



**Solution for Privacy-Preserving
Decentralized Applications**



Our Passion & Goal

Privacy & encryption for everyone

Today it is complicated (sometimes expensive) to implement security and encryption of personal data.

Our project aims to offer the world an out of the box encryption solution that makes it easy to implement best practices, modern and up to date security.

The solution will offer everything needed including data encryption, key & storage management, inter-blockchain deployment and much more.

Key values of Nulink

Easy to implement

Easy to manage

Open source

So secure that not even the system owner can read or see the data

Easy for users to share data secure if they choose to



Security and privacy

There are many risks and complications handling data

Complicated

It's complicated to implement encryption and security solution. There are many choices, potential security risks and mistakes that can be made.

Data leakage

Storing data secured is complicated. If you store in one location and you have a break in, you have a serious breach.

Costs

Implementing best practices security and privacy solutions is expensive.

Third party access

Third party access to data and handling of access is complicated and creates security risks.



Why is there such a big interest in this project?

What is the problem Nulink is addressing?

Out of the box

We are creating an out of the box solution that makes it easy to implement best practices encryption.

Endpoint encryption

Encrypt data immediately at end point and store it decentralised. Not even you as a company can access your clients sensitive data.

Community based effort

Nulink is built on community and token economy. Users can implement this solution for free.

Access Control

With Nulink you can implement access control through cryptographic technologies such as PRE/ABE. Access can be granted with limited time, different authentication methods, policies, etc.



Programs

NULINK
www.nulink.org

Binance Labs Incubation Season4 Selected





NuCypher support

Building better solutions

We are very grateful for the official support from
[NuCypher](#)

The image shows a Twitter thread from the account @NuLink_. It consists of three tweets and one video post.

- David Nuñez (@david_nunez · Jul 2)**
Meet @NuLink_, a project trying to bring @NuCypher to the @Polkadot ecosystem. This is one of the first independent efforts in the @NuCypher development scene.
Looking forward to see what you #BUIDL !!
- NuLink (@NuLink_ · Jul 2)**
Nulink official website has been launched! Thank you for your continuous attention to Nulink. You can learn more detailed information from our official website, including the白皮书 and applications.
paper soon.
- NuCypher (@NuCypher · 7 Jun)**


GIF EXPAND THAT NETWORK
- NuLink (@NuLink_ · 5 Jun)**
NuLink is a middleware to bridge Ursulas network of Nucypher to other blockchain Ecosystem such as Polkadot and Solana.



Accepted grant proposals

Polkadot Web3 Foundation, HECO, NEAR, PlatON, Solana has approved Nulink open grant proposal

Nulink currently is bridging the PRE Network to Polkadot, Heco, Near, PlatON, Solana and will cooperate with more ecosystems in the future to fulfill inter blockchain features.

[Learn More](#)





Nulink Technology

Enterprise level security for startups,
SMB and enterprises

NuLink is a decentralized solution for privacy-preserving application where we combine best practices with best of breed solutions. Nulink has blockchain, access control ([Proxy Re-Encryption](#), [Attribute-Based Encryption](#)) and secure computation ([Zero-Knowledge Proof](#), [Secure Multi-party Computation](#), [Fully Homomorphic Encryption](#)) as technical core, and it provides enterprise-level privacy data sharing and computation services.





Architecture

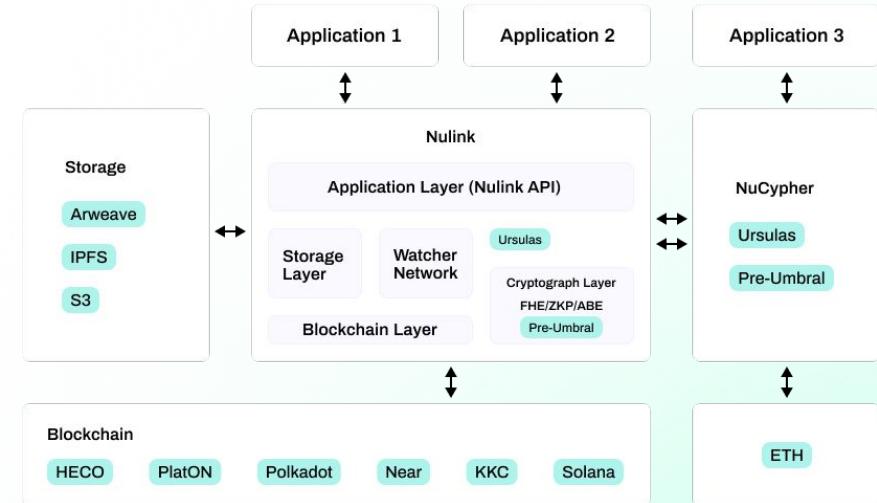
Overview of Nulink Network

By integrating best in class technologies we are building a strong technology foundation.

