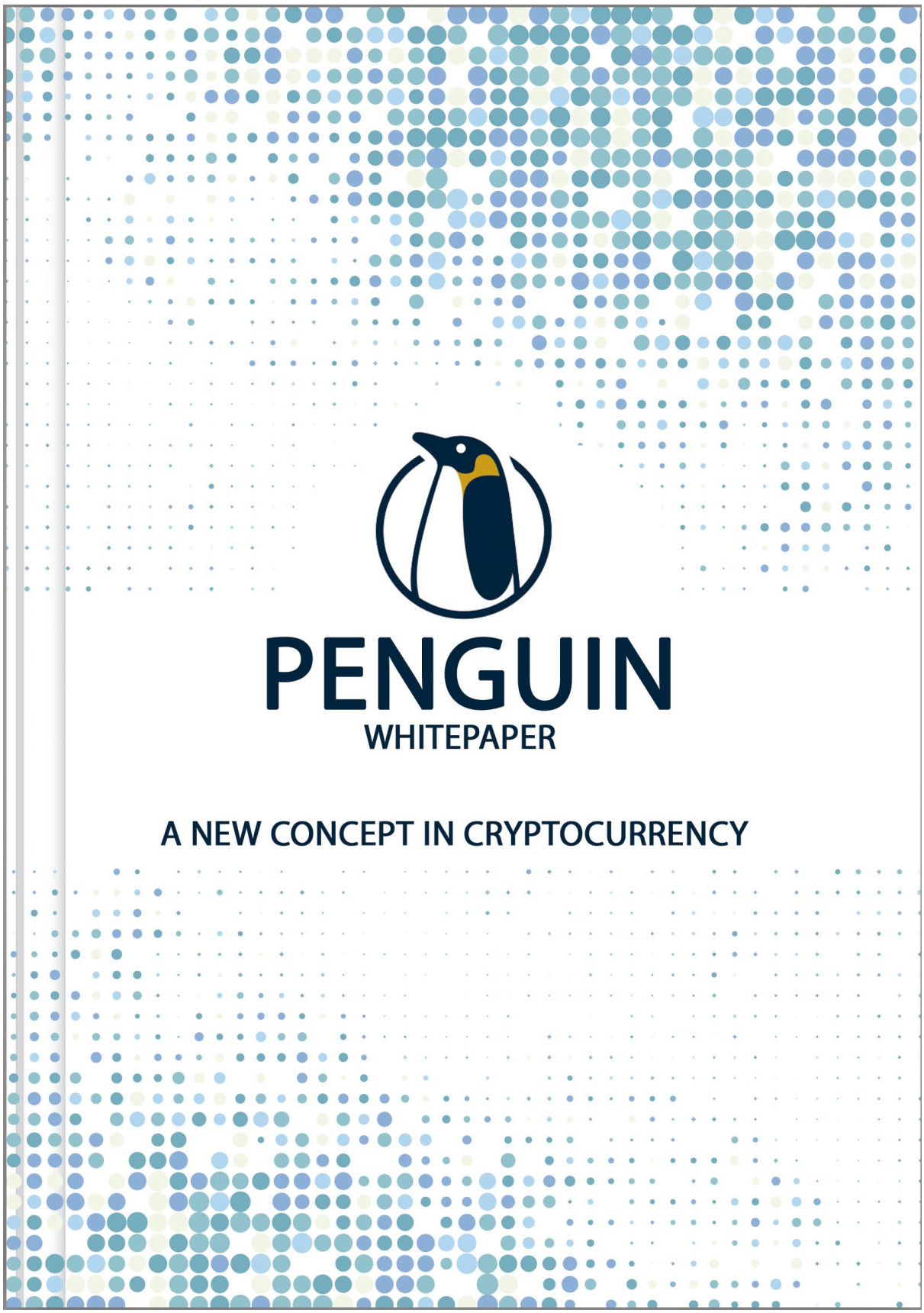

PENGUIN
WHITEPAPER
A NEW CONCEPT IN CRYPTOCURRENCY

Penguin Coin

White Paper

Version 1.0.0

June 18, 2018

http://penguincoin.co/

Name: Penguin Coin

Ticker: PENG

algo : quark

mode : pos/mn

rpc : 3181

p2p : 3182

stake age : 1 hours

PENG FINAL FIGURES

Maximum supply - 17,147,480,000

Distributed over 52,560,000 Blocks.

