



Whitepaper V 1.0

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1 Prelude

The notes within this Whitepaper publication are intended to formally document the concepts, vision, and features of the KnoxFS cryptocurrency (KFX). This document will explain in a methodical manner, the details of KnoxFS currency, its structure, purpose and associated Masternode/Staking benefits.

Before downloading any of the KnoxFS wallets and purchasing the coin, we urge people to thoroughly read through and understand this document in its entirety.

It is important to note that KnoxFS is **NOT** a security-based coin nor are there any guarantees or promises relating to the increase or decrease in value of the coin over any period of time.

This coin, KFX should be purchased solely at the discretion of the purchaser and any technology outlined in this document is primarily experimental and does not bring with it any guarantees or certainties regarding operation and intended purpose.

We hope you enjoy the KFX Whitepaper, and if you have any questions concerning it, please join our discord group or simply email us at - contact@knoxfs.com

2 Introduction

KnoxFS is a Bitcoin-based cryptocurrency with a focus on privacy, decentralisation, data storage, distribution and security. It aims to provide a truly innovative, secure and private cryptocurrency to the non-blockchain and cryptocurrency based world for both network users and global merchants.

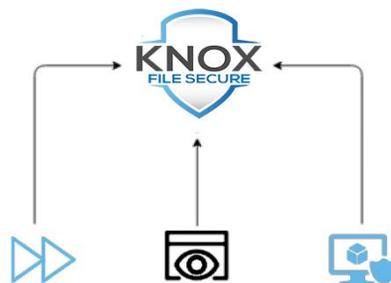
KnoxFS utilises an energy efficient Proof of Stake (PoS) model and a Masternode network promoting key community-based governance that focuses on sustainability, community cohesiveness and network stability.

KnoxFS is a form of online digital money that can easily be transferred all around the world in an instant with almost zero transaction fees. It is not owned or governed by any single person or organization and it is secured by a network of nodes that are spread across the globe.

Our long-term goals here at KnoxFS are to become an advanced and decentralised Data Storage network based on IPFS, that is private, secure and attractive to business merchants and users worldwide.

KnoxFS aims to be a practical utility coin for both data users and storage node owners across the global network.

KnoxFS



FAST - PRIVATE - SECURE

3 KnoxFS Features

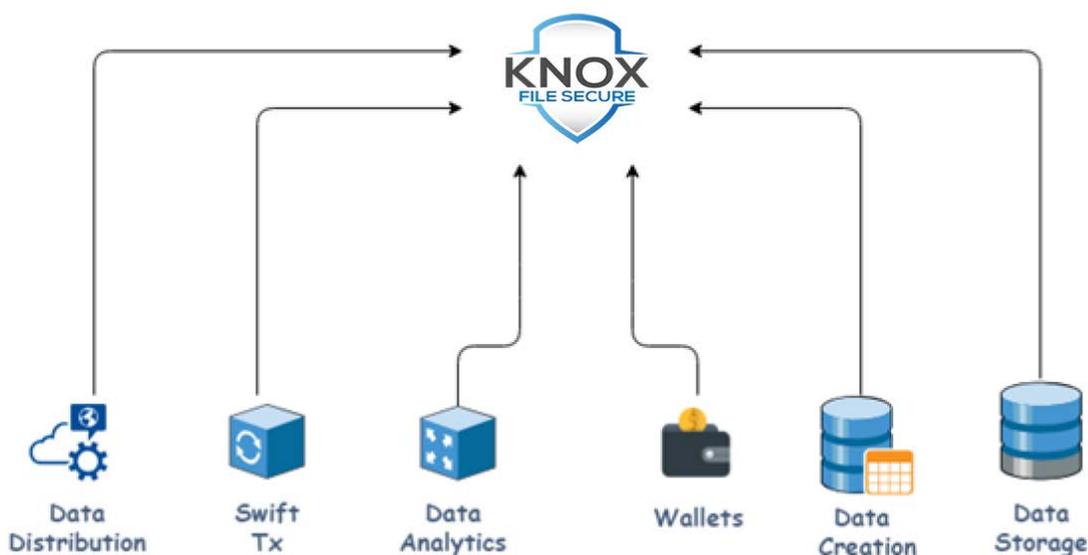
KnoxFS is an anonymous Peer-to-Peer cryptocurrency. KnoxFS is a PoS coin.