The Nulink network integrates the Application Layer, the Cryptograph Layer, the Storage Layer, the Blockchain Layer and the Watcher Network.

Nulink users can simply integrate into one single API and get access to multiple storage and BlockChain solutions. For key management we integrate into [NuCypher](#).

Miners can get our token NLK in storage layer by providing decentralized storage services and also in watcher layer by relaying information from ETH.





Successful Testnet Launching

Horus Network is NuLink's testnet for developers and community members to test and implement proprietary security infrastructure components into their Web3 applications.

Total Nodes

3,500+

Total Locked \$NLK(test)

154,000,000+

Registered Users

44,000+

Files Uploaded

96,000+

File Sharing Count

487,000+



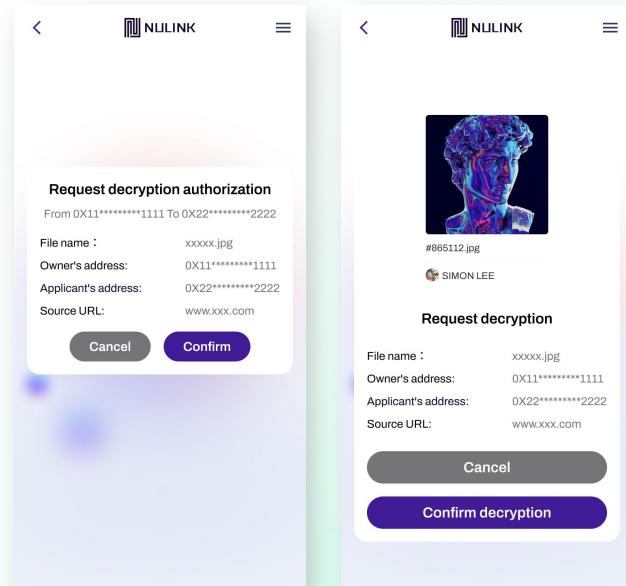
Nulink Agent & Nulink API services

-Use PRE sharing without needing to understand the PRE process.

Nulink Agent provides a complete user-oriented **PRE** service, with an embedded web-based wallet tool that securely stores user private keys and other information locally in a fully decentralized manner, ensuring user data safety.

DApp developers can easily integrate privacy sharing processes into their business using **Nulink API** through lightweight interfaces and low-code development.

Additionally, Nulink offers an SDK for developers to seamlessly and deeply implement their own business processes in a localized manner.

