Abacus Coin White Paper V0.1

Introduction:

Each day more investors are drawn into the Cryptocurrency space. These investors don't necessarily just want to hold on to cryptocurrency; they would like to put their crypto to work and garner consistent returns. In an attempt to gain more cryptocurrency, some investors buy "mining" computers. However, there are many drawbacks with traditional mining including electricity and equipment cost, a negative environmental impact, inconsistent returns, and a high barrier of required technical knowledge. Abacus Masternode hosting will solve these problems.

The Problem:

The first major drawback of traditional mining operations is the energy and environmental cost required. In 2018, Market Watch calculated that mining a single bitcoin in Ontario, Canada, would cost around $3965 in energy alone (1). Because of this energy demand, running a traditional mining computer is detrimental to both the environment and the mining operator's bottom line.

Furthermore, many coins cannot be consistently mined by an individual with a few mining rigs. This is because the network hashrate of many cryptocurrencies is prohibitively high. As a result, an individual miner will likely have "dry spells" when no crypto is mined. With the high cost of electricity/equipment, maintenance, and personnel, traditional mining is likely to be, in the mid to short-term, an unprofitable venture.

The Solution:

In 2015, Bitcoin was forked and rebased into a new cryptocurrency project called DASH. DASH popularised Masternodes. At its peak price, in January 2018, one DASH MN was worth about $500,000 USD. More blockchain projects each day are turning to Masternode (MN) because they have

many advantages over traditional mining. Firstly, the energy cost is much lower. Instead of having to run a mining rig comprised of energy-demanding CPUs, GPUs, or ASICs, in many instances a Masternode can be run on a 1GB memory Virtual Private Server (VPS). Furthermore, the return is consistent, as the block rewards for MN coins are transparently documented in each MN cryptocurrency's technical information. Consistent returns and cheap operating cost make Master Nodes valuable investment apparatuses for long-term passive income.

What is a Masternode:
Blockchains use various consensus mechanisms to process and keep track of transactions. The two main types of blockchain consensus protocols used today are Proof of Work (PoW) and Proof of Stake (PoS). Bitcoin uses PoW. With PoW, computers keep track of and process transactions by "mining blocks." Basically, when a computer is mining, it is processing data to guess the answer of a mathematical "puzzle." The computer that firsts guesses the correct answer wins the right to add the next block to the chain--getting more cryptocurrency as a reward.

Other blockchains run using a Proof of Stake (PoS) consensus protocol. PoS cryptocurrencies often use Masternodes (MN) to perform special tasks on the blockchain, such as allowing for private transactions through coin mixing. All Masternodes for a specific blockchain are put into a queue. When a MN reaches a certain spot in the line, it is eligible to be randomly selected to add the next block into the blockchain. When it is selected, that MN is rewarded with more cryptocurrency. Because of the random element, MN rewards can occur at variable time intervals, but tend to average out.

Masternodes provide a good cryptocurrency investment opportunity because a MN will produce more cryptocurrency over time. The cryptocurrency gained from running a Masternode can be collected and

used to set up another MN, creating a compounding effect. For the reasons described above, MN ownership is an intriguing investment opportunity--especially if the MN cryptocurrency has utility, which will drive up demand and price.

Abacus Consensus:

Abacus (ABA) had an initial PoW period finished at block 200 then switched to PoS from there onward.

Role of Masternodes in a Blockchain Network:

An article from coin central gives more insight into the role of Masternodes: "Masternodes, also known as bonded validator systems, are a series of servers that underpin a blockchain network. They are responsible for enabling specific services that miners under proof of work cannot accomplish. " (CoinCentral, 2018)

Much like Proof of Stake, Masternodes rely on staking a certain amount of a given currency within the currency's network. To establish a masternode on the Abacus network, you need the collateral of 1000 ABA, a dedicated IP address, and the ability to stay connected 24/7 with, at most, 1 hour of downtime.

Where does Abacus fit in?

Abacus is a fork of PIVX. The ticker for Abacus is (ABA). Abacus aims to provide transparency, reliability, ease of use, and metrics to Masternode hosting services. Currently, Masternodes must be maintained and launched on a Virtual Private Server (VPS). Many people have neither the time nor technical knowledge required to run their own Masternode. However, these people may still be interested in the passive income that Masternodes produce through their rewards. Abacus-hosted Masternodes will require no

technical knowledge. Abacus will create software that can launch, maintain, and provide MN analytics at a click of a button.

