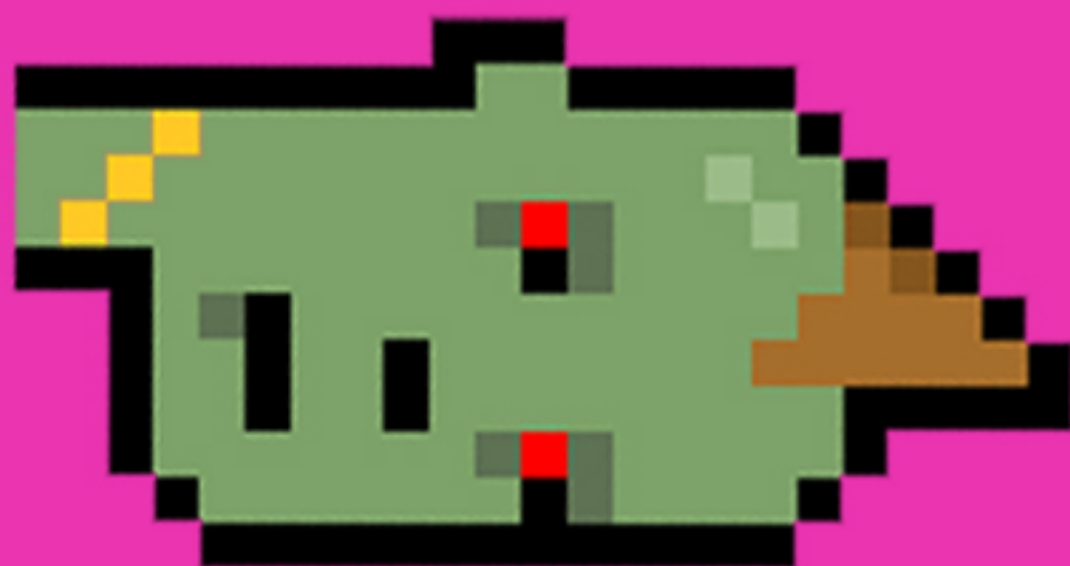


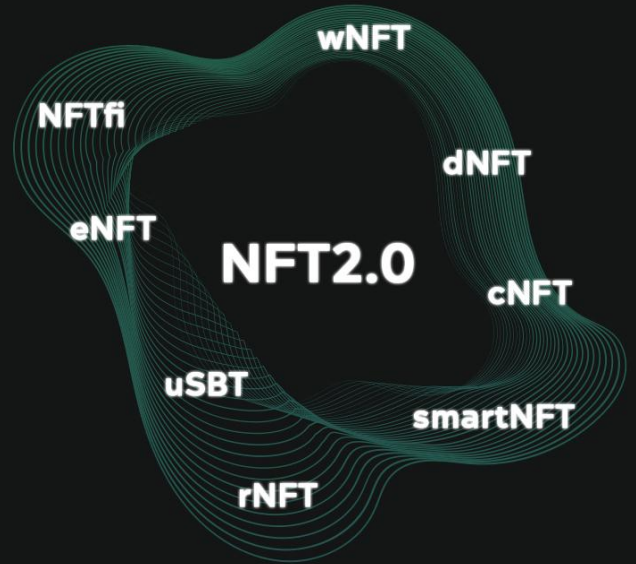
PUNKS ARE DEAD



The Rising
of
NFT2.0

NIFTSY Digest

One source
to **rule** them all



Unlocking the Future of NFTs: Market Insights, Regulation Updates, Security Trends, Development Breakthroughs, and NFT Analytics Revealed!

Don't miss out on the latest NFTs insights! Click the link below to dive into the future of crypto and stay ahead of the game.

[NIFTSY NFT Digests](#)

Contents

Contents	1
What is the NFT?	4
What is a token?	4
But what are unique tokens?	4
History of NFTs (Bonus Material)	6
Why do I need ERC-721	9
Types of NFTs.	9
ERC-721 NFT tokens	10
Examples of ERC-721 NFTs	11
The Metaverse and NFTs (Bonus)	12
Benefits of the NFT ERC-1155	13
What is SBT	14
Why do you need an SBT?	14
Example of using SBT	15
How to mint Soulbound tokens with Envelop (Guide)	16
ERC-3525 Semi-Fungible Token	20
Structure of the ERC-3525 standard	20
Where ERC-3525 NFTs are used	21
ERC-4907: Rental NFT, an Extension of EIP-721	22
NFT Rental Standard with Dual Roles	22
ERC-6551 token-bound accounts (TBAs)	23
How Does ERC-6551 Work?	24
Use Cases of ERC-6551	24
Limitations of ERC-6551	25
NFT 2.0. From image to technology	26
NFT2.0 from DAO Envelop	27
How to make NFT2.0 via Envelop (Guide)	29
Wrap wNFT	30
Dashboard functionality	32
Wrapped NFT viewing page	33
Dynamic NFTs (dNFTs)	36
Metadata problems and how to fix them	36
Modifiable content that we trust. Approaches to building dynamic NFTs.	37
Mint NFT to IPFS and SWARM with Envelop	39
How To Mint NFT with Envelop (Guide)	39
INO – Initial NFTs Offering. A new way to IDO from DAO ENVELOP	41
Why it's important to distribute tokens through wNFTs	42
Envelop has arranged a 1st-ever VC contribution deal via NFT	42
ENVELOP secures support for its wNFT technology from Animoca Brands	43
Liquid farming with NFTs	44
Liquid Farming Value proposition	45
SAFT wNFT – The New tool for Startups and VCs	47

The Evolution of fundraising	48
History and mythology	48
From ICO to ILAO	49
ILAO. Details	50
Launchpad Killer?	53
NFT 2.0 Launchpad	54
Benefits of the Envelop NFT Launchpad	54
NFT Launchpad Interface	55
Inheritance and other delayed payments via NFT by ENVELOP	57
The index by DAO Envelop	60
How to make a Dynamic NFT index MVP in half an hour with ChatGPT	62
Some code from ChatGPT	62
NFT & wNFT for Index	65
NFT as a Collateralized Derivative	68
Calculating costs for NFT index	68
NFTs. Tickets. Accesses. Certificates. Gifts.	69
A brief analysis of the ticket market	69
What's under the hood of the NFT ticket service?	70
What are the core features of the ticketing service?	71
Ledger has fallen, but a CrossNFT wallet is an alternative	71
How to store crypto safely when your seed phrase is stolen?	72
CrossNFT wallet with zero-knowledge proof	73
Decentralized liquidity	74
Step 1. Create NFT liquidity pools on Uniswap v3	74
Step 2. Combine multichain liquidity via Cross-NFT	75
Step 3. Transfer liquidity	79
Why do we need cross-NFT?	81
How to transfer liquidity interchain via CrossNFT (Guide)	82
General ways to earn money on NFT	95
Airdrops	95
Bounty	95
Action to Earn	96
Special ways to earn money on NFT	97
Indexes, or collateralized derivatives	97
Direct indexes	97
SAFT wNFT and Launchpad	98
Liquid farming	98
Hedging with dust	99
Loan and borrow	99
Creating and maintaining oracles	99
Supporting Protocols and DAOs	100
Soulbound Token SBT	100
Unstoppable NFT	100
Royalties and multi-royalties	101
Pledge-free (Uncollateralized) rentals	101

Arbitrage	101
Cross-NFT	102
Additional sources	103

NFT Genesis by Envelop

What is the NFT?

Before we tell you what NFT is and why it's needed, it's worth answering two simple questions:

- What is a token?
- What kind of tokens are there?

What is a token?

With the advent of the Bitcoin network in 2009, not many people trusted it, because no one had ever seen anything like it before. Bitcoin's blockchain meant transferring value within an untrusted environment. An internal coin - Bitcoin with the ticker BTC - was used to control internal spam and incentivize network members.

Over time, Bitcoin began to have alternative solutions (**altcoins**), and one of them was Ethereum, with the main coin ETH. The Ethereum network allowed the creation of new programmable assets, which became known as tokens. This is how the difference between a coin and a token is usually defined:

1. A coin has its own blockchain, but a token does not. A token is created inside an existing blockchain.
2. A coin is always a fungible, unique entity, while a token can be anything.
3. Coin and token can be used in different transactions that only partially overlap each other. For example, a coin can always be transferred to others, but a token cannot. For example, so-called SoulBound Tokens (SBT) are not transferable by default.

But what are unique tokens?

Absolutely all things in the world are divided into unique and not unique! Here are examples of unique tokens:

- A Van Gogh painting
- Handmade birthday cake from your mother
- Your fingerprint.



Unique Tokens

And here are non-unique tokens:

- Money bills in your wallet
- A mass-produced Toyota Corolla
- And even your iPhone is one of millions.

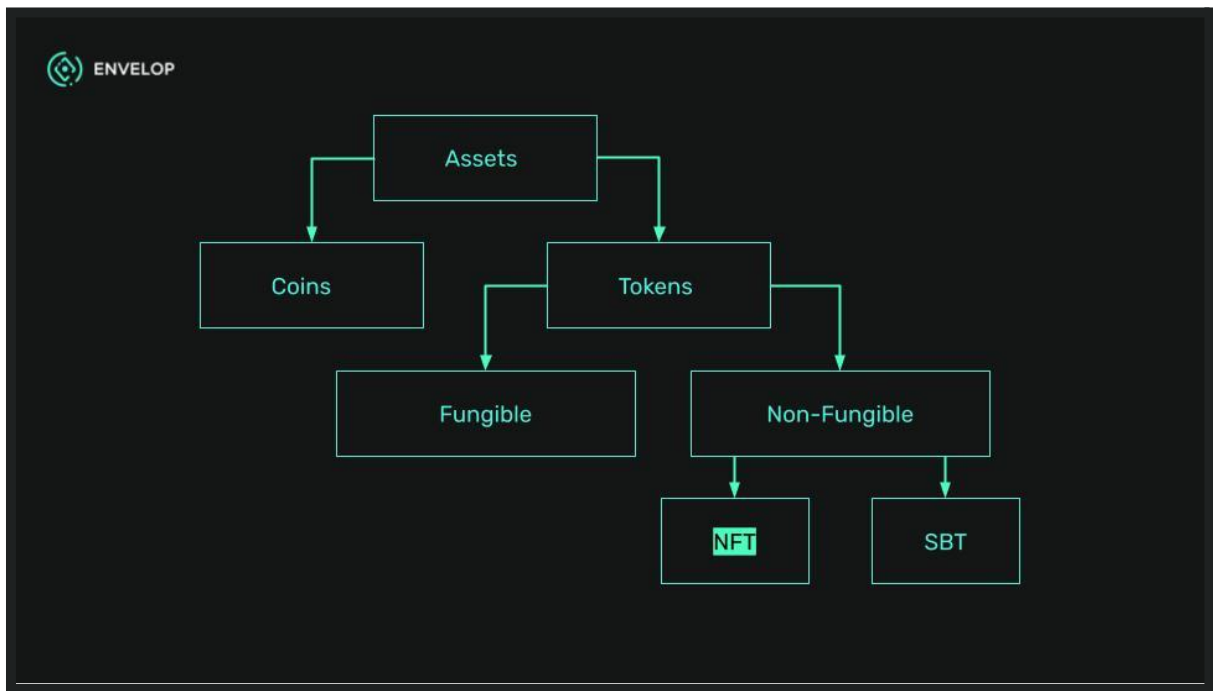


Non-unique Tokens

Uniqueness refers not only to objects, but also to things intangible. Fictional characters, character traits, and indeed each person as a whole are unique. Thus, in the world, all entities can be:

- Fungible (can't everyone exchange their iPhone for a new one?)
- Semi-fungible (ERC-3525, etc.: this is a new category and we don't cover it much in the book)
- Not-fungible (I hope no one is ready to replace their relative with a newer one :-))

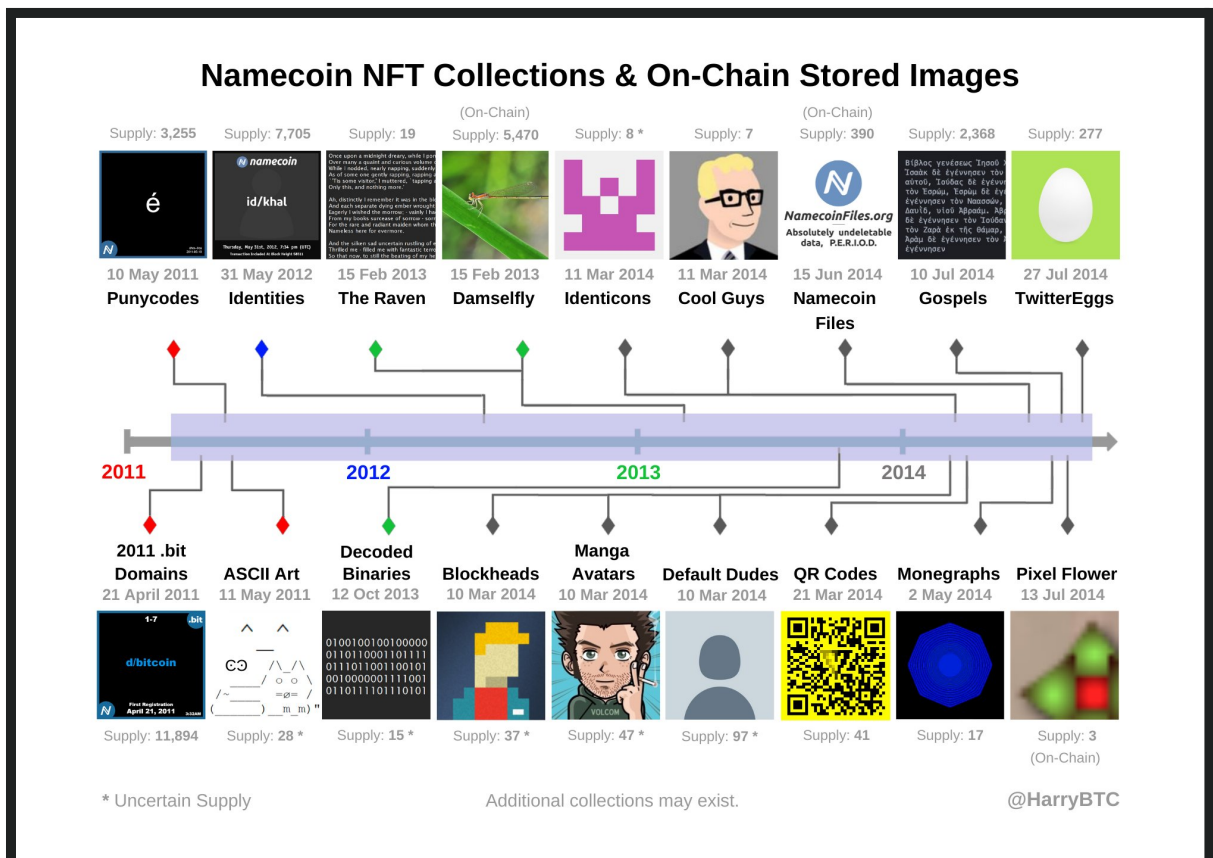
Non-fungible entities are NFT. All of the above can be displayed in a clear diagram!



History of NFTs (Bonus Material)

The first NFTs can be traced back to Colored Coins, built on the Bitcoin network back in 2012. Colored Coins was an experiment designed to explore the idea of Non-Fungible Tokens.

But some researchers trace the NFT lineage back to an even earlier period. You can find such a chronology in this thread.