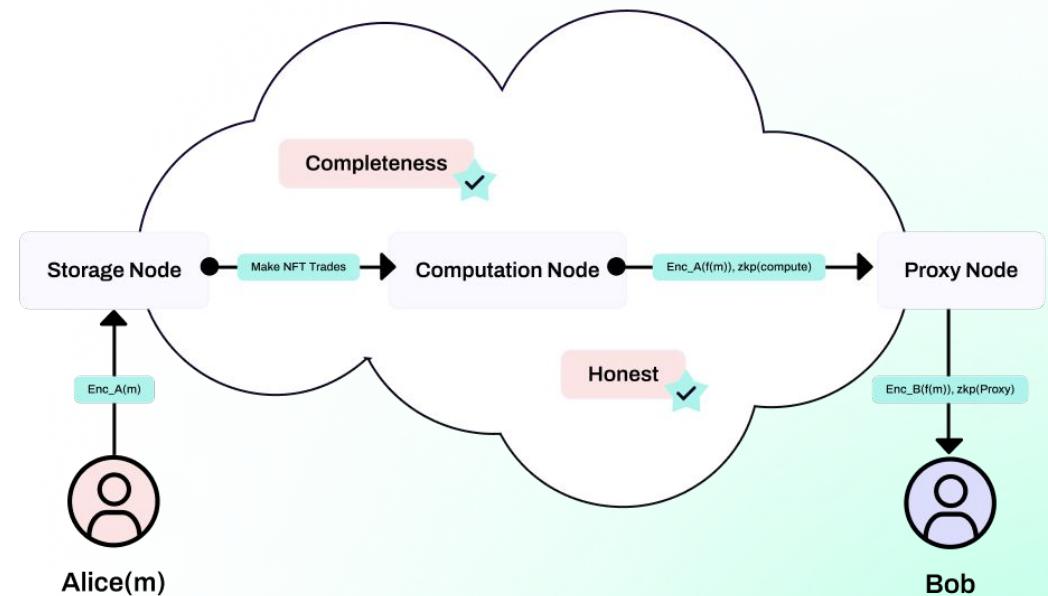


Nulink Agent

ZK For Node Functional Proof

For each type of node in NuLink Network:
Storage, Computation, Proxy. ZKP is used
to ensure that all functional nodes, including
storage nodes, computing nodes, and proxy
nodes, have **publicly verifiable operations**.

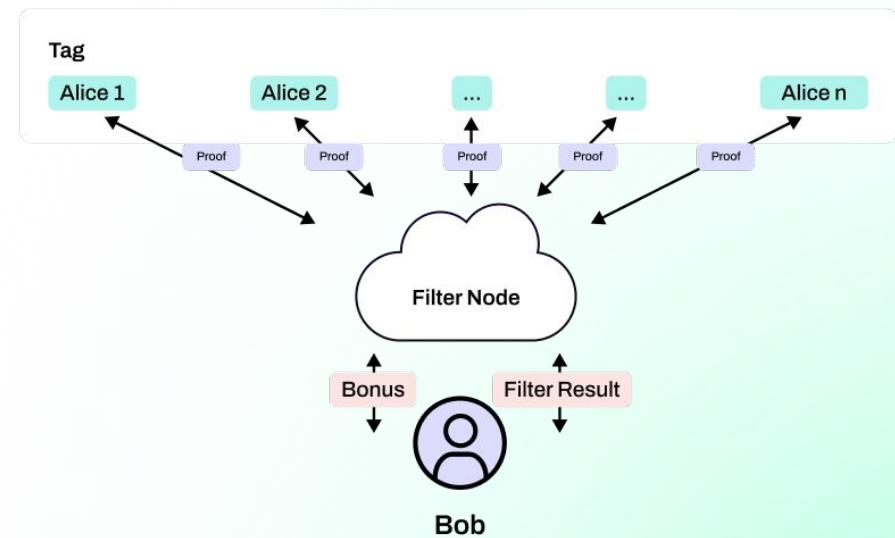
Furthermore, NuLink will develop **packed**
zero-knowledge proof techniques which
can help NuLink network reduce redundancy



ZK For Value Proof while Ensuring User Privacy

Scenario: Bob wants to filter information within a certain tag, he need to present some bonus, Alice can provide further value proof to get the rewards.

Filter Nodes transfer the content requirements to Alice who have files with that required tag. Within the reward duration, Alice can generate a ZKP to prove that their file contains the specific content that Bob is looking for, without exposing the rest of the file's other contents.





