BRIXCOIN

White Paper

Contents

BRIXCOIN

A Crypto Currency Built For Communities

THE BRIXCOIN COMMUNITY - www.brixco.in

Abstract. *A crypto-currency based on Bitcoin, the work of Satoshi Nakamoto, with various improvements such as a two-tier incentivized community network, known as the (BMN) BRIX Masternode Network. Included are improvements such as PrivateSend, for increasing fungibility and InstantSend which allows instant transaction confirmations without the need for a centralized authority.*

Without the initiative of Satoshi Nakamoto and the team that made Bitcoin real and their continued work to build upon that vision, Brixcoin and the currencies that came before it would not exist. We recognize the power of the original Bitcoin creation and we honor the spirit of open source and the financial revolution it embodies, by taking what exists and striving to apply it to the benefit of communities around the world.

WWW.BRIXCO.IN

BRIXCOIN VISION

Putting Coins In Wallets & Cash In Pockets

The BRIX Community Comprises Many Individual Parts Molded Into A Collective To Benefit Impoverished Communities Worldwide …

'Brick' production worldwide is one of the largest impoverished industries & their communities are some of the poorest in the world. THIS was the initial driving force behind the creation of BRIX.

This is, by no means, the only project worthy of our time and effort as a community. However, even if we save a single 'donkey' in the process, we will have accomplished just one of our long list of project goals.

During this vision, we encourage all BRIX Community Members (BCM's) to participate and share their hopes and dreams, so that we may amplify & support those members to their ultimate goal.

Reference : https://www.antislavery.org/report-slavery-india-brick-kilns

The Brixcoin Special Projects Initiative

Through the use of the BRIX coin wallet and code, the BRIX community and crypto technology in general, Brixcoin will drive the **The Brixcoin Special Projects Initiative** to achieve our vision.

Please See The Section Below For Further Details …

OR

Contact Us Today

Bitcoin, Dash & The Cryptocurrency World

Dear Prospective Brixcoin Community Member,

It is important for you, the reader of this white paper, to understand the origins of the Brixcoin currency and the origins of much of the technical content of this white paper. Brixcoin is a code fork of the Dash cryptocurrency. That means we took an existing open source licensed project and created a copy of it and then over time have been writing our own code and tweaking the existing code to enable the project that we envision.

The **Brixcoin** project and **BRIX Community Members (BCM's)** will become the defacto mechanism, method and driving force behind the Brixcoin vision.

We must though, acknowledge our gratitude to the Dash team for the high-quality platform they have built which has allowed us to launch and build the Brixcoin network and blockchain. Without their tireless work and dedication to creating a powerful base upon which to build our vision, Brixcoin would have been much more difficult to accomplish.

We want to thank and recognize the Dash team for their work. While we are pursuing a different path technically and strategically, it is in the spirit of Open Source, that we share our code just as Dash shared theirs. All of us collectively, in the cryptocurrency community, are working toward a better future for the planet.

Thank you,
The Brixcoin Team

Fair Public Launch

Brixcoin does not have any developer pre-mined blocks.

Brixcoin has not been launched through an ICO or as part of an existing ICO.

No Initial Investor Funding has been used for the BRIX coin project.

Brixcoin's initial infrastructure funding has been provided by the founders directly.

Preparation For Day 1 Launch

23rd - 24th August 2018

1. Two dns seed nodes will be compiled and launched/activated
2. **The Brixcoin Special Projects Initiative** wallet will be established and activated to collect the initial mining rewards to fund the 1st 50 masternodes, any balances in excess of that will be disbursed to The Brixcoin Special Projects Initiative.
3. One single node (brixcoin wallet) cpu miner instance (4 cores) will be launched to mine the coins for the 1st 50 masternodes (50050 BRIX Coins)
4. Once the required 50050 BRIX have been secured the miner instance will continue running on 1 cpu core until the 1st 10 masternodes and wallets are active and processing, all excess coins generated from this mining instance will go into The Brixcoin Special Projects Initiative wallet for later disbursement back into the community.
5. Two primary masternodes will now be setup and configured to kickstart the masternode network and be ready for launch day.