MN Collateral - 5.000.000 Coins

Block Time- 60 seconds

Stake time- 60 seconds

Abstract

This paper introduces and outlines the key features of the Penguin Coin crypto-currency, including the rationale behind the design choices. Penguin Coin is based on the PIVX code with MasterNode (MN) and Proof of Stake (PoS) functionality built in, as well as adding features such as Autonomous Charitable Transfers (ACTs) that allow Penguin Coin to make regular and immediate donations, funded exclusively by MN rewards, to a global charity network .

Some care has also been taken to explain several core concepts and technologies ubiquitous to crypto-currencies so that this paper can serve as a self-contained guide to Penguin Coin even for readers not familiar with crypto-currency in general.

Contents

1. INTRODUCTION

1.1. Penguin Coin

Cryptocurrency began with Bitcoin in 2008. A purely peer-to-peer version of electronic cash that would allow online payments to be sent directly from one party to another without the use of a financial institution. Many alternative cryptocurrencies would soon follow. We are at the start of a cryptocurrency boom that has the potential to change the world dramatically.

Penguin Coin intends to be a major part of this global change. With a committed development team, Penguin Coin plans to become an integral part of donating to global aid and humanitarian efforts.

Helping the future with blockchain. Penguin Coin is inspired by a creature that routinely endures and overcomes tough conditions just to survive. Man-made and natural disasters are sadly very much features of the world we live in and so we must strive to provide much needed assistance to the less fortunate, irrespective of their location or background.

1.2. Blockchain

A blockchain, is a continuously growing list of records, called blocks, which are linked and secured using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction. By design, a blockchain is resistant to modification of the data. It is "an open, distributed ledger that can record transactions between two parties efficiently and in a

verifiable and permanent way. For use as a distributed ledger, a blockchain is typically managed by a peer-to-peer network collectively adhering to a protocol for inter-node communication and validating new blocks. Once recorded, the data in any given block cannot be altered retroactively without alteration of all subsequent blocks, which requires consensus of the network majority.

1.3. Structure

A blockchain is a decentralized, distributed and public digital ledger that is used to record transactions across many computers so that the record cannot be altered retroactively without the alteration of all subsequent blocks and the consensus of the network. This allows the participants to verify and audit transactions inexpensively. A blockchain database is managed autonomously using a peer-to-peer network and a distributed timestamping server. They are authenticated by mass collaboration powered by collective self-interests. The result is a robust workflow where participants' uncertainty regarding data security is marginal. The use of a blockchain removes the characteristic of infinite reproducibility from a digital asset. It confirms that each unit of value was transferred only once, solving the long-standing problem of double spending. Blockchains have been described as a value-exchange protocol. This blockchain-based exchange of value can be completed quicker, safer and cheaper than with traditional systems.

1.4. Blocks

Blocks hold batches of valid transactions that are hashed and encoded. Each block includes the cryptographic hash of the prior block in the blockchain, linking the two. The linked blocks form a chain. This iterative process confirms the integrity of the previous block, all the way back to the original genesis block.

1.5. Block time

The block time is the average time it takes for the network to generate one extra block in the blockchain. Some blockchains create a new block as frequently as every five seconds. By the time of block completion, the included data becomes verifiable. In cryptocurrency, this is practically when the transaction takes place, so a shorter block time means faster transactions.

1.6. Decentralization

By storing data across its peer-to-peer network, the blockchain eliminates a number of risks that come with data being held centrally.