Commercial Usage

Encrypted NFTs Trading Market

Electronic Health Records Sharing

Joint medical data analysis

Decentralized Digital Rights Management

Secure data sharing collected by IOT devices

Financial encrypted data prediction

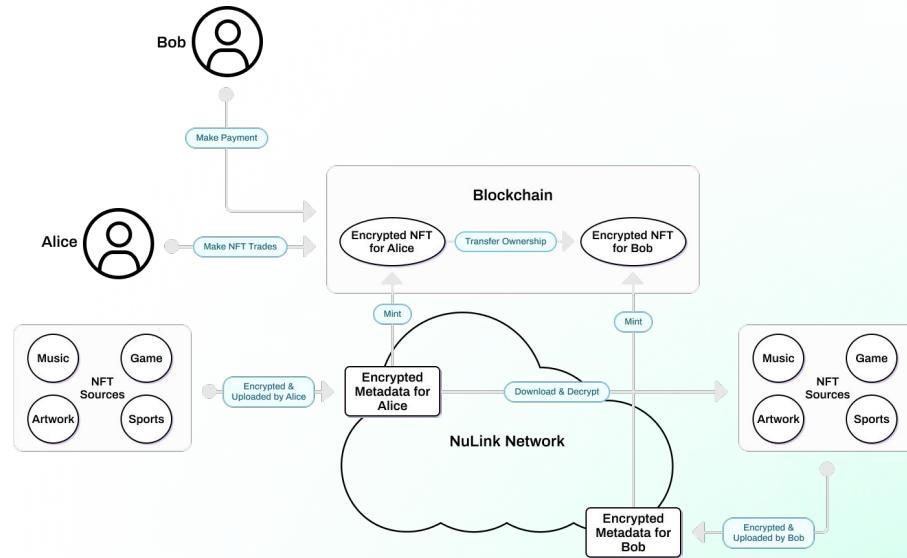
Private-Preserving Social Network

Inquiry of credit history

Encrypted NFTs Trading Market

The Market

NFT sales volume surges to [\\$2.5 bln in 2021](#) first half. It's booming and there is an increasing need for more interesting solutions to take NFTs to the next level. What if we could encrypt the information in an NFT and grant access to only selected people? Could we build more interesting concepts and features?



Technology

In order to conduct secure NFT trading, the transaction is divided into two parts, the payment and the transfer of NFT ownership need to be completed on chain. The NFT transmission needs to be completed synchronously and securely under the chain. Alice first encrypts and uploads its own NFT resources to Nulink Network, through Nulink's proxy re-encryption function, NFT can be safely transmitted to Bob. The encrypted NFT data of Alice and Bob are written to the blockchain by mint operation. This step completes the transfer of NFT ownership on chain.



NFT private auctions

Smarter sales

Just as in the real world it would be possible to set up private auctions where only a selected few could view the art pieces for sale. The artist could create special events for the most dedicated fans or special collectors.

As an example to join a private auction you need to own a piece of art from the artist or have certain number of ETH.

The screenshot shows a web-based NFT marketplace interface. At the top, there's a search bar labeled "Search NFT", a "Private Marketplace" button, and a "CREATE" button. A user profile for "Bob" is shown on the right. The main area features a background image of a wooden cabin at night with string lights and a sign that says "BABY". Overlaid on this is a white callout box containing the text "The Bored Alice Private Auctions", a brief description, and a "Request to join" button. Below this, there's a summary section with icons for the owner (@riana), items (32), collection guests (42), and collection worth (12.2K). At the bottom, there are tabs for "About", "Upcoming Auctions" (which is selected), and "Guests". The "Upcoming Auctions" section shows 3 items, with one item titled "Brand new Bored Alises" featuring a cartoon monkey and a date of "WED, SEP 21, 6:30 PM CEST". The "Guests" section shows 42 users represented by small profile icons.



NFT private collections

Private art

Enable NFT art collectors to encrypt and secure their NFTs. The collector can secure their art and then share access to who they desire.

The screenshot shows the Nulink Private Marketplace interface. At the top, there's a search bar labeled "Search NFT", a "Private Marketplace" button, and a "CREATE" button. A user profile for "Alice" is shown on the right. A message bubble says "Welcome Alice, You have 2 new guest requests that want to view your collection" with a "View" button. Below this, a "Filter" sidebar includes buttons for "Favourites" (Open), "Top 10", "Top 20", "Newest Collection", and "Super secret". It also has a "Search members" field and links to "@riana" and "@cudiramirez". The main area displays "20 items" of NFT art, each with a preview image and a count: one item has 3, one has 505, and one has 12. The items feature various cartoon monkeys wearing hats like fezzes and baseball caps.



Encrypted NFT

Security

Enable NFT owners to encrypt one or several metadata containers for a specific NFT and then grant access. This type of technology and implementation will make it possible for alternative NFT collections containing sensitive data.

