KRONA
A DECENTRALIZED PAYMENT NETWORK BUILT FOR INSTANT PEER-TO-PEER TRANSACTIONS
SUMMARY

- The Next-Gen Cryptocurrency
- XKN Ledger
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- Consensus Algorithm
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  - Candidate Nodes
  - Consensus Nodes
SUMMARY

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• Token Distribution
• Krona Development
• Contribute to Krona Network
• Links
• Meet the Founder
THE NEXT-GEN CRYPTOCURRENCY
NEXT-GEN CRYPTOCURRENCY

- Krona’s XKN Ledger is a state-of-the-art blockchain
- Unique egalitarian token distribution mechanism through RandomX PoW
- Unique dBFT consensus algorithm with on-chain governance built-in
- Near instant transaction settlement
- Built from the ground up as a global decentralized payment network
XKN LEDGER

• The XKN Ledger is a slightly different take on Satoshi’s brilliant Bitcoin white paper, sharing the same principles and ideology as BTC: a decentralized Peer-to-Peer cash system

• Running on a state-of-the-art consensus algorithm that allows for near instant transaction settlement time

• Completely decentralized in its development and on-chain governance, with no ICO fund raising or pre-mined coins
XKN LEDGER CHARACTERISTICS

- Delegated Byzantine Fault Tolerant (dBFT 2.0) consensus algorithm
- 5 seconds block time
- One block finality: transactions are confirmed and irreversible once they’re put into a block
- Optional transaction fees; adding fee would make it higher priority
- Transaction scripting with Smart Contracts
- 21,000,000 Kronas (XKN) maximum supply
- Kronas (XKN) has 8 decimal places
CONSENSUS ALGORITHM

- Byzantine Fault Tolerance mechanism is a universal solution for distributed systems
- **XKN Ledger** proposes **dBFT 2.0** consensus algorithm based on PBFT (Practical Byzantine Fault Tolerance) algorithm
- The algorithm determines validator set according to real-time blockchain voting, which effectively enhances the effectiveness of the algorithm, bringing block time and transaction confirmation time savings with a 3-stage consensus as well as a recovery mechanism

- Network nodes can be classified in four groups: **Regular, Standby, Candidate** and Consensus Nodes
REGULAR NODES

- Most common nodes in the network
- Used by exchanges, service providers, custodial wallets, and regular users that want to run their own copy of the blockchain
- Mainly responsible for interacting with the blockchain by sending & receiving transactions, and computing the wallet balance in the Krona Payment Network
- Does not contribute with network consensus
**STANDBY NODES**

- The *first set of nodes* present in the network during genesis
- *Contribute to consensus* during the early stages of the network
- A *predefined set of contributors* will be given the *right to run a Standby node*; defined prior to the network launch

- Who has the right to run a Standby node?
  - *Top 5 GitHub contributors* from now until the mainnet launch
  - *Top 10 donors* to the Krona project from now until the mainnet launch

- Must have 24/7 server availability to assure healthy transaction times at mainnet launch
CANDIDATE NODES

- Nodes willing to contribute with the network consensus
- Not yet contributing to consensus; needs on-chain governance approval through Krona’s unique Election Mechanism
- Anyone can vote, at anytime, with their Kronas (XKN) into a set of Candidate Nodes they feel deserves to participate in the network consensus
CONSENSUS NODES

• Nodes effectively contributing with network consensus by validating transactions through the dBFT 2.0 consensus algorithm

• Earn rewards in Krona (XKN) based on our unique distribution system

• Must have 24/7 server availability to assure healthy transaction times
  
  • Gets gradually penalised if fails to contribute to consensus due to network inactivity or as a byzantine node
ELECTION MECHANISM

• **Anyone** can apply as a Candidate Node by paying an entry fee to the network
• A **decentralized election mechanism** defines the next set of Consensus Nodes, in real time
• Consensus Nodes have the power to decide on the network transaction fees, maximum transaction per block and other variables
• Standby nodes are susceptible to the same Election Mechanism that Consensus Nodes are, and can be voted out of the Standby list if the users chooses so
ELECTION MECHANISM

- **Anyone** can vote into a specific or set of Candidate Nodes of their choice **by allocating Kronas (XKN)** to them, the vote weight being **proportional** to the amount of XKNs in the voter’s wallet. Funds **never leaves** your wallet when you vote, but spending the XKNs used to vote with removes your vote on the Candidate Nodes by a proportional amount of XKNs being used.

- The election mechanism **runs in real time**, per block, assuring that the list of Consensus Nodes is always changing based on the network choice. This guarantee competitiveness among Consensus Nodes to provide the best user experience possible and punishes the ones with bad reputation.
TOKEN DISTRIBUTION

• **Egalitarian token distribution**; anyone can participate in the distribution, at anytime
• No Initial Coin Offerings (ICO); no pre-mined coins

• Distribution works by solving a RandomX Proof-of-Work problem every 60 blocks (approx. 5 minutes)
  • The problem is based on a key block hash and changes once someone finds a solution
  • The first to submit the PoW solution to the network gets a **reward** in Kronas (XKN)
  • 75% of the reward goes to the user that solved the PoW problem
  • 25% of the reward is split among all Consensus Nodes in the network
  • The difficulty of the RandomX PoW problem varies accordingly to maintain a constant emission of rewards every 5 minutes, on average
TOKEN DISTRIBUTION

• The token distribution phase should take 4 years to complete
• Max supply of 21,000,000 Kronas (XKN) should be in circulation by the end of the distribution phase; 4 years
KRONA DEVELOPMENT
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• The Krona Payment Network is already under advanced development

• What’s already done:
  • XKN Ledger with dBFT 2.0 consensus algorithm, and election mechanism
  • XKNL-VM to interpret Smart Contracts
  • Krona Wallet; a multiplatform GUI wallet

• What’s still under development:
  • Token distribution through RandomX proof-of-work
  • Enhance election mechanism to apply penalties to Consensus Nodes with bad uptime and other undesirable behaviours

• Mainnet expected to launch by late 2021
CONTRIBUTE TO KRONA NETWORK
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• Technical contribution
  • Contribute to Krona project by heading to our GitHub page

• Monetary Contribution to fund development
  • Donate to one of our donation addresses below to contribute with Krona development
  • Top 10 donors will be given the right to run Standby nodes at mainnet launch; 25% of the maximum supply of 21M will be split between the Standby/Consensus nodes during the 4-year token distribution phase

BTC: 3NK8U2NwrJd8BSSvsuF2pYYM3eYELBnNbJ
ETH: 0x8A27d371Eb6e28a7725033E3814274F7816786fA
KEEP UPDATED ABOUT KRONA

• Krona website: https://xknl.org/

• Reddit: https://www.reddit.com/r/XKNLedger/

• Bitcointalk thread: https://bitcointalk.org/index.php?topic=5324127

• GitHub page: https://github.com/krona-project

• Twitter: https://twitter.com/XKNLedger
MEET THE FOUNDER

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