Transaction Execution and Distribution

Transaction

A transaction is a new record of exchange of some value or data between two public addresses of the blockchain . Transactions can happen in new node and takes time to get verified when a new block is created containing that transactions.

Transactions are data structures that encode the transfer of value between participants in the bitcoin System.

The process of transaction verification and recording is immediate and permanent.

Transaction is approved through a process known as consensus.

Although most transactions are organized as address payments (based on a script called Pay-to-Public-Key-Hash, or P2PKH), bitcoin transactions may also use other forms of scripts, besides addresses and amounts, and contain additional details.

How Transaction is Committed?

Stage 1: Initiation of transaction proposal

Stage 2: Transaction is broadcasted
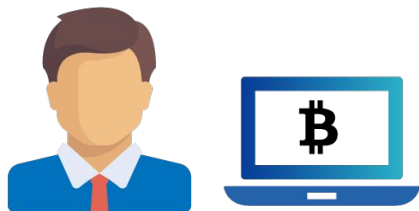
Stage 3: Transaction is verified

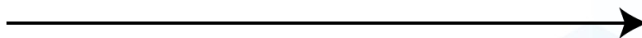**Stage 4**: Transaction Commitment.

How transaction is committed?

Stage 1: Initiation of transaction proposal
At initial stage, transaction is created and signed by the owner.

Transaction is created, with amount of bitcoins and Bob's address.
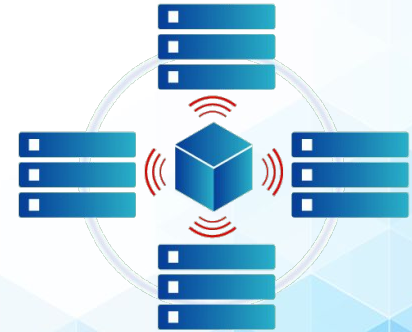
User created a transaction

User signed the transaction

How transaction is committed?

Stage 2: Transaction is broadcasted

At this stage, transaction is broadcasted to the network.
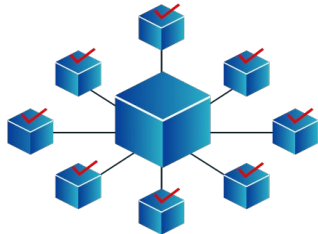

Signed Transaction

**Transaction is broadcasted
to the Network.**

How transaction is committed?

Stage 3: Transaction is verified

Once the transaction is broadcasted to the network, other authorized nodes verify it. If transaction is valid, it is added to a Block, and if not, nodes reject the transaction.

Transaction is verified by other nodes in the network.

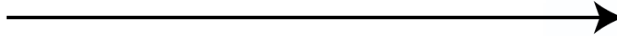Transaction is bundled into a Block with other transactions.

How transaction is committed?

Blockchain Council™

Stage 4: Transaction is committed

Finally the Block is added to the Blockchain, and transaction is committed.

Block is added to the blockchain

Transaction Completed