STREAKK

# A 3rd Generation Blockchain

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Streakk Blockchain is a super blockchain on which you can build your own blockchain. Streak helps to explore the potential of their cryptocurrencies, powered by the following features:

- Fixed fee of $0.0001
- Over 100,000 transactions per second [TPS]
- 2 to 4 seconds of transaction confirmation time
- 0.00012 KWH Energy Use Per Transaction
- High Scalability

The Streakk blockchain is a highly advanced blockchain with unique features and capabilities. Customers can create their specialized blockchain over Streakk's main chain. It will help developers create a specific, tailored blockchain without impacting the main blockchain. Building a side chain on Streakk's main chain offers increased flexibility and scalability while leveraging the security and trust of the main chain.

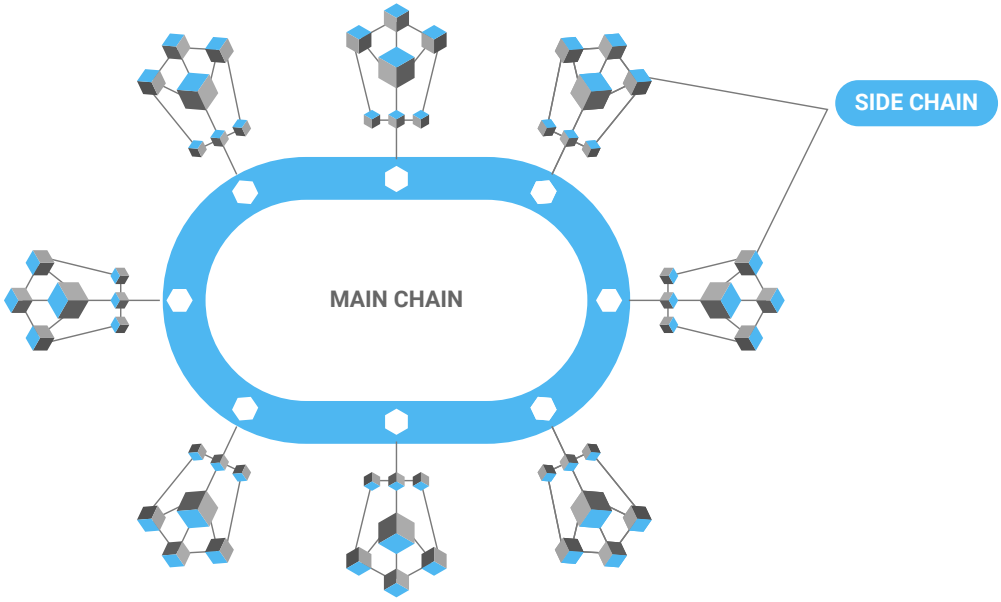
| | 1ST GENERATION<br>BITCOIN<br>BTC | 2ND GENERATION<br>ETHEREUM<br>ETH | 3RD GENERATION<br>STREAKK<br>STKK |
|---|---|---|---|
| TRANSACTIONS PER SECOND | **3+** TPS | **12+** TPS | **100,000+** TPS |
| AVERAGE FEE | **$19.26** USD* | **$14.71** USD* | **$0.0001** USD* |
| TRANSACTION CONFIRMATION | **10-60** MINUTES | **10-20** SECONDS | **2-4** SECONDS |
| ENERGY USE PER TRANSACTION | **885+** KWH | **102+** KWH | **0.00012** KWH |
| SCALABILITY | **LOW** | **MEDIUM** | **VERY HIGH** |