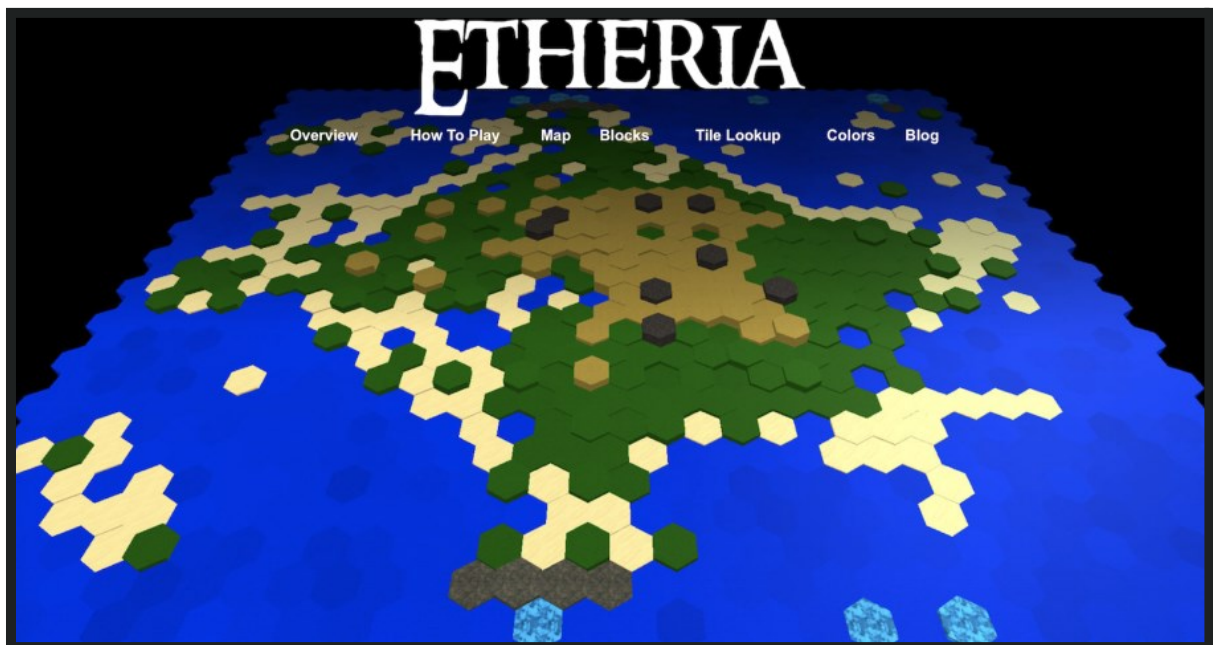
source: twitter.com/HarryBTC/status/1547626331529105411/photo/1

Some whitepapers analyzed its possibilities and hailed it as an achievement for differences itself from common Bitcoin transactions. However, because it was developed on the Bitcoin network, there were limitations in place because Bitcoin's scripting language required full consensus on its value.

"For example, 3 people agree that 100 Colored Coins represent 100 company shares. If even one participant decides they no longer equate Colored Coins to represent company shares, the entire system falls apart."

However, Colored Coins sparked further innovation and established the foundation for NFTs. Later projects like Counterparty (asset creator and decentralized exchange) have confirmed the potential of putting real-world assets onto distributed ledgers. However, it was evident that developers require a more versatile blockchain to showcase the full potential of NFTs.

When the Ethereum network launched in July 2015 and introduced smart contracts, developers finally had a platform to develop NFT projects. One of the first NFTs on the Ethereum network was Etheria, a virtual isometric world where players can own tiles, farm them for blocks, and build things. The project was created in 2015 and has since become a collector's item for being a part of Ethereum's history. So, Etheria is almost as old as Ethereum itself.



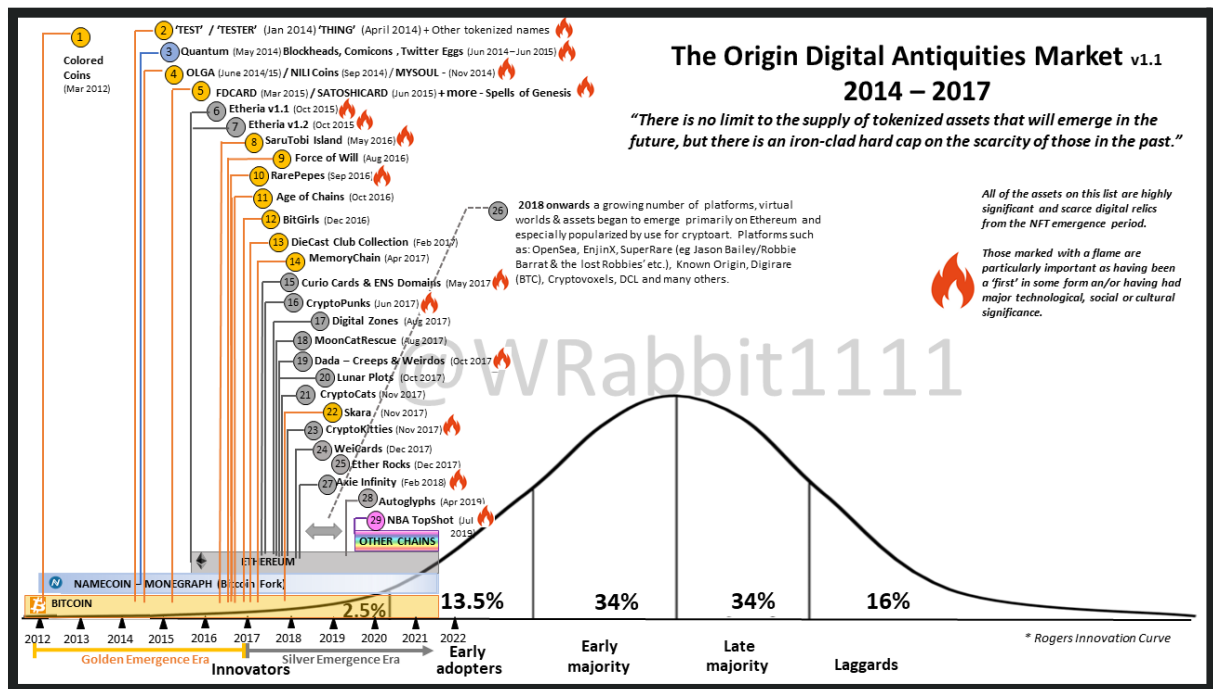
2017 brought such notable projects as CryptoPunks, Mooncats and CryptoKitties, which are now widely recognized.

It was at this time that the relevant NFT development standards began to take shape. Prior to this, most tokens on Ethereum used the ERC-20 standard (ERC stands for Ethereum Request for Comment). The ERC-20 standard is well suited for many of the functions in Ethereum used in creation, but it is poorly suited for creating unique tokens.

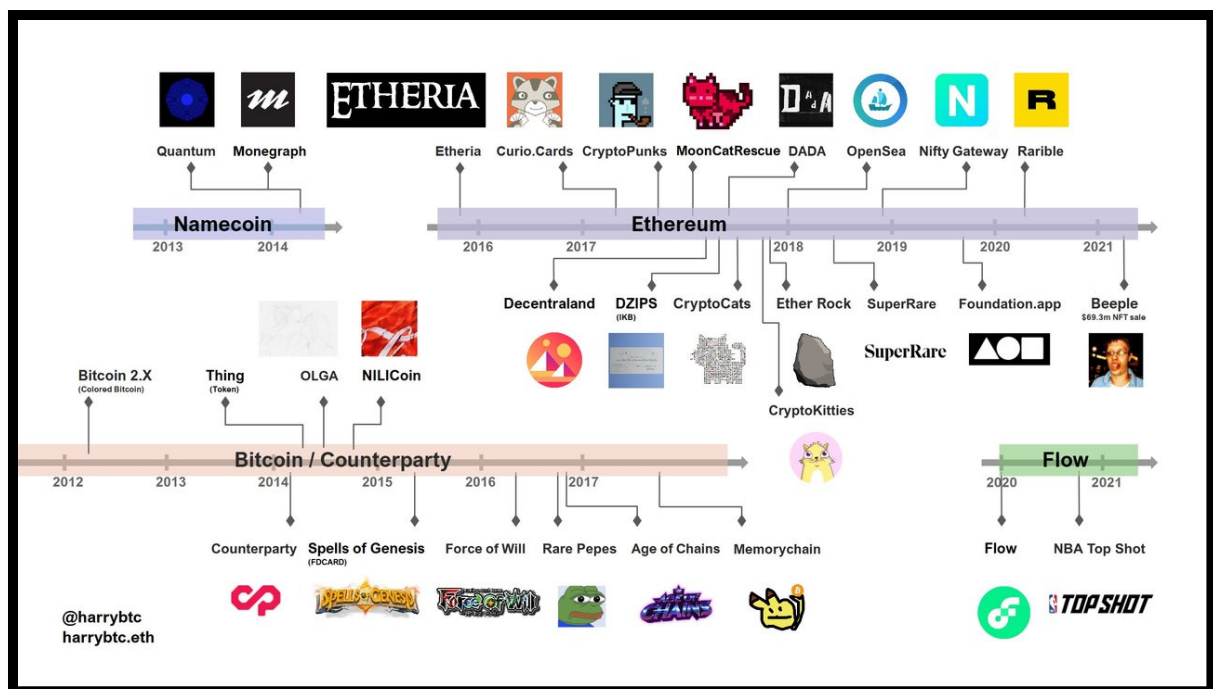
In September 2017, Dieter Shirley, a Github contributor, proposed the [ERC-721 standard](#) to standardize unique tokens. The proposal aimed to improve past iterations such as gas efficiency and allow the blockchain to recognize non-functional tokens.

It was in this proposal that the term "NFT" first appeared. This new standard would later be used in CryptoKitties, the first project to implement ERC-721. After CryptoKitties, many NFT projects followed suit and adopted the ERC-721 standard.

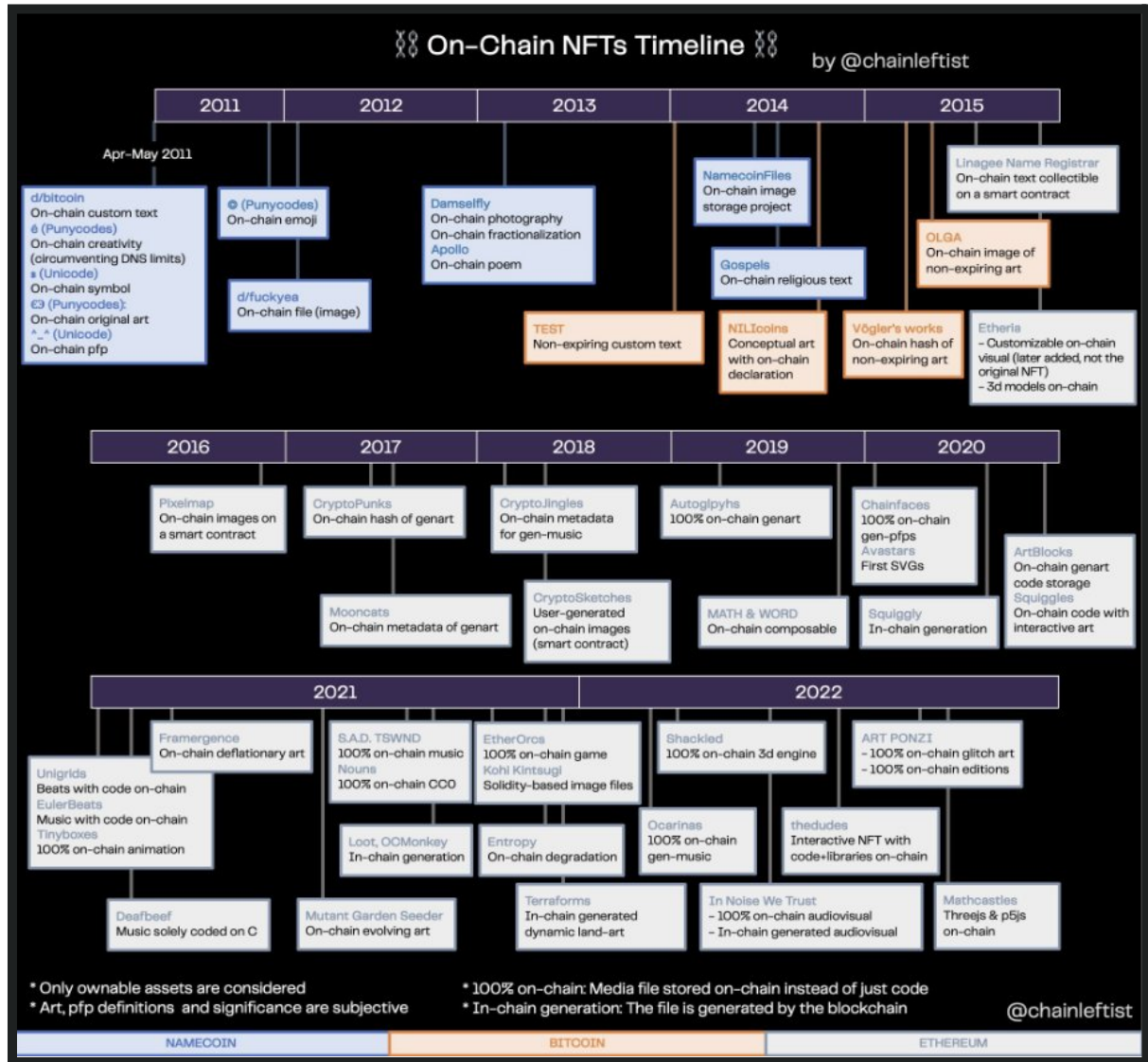
[In this thread](#), the author has compiled the largest portion of different versions of the NFT chronology.



source:images.hive.blog/p/2Qhdda6QnbewmLm8NhwoBxEay1M6U4AZ7zB9Sh4UWb9qhD1nQwiU5hEx38Qh sQDYQf8YzpTTE61WRfFx9C?format=match&mode=fit



source:images.hive.blog/p/23KQwnti57su3LFPqSUHj4XrDK3TmQ5hewq3KVhbukrqKQACTHuwkmNnmiziCteXq gZCdna6pWwGx2tXR5nnPP2y4q6dn6H?format=match&mode=fit



source: pbs.twimg.com/media/Ffp3MyBWIAAuX8k?format=jpg&name=medium

And don't forget the most important site writing the history of the NFT nfttimeline.com.

Why do I need ERC-721

We already figured out what NFT is and looked at its main differences. By 2020 - 2021, NFTs have finally formed as a special sector of the cryptocurrency market. What types of NFTs have arisen and why are there so many of them?

Types of NFTs.

To date, there are the following main types of NFTs:

- **ERC-721** standard NFTs and similar tokens*;
- **ERC-1155** standard NFTs and similar tokens;
- **SBT** (SoulBound Tokens);
- **Other** non-interchangeable tokens.

* Note the term "similar tokens". The point is that there are many blockchains and the names of the standards may differ, but the concept remains. For example, in the BNB Smart Chain network the ERC-721's analog is the BEP-721 standard.

For this reason, we will not consider any specific standards, but will look at general approaches using the example of ERC-721 and other types of NFTs.

ERC-721 NFT tokens

ERC-721 is a compound term, and first, let's answer the question: **what is ERC?** ERC stands for Ethereum Request for Comments: it's actually a proposal to improve the Ethereum network. And 721 is the sequence number of the submitted request.

The ERC-721 standard specifies:

...This standard provides basic functionality for tracking and transferring NFTs.... NFTs may represent ownership of digital and/or physical assets... such as

- *Physical property - homes, unique works of art;*
- *Virtual collectibles - unique photos of kittens, collectible postcards;*
- *Assets with "negative value" - loans, encumbrances and other liabilities;*

The standard allows applications to work with any NFT on Ethereum.

