration with other protocols.

Our protocol architecture has a basic principle, i.e, which it creates a protocol matrix and maximize the utility of liquidity in the protocol matrix. There are three important dimensions here: The first dimension is an asset-type protocol, which is mainly a stable asset token (for example USDx) and interest-earning tokens (for example AUX) Token); the second dimension is a lending protocol, including the lending market, hybrid lending platform, currency market, etc.; the third dimension is a liquidity protocol, including Swap, decentralized exchange, trading protocol, derivatives protocol, etc. Our agreement can not only freely interact with other open financial protocols, but also run on different blockchain platforms, so the protocol matrix can be quickly expanded from the Ethereum ecosystem to other platforms (including other first and second layer networks).

Our original design is to achieve the expansion of network value through protocol integration, so that any protocol or decentralized application or blockchain can connect and inter-operate with us without friction, and ultimately make the entire ecosystem become an open financial platform that evolves, adjusts, motivates, and governs itself.

Dex protocol matrix

Asset protocols specifically refer to the tokenization process of on-chain or off-chain assets,i.e, encapsulating assets into tokens of different forms. For example, DAI is an asset protocol in the MakerDAO system, and users can cast DAI by staking Ethereum or other digital assets. In addition, there are interest-earning tokens, such as Compound's cDAI and AUX's dDAI. These two tokens represent a certain asset and the interest income obtained from the interest-earning protocol, and users have the right to redeem the capital and the corresponding interest at any time

As an upstream protocol, asset protocol can be combined with other asset protocols and functional protocols (decentralized exchanges, lending protocols, etc.) to create a moat and synergize with downstream protocols. At the same time, the nature of its currency is conducive to strengthen network effects. For example, for an agreement that integrates DAI, DAI will always be deposited in its system as an asset and liquidity.

Our protocol matrix is centered on the decentralized exchange with stable currency, which is committed to achieving the greatest potential for asset value transmission. Our three core protocols will support and integrate multiple stable currencies. In addition to the stable currency USDx, we are about to launch a derivative interest-earning protocol that supports most mainstream stable assets. Such protocol will take into account the optimal return on assets, and more importantly, it will help to aggregate and retain liquidity and assets in the AUX protocol matrix.

We will also fully open the liquidity to third-party protocols, such as Compound, dYdX, etc. We will also integrate the liquidity of other protocols into our protocol, proportionally, and put assets on uniswap, which will be rewarded with our tokens, if the liquidity is provided for uniswap, you can get our token rewards. In addition, we also plan to develop asset tokens that anchor other sovereign currencies, commodities, and physical objects in the future.Next, we will start to introduce the lending protocol and our design plan for optimizing the lending agreement.

Loan Agreement: Outlines of loan market, money market and interest rate market

Loan agreement plays a crucial role in our agreement matrix, which not only provides interest income for upstream asset-type agreements, but also regulates the liquidity of the agreement matrix by adjustment of interest rates. The interest rate market determines the distribution of primary capital, so it is the most critical infrastructure in modern finance and The interest rate market of cryptocurrency is like a wormhole, because it connects two parallel universes (cryptofinance and traditional finance) together, allowing capital to circulate freely between them.

The current open Loan Agreement has a strong competitive advantage in the capital efficiency because of the interoperability and composability of assets and liquidity, Loan demand creates the interest rate market, providing income for capital (such as StableCoin)and compensating for the opportunity cost of holding capital in the open financial network, without depending on interest from traditional financial markets. However, there are many disadvantages in the current universal open loan agreement. Most Loan Agreements (Compound, Aave) have no debt ceiling (only Maker sets a debt ceiling for each mortgage asset). Open finance is still in the early stage of the industry development. The risk caused by the absence of debt restrictions may lead to any hacker attack or functional defect to destroy an agreement.

Currently, the license-free and open design of open finance cannot satisfy users who require high compliance and/or need counterparties. This severely hinders the expansion of the agreement and causes restrictions on some users. The current open Loan Agreement is likely to be threatened by of the portfolio risk of upstream asset agreements (such as USDT, USDC and DAI), and the risk will be magnified several times especially when it is combined with atomic transaction and flash loan.

The lack of flexible risk control module and framework in the current open financial agreement has greatly hindered its expansion of its scale, especially with difficulty in serving users with customized needs. The open finance is in a stage of rapid development, so our Loan Agreement will better meet the needs of different groups in various design modes. On the one hand, we will build an unlicensed loan agreement, but will increase more built-in risk control parameters; On the other hand, we will cooperate with centralized financial operators to launch loan agreements for specific users and assets.

AUX will continue to make great efforts to develop in the field of open finance and focus on development and technical support of fully open and unlicensed agreement. Our centralized financial partners will take charge of establishing a compatible interface for interacting with the AUX protocol. Loan agreements serving centralized financial partners still run in a fully verifiable, on-chain, fully automated and open manner. For the mixed-mode AUX load platform, most of the capital supply will come from the hybrid loan pool under interest-generating token pool (AUXPool).

