NKN: New Kind of Network

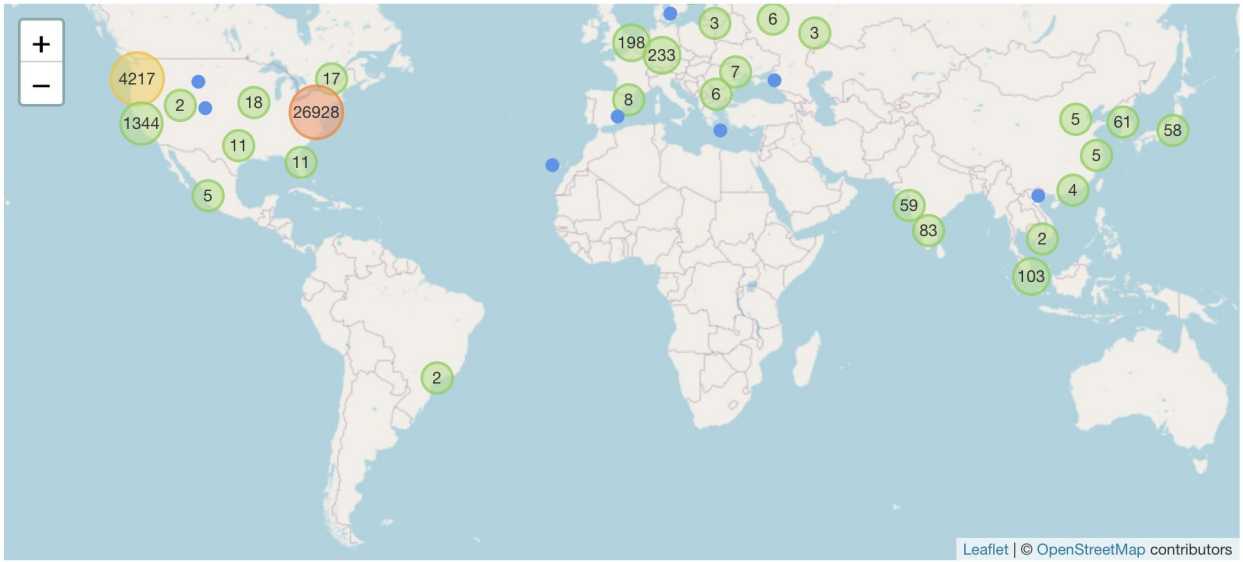
building the world's largest blockchain for network sharing

November 2020 Edition

Node Map

NKN is building the world's largest blockchain network

Full nodes: **33426**



Countries and regions running NKN nodes: 36
(join as miner)

RANK	COUNTRY	NODES
1	United …	32494 (97.22%)
2	Germany	224 (0.67%)
3	India	141 (0.42%)
4	Singap…	103 (0.31%)
5	Nether…	81 (0.24%)
6	United …	74 (0.22%)
7	Canada	70 (0.21%)
8	South …	61 (0.18%)
9	Japan	58 (0.17%)
10	France	45 (0.13%)
11	China	13 (0.04%)
12	Russia	10 (0.03%)

NKN full nodes all around the world, with more nodes than Bitcoin network.

Snapshot from nkn.org (November 2020)