Day 1 - The Launch - 25 August 2018

The Official BRIX Coin Launch Day

1. 25 August 2018 Community Website Portal launch and open for registration of masternodes.
2. The initial windows desktop wallets will be available for download and activation.
3. Initial Masternodes and masternode startup coins(collateral) will be allocated via shop sales to the initial masternode owners for setup.
4. Initial Brix Coin Community Member's masternodes will be activated to start securing the network.
5. The activation and onboarding of the masternodes will commence.
6. An official announcement will be posted on the bitcointalk forum.

Technical Info - Primer

Block Time Target

Brixcoin runs at a proposed "two and a half minutes" block time. Brixcoin uses this block time as a compromise between Bitcoin's long block time, and an excessively fast block time. This adds to Brixcoin's overall security and stability.

Reward Halving (BRIX Coin Supply)

An approach similar to DASH has been taken to restrict the inflation of mining with BRIX, using a 7% reduction of the coin supply per year. This is done as opposed to the halving principal being implemented by many other currencies. In addition, the supply of each block is directly relative to the number of miners (Hash Power) on the network; more miners results in lower mining rewards.

Production of BRIX is scheduled to carry on throughout this century and onto the next, slowly winding down until near the year 2155, when the theoretical production of new coins will come to an end.

Nobody truly knows what the near or distant future holds for us, however we envision a future for BRIX that encompasses our grandchildren and their grandchildren into the future.

Block Reward Split

Each block reward is split between miners, masternodes and BRIX Decentralized Governance *(Please refer to the Decentralized Governance section below).*

The initial mining rewards split (MRS) will start at 20/80 in favour of the miners. This initial split will encourage BRIX members to help jump start the BRIX network by contributing some of their cpu/gpu/asic resources to securing the network.

45%	Mining Reward
45%	Masternode Reward for Proof-of-service
10%	Decentralized Governance Budget

Figure 1 Final Rewards Split

The eventual split will be 45% to miners, 45% to masternodes, and 10% to the BRIX decentralized governance. This split rewards the miners for processing blocks while securing the network. It rewards the masternodes for securing the masternode network and processing InstantSend and PrivateSend.

The masternode network can also be used for future innovations such as an application layer for performing various community functions. The more miners and masternodes there are the more secure the network becomes against attack.

The 10% share to the decentralized governance is not "paid" out as part of every block reward but rather is distributed through the superblock approximately every 30 days once activated. The superblock pays out to qualifying "Special Project Proposals" in order of yes minus no votes (The mechanism by which the winning proposal is chosen) in that month's proposal queue.

Coin Supply

Brixcoin's theoretical coin supply is approximately 18,000,000 coins.

16,424,999 BRIX	Assuming zero budgetry allocation
17,999,999 BRIX	Assuming full budgetry allocation

Figure 2 Theoretical Supply

```
1    # click RUN button above
2    # computes the theoretical brix min/max coins generated over the next 250 odd years
3    # subsidy reduction interval in blocks (system constant)
4    CYCLE_LENGTH=225000
5    # blockchain state at first block
6    cycle_year = 2018.17248 # 2018-03-04 14:21:04
7    # 2018 + ((31 + 28 + 4 + (14 + ((21 + (04 / 60)) / 60)) / 24) / 365.25)
8    cycle_height = 1
9    cycle_outstanding = 2250000
10   # BUT, removing launch diff-adjust outlier and averaging-in the leap day minting...
11   # yr height block birthstamp    delta
12   # skews the results too much.
13   # experiments find this static value fits the current asic network better
14   #                     avg-min-per-yr avg-min-per-block
15   avg_blocks_per_year = float((365.25*24*60)/2.5)
16   # FORECAST
17   def block_subsidy_at(nHeight):
18       nSubsidy = float(5)  # assume minimum subsidy
19       for i in range(CYCLE_LENGTH, nHeight, CYCLE_LENGTH):
20           nSubsidy -= nSubsidy/14
21       return nSubsidy
22   future_year = float(cycle_year)
23   cycle_duration = float(CYCLE_LENGTH / avg_blocks_per_year)
24   totals = {
25       "max" : cycle_outstanding,
26       "min" : cycle_outstanding
27   }
28   print "approx          block       minimum       maximum      min/max   difference"
29   print "date            height       coins         coins     difference  percentage"
30   print "-------      ----------    ----------    ----------   ----------  ----------"
31   for block in range(cycle_height, cycle_height+(CYCLE_LENGTH*250), CYCLE_LENGTH):
32
33       future_year += cycle_duration
34       #year_part = int(divmod(future_year, 1)[1] * 12 + 1)
35       month = int(divmod(future_year, 1)[1] * 12 + 1)
36
37       cycle_subsidy = (block_subsidy_at(block) * CYCLE_LENGTH)
38       totals["max"] += float(cycle_subsidy * 1.0) # full budget allocated
39       totals["min"] += float(cycle_subsidy * 0.9) # no budget allocated
40
41       delta = totals["max"] - totals["min"]
42       delta_pct = (1.0 - totals["min"]/totals["max"]) * 100
43
44       #fmt="{:02d}/{}\t{}\t{:10,d}\t{:10,d}\t{:10,d}\t{:.2f}%"
45       fmt="{:02d}/{}    {:10,d}    {:10,d}    {:10,d}   {:10,d}        {:.2f}%"
46       mod_scale = int(future_year) <= 2075 and 1 or 5
47       if int(future_year) % mod_scale == 0:
48           print fmt.format(month, int(future_year), block + CYCLE_LENGTH, int(totals
             ["min"]), int(totals["max"]), int(delta), delta_pct)
```

