WHITEPAPER

Introduction:

1. Cryptocurrency

A cryptocurrency is a digital asset designed to work as a medium of exchange that uses strong cryptography to secure financial transactions, control the creation of additional units, and verify the transfer of assets. Cryptocurrencies are a kind of digital currency, virtual currency or alternative currency. Cryptocurrencies use decentralized control as opposed to centralized electronic money and central banking systems.

The decentralized control of each cryptocurrency works through distributed ledger technology, typically a blockchain, that serves as a public financial transaction database.

Bitcoin, first released as open-source software in 2009, is generally considered the first decentralized cryptocurrency. Since the release of Bitcoin, over 4,000 altcoins (alternative variants of Bitcoin, or other cryptocurrencies) have been created.

2. Blockchain

A blockchain, is a growing list of records, called blocks, which are linked using cryptography. Blockchains which are readable by the public are widely used by cryptocurrencies. Private blockchains have been proposed for business use.

Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data (generally represented as a merkle tree root hash). 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.

Though blockchain records are not unalterable, blockchains may be considered secure by design and exemplify a distributed computing system with high Byzantine fault tolerance. Decentralized consensus has therefore been claimed with a blockchain.

Blockchain was invented by Satoshi Nakamoto in 2008 to serve as the public transaction ledger of the cryptocurrency bitcoin. The invention of the blockchain for bitcoin made it the first digital currency to solve the double-spending problem without the need of a trusted authority or central server.

3. Understanding Proof of Stake (PoS) System

The proof of stake was created as an alternative to the proof of work (PoW), to tackle inherent issues in the latter. When a transaction is initiated, the transaction data is fitted into a block with a maximum capacity of 1 megabyte, and then duplicated across multiple computers or nodes on the network. The nodes are the administrative body of the blockchain and verify the legitimacy of the transactions in each block. To carry out the verification step, the nodes or miners would need to solve a computational puzzle, known as the proof of work problem. The first miner to decrypt each block transaction problem gets rewarded with coin. Once a block of transactions has been verified, it is added to the blockchain, a public transparent ledger.

Mining requires a great deal of computing power to run different cryptographic calculations to unlock the computational challenges. The computing power translates into a high amount of electricity and power needed for the proof of work. In 2015, it was estimated that one Bitcoin transaction required the amount of electricity needed to power up 1.57 American households per day. To foot the electricity bill, miners would usually sell their awarded coins for fiat money, which would lead to a downward movement in the price of the cryptocurrency.

The proof of stake (PoS) seeks to address this issue by attributing mining power to the proportion of coins held by a miner. This way, instead of utilizing energy to answer PoW puzzles, a PoS miner is limited to mining a percentage of transactions that is reflective of his or her ownership stake. For instance, a miner who owns 3% of the Bitcoin available can theoretically mine only 3% of the blocks.

With a PoS, the attacker would need to obtain 51% of the cryptocurrency to carry out a 51% attack. The proof of stake avoids this 'tragedy' by making it disadvantageous for a miner with a 51% stake in a cryptocurrency to attack the network. Although it would be difficult and expensive to accumulate 51% of a reputable digital coin, a miner with 51% stake in the coin would not have it in his best interest to attack a network which he holds a majority share. If the value of the cryptocurrency falls, this means that the value of his holdings would also fall, and so the majority stake owner would be more incentivized to maintain a secure network.

4. What Is A Masternode?

Masternode is simply a cryptocurrency full node or computer wallet that keeps the full copy of the blockchain in real-time, just like your have Bitcoin full nodes and is always up & running.

But masternodes are considerably different in their functionality than normal nodes.

They are different because they perform several other functions apart from just keeping the full blockchain and relaying blocks/transactions as a full node does in Bitcoin/Litcoin.

Some of the special functions that these nodes perform are:

- Increasing privacy of transactions- Doing instant transactions

- Participating in governance and voting

- Enable budgeting and treasury system in cryptos

These masternodes are not standalone but they are always communicating with other such nodes to make a decentralized network and are often referred in short form as MN.

5. What Does It Take To Run A Masternode?

Just like full nodes in a cryptocurrency, masternodes can be run by anyone. However, there is an entry barrier in place to ensure that the system doesn't get malicious. The entry barrier is what one needs to commit or collateralize certain units of that particular cryptocurrency to run a masternode.