NKN : The Missing Element of Web 3.0

PROOF OF STORAGE

e.g. IPFS/Filecoin, Storj

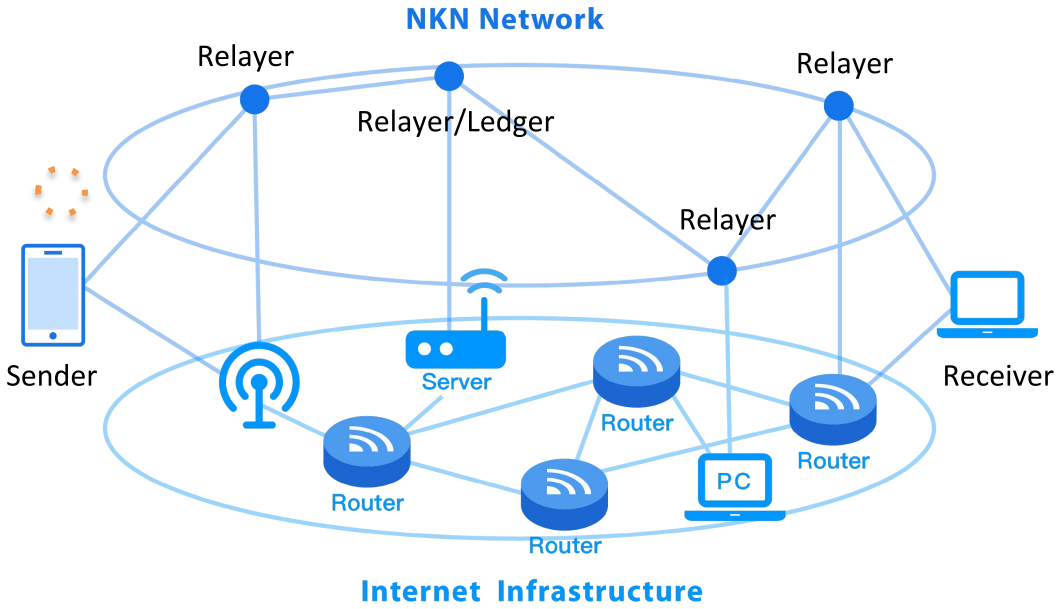
PROOF OF WORK

e.g. Bitcoin, Ethereum

PROOF OF RELAY/TRANSMIT

Missing -> NKN

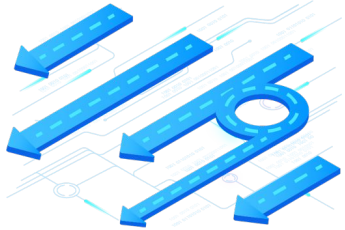
What is NKN



- A new kind of P2P network connectivity protocol & ecosystem powered by a novel public blockchain.
- Economic incentives are provided to motivate Internet users to share network connection and bandwidth.
- A decentralized platform that contributes as the indispensable networking infrastructure for Web 3.0, the better Internet with transparent and open mechanism, by providing the server-less communication with security and privacy.

