QNODE BLOCKCHAIN



WHITEPAPER -(v2.0.0)

(Revised, July 2020) https://qngnode.cc

Achieving a Consensus Network for Digital Payments & Passive Earning

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ABSTRACT

The **QUANTUM NODE GROUP** [QNG] is a Non-Ico crypto-currency project group made up of crypto-enthusiast. We seek to build a consensus blockchain network of digital mining and masternode functionalities for digital payments & passive earning in the product **QNODECOIN**.

ACKNOWLEDGEMENT

The QNODECOIN (QNC) would never have been built without the fore works of predecessors who developed projects like *Bitcoin-Core, Dash-Core, Waves platform Blockchains etc.*

Also, the *GIT-HUB Open Source (written in codes*) and all the free access to information are constantly paving the way for exciting innovations and Qnode Core developers is deeply thankful to all who have gone before us.

We also deeply appreciate the developers of the Waves platform for giving us a platform for business tokenization in other to materialize our thoughts (ideas) in the issuing of the QCASH Token. *When information and knowledge is free, society can only benefit from it and get better*.

INTRODUCTION/HISTORY

ABOUT QNG

The QNG (Quantum Node Group) project started on the wavesplatform and expanding its pursuit to solve passive earnings within cryptocurrency investments from just securing established blockchain platforms of choice to becoming a blockchain itself.

QNG is determined to present a digital payment currency alternatively for real life using a p2p secured payments and that also guarantees passive earnings within the space through a consensus network with mining and masternode functionalities.

QnodeCoin shall be the transformation of QCASH token to a native blockchain coin, which will be enabling investors to get their ROI (returns on investments) with minimized exertion, properly managed risk, and completely with in-built reporting. Also, we are able to explore numerous exchanges, with additional trust for financial security that benefits every investor, as well as maintaining low resistance and ease of access to the common man of society.

QNC brings you to profitable options to earn discretely. You are presented with the choice of investment strategy that works for you. From participating in a computational problem solving called PoW mining to deploying cold and hot wallets via masternode from your pc on our blockchain. Also, we shall build a vendors platform for ease of digital payment settlement.

The Qnode Coin will also facilitate privacy of transactions, with added value and exclusivity. In the future, we hope to achieve mass adoptions via the supported malls/vendors we shall engage in selected countries.

QNG MISSION

The Quantum Node Group project is clearly in three phases.

During the phase 1, the QCASH will be domiciled *(as already issued)* on the waves platform. We utilize it in our business tokenization model.

QNG will in phase 2, launch a stand-alone blockchain for its consensus with the X11 algorithm where QnodeCoin shall serve as a digital payment alternative currency for a real life (vendors) use on peer to peer secured network. QCASH will thus be moved (by swapping) to *QNODECOIN* on new blockchain. The swap ratio is 1:10 **(QCASH: QNC)**.

And in Phase3, QNG shall to launch it private exchange with QNC as native coin.

PROJECT PHASES

QNG project shall have no soft or hard cap as non-ico. We are not constrained to roadmaps, but subsequently engage community for developmental supports.

✓ PHASE 01: THE QCASH ASSET

Phase 1 featured QCASH asset, which has ended at the update of this paper (March, 2020)

✓ PHASE 02: THE LAUNCH OF NATIVE BLOCKCHAIN (QNODECOIN)

Phase 2 is the launch of Qnode Blockchain with a consensus staking and masternode mining feature. This was later upgraded to X11 algorithm at the update of this paper (July, 2020).

✓ PHASE 03: THE RELEASE OF P2P DIGITAL WALLET FOR VENDORS' ADOPTION AND A PRIVATELY OWNED EXCHANGE.

Phase 3, the release of a p2p mobile wallet for vendors and a launch of a private exchange

THE NEW ERA TECHNOLOGICAL LAYER

There is a new era in the world's economics of digital transactions. The new era breeds the technology behind our project and that makes it lucrative.

IT BEGINS WITH THE BLOCKCHAIN TECHNOLOGY

Blockchain is a way of storing data or a digital record of transactions. The records are immutable and cannot be changed. Digital records are combined into blocks and then these blocks are cryptographically and chronologically linked together in a "chain" using complex mathematical algorithms. Hence the name block chain.

Each block is linked with the previous block and contains a complete set of all records that came before it. New blocks are always added to the end of the chain. Computers running on the same network perform the encryption process known as *hashing*. When all computers in the network complete their calculations and receive the same result, a confirmation is made. Then the block is given a unique digital signature by the first miner who forged it.