KnoxFS is ideal for merchants as it has almost zero transaction fees due to the highly efficient PoS model. Swift TX allows superior transaction speeds which are ideal for micro-transactions between wallet holders.

KnoxFS is based on PIVX, which drew its inspiration from Dash, a project that has solved many of the problems in Bitcoin by speeding up transactions times, offering robust privacy solutions and boasts a decentralised governance funding system.

KnoxFS has a highly active, accessible and responsive development team who listen to the community in order to develop more streamlined and efficient technologies for the KnoxFS community.

In the near future, KnoxFS proposes to integrate data storage and distribution blockchain features suitable for both private and business users embracing IPFS technology, a protocol that uses key hash identifiers to safeguard user data, thus preventing data compromise.



4 KnoxFS Masternodes

Masternodes are nodes running the same wallet software on the same blockchain to provide extra services to the network. These services include coin mixing for increased privacy of transactions, and instant transactions.

For providing such services, holders/owners are also paid a certain portion of reward for each block. This can serve as a passive income to the Masternode owners minus their running costs.

The KnoxFS Masternodes are incentivised nodes that receive rewards based on their availability and their ability to offer network services in a decentralized and trust-less manner.

Running a KnoxFS Masternode requires locking a certain amount of KFX for as long as you choose to run the Masternode. Masternode owners will be allowed to vote on budget and development proposals in the future.

Holders/owners are the backbone of the present and future services offered on the KnoxFS network and as such are rewarded at an equal level in comparison to normal wallet stakers. Masternode owners, however, have a significant governance role to play not only in the current KnoxFS network but also as a critical voice for future developments and the overall success of KnoxFS.

Masternode Rewards

KnoxFS is implementing a 3 Tiered Masternode system to allow all types of investors the opportunity to own a full Masternode.

Tier 1 Masternode: 30,000 KFX collateral with 4 KFX reward.

Tier 2 Masternode: 50,000 KFX collateral with 10 KFX reward.

