

# APIS

# MASTERNODE PLATFORM





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## 0. Abstract

The APIS is building a “Masternode Platform” to acquaint a wider audience with the coined term “masternode” and allow them to enjoy the advantages and benefits of a masternode. This paper is an overview of our approach to attaining this goal.

## 1. Introduction and Problem Statement

The APIS is a masternode platform that enables the entire spectrum of users to have easy access to a two- tier incentivized network, also known as the “Masternode Network”. Masternodes refer to nodes in the cryptocurrency market that fulfil a specific function beyond simply relaying transactions. A masternode’s most distinctive feature is that anyone running a masternode can get masternoding rewards periodically by locking up their cryptocurrency in the masternode. However, despite its attractive characteristic, hosting a masternode is quite out of reach for most individuals as masternodes require substantial capital and intricate software engineering to set up. By aiding these individuals and bringing them together to form a masternode, we will be able to encourage more people to participate in masternoding as well as provide them with a much safer masternoding channel rather than deep diving into technical undertaking without sufficient experience.

## 2. What is a Masternode?

### 2.1. Definition

Masternodes are “servers” in the cryptocurrencies network that relay transactions and sometimes also process other specific functions. The most distinctive characteristic of a masternode is that users in a masternode can receive masternoding rewards periodically in the form of the cryptocurrency specific to the masternode. The yield varies primarily according to the masternode count and

the different pay-out periods of each coin. This makes masternoding a means to receive periodic rewards from cryptocurrencies without having to run expensive mining equipment or actively trade in exchanges. To create a masternode, a user need only to lock in a specific amount of coin. Users can then either set up a server to host the masternode or ask a service provider to do so on their behalf.

### 2.2. Proof-of-Work(POW) and Proof-of-Stake(POS)

Coin mining can be divided into two different methods: POW (Proof-of-Work) and POS (Proof-of-Stake). POW is a system where users are able to earn more coins from more available blocks when the hash reserves are higher. However, with the corresponding increase in hashes, more blocks are required to be made available to ensure that the block generation time remains constant which creates a certain level of difficulty. This POW method has some limitations. Economically, high electricity consumption, and high costs of mining equipment (ASIC, GPU, etc) and their maintenance translates to huge expenses. There are also concerns around blockchain security and hash monopolisation issues. For most coins, the POW method has been chosen in the past and the most typical examples are Bitcoin, Litecoin and Ethereum.

POS is a method designed to solve the biggest drawbacks of POW mentioned above. For POS, the higher the staked proportion of the entire coin supply, the higher the acquisition amount for the additional coins issued. In other words, the role of “hash” in the POW method is equivalent to the role of “staking” in the POS method. In addition, the POS method can achieve stronger security just by linking multiple wallets for coin storage. In recent years, coins using the POS method have been on the rise and existing coins are also switching to the POS method. Ethereum is a perfect example of this.

### 2.3. Masternode using POS method

Most of masternode blockchains e.g. PIVX use PoS(Proof-of-Stake) consensus algorithm for block mining. PoS is a type of algorithm, which requires users to stake specific amount of coins to get a chance of selected to validate and mine blocks.

But, blockchain networks only composed of PoS miners can have technical issue. If PoS miners attack network by manipulating old block data, there is no way for light nodes (nodes only have recent block data) to restore original blocks.

To prevent this, masternode system is developed. Masternode is a non-mining full node (which has whole blockchain data), which provides network participants an integral block data. They receive a specific amount of coins, as a reward of maintaining blockchain network.

Lots of masternode coins implemented this algorithm, including PIVX.

### 2.4. Advantages and Limitations of a Masternode

#### 2.4.1. Masternode's Advantages

PIVX	USD	Coin
Monthly Reward	217.80	10.7422
Yealy Reward	2,649.98	560.129
ROI(Annual)	5.60%	

DASH	USD	Coin
Monthly Reward	5,339.98	6.753
Yealy Reward	64,969.78	82.1615
ROI(Annual)	8.22%	

MEME	USD	Coin
Monthly Reward	940.30	709.674
Yealy Reward	11,440	8634.367
ROI(Annual)	57.56%	

KORE	USD	Coin
Monthly Reward	50.322	11.91
Yealy Reward	612.26	144.905
ROI(Annual)	28.98%	

*\* As of December 12, 2017*

A masternode has its own Return of Investments ("ROI"). ROI measures the efficiency of an investment and a high ROI signifies that the masternoding was successful and cost-efficient.

## 2.4.2. Masternode's Limitations

### Amount of money/coins required for the formation of each masternode

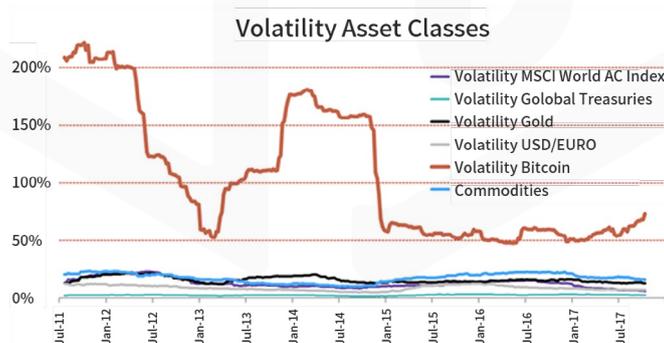
Coin / detail	Price	Change	Volume	Marketcap	ROI	Nodes	# required	Mn Worth
SIBcoin (SIB)	\$2.4898	25.14%	\$5,777,790.000	\$39,699,846.00	8.42%	7,484	1,000	\$2,489.75
Dash (DASH)	\$761.456	-0.05%	\$179,460,000.00	\$5,889,854,116.00	8.63%	4,085	1,000	\$761,456.00
Chaincoin (CHC)	\$0.5095	43.45%	\$98,033.00	\$7,208,127.00	54.77%	2,356	1,000	\$509.48
Crown SN (CRW-SN)	\$1.6151	8.92%	\$237,427.00	\$26,301,331.00	40.41%	2,229	500	\$807.53
PIVX (PIVX)	\$5.3692	1.71%	\$4,156,010.00	\$295,627,784.00	5.75%	2,115	10,000	\$53,692.00
ArcticCoin(ARC)	\$0.0534	-4.25%	\$26,568.70	\$1,312,748.00	18.05%	1,684	1,000	\$53.42
PURA (PURA)	\$0.6333	8.23%	\$593,478.00	\$108,903,009.00	1.93%	1,022	100,000	\$63,330.80
Crown (CRW)	\$1.6151	8.92%	\$237,427.00	\$26,301,331.00	23.00%	979	10,000	\$16,150.50
MonacoCoin (XMCC)	\$0.5255	75.60%	\$18,237.40	\$1,379,848.00	66.78%	763	1,000	\$525.49
Innova (INN)	\$4.1425	-0.52%	\$86,670.80	\$3,647,433.00	374.51%	614	1,000	\$4,142.51

▲ source : <http://masternodes.online>

The barriers to entry for forming a masternode often exceed the financial capacity of ordinary participants as the required number of coins needed is beyond their means. A case in point would be setting up a DASH masternode which would cost 1,000 DASH coin (equivalent of USD760,000.00).

The technical and equipment set up needed to form the masternode, together with its continued maintenance, would require professional expertise which is another barrier to entry for the ordinary individual. DASH requires the masternode to have a server that is operational 24 hours a day, seven days a week to support the operation of related software at a moment's notice.

## 2.5. Opportunities



Bitcoin volatility means “more regulation” of cryptocurrency may be on the way. As can be inferred from the graph above, Bitcoin's price volatility outstrips all other assets. High volatility implies high risk and is the main reason why many people regard investment in cryptocurrency as “speculation”, thus bringing about concern from regulators. This misconception has become an obstacle to the development of cryptocurrency, and by extension blockchain technology.

However, with the introduction of masternoding, ordinary participants can now minimize their risk and continue generating sizable earnings. Moreover, now that many participants are seeking to find a reliable platform for investments, it is high time that the community starts focusing more on masternode platforms rather than existing exchange markets.

