Giant

A decentralized network for the Smart Bets

Whitepaper Version 1.0

by The Giant Development Team
giantpay.network
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Content

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Giant design goals: Smart Bets

Giant applies blockchain and smart contract technologies for self-regulation of digital assets used for "smart betting" in a decentralized network.

Digital assets

Digital assets are programmable assets that exist in the form of electronic data. With blockchain technology, the digitization of assets can be decentralized, trustful, traceable, highly transparent, and free of intermediaries. On the Giant blockchain, users are able to register, trade, and circulate single type of assets - Giant Coin.

Giant has two forms of digital assets: *global assets* and *contract assets*. *Global assets* can be recorded in the system space and can be identified by all smart contracts and clients. *Contract assets* are recorded in the private storage area of the smart contract and require a compatible client to recognize them. *Contract assets* can adhere to certain standards in order to achieve compatibility with most clients.

Giant coin Specification

- Ticker: GIC

- Type: POW + POS + MASTERNODE

- POW Algorithm: Quark

- Block Time: 120 seconds

- Difficulty Retarget: DGW v3.0 Every block

- Mined/Minted Maturity: 101

- Max Coin Supply: 5151000 POW Phase + Infinity POS Phase

- Premine: 3.88% of POW

- Masternode Collateral Price: 1000 GIC

- P2P Port: 40444

- RPC Port: 41444

Application and Ecosystem

Ecosystem is vital for the open source community. In order to achieve the goal of an intelligent economic network, Giant will be committed to the development of its ecosystem, providing mature development tools, improving development of documents. We plan to support the following Giant-based applications and ecology and to reward improvements of the processes:

- **Node Program**
  - A fully functioning Full node PC program
  - Web / Android / iOS clients that do not need to synchronize with the blockchain
- **Giant Network site**
- **Blockchain Explorer**

- **SDK Development Kit**
  - Support JavaScript
- **Smart Contract Compiler and IDE Plugin**
  - JavaScript / TypeScript
- **Decentralized Applications**
  - Giant.Exchange

Giant Management Model

Economic Model

Giant has a single native token, Giant Coin (abbreviated symbol GIC).

GIC emission is unlimited, but the reward for a block is regulated depending on the block height. At the beginning, the emission curve is designed for the rapid growth of the network, while further, the number of issued coins will decrease. The decrease will occur both due to the reduction of the fee for a block, and due to burning of the transaction fees. Burning of the transaction fees is an important element of the Giant network, since the fee is required to create a transaction and to execute the smart contract. Burning of the fees in the Giant network provides a long-term effect by increasing the value of GIC and by eliminating the problem of transaction spam.

Giant Management Model

The emission of Giant is divided into two phases:

1.   the POW phase (appx. 1 year)

2.   the POS phase (all subsequent time)

A key element of the Giant economy is the Giant masternodes. Masternode is a full node of the Giant network that is associated with a frozen collateral of GIC on the account of the masternode owner. By helping to scale and to validate the Giant network, the owner of the masternode receives the following options:

- Payment of 80% of rewards from a block
- Ability to create smart contracts in the Giant network
- Opportunity to participate in building the future of the Giant network through voting, where 1 vote equals 1 masternode

Masternode rewards

The Masternode Reward depends on the phase and number of enabled Masternodes in the network. In general, payments for a standard day for running a Masternode can be calculated by using the following formula:

$$(n/t)* r*b*a$$

Where:

n is the number of Masternodes an operator controls

t is the total number of Masternodes

r is the current block reward

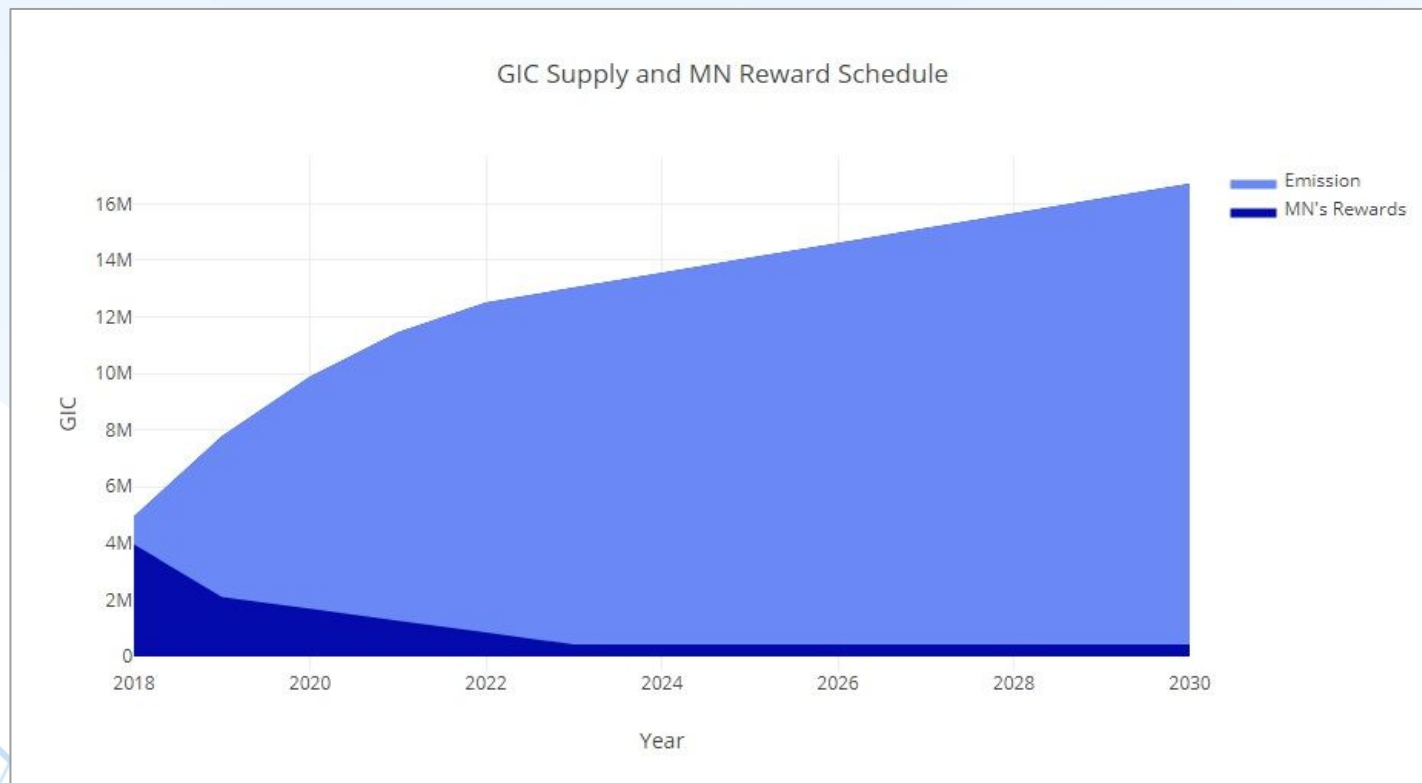*b* is blocks in an average day. For the Giant network this usually is 720.

a is the average Masternode payment (80% of the average block amount)

Return on investment for running a Masternode can be calculated as

$$((n/t)*r * b*a*365) / 1000$$

Where variables are the same as above

Masternode rewards

GIC Supply and MN Reward Schedule

Masternode rewards

Timeline	Block	Reward Distribution (Miner + Masternode)	Coin Emission	Total Supply	Inflation Rate	Miners Reward	Masternodes Reward
Premine	2 — 500	0 GIC	200 000	200 000			
08.05.2018 - 04.06.2018	501 — 20000	2 GIC + 8 GIC	194 990	394 990	49,37%	38 998	155 992
04.06.2018 - 01.07.2018	20001 — 40000	3 GIC + 12 GIC	299 985	694 975	43,16%	59 997	239 988
01.07.2018 - 07.05.2019	40001 — 262800	4 GIC + 16 GIC	4 455 980	5 151 000	86,51%	891 196	3 564 784
PoS	Block	(Staker + Masternode)	Coin Emission	Total Supply	Inflation Rate	Stakers Reward	Masternodes Reward
08.05.2019 - 07.05.2020	262801 — 525600	2 GIC + 8 GIC	2 627 990,00	7 778 945,00	33,78%	525 598	2 102 392
08.05.2020 - 07.05.2021	525601 — 788400	1,6 GIC + 6,4 GIC	2 102 392,00	9 881 337,00	21,28%	420 478	1 681 914
08.05.2021 - 07.05.2022	788401 — 1051200	1,2 GIC + 4,8 GIC	1 576 794,00	11 458 131,00	13,76%	315 359	1 261 435
08.05.2022 - 07.05.2023	1051201 — 1314000	0,8 GIC + 3,2 GIC	1 051 196,00	12 509 327,00	8,40%	210 239	840 957
08.05.2023 - ∞	1314001 — INFINITE	0,4 GIC + 1,6 GIC					

As you can see the GIC supply is designed for fast accumulation of Masternodes in the Network during the first years.

By that time we can ensure the speed of transactions once the Giant based projects start.

Distribution of Premine

200,000 GIC Premine (3.88% of the POW phase) is reserved for the following purposes:

- 6000 GIC - to create the first 6 masternodes that stabilize the Giant network
- 44000 GIC - to have bounty programs and airdrops
- 50000 GIC - marketing budget for the promotion of the Giant network and Giant-based applications (Giant.Exchange, etc)
- 100000 GIC - motivation of developers for the development of the Giant network and its ecosystem

Governance mechanism

Decentralized and self-financing governance system of the Giant empowers the community to steer the direction of Giant. This system allows anyone to make a governance proposal using https://proposal.giantpay.network.

