

The logo for NIX PLATFORM is centered on a dark blue background. The word "NIX" is in a bold, white, sans-serif font. The letter "X" is stylized, composed of two overlapping blue bars that cross each other. Below "NIX" is the word "PLATFORM" in a smaller, white, sans-serif font. The background features abstract, curved blue shapes in various shades, creating a sense of depth and movement.

**NIX**  
PLATFORM

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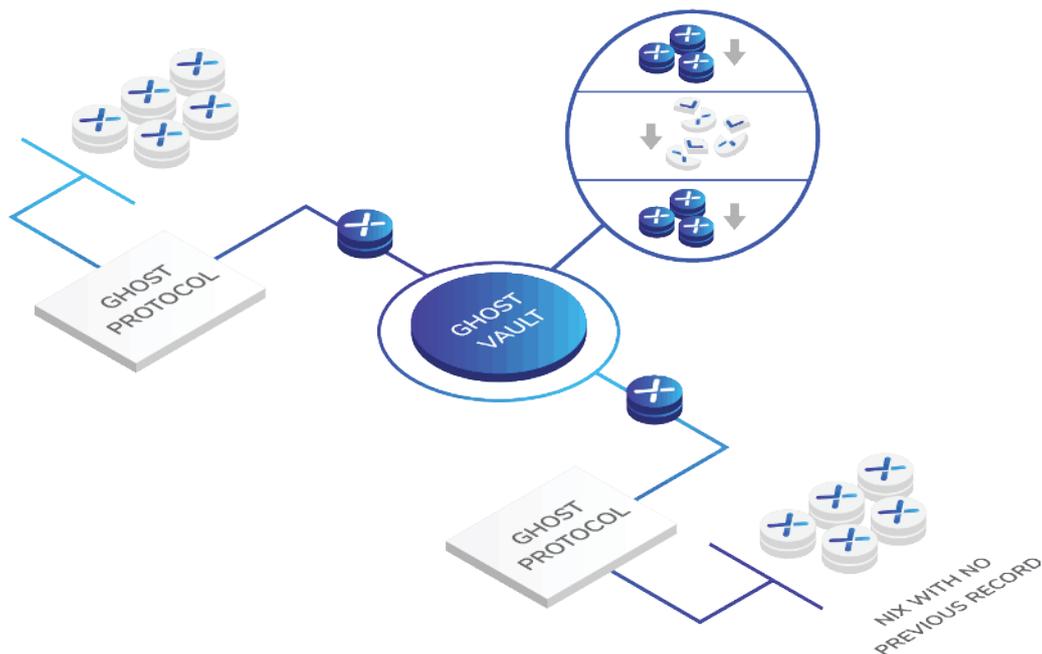
## Abstract

NIX Platform is an interoperable ecosystem driven by the purpose of bridging privacy to decentralized finance; its current infrastructure fuels anonymity, confidentiality and scalability solutions in a secure reliable approach, while building a modular framework to efficiently privatize any tokenized chain. NIX Platform uses Lease Proof of Stake consensus and Ghostnodes to secure the network and allow for the implementation of its privacy backbone, the Ghost Protocol.