Scope / content	Country	Addition information
Prohibition	China	Banks and payment systems prohibited from dealing in bitcoins. Individuals are free to trade.
	Russia	Bitcoins cannot be used by citizens and legal entities.
	Iceland	Foreign exchange activities with Bitcoin illegal.
Prohibition of ATMs	Taiwan	Approval for bitcoin ATMs refused.
Protection from money Laundering & illicit activities financing	Singapore	Financial intermediaries to verify the identities of their customers and report suspicious transactions.
	USA	Bitcoin exchanges and most miners are obliged to collect information on potentially suspicious transactions and are to report them to the federal government
Taxing Bitcoin	USA	The sale, exchange or use of Bitcoin for payment in a real-world economy transaction may result in tax liability.
	Japan	The tax will cover gains from trading Bitcoin, purchases made with Bitcoin and revenues from transactions. Banks and securities firms will be prohibited from Bitcoin trades.
	Finland	Rules on taxation of capital gains apply when profits are made from transfer to another currency. increase in value in Bitcoin after it was obtained as payment is also taxable.
	Germany	Profits from mining or trading subject to capital gains tax unless hoarded for at least one year.

### 3. The APIS Masternode Platform

#### 3.1. Business Model

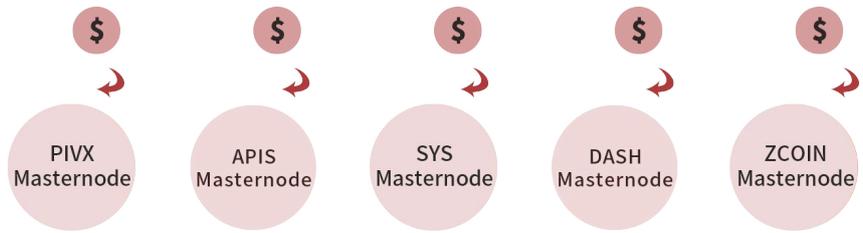
Cryptocurrency, which has emerged with the development of blockchain, is at the forefront of the Fourth Industrial Revolution. This has been characterised by decentralisation, anonymity and reliability. The cryptocurrency markets are now attracting participants from various industries and academic fields. Nevertheless, large price fluctuation is making cryptocurrency seem "speculative" and is raising fears of it becoming a social problem.

The APIS Masternode Platform will provide participants with a cyclic reward system and minimise the inherent market risk with reliability, accessibility and reduced volatility. Ultimately, APIS aims to become the first key currency of masternode coins.

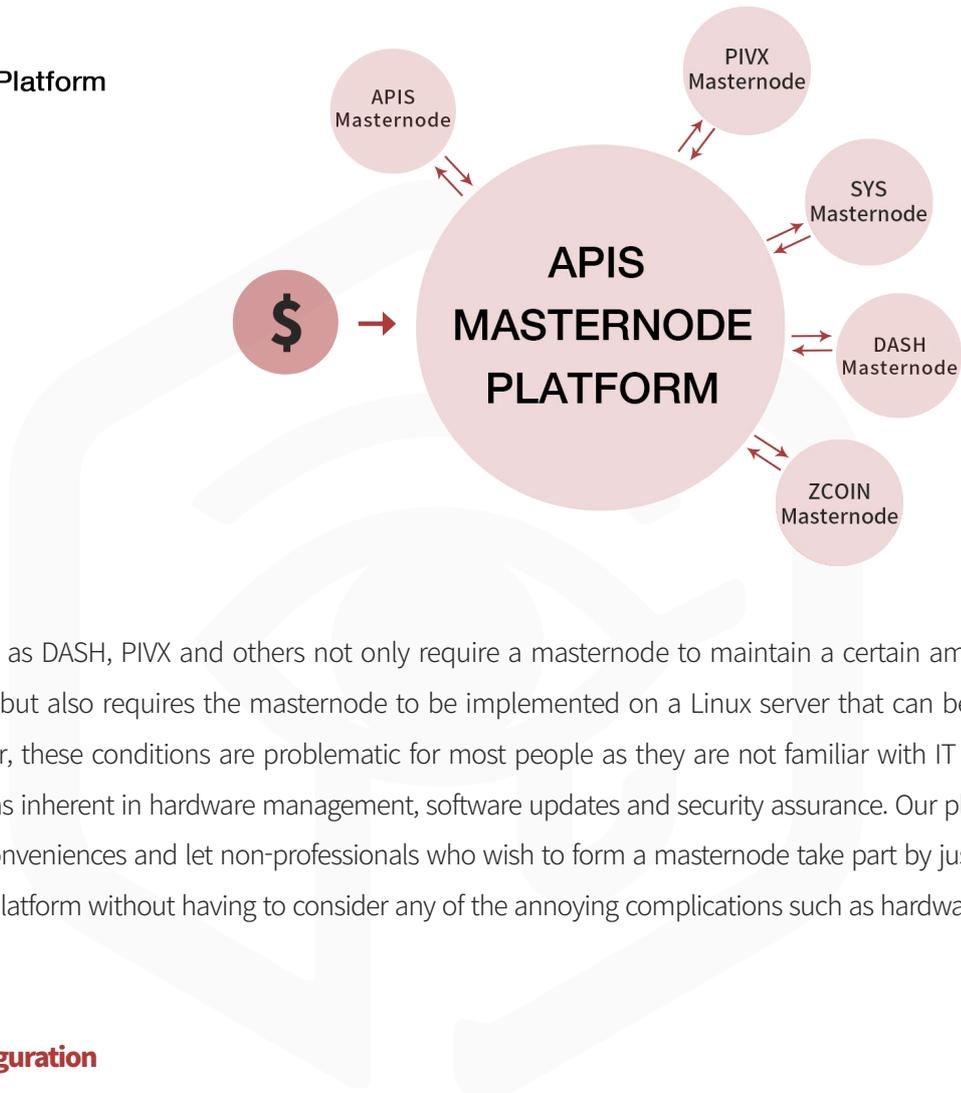
#### 3.2. Platform Overview

The APIS Platform is an APIS mainnet based masternode platform that aims to help individual and corporate users participate in desired masternodes easily and effectively. It supports multiple platforms including PC and mobile devices, thereby providing users with the chance to earn periodic reward and enjoy the benefits of cryptocurrency more conveniently. This section explains the importance of the APIS Core along with the usefulness and innovation of our official "APIS" coin, named after the ancient Egyptian bull deity.

### Typical way of Masternode Participation



### The APIS Masternode Platform



Existing coins such as DASH, PIVX and others not only require a masternode to maintain a certain amount of coins in its software wallet but also requires the masternode to be implemented on a Linux server that can be operated 24 hours stably. However, these conditions are problematic for most people as they are not familiar with IT and resolving maintenance problems inherent in hardware management, software updates and security assurance. Our platform is able to deal with such inconveniences and let non-professionals who wish to form a masternode take part by just becoming a member of the APIS Platform without having to consider any of the annoying complications such as hardware or software manipulation.

### 3.3. Platform Configuration

#### 3.3.1. Masternode Core

A masternode core is a distributed database consisting of cutting-edge encryption technology to manage APIS Masternode user reports, shares and trading records on the platform. Individual participant wallet information is securely stored on an Ethereum-based blockchain that also ensures system stability and asset protection through systemic data backup and restoration. Masternode information that is already incorporated on the platform will be accessible in the future through API and SDK that will be provided and all data communication will be encrypted as well. Through this process, we can strengthen the scalability of the APIS platform.

### 3.3.2. Masternode Hub

Masternode Hub composes and manages various coins such as DASH, MEME and BTDX's masternodes systematically. When a masternode is newly formed by user participation, the masternode hub automatically creates VPS (Virtual Private Server) for each masternode, prepares required up-to-date software and operates the masternode by depositing a designated amount of cryptocurrency in the wallet through the masternode core. All processes are carried out automatically and the users are informed with a push-message every time there is progress in the procedure such as the building of a VPS, the installation of software, and creation of a wallet.

Masternode Hub constantly reports rewards earned from the running of each masternode to the masternode core and allows participants to clearly track their rewards through the APIS Core. Masternode Hub's hardware is operated 24/7 by our highly-experienced management team.