The NKN Advantages

Millions of nodes



High aggregated throughput

Zero Server

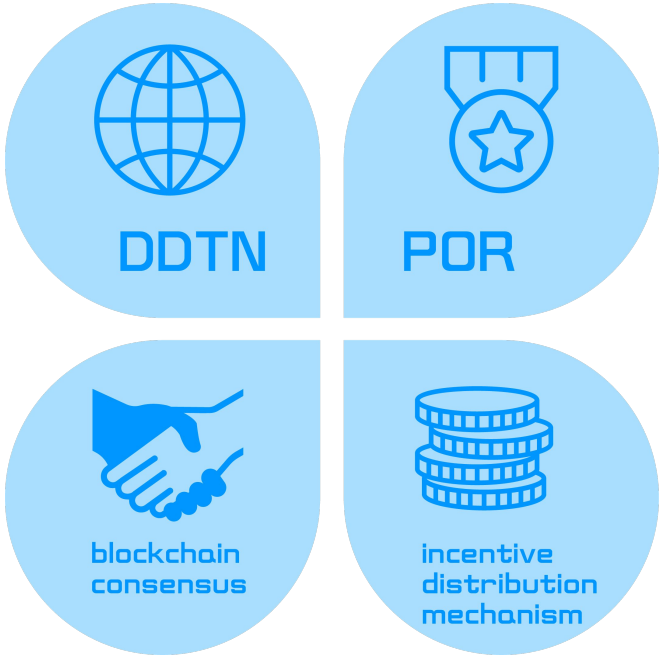
Unique & global ID

Extra security & privacy

Low latency

NKN core technology innovations

Dynamic topology & routing based on Chord DHT, overlay on top of TCP/IP

