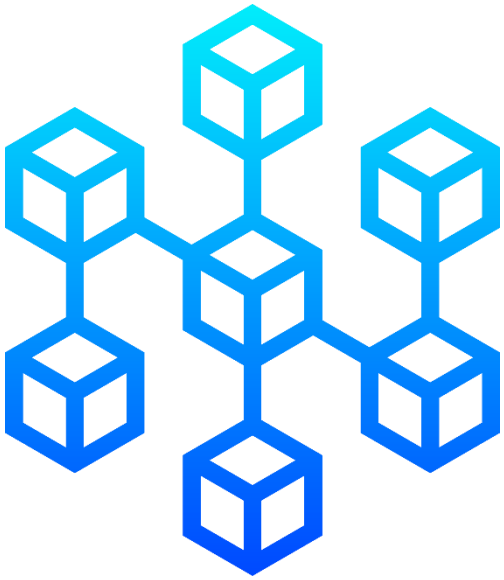


PLUS

Whitepaer for PLUS token ver 1.0

Blockchain

Blockchain is a distributed database technology that safely stores and manages data. The main features of blockchain are as follows:

1. Distributed: Data is distributed and stored on multiple computers (nodes), so there is no need for a centralized server.

2. Immutability: Data recorded once cannot be changed, which increases the reliability of the data.

3. Transparency: All transaction records are public and can be verified by anyone.

4. Security: Data safety is guaranteed using encryption technology.

Blockchain is mainly used as a platform for executing cryptocurrencies (e.g. Bitcoin, Ethereum) and smart contracts.

1. Distributed ledger

Blockchain stores data distributedly on multiple nodes (computers) rather than on a centralized server. All nodes maintain the same ledger, which ensures data consistency and reliability.

2. Block and chain

Blockchain consists of multiple blocks, each block containing transaction data and the hash value of the previous block. This causes the blocks to be linked in a chain, so if the data in one block is changed, all subsequent blocks are affected. This ensures the immutability of the data. 3. Encryption

Blockchains increase security by encrypting transaction data. Each block uses a hash function to generate a unique hash value, and this hash value changes when the contents of the block are changed, so the integrity of the data can be verified.

4. Consensus Algorithm

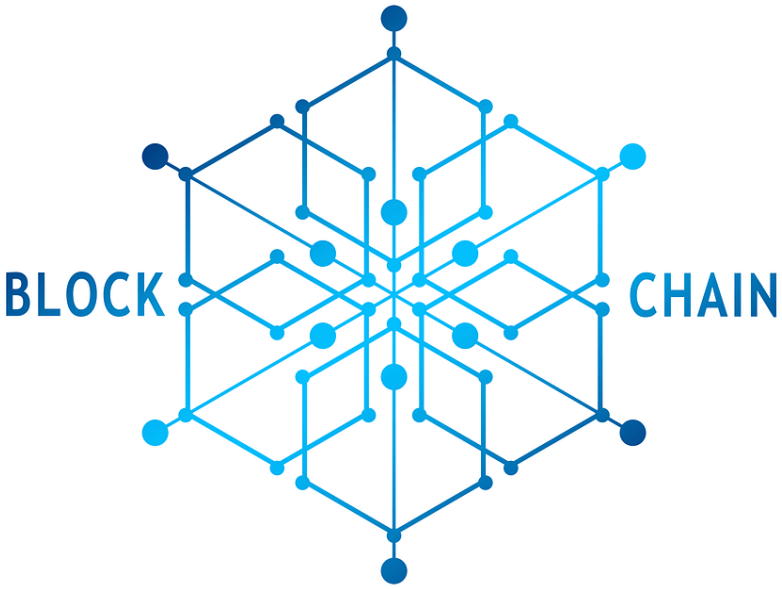
Blockchains use a consensus algorithm to maintain the same transaction record for all nodes in the network. Representative consensus algorithms include Proof of Work and Proof of Stake. These algorithms verify the validity of transactions and coordinate the process of adding new blocks.

5. Transparency and Anonymity

Blockchains provide transparency in that all transaction records are public and can be verified by anyone. However, users' identities are displayed as encrypted addresses, so anonymity can be maintained.