The screenshot shows a digital interface for an NFT collection. At the top, there's a search bar labeled "Search NFT". On the right side, there are buttons for "Manage Access" (with a red notification dot), "CREATE", and a user profile for "Alice" (0xa0F3...E344). Below the header, the NFT listing for "Galaxy shrooms" is displayed. The listing includes:

- Creator:** Alice (@alice)
- Encrypt this NFT with Nulink** (button)
- Galaxy shrooms** (title)
- Description:** If mushrooms are one of the reasons that humans are intelligent today. Perhaps the alien beings in the next galaxy are simply mushroom people.
- IPFS Media URL:** Would you like to encrypt the IPFS URL? (button)
- Private note:** As a curator, if you have any questions about this piece you can reach me at @alice on Twitter or alice@privatemail.com (button)
- Provenance** (link)

At the bottom of the listing, it shows the current bid and auction end time:

Current Bid	Auction ends in
5.0922 ETH	2 54 4
\$15,334.44	Hours Minutes Seconds

The main image of the NFT is a vibrant, glowing blue and purple mushroom against a dark background with floating particles.



Electronic Health Records Sharing

Overview

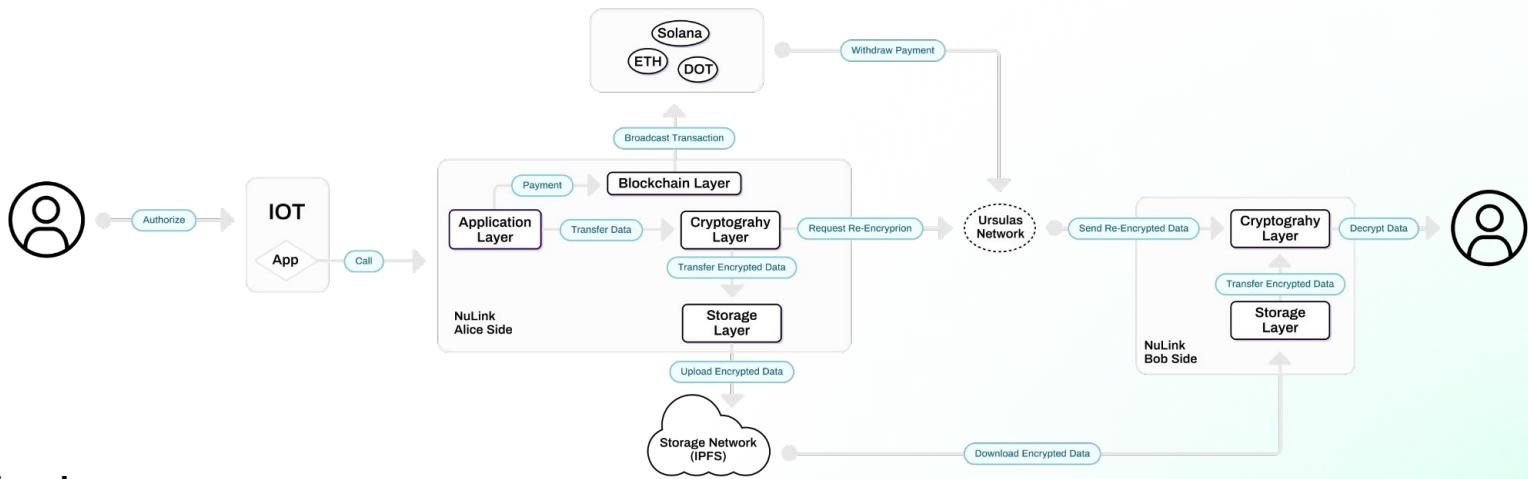
The number of data breaches in healthcare is constantly [increasing and affects millions of people](#). These data breaches are devastating for normal people including children. One of the absolute worst ones is the data breach of the [Finnish mental health startup](#) where 25 000 people received a ransom demand. If they did not pay, the hackers would reveal their mental issues to the world.

What if we could secure the sensitive data in a better way that makes health records less sensitive to data breaches and at the same time enables patients to easily share the data with the doctor that helps them?

Issues

One of the big issues with current health records storage solutions is that all data is stored in one single location. Once a hacker has found a way in, it's possible to access the records of millions of people. Our suggestion is decentralized storage of health records and smarter access control.