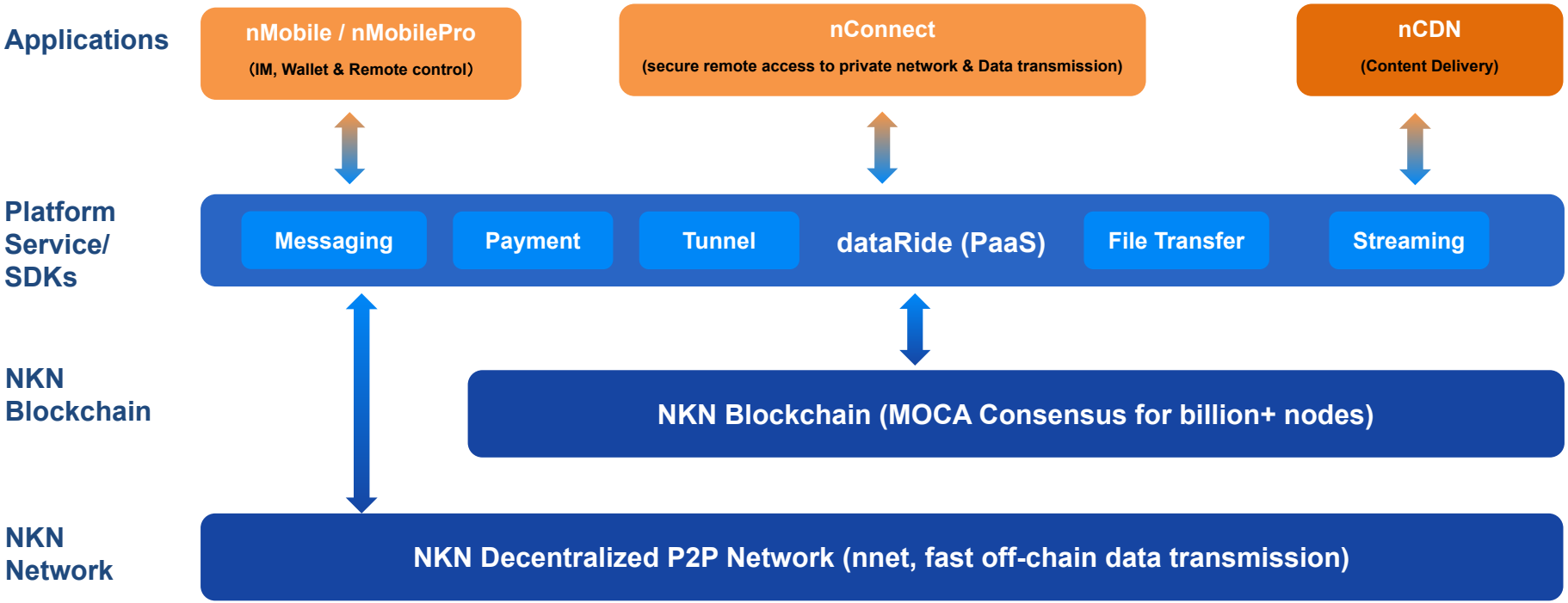


Signature Chain for secure and verifiable data transmission; useful proof of work

MOCA consensus algorithm for Billions of equal nodes

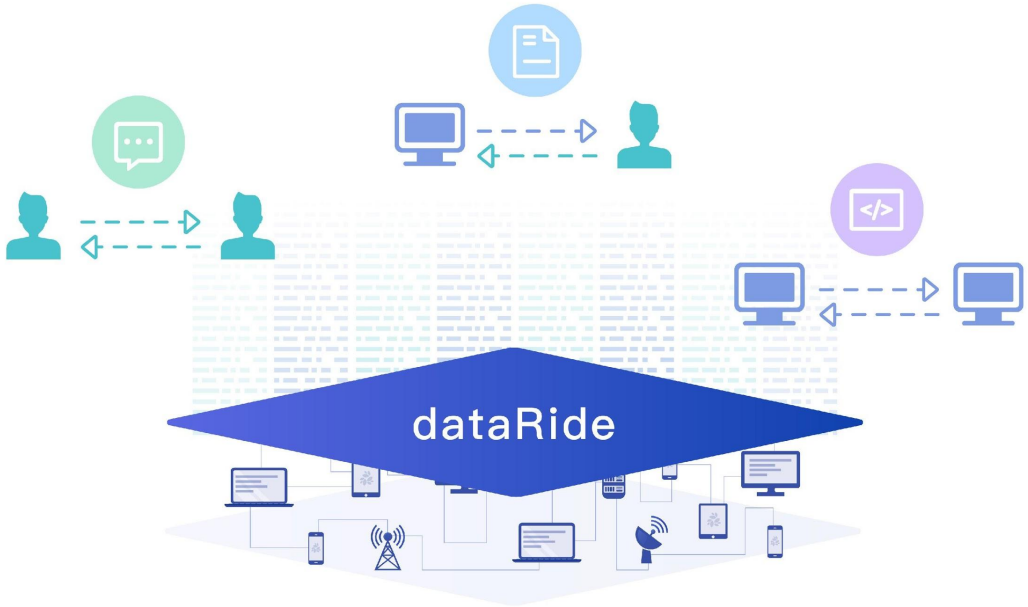
Relay and mining reward to incentivize sharing and building the new Internet

