BTCBYTE
.ORG

FAIR, GREEN, EVERYONE
CAN PARTICIPATE.

BtcoinByte Team / 2019

CATALOG

1.BACKGROUND

1.1 POC MINING

The full name of POC is proof of capacity, that is, the block generation right is determined by the storage capacity. The earliest POC was proposed and implemented by burstcoin in August 2014. Not enough attention. In 2017, the craze was covered by a bunch of POWs advocated by mining machine manufacturers, which has been unknown. POC mining uses processors or graphics cards to fill the hard disk space with hash data through special algorithms. This process is called plot disk, or P disk for short. During the period of p-disk, there is no mining revenue. After p-disk completes the opening mining, it cooperates with the main network of the project to continuously start the block. The hard disk submits the full hash data to the main network for verification through scanning, and verifies the block hash value and capacity proof. If a block hash value close to the correct or completely correct value is submitted within the fastest time of the block, the miner will be rewarded with the block, that is, the mining revenue. It's like a math contest where the person who gives the correct answer first and submits it to the examiner for confirmation will be rewarded. When you have more question banks and more knowledge reserves, you are more likely to get rewards, which requires capacity to reserve, that is, the capacity of the hard disk.

1.2 POW MINING

Pow, or proof of work, is to determine the distribution of money according to the effective work contributed by mining. Most public or virtual currencies, such as bitcoin and Ethereum, are based on the pow algorithm to achieve their consensus mechanism. In pow, the number of coins in each block has nothing to do with the number of coins it owns,

POW determines that you want to get more money by mining. It depends on the hardware itself, such as the operation speed of your graphics card, CPU and ASIC, which is the calculation power we often hear about, but this is the physical calculation power. POW mining is like distribution according to work. The greater the contribution, the more rewards.

1.3 DIFFERENCE BETWEEN POC AND POW

1.3.1 Energy consumption

POW because mining requires a lot of hash operations, with the increase of computing power, the cost of hardware and power will continue to rise. According to the encryption currency energy consumption index released by digiconomist.net, bitcoin mining currently consumes about 42.15-54.11 terawatt hours (TWH, 1 terawatt hour is 100 million kwh) of electricity per year. POC mining does not need a lot of hash operation. It uses mapping software to write hash value in advance, and uses CPU / GPU to retrieve hash value stored in hard disk. It can be mined without too much power consumption. The average power consumption of a PoC hard disk miner is about 300W, and the power consumption of 10 complete machines is only 3000 watts. The total power of so many machines is equal to that of two air conditioners.

1.3.2 Computing power

POW mining pool is the main force, the pool with high calculation power has the right of choice, and the miner has no right to participate in the decision. Whoever has the power of calculation can control the price. Many ASIC mining machine manufacturers or dachaoli mining pool are enough to affect the price of pow currency.

POC mining miners are the main force, and all miners have the right to participate in the decision.

1.3.3 Hardware

POW miner is currently divided into two categories, ASIC miner and video card miner. ASIC miner is a mining machine with designated currency, with high cost of new products, easy monopoly, fast product iteration, elimination and no switching of other mining projects. The main cost of the video card miner is the video card chip. The greater the computing power, the more high-end video card is needed, and the lower the maintenance rate after mining.

The main cost of POC miner lies in hard disk. Hard disk is a popular product. It is easy to buy and won't be monopolized. It has a high market share and can be used without worrying about iteration. There is no significant difference between the mining benefits of second-hand hard disk and new hard disk, such as home computer, home Data Storage NAS server, monitoring video storage machine, enterprise data storage server, etc. The wide use range and use value make the second-hand hard disk have excellent product preservation rate, and it is easier to sell or reuse.

1.3.4 Site selection

The pow power consumption is large and the heat is also very large. Only in the low temperature area and the excellent heat dissipation design of the machine room can the machine run in a stable working range. Due to the high power consumption and heat generation of the machine, high-speed violent fans are needed to provide heat dissipation. The noise of each machine is 80-100 decibels, equivalent to the noise of a small generator, which will produce serious disturbing noise in dense cities. Therefore, the mine is generally located in remote areas with low electricity price, low temperature throughout the year and far away from the urban area.

POC miner has three elements of comprehensive power consumption, noise and heat. It is not difficult to arrange dozens of POC miner in ordinary family study and enterprise office. There is no need to hire an operation and maintenance team. Even if the machine crashes, you can restart it at any time to solve the problem. Hardware replacement is simple and it is easy to buy spare parts.