Actually, the ERC-721 standard NFT has two properties:

- ID (a sequential, unique token number within a smart contract) and
- metadata (a data array with a name, description, image address, and other allowed properties).

And the 2021-2022 hype has shown that it is metadata that's still a problem area for many NFTs.

But why?

First, many of them, especially images, are stored on centralized servers, which means that instead of an NFT we get some conditionally unique token whose metadata can disappear at any moment if the server is shut down.

Therefore, several possible solutions have appeared on the market:

- storing data in an interplanetary file system (IPFS),
- decentralized file storage (DFS): Filecoin, Storj, Sia or in systems like Swarm based on Ethereum.

But for now, there are no perfect solutions. And there are many reasons for that:

- Someone has to pay to store the data, otherwise it will be deleted if not used for a long time;
- storing large files in DFS is extremely difficult,
- accessing large files through DFS is not fast.

Second, possible attacks on metadata:

- spoofing attacks, - when one ID corresponds to different metadata (of the attacker and the honest author/owner)
- phishing;
- fake giveaways (airdrop) with the subsequent extortion of approves (*approve - permission to interact with the contract*);
- direct replacement of metadata.

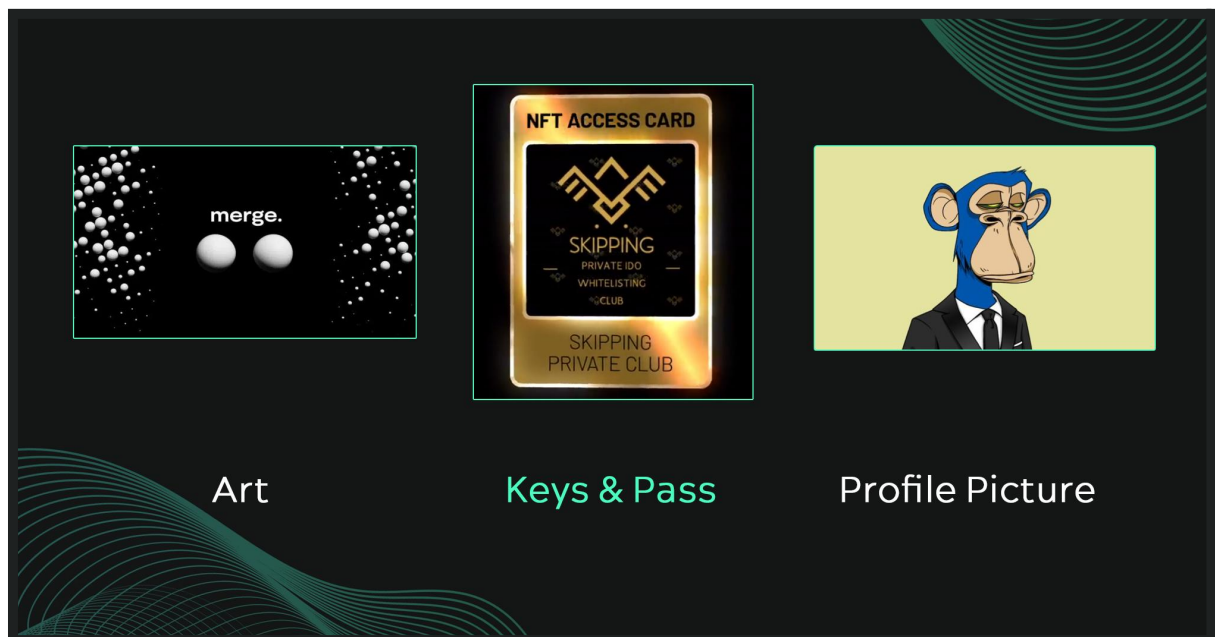
But the development of NFTs does not stop: in particular, DAO Envelop invented a system called **unstoppable NFTs**, when the "smart" NFT itself pays for its storage, taking funds from fees (royalties) that accrue to the creator of the NFT from it and/or other NFT collections of the same author.

Thus, ERC-721-like tokens have two key characteristics:

- ID - a unique identifier for a particular smart contract and blockchain;
- Metadata - which only when storage is decentralized can be considered unique.

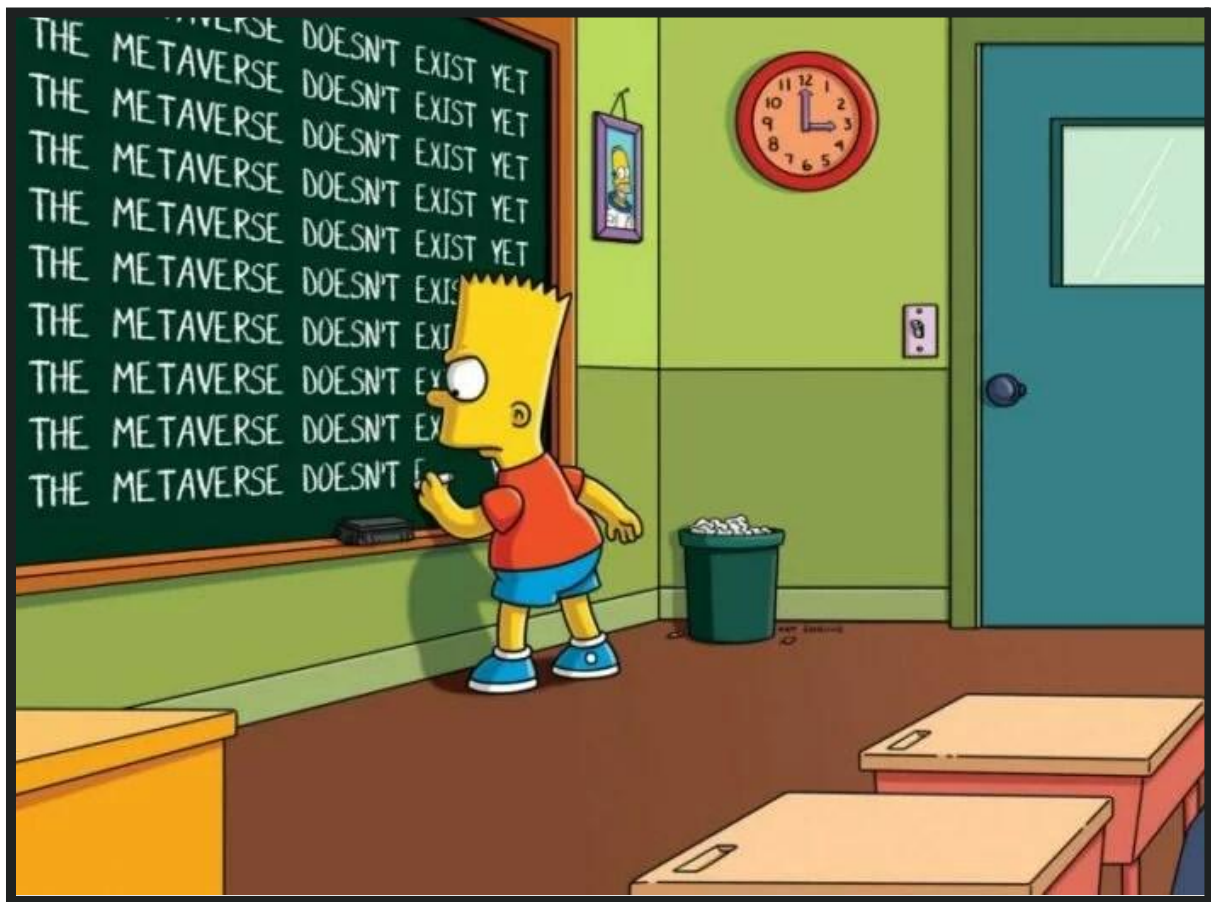
Examples of ERC-721 NFTs

- Digital art - paintings, photos, videos, etc.
- various access keys, passes, tickets, memberships to private clubs, etc...
- avatars or PFP NFT (Profile Picture Non-fungible Token).



Avatarization is one of the areas that has stepped far ahead with another major hype, the Metaverse.

The Metaverse and NFTs (Bonus)



The term "metaverse" originated in the 1992 science fiction novel *Snow Crash* as a portmanteau of "meta" and "universe". Only in 2021 Metaverse received a new round of evolution due to the fact that Mark Zuckerberg decided to rename his main project.

The main thing you need to know about the **Metauniverse**:

- **The Metaverse exists in a multi-dimensional space** that includes: real reality (RR), virtual reality (VR), augmented reality (AR), mixed reality (MR), and other types of reality;
- **The Metaverse operates within an economy of the act**, which involves interaction not only with humans, but also with Internet of Things devices, smart contracts, neural networks, avatars, and other entities;
- **The Metaverse requires total tokenization**, because otherwise the transition from offline to online and back again will be impossible.

This is why critics who don't understand why tokenization is necessary are so cruel to NFT. They think that NFTs are just pictures, but in fact they are not, because **NFTs are one of the few opportunities to represent ANY unique entities within the Metaverse.**

But the interesting thing is that the NFT market has responded positively to this critique. A market for programmable assets has already arisen and is booming, and primarily through non-fungible tokens.

Sources:

- [Metaverse Market Report 2022](#)
- [metaversed.consulting](#)
- [metaverseinsider.tech](#)
- [mixed-news.com](#)
- [xrtoday.com](#)

Benefits of the NFT ERC-1155

Earlier we learned that the first NFT standard was ERC-721. Now we'll consider the NFT token standard ERC-1155.

On the one hand this standard as well as ERC-721 contains identifier and metadata. On the other hand, an ERC-1155 NFT contract can include any combination of fungible, non-fungible tokens or other configurations (e.g. semi-fungible tokens).

Thus, the ERC-1155 (Multi Token Standard) allows each token identifier to represent a new configurable token type that can have its own metadata and other attributes.

The NFT ERC-1155 standard is ideal for creating (mint) unique collections. In addition, ERC-1155 are most often used in the gaming industry, as they can contain both the character and his attributes (e.g. helmet/armor/swords/etc.).

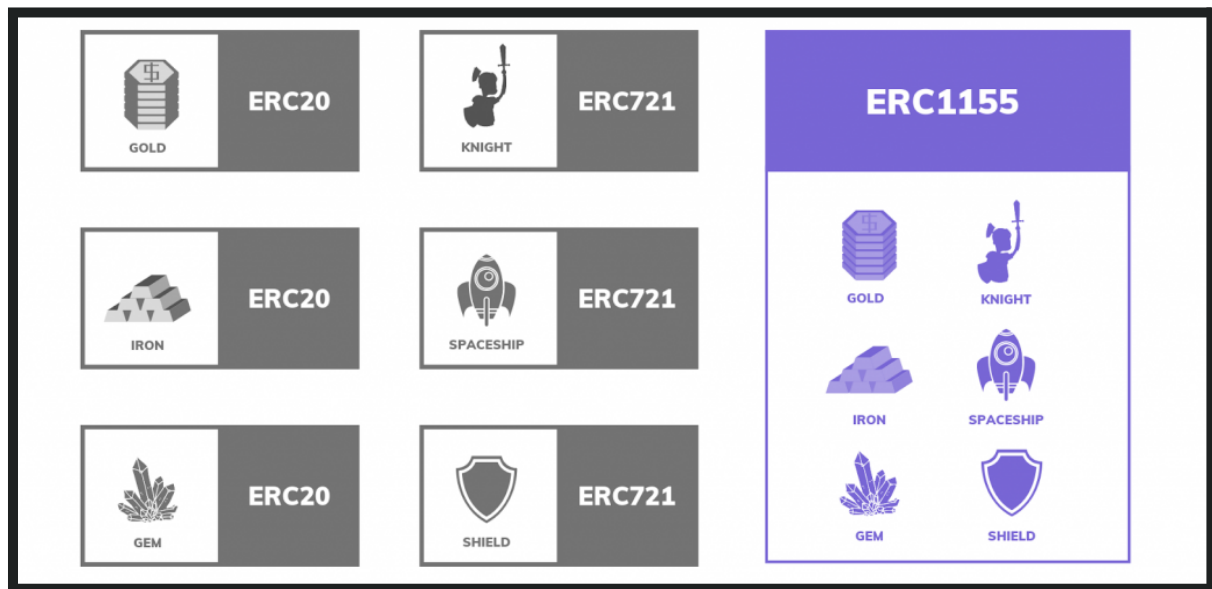
Another important advantage of the NFT ERC-1155 standard is that you can send any number of items to one or more recipients in a single transaction, saving fees.

The best analogy for the standard is a shopping cart in a supermarket. With the implementation of the standard it is not necessary to carry each new product to the checkout, but you can put everything in the cart and bring all the goods at the same time.

From a technical point of view, ERC-1155 uses a single smart contract to represent multiple tokens at once. That is, if previously to send USDT (ERC-20 standard token) and your NFT (ERC-721), the user had to perform several different transactions, which was ineffective and expensive, with the advent of ERC-1155 these tokens can be included in one smart contract. And accordingly sent in a single transaction.

Thus ERC-1155 has a number of advantages:

- It supports multiple tokens. Whereas ERC-20 and ERC-721 require a new smart contract for each type of token.
- Supports fungible, non-fungible, semi-fungible tokens. Semi-fungible tokens are similar to tickets. They are fungible and can be sold before the event. But after, they lose their value and become collector's items (non-fungible).
- It has a secure transfer feature that allows tokens to be returned if they are sent to the wrong address, unlike ERC-20 and ERC-721.



Compare ERC20, ERC721, ERC1155

What is SBT

SBT (Soulbound Token) is a non-fungible token (NFT) that cannot be sold or transferred. In other words, it's a non-transferable NFT.

But why do you need a token that can't be transferred?

Why do you need an SBT?

The answer is simple - to build a reputation. In decentralized networks with their openness and anonymity, in order to somehow restrict one account from another, we need some additional data.

We can require authentication documents, but then decentralization and anonymity will be broken, and we will go from working in an untrusted environment to a trusted one, because when we give our data to a third party, we have to trust it.

Therefore, the more correct and natural approach is to **build a transactional reputation**. In this case, all of your achievements, activities, rewards and possible malicious actions are recorded on the blockchain, thus forming your reputation based on your online activity.

An example of implementation of transactional reputation in validation of PoS-network. A validator has a positive reputation if it validates transactions quickly, correctly, safely and thus increases security, fault tolerance and other characteristics of the system. And we don't care what diploma or certificates this validator has, what courses he has taken, etc. If he starts cheating, falsifying transactions, signing invalid blocks or otherwise disrupting the network, he loses not only his reputation, but is also fined. This mechanism of punishing dishonest validators is called slashing.

In this way, SBT is a natural evolution of the transactional reputation building approach. SBT can not just confirm your successes or failures, but can be used as an advanced way to organize access.

Already today, it is possible to categorize any account into the following access levels:

1. A wallet (e.g. Metamask) as the most common layer used for authorization to decentralized applications such as Uniswap or OpenSea;
2. Various ERC-20 tokens used for voting, for example
3. NFTs, which can directly grant access (for example, NFT tickets) or give some special conditions, such as discounts.
4. Smart-NFTs (aka NFT 2.0, or programmable NFTs), which serve as a kind of "wallet within a wallet", or more precisely, a multi-account. Within such an NFT there may be other tokens;
5. SBTs, which determine the status, skills, and other attributes of the account holder even if we know nothing about him/her, including whether he/she is a human, a neural network, a bot, or something else.