NKN system, services and products



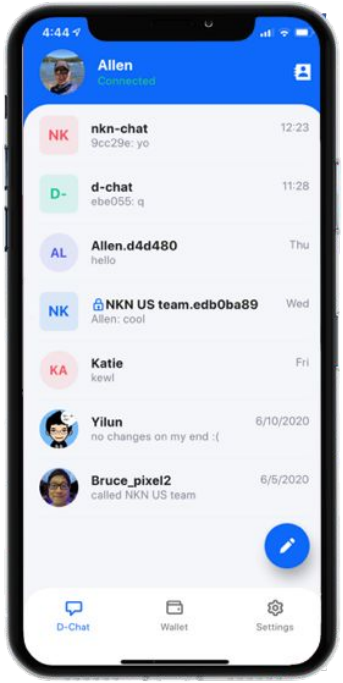
DataRide: Decentralized Networking PaaS

DataRide: NKN's decentralized PaaS, built on crowd-sourced servers, provide the ultimate fast, reliable, secure and low-cost messaging, streaming and file transfer service for person to person, machine-human as well as machine-machine communication.



nMobile on DataRide

The Trusted Chat: the World's most secure chat, where your personal data is kept only on your device with your private one-on-one chat ensured by end-to-end encryption.



Download on the App Store

GET IT ON Google Play

GitHub

Security & Privacy Focused

Data Storage

Only on your device, never in cloud

No Central Server

eliminates cloud database breaches

100% Open Source

transparent, auditable, trusted

Private Key

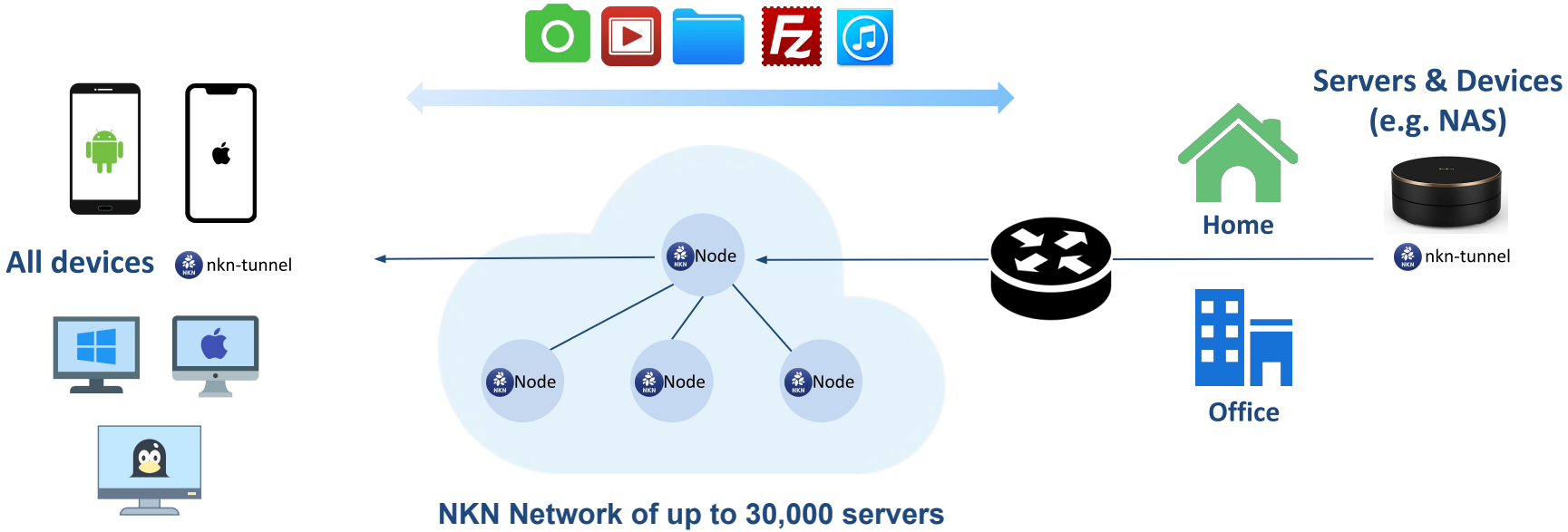
Only on your device, never in cloud

end-to-end Encryption

no data is accessible in transit

nConnect on dataRide

nConnect: secure remote access and connection to files and apps on private network



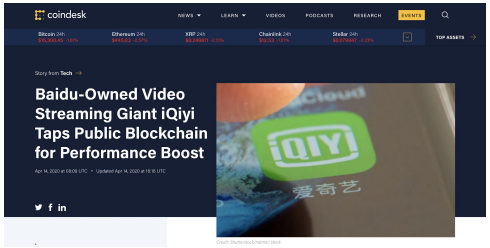
nCDN on dataRide

nCDN: A new kind of content delivery network, a crowdsourced service offering accelerated performance for website, video and all kinds of rich media contents.

Key Benefits

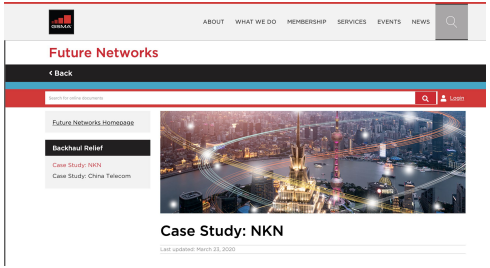
- 24*7 Always on
- High Speed
- Lowest Latency
- Dependable
- Low cost
- Massive scale
- Especially good for popular and longtail content
- Smartest scheduling

Commercial Success



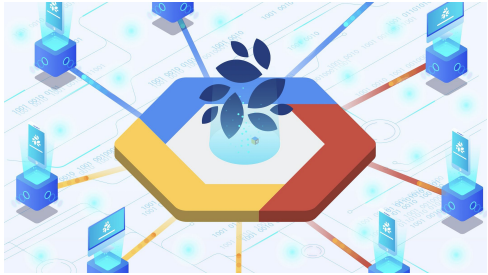
[NKN with iQIYI]

[NKN with Synology]



[NKN with China Mobile]

[NKN with AWS]



[NKN with Google Cloud]

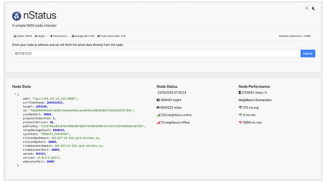
[NKN with DigitalOcean]

Applications by community

D-Chat
Secure and decentralized chat
More information

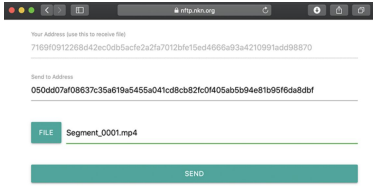
Surge:
A fast and secure P2P file sharing application
More information