*Average fees of network May 2021

# Multi-Chain Architecture

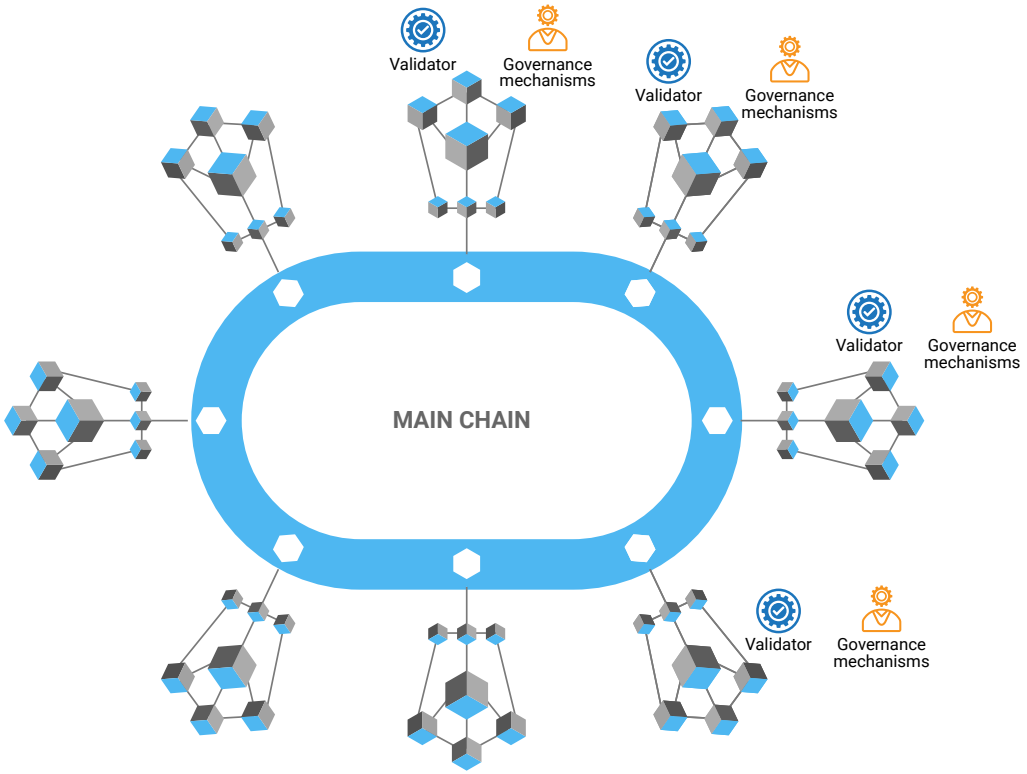
Streakk's multi-chain architecture provides a flexible and scalable solution that processes high transaction volumes and supports various use cases. The multi-chain architecture utilizes multiple independent chains to process and store transactions. This approach improves the network's overall efficiency.

The Streakk Main chain stores the most critical and sensitive data. The main chain plays a crucial role as the anchor chain that ensures the security and integrity of the entire network. It is the primary blockchain that serves as the backbone of the sidechain network, providing a reliable and trusted platform for the sidechains to operate on. Its robust consensus mechanism and high-security level help prevent any malicious activity or tampering within the sidechain network. The main chain also ensures that any assets or data transfers between the sidechains and the main chain are secure and immutable.




**Multi-Chain Architecture**

On the other hand, the side chains are the secondary blockchains that operate alongside the main chain but are designed to have a specific purpose. Each side chain has its own validators and governance mechanisms, independent from each other. Sidechains can be used to process particular types of transactions, create new applications, or provide additional capacity for the network. Sidechains are connected to the main chain through a two-way peg mechanism that enables data to be securely transferred between the sidechain and the main chain. Sidechains can operate with different rules and consensus mechanisms than the main chain, providing greater network flexibility and customization. The main and side chains work together to create a more efficient and scalable blockchain network, providing a seamless and flexible experience.



# Why Side Chains?

Sidechains are a solution to two basic problems in blockchains:

- **Scalability:** It is challenging to scale a blockchain that serves multiple purposes since new implementations and upgrades would probably favor some use cases while clashing with others. On the other hand, having multiple blockchains will let them add functionality without clashing with the others.

- **Flexibility:** It is reasonable to assume that a blockchain will either be incredibly good at solving one problem or not so good at trying to solve numerous problems. A blockchain specializing in solving a specific problem has more leverage toward itself and its users. The highly specialized, purpose-built blockchains known as sidechains can benefit from one another by working together.