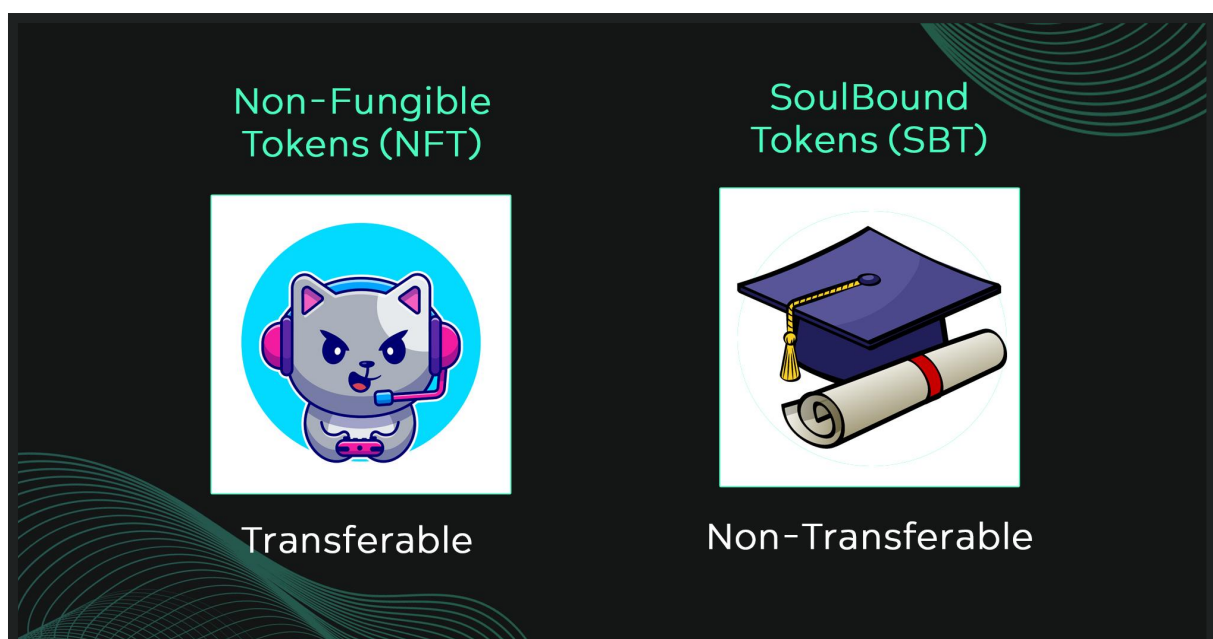
Example of using SBT

Let's look at the use of SBT on the example of implementation of micro-DAO architecture (*DAO - decentralized autonomous organization*) in Envelop.

To access the micro-DAO page - authorization via MetaMask is required. Further, to participate in the work of a separate micro-DAO, you may need:

- NFTs from a specific collection;
- Some number of ERC-20 tokens NIFTSY or other tokens required to begin financial participation in this micro-DAO;
- SBTs that confirm, for example, that you are a coder, and no other expertise is required for this micro-DAO (e.g., this is a micro-DAO for coding a strictly defined set of smart contracts).

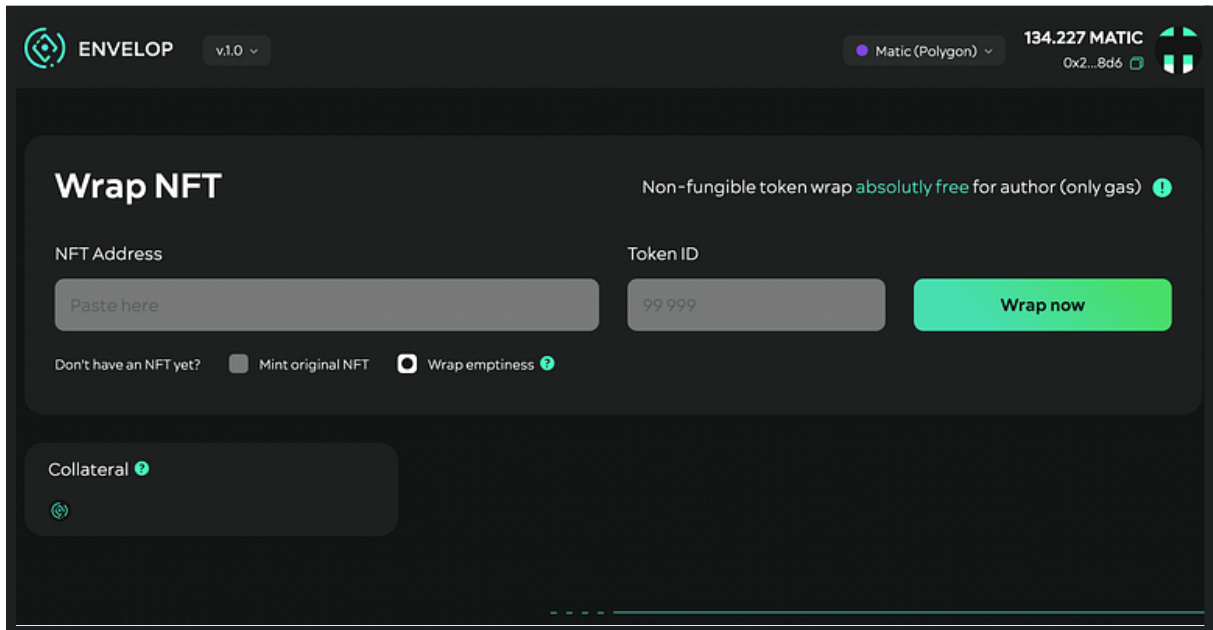
So, with all this data on the blockchain, we can analyze it and get the information we need (reputation score) at any time. At the same time, there are no centralized and standardized lists, which means that it's impossible to deprive a person of what he or she has earned, be it capital, rating, experience, etc.



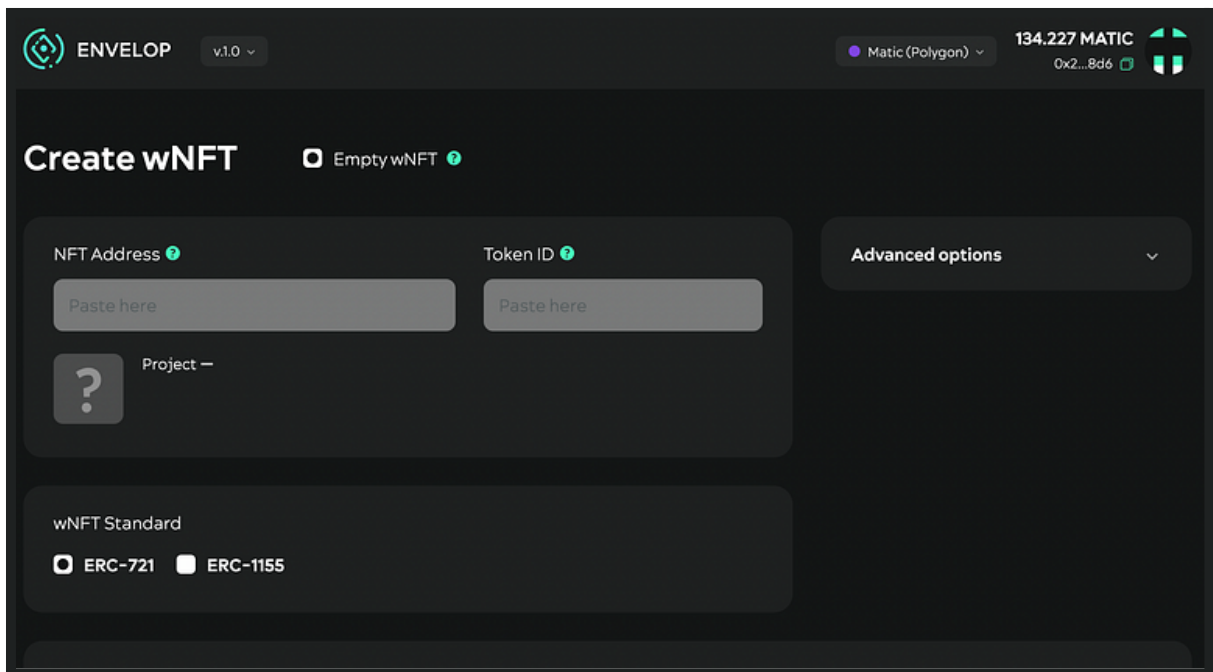
How to mint Soulbound tokens with Envelop (Guide)

So, to create your first SBT without code you can use DAO ENVELOP dApp: <https://app.envelop.is/list>

Connect to the dapp via metamask. Check "Wrap emptiness" and click "Wrap now"

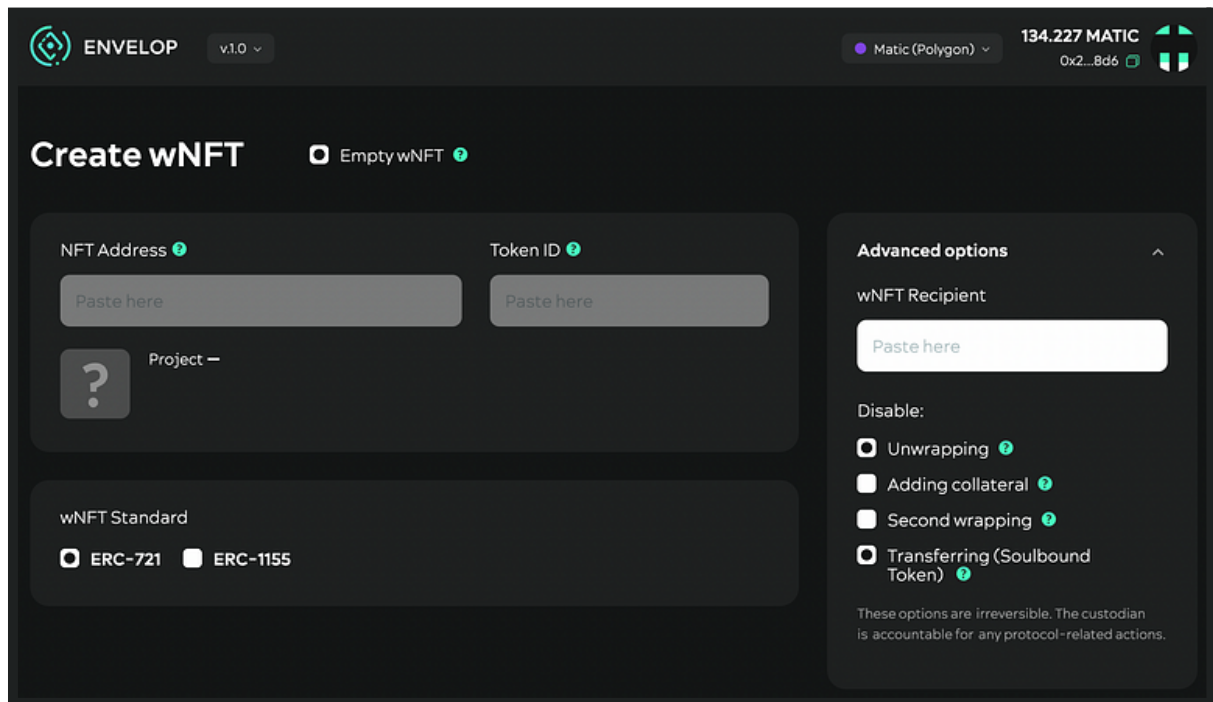


After that you'll redirect to the page: <https://appv1.envelop.is/wrap?empty=true>



How to mint SBT with Envelop

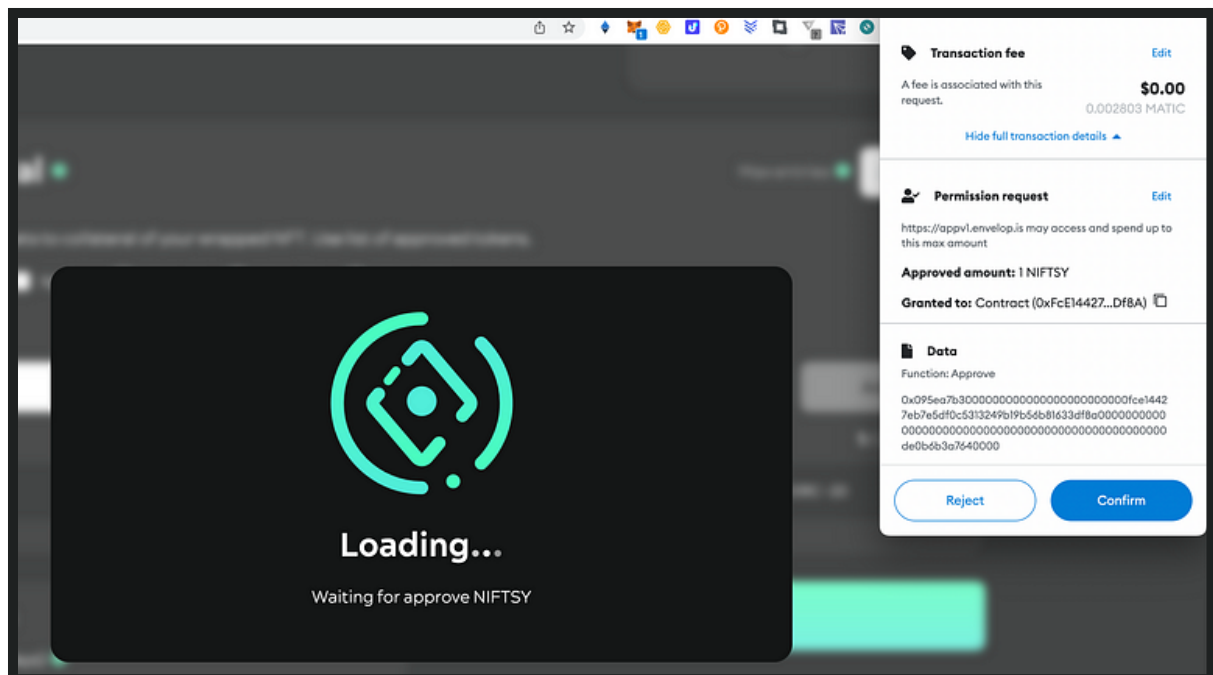
Click on the “Advanced options” menu, and select “Unwrapping” to prevent the owner from unwrapping wNFT in the future, and “Transferring”, which sets the token’s **non-transferability** condition. Which is the key feature of the Soulbound Token.