Figure 3 Theoretical Coin Supply Calculation

Try the calculation estimates here:
https://repl.it/@awsafrica/SecondAlienatedIntercept

Difficulty Adjustment - Dark Gravity Wave (DGW)

Many coin networks could be easily manipulated by miners because the difficulty is only adjusted over large block spaces. This means large mining groups could mine coins e.g. 1024 blocks until the difficulty raised, and then turn their miners on to another coin for e.g. 2048 blocks. This manipulation of the blockchain would only benefit strategic mining groups aimed at getting rewards faster. Dark Gravity Wave (DGW) changes the difficulty every block which increases security by stabilizing the network from the "mining attacks".

Benefits of Dark Gravity Wave

Dark Gravity Wave uses multiple exponential moving averages and a simple moving average to achieve the smoother difficulty re-target mechanism. With BRIXCOIN the **Dark Gravity Wave** difficulty algorithm helps to make us immune to issues like multipools as it retargets difficulty every single block. Not just that; with **Dark Gravity Wave** the BRIXCOIN blockchain becomes more secure and block times become much more consistent; despite large fluctuations in mining power hopping on and off the chain. Apart from controlled difficulty some other benefits of Dark Gravity Wave are security, faster transaction, more miners and a reliable chain.

Masternodes

Each BRIX Community Member (BCM) will be issued with a "Ready To Run" vps server called a masternode. *(No technical Knowledge Required)*

Should you have the technical ability to set up a masternode yourself, then you can follow the setup guides provided on the www.brixco.in/masternodes website.

Each masternode is paid rewards in a pseudo random/roundrobin distribution style to facilitate InstantSend and PrivateSend. Most importantly, owning a masternode will also allow the owner to put in a proposal to the Decentralized Governance and to vote on Governance Project Proposals.

Decentralized Governance

The Brixcoin **Decentralized Governance Proposal Platform** will begin after block 250,000.

Decentralized governances will allow masternode holders to put in proposals for budgetary funds to be distributed to successful applicants.

All masternode holders may then vote on submitted proposals, and if successful, they are paid on the superblock which happens every 30 days after the Decentralized Governance Proposal Platform goes online.

This allows the community to help influence the future of BRIXcoin, submit proposals to help their local communities, and expand the BRIX Community work force. Since masternode owners will have an active role in the future of Brixcoin, it will also increase community activity.

Future BRIX Community Innovations

Cryptocurrency technology is constantly changing, so to this end, Brixcoin must also be constantly innovating. We use community suggestions to sort through the next technology and trends to advance Brixcoin.

We do this because there are so many different new technologies springing up that it's impossible for one person to keep track. While we innovate tried and tested new technology from other coins, The Brixcoin Community is also dedicated to creating our own innovations and methodologies.