### 3.3.3. APIS Core

APIS Core manages user information as well as APIS assets and provides all core functions that correlate with the masternode core. APIS Core is an EVM (Ethereum Virtual Machine) based blockchain program that can be connected with various platforms such as Ethereum or Qtum and makes use of the POS methods. APIS Core supports multiple Operating Systems (OS) such as Windows, Linux, Mac, Android and iOS.

### 3.4. Platform Accessibility and Security

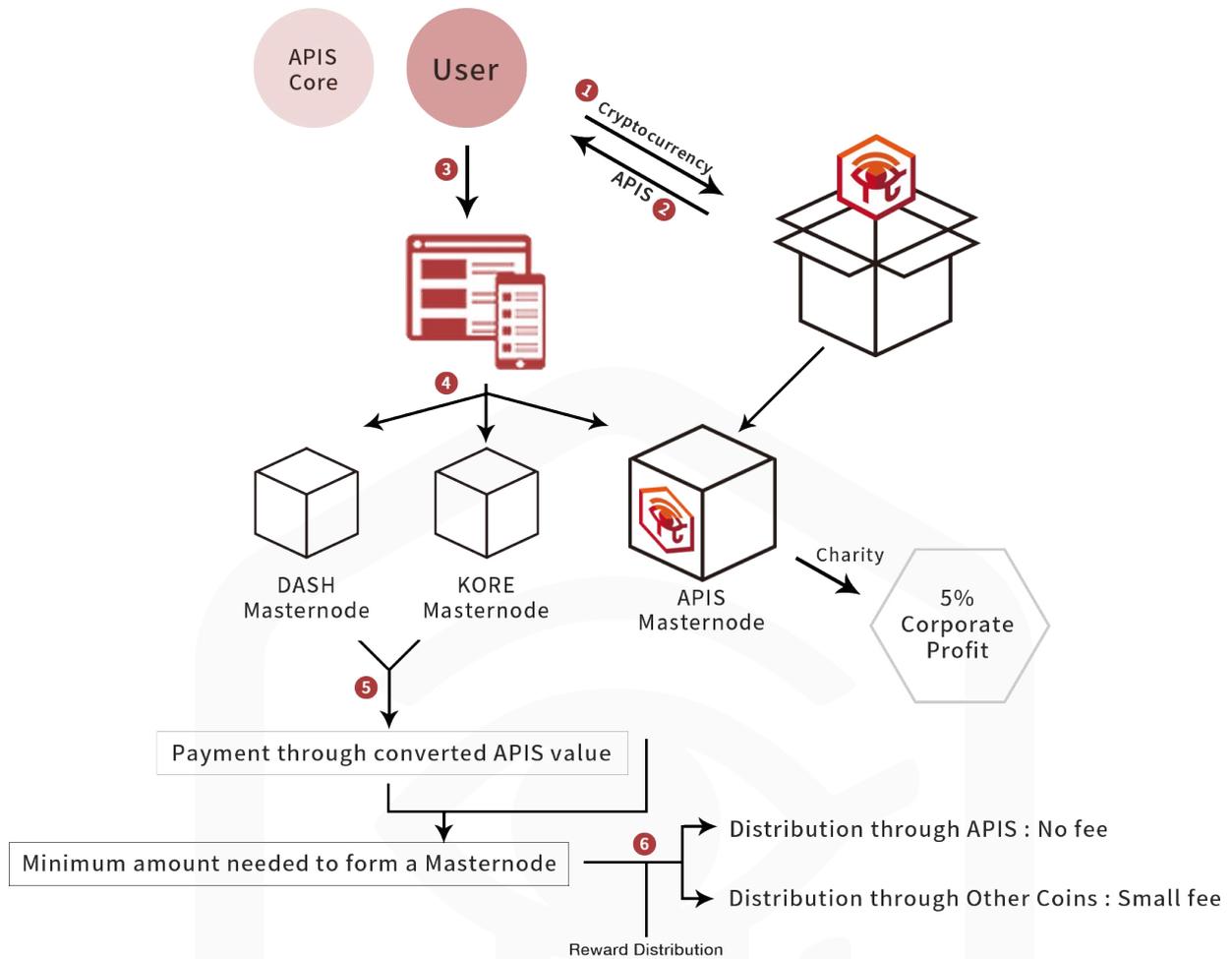


#### Distributed Network of APIS

Distributed Denial of Service (DDoS) attacks aimed at cryptocurrency are currently on the rise. A cryptocurrency network at its incipient stage is very vulnerable to attacks owing to its small number of nodes. Moreover, if nodes consisting of a network are regionally concentrated or disproportionately dispersed, there is a high chance that the efficiency of transaction signals might decrease.

To prevent this from happening, our solution is to evenly build, distribute and operate system servers worldwide and located in main data center to provide consistent signals to different regions globally.

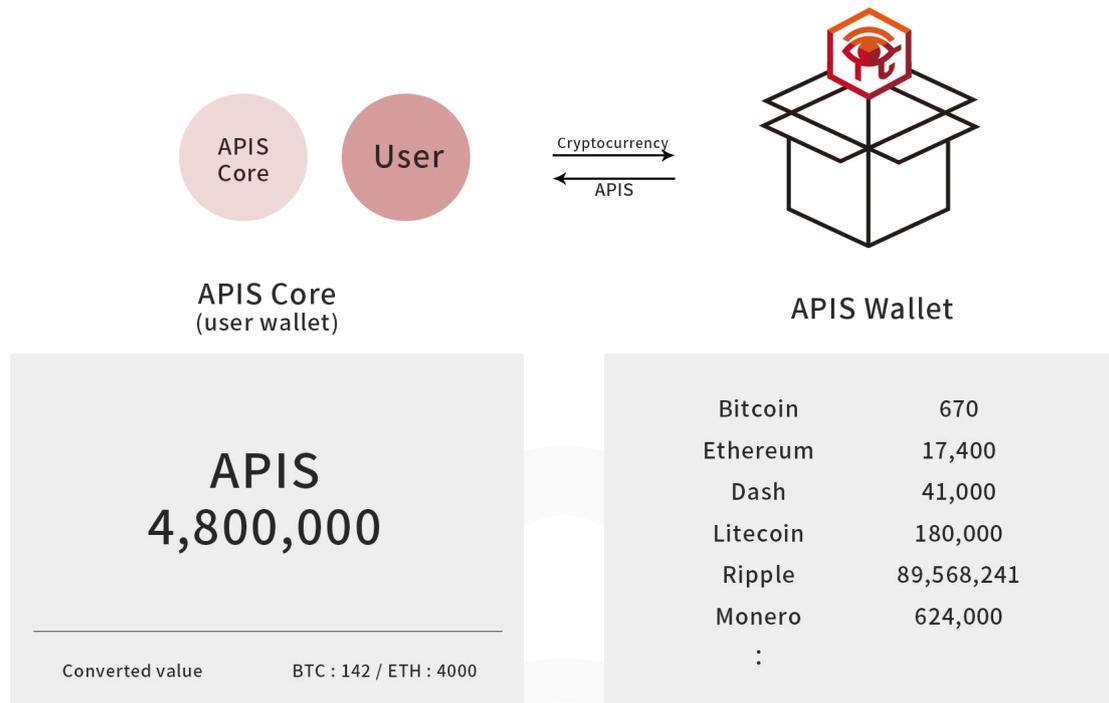
### 3.5. Platform Operating System



When users transfer other cryptocurrency (such as Bitcoin or Ethereum) to the APIS Core, they receive converted APIS coins of the same value, which means all transactions on this platform are carried out in APIS coinage and are ready for participation in desired masternodes through a function in the APIS Core.