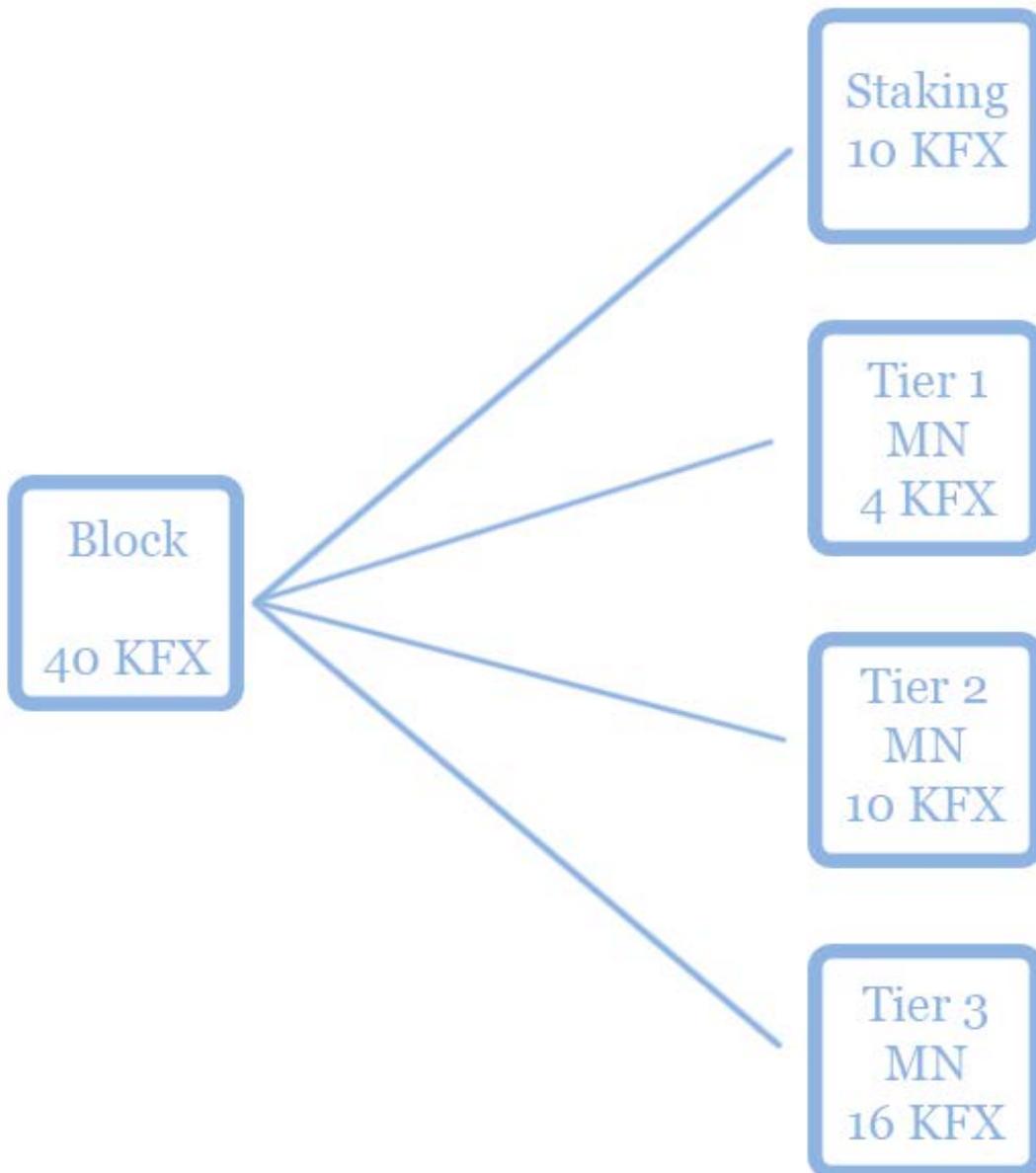
Tier 3 Masternode: 70,000 KFX Collateral with 16 KFX reward.

The logic of the ABS is simple; the higher the Masternode count, the smaller the reward portion of each PoS block that will be paid out to the Masternodes and the larger the reward portion for staking nodes.

Conversely, when the Masternode count falls, the Masternode reward portion is increased and the staking node reward portion decreases.

5 How The Reward System Works?

KnoxFS offers a very attractive Masternode reward structure of 40 KFX per block: 30 KFX split between three tiers of Masternode holders/owners and 10 KFX for the staker.