Proposals get votes from masternodes that direct the future of the currency and projects. Initially the Giant block reward allocates 0% into a community-governed Treasury Fund. In the future, after the implementation of the features planned for 2018, the community will decide what percentage of the reward block will go to the Treasury Fund. This fund will be fully open to audit by the public, providing assurance of the fund's intended use.

Smart Contract

Blockchain technology provides us with a decentralized, tamper-resistant, highly reliable system in which smart contracts are very useful. Giant has an independent smart contract system: GiantContract.

The GiantContract smart contract system is the biggest feature of the seamless integration of the existing developer ecosystem. Developers do not need to learn a new programming language but use Javascript (Java and C # in the future) in their familiar IDE environments for smart contract development, debugging and compilation. Giant's Universal Lightweight Virtual Machine, GiantVM, has the advantages of high certainty, high concurrency, and high scalability. The GiantContract smart contract system will allow millions of developers around the world to quickly carry out the development of smart contracts.

GiantContract will have a separate white paper describing the implementation details.

Smart Contract system: GiantContract

The GIANT' smart contract system consists of two parts:

GiantVM - Universal Block Chain Virtual Machine:

GiantVM is a lightweight, general-purpose virtual machine whose architecture is based on Javascript V8 engine, that reads and executes instructions in the contract in sequence, performs process control based on the functionality of the instruction operations, logic operations and so on. It has a good start-up speed and versatility, is very suitable for programs such as smart contracts, can also be ported to non-blockchain systems, or integrated with the IDE to provide an optimal development experience.

Smart Contract system: GiantContract

Software Development Kit - Compiler and IDE plugin:

DevPack includes the high-level language compiler and the IDE plug-in. As GiantVM' architecture is based on Javascript engine, the compilers in DevPack can compile Javascript code into GiantVM's instruction set. Developers do not need to learn new languages and will be able to immediately start developing smart contracts in any Javascript IDE. This greatly reduces the learning curve for developing smart contracts, allowing us to easily build a vibrant community around GiantContract.

The first implementation of the API for smart contracts will focus on the issues of implementing smart bets, but in the future, smart contracts in the Giant network will be increasingly universal.

Acknowledgments

This project would not be possible without the previous work of the Bitcoin and Dash development teams. We appreciate their efforts greatly. We are excited to belong to an open source community and appreciate the opportunity to contribute to this growing technological field.

Legal

Cryptocurrency investments are exposed to high risk. Before using any cryptocurrency, it is important to consider the nature, complexity and risk. Do not invest more than you can afford to lose. It is important not to use coins without taking into account the possible loss, since the price of these currencies is highly volatile and the Giant team is unable to regulate market-defined prices. We strongly suggest seeking advice from your own financial, investment, tax, or legal adviser. The Giant Development Team will always act in good faith and is not liable for the use of Giant by other community members, people or institutions.

The decentralized binary options Giant.Exchange

Centralized binary option companies have been known for manipulation of the price feed in their favor, holding their funds and suspending accounts when payout is to be proceeded

In this way, traders are playing an unfair game. So traders may win a bet but lose their money.

Giant.Exchange aims to build an independent and decentralized platform for the binary options industry based on the Giant blockchain. Traders on the Giant.Exchange receive:

- P2P trades - Traders bet against Bankrollers (the same traders who create a smart bet contract), Giant.Exchange does not receive a share of profit as traditional platforms do.

- Guaranteed Payout - Payments are made by the smart contract directly to traders' GIC address. No one can block withdrawals.

- 100% Transparency and Provably Fair by getting assets price on blockchain. Therefore cheating by manipulation of price feed is impossible .

The decentralized binary options Giant.Exchange

We create 100% on-chain system, as we believe the foundations of the Giant blockchain are solid and can support a high user-friendly Dapp.

We do not bet against traders but provide a large catalog of assets and create marketplace by letting bankrollers (masternode owners) create varied asset contracts by themselves on our platform, e.g. 1 minute BTC/USD, 5 minutes BTC/ETH etc..

Giant.Exchange will have a separate white paper that describes the features and technological aspects .

Giant Team

Ruthren Luck - Project Coordinator

Dashawn the Diamond - Blockchain Developer

Cynric the Viper - Full Stack Developer

Calder Whispers - Full Stack Developer

Smokey Lawrence - Marketing Manager, Community Manager

Nine Lives Fred - Community Manager

Hamilton the Suit - Brand and Design

Summary

Giant is a distributed network that combines digital assets, smart contracts and masternodes. The Giant system will use many original technologies, as the infrastructure for the Smart Bets.

Giant Coin (GIC) as a single mean of payment of Giant based projects is capable of becoming mass used among users of Giant based projects and investors running Masternodes.

References

1. Bitcoin: A Peer-to-Peer Electronic Cash System: https://bitcoin.org/bitcoin.pdf
2. Dash White Paper: https://dashpay.atlassian.net/wiki/spaces/DOC/pages/5472261/Whitepaper