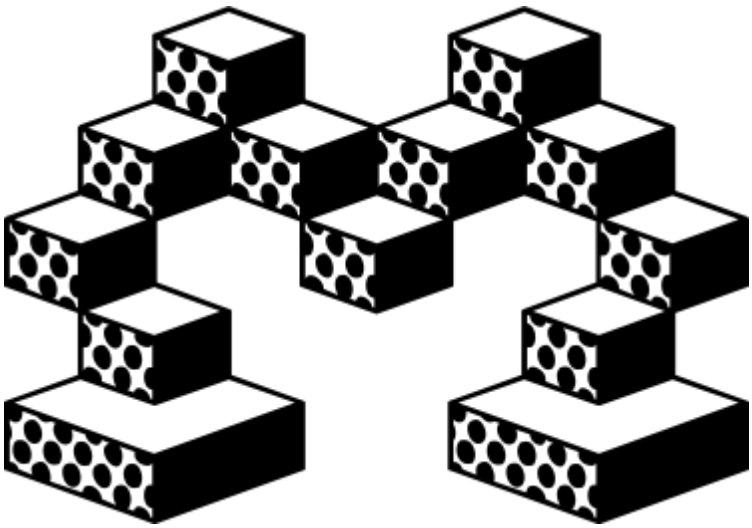

MAGNATUM

WHITE PAPER

31 August 2017

www.magnatum.io

ABSTRACT SUMMARY

Hereby, we would like to present you an evolutionary cryptocurrency with the complexity dynamic adaptation mechanism depending on the transaction load on the network.

The issues of an infinite queue no longer exist.

The growth in the number of unconfirmed transactions is the key problem of the most popular cryptocurrencies.

This technical flaw places a serious limitation on their development.

Magnatum is the world's first cryptocurrency with the complexity dynamic adaptation depending on the network load.

The innovative algorithm developed by us reduces the interval between blocks, preserves the network bandwidth even at peak loads.

Join the most technologically advanced currency of the summer 2017.

INTRODUCTION

Cryptocurrency scalability

Most crypto-currencies are bitcoin-based ones, and contain an identical problem. The transaction block is limited to 1 Mb, and the extraction of blocks is limited to 10 minutes, accordingly, the number of transactions processed by the network per unit of time becomes also limited. As a result, unprocessed transactions fall into the queue.

The number of users has grown from several dozen people at the dawn of bitcoin emergence to several dozens of millions - and will only grow further.

Today's queues for processing in Bitcoin network reach 24 hours.

The growth of the user base is logically accompanied by an increase in the number of transactions. Now hundreds of thousands of transactions are processed per day. The key issue is that as of today the network of Bitcoin and other cryptocurrencies processes transactions more slowly than they enter the network.

Thus, the system faced the problem not only of transaction delays, but also of the possibility of an infinite queue.

The 1 Mb issue

The problem lies in the parameter, which is called the "block size limit". In 2010, Satoshi Nakamoto has limited the block size to 1 megabyte. This is a security measure that should prevent possible DoS attacks by hackers creating large and even unlimited block sizes in order to paralyze the network.

However, this solution had an unfavorable long-term effect on the network bandwidth as a whole - each transaction contains the data of the sender, the recipient, the number of coins transferred, etc.

Data take an insignificant space in case of a single transaction.

But there is a need in a lot of space since hundreds of transactions are being made per second.

The current block size limit of 1 Mb correctly processes from three to seven Bitcoin-transactions per second. The number of new appeared blocks is larger and they queue up, and today the waiting time can exceed 24 hours.

The solution to the scaling issue

The issue of scaling has been studied for a long time. It was proved that if the maximum block size is increased to the limits sufficient for the world needs, then the size of the blockchain will grow to at least a few petabytes.

In turn, this will lead to an increase in the Bitcoin centralization; only large companies will be able to allocate such a space for the data, processing power and network bandwidth needed to handle such huge data sets, throwing the small operator's nodes off the network. Thus there is a contradiction with the basic idea of Bitcoin as money managed by their users.

Even solutions like SegWit do not solve the problem completely, but only postpone the collapse for a later period.

Magnatum - quick coin transfers for a network of a billion people

Hereby, we present you an evolutionary cryptocurrency with the complexity dynamic adaptation mechanism depending on the transaction load on the network. The issues of an infinite queue no longer exist.

The algorithm implemented in the Magnatum project allows solving the issue of growing queues once and forever.

Liquid Blocks Algorithm

As soon as the block size exceeds half the permissible block size of 1 Mb, the Magnatum platform blockchain increments the counter called the overload counter. Initially, the counter equals one, and nothing happens if the blocks are within the specified sizes. As soon as the counter value increases, the complexity is recalculated so that the mining time of the next block is halved. If the next block exceeds the permissible half of the

size again, the counter will increase again, and the mining rate will be 4 times higher. In order to prevent the effect of mining time reduction on the coins issue, the overload counter reduces the compensation, just like the mining complexity.

Figure 1 shows the dependence of complexity, rewards, daily mining of coins, depending on the overload counter.

