## Part I Introduction

Clip protocol is an integrated Defi infrastructure platform.

Clip integrates the several core DeFi protocols with a cross-chain bridge for fully automated investing. The protocol:

- Captures high-quality assets in each ecosystem and produces high-yield returns;
- Aggregates data, analysis, with comprehensive DeFi data;
- Is a Web3.0 data services platform.

### The problem

We will address a few key problems in the DeFi market.

1. The current most popular method for cross-chain DeFi is using the Yearn Vault. That concentrates computing power into a random mining pool, but does not specify which coin to mine. It only seeks projects that use the same mining algorithm that produce the best income. It then has to transfer computing power to the project, in the process failing to maximize gains. It must go through multiple smart contracts, which can create layers of fees, lag and security risk. The yearn vault is one example, although they sometimes have high returns, the depth is very poor and there are security risks.

2. The current DeFi market data platforms only display certain statistics. TVL, APY, and APR can be used to illustrate this paradigm. But when users see the data, it means that someone has already enjoyed this return, and does not predict future returns.

3. DeFi platforms are also released without thorough review, or even an audit. Many mines do not display transaction volumes, and contracts can only enter with no exit. If the user is merely using the data displayed from the DeFi platform to select the project, it is easy to lose money. Even the principal is not guaranteed. Analysis of the project requires more comprehensive data support.

### How we make it happen

1. Through the introduction of third-party security companies and a whitelist audit system of the target, a real-time audit is carried out to ensure the safety of the protocol.

2. We ensure that user funds are in their hands using threshold signature technology, a multi signature mechanism, sharing private keys without the need to entrust funds with

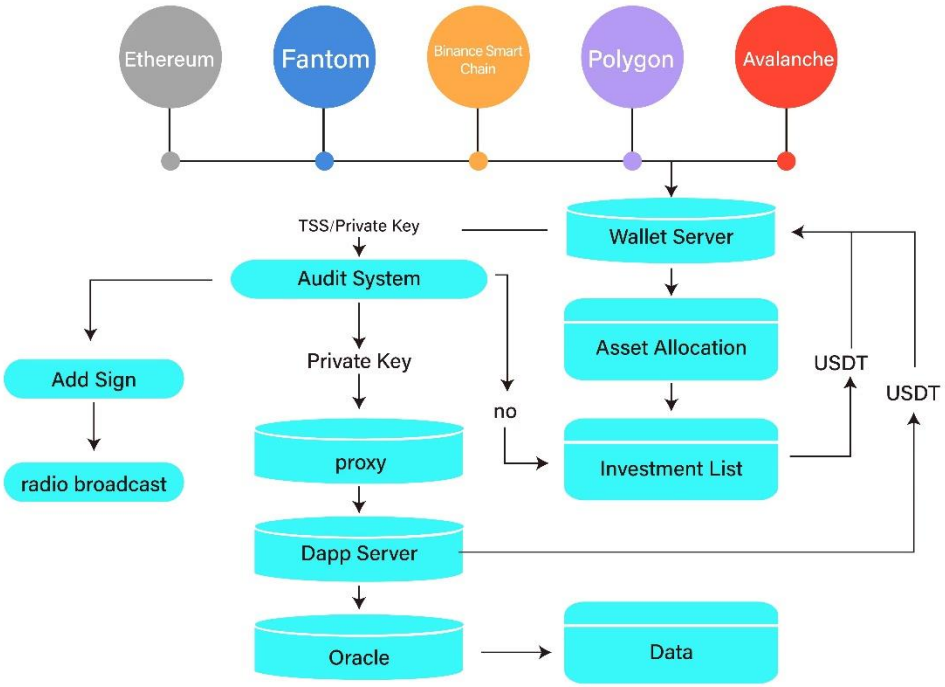
the platform or other third parties.

3. Cross-chain Bridge: Users can engage various DeFi projects on a variety of different layer 1 public chains through a single wallet account.