Peer-to-peer blockchain networks lack centralized points of vulnerability that computer crackers can exploit; likewise, it has no central point of failure. Blockchain security methods include the use of public-key cryptography.

A public key (a long, random-looking string of numbers) is an address on the blockchain. Value tokens sent across the network are recorded as belonging to that address.

A private key is like a password that gives its owner access to their digital assets or the means to otherwise interact with the various capabilities that blockchains now support. Data stored on the blockchain is generally considered incorruptible.

Every node in a decentralized system has a copy of the blockchain. Data quality is maintained by massive database replication and computational trust. No centralized "official" copy exists and no user is "trusted" more than any other. Transactions are broadcast to the network using software. Mining nodes validate transactions, add them to the block they are building, and then broadcast the completed block to other nodes.

2. PENG: THE DRIVING FORCE

2.1. MISSION

Penguin Coin strives to provide the world with an easy to use, functional and meaningful cryptocurrency. A cryptocurrency of both utility and charity. A coin which can reach across borders and barriers to quickly and securely provide support where it is needed most.

The central idea behind Penguin Coin is to provide essential aid and help to people and animals in need, regardless of background or location. Man-made and natural disasters are sadly still very much features of the world we live in and routinely imperil the lives of humans and animals alike.

As a result, the Penguin Coin network will generate and distribute funds to international organizations known for their efficiency and honesty as well as smaller scale local efforts that have been verified by Penguin Coin environmental ambassadors and the Penguin Coin community

Since full transparency is also one of the key pillars of the project, all generated funds will be in a publicly visible wallet on the blockchain, and all donations can be tracked and will be communicated through various media.

3. Goals and Objectives

Penguin Coin (ticker PENG) strives to achieve a number of goals. In order to do so, PENG must successfully navigate through or implement a series of steps or objectives. Summarised below are the core goals of the coin and the mechanisms or steps on which these goals are contingent.

3.1 Enable Positive Change

Enable positive change to a broad array of humanitarian and animal welfare efforts globally.

Objectives

- Central to achieving this goal will be to extensively leverage blockchain technology to enable rapid, low to zero cost cross-border donations of PENG into relief organisations. To do so, it is critical for PENG to forge strategic partnerships with several major influential humanitarian / animal welfare organisations with initial selection contingent on their effectiveness (i.e. ability to deliver a high percentage of donations to the targeted cause). These organisations will integrate PENG into their list of approved payment methods which in turn will open the door to donations from PENG users. Note that many charities already accept BTC, despite its limitations.

- Design proprietary Blockchain based tools to facilitate the integration of PENG into the workflow of aid organisations. Successfully integrating these tools ensure all donations submitted in PENG will be used as efficiently as possible by the target organisations..

- Implement Autonomous Charitable Transfers (ACTs). A 5% slice of all Masternode pay-outs is siloed off into a transparent, public wallet and periodically transferred to our partner charities

3.2 Develop Penguin Coin

Develop PENG and its community into a sustainable, stable ecosystem.

Objectives:

- Develop scrypt algorithm to permit seamless integration of modifications and functional enhancements. This important design choice will ensure that the code can readily adapt to future technology developments.

- Base PENG on PoS (Proof of Stake), which is a green algorithm (i.e. computationally not intensive).

- Introduce a system of Governance in the Masternode so that all future decisions can be taken in conjunction with the community. A small percentage of Masternode coins We will introduce a system of Governance in the Masternode. A small percentage of Masternode coins generated will be fed back into PENG development to ensure we can devote the necessary resources to improving the coin with new features to remain competitive and boosting the PENG development teams capacity.

- Listen to community feedback and integrate features on the community wish list. Maintain a constant dialogue with the community through various social media platforms.

- Ensure PENG is as transparent as possible in its activities with respect to ACT, charity selection and development roadmap.