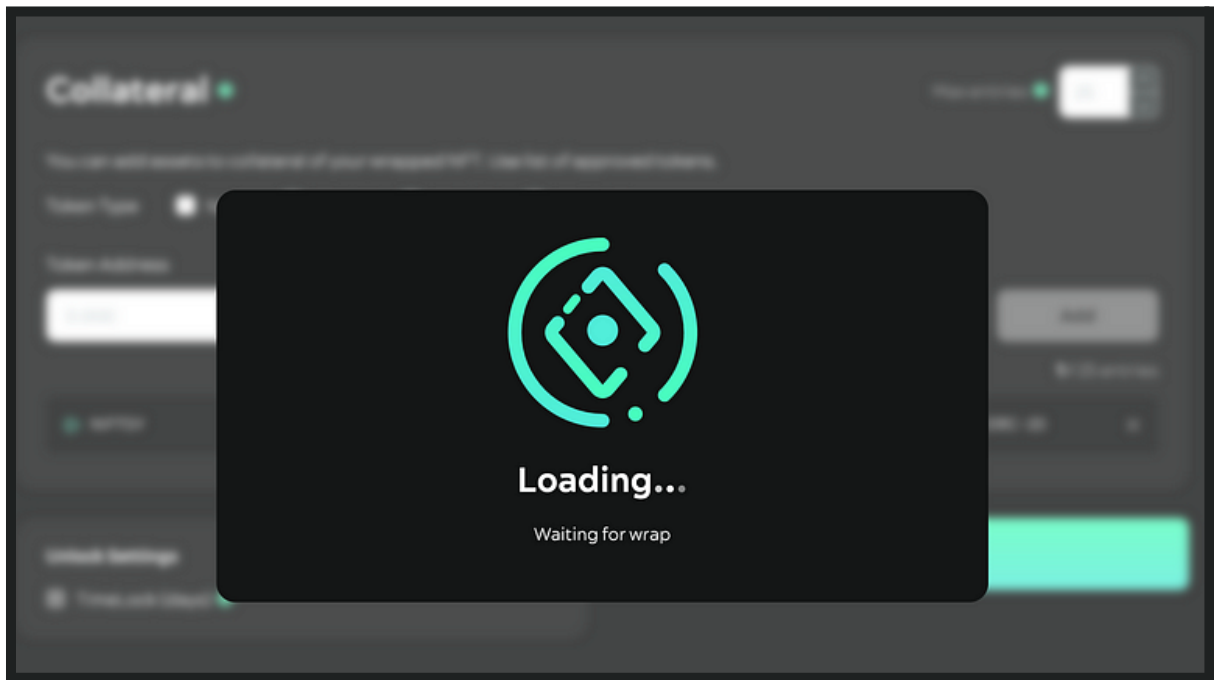
How to mint Soulbound tokens with Envelop?

You can immediately add some fungible or not fungible token to the Collateral, if you want the SBT to have the right feature at the mint time, but you can do it later.

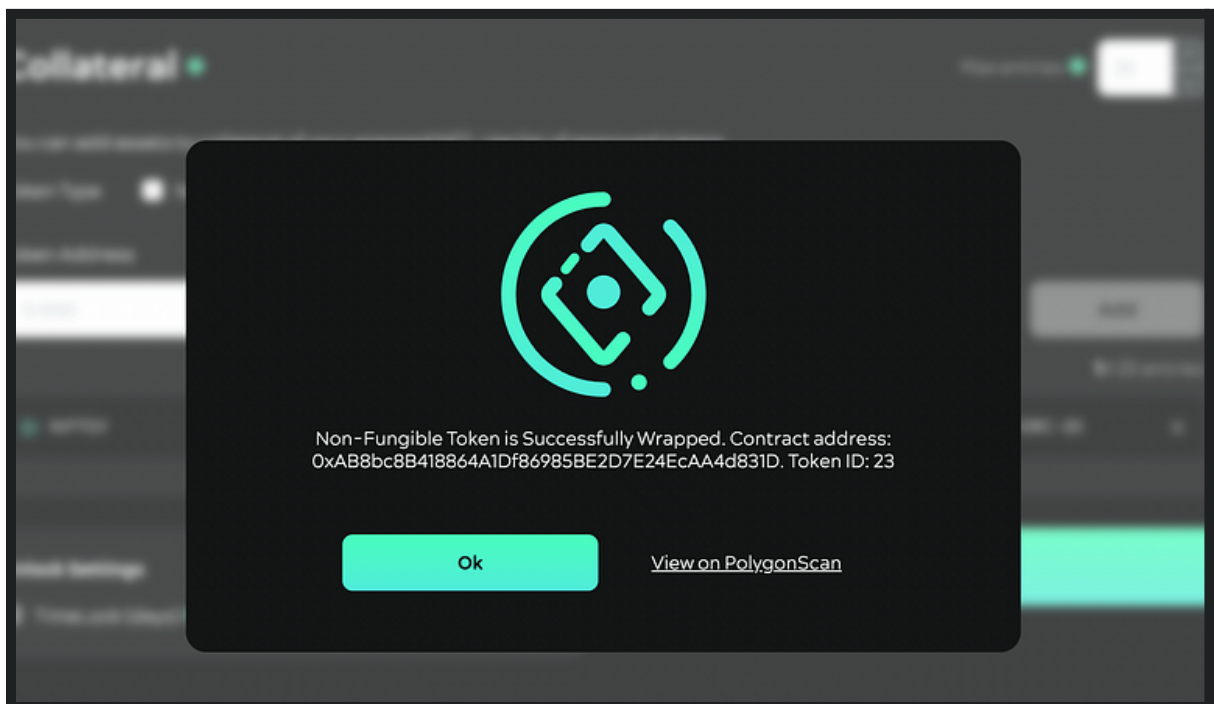
Next you need to confirm the transaction in the wallet.



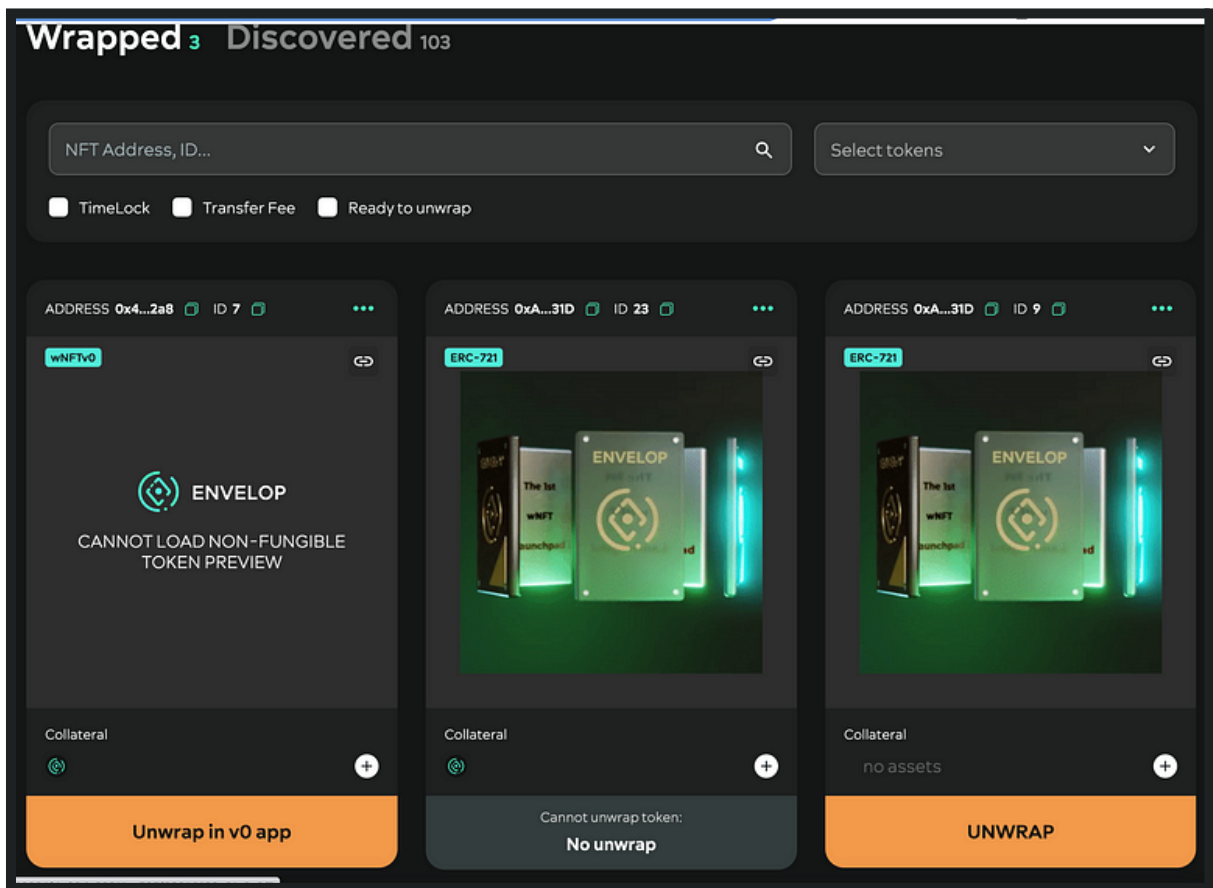
After that, wait for the wrap:



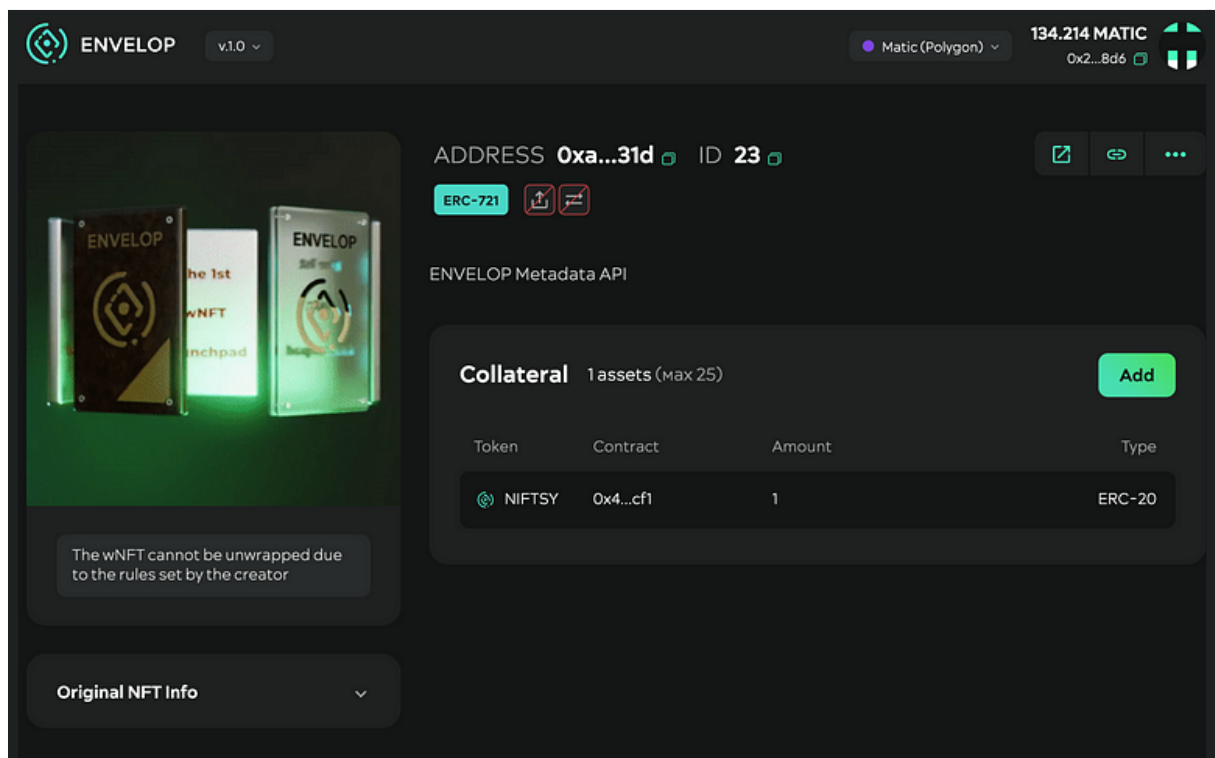
That's how, in just a few clicks, you minted an SBT. See our example <https://polygonscan.com//tx/0x86d10fba3f57fc5831f2d641415a8c687ac6e6a2bdf9d122373b316361793bab>



You can find your SBT here <https://app.envelop.is/list>



And there is a specific page for SBT. In our case it is: <https://app.envelop.is/token/137/0xAB8bc8B418864A1Df86985BE2D7E24EcAA4d831D/23> (where 137 is the Polygon chain ID):



Under the address you see the ERC type of token and its properties, that it is non-transferable and non-unwrappable.

ERC-3525 Semi-Fungible Token

Unlike ERC-721 and ERC-1155, the ERC-3525 standard has only recently appeared, the final version was adopted only in the fall of 2022, so there are very few practical implementations so far. Let's see what caused the creation of a new class of tokens.

ERC-20 is the first token standard for Ethereum. Each token is fungible, which provides it with high liquidity and scalability. However, there is no unique property (id attribute), so each contract can only represent one type of asset. In practice, this leads to the **need to create an extremely large number of EIP-20 contracts for each individual issue.**

ERC-721 adds uniqueness (id property), so each token can represent different types of assets. But **each token cannot be divided, combined, or represent a quantity value.**

ERC-1155 allows each token to be customized on top of ERC-721 by adding quantity properties (supply), metadata, and other attributes for each identifier (id property). The primary use case for ERC-1155 is to distribute the same NFT with multiple print runs. However, the token identifier and quantity of each NFT are fixed at creation (minting), so tokens cannot be merged or split, and **there is no compatibility with ERC-721.**

ERC-3525 combines the best features of the ERC-20 and ERC-721 standards. Tokens are non-fungible through slot and id attributes. And can be fungible with the ability to split and merge.

ERC-3525 tokens are often referred to as Semi-Fungible Tokens SFT. They combine the liquidity properties of fungible tokens with the uniqueness of non-fungible tokens. So how is it possible?

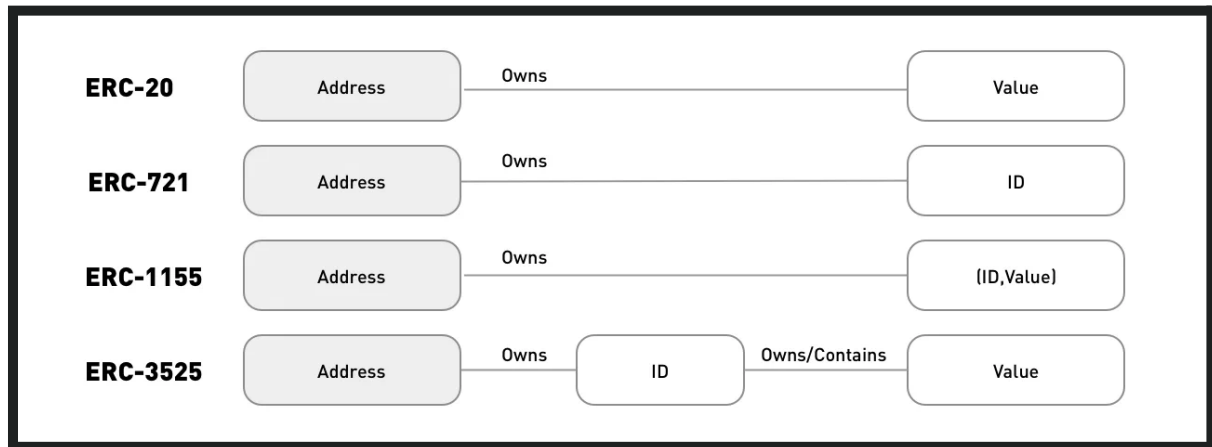
Structure of the ERC-3525 standard

ERC-3525 extends the ERC-721 standard. In addition to having the id property that differentiate each token, ERC-3525 introduces two new properties - slot and value. All three attributes allow quantitative operations such as split, merge, transfer, and comparison of NFTs within a single slot. Let's take a closer look at these properties:

- token id, as well as in ERC-721, represents the uniqueness of the token.
- slot - a property that is added to each token. The same slot represents the same attributes of tokens, which allows tokens with different id's to be identified as the same token. For example, if two bonds have the same issue date, maturity date, and interest rate, they will be assigned the same slot. Thus, two bonds can be split or combined as one bond.

- value - the value (worth) of the assets. For example, a bond with a nominal value of \$100 can be split into two bonds with a nominal value of \$50. The 100 and 50 can represent the value of the assets held.

The <ID, SLOT, VALUE> structure allows quantitative operations such as splitting, merging, transferring, and comparing tokens within a single slot. The ERC-3525 is backward compatible with the ERC-721 standard, which means that ERC-3525 tokens can be used in all interfaces that support ERC-721.