nknX
NKN node and wallet manager
More information

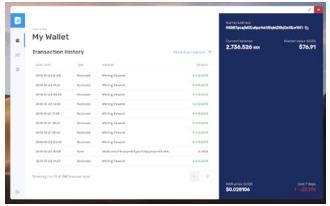


nStatus:
NKN node analyser
More information

NKN shell
Shell access over NKN network
More information



nFTP File transfer
Sends file securely over NKN
More information



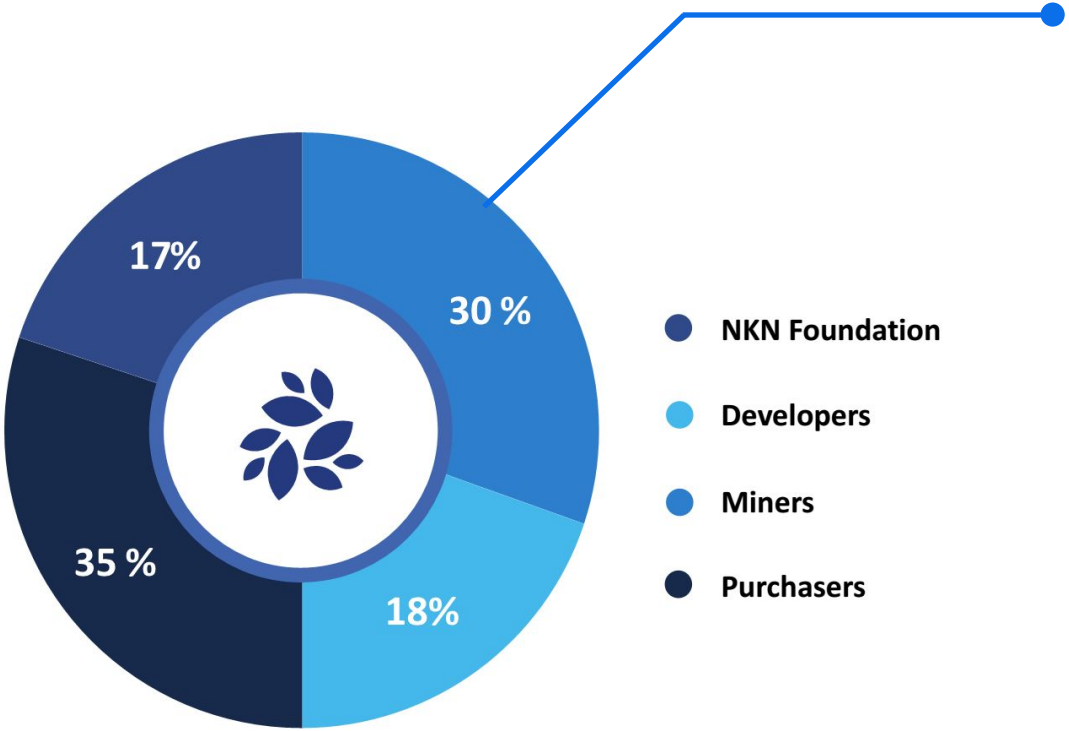
Vault
Multi OS desktop wallet
More information