2. BITCOIN BYTE OVERVIEW

2.1 BITCOIN BYTE INTRODUCTION

Bitcoin Byte (hereinafter referred to as BTB) is a new fair green encryption currency based on conditional proof of of of capacity (hereinafter referred to as CPoC). "Bit" comes from bitcoin. "Byte" is the basic unit of capacity. "Bitcoin byte" is a perfect combination of bitcoin (the ancestor of POW) and burstcoin (the ancestor of POC). It not only realizes "one person one vote" of bitcoin, but also solves the waste of pow resources. It also solves the problems of POC mining, including but not limited to uneven distribution, capacity compression, calculation force concentration, mining and pumping. BTB brings inclusiveness, unity and fairness to the community, and everyone participates.

2.2 BITCOIN BYTE PARAMETERS

1) Max supply: 21,000,000 BTB
2) Target blocktime: 4 minutes
3) Basic pledge ratio: (current total output) /(current average capacity)*10
4) Support on chain pledge:
➢ It takes effect after 6 blocks are confirmed.
➢ After 100 confirmed blocks can be withdrawn.

5) Initial block reward:

➢ Minimum 2 BTB (pledge ratio is less than basic pledge ratio).
➢ Up to 20 BTB (base pledge ratio greater than or equal to ten times).
6) Convergence issue:
➢ When the output reaches 10.5 million BTB, the first reward will be halved.
➢ The second half was when total supply is 15.75 million BTB.
➢ After each halving, the next halving is performed when the output reaches half of the difference between the previous two halvings.
7) Initial allocation:
➢ BTB Foundation 8%, a total of 1.68 million BTB.
➢ Unlocked 80,000 BTB for IEO to pay upfront development costs and promotion costs.
➢ Unlock 100,000 BTB for community promotion rewards and standby funds (without participating in any collateral).
➢ Locked 1.5 million BTB and unlocked 0.5 BTB per height for team-related expenses, server, node, and code maintenance costs (freezing period up to 25 years). The initial allocation is completed in the genesis block and is included in the total issuance volume. Unlocked coins are not included in the calculation of the pledge ratio.
8) Open source code:
➢ BTB is forked from Bitcoin Core 0.18.
➢ BTB is an open source community project, and the team will open source the code after confirming the security and robustness of the code.

2.3 BITCOIN BYTE FEATURES

2.3.1 Dynamic pledge,dynamic output, without kickback

➢ The pledge ratio is infinitely close to the ratio of current total output and network computing power.

➢ Calculation formula of basic pledge: divide the current total output by the current average capacity (TB) × 10 assume that the basic pledge is X BTB /1(TB)

Pledge Ratio	Output (BTB)
0-X	2
X-2X	4
2X-3X	6
3X-4X	8
4X-5X	10

➢ After 5X, round down according to actual pledge:

a. 5.15X pledge: Get 5.1 * 2 output.

b. 9.99X pledge: Get 9.9 * 2 output.

c. Maximum output of 20 BTB (10 times the base pledge ratio)

2.3.2 Perfect POS economic model

The BTB wallet has a pointing function, and the owner of the coin can point to others for pledge mining and improve the mining income. Holding coins is POS mining. Pointing to a loan and cooperation relationship, the currency owner can revoke at any time to ensure the security of funds. With the increase of computing power, the demand for coins will be more and more, which is beneficial to the coin holders.

2.3.3 Dynamically limit single plotter ID capacity

To facilitate the participation of miners with small computing power, the BTB solution：

➢ The capacity of plotterId is dynamically limited. The deadline submitted after exceeding the capacity will be rejected by the entire network.

➢ The mainnet plotterId capacity is limited to the maximum of 256TB or (full network capacity (TB) / 5040).

2.3.4 Mining poc2-compatible currencies

At this stage, there are many POC currencies. BTB welcomes miners from other POC currencies to participate in mining, bringing tolerance, uniformity and fairness to the community.

2.3.5 Pre-mined coins have been locked for up to 25 years

Locked up 1.5 million BTB, and unlocked 0.5 BTB per height for team related expenses, server, node, and code maintenance costs (freezing period up to 25 years).

3.ROAD MAP

1. November 12, 2019: The BTB genesis block was dug out, launched IEO, and released 80,000 BTB to the miner community.

2. December 12, 2019: BTB achieves an average computing power of 100PB, the computing power continues to grow, the main network is stable, and the official website version 2.0 is upgraded.

3. In 2020, the globalization of the community will preach the global POC miners and raise the POC consensus.

4. The community matured, and the benign increase in computing power went online with a world-class exchange.

5. After the computing power of the entire network is stable, we will develop a distributed cryptocurrency stable currency system based on BTB to provide currency and finance to the world.