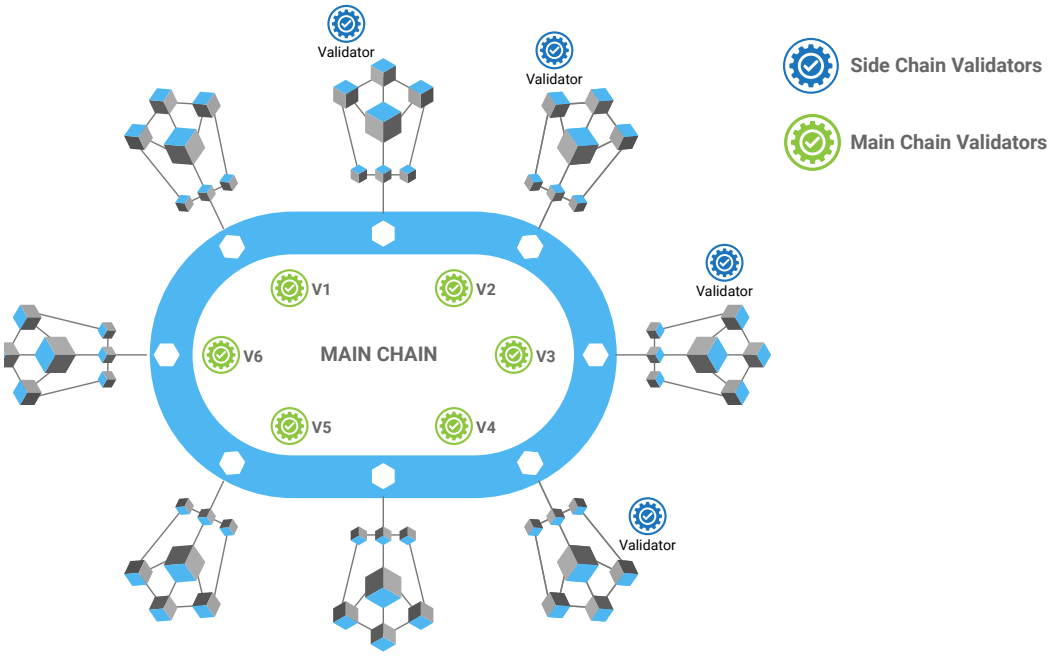
- **Shared Security:** One of the advantages for chains thinking about becoming sidechains and joining the Streakk is shared security, which basically means that the economic security offered by the Main Chain validators will be shared by any sidechains that are connected to the Mainchain.

# Main Actors

Validators play an important role in both the main and side chains.

**Validators (Main Chain):** On the main chain, validators are responsible for verifying blocks and adding them to the blockchain. They use Streakk's proprietary consensus mechanism to validate blocks and ensure the security and integrity of the blockchain network.

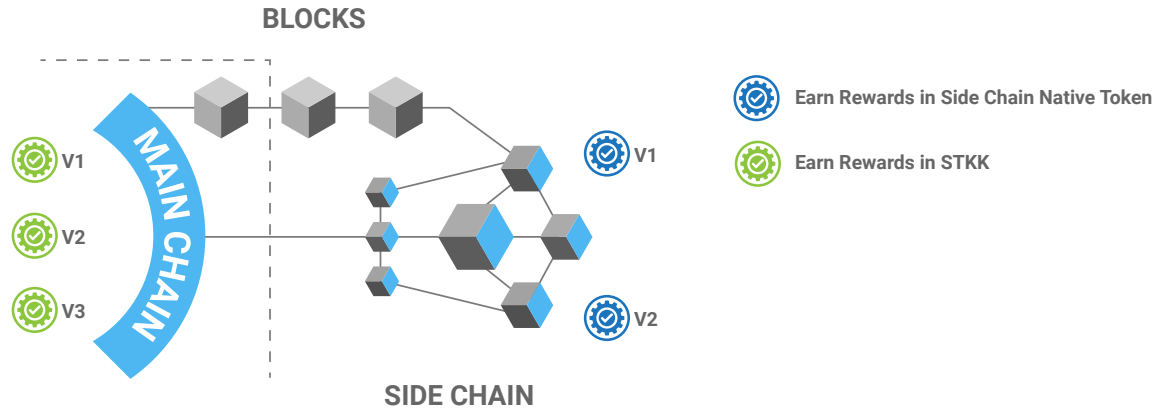
**Validators (Side Chain):** On the side chain, validators perform a similar function but with a focus on processing transactions within the sidechain network. Validators on the sidechain use a consensus mechanism specific to the sidechain to validate transactions. They are responsible for verifying transactions, adding them to the sidechain, and completing the blocks, which enable blocks to be validated on the main chain.



Validators on the side chain get rewards in the native side chain asset for validating the transactions and completing the blocks.

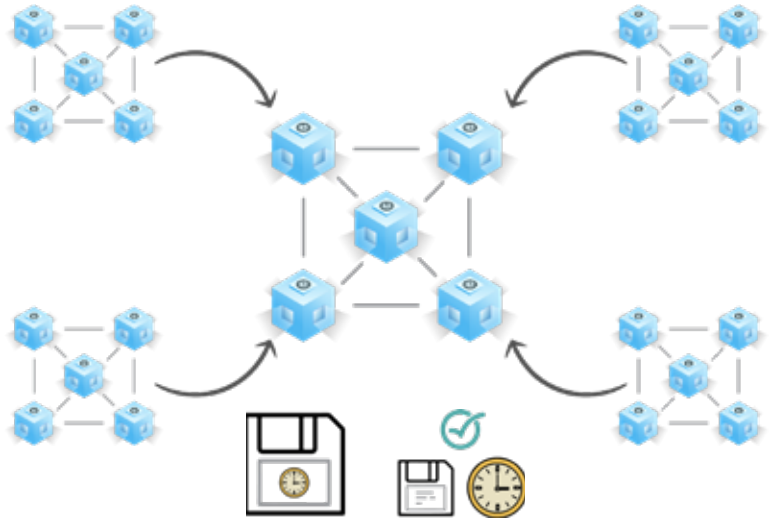
**Main Chian Validators, on the other hand, validate the blocks created on the side chain and earn the rewards in STKK.**

In both cases, validators play a critical role in maintaining the security and integrity of the blockchain network. They are responsible for ensuring that transactions are processed accurately and efficiently and protecting the network against malicious activity or tampering.