nScan
NKN blockchain explorer
More information

ECOSYSTEM

Economic model, partnership, token metrics

Token metrics

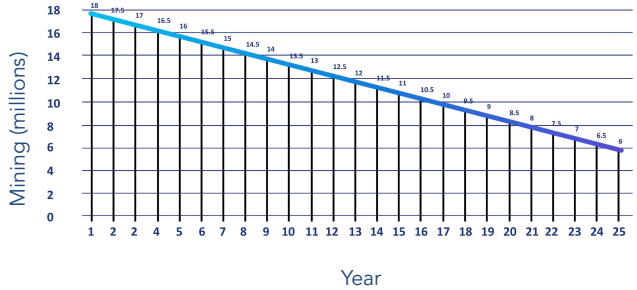


At genesis

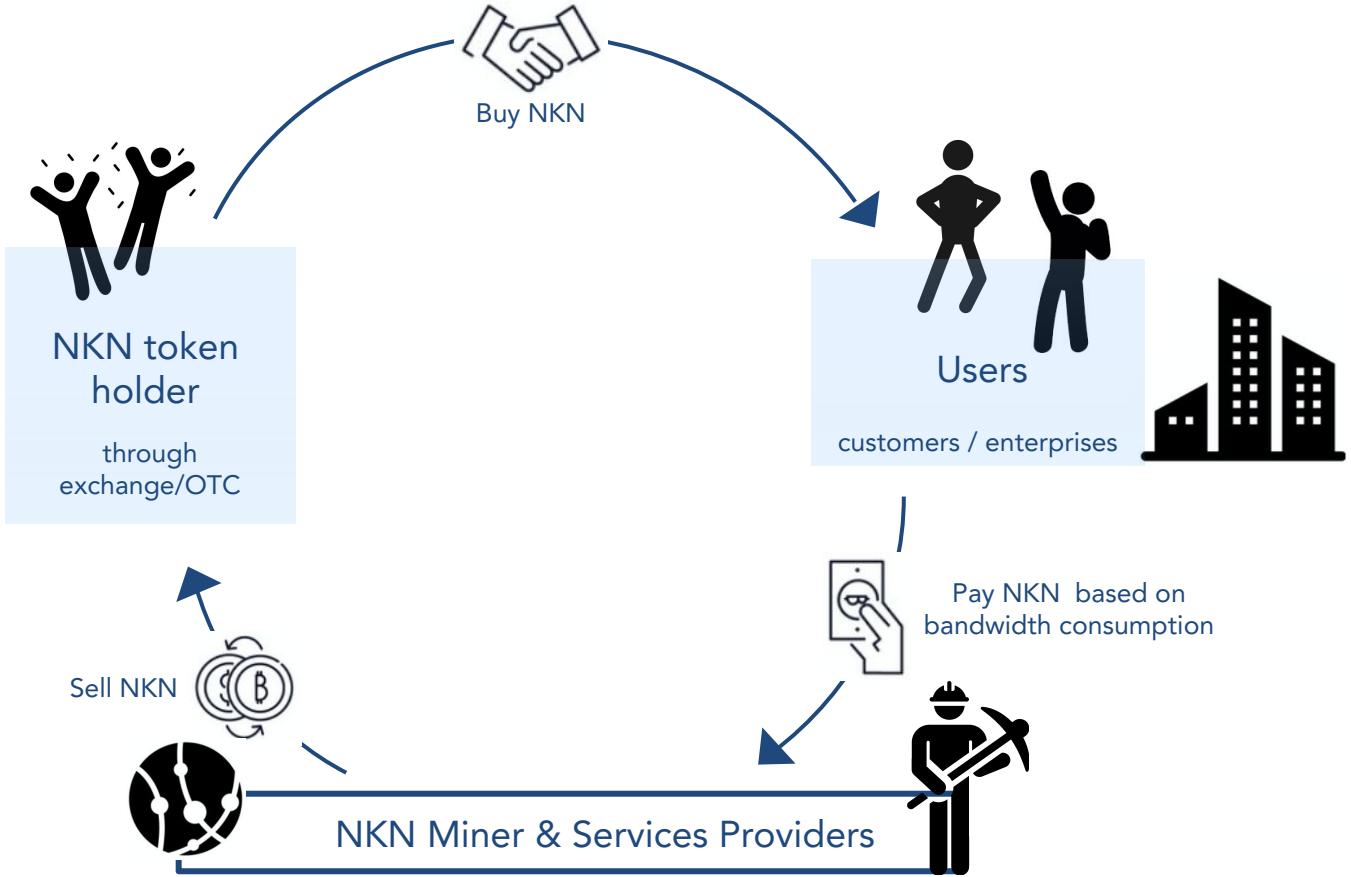
- NKN Foundation: strategic investment in building the ecosystem (17%)
- Developers: founding team, community developers (18%)
- Purchasers: purchasers of NKN tokens (35%)

Over 25 years

- Miners: get reward for traffic relay & block maintenance (30%)



NKN token utility and circulation model



Listed Exchanges

BINANCE

Huobi Global

BITTREX INTERNATIONAL

gate.io

UPbit

Uniswap

Strategic partners & alliances

Milestones & Roadmap

NKN Achievements Timeline (2018 - now)

White Paper Released

Public Testnet

NKN 1.0 Mainnet

D-Chat

nCDN

dataRide

nMobile 1.0

NKN 2.0 Mainnet

2018 Q1 Q2 Q3 Q4 2019 Q1 Q2 Q3 Q4 2020 Q1 Q2 Q3 Q4

Funding Complete

1-Click Market for DO, GCP, and AWS

中国移动 China Mobile

BINANCE

iQIYI

NKN Roadmap beyond 2.0

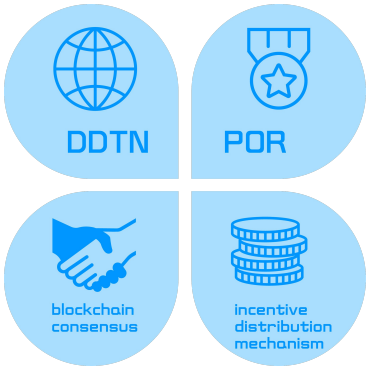
Technology

- Mainnet integration with exchanges and hardware wallet
- Fast block synchronization
- More client and wallet SDK supporting different programming languages
- Remove limitation on fixed ports and single IP address per node
- Support IPv6