Comparison of ERC-20, ERC-721, ERC-1155, ERC-3525 token standards

Where ERC-3525 NFTs are used

ERC-3525 tokens can be viewed as a kind of container or wallet of digital assets, in which a user can place tokens of different types in different quantities. ERC-3525 token users can also freely transfer digital goods directly into and out of the token, allowing complex transactions on the blockchain, such as repaying a loan to multiple lenders, to be performed quickly and cost-effectively.

In general, any digital good that has quantitative attributes and may need to be divided or combined can be represented by a semi-fungible token. Bonds, coupons, vouchers, invoices, promissory notes, land titles, complex financial contracts such as futures, options are examples of digital goods.

The following examples of SFT applications can now be found:

1. Decentralized Finance (DeFi). SFT is suitable for use in financial instruments such as bonds, insurance policies, vesting plans, mortgages, etc. The split and merge features allow people to quantify tokens and increase flexibility in asset management. Financial instruments usually have different attributes, for example, there are different types of bonds with different issue dates, maturities, interest rates. With SFT, bonds with the same attributes (slots) can be split or merged by value transfer. The same applies to other financial instruments.
2. SFT can be used to create and distribute virtual assets in games and metaverses. It can divide game assets into smaller pieces. For example, a piece of virtual land can be split up and owned by different guild members rather than one person. Or, for example, 333 swords that look and function the same except

that they all have a serial number from 1 to 333, and number 1 or number 222 might cost more than number 2 and 301, for example.

3. Gift cards, raffle tickets, and performance tickets. All tickets are the same (in design, i.e. metadata), but each ticket is assigned a different seat;
4. Supply chain tokenization. For example, tokenizing a shipment of goods with SFT makes the distribution process more traceable and manageable.

ERC-4907: Rental NFT, an Extension of EIP-721

ERC-4907 allows the owner of an NFT to authorize another person to use his NFT for a specified period of time. After that period of time, the user no longer has access to the NFT.

Current ways of **rental** of NFTs:

- Collateralized rental
- Uncollateralized rental

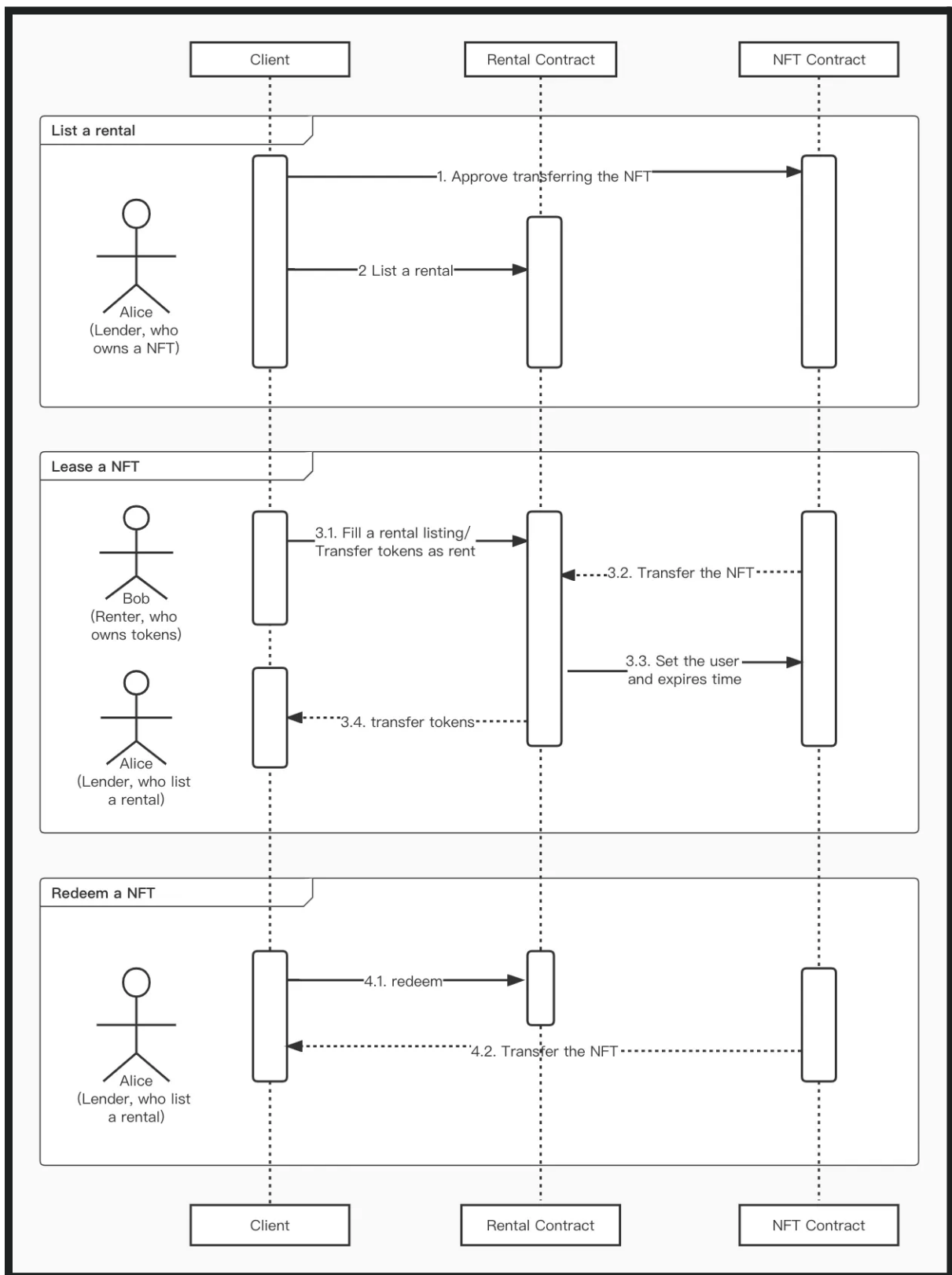
In both cases, the owner transfers ownership of the NFT to the user with some security or conditions that guarantee the return of ownership at the end of the lease term. Once the NFT is leased, the original owner has no control over it, which creates many potential risks. In addition, at the end of the lease term, the owner has to manually repossess the asset, which is a complex and costly process, especially when multiple assets are leased at the same time.

With the implementation of ERC-4907, the roles of owner and renter are now separated by an expiration date, meaning that renter privileges are automatically terminated without any further transactions on the chain.

NFT Rental Standard with Dual Roles

ERC-4907 adds a new role to the NFT standard, separating the owner and the user of the NFT, making a "rent" possible. The tenant can use the NFT until the end of the loan period, automatically transferring the NFT back to its owner.

ERC-4907 simplifies the NFT lease process with an automatic "expiration" feature that provides a time-limited user role. This innovative feature makes NFTs available for lease by default; owners no longer need to manually remove user rights, eliminating a tedious process and another transaction on the chain.



Renting Process

ERC-6551 token-bound accounts (TBAs)

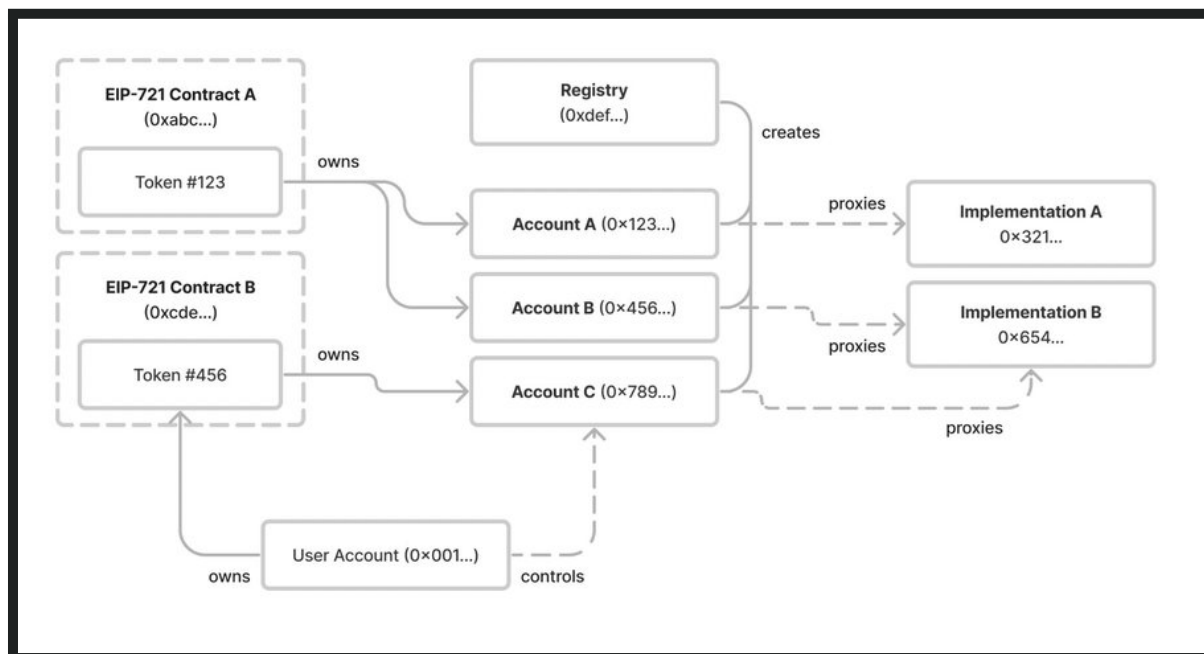
ERC-6551 turns every NFT into a smart wallet that can own tokens and interact with dApps across the Ethereum ecosystem. This means that ERC-6551 can store tokens and other NFTs in the same way as a regular smart contract wallet. The same applies to transactions. These so-called token-bound accounts (TBAs) are created and managed through a permissionless registry compatible with existing ERC-721 NFTs.

How Does ERC-6551 Work?

ERC-6551 utilizes an unresolved registry that is compatible with existing ERC-721 NFTs. The registry is a smart contract that acts as a factory and catalog for TBAs. Anyone can create a TBA for any ERC-721 token by calling a function in the registry and paying a small fee. The registry then deploys a proxy contract that acts as the TBA for that token.

The proxy contract representing the TBA inherits all the properties and metadata of the original ERC-721 token. It also implements the EIP-1271 standard, which allows it to sign messages and verify signatures on behalf of the token. This allows TBA to interact with other smart contracts and accounts on Ethereum, such as decentralized exchanges (DEX), credit platforms, gaming environments, etc.

Other assets, such as tokens or other NFTs, may be stored in the TBA. These assets can be transferred to or from the TBA by calling functions on the proxy contract.



What can I put in my NFT's token bound account? Absolutely anything you would put into your old wallet. ETH, USDC, ERC-20, ERC-721, ERC-1155, and any other tokens you would normally send to your Metamask, Ledger, etc.

Can I nest my Token Bound NFTs inside of each other? Yes! Since every NFT is a Token Bound Account, there are no limits to how many tokens you may have nested in your NFTs, or how far down you go. If you want to put an NFT inside of an NFT inside of an NFT you can. When you transfer that NFT to someone else, everything inside automatically goes along with it.

Use Cases of ERC-6551

Composability. You can combine your NFT with related assets, such as other NFTs and tokens, into a single profile. If you sell or transfer an ERC-6551 NFT, all the assets within

it will also be transferred. With TBA, you can create a "bag" of game assets that can be stored in an ERC-6551 token and greatly enhance the user experience in a Web3 game. Prior to TBA, all assets (NFTs) collected in a game were stored in a wallet as individual tokens.

Each of your NFTs has its own **identity** and can interact with DApps independently. They are independent of the wallet they are stored on and can be linked to your on-chain identity. This opens up new opportunities for loyalty programs or in-game rewards based on past NFT behavior. It may also impact the value of NFTs, as platforms can use NFT identity and reputation to determine the creditworthiness or risk mitigation of a counterparty.

Provenance means that you can get a full picture of the asset's transaction history or usefulness beyond the certificate of ownership. Currently, NFTs don't provide much information about what the NFT has done in the past or how it has been used.

Dependency means that your NFT can independently interact with other assets or platforms on the chain to enhance its functionality and value. ERC-6551 NFT can own other assets or tokens that can enhance its performance or appearance. It can also interact with other platforms or smart contracts. This is akin to an NFT having its own identity and history on the chain, making the NFT more interactive.

Limitations of ERC-6551

One of the main challenges of ERC-6551 is gaining support from existing NFT projects and platforms. Not all NFT projects support the ERC-6551 standard, especially those that do not adhere to the `ownerOf` method, such as CryptoPunks. This means that some of the most popular and valuable NFTs will not be able to take advantage of the tokenized account linking feature.

In addition, some NFT platforms may not be willing or able to integrate with the ERC-6551 standard, either due to technical difficulties or commercial reasons. Thus, ERC-6551 standard NFTs may not be immediately available to all collectors and creators.

ERC-6551 also needs to be protected and, as it becomes more widespread, may provide hackers with a larger attack surface. ERC-6551 NFTs can own assets and interact with applications, and thus become more attractive targets for hackers trying to exploit vulnerabilities and loopholes.

Finally, ERC-6551s should provide convenience and intuitiveness. ERC-6551 represents a new level of complexity and functionality for NFTs. It also requires a new level of understanding and awareness from users who want to use them effectively. For example, users may need to learn how to create, access, manage and transfer tokenized accounts and their assets.

NFT 2.0. From image to technology

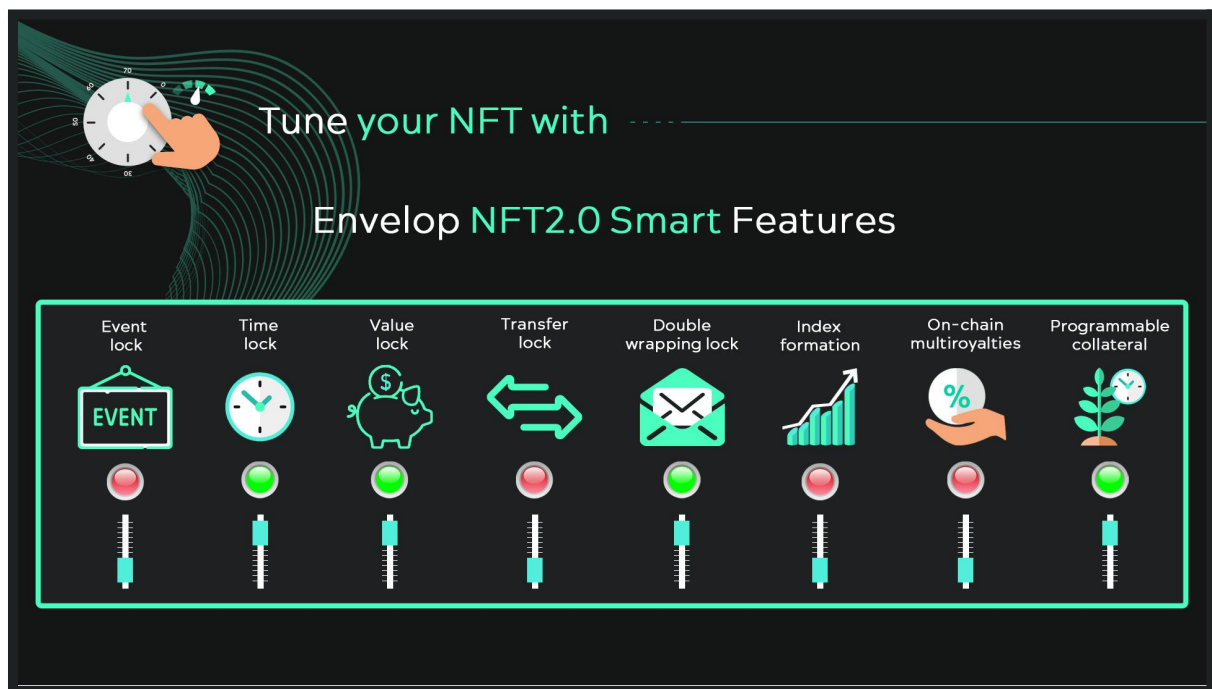
The NFT industry is developing very fast. NFT technology offers much more possibilities than generating static collections of images. Many projects have started to enter the market, expanding the scope of NFT. But because they were innovators, there was not yet a stable name for NFT with new functionality on the market. So a lot of terms appeared, which we will try to understand:

- **NFT 2.0 is the broadest notion**, it's difficult to define its content and scope, but in general it is NFTs that have additional (including mandatory) properties in addition to the standard ones (ID and metadata);
- **Programmable NFTs** - the same as NFT 2.0, but with a focus on the way in which additional features are provided. They are sometimes referred to as Smart-NFTs. Often no standard programming languages are used to create these NFTs, but rather no code solutions where no programming skills are required. With this approach, you simply select the functions you need from the standard settings;
- **Wrapped NFTs or wNFTs** are a specific implementation of programmable NFTs. This approach is used by such projects as Envelop, Charge Particles, Solv.finance and others;
- **Dynamic NFTs** are programmable NFTs where the metadata changes depending on the conditions of the smart contract.
- **Financial NFTs** are programmable NFTs that contain Collateral and can be used in DeFi, GameFi markets.