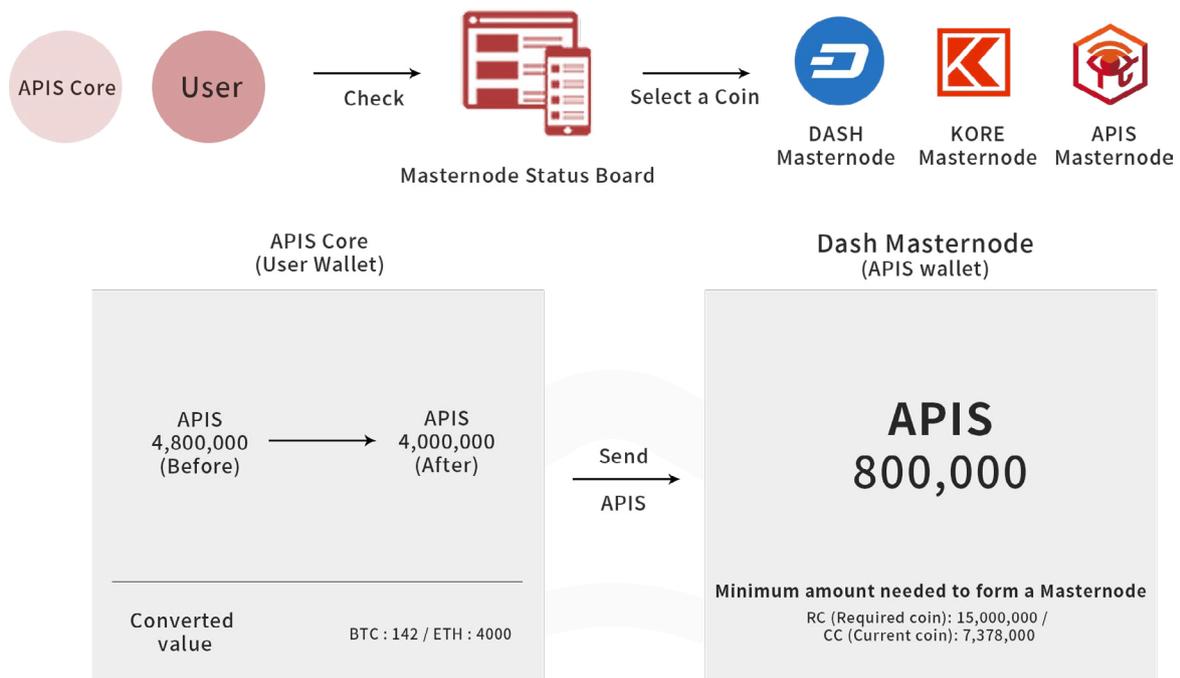
Once the masternoding terminates, participant can receive their rewards according to their share/contribution. 5% of the company’s reward generated from the APIS masternode platform is set aside to our foundation to be launched, APIS Blockchain institute which is for fostering Blockchain human resource to improve blockchain development conditions.

### 3.5.1. How to get an APIS coin



- APIS coin can be purchased on secondary trading markets (i.e. exchanges).
- APIS coin can be purchased in the APIS Core by sending other cryptocurrencies such as Bitcoin and Ethereum to the APIS Wallet in the APIS Core  
(Cryptocurrencies sent are automatically converted to APIS of equal value).
- APIS coin can be purchased in our webpage using Paypal or other cryptocurrencies.

### 3.5.2. The APIS Core -PC

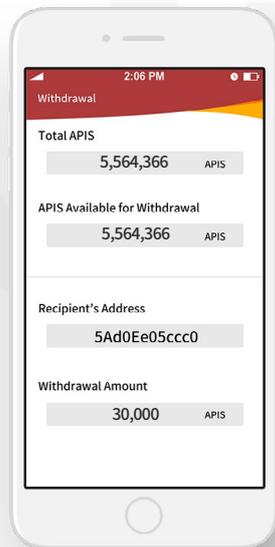
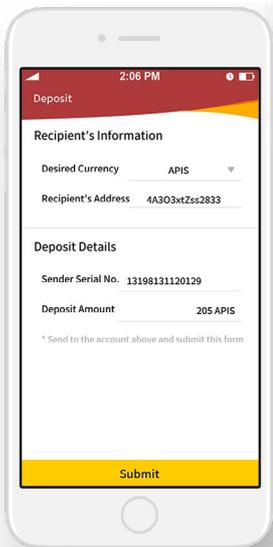
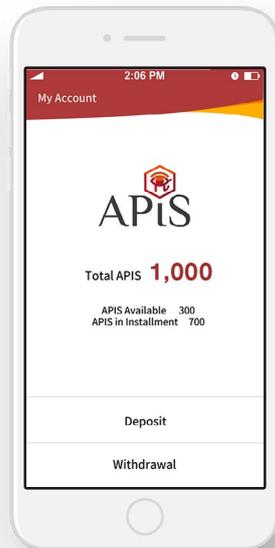
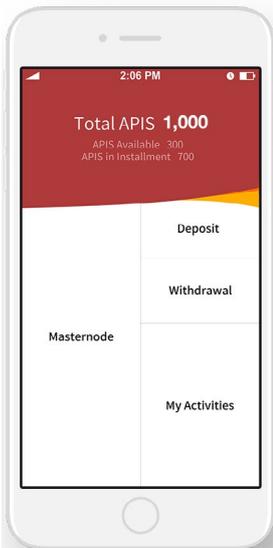


The APIS core is a proprietary program that supports masternoding of various cryptocurrencies, participation in the APIS masternode, APIS coin deposit and APIS coin withdrawal.

The role of the "masternode selection" function is to allow users to identify the conditions of a certain masternode such as its ROI, technology, and price needed to form its masternode. Once the user selects a masternode to run from the list in the APIS Core, the user can send any amount of APIS coins to the desired masternode.

Example A) Kevin wants to form a DASH masternode, but he can only afford 100 DASH coins whereas the minimum number of DASH coins needed to form a DASH masternode is 1,000 DASH coins. Kevin is aware that he can use the APIS Core to form a DASH masternode with only 100 DASH coins. Once the designated time for masternoding ends, Kevin will receive 1/10 of the total reward gained, which includes both principal and the total reward gained.

### 3.5.3. The APIS Core - Mobile



#### MAIN

- A. My Account
  - Shows Total APIS, APIS Available, APIS in Instalment
- B. Mastermode
  - Used when checking and joining mastermode instalment products
- C. Deposit
  - Used for depositing APIS coin
- D. Withdrawal
  - Used for transferring APIS to other accounts or platforms
- E. My Activities
  - Displays all the activities conducted by the user

#### My Account

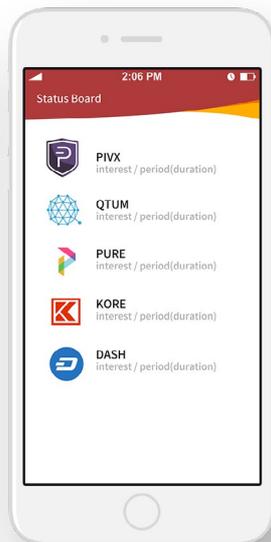
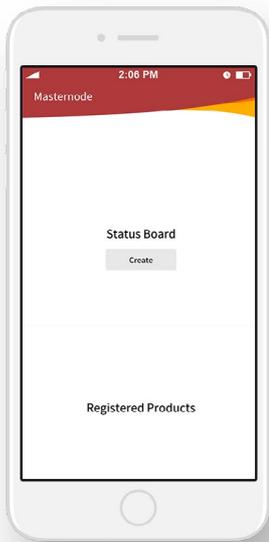
- A. Logo
- B. APIS Balance
  - APIS Core, namely, shows the total amount of APIS in APIS Wallet, APIS available and APIS in instalment
- C. My ID Number
  - Show the user's serial number
- D. Deposit
  - Used for depositing APIS in APIS core. Upon clicking, it connects to the internet browser. The user gets to transfer out the APIS cryptocurrency to Wallet ("My ID No." required)
- E. Withdrawal
  - Used for transferring APIS to other accounts or platforms

#### 1) Deposit

- A. Recipient's Information
  - User gets to select the currency he/she wants to send
  - Deposit address generated according to the currency that the user intends to send
- B. Deposit Details
  - Sender's Serial Number, amount of currency to deposit
  - Amount of currency to deposit
  - Desired deposit amount will be automatically converted to APIS value in real-time
  - Transfer the currency to our company's wallet and submit a form with user's serial number on it.