3.3 Widespread Adoption

Objectives:

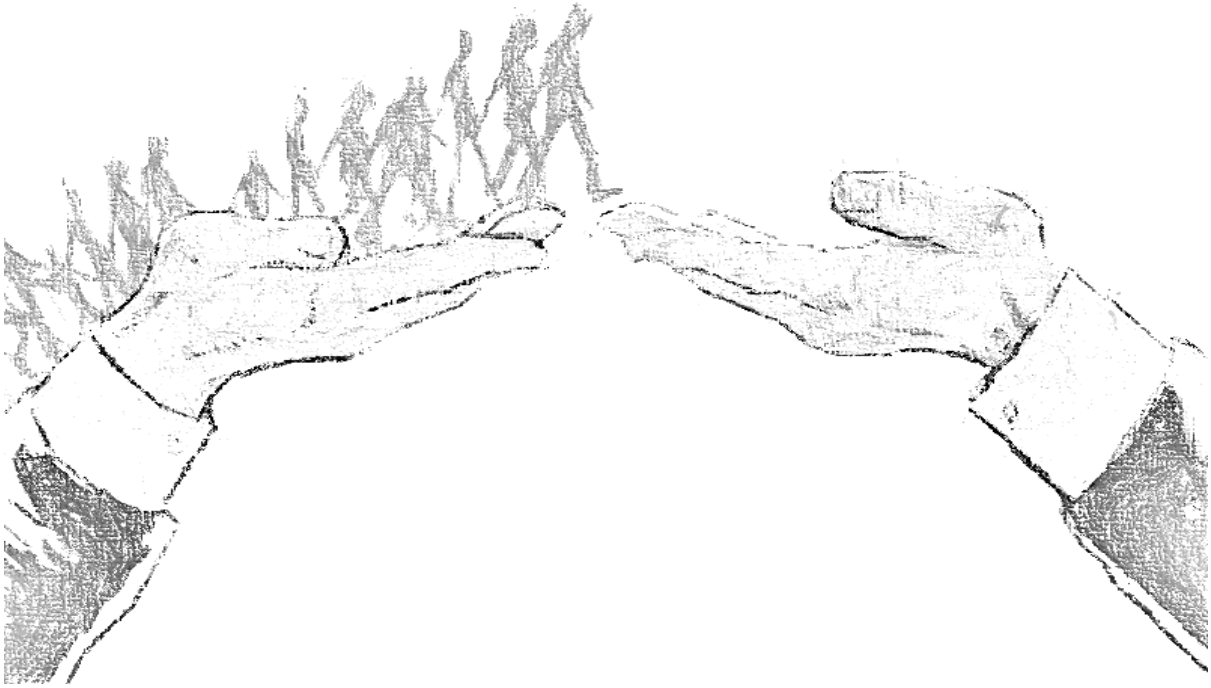
1. Maximise PENG accessibility by launching PENG on a broad array of platforms from iOS, Android, Windows, Linux, Mac and Web. approach for improving this currency.

2. Maintain and continuously develop a clear, concise website and marketing material that outline the core features and advantages of using PENG.

3. Add a marketing department to our team to significantly expand our presence on social media networks and create informative media content in the form of videos and infographics and to engage in targeted advertisements through various channels.

4. Introduce a PENG virtual store on our website.

5. Open physical stores in strategic locations globally to expand PENGs reach beyond purely digital.



4. Technology

Penguin Coin is a new alternative cryptocurrency and is open-source, uses peer-to-peer technology to function with no central authority, and relies on scrypt algorithm for proof of work.

4.1. WHAT IS A MASTERNODE?

Masternodes are nodes running the same wallet software on the same blockchain to provide extra services to the network. These services include:

- Anonymization increased privacy of transactions
- Instant transactions
- A decentralized governance
- A decentralized budgeting system
- Immutable proposal and voting systems.

For providing such services, Masternodes 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 cost.

Because of their increased capabilities, Masternodes typically require a sizable investment in order to run. But this is where incentivization comes into play, as Masternode operators are rewarded by earning portions of block rewards in whatever given cryptocurrency they're facilitating.