Electronic Health Records Sharing



Technology

First, Alice calls the Application Layer through APP on the IOT device, selects proxy re-encryption service and authorizes. On the Nulink Alice side, after receiving the authorization, the Application Layer invokes the Blockchain Layer to initiate and verify the transaction, and transfer data to the Cryptograph Layer. Cryptograph Layer interacts with the Storage Layer to perform encryption operations and upload the encrypted data. The encrypted data obtained at this step can only be decrypted by Alice. In order to convert it into ciphertext that can be decrypted by Bob, we implement proxy re-encryption through Ursulas nodes deployed by Nucypher. The encrypted data after re-encryption will be sent to the Cryptograph Layer in Nulink Bob side and can be decrypted directly.



Release plan and milestones

Deliver NuLink Polkadot pallet and launch Polkadot watcher node

2021
Q4

NuLink core library v.1
Release:
1. Watch Network Deployment
2. Fully support PRE.
3. Release NuLink Agent plugin and NuLink frontend.

2022
Q2

Launch NuLink's testnet in BNB smart chain.
1.NuLink worker node Installer Release
2.NuLink staking Dapp Release
3.NuLink Agent Release
4. Nulink File Sharing Dapp Release

2022
Q4

1.NuLink core library v.2
Release: Storage Layer Deployment to support more decentralized storage solutions!
2. NuLink API Library Release

2023
Q2

Launch NuLink's mainnet.
Start on-chain governance (DAO) in NuLink mainnet.

2023
Q4





Nulink organisation and set up

The formula for success

Core Team

A combination of blockchain, cryptographic, math, enterprise security sales, B2B design, marketing and a passion for building amazing products - A team focused on making this a success that has done it several times before.

Community

We are building a community of passionate developers, security experts and cryptographic thinkers to drive the usage of the technology.

Token economy

Using token economy we implement strong incentives to participate, contribute and ensure the solution have the absolute best performance.

Foundation

The independent foundation established in Singapore will ensure that Nulink technology stays open and available for everyone.



Team

Core Members

Noel Braganza

Co-Founder and Product Owner of [MuchSkills](#), Co-Founder of [Up Strategy Lab](#). Previously Design Director of The [Techno Creatives](#) and Interaction Designer of [Design Lab in MIT](#) at Cambridge USA.

[LinkedIn](#)

Daniel Nilsson

CEO of [Up Strategy Lab](#), Co-Founder of [MuchSkills](#), Co-founder & Operations Leader of [One Life Dreams](#). Previously Chief Commercial Officer of [Appland](#), Chief Marketing Officer of [Mentice](#) and COO of [Appgate \(Former Cryptzone\)](#).

[LinkedIn](#)

David Jiao

Over 10 years experience in automotive and AI industry. Entrepreneur experience of founding startups both in Sweden and China , successfully raised a few rounds of investment and as CPO of [Golden Ridge Robotic](#) was responsible for a series of [autonomous products](#).

[LinkedIn](#)



Team

Core Members

Sam

Senior Blockchain Developer; Cryptography Geek; ETH layer 2 researcher, core code contributor of Nest and Compound; technical advisor of ZKSWAP and other Defi programs. Application Scenarios

Rookie

Blockchain and Cryptographic Researcher. Currently pursuing PHD degree in cryptography from UCAS.

Pawn

10 years experience in professional algorithm design and development in Blockchain and Privacy Computation Lab in both China and the US. During and after his PHD, his research has focused on Multi-Party Computation, Trusted Execution Environment, Zero-Knowledge Proof, Homomorphic Encryption and blockchain technology.



Advisors

David Nunez

CTO of NuCypher. Postdoctoral Researcher at NICS Lab (Universidad de Málaga, Spain).

[LinkedIn](#)