#### 2) Withdrawal

- A. Total APIS
  - Total Apis including those in instalment
- B. Withdrawable APIS
  - Usable APIS excluding the ones in instalment
- C. Recipient's Address
  - Input the recipient's APIS blockchain address
- D. Withdrawal Amount
  - Amount to be withdrawn (in APIS)



## Masternode

### A. Status Board

- Shows all the POS-based and ongoing masternode products
- Shows each masternode coin's information such as reward rate, minimum APIS required to form a masternode and instalment period
- If any of the coins seems reasonable, then one can "select" and start delivering on the instalment B. Registered Product

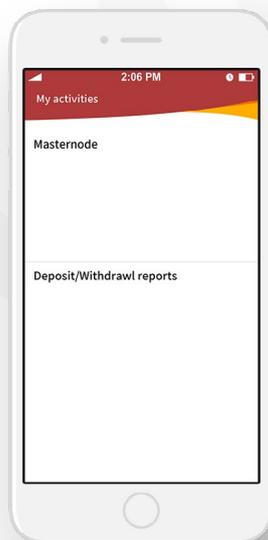
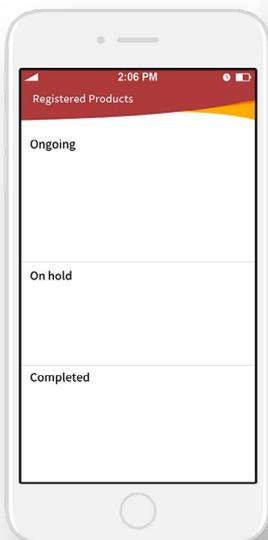
### B. Registered Product

- Lists all the masternode products that the user is currently registered in
- By click on the product names, the user can see the details in real-time

## Status Board Example

### A. All the coins that are available for masternode instalment

- B. Lists information such as coin's name/current price/minimum requirement/instalment period



## 1) Registered Masternode

### A. Ongoing

- Products that the user is participating in and is currently ongoing
- Shows details such as instalment amount left and reward accrued

### B. Completed

- Lists the masternodes that the user participated in and completed

## 2) My Activities

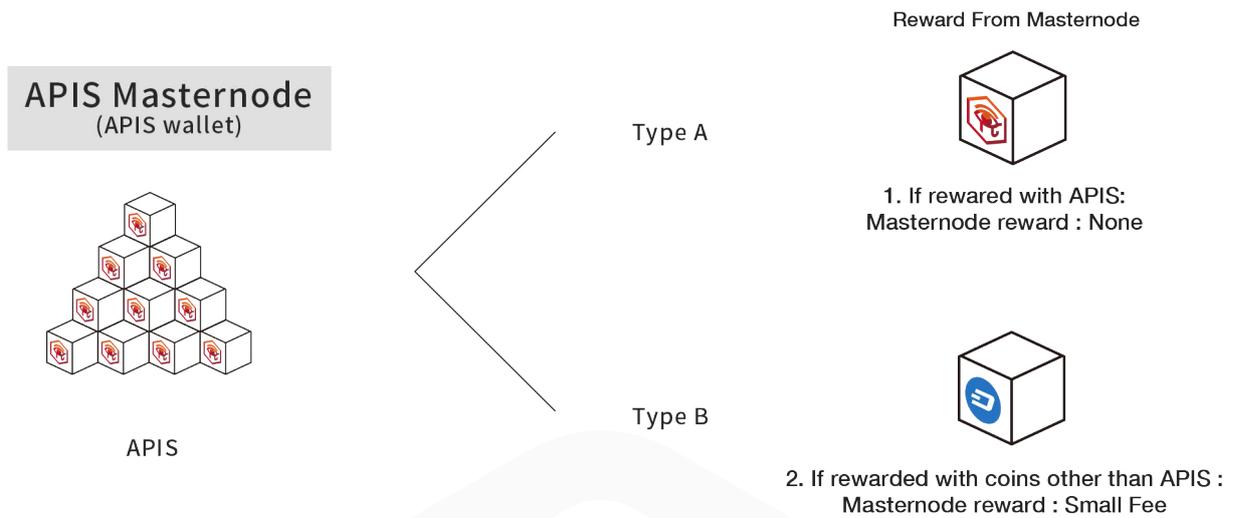
### A. Masternode

- Shows all the masternode products that the user has participated in

### B. Deposit/Withdrawal records

- Shows all the deposit/withdrawal records of the user.

### 3.5.4. Reward Distribution



If the user chooses to receive the reward in the form of the coin they have invested in, a small fee applies. Conversely, if the user chooses to receive the reward in APIS, there will be no fee charged.

### 3.5.5. APIS Coin

#### 3.5.5.1. APIS Specifications

Types	BTC	ETH	APIS
Coins Issued	About 16.5 million	About 96 million	9.52 billion
Decentralization	Middle	Low	High
Stability	Middle	Middle	High
Transaction Fee	0.0005 BTC	0.01 ETH	0.005 APIS
Method	POW	POW	POS
Governance Model	Distributed opensource governance	Centralized opensource governance	Decentralized opensource governance

- Total amount of coins issued : 9,520,000,000
- Block Time : 8 seconds
- Block Reward : Decrease by 11.37% per year
- Minimum Number of APIS needed to form its masternode : 50,000APIS

### 3.5.5.2. Features of APIS

#### 1) Atomic Swap

A technology that has been implemented in Q4 2018, Atomic Swap refers to the direct transaction between two different coins operating on separate blockchains. The distinguishing trait of this technology is that there is no third-person or party involved. Once applied, it will make it far easier for users to buy cryptocurrencies, as no further transactions of any kind are required. Once commercialized, users will be able to buy coins directly from their wallets without having to go through separate platforms. This technology is applicable in the formation of a masternode by automatically converting users' APIS to specific coins through the Atomic Swap technology.

#### 2) Lightning Network

Like Atomic Swap, Lightning Network is a technology that makes use of the "hash time lock contract" mechanism. The only difference between the two is that where Atomic Swap connects blockchains, Lightning Network connects different payment channels.

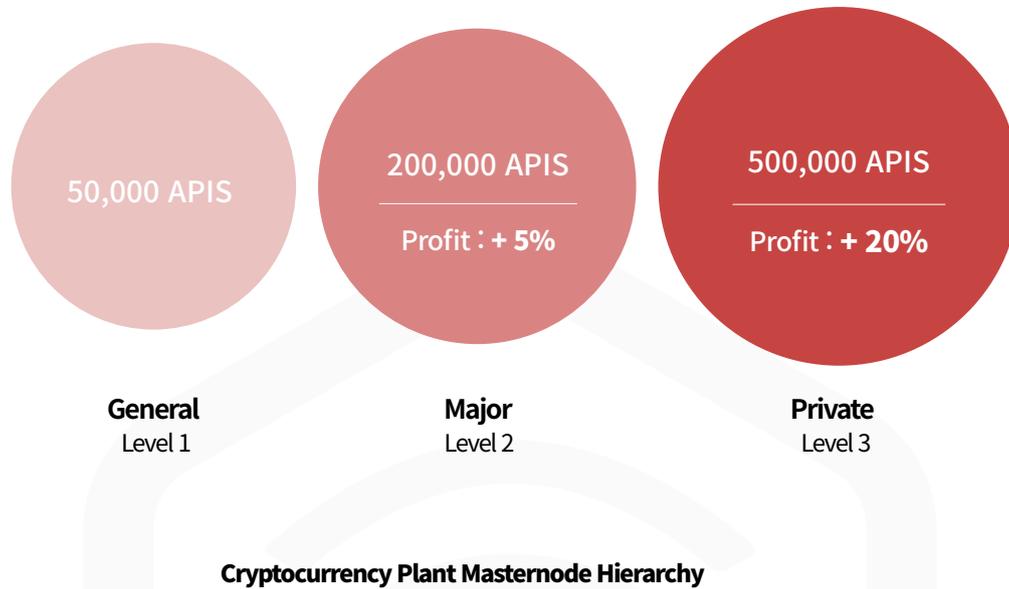
For example, Rachel, who only has 200 Litecoin intends to buy Jack's car that Jack priced at "1 Bitcoin". Rachel and Robert already have a Litecoin channel open while Jack already has a Bitcoin channel open with Robert. As payment for the car, Rachel sends 200 Litecoins to Robert and Robert sends 1 Bitcoin to Jack. All these transactions are carried out by hash time lock contracts and Robert functions as the payment conduit that does not require trust between Rachel and Robert in these transactions. In this scenario, Robert functions as an altcoin exchange which does not require any degree of trust between Rachel and Jack. Similarly, our masternode platform, the APIS Core, would undertake the same function as Robert.

would require us to deal with the DDoS issue even though the network has been devised to deal with those who harbor malicious intent, the "middlemen", being Robert in the case presented above, is able to postpone or block transactions at will. As such, these untoward "middlemen" can be shut down and by positioning our APIS platform as the middlemen.