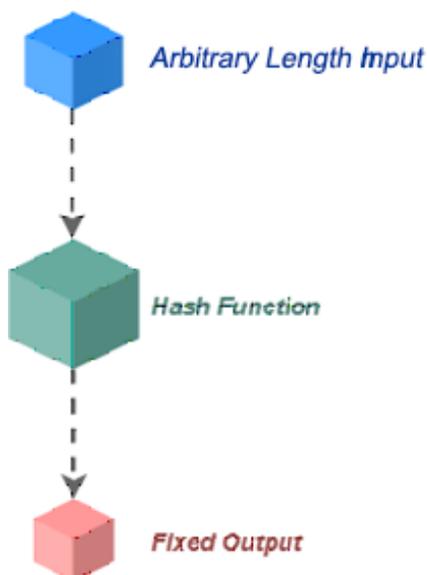


6 IPFS

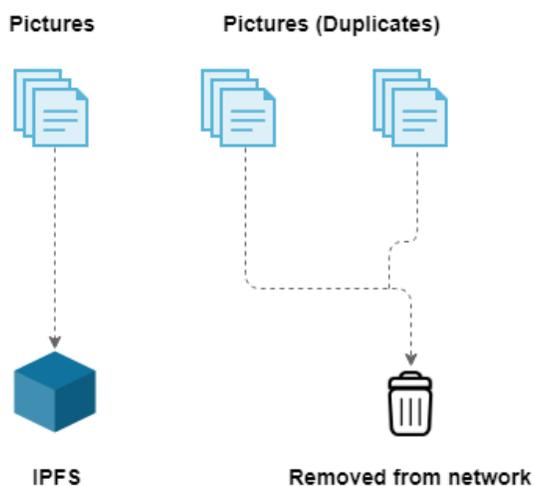
6.1 How Does IPFS Work?

IPFS stands for InterPlanetary File System, which is a peer-to-peer hypermedia protocol to create a distributed web, which will be faster, safer and more open.

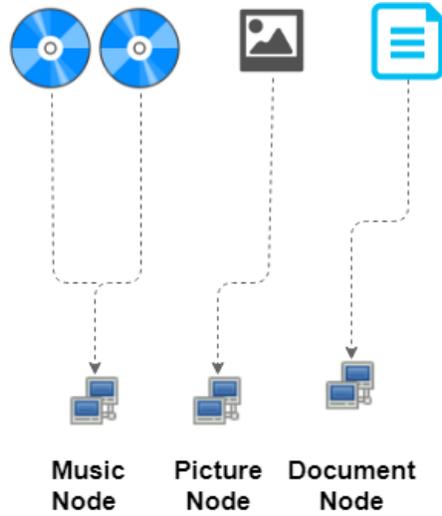
Each file and all of the blocks within it are given a unique fingerprint called a cryptographic hash.



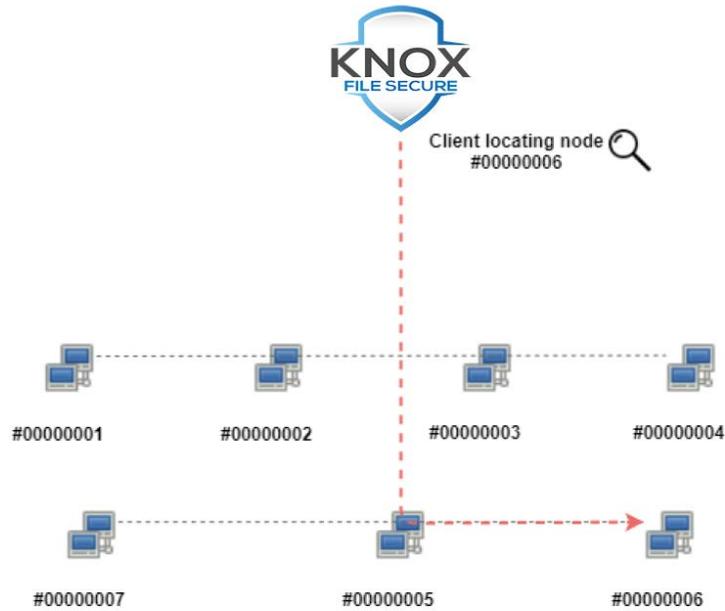
IPFS removes duplications across the network.



