Overview Of The Mixin Network – A Free And Efficient Transaction Network

With the introduction of Bitcoin, a revolution began in the finance industry. The public regained the ability to control their assets individually, follow closely on how resources are being shared, and to rescue the global market from the dominance of a few. Currently, many people from diverse locality and background have accepted the concept behind Bitcoin and Blockchain technology, and new users and investors keep pouring into the cryptocurrency market on a daily basis.

However, Bitcoin is still suffering from certain limitations that are hindering its further growth and development in the global market. The major challenges include limited transaction and trading power, inefficient or slow transaction processes and unreasonable transaction fees. Some solutions like the Lightning Network and the Liquid project from Blockstream has been introduced to the open Bitcoin system in a bid to solve some of these problems without compromising the competency and standard of the Bitcoin security system.

The Mixin Network is also a proposed solution that can be used on all public distributed ledgers to verify and authenticate all cryptocurrency transactions as well as improve the privacy of each transaction made by users with no charge at all.

Mixin Kernel

Mixin has developed a single hypothetically stable Kernel with lots of dynamic Domains and several multi-purpose Domain Extensions all together. The primary function of the Mixin Kernel is to verify asset transactions, and not to create any asset. All assets on the Mixin Network pass through the domain. The high performance of the Mixin Kernel allows it to operate at optimal efficiency without the need of a central authority, that is, it runs autonomously. The Mixin Kernel makes use of the UTXO model of Bitcoin to manage transactions between two parties on the Network, and CryptoNote OTK (one time key) derivation algorithm is employed as a way of enhancing privacy, since address reuse is not a problem on the Network.

Additionally, the Kernel nodes (1 Kernel node = 10,000 XIN) comprises a loose mesh topology, and are liable for transaction confirmation and continuity. In order to ensure that trust issues and data manipulations do not come up, Mixin Kernel made sure Kernel nodes operates in a Trusted Execution Environment by being an ABFT consensus DAG.

Mixin Domain

The Mixin Domain is the distributed ledger in charge of providing assets for the Mixin Kernel as the Kernel doesn’t create any assets. Assets may include those on any of the Blockchains available in the market, and even financial institutions like the central bank. The standard JSON-RPC interfaces is the name of the system in which the Mixin Kernel uses to place a call or communicate with the Mixin Domains, and it’s the only way possible for the Kernel and Domains to exchange status. Presently the Mixin Kernel only put into operation the standard

‘https’ transport for the protocol. For example the ‘kernel_registerDomain’ call is used to get a domain registered, the ‘domain_getKeyDerivationFunction’ call is used to get the domain specific asset key derivation function, the ‘domain_unlockAsset’ call is used to unlock the asset and transfer out to external sources and so on.

Domain Extensions

The primary functions of the Mixin Kernel which is basically for transaction purposes and the Mixin Domains which serves as an asset provider and an access to external Blockchains or any other external source available, have made the Mixin Network become a real powerhouse when it comes to matters relating to distributed ledger and also digital assets. The introduction of Smart Contracts by the Ethereum Blockchain has made peer-to-peer transactions a lot easier for many people. We would therefore allow Extensions to Mixin Domains, something like the smart contract but with higher strength capability and performance. This would digitally facilitate, authenticate, or implement the negotiation or promise between two parties in a contract thereby encouraging transparency on the Network.

Conclusion

The Mixin Network is going to try as much to not interfere in the affairs of the users and XIN would be the only stake to establish control on any problem that arises on the Network. The Network has a high performance engine that would ensure transactions are processed very efficiently in a secured environment without transaction fees.