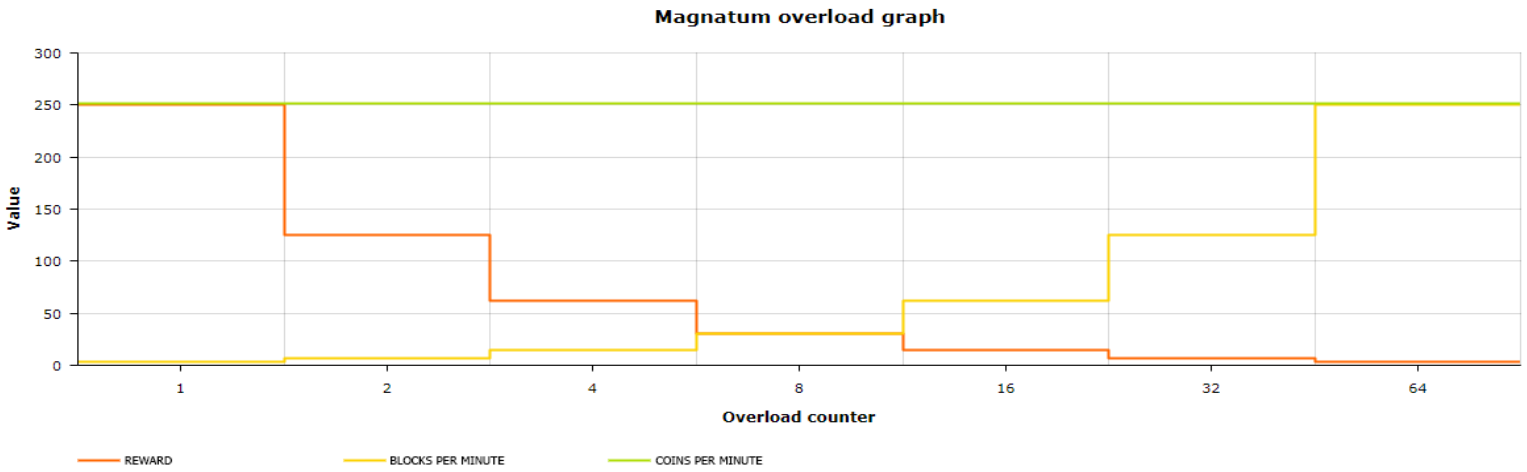

Figure 1

MAIN FEATURES

SKUNKHASH RAPTOR

The new hashing algorithm managed to gain popularity among the miners. There are the CPU Miner, GPU AMD Miner and GPU Nvidia Miner.

Magnatum uses a GPU-optimized algorithm, gaining a beneficial advantage over other cryptocoins.

CLASSICAL PoW

Proof of the Work performed enables the blockchain to remain "clean", and the entire community to compete in order to verify the transactions validity and making any attacks on the system very expensive.

LIQUID BLOCKS

The interval between blocks decreases in proportion to the number of transactions, increasing the network bandwidth, but preserving the currency emission by reducing the reward.

SPECIFICATIONS

Coin name	Magnatum
Ticker	MGT
Coin type	PoW
Hashing Algorythm	SkunkHash
PoW Algorythm	Dark Gravity Wave v3 mod Liquid Blocks
Supply	130,000,000 per year
Premine	~2500000
Block time	60 seconds
Block reward	250 MGT

MAGNATUM ROADMAP v1.0

- Magnatum cryptocurrency (done)
- Mining Pool (done)
- Liquid Blocks algorythm (done)
- Whitepaper (done)
- Website (done)
- Mac Wallet (done)
- Windows Wallet (done)

- Explorer (September)
- Exchanges (September)
- More nodes
- Anonymity network with Tor nodes
- Magnatum Web Wallet

INVEST IN MAGNATUM

1. Today, financial transaction systems have become faster than 50 years ago. However, they are not that fast as they could be. Compliance with all procedures when buying or selling shares takes several days. Bitcoin was designed to speed up transactions to instant ones, but stuck. Magnatum is the first cryptocurrency, where the transfers occur right there and then, regardless of the growth in the number of network participants.

2. A bank account is needed for financial transactions. Today, according to the World Bank's research, 2 billion people do not have a bank account. To conduct financial transactions through the Magnatum cryptocurrency, it is enough to download the wallet and synchronize with the system.

3. The purchase of foreign assets and securities abroad requires time and operating expenses, which are sometimes considerable. The Magnatum system is completely transparent, decentralized and has no limits. Buying assets on another continent will not be more difficult than buying a roll near your house.

4. The transfer of shares between issuers and investors can take up to 6 months, taking into account all approvals and money remittances. Using the Blockchain technology makes the deal quick and transparent.

Magnatum is a part of the new world. One project, one central idea - instantaneous transfers within the blockchain network for billion people.

CONCLUSION

The blockchain technology has tremendous prospects. Our vision is to participate in the maximum number of areas and move forward, both independently and together with other people and teams. We are in the early stages of using cryptocurrencies and we all need to work together to make the most of their potential. The opportunity to change the world for the better inspires us and gives us the strength to work aggressively.

We are confidently moving along the road map, hoping to meet new challenges, new people and tremendous opportunities.