Liquidity Agreement:

The last section of our agreement matrix, including Flash Exchange for Token, Decentralized Exchange, Derivatives Agreement, I s the Liquidity Agreement. The main function is to exchange the token ownership through decentralization.
In the past two years, the Decentralized Exchange has grown rapidly, such as dYdX in the order book model, Uniswap in the automatic market maker model and Curve.Fi focusing on the transaction of StableCoin. Blockchain technology enables Decentralized Exchange to have a strong competitive advantage in dealing with large and low-frequency transactions (such as StableCoin swaps or token transactions in the long tail market). However, Decentralized Exchange still cannot compete with Centralized Exchange for high-frequency and low-latency transactions.

Transaction is the business that is the most susceptible to capture value in the cryptocurrency value chain, with the characteristics of large transaction volume and frequent transactions. Therefore, our vision is that the transaction agreement should be combined with the loan agreement to make full use of shared liquidity to prevent value escaping and subsidize other agreements, which will help keep the assets and liquidity of our agreement matrix.

This is the last part of the open financial feedback chain we are looking forward to, and it can lock liquidity in our agreement matrix.

We assume that a token holder (such as 100 USDC) needs to look for investment opportunities for the 100 USDC he holds, otherwise he will face the loss of opportunity cost. Therefore, he needs to deposit 100 USDC in an interest-generating market to obtain interest. And he may also need to temporarily use USDT, such as exchanging it into legal currency through OTC Therefore, he can deposit 100 USDC as collateral into a loan agreement and lend USDT. Assuming again that he owes a friend 50 USDC, he can exchange 50 USDC into USDT with equivalent amount to repay the debt.

Lack of any one step above could cause liquidity to escape from the ecosystem. For instance, assuming that there is no transaction agreement, users may go to Uniswap to exchange tokens. Once the liquidity is lost, you will never see it and it will no longer contribute value to your ecology.

If the liquidity agreement is combined with interest bearing token, such as using interest-generating token as reserve asset, the liquidity agreement of token exchange or automatic market maker mode will have strong competitive advantage and will greatly increase the economic returns of liquidity providers. In our current product roadmap, the forthcoming liquidity agreement will mainly focus on token exchange and automated market maker models.

Final Vision One-stop, unified open finance platform

In the past few years, open finance has shown a robust growth momentum in terms of development and lock-up value of agreements. However, most of the agreements lack a moat for capturing the long-term value. For example, some open financial agreements are dedicated to developing in a certain vertical field. (Such as Uniswap in an automatic market maker model, or Curve.Fi, which focuses on stablecoin exchange), but the competition of open financial agreements will ultimately be a competition for liquidity. It is assumed that liquidity can achieve the maximum efficiency in the three types of value-interlocking agreements, it will not only remain in a certain type of agreement. Liquidity, as the term implies, has been pursuing high efficiency in the flow. Any vertical agreement can not avoid the liquidity escape, so it must be condensed in some way.

The agreement matrix is designed to minimize the loss of liquidity and create gravity to keep it. Once the liquidity escapes, it may disappear forever. Just like an astronaut traveling into outer space, no one knows if there is a chance to come back alive.

In the future, open finance will develop into a pattern of several large agreement matrix clusters, which are interlocked with each other through agreement tokens. Several super agreement clusters will constitute the galaxy of open finance and regulate most value streams in the open financial universe.

Ultimately, a new open financial system parallel to traditional finance will be formed, which will gather global assets and liquidity together to realize the free flow of value flow like information flow. This will be truly reshaped currency and open finance, a brand new, self-evolving and self-sustaining financial infrastructure.

III. AUX

As an applied token, AUX will be widely used in network governance, risk buffer and incentive mechanism.

Since Ethereum has the most vigorous and prosperous open financial ecology, we will deploy various underlying protocols (such as asset agreement, liquidity agreement, loan agreement, etc.) and our platform currency AUX based on Ethereum network in the early stage of the project.

However, we are also aware of the problems existing in Ethereum (relatively limited scalability of the underlying layer, inflexibility of consensus algorithm, autonomy of token model, that is, other token is not allowed to pay for network fees). With the maturity of AUX network, we will move to a separate block-chain at the appropriate time in order to better implement the consensus mechanism and token model that we agree to, but in any case, we will always be neutral to any public chain.

Open financial model and value capture

As the infrastructure of encrypted digital finance, open financial protocol plays a fundamental role in the pyramid of open finance. At the bottom of the protocol, asset class protocols provide the necessary infrastructure for the upper functional protocols. The main asset class protocols are stable currency (DAI, USDT, USDC, etc.), commodity token (XAUT, PAGX, etc.) and interest bearing token (cToken, dToken, rToken, etc.).

We believe that encrypted digital finance will be developed in the combination of centralized finance and decentralized finance, presenting the mode of "front store and back factory". Centralized finance will assume the function of front-end stores, directly face users and provide services for them; while decentralized finance will sink into the back-end factory as infrastructure to provide services and assistance for the upper application and centralized finance, and finally become a vertical network throughout the entire ecology.

As the liquidity and assets of decentralized finance continue to grow, it will eventually become a unified liquidity pool, providing the original liquidity for all decentralized financial agreements. Therefore, our goal is to establish an agreement matrix born in the decentralized financial ecology, and become a wormhole connecting the parallel universe of decentralized and centralized finance.