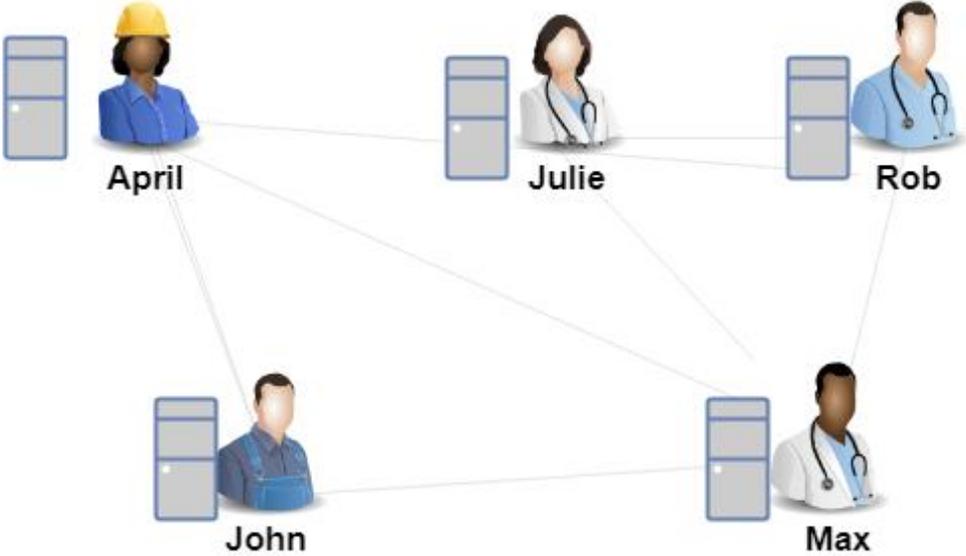
Each network node stores only content it is interested in, and some indexing information that helps figure out who is storing what.



When looking up files, you are asking the network to find nodes storing the content behind a unique hash.



Every file can be found by human-readable names using a decentralized naming system called IPNS (InterPlanetary Naming System).



6.2 KnoxFS & IPFS

KnoxFS will use IPFS to securely store, send and distribute all file types across a global IPFS node system initially and will then proceed to a customized IPFS KnoxFS node network at a later stage. The KnoxFS IPFS network storage node will allow greater flexibility to suit specific functions that will fit more specific types of individuals or group collaborations and allows KnoxFS to work within international data requirements and security initiatives.

The overall vision and objective are to build a completely distributed and secure means of storing and sharing data. Whether the technology used is leveraged in a way to transmit simple messages in an e-mail style system (Secure Messaging/E-mail), or share sensitive information with only the intended parties granted access, we are going to make as much efficient use as possible with what we have at our disposal.

Why Blockchain Isn't A Good Fit For Data Storage?

Blockchain is slow, expensive and very difficult to work with even from a developer's viewpoint. Data is limited only to the size of the blockchain address which is usually very small. Blockchain becomes expensive because the user not only has to pay a transaction fee but will also have to burn a tiny bit of money on storage. Even storing mere kilobytes can get very expensive because users are paying for the transaction and the storage of that data. It gets even more expensive if smart contracts are involved.

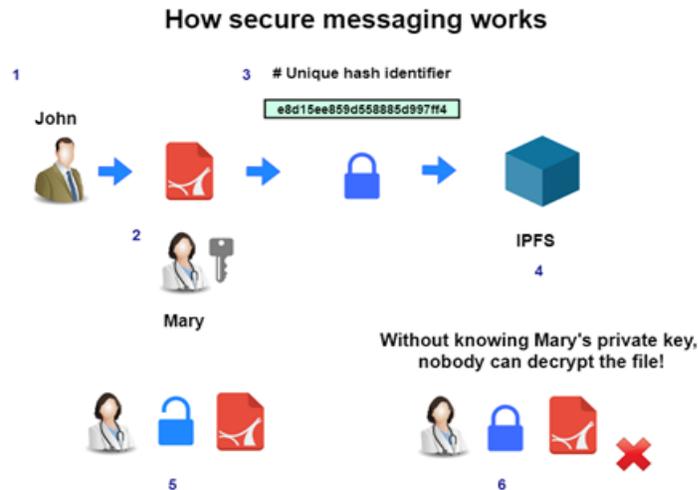
Blockchain data storage is not secure as every participant has a copy of the entire chain. Deleting data on the blockchain is also not possible due to the design of the protocol. IPFS is used simply because the blockchain cannot cater or handle unlimited amounts of data. IPFS involves a user having to go through highly secure layers to access data types. It is probably one of the most secure ways of sending data across a global platform in existence today and the way it is going, will be widely adopted by businesses going forward.