Abacus aims to offer one-click Masternode hosting for only the highest-quality Masternode projects. Abacus-hosted Masternodes will give investors peace of mind, because any coin hosted on Abacus will be vetted by our team prior to listing on our hosting platform.

Abacus will provide responsive customer service and fair Masternode hosting rates. Abacus will accept only the ABA cryptocurrency as a form of payment for Masternode hosting.

ABA will be listed on the decentralized exchange Crypto Bridge shortly. This initial crypto bridge listing fee will be paid for by Masternode Private and Public sales.

Abacus LLC will be a separate entity, running as a software as a service company (SaaS). ABA coin holders will not be entitled to any aspect of the Abacus company. However, as previously stated, Abacus will accept only ABA as payment for our services.

Shared Masternode Hosting
For a 5% - 10% fee of MN rewards. ABA will create automated Shared Masternodes. These shared MN will pool the resources of those wanting a MN but not having enough collateral for one on their own. These pooled MN will have automated payments where, based on the percentage of MN collateral, the equivalent percentage of MN rewards will be automatically paid to the individual in the shared MN.

Abacus One-Click Masternode Purchase
An ABA Masternode exchange will be created. This will be a place where users can use their debit cards to seamlessly buy enough collateral to run a Masternode.

Private Transactions Using Zerocoin Protocol
What is Zerocoin?
Zerocoin fixes a major weakness in Bitcoin: the lack of privacy. Using the zerocoin protocol, transaction values and destinations are shielded through coin mixing.

3D Printing Marketplace
Abacus coins can be used to purchase 3D printed items from our marketplace. The user will give us the design they want 3D printed, paying with ABA. Our team of engineers will then print the item and ship it.

Mobile Wallets
The Abacus team has plans to create two mobile applications. The first mobile app will an ABA wallet for Android and IOS. In 2019, Abacus will also create an app for hosting Masternodes.

Abacus Masternode Community Funds
Abacus hosting platform will give back to the communities who trust us to host their Masternodes. For every Masternode hosted on our platform, 5% of the profits will be given back to that community. ABA will provide transparent metrics, and the public key for each community fund will be known. Each fund's private keys will be controlled by their community's developers.

We are not obligated to follow this model, but you may choose to move your Masternodes off the platform if we don't abide by this commitment.

Abacus Starting Roadmap:

1. **Main Net - Completed October 14, 2018**
2. **Abacus Host - Coming soon**
3. **Abacus Wallet App - Q2 2019**
4. **Abacus "coin market cap" for Masternodes - Q3 2019**
5. **Abacus Host App - Q4 2019**
6. **3D Printing Market - Q1 2020**

* Abacus will do our best to meet these dates but they are subject to change. If we are not on track to meet these dates a few weeks notice will be given.

ABA Technical Specifications

Coin Specs

ABA Technical Specifications

Symbol	ABA
Block Time	120 seconds
Difficulty Retargeting	DGWv3
Address Prefix	A
Block Reward	10 ABA
Halving	12 months
Ports	3355, 33556
Masternode Collateral	1000 ABA
Block Reward Distribution	5/5(50% Staking / 50% Masternode)
PoW Algorithm	Quark
P2P Port	3355/td>
RPC Port	33556
Max Supply	10,000,000 ABA
Premine	5%

Reward Distribution

Genesis Block		
Block Height	Reward Amount	Notes
1	500,000 ABA	Initial Pre-mine

Rewards Breakdown

Year	Block Reward (50% for Masternodes/ 50% for Staker)	Masternodes Reward	Staker Reward
Year 1	10 ABA	5 ABA	5 ABA
Year 2	5 ABA	2.5 ABA	2.5 ABA
Year 3	2.5 ABA	1.25 ABA	1.25 ABA
Year 4	1.25 ABA	0.625 ABA	0.625 ABA

Every year block rewards are reduced by 50%

Works Cited

1. Yap, R. (2018). Understanding how Zerocoin in Zcoin works and how it compares to other anonymity solutions Part 1. [online] Zcoin. Available at: https://zcoin.io/understanding-how-zerocoin-in-zcoin-works-and-how-it-compares-to-other-anonymity-solutions-part-1/ [Accessed 25 Sep. 2018].

2. CoinCentral. (2018). What Are Masternodes? An Introduction and Guide. [online] Available at: https://coincentral.com/what-are-masternodes-an-introduction-and-guide/ [Accessed 25 Sep. 2018].

3. Vasin, P. (2018). BlackCoin's Proof-of-Stake Protocol v2. [ebook] Available at: https://blackcoin.org/blackcoin-pos-protocol-v2-whitepaper.pdf [Accessed 25 Sep. 2018].