This block is then added to the digital register, which is updated across all computers on the network. Once this is complete, the block cannot be altered, and it is virtually impossible to fake or change once added to the blockchain. Only

new entries or data can be added to subsequent blocks. This makes the network impossible to hack; because, hacking can only be possible if each computer in the network (which are distributed worldwide) can be hacked simultaneously. Thus it's impossible to hack the chain.

Unlike, traditional relational database systems, where data can be *Created*, *Read*, *Updated*, *and Deleted* (CRUD). The reverse is the case with blockchain database, which is designed for data to be *Created*, *Read*, *Appended*, *and Burned* (*CRAB*). Yet, it must still leave behind a track of history of any form of modification as earlier indicated.

Furthermore, traditional relational database systems are centralized, but blockchain databases are decentralized and can be distributed on a global scale, which ensures that the network is always available and secured. The hashing process is irreversible. If a malicious attempt is made to change the registry, it will never match such alterations of registries held by other chain computers.

This shapes the consensus rules within the network and any results in the alteration of registries or any other shorter chains in the network are disregarded. Thanks to the father of it all *Nakamoto Satoshi* of the Bitcoin core.

PROOF OF WORK – PoW (MINING)

The first layer usability of the Qnode Network is the Proof of Work functionality. Mining in the context of digital assets such as QnodeCoin crypto-currency that runs on its native blockchain, refers to the process of solving cryptographically difficult problems as a method of adding transaction records to its public ledger of past transactions.

QnodeCoin implements a mining algorithm known as X11 originated from the Dash protocol which is intentionally designed to be resource-intensive and difficult so that the number of blocks found each day by miners remains steady. Off course, this ledger of past transactions known as block chain is a chain of blocks linked together.

Mining within the network, is the mechanism for generating new QnodeCoins. Miners are rewarded with a percentage of the total coins mined per block which in addition to rewards for masternode owners per block mined and that of treasury. This serves the purpose of disseminating new coins in a decentralized manner as well as motivating people to provide security for the system.

There are currently three main ways of participating in mining on Qnode's Blockchain.

- CPU Mining (Using a modern general purpose computer)
- GPU Mining (Using high-end computers with dedicated GPUs).
- ASICs.

The CPU is the simplest and most general hardware available for mining which is present in every computer. A CPU is designed to be versatile but offers less efficiency than a GPU, which is designed to rapidly calculate millions of vectors in parallel. While specific CPU instruction enhancements are related to cryptography such as AES or AVX can provide a decent boost.

On the other hand, GPUs offer a significant performance increase due to their multiple pipelines capable of processing the predictably repetitive calculations associated with crypto-currency mining.

Finally, ASICs which stands for Application-Specific Integrated Circuits describes certain categories of processors that are relatively inflexible and can only process the specific function(s) for which they are designed e.g X11 Algorithm, but at an even faster rate than the more general purpose GPUs and CPUs. A number of X11 ASICs are now available on the market, which have quickly made CPU and GPU mining uneconomic due to the increased difficulty of hashing arising from the rapidly increasing hash rate. What this implies is that anyone with access to X11 ASICs (Rigs) can simply add qnodecoin to the pool of coins minable with them. HOW TO MINE

PROOF OF SERVICE - PoSe (MASTERNODES)

The second layer usability of the QNC network is Proof of Service functionality called Masternode. It is a computer running a digital wallet 24/7. Specific wallet settings and configurations must be set in order to turn an ordinary digital wallet into a masternode wallet. Once the masternode is running, it powers the project's network by processing transactions, mixing coins, and often offers voting rights.

MN plays an important part of the QNC network. The QNC-MN network is that section of the blockchain that donates processing power to confirm transactions and hold a complete record of the blockchain. A masternode will receive a reward for security and stability service performed.

These nodes serve a special purpose within the network to mix various transaction amounts to increase difficulty, privacy and anonymity of transactions. This is done by the process of obfuscation, which is also inherited through the open source Dash code base.

QNC POTENTIAL USE-CASES

MASTERNODE (PoSe): The Masternodes help to support the QNC network by providing faster transaction times, anonymous transactions, and decentralized operations. Also there is 55% profit share from block rewards as incentive for investing in the necessary amount of coins (or tokens) required for a QNC masternode *(i.e. rewards are directly paid to QNC-MN wallets that are linked to the blockchain network evenly and automatically).*

CPU/GPU/ASIC: Mining as earlier explained is the function of miners who forge blocks on the network by a collation of past transactions and new transaction with computational power, either by a CPU or GPU or ASIC. A 35% block rewards are shared democratically among miners.