As IPFS can handle unlimited amounts of data in any file format, transferring data from one cloud-based platform should not be an issue, if zipped.

The Process of Sending & Receiving Files Using IPFS (Custom or Global)

John (sender) wants to send a message to Mary (recipient), so he creates his message using one of the following data types;

1. Zip Files
2. Audio Files
3. Video Files
4. Texts
5. Images

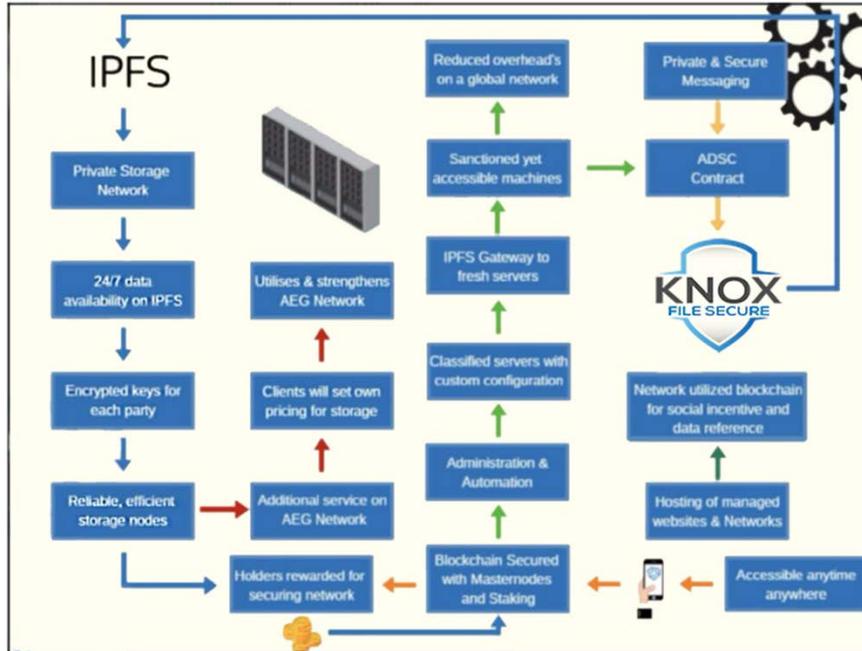


Once the message is created, John encrypts it with Mary's public key so only Mary can access it using her private key. This message is then sent (uploaded) on the IPFS network. John then proceeds to send Mary the hash of that file which can only be encrypted with the public key of the recipient, which in this case is Mary.

Mary, the recipient, then proceeds to decrypt the hash file with her private key. Once Mary decrypts the hash file using her private key, John's wallet notifies him that the file has been downloaded from the IPFS server. For an extra layer of security, the content will not be displayed without the user unlocking their wallet for either that session or per-message.

All file types can be transmitted and there is no limitation to data size. However large data types are encouraged to use compressed (zip) files as it makes the whole messaging process more efficient. Nodes that participate in storing data will receive a percentage of the fee charged for carrying out this secure messaging feature. This is to ensure that all participating nodes are rewarded for enabling this service on the IPFS network.

So every time a storage node serves up content, it will receive a fee that will come from the message users wallets. These fees are yet to be established, but will be very soon.



7 Technical Specifications



Coin Ticker: KFX

Default RPC: 15221

Default P2P: 19328

Coinbase Maturity: 50 confirmations

TX Maturity/Spendable: 6 Confirmations

Block Time: 1 minute

Block Reward: 40 KFX

Staking Reward: 10 KFX

Tier 1 MN Reward: 4 KFX

Tier 2 MN Reward: 10 KFX

Tier 3 MN Reward: 16 KFX

Minimum Stake Age: 1 Hour

8 Future Innovations

8.1 Data Collaboration

Not only will users be able to send and receive data between single based users , but also will be able to send data to multiple users using a unique multi-send DCB command across the KnoxFS network. This feature will be particularly useful for time efficiency and team collaboration.