4. Automated adaptation of different public chains: We adopt new mining and staking information in real time.

5. Use of data tracking, comparing and analyzing all mining pools in the whitelist to form an effective analysis.

6. Implementation of the Web 3.0 ecosystem: We provide a DeFi intermediation platform, summarizing data, with more effective analysis, and generating high-value information for the core public chains.



## Part II  The core technology

Threshhold Signature Scheme **(TSS)**

TSS is an encryption protocol for distributed key generation and signatures, TSS can be used in ECDSA-based blockchains, including various EVM-enabled networks.

ECDSA（Elliptic Curve Digital Signature Algorithm） TSS allows for the private key to be distributed and secured much more safely.

TSS allows for flexible threshold policies. For example, three users can jointly manage a private key. Everyone only holds part of the private key shards. In order to sign a transaction, it is necessary to integrate the signature data of at least two users to construct a valid signature.

For CLIP, the threshold signature mechanism can use multiple devices to manage private keys, so that a single compromised device does not pose a risk to the asset. For platform business operations, the threshold signature mechanism enables better access control strategies to prevent internal or external personnel from stealing platform funds.

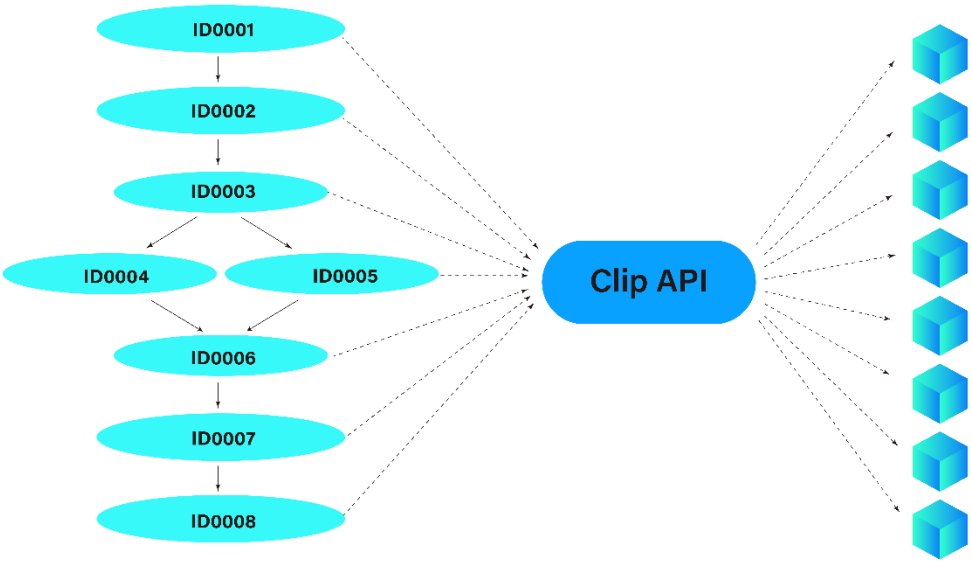
TSS technology allows us to replace all commands with distributed computing so that private keys are no longer a single point of failure. Different from traditional Multisig (multi-signature), TSS uses off-chain distributed multi-party computing technology, while multi-signature occurs on-chain, which may consume more compute and fees. Additionally, the participants of multi-signature will be exposed in the blockchain, and become a potential attack point.

TSS Process:

1. Vault initialization: This step establish an end-to-end encrypted communication channel to initialize the participating parties.
2. Key generation: In this step, we need to determine the threshold policy for the number of signers and share the private key. For example, with a 2/3 policy, this means that the private key will be split into 3 private key fragments, and any 2 of the 3 participants can sign the transaction.
3. Signature: Generate digital signatures from the respective private keys so that the private key will not be leaked
4. Vault reorganization: If someone loses the private key, it is necessary to re-share the private key. Reorganization will generate new key shards, while previous shards will be invalidated.

