

# TOKEN PLUS

WHITE PAPER



# SMART CONTRACT

Smart contract is one of the most important parts of modern block chains. Smart contracts are deployed on block chains, triggered automatically and cannot be modified after deployed. These characteristics make smart contracts the best solution for traditional digital contracts. However, smart contracts cannot communicate with data outside the block chains. Based on this problem, we propose a solution to this. The solution is called an oracle. An oracle connects the off-chain world with smart contracts. Differ from most existing oracles, TOKEN PLUS is a decentralized oracle network, which provides more secure services than the normal ones. This paper details the on-chain components for smart contracts connecting with the off-chain world and the underlying modules of TOKEN PLUS nodes. Probable optimizations are also included in this paper, which illustrates the directions for BLT Token in the future.



# BLOCK CHAIN

With the help of optimized hardware, A 'Block' is mined towards solving a complex mathematical algorithm (the process is called hashing), whosoever cracks the right hash, is rewarded with a Block reward (a set number of a crypto plus transaction fees). The crypto's included in the block reward are all new coins. The whole point of mining crypto currency is to earn them!



# DATA AGGREGATION AND SECURITY

TOKEN PLUS proposes two approaches to avoid the appearance of faulty nodes: distribution of data sources and oracles. **Data Source** We can obtain data from several different data sources to mitigate the impact of an abnormal data source. An aggregating function can aggregate the results into a single output. There can be many ways to do aggregation, such as calculating the weighted average after removing abnormal data. Data sources may obtain data from each other, and this causes the aggregated result inaccurate. TOKEN PLUS will concentrate on solving these problems, and report on the independence of data sources.





# CONTRACT-UPGRADE SERVICE

No one can control the actions of smart contracts once deployed; this makes the security of the oracle important. A decentralized exchange can suffer a massive loss if it receives incorrect data from an oracle.

TOKEN PLUS proposes a contract-upgrade service for security reasons. The service will be run by the organizations who launch TOKEN PLUS nodes and follow TOKEN PLUS's philosophy of decentralized design. Many smart contract hack events show there remain significant security risks.

This is precisely the reason for our proposing the contract upgrade service. Contract-upgrade service is non-mandatory. Users decide whether to turn this on according to their demand. Contract-upgrade service will deploy a new set of oracle contracts on cevulner abilities are discovered. The two versions of contracts will both exist and available to use. With the philosophy of decentralization, there will be a flag for users to control. The flag enables requesting contracts to select which set of contracts they would like.

TOKEN PLUS is a decentralized oracle network. The choice of whether to use the new version is left to the user but not the contract developer. Also, we expect that providers will be able to support multiple versions of TOKEN PLUS developed by the community.



# TOKEN PLUS USAGE

TOKEN PLUS is a TRX20 token. The TOKEN PLUS network utilizes the TOKEN PLUS\*\* to pay TOKEN PLUS Node operators for the retrieval of data from off-chain in data feeds, formatting of data into block chain readable formats, off-chain computation, and uptime guarantees they provide as operators. TOKEN PLUS will power TOKEN PLUS in many ways.



# ROADMAP AND FUTURE PLAN

We'll concentrate mainly on the direction of improving safety and reliability. Validation system The validation system should monitor on-chain oracle behavior, providing objective performance metric to guide users' selections. The monitor will be in two perspectives: - Availability: recording oracle failure and responding to queries. - Correctness: recording the deviation compared with other oracle nodes. TOKEN PLUS can monitor the activities of all oracles. The statistics of availability and correctness will be published on the block chain.





# CONCLUSION

We introduce the decentralized network TOKEN PLUS, including its on and off-chain components. We interpret our schemes of security and decentralization. We also discovered the existing design flaws and give plans for future developments.

Decentralization is the foundation of the block chain, and of course, TOKEN PLUS. We will always adhere to the concept of decentralization, further improve the performance and security of the oracle network.

TOKEN PLUS is a project that stands on the shoulders of giants. We will always value the community and continue to develop TOKEN PLUS in an open-source manner. We are appreciated for any reviews and suggestions from the community. We hope TOKEN PLUS can promote the development of block chain and smart contracts.