Commercialization

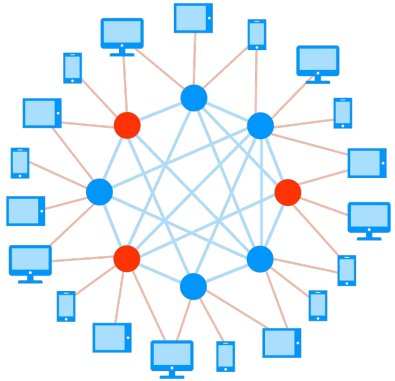
- Pursue the addition of new crypto exchanges for NKN token holders around the world
- Accelerate token circulation by growing business in dataRide and nCDN
- Forge new partnerships for intergalactic communication infrastructure
- Expand nMobile, the extra secure server–less and trusted chat, to mainstream
- Sponsor development community for significant applications utilizing NKN

NKN Research Directions



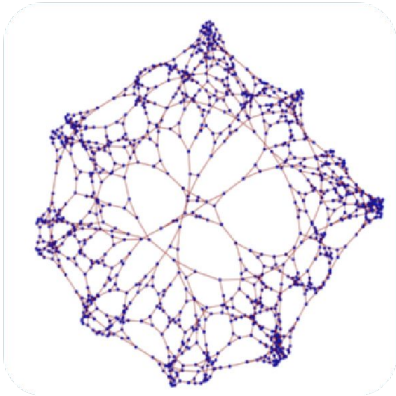
Blockchain DLT

Scale to billions of nodes
Proof of Relay
Micro payment
Instant settlement



Decentralized Cloud & Edge

True global reachability via NKN Address; Massively peer to peer data relay and caching PaaS
Smart scheduling & routing based on price, performance, utilization



Advanced Research

Self evolution of NKN network topology and routing
Using Cellular Automata for massive smart “pod” computational evolution and artificial intelligence

ABOUT

Project overview and core team

NKN Project overview

- NKN was founded in January 2018 by a group of entrepreneurs and engineers with many years of building networking and blockchain technology in companies like Google, Nokia, QCOM, Baidu, and OnChain.
- The ideal driving this team is that blockchain provides both technical and economic innovations to disrupt the networking business.
- The team has two sites, in Silicon Valley, California and Beijing, China.

Core team and advisors

Yanbo Li

Founder | Strategy & System Architecture

ex-OnChain co-founder

Bruce Li

Co-Founder | Strategy & Operations

ex-Googler & Nokia

Dr. Yilun Zhang

Co-Founder | Core Researcher & Developer

Ph.D. Physics, UCSD

Allen Dixon

Business Development & Compliance

ex-Nokia

Dr. Whitfield Diffie

NKN Technical Advisor

2015 Turing Award winner

co-inventor of public key cryptography

Dr. Stephen Wolfram

NKN Technical Advisor

Author of New Kind of Science

Chief designer of Mathematica and the Wolfram

Press

Baidu-Owned Video Streaming Giant iQiyi Taps Public Blockchain for Performance Boost

"The joint effort marks a step forward in the development and interoperability of two emerging technological innovations, blockchain and edge computing, NKN said."

Narwhal: NKN's New Mainnet Comes To Surface

"The Narwhal Mainnet is NKN's first step to create the world's largest permissionless public blockchain by number of nodes. The testnet already registered 13,000 full consensus nodes, and now the project hopes to scale it up to "millions if not trillions of nodes.""

Case Study: NKN

"At the same time China Mobile was rolling out its 5G service, NKN began engaging with one of the largest Video Service Providers in China that have been experiencing phenomenal customer growth and looking for new ways to meet the growing demand."

An NKN Odyssey: A Billion Nodes with Dr. Zhang

"Let me be explicit: the current NKN node code, without any modification, will work with one billion full nodes without any problem."

NKN.ORG

Free the bits, rebuild our Internet.

https://blog.nkn.org

https://t.me/nknorg

contact@nkn.org

https://twitter.com/NKN_ORG