# Streakk's Proprietary Consensus Algorithm

Streakk uses a proprietary consensus algorithm, which is a combination of Proof of Stake [PoS] and Simple Time Protocols [STP]. Combining PoS and STP creates a hybrid consensus mechanism that combines the benefits of both protocols.



**Data exists at a particular time**

## POS + STP = Extremely Fast Blockchain Transactions

Proof of Stake [PoS] is a consensus mechanism that uses a form of virtual mining where validators are chosen to create and validate new blocks based on the amount of stake they hold in the network. It means that validators who hold more stakes have a greater chance of being chosen to create new blocks and earn block rewards.

The Simple Time Protocol incorporates a clock into the blockchain. The clock verifies the time between two events. It provides the validators in the network with knowledge of the timestamp of events. The feature reduces the redundancy of checking with all validators back and forth when recording a transaction. STP helps encode a trustless passage of time into the ledger. Therefore, the nodes can generate the next block without waiting to align with the entire network beforehand. It reduces the consensus overhead.

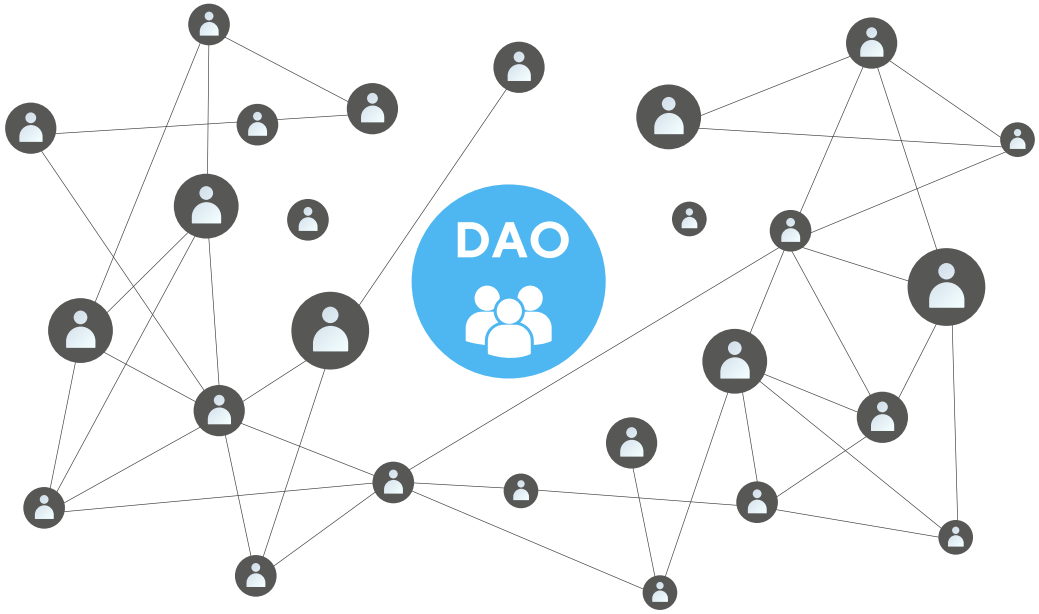
When PoS and STP are combined, the STP component can be used to create a reliable and tamper-proof time-based record of transactions, while PoS can be used to validate new transactions and create new blocks based on the amount of stake held by the validators. This hybrid consensus mechanism provides faster transaction times, lower energy consumption, and improved security.

This combination creates a more efficient and secure blockchain network that supports various decentralized applications and use cases.

# Governance Mechanisms

Streakk follows the DAO (Decentralized Autonomous Organization) governance mechanism. It enables decentralized decision-making and community-driven development.

DAOs are implemented as smart contracts executed on the blockchain. The smart contract code defines the rules and governance structure of the DAO, including the decision-making process, voting procedures, and management of the DAO's assets.




Sidechains may use different governance mechanisms, consensus algorithms, interoperability protocols, and smart contract languages depending on their use case. Sidechains can be designed to have specific features or functionalities unavailable on the main chain, allowing developers to create new types of governance mechanisms that may be more effective for particular use cases.