**Capacity of the Clip API**

Clip through the development of the API interface, the public blockchain DeFi platform crawler, the capture indicator in the interface set perfectly, any one of the indicators unqualified, there may be security risks, API will give up this target. When all the metrics meet the requirements, the API sends this target to the security company server for review, and the audit is added to the whitelisting system. Crawl metrics and security companies are all at the service of risk control.




**Clip SDK**

Clip will also provide the SDK, a DeFi platform with cooperation intentions, which can be accessed through the SDK, and the DeFi platform bringing high-quality targets to Clip. This provides risk control services for DeFi platforms. Only high-quality targets that pass the risk control standard can join the whitelist system.

**Cross-chain bridge technology**

In view of the problem of the value islands of each public chain, Clip has built a cross-chain bridge system, so that assets can be efficiently transferred between multiple chains. Clip Cross-Chain Bridge currently supports 5 public chains including:Ethereum, Polygon, Avalanche, Binance Smart Chain, Fantom along with 40 DeFi ecosystems and hundreds of tokens. In the future, it will support the DeFi ecolosystem on all public chains so that the public chain with DeFi ecology will be fully covered by the cross-chain bridge system.
Clip cross-chain bridge system, solves the following problems
• Reduces Gas fees while increasing transaction speed

• User assets can be freely interacted with
• Improved user experience
• Increase the productivity and usefulness of existing crypto assets
• Greater security, better privacy
• Solution for the flow of funds

**Part III: Platform Usage**

**Role description**

There are four roles on the CLIP platform: platform party, broker hunters, investors, and the security company.

**Platform party**

Clip is an infrastructure integration service platform for the DeFi ecosystem. It lowers barriers to entry, smooths the user experience, automates adoptation, and provides comprehensive data integration.

It also has transparent and safe data on the target project, investment, liquidation, income distribution and other aspects of the platform.

**Broker hunters**

The platform is able to aggregate data and provide information well packaged for new users. This data or investment opportunity can be promoted by our broker hunters.

Any user can become an broker hunter. There is a well constructed system with three levels
• Junior broker hunters, through their own investment results inform prospective investors and help them decide if they want to participate.
• Intermediate broker hunters both promote the project and pledge tokens. They get access to more data and features.
• Senior broker hunter, work directly with partnering organizations to grow the ecosystem.

Broker hunters have the right to access platform resources, publish asset allocation lists, and configure relevant parameters. If you want publish the asset allocation list, you need to pledge a certain percentage of platform tokens.

The platform counts the investment returns of broker hunters for each period, and performance can also be searched.

When broker hunter’s investment loss reaches 30%, their pledge tokens are directly deducted, liquidation is initiated through the contract, and all assets are exchanged for USDT, which is then returned to investors in proportion to the investment.

Broker hunters can integrate various high-quality projects more smoothly through the CLIP platform and earn more income.

**Investors**

Investors obtain investment rights (tickets) by staking CLIP-issued tokens on the platform.

Before the product listing is released, they stake a specified number of platform tokens for a certain amount of days to get 1 ticket, the more tickets you get, the higher the investment amount you have.

If you invest during the eligible period, the corresponding tickets will be burned, and when a new product list is released, the number of tickets obtained by investors will be recalculated.

Investors use of the CLIP can easily obtain high-quality assets with a one-click completion of investment.

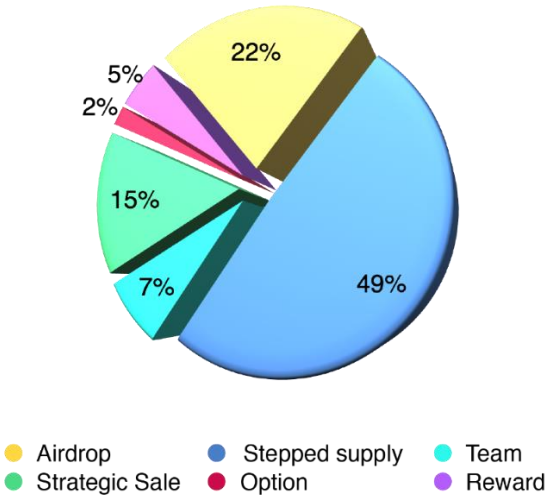
**Security companies**
Audit DeFi platforms, mining contracts, mining projects, etc. to ensure security.