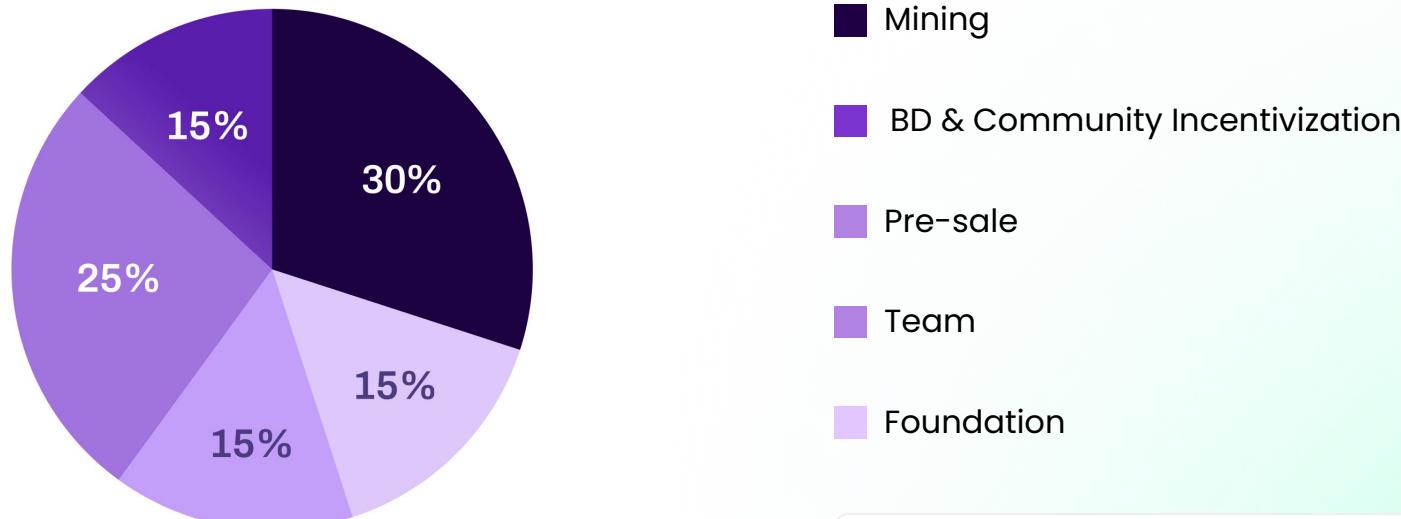
Jeffrey Duan

Professor of Applied Mathematics Department in Illinois Institute of Technology. Director of Center for Stochastic Dynamics and Computation in IIT.

[LinkedIn](#)



Token Issuance Plan



Total Supply : **1 billion** Token Symbol: **NLK**



Token Issuance Plan

ITEM

USAGE

RELEASE RULE

Mining

For motivating stakers as a mining reward.

After main network launched, it will be mined linearly within four years. The new mining rules would be determined by Dao after 4 years.

BD & Community Incentivization

For community development, airdrops and other activities that are conducive to ecological development.

2% of total would be released after listing, and 2.6% of total would be released each season (All unlocked after 5 seasons).

Pre-sale

The raised funds are used to ensure the continuous development of the project and the operation and maintenance of the platform.

Please refer to sheet "Release Rule" for details.

Team

For motivating the core team.

This portion would be released linearly within 30 months after 3 month cliff.

Foundation

For the normal operation of the foundation.

3% of total would be released after listing, and 2.4% of total would be released each season (All unlocked after 5 seasons).



Subscription Plan & Release Rule

SUBSCRIPTION PLAN	Percent	Quantity(NLK)	Valuation(USD)	Price	Raising Volume(USD)
Pre Seed round	1%	10 million	5 million	0,005	50 thousand
Seed round	10%	100 million	15 million	0,015	1.5 million
Private round	8%	80 million	30 million	0,03	2.4 million
Strategy round	6%	60 million	80 million	0,08	4.8 million

RELEASE RULE	1st batch	Linearly release in
(Pre-)Seed round	15%	12 months
Private round	20%	12 months
Strategy round	25%	12 months



Investors

Backed by some of the best organizations in Web3



@coincu ventures



CYPHER VENTURES



MACLANE
WILKISON

M MAVEN
CAPITAL



newTRIBE
CAPITAL

OIG
ORACLES INVESTMENT GROUP

R-930
CAPITAL

Investors

Backed by some of the best organizations in Web3

The logo for tokenova is a white, italicized, lowercase word 'tokenova'.The logo for Y S Y N features a pink and white geometric pattern consisting of triangles and squares.The logo for ZBS CAPITAL features the text 'ZBS' in a large white bold font and 'CAPITAL' in a smaller white sans-serif font, with a horizontal blue line under 'CAPITAL'.



Thank you

Investor relations
cooperation@nulink.org