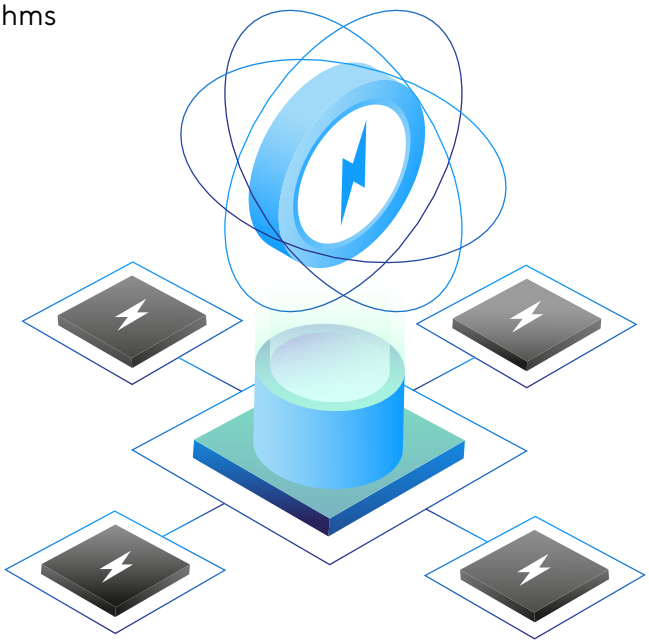
# Use Cases

### Governments on Blockchain:

Streak's multichain architecture enables governments to build on top of the Streak main chain and use their own governance mechanisms and consensus algorithms

### Financial Institutions:

Building a side chain allows financial institutions to bring all their data onto the blockchain with the security and trust of the main chain.



### Central Bank Digital Currencies [CBDC]:

Streakk's Blockchain can enable the issue and management of Central Bank Digital Currencies (CBDCs) in a more efficient and scalable manner. CBDCs can benefit from the faster transaction processing times and lower transaction fees that Streakk provides.

### Stablecoins:

Deploys stablecoins to make them more viable for smaller transactions.

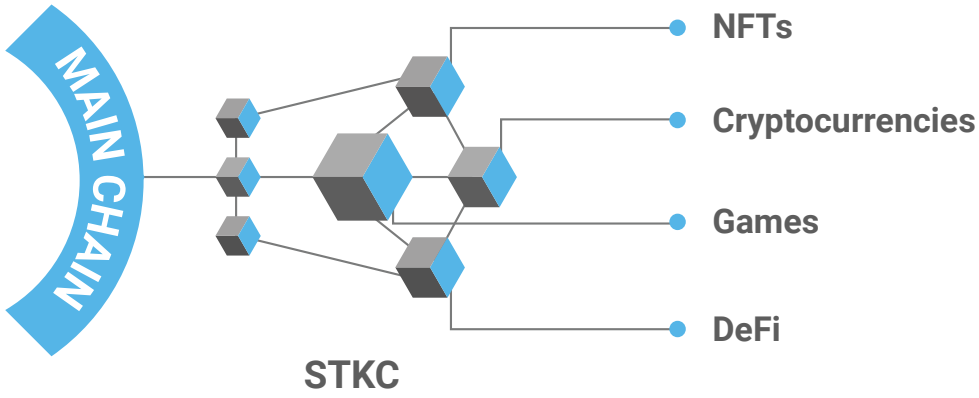
# Streakk Chain

Streakk Chain is the first side chain built on Streakk Main Chain. It is an application-specific data structure that is globally coherent and can be validated by the validators of the Main Chain. Streak Chain has its own validators. The role of these Validators is to maintain a full node of the Streakk Blockchain, retain all necessary information about the blockchain, and produce new blocks to pass to the MainChain validators for verification and inclusion in the MainChain

The Validators of Streakk chain are incentivized in the STKC. They are not required to be staked on the Main Chain or own the native token of Main Chain

Streakk Blockchain serves as a gateway to WEB3 projects. These can build on Streakk Chain and benefits from the security, scalability of the Mainchain

1. **Non-Fungible Tokens (NFTs):** Streakk Chain the perfect choice for NFTs as it provide secure and affordable transactions.
2. **Cryptocurrencies:** Streakk Chain helps maximize the potential of cryptocurrencies by giving them excellent day-to-day utility.
3. **Games:** Streakk Chain is perfect for Web3 games and P2E (Play to Earn games)
4. **Decentralized Finance (DeFi):** By using Streakk chain for DeFi, users can benefit from faster processing time and increased flexibility.

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