IV. Token rules:

Total supply 1,000,000,000

Token ticketer AUX (Aquila Protocol)

Liquidity mining: 45%

Staking Reward:30%

Insurance Reserve: 10%

Public sale: 5%

Community and marketing: 10%

Token usage:

Usage 1: Decentralized exchange:

Liquidity mining rules: according to 3% of the transaction amount of currency pair, the platform currency token with corresponding value is obtained. The price is based on the previous 0 point one day as the anchor.

Token function: voting right and profit right. Holders can participate in decision-making and voting in the system.

Voting rights:

holders are allowed to make the following agreement decisions:

1. Decide whether to put money or not

2.Proportion of handling charges

3.Add new business lines

4.Make reward rules for people who expand new markets

5.Formulate reward rules for marketing service providers.

6.Decide the reception rate.

7. Decide the change of token mechanism.

Rules of voting rights:

1.The proposer gets 1% of the total voting amount, and the remaining 99% is sent to the zero address for destruction.

2.Decision-making right is determined according to the ranking of total quantity destroyed.

3. Voting rules: proposal is sent to the community interface. People who are for and against should burn the token as a vote.

Usage 2: Dividend profit right, the platform profit are very diversified; users can burn the token into the reward pool, so as to obtain the share of the reward, and pay dividends on a daily basis.

Scope of dividends:

1.Service charge

2.Loan interest

3.Candidate to be added to the asset shelf fee commission.

4.Leverage transaction fee and liquidation allowance

5. All expenses generated by other platforms will be rewarded.

Usage 3: Decentralized lending agreement

Voting rights:

1.Add a new credit

2.Abolish the current credit

3.Increase deposit and withdrawal costs

4.Change the chain right proportion of the credit percentage (so as to compensate for other rewards, such as COMP)

5.Allocate a percentage of the agreement yield to fund the award pool (up to 3.5% of the interest earned)

6. If distributed awards are enabled, YFI will also allow holders to claim their shares from the award pool

Usage 4: Profit right:

1.Interest sharing

2.Transaction cost sharing

3.Leverage transaction fee and liquidation allowance

4.Liquidation allowance

AUX model

AUX application scenarios and functions

There are many roles in AUX's protocol matrix, such as liquidity provider / receiver, depositor / lender, trader, developer and community contributor.

We believe that the two-tier token model is the most suitable one for open finance, in which stable assets (such as USDT, USDC, DAI, USDx, dToken etc.) are used as transaction tokens in the network, while platform coins (DFN tokens) play the role of guarantee and escort, ensuring the network effect of the platform and providing practicability.

As an open financial protocol network, the core value of AUX network is driven by liquidity, asset / token reserve and network effect.

The token model needs to form a positive feedback loop and achieve better interest binding through sustainable long-term incentives. As an application-oriented token of the platform, token can be used for platform governance, fee payment, mortgage verification, incentive and insurance.

Token has the following functions:

Token governance

Token acts as a governance voting tool in ecosystem and community participation. The governance function determines that token holders also have the right to adjust the native protocol of AUX, such as modifying, extending, formulating key functions in AUX protocol matrix, or adding application scenarios of AUX. It takes a long time and gradual process to realize the complete decentralization of chain governance. We believe that, compared with the degree of decentralization of governance, it is more important to find the market positioning and verification suitable for the agreement and product.

Payment of agreement fee

The AUX can be used to pay the agreement fee in the AUX ecosystem, including coinage fee, coin selling fee, interest payment in the loan market.

For example, in the USDx protocol, when the user needs to reverse destroy the USDx and take back the stable currency of the underlying component, the user needs to pay the corresponding coin destroying fee by AUX.

System stabilizer

AUX is the last security line of defense to protect all AUX protocols in the event of extreme events, system bad debts and malicious attacks by hackers on lending and trading protocols. For example, once some protocol goes wrong or is attacked, a lot of bad debts will be generated. In this case, we will pay off the bad debt and recapitalize the agreement by issuing additional AUX or auctions.

Dividend token

Token is the final system token of AUX protocol matrix and its ecological platform (such as lending market, decentralized exchange), therefore, it is a tool to obtain the economic value of the whole system, and also the main means to stimulate lending, liquidity and equity pledge.

The purpose of the equity pledge mode is to ensure the consistent actions of all participants, keep pace with the times of chain governance and consensus, and encourage the long-term participation of all parties.

The overall design goal of equity pledge model is to ensure the long-term effectiveness of incentives, attract more non arbitrage users to participate and make contributions, and help us build a more neutral, self-motivated and interoperable infrastructure.

Staking token

This ecosystem will introduce a DPoS consensus mechanism, in which token holders can obtain exclusive staking rewards by pledging tokens to nodes. In staking, anyone can make money by locking positions with encrypted assets.

Staking reward mechanism:

The release of the project in the staking section will be released at the same frequency according to the mining liquidity. The token released is fully rewarded to all the addresses of staking behaviors.

The user enters the token into the specific staking address to lock it. Each lock period is 7 days.

Ending: the world of the future is opening up, and we are the curious children facing the future