This is done to ensure that a masternode owner doesn't cheat or corrupt the system and the best of doing so is by putting this entry barrier where the masternode operator has something at stake in the whole game.

So naturally, it becomes very less likely that a masternode operator will cheat because he has a stake in running the whole system and even if he chooses to do so he will be punished in the form of devaluation of their own HODLings.

6. Requirements for a DACH Masternode Hosting

- 5000 DACH Coins

- VPS running on Linux with a dedicated IP Adress

You can find our DACH Masternode Guide under GitHub:

https://github.com/dachcoin/masternode-install

7. Introduction to DACHex Platform

DACHex Crypto Tracker is an ultimate platform to keep track of crypto market and prices. It has a clean, user-friendly, contemporary design, awesome features and continuous updates.

Features that will be implemented:

- Realtime Charts Prices (for over 1600+ Cryptocurrencies)
- Portoflio (Blockfolio) - where a user can easily create own portfolio and track their profit
- Featured ICO's list (ANNs)
- Active ICO's list (ANNs)
- Upcoming ICO's list (ANNs)
- News updates
- Cryptocurrencies categorisation by top currencies (as a Filter)
- Detailed overview page for each cryptocurrency
- Includes Twitter/Facebook feeds from top crypto gurus
- Includes all big exchanges information
- Day/night mode
- At beginning we add 2 different languages (English and German)
- Watchlist
- Banner Ads Management (GIF/PNG)
- Changelly and/or Shapeshift will be also implemented (API)
- Search functions
- More features coming soon

8. Utility of DACH Coin

8.1 Memberships

- Being a basic member is free.

Accessing the Platform is generally free and requires registration

- Premium Members

Premium Members have access to more other options than a "Basic Member" such as Banner Ads Management, ANNs (new Coins), Dashboard integration, more features will added along the time.

Premium Memberships are primary available with DACH and BTC.

8.2 Paid Listings

- 5000 DACH = ICO's (Presales) - BTC payments also accepted

- 3500 DACH = Launched 1 month after Public (one exchange required) - BTC payments also accepted

8.3 Fast-Track Listings

- 7500 DACH = Fast Track: Not Guaranteed that your ICO's (Coin) is listed in same day - BTC payments also accepted

- 10000 DACH = Fast Track: Dedicated Day incl. Twitter Post - BTC payments also accepted

9. DACH Specifications

- Coin Name: DACH Coin (DACH)
- Coin Type: POS & MN
- Max Coin Supply: 38,000,000 DACH
- Block Time: 1 Minute
- Algorithm : Quark
- Premine: 1M DACH
- Maturation time : 101 Blocks
- Min stake age : 1 hours
- Encrypted transactions: YES
- Mine-able: NO
- Masternode Collateral: 5,000 DACH

10. Reward Distribution

Block Height	Masternodes	PoS
0-25000	90% (0.9 DACH)	10% (0.1 DACH)
25000 - 40400	90% (31.5 DACH)	10% (3.5 DACH)
40400 - 66200	90% (45.0 DACH)	10% (5.0 DACH)
66200 - 98900	90% (54.0 DACH)	10% (6.0 DACH)
98900 - 136800	90% (63.0 DACH)	10% (7.0 DACH)
136800 - 156800	90% (36.0 DACH)	10% (4.0 DACH)

156800 - 250000	90% (27.0 DACH)	10% (3.0 DACH)
250000 - Infinite	50% (10.0 DACH)	50% (10.0 DACH)

11. Important Links

Website:	https://www.dachcoin.live/
Bitcointalk:	https://bitcointalk.org/index.php?topic=4969379.0
Twitter:	https://twitter.com/dachcoin
Instagram:	https://www.instagram.com/dachcoin/
Discord:	https://discord.dachcoin.live
Twitter:	https://twitter.com/dachcoin
Explorer:	https://explorer.dachcoin.live/
GitHub:	https://github.com/dachcoin/dachcoin
MN Guide:	https://github.com/dachcoin/masternode-install
Wallets:	https://github.com/dachcoin/dachcoin/releases

12. Partners

MNRANK:	https://mnrank.com/coin/DACH/
MNMARKETCAP:	https://www.mnmarketcap.com/currencies/DACH
PANDABOT:	http://pandabot.fatpanda.club/