Ensuring the successful launch of the lightning network

### 3.5.5.3. Benefits for APIS Users

We are aiming for a differentiated operating policy from existing masternode coins. In the case of APIS, a hierarchical operation system is adopted by differentiating rewarding rates according to the amount of masternoding volume made in the APIS masternode. Moreover, by applying Parallel Masternodes Technology, POS Algorithm, we will realize 1 PC - Multi Masternodes, but not 1 PC - 1 Masternode.



Grade	No. of APIS	Bounce
1 (General)	50,000	N/A
2 (Major)	200,000	+5%
3 (Private)	500,000	+20%

### 3.5.5.4. APIS Vision and Platform Scalability

The ultimate goal of APIS is to lower the barriers to entry for the masses to participate in the cryptocurrency sphere. This is achieved by:

#### 1) Smart Contract on Canvas

With the evolution of bitcoin’s simplified scripting into Ethereum’s smart contract mechanism, the use of cryptocurrency is also expanding into various areas including ICO funding, token issuance, identity verification, and cloud storage service. However, most “smart contracts” are not that smart. They are focused on and heavy on technical development and often neglect the needs of

user experience and interface. As a result, deployed smart contracts are hardly user friendly, if usable at all. Smart contract end-users are also forced to utilize the user interface provided by the core program of the respective cryptocurrency or web-based application. This would mean that a smart contract may have more than one use case, which could further confuse its already perplexed users. As a result, users often have to refer to the technical manual for the smart contract they are using or get help from experienced individuals. This is counterintuitive to the whole concept of the smart contract mechanism which aims to make cryptocurrency accessible to the masses.

The solution is the implementation of the smart contract on canvas by APIS. Developers can register UI elements (the canvas) written in HTML when they deploy their coded smart contract on the blockchain. Canvas consists of a single HTML file and can include CSS, Javascript and images. We recommended not to conduct obfuscation in order to provide transparent data processing mechanism to the contract users. Image files can be registered to the document through Base64 encoding. Smart Contracts element implemented in Javascript can be called within a canvas.

As the HTML file that functions as a canvas cannot be saved on the blockchain, developers must provide an environment in which canvas files can be accessed through the web. These addresses are published through the creation of the Canvas Location variable within the smart contract. In addition, the entire canvas code must be hashed with Keccak-256 and saved on the Canvas Hash variable in the respective smart contract to prevent secretive and unannounced changes. Through these measures, applications can decide on the existence of a canvas, organize a GUI, and verify immutability of the canvas used.

## 2) Address Masking

The use of Public and Private Key in cryptocurrency is innovative from the security perspective, but the actual written addresses such as a hexadecimal address is near impossible to use without the function of copying and pasting, not to mention memorizing. It cannot be overstated to say that user experience was not among the highest priorities when cryptocurrency addresses were developed. For blockchain technology to go mainstream, however, complex address such as the ones used now must also be simplified like phone numbers or email addresses in order to be used by the masses. APIS aims to bring the “address masking” concept to reality for this

particular reason. Through the APIS core program, anyone can register a simplified address that gets rerouted to their original hexadecimal address. The simplified address consists of a name identifier, @, and a domain name. Such easily identifiable, simplified address can increase user recognition of each address and resolve issues arising from sending and receiving to and from complex addresses. To prevent uncontrolled creation of address and their abuse by random individuals, public use addresses and addresses requiring authorization are distinguished. Open domain addresses that may be owned by any individual are limited to the following, but can be added through user requests: Me (personal wallet), edu (educational facility), com (company), org (organization and group)

The owner of a domain has the authority to mask the given address and can transfer that authority to another person through ownership validation. Owner of a masked address can also change the original wallet address that has been linked through ownership validation by using a wallet private key. In case of a dispute regarding a masked address or a domain, their ownership may follow the terms and conditions of APIS platform. In order to deter uncontrolled address creation, there will be a certain fee associated with masking an address.

## 3) Mineral System

Most cryptocurrencies present in the market today charge a small fee for using the resources required for transfer of the currency or for smart contract initiation. This fee is provided to the node as a block creation reward, thereby incentivising people to run nodes and to continue running them. However, most cryptocurrency users are seldom involved with block rewards and the fee typically comes off as a burden of cryptocurrency use, not an advantage. Although the fee is small, each and every transaction necessitates a fee. This is rather cumbersome and inefficient, particularly

in countries where domestic bank wire does not require a fee. Cryptocurrency transaction fees may therefore be a major barrier to entry for people who wish to use the currency on a daily basis. APIS aims to improve this fee system by introducing the Mineral system. To initiate smart contracts on APIS or transfer APIS to another wallet, a separate currency called Mineral must be used. APIS users may purchase Mineral through APIS whenever required. Minerals can also be obtained as rewards from placing APIS tokens in a personal wallet. Minerals will be distributed in proportion to the amount of APIS tokens held in the wallet. The upper limit of Minerals receivable as reward can also be adjusted depending on the level of contributions a wallet has made to the APIS network (such as APIS transactions) which ensures that the most active APIS users receive the most Minerals.

Of note, Minerals can only be used as transaction fees; they cannot be sent to another wallet or user and cannot be traded for APIS. Minerals provide an almost no-fee environment to active APIS users, so a significant increase in user transactions is expected as users attempt to minimize their fees. Mineral system will therefore encourage the real-world use of the APIS ecosystem by this incentive mechanism that rewards greater adoption with lesser fees. The reward/incentive structure is implemented as follows.

- 1) Mineral will automatically accumulate according to the amount of APIS stored in the wallet.*
- 2) Mineral can be purchased with APIS, but Mineral cannot be converted to APIS.*
- 3) Mineral cannot be sent to other addresses but can only be created and burned.*

By creating this new Mineral system, we intend to contribute to the popularization of the cryptocurrency market by enabling faithful users of APIS to carry out several transactions without any fee.

## 4. Token Sale

As we proceed presale stage, we faced unexpected QtumCore problem which forced us to choose early closure. The entire leftovers caused by early closure (254,584,967 tokens) will be burned.

And for stable and smooth fundraising, we've decided to change the method from QTUM based to ETH based, since it works better with our development and vision.

Our APIS Token Sale amount this time is 5,236,000,000 APIS, which is 55% of the total APIS valued at 31,250ETH. 3,332,000,000 APIS shareholding (equivalent to 4,284,000,000 APIS) will be locked-up for a year after listing and will be used as liquid asset. All stage's unsold token will be burned. Our sale this time will be divided into 3 main stages.

### 4.1. Private Offering Stage

Token Allocation: 1,380,000,000 APIS / 7,500 ETH

Many partners, companies and angel investors have contributed to the establishment and development of the APIS platform which is equivalent to 1.2 billion APIS. In return, we provided 15% of allocated tokens (180,000,000 APIS) as bonus.

All the APIS tokens sold in Private Sale will be locked up for 3 months after listing.

### 4.2. Pre-sale Stage

Token Allocation: 756,000,000 APIS / 4,312 ETH

The early investors of APIS invested an equivalent of 700,000,000 APIS and were given an 8% bonus as a sign of appreciation which amounted to a total of 756,000,000.

### 4.3. Crowd Sale Stage

Token Allocation: 3,100,000,000 APIS / 19,375 ETH

During this stage, we began to publicise our platform by setting up our global community through various social media platforms and attracted investors from the general public with the exception the investors from the United States of America and People's Republic of China for the development of the APIS Platform.