Financial NFTs should not be misunderstood as part of the programmable asset ecosystem, as the same term is used when conventionally classifying NFTs by application sector. For example, you can use your NFT1.0 avatar as collateral to secure a loan. Then such a project is said to belong to the financial NFT sector, while NFT itself belongs to the first generation. NFT projects are often included here: NFTx, Fractionalization protocols, loans, leases, uncollateralized indexes.

Using Envelop as an example, let's see what NFT2.0 can already do today:

- Set lock by event;
- Set lock by time;
- Create different degrees of nesting and therefore asset manageability;
- Create updatable SBTs and various certificates, gift tickets and more;
- Create collateral-free leases
- Set up different royalty and multi-royalty options



So the stereotype that "the NFT is a picture" is not just false, but largely unfair. Here are a number of other examples that prove it:

- In Uniswap v.3 your liquidity is represented by NFTs;
- Collab use NFTs to authorize;
- Etc.

Therefore, the NFT 2.0 market is well positioned for further development and growth, both in terms of the number of users and tools being created.

NFT2.0 from DAO Envelop

Wrapped assets are not an innovation itself. They have existed for a long time and in different forms. For example, wBTC is a BTC-like token created inside the Ethereum network. Why are they needed? There are several answers:

1. **Transfer to another network.** You can't just transfer coins from the Bitcoin network to the Ethereum network, so you lock BTC on the Bitcoin network via a smart contract and instead receive an equal amount on the Ethereum network in the wBTC token, which is a fungible token ERC-20;
2. **Giving new properties.** Such a wrapped bitcoin wBTC token gets all the properties of Ether tokens: transaction speed, use in decentralized applications, storage methods in the familiar Metamask wallet, etc.

There are other reasons, but the main thing for us to understand is that a wrapped asset is one that gets new properties due to the fact that the main (initial) asset interacts with some smart contract. And such a smart contract works like a program inside a global decentralized computer - the Ethereum blockchain or any similar.

But DAO Envelop decided to make not just a wrapped asset, but a truly programmable NFT-based Asset.

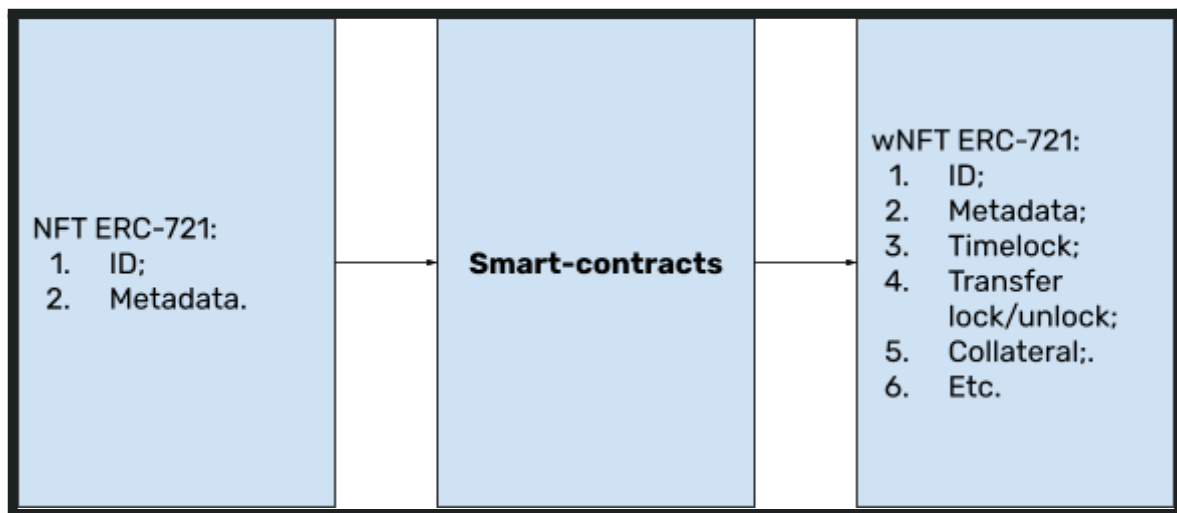
What does this mean?

1. NFTs have other properties besides ID and metadata, such as,
 - non-transferability (then we get Soulbounds tokens),
 - time and event locking (timelock, etc.),
 - possibility of temporary transfer (collateral-free lease), etc.

Why and who needs it? Actually - a lot of projects: from various funds (investment, hedge, other) that can use the secondary collateralized liquidity market, to GameFi projects that can allow players to rent out characters, eliminating the risk of non-return, non-payment and others.

2. Wrapped NFTs remain fully compatible with ERC-721, ERC-1155 standards, i.e. they can also be traded, listed on marketplaces, **transferred** between wallets, exchanges, etc., which makes them a comprehensible tool in different blockchain systems.

Consider the diagram:



As you can see, in addition to the fact that wNFTs themselves begin to have new properties, they can contain other assets within them. What is this for?

First, so that every creator (artist, photographer, 3D sculptor, designer, others), startup and others can attach, for example, their fungible tokens to any NFT. A simple example implemented by DAO Envelop as early as 2 years ago - NFT tickets with a whole set of ERC-20 tokens inside. It's convenient and **environmentally friendly**, no need to waste materials on packaging, takes up no space offline and extremely little online. A new format for handing out gifts for any conference, exhibition, etc.

Second, it is possible to create a competent division of rights in any DAO or just for yourself (for security purposes). Here's an example:

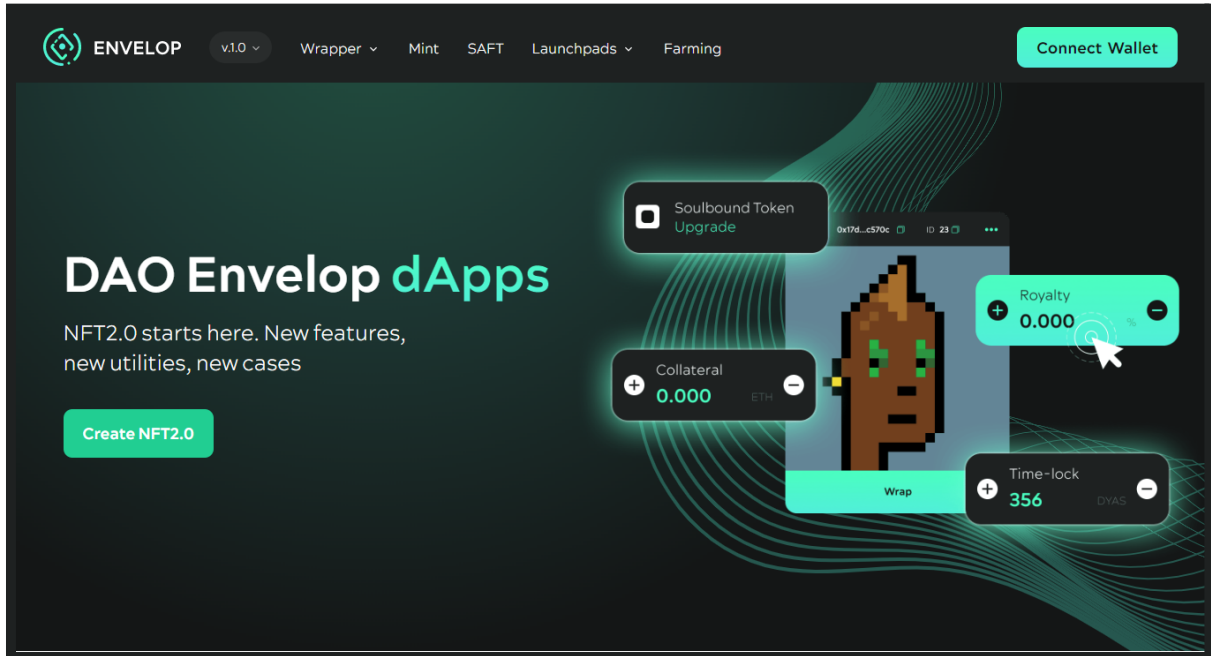
- The first level of authorization is your non-custodial wallet, such as MetaMask;
- The second level of authorization is an NFT, such as the one associated with a given DAO and/or event;
- Third level of authorization - tokens within the NFT. For example to vote you must have more than 10,000 NIFTSY inside your wNFT from DAO Envelop;

- The fourth level is your SBTs, which can be evidence of sufficient experience. For example if you only need to vote among developers.

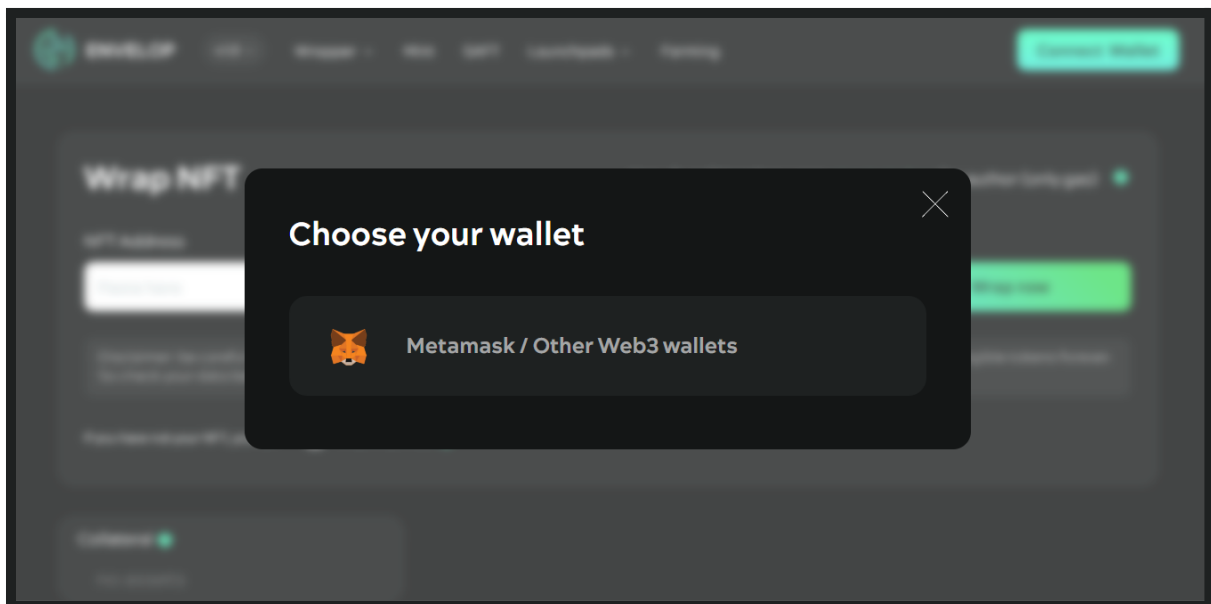
This approach allows wNFT solutions to be embedded in virtually any field or industry within Web 3.0.

How to make NFT2.0 via Envelop (Guide)

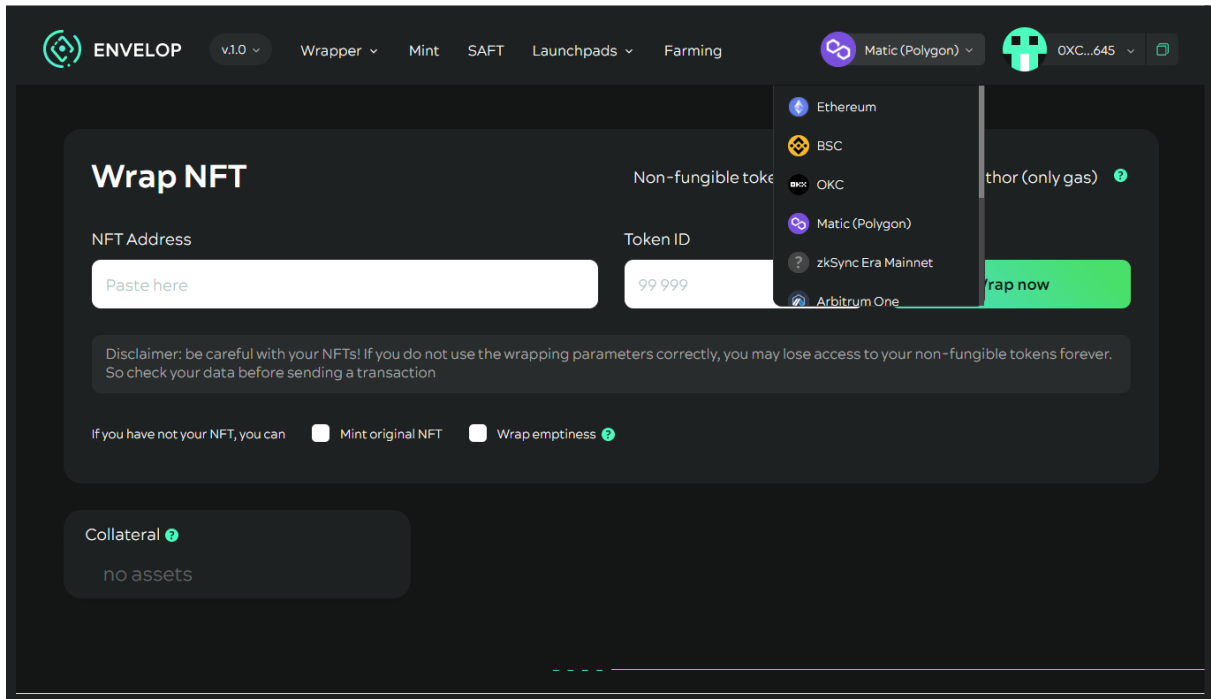
Go to app.envelop.is:



Click the button "Create NFT2.0":



