

# Blockchain

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## Contents

# 1 Block

Each user owns a pair of private and public key.

All the transactions broadcasted to the network are grouped into blocks, which contain

- Merkle tree root hash
- Timestamp
- nBits
- Nonce
- Previous block hash
- Number of transactions

# 2 Proof of Work

Proof-of-Work (PoW) is a cryptographic proof that a party has spent a certain amount of computational effort.

When a miner solves the puzzle the current block is archived, a new block is generated and all the transactions in the previous block are confirmed. The miner is then rewarded by the system.