- Supported Currency: QTUM, ETH

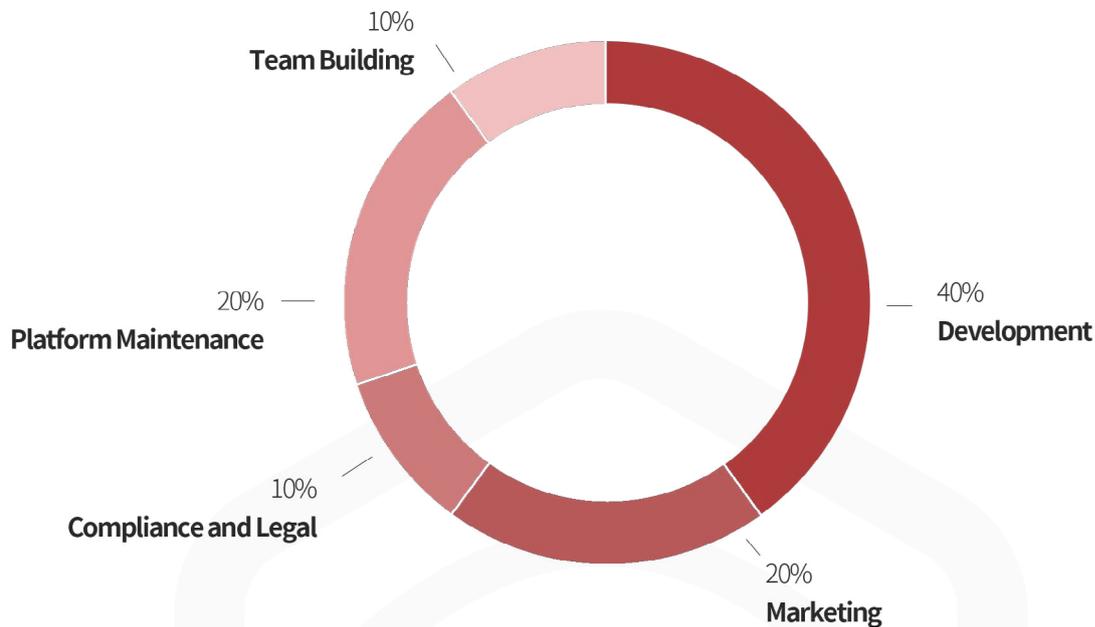
- Participation Routes: Official Website

	Token Sale		
APIS Sales Plan	Private	Pre-Sale	Crowd Sale
Total Sale Amount	5,236,000,000		
Sale Amount	1,380,000,000	756,000,000	3,100,000,000
Token Bonus	15%	8%	-
APIS per QTUM	5,750	5,400	5,000
APIS per ETH	-	-	ETH/QTUM ratio was announced 2 hours before the sale and will follow CMC

\* ETH/QTUM ratio will be announced at Website.

## 5. Budget Allocation

The development of the APIS Platform was financed through crowd funding using QTUM and ETH. The funds are being used over a period of six years.



### 1) Development

The APIS team is spending most of the fund raised in developing the system and hiring staff for the Development, Production, Operation and Maintenance Team, Android/IOS team, APIS and Web Community Team, Test/Management/Maintenance Team, Big Data Statistics Team and the Design Team. This ensures our platforms’:

- Security
- Scalable design with easy maintenance
- Stable and reliable operation backed by a professional maintenance team

### 2) Platform operating costs

Good products are a result of good operation. The APIS team has set aside 20% of the funds to build professional products, maintain operations and customer service teams. We handle all customer. issues in a timely manner, actively responding to the needs of the local community and continue to remedy discrepancies promptly.

### 3) Market and Marketing Costs

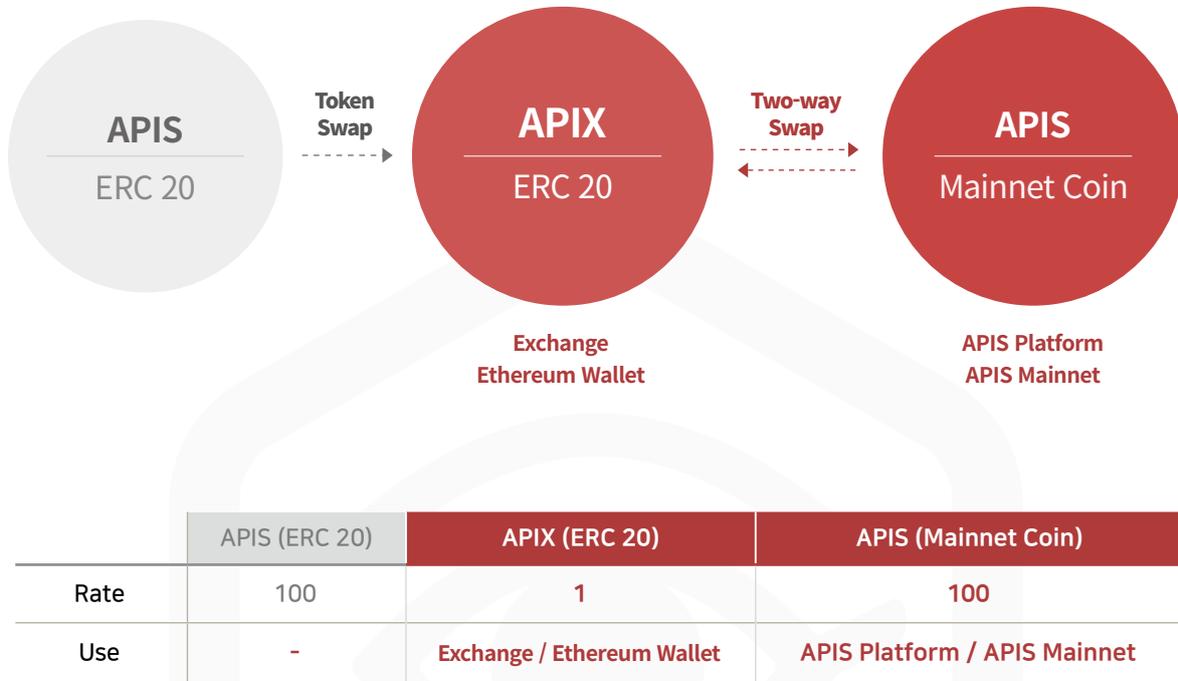
In this Internet era, a good application can never do without good public relations, marketing strategy and business cooperation. The APIS team is using 20% of the funds for market and marketing activities and will strive to promote and disseminate APIS worldwide.

The APIS social networks will support eight different languages: English, Japanese, Korean, Simplified Chinese, Traditional Chinese, Russian, Spanish, German and Thai. More languages are planned in the future and we are positive that through reasonable public relations and marketing budget, APIS will become the most widely used currency worldwide. Moreover, in order for users to better understand the APIS platform, we will actively take part in various blockchain activities for global publicity and marketing.