**Part IV Token design**

Total issue 100,000,000

**Token function**
Platform fees
Broker hunter deposit
Investment user tickets

**Token allocation**




**Strategic sale description**

| Strategic sale | Percentage | Date | Function |
|---|---|---|---|
| Angel Round | 2.5%—2.8% | 2022.05 | Road A V1.0<br>• Threshold Signature Scheme (TSS)<br>• Risk control and clearing mechanism<br>• CLIP API<br>• Support asset cross-chains<br>• Adapt to support EVM public chains<br>• Connect with high-quality DeFi protocols |
| Round A | 2.2%—2.5% | 2022.11—2023.05 | Road B V2.0<br>• Adapt to all public chains, including non-EVM chains<br>• Automatically adapt to various core DeFi protocols<br>• CLIP SDK components<br>• Data Integration Service<br>• NFT badge system |

## Lock Up Model

The expected rate of return of the platform token is the excess rate of return over the risk free rate. The currency price is P. According to the asset portfolio theory, the optimal holding ratio of platform tokens is

$$w_2 = \frac{R_2 \times \sigma_1^{\,2} - R_1 \times \rho \times \sigma_1 \times \sigma_2}{R_1 \times \sigma_2^{\,2} + R_2 \times \sigma_1^{\,2} - (R_1 + R_2) \times \rho \times \sigma_1 \times \sigma_2} \quad (1)$$

Lock Up Coefficient

$$\beta = (\frac{w_2}{1 - w_2}) / p \quad (2)$$

Standard Deviation

$$\sigma = \sqrt{\frac{\sum (x - \bar{x})^2}{n}}$$

Correlation Coefficient

$$\rho = Correl(X, Y) = \frac{\sum (x - \bar{x})(y - \bar{y})}{\sqrt{\sum (x - \bar{x})^2 \sum (y - \bar{y})^2}}$$

## Token Model

49% of the tokens are partially supplied when the following three conditions are met at the same time:

• TVL ≥ US$100 million;

• Platform token lock-up accounts for no less than 50% of the cumulative supply;

• The platform has been officially launched for more than 1 year.

## Supply Allocation

The supply allocation of 49% of the tokens is determined according to the cumulative circulation of this component of the tokens:

• Divide 49 million tokens into 100, and each 490,000 supply bucket is used as a supply range;

• Each supply interval has a corresponding supply coefficient, the basic supply coefficient is α, and the supply coefficient of the i-th supply interval is $\alpha*(1-\frac{i-1}{100})$,The speed of supply decreases linearly.

• The daily token supply in this range is equal to the platform's TVL* range supply coefficient on that day;

• The value of the base supply factor depends on the platform's expected long-term average TVL and the period over which all 100 million tokens will be released. The base supply factor is about 0.001.

**Part V RoadMap**

| Road A V1.0 | Road B V2.0 | Road C V3.0 |
|---|---|---|
| • Threshold Signature Scheme (TSS)<br>• Risk control and clearing mechanism<br>• CLIP API<br>• Support assets cross-chain<br>• Adapt to support EVM public chains<br>• Adapt to high-quality DeFi protocols | • Adapt to all public chains, including non-EVM chains<br>• Automatically adapt to high-quality DeFi protocols<br>• CLIP SDK<br>• Data Integration Service Module<br>• DAO partnerships<br>• NFT badge system | • Support all cross-chain protocols and develop cross-chain components<br>• Multi-dimensional DeFi client data service<br>• Web3 infrastructure integration service platform |