6. Smart Contracts

Blockchains support automated transactions through smart contracts. Smart contracts are programs that are automatically executed when certain conditions are met, enabling reliable transactions without an intermediary.



Each block in the blockchain is created through the following process:

1. Transaction Collection

The first step in block creation is to collect transactions occurring on the network. When a user requests a transaction on the blockchain network, the transaction is stored in the memory pool (or transaction pool). This pool holds all transactions that have not yet been included in a block.

2. Block Generation

When a certain number of transactions are collected, a new block is generated. This process usually involves the following steps:

• Transaction Selection: Miners (or block generators) select transactions from the memory pool and include them in a new block. Transactions with higher transaction fees are often selected first.

• Block Header Composition: The header of a new block contains the following information:

• Hash value of the previous block

• List of transactions in the current block

• Timestamp

• Difficulty Target

• Nonce: A random number required to generate the block

3. Consensus Algorithm

To generate a block, miners use a consensus algorithm to verify the validity of the block. The most common method is Proof of Work. This process is as follows:

• Hash Computation: Miners calculate a hash value of the block header. This hash value must satisfy certain conditions (e.g. a certain number of leading zero bits). • Nonce adjustment: The miner repeatedly calculates the hash value while changing the nonce. This process is repeated until a hash value that satisfies the condition is found.

4. Block verification and propagation

Once a valid hash value is found, a new block is created. This block is propagated to other nodes in the network for verification. Other nodes check the validity of the block, verify that all transactions are valid, and that the connections to previous blocks are correct.

5. Block addition

Once the block is verified, each node adds the new block to its own blockchain. This permanently

records the new block on the blockchain.

6. Reward

The miner who successfully creates a block is rewarded with a new cryptocurrency (e.g. Bitcoin) and the transaction fees included in that block.

During the block creation process, transaction data goes through several verification processes. This process is essential to maintain the security and integrity of the blockchain. The main steps in transaction data verification are as follows:

1. Transaction format verification

Before a transaction is included in a block, basic format verification is performed. This step checks that the structure of the transaction is correct. For example, it checks that the inputs and outputs of the transaction, signature, etc. are correctly included. 2. Signature Verification

Each transaction is signed with the sender's private key. Nodes in the blockchain network verify this signature to confirm that the transaction was actually created by the sender. The signature verification process is as follows:

• Public key usage: The signature is verified using the sender's public key. This process verifies that the transaction data and the signature match.

3. Balance Verification

To confirm the validity of the transaction, verify that the sender's wallet has sufficient balance. This is the process of confirming that the transaction inputs actually exist and that the sender holds the corresponding assets.

4. Duplicate Transaction Prevention

The network has a mechanism to prevent duplicate transactions so that the same transaction is not processed multiple times. To this end, each transaction has a unique identifier (transaction ID), and transactions that have already been processed are removed from the memory pool.

5. Smart Contract Verification (if applicable)

If the blockchain platform supports smart contracts, verify that the transaction satisfies the conditions of the smart contract. This is the process of determining whether the transaction is valid according to the rules of the contract. 6. Verification via Consensus Algorithm

Before a block is created, miners verify that the transaction is valid and include it in the block.

During this process, the validity of the block is verified through a consensus algorithm (e.g., proof of work, proof of stake, etc.). All nodes verify that the transactions included in the block are valid and decide whether to add them to the blockchain.

7. Network Verification

When a new block is created and propagated to the network, other nodes verify the transactions in the block. During this process, each node verifies that all transactions included in the block are valid and decides whether to add them to the blockchain.

ERC20 Token

ERC20 is a standard specification for tokens issued on the Ethereum blockchain. ERC stands for "Ethereum Request for Comments", and 20 is the unique number of this standard. The main features of ERC20 tokens are as follows:

1. Compatibility: All tokens that follow the ERC20 standard are interoperable on the Ethereum network. This means that they can be easily traded on various wallets and exchanges. 2. Smart Contract: ERC20 tokens are issued through smart contracts, which define the functions of issuing, transferring, and checking the balance of the token. 3. Flexibility: Developers can easily create their own tokens based on the ERC20 standard. This is often used as a method of fundraising, such as an ICO (Initial Coin Offering).