P2P VENDING: The QNC network will provide an interface for mobile wallets users to perform peer to peer payments among users (merchants and customers alike) to instantly accept or pay in crypto assets. The Qnode development team has plans to release her web and mobile product wallet in due course to enable swift and portable transactions among vendors and non-vendors alike.

EXCHANGE: Beyond P2P vending for payment settlements, we shall list QNC into exchanges to enable centralized and decentralized trades. *As well as build a native exchange for QnodeCoin for more utility.*

ATOMIC SWAP: QNC will allow users to perform atomic swap with determined cryptos (stable assets) in the nearest future, and receivers will receive payment in the pegged asset. The QNC network shall handle conversation through atomic swaps between cross-chain crypto assets and fiat in the nearest future.

QNODE COIN SPECIFICATION

At full-fledged of Qnode blockchain, QCASH will be move to its native blockchain with the following specification for swap of QCASH to QNODECOIN, as stated below in ratio 1:10.

QNODECOIN SPECIFICATIONS (V2.0)	
COIN NAME:	QNODECOIN
TICKER:	QNC
ALGORITHM (POS):	POW (X11)
TYPE/CONSENSUS:	Proof of Work + MN
INITIAL BLOCK REWARD:	50 QNC
MN, MNR & SB REWARD:	55% (MN), 35% MNRs, SB 10%
BLOCK TIME:	300 seconds
POW-MATURITY	50 minutes
MASTERNODE COLLATERAL:	20,000 QNC
TOTAL SUPPLY:	24,624,000 QNC
PRE-MINE & V2.0 SWAP	3,600,000 QNC
SUPPORTED WALLETS	WINDOW, LINUX & MAC-OS WALLETS





DECENTRALIZATION OF QNODECOIN

The QNG project began on the Waves platform with tokenization. And it has ever been our ultimate goal to decentralize QnodeCoin on decentralized exchanges. Once again our best & first pick is the Waves DEX.

At this paper (v2.0.0) update in July, 2020, Qnode Core Developers have already deployed a token with the same name for 1:1 backing on the <u>Waves.Exchange</u> platform to formally initialize the decentralize feature of the DEX to QnodeCoin. *A gateway is being developed to enable both blockchain interact seamlessly.*

Tokenization On Waves platform

Name: QnodeCoin Issuer: 3PQhZFZThfrYdTxNSkSLBsGeBgHAppHUsNm Asset ID: 4wLYwGEYPnhV8d3EFbmkbzGKyLKSZmaZUqkDAXumidQv Supply: 24,624,000 Reissuable: False MainNet: DEV.PYWAVES.OR/ASSETS/

DOCUMENTATION

The QNG project was never done in isolation. We are not isolated. We have depended on several libraries and github resources to produce this document as it were meant to fit into our business module. We hereby cite the helps gotten from the several references below:

Thanks for your understanding.

CATALOG

- <u>https://docs.dash.org/en/latest/introduction/about.html#whitepaper</u>
- <u>https://docs.dash.org/en/latest/masternodes/index.html</u>
- ✓ <u>https://pivx.org/what-is-pivx/</u>
- ✓ ✓ <u>http://marcoin.cc/marc_mn_guide.pdf</u>
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- ✓ <u>https://github.com/CounterpartyXCP</u>
- ✓ *http://wiki.nxtcrypto.org/wiki/Whitepaper:Nxt*

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The QNG digital assets coin and tokens alike QNC or QCASH (on wavesplatform) has an independent value separate from the project team original stipulation. The trading behavior of the different digital assets on trading platform, market environment and the degree of acceptance of market entities will determine and change the value of any of the mentioned asset as stated above. This value is determined by the recognition of the value and exchange value of the relevant market participants. Digital assets markets could have larger price volatility caused by unstable policies on blockchain in countries and regions around the world. It is common for prices to face drastic fluctuations and value of your holdings could increase or decrease by over 100% in a single day. Although this could mean potential huge profits, as well as potential losses. The QNG team cannot guarantee the value of QNC over time is unstable. Also the ROI of Masternodes can depends from several conditions and cannot be considered as a guarantee of financial return. QNG assets cannot be regarded as bonds or any form of securities, nor is it a project company's equity, shares, ownership or control.

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