8.2 QT Wallet Redesign

We will be re-designing our wallet look, feel, and user interaction. This wallet design will create a foundation for our wallet services to come, including secure messaging, data management, and much more other features. The wallet re-design will have a more user-friendly interface, attractive colors, icons, etc.

8.3 Wallet Tab Proposal/Voting

KnoxFS users will have the ability to easily perform governance functions from within their KnoxFS wallet. The re-design will cater for this although this feature will be added some time after the QT wallet delivery. Users can vote on all KFX proposals from within their wallet whether it's mobile or desktop based. There will be no need to go to a website to carry out these actions.

8.4 Automatic Backup/External Storage Devices

The KnoxFS wallet will allow users to choose automatic backup locations such as external storage devices.

8.5 Hardware Masternode Support

KnoxFS users will be able to store their private keys in a hardware wallet in an offline environment or cold storage device. This will provide the highest possible level of security to our users. All Masternode collateral can be secured in a ledger device while earning rewards.

8.6 U2F Integration

Users can protect their wallets against hackers by using both passwords and U2F security keys. We will set up instructions for the most popular U2F devices.

9 KnoxFS Ecosystem

9.1 Reliable Development

The KnoxFS foundation is dependable, and this can be seen by the very nature of our technical specification, community growth and interaction, and consistent work progress. The developers are very active in the support platforms and highly engaged with the entire KnoxFS team including Marketing, Business Development, and Supporting Departments.

9.2 Masternodes

KnoxFS Masternodes are incentivised nodes that require a total collateral of 30,000 - 70,000 KFX to set up, depending on the tier the investor chooses. Masternode owners will also be able to vote on budgets and development proposals within the KFX network. Masternodes are the backbone of the current and future growth of KnoxFS. They strengthen the entire network along with the staking community.

9.3 Privacy/Anonymity

One of the most attractive features of KnoxFS is the direction it's going in. Online privacy and security is a top priority for online merchants and network users. KnoxFS offers secure and private transactions along with highly secure data sharing and storage for its users. With the demand for private and secure data channels on the rise, KnoxFS has already positioned itself as a leading player, utilising the most secure technologies in existence; IPFS.

9.4 KFX Merchants

KnoxFS will have a number of merchants who will be accepting KFX as a form of payment for their business operations coming very soon. These businesses will range in industry niche. We have already been contacted by several to date. The KnoxFS team will actively be setting up a department for this very purpose in the 4th quarter of 2018. Online merchants will initially be invited, and we will spread to more offline based businesses subsequently. KnoxFS aims to have several businesses signed up before the 1st quarter of 2019 and growing afterward.

9.5 KFX Community

As KnoxFS grows, so also does its community. Today we already have a very supportive, active, and large community. The Developers engage with the community, and our teams of Moderators, Marketers, Translators, and more have been built from community members who have been active, engaged, and believe in the solution KnoxFS is offering.

10 KnoxFS Roadmap

KnoxFS will always be striving for excellence and looking for ways to bring additional solutions to the marketplace. Although this roadmap only goes as far as 2020, our goals reach far beyond that point.

11 Conclusion

Prior to July 1st, 2018, Aegeus sold a portion of the 21 million supply to fund the project and future based developments. Up to 25% of this was reserved for marketing, operational costs, and future development. All this was achieved without conducting an ICO.

As predicted and promised, multiple exchanges occurred after the coin sale, and unsold coins were burned after July 1st, 2018. Approximately 12 million coins were burned.

Our excitement now lies in achieving our roadmap goals. We will strive to meet these roadmap goals to the best of our ability.

We would like to thank you for reading this Whitepaper, and invite you to our discord rooms and other platforms.

For more information regarding KnoxFS, partnerships, merchant applications, whitepaper, or to speak to one of our team, please visit <http://www.knoxfs.com> or contact us at contact@knoxfs.com.