We will do this by attracting developers and team members who believe not only in our cryptocurrency but also in our long-term goals of helping impoverished communities of the world.

The Brixcoin Special Projects Initiative

Brixcoin's vision To Benefit Impoverished Communities Worldwide will be achieved by helping people overcome the difficulty of accessing funding for their community projects. We will become their funding source, so that they may realize their potential ideas and enjoy fulfilling and creative lives.

One of the ways in which we will do this is by nurturing imaginative people who have solid ideas that have the potential to achieve positive social change within their communities.

The **Brixcoin Special Projects Initiative** will be set up to support individuals and small organisations with unusual or radical ideas at the earliest stage of development. This will allow for research, exploration and the necessary development work prior to launching and testing a new approach. Any venture with an end goal of contributing to the upliftment of impoverished communities throughout the world will have a voice within BRIX.

The Brixcoin Special Projects Initiative will effectively support individuals, partnerships and small organisations with "grants" of up to $10k ($15k in exceptional circumstances).

Funding ideas are rare in the philanthropic world, especially those at an early stage of development or conceptualisation. Most traditional funding sources usually shy away from funding individuals or small organisations.

However, Brixcoin and The Brixcoin Special Projects Initiative, realises that risk-taking in grant-making can yield great results. We know that unexpected outcomes can be as exciting as envisaged successes, and we are eager to learn and evolve from the entire range of our grantees' experiences.

In addition to the financial support provided to grantees, The Brixcoin Special Projects Initiative will offer a program of wrap-around community support: including but not limited to; monitoring, mentoring, coaching and learning events.

The Brixcoin Special Projects Initiative draws upon the expertise of the current and future BRIX community. Our interest is with our prospective philanthropists as much as their ideas, and we want to nurture and facilitate them with a network of peer support.

Conclusion

Brixcoin uses a mixture of Bitcoin and DASH code to achieve a secure and fast blockchain. With the x11 algorithm, quick block rewards, and a well thought out coin supply, we will be stable and valuable while still being a usable cryptocurrency.

The Brixcoin Decentralized Governance and Masternode code helps spread and unite the community members who will all have a true voice in the future of Brixcoin.

Lastly, our dedication to helping the world through **The Brixcoin Special Projects Initiative** and *"proposal-based funding"*, helps to market the coin to an ever-growing community and the world at large.

The Brixcoin Team

The Brixcoin team is truly international. Our team members work 'virtually', to create the powerful platform and cryptocurrency you have available for your use today.

By joining Brixcoin, YOU, ultimately, will become The Brixcoin Team

Every member of the team shares the core vision of molding a collective to the benefit of impoverished communities around the world. We can be reached via the channels below and welcome your feedback, ideas, and community involvement.

Without you, we do not have a reason to exist, so please come along and become…

A BRIX Community Member (BCM) Today!

Glossary

Altcoin
Generally, any crypto-currency other than Bitcoin or Ethereum. (Though some Bitcoin folks would probably still say Ethereum is an altcoin)

Tokens
Refers to the 'currency' of projects built on the ethereum network that have raised money via issuing their own tokens.

ICO (Initial Coin Offering)
Initial Coin Offering, somewhat like an IPO in the non-crypto world. Startups issue their own token in exchange for ether. This is essentially crowdfunding on the ethereum platform.

Blockchain (Transaction Ledger)
The classification of technology that crypto coins fall into. Blockchains are distributed ledgers, secured by cryptography. They are essentially public databases that everyone can access and read, but the data can only be updated by the data owners. Instead of the data residing on a single centralized server, the data is copied across thousands and thousands of computers worldwide. More detailed information available at: https://en.wikipedia.org/wiki/Blockchain

Node or Masternode
A publicly accessible computer/server that possesses a copy of the blockchain and is working to maintain or process transactions and functions for the network.

Mining
The process of trying to "Solve" the next block on the blockchain. It requires large amounts of computer processing power to do effectively and is rewarded with crypto coins.

Fungibility
Something fungible can be exchanged for something else of the same kind.

Daemon
Is a type of program on Unix-like operating systems that runs unobtrusively in the background, rather than under the direct control of a user, waiting to be activated by the occurrence of a specific event or condition.

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