## NIX Platform Solutions

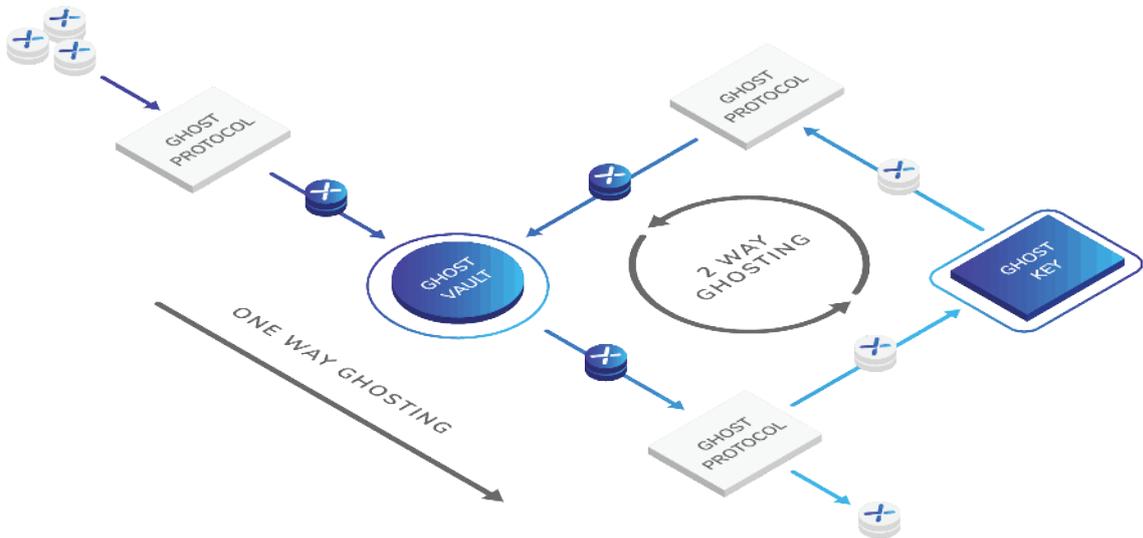
NIX Platform frames three solutions that target internal and external privacy concerns: NIX Ghost Vault, NIX 2-Way Ghosting and its recently announced and on-development invention, the NIX Bridge.

NIX Ghost Vault<sup>1</sup>: This feature, embedded in NIX core wallet, provides optional privacy to either the sender or the receiver by making user's coins completely private from the chain. Its completely trustless implementation encompasses the integration of the Sigma Protocol into the NIX Ghost protocol.

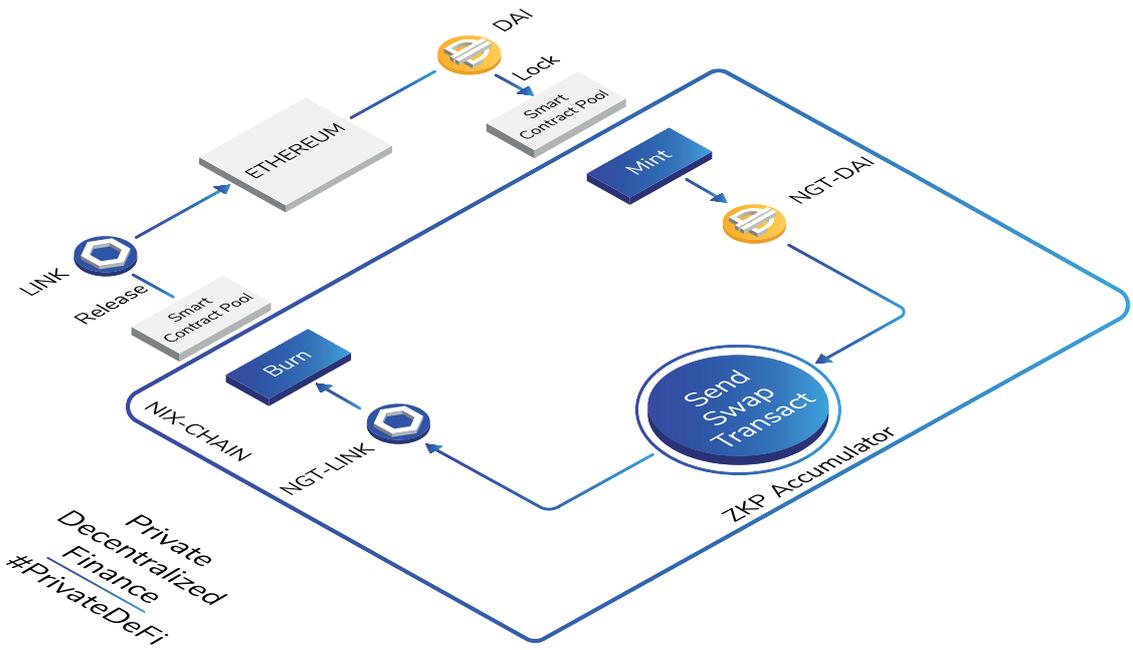


<sup>1</sup> Supported on core, GUI and CLI wallets.