4.2. Proof Of Stake Overview

To achieve consensus; Proof of Stake (PoS) requires nodes running a wallet software proving that it has coins in the blockchain in order to verify a block of transactions. The participating nodes receive an amount of blocks proportional to their stake per set period as a form of reward.

This means that with lots of participating nodes (with roughly even amounts of coins) the network becomes very secure due to the increased difficulty of owning a majority of coins in the network.

Block Height	PoS (%)	MN (%)	Block Rewards	Pos Reward	MN Reward
1 - 525600	30%	70%	1000	300	700
525600 - 1051200	25%	75%	950	235	715
1051200 - 1576800	20%	80%	900	180	720
1576800 - 2102400	20%	80%	850	170	680
2102400 - 2628000	20%	80%	800	160	640
2628000 - 3153600	20%	80%	750	150	600
3153600 - 3679200	20%	80%	700	140	560
3679200 - 4204800	20%	80%	650	130	520
4204800 - 4730400	20%	80%	600	120	480
4730400 - 4783000	20%	80%	550	110	440
4783000 - 5308600	20%	80%	500	100	400
5308600 - 5834200	20%	80%	450	90	360
5834200 - 6359800	20%	80%	400	80	320
6359800 - 6885400	20%	80%	350	70	280
6885400 - 7411000	20%	80%	300	60	240
7411000 - 7936600	20%	80%	250	50	200
7936600 - 8462200	20%	80%	200	40	160
8462200 - 8987800	20%	80%	150	30	120
8987800 - 9513400	20%	80%	100	20	80
9513400 - 10039000	20%	80%	100	20	80
10039000 - 10564600	20%	80%	50	10	40
10564600 - 11090200	20%	80%	50	10	40

Algorithm: Quark

Coins Max Supply: 17,147,480,000

Distributed over 52,560,000 Blocks.

Block Time: 60 Sec

Reward System: Proof Of Stake / Masternode

Coin Maturity: 60 Blocks

4.3 Privacy Token

The underlying code for Penguin Coin is PIVX base.
It utilizes a network of masternodes for an openly visible decentralized governance and increased transaction privacy.

The main goal is to achieve near instant private transactions and a governance that helps sustain the network for the benefit of all the users involved. While we are well on our way to achieving this, some of the features are under development and should appear in the near future.

Zerocoin is a very well respected 3rd party project that seeks to fix a major weakness of Bitcoin, namely the inability to unlink transactions from the public ledger (i.e. privacy). In order to imbue PENG with 100% untraceable, anonymous and secure sending / receiving, we have leveraged the powerful technology suite of Zerocoin and so refer to this new variant as zPENG. zPENG will be enabled at block 10,000,001.

zPENG is 100% private and fungible. It is anonymous and untraceable. Every coin sent has no transaction history. Large wallets, attractive to scammers, are totally opaque. zPENG are stored by the zerocoin protocol into a shared, decentralized pool and the blockchain perfectly tracks the amount in circulation. Whenever a user wishes to send zPENG to another wallet address, the senders wallet issues a zero-knowledge proof to the blockchain which coverts some of the zPENG in the pool back to PENG and sends to the recipient in a single step process. As long as a spender can provide zero-knowledge proof of zPENG ownership within the shared pool, new zPENG will be created. This essentially unlinks the coins transaction history from any previous addresses, which in turn makes the transaction untraceable.

5. Roadmap


ROAD MAP
Q2-Q3 2018
- Currency development
- Mobile application dev.
Q3 2018
- Pre sale Masternode
- Pre sale OTC
Swap PenguinCoin
09-14 2018
Q4-2018
- Listings in Exchanges
- Launch wallet IOS
- Launch wallet Android
Marketing Expansion
Q4-2018
Q1-2019
- Online Store
- Physical Store
Q2-2019
- Penguin HQ
- Sponsored events