## 6. Token Swap

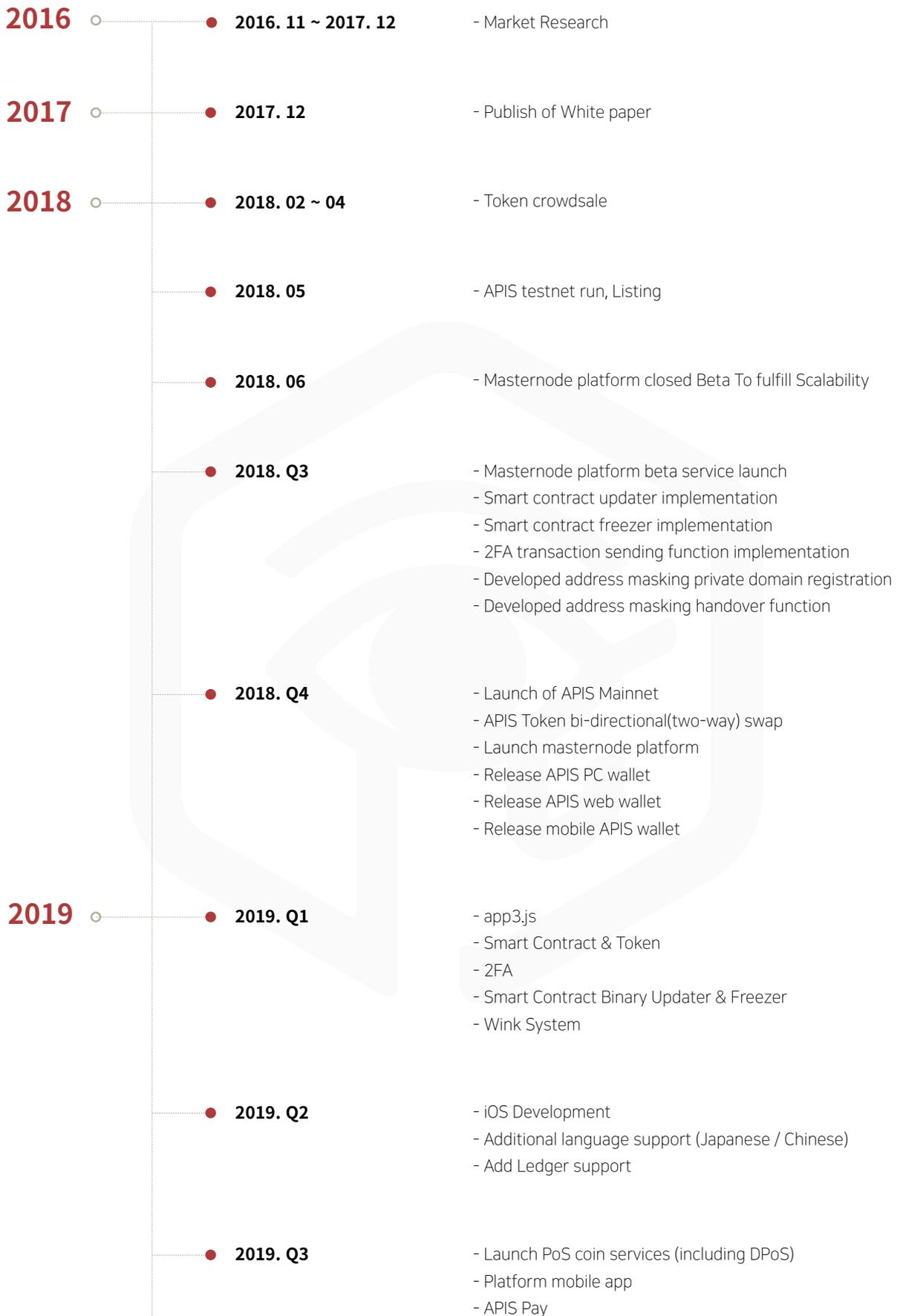
The former ERC-20 token (APIS) is based on Ethereum mainnet which can not issue additional tokens and therefore, a gap grows bigger as APIS Mainnet Coin issuance increases with the inflation rate.

So We have executed a 100(APIS):1(APIX) token swap to remove the gap between ERC token and Mainnet coin, for a better trading condition.



Mainnet Coin (APIS) will be used on APIS Core and APIS platform. As for token trading on exchanges, the new ERC-20 token (APIX) will be used. The back-and-forth transfer between APIS Core and APIS Platform will be done automatically, with 100(APIS):1(APIX) rate.

## 7. Roadmap



2020

● **Project Nile**

**1) Scalability of APIS Mainnet**

- Establishing APIS Labs
- APIS Open API release
- APIS Labs opens APIS dev. community
- APIS Open API Beta starts
- APIS Smart contract IDE Beta open
- Delivering AC/DC consensus of core contracts
- APIS Open API official launch
- AC/DC confirm, disclosure
- AC/DC suggestion system open
- APIS smart contract IDE official launch
- Enterprise APIS Open API open

**2) Enlarging business opportunities**

- Releasing on-demand APIS Masternode platform
- Releasing on-chain Asset / Exchange
- APIS Labs opens DApp Incubator program
- On-chain Asset launch
- On-chain Exchange(DEX) launch
- On-demand APIS Masternode platform Beta open
- Releasing APIS Masternode platform for firms
- APIS hash power platform disclosure
- Partnership as APIS Masternode platform for firms
- Disclosing APIS hash power platform partner
- SPHINX licensing and partnership
- APIS hash power platform Beta open
- Additional listing of on-chain Exchange(DEX)
- Official launch of on-demand APIS Masternode platform
- 1.2.15. Releasing APIS hash power platform
- Releasing APIS Masternode platform for firms

2021

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● **APIS Platform  
Crypto Loan**

- Reviewing the collateralization rate for Masternode and legal issues
- Reviewing the collateralization rate and legal issues for Masternode and staking service
- Consultation with global banks to add various currency pairs
- Automatic KYC setting and upgrade/lowering of loan limit/fee
- Beta and service stability audit
- Official launch of APIS Platform Crypto Loan

2021

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● **APIS Platform  
Crypto OTC**

- Partnering up with mining pools and exchanges
- Legal advice for the service
- Preparing for KYC/AML and legal compliance
- Fiat gateway consultation with major Banks
- Confirming OTC escrow system with global law firms and trust corporation
- APIS Platform Crypto OTC Beta for BTC and selected Altcoins
- Stability auditing for Beta and the service
- Official launch of APIS Platform Crypto OTC

● **APIS Pay**

- APIS Pay Telegram Beta launch
- APIS Pay Telegram transfer option open
- Releasing APIS Pay App Beta
- APIS Pay App transfer option open
- Commerce, transfer option open
- Partnership with commerce firms and MOU for implementing simple pay option
- Transfer option(Tip) and simple pay plugin release
- APIS Platform - APIS Pay account interlinking open
- APIS Platform - APIS Pay asset interlinking open
- APIS Pay Telegram, APIS Pay App official launch
- Preparing for APIS Pay Card legal advisory and registration
- Partnership for APIS Pay Card (including PGs, Card issuers)
- Kakaotalk / Facebook Messenger version APIS Pay launch
- Dispatching APIS Pay Card

## 8. Disclaimer

The information provided in this whitepaper and accompanying material is for information purposes only. It should not be considered legal or financial advice. You should consult with an attorney or other professionals to determine what may be best for your individual needs.

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Content contained in or made available through our website or affiliated websites or social media channels is not intended to and does not constitute legal advice or investment advice and no attorney-client relationship is formed. Your use of the information on the website or materials linked from the Web is at your own risk. Also, we limit the meaning of word 'reward' to mean cryptocurrency on specific blockchain, which can be received by contributing to the blockchain network by the method of masternoding.

## References

- 1) A.M ANTONOPOULOS. Mastering bitcoins, 2014
- 2) M.Vukoli'c The quest for scalable blockchain fabric: Proof-of-work vs. bft replication. International Workshop on Open Problems in Network Security, pages 112~125. Springer, 2015
- 3) A peertopeer electronic cash system (2008)
- 4) O.Bussmann. The Future of Finance : FinTech, Tech Disruption, and Orchestrating Innovation, pages 472~485. Springer International Publishing, Cham, 2017
- 5) P Vasin. Blackcoina A-Z's proof-of-stake protocol v2, 2014
- 6) C.Cachin. Architecture of the hyperledger blockchain fabric. In Workshop on Distributed Cryptocurrencies and Consensus Ledgers, 2016
- 7) Proof-of-stake, 2 January 2018. <https://en.wikipedia.org/wiki/Proof-of-stake>
- 8) PoS 2.0 Whitepaper, 2014. <http://blackcoin.co/blackcoin-pos-protocol-v2-whitepaper-cn.pdf>
- 9) What Is A Masternode, March 7, 2017. <https://themerkle.com/what-is-a-masternode/>
- 10) Proof of Stake (PoS), May 15, 2017. <https://www.investopedia.com/terms/p/proof-stake-pos.asp>
- 11) Distributed Applications (DApps), May 15, 2017. <https://www.investopedia.com/terms/d/distributed-applications-apps.asp>
- 12) Smart-Contract Value-Transfer Protocols on a Distributed Mobile Application Platform 2017 <https://qtum.org/en/white-papers>
- 13) NIST hash function competition, 20 November, 2017. [http://en.wikipedia.org/wiki/NIST\\_hash\\_function\\_competition#Finalists](http://en.wikipedia.org/wiki/NIST_hash_function_competition#Finalists)