NIX 2-Way Ghosting<sup>2</sup>: Based on NIX Ghost Vault concept, NIX Platform offers on-chain privacy for both sender and receiver in one single transaction. 2-Way Ghosting makes this possible by the issuance of private smart contracts on chain while allowing zero-knowledge proof transaction edged privacy; the solution derives in absolutely address-less transactions.



NIX Bridge<sup>3</sup>: A privacy and scalability enhancement system built for external interoperability that extends NIX embedded privacy to tokenized chains and Decentralized Finance applications. Its permission-less architecture pegs to outer chains and privatizes tokens in a secure manner by mirroring ERC20 tokens in the form of NGT-ERC20 assets into NIX’s dynamic chain pools. In such pools,



<sup>2</sup> Supported on core, GUI and CLI wallets.  
<sup>3</sup> NIX Bridge is currently being developed by the collaboration between NIX Platform and Blockchain Foundry.

## Trustless Network Security and Incentives

Consensus: NIX Platform employs Proof-of-Stake consensus to secure the network, validate the blockchain and allow the emission of new blocks. NIX holders (stakers) act as operators that account for the execution of those tasks. This consensus aligns with NIX Platform's value of decentralization.

Staking<sup>4</sup>: For POS consensus to work, NIX holders are required to stake coins in either core wallets or via third party services (Leased Proof of Stake). As a result, they receive staking rewards which payment frequency is proportional to the amount of NIX they stake and consequently to their voting power on the network validation process.

Ghostnodes<sup>5</sup>: NIX Ghostnodes are masternodes that help to secure the NIX network and enable transactions utilizing the Ghost Protocol; all smart contracts elements requiring privacy processing rely on the Ghostnodes to fulfill those requests. Since contributing to the NIX network in this approach entails a running cost and a collateral of 40,000 NIX, each node is compensated by earning a) 8.448 NIX every time a new block is generated, of which the frequency of payment is based on the volume of active nodes on the network, b) the 0.25% processing fees from Ghost Protocol public to private transactions, which are fairly distributed among all active nodes by the implementation of the Ghostnode Fee Pooling, and c) a 0.1 NIX flat fee coming from 2-Way Ghosting Transactions.

Moreover, NIX Bridge implementation brings extra rewards for Ghostnodes participating in this solution: d) a 50<sup>6</sup> NIX fee out of the creation of NIX Ghost Tokens and e) a 0.17<sup>7</sup> NIX flat fee from NGT pool transactions.

Ghostnode Fee Pooling: The role that the Ghostnode Fee Pooling scheme plays in the NIX fee distribution system is to destroy the generated fees in each 720 blocks cycle (approximately 24 hours considering NIX block emission), register

## Off-chain Governance

NIX governance model is focused on all invested stakeholders who actively participate in NIX's ecosystem (node and staking participants of any amount); its establishment set the power of NIX's expectations into the hands of NIX community and investors and made NIX development funding entirely transparent.

This light weight off-chain system uses a dApp that connects to the NIX core wallet which function is to avoid the storage of unnecessary on the NIX blockchain. Its environment allows the entire NIX community to make any kind of proposal to be voted by both node owners and stakers, whose vote weight depends on the amount of successful coinstakes that an address receives in terms of rewards.

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<sup>4</sup> Wallet and Leased Cold staking supported on core, GUI and CLI wallets.

<sup>5</sup> Supported on core, GUI and CLI wallets, flare mobile and electrum wallets.

<sup>6</sup> Fee subject to changes.

<sup>7</sup> Fee subject to changes.

## NIX Ghost Protocol

NIX optional privacy mechanism is comprised of several elements that allow users and developers to opt not only for private coin transactions, but also for network privacy.

The platform absorbs the Sigma Protocol, a strong zero-knowledge proof system that greatly improves the Ghost Protocol by guaranteeing no trusted setup, decreasing transaction size and anonymizing user data. Sigma is a fundamental aspect of NIX Platform as its cryptographic system eradicates transaction history within the blockchain by burning and latterly minting coins.

Additionally, NIX Platform inserts an instrument that expands the isolated zero-knowledge scheme: Commitment Key Packs, also known as Ghost Keys; this implementation alone gives users the option to destroy public NIX and have them stored in a Ghost Vault, irrespective of the vault's ownership. When CKP are combined with previously ghosted NIX, third parties are able to conduct direct zero-knowledge payments, resulting in address-less transactions which are the base of our NIX 2-Way Ghosting solution.

TOR Anonymity Network is also attached to the NIX Ghost Protocol; this technology provides a multi-layered encryption that blocks trackers and defends against surveillance. The inclusion of the TOR structure enlarges NIX privacy set by protecting both originating and destination IP addresses, which in consequence disables traffic analysis.

NIX Ghost Protocol is also enhanced by making use of Dandelion ++, a protocol that obscures the network origin of a transaction by initially broadcasting it to only one random peer. The one-peer broadcasting process is repeated several times in an arbitrary manner until eventually the transaction is diffused and propagated across the network. This technology successfully hides the original sending node, adding an improved level of anonymity to NIX Platform's privacy protocol.

## NIX Private Atomic Swaps

With the collaboration of Flare Wallet team, Komodo developers and AtomicDEX developers, NIX Platform successfully accomplished the first automated privacy swap in history. This achievement introduces a groundbreaking development for DEX trading, an intermediary swap conducted through the NIX network that eliminates cross-chain address history linkage.

The first case of privacy swap using NIX Platform, where user A buys 0.06 KMD from user B with 0.8 ghosted NIX, is demonstrated in both Komodo and NIX explorers as it is shown in the following links: a) Ghost Deposit, b) User A sending taker payment to user B, c) User B sending maker payment to user A

## **Enhanced Ghost Protocol: NIX Platform improved Privacy and Scalability Proposition**

NIX Bridge's privacy solution demands a new incorporation to the Ghost Protocol in order to grant a revolutionary level of anonymity and confidentiality for different ecosystems. To accomplish that end, NIX Ghost Protocol is absorbing a new zero-knowledge system (TBA) which is trustless in nature and eliminates constraints for fixed denominations.

As result, the enhanced Ghost Protocol develops NGT dynamic asset accumulators where tokens can be merged, split or partially redeemed while all transaction amounts remain hidden. The combination of the new zero knowledge protocol with the cover-up of sender and receiver addresses, acknowledges the introduction of the most powerful interoperable privacy solution on the market.

As a scalability solution, the enhanced Ghost Protocol allows a single transaction to contain simultaneous spends and output multiple NIX, greatly reducing proof size and generation times.

## **NIX Software Development Kit**

NIX Platform released a Software Development Kit that allows developers to access all the functions and tools available within the NIX Platform, with the option to interact and build on top of the NIX Platform by using the cross-platform JavaScript language.

## **Future Functionality**

As NIX Platform is currently able to provide intra and cross-chain privacy in a decentralized manner, the platform's final goal is to move to the Decentralized Finance field, by initially delivering instant and enhanced privacy to tokenized chains, to mention NIX Bridge's first use case: Ethereum and ERC20 tokens.

## NIX Specifications

Network	
Network	BTC 0.17
Mainnet Port	6214
Testnet Port	16214
Consensus	Proof of Stake/Custom LPoS
Block Time Target	2 minutes
Difficulty Adjustment	Every block, 2 block moving average
Max. Block Size	2MB
Est. TPS	80

Coin	
Current Supply	~47,360,000 (SEP 2020)
Maximum Supply	102,210,160 (After 40 years)
Staking Reward	~2.6 per block
Ghostnode Reward	~8.4 per block
Ghostnode Ghost Vault Fee * (1-way Ghosting)	0.25%
Ghostnode Vault to Vault TX Fee * (2-way Ghosting)	0.1 Ghosted NIX

\* Vault fees are pooled and split among all active Ghostnodes on a daily basis.