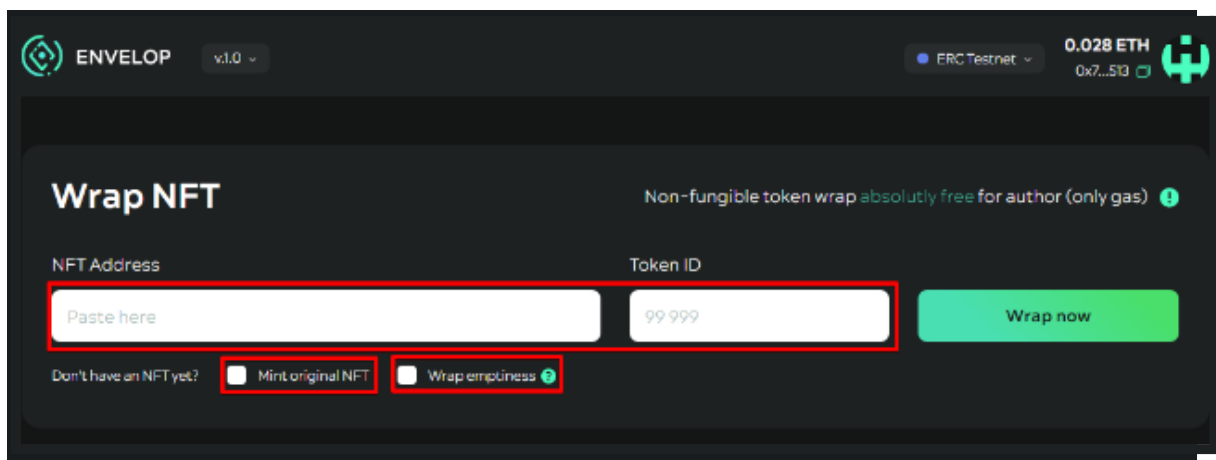
Connect to the dApp with your Wallet. Chose the network that you need:



Wrap wNFT

You can choose one of these options:

- specify the contract address of your token and ID
- or mint an original NFT with Envelop's metadata
- or wrap emptiness without graphic metadata



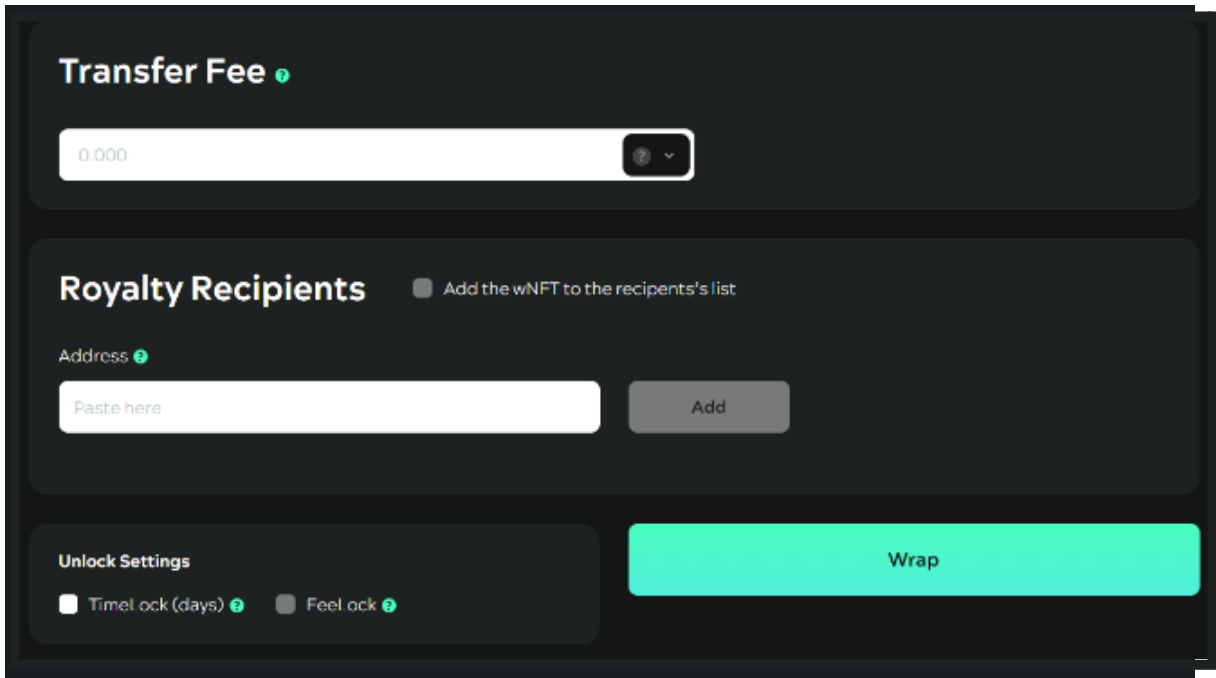
Additionally you can choose:

- wNFT standard: ERC-721 or ERC-1155
- advanced options

Add collateral:

And so:

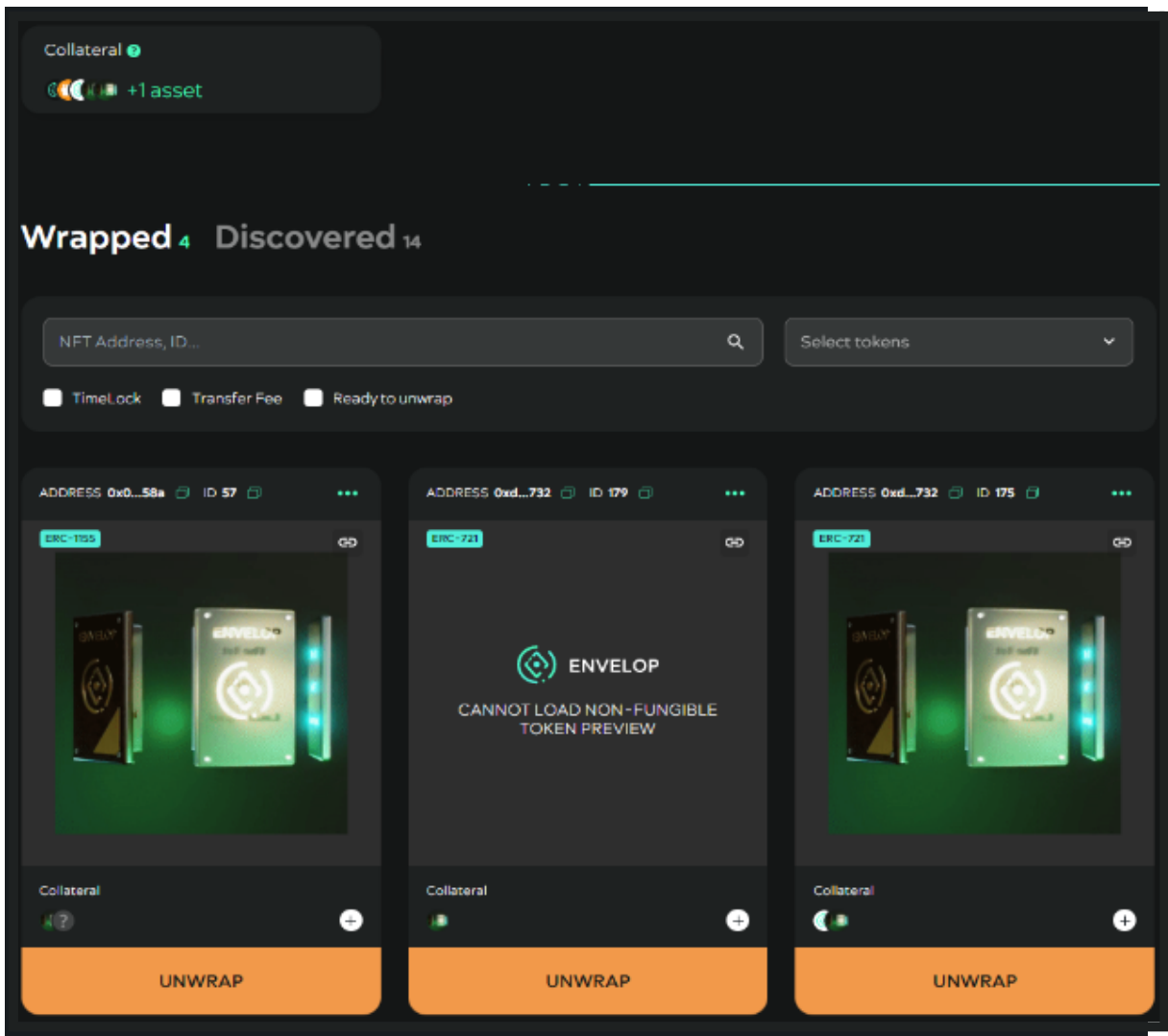
- specify the amount of the fee
- specify royalty income recipients
- specify unlock options



Dashboard functionality

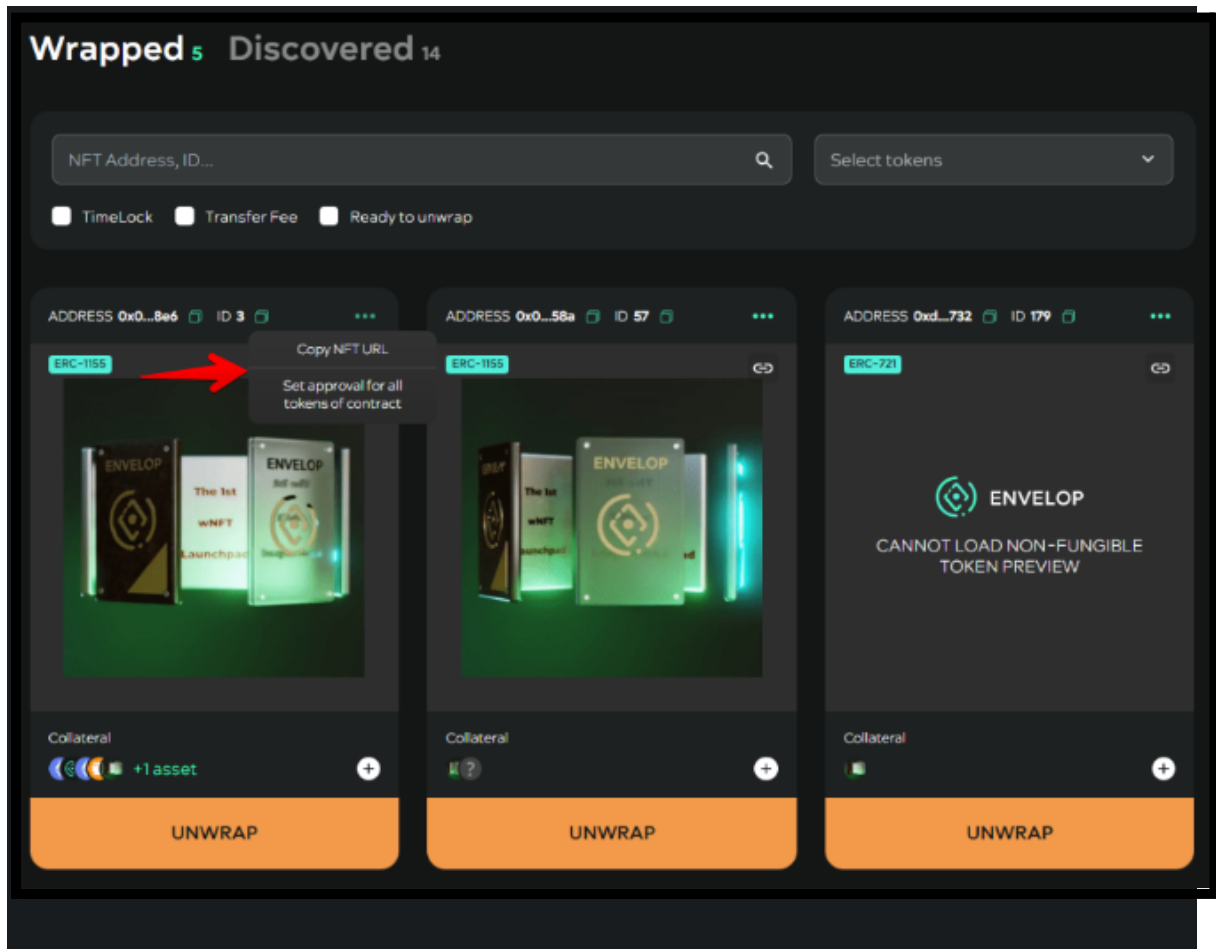
On your dashboard, you can see:

- all your NFT collateral
- original (discovered) and wrapped NFTs



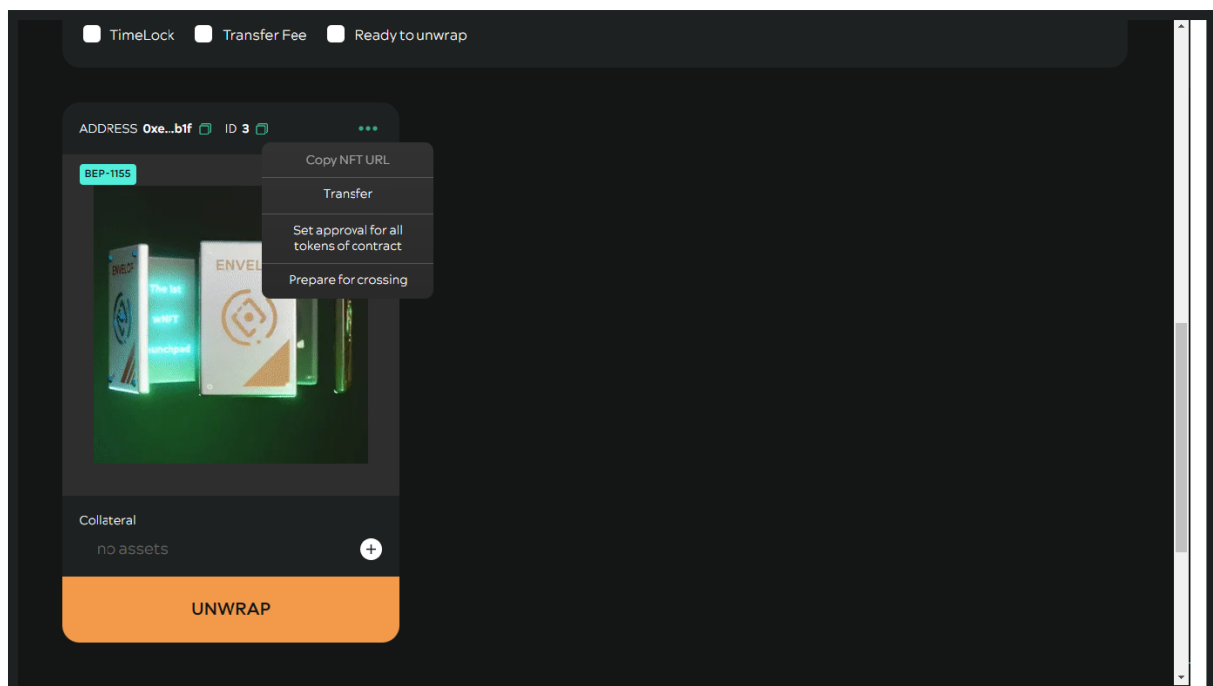
You can:

- copy wNFT URL,
- set approval for all tokens of contract



Wrapped NFT viewing page

You can find all data for you NFT or wNFT in the viewing page. Just chose from the menu "Copy NFT URL"



You can see

- royalty and fee settings
- lock settings
- information about the original token
- information about the collateral

The screenshot displays the ENVELOP interface for an NFT. At the top, the user's balance is shown as 0.024 ETH. The NFT details include the address 0x0...8e6, ID 3, and a status of ERC-1155. The interface shows 1 copy and a total supply of 1. A section titled 'Collateral' lists 6 assets (max 25) with columns for Token, Contract, Amount, and Type. The assets listed are ETH (0.001), WETH (0.01), DAI (1), and vENVLP (0.001). A 'Royalty' section shows a total of 0.001 and a list of two recipients, each receiving 50% of the royalty income.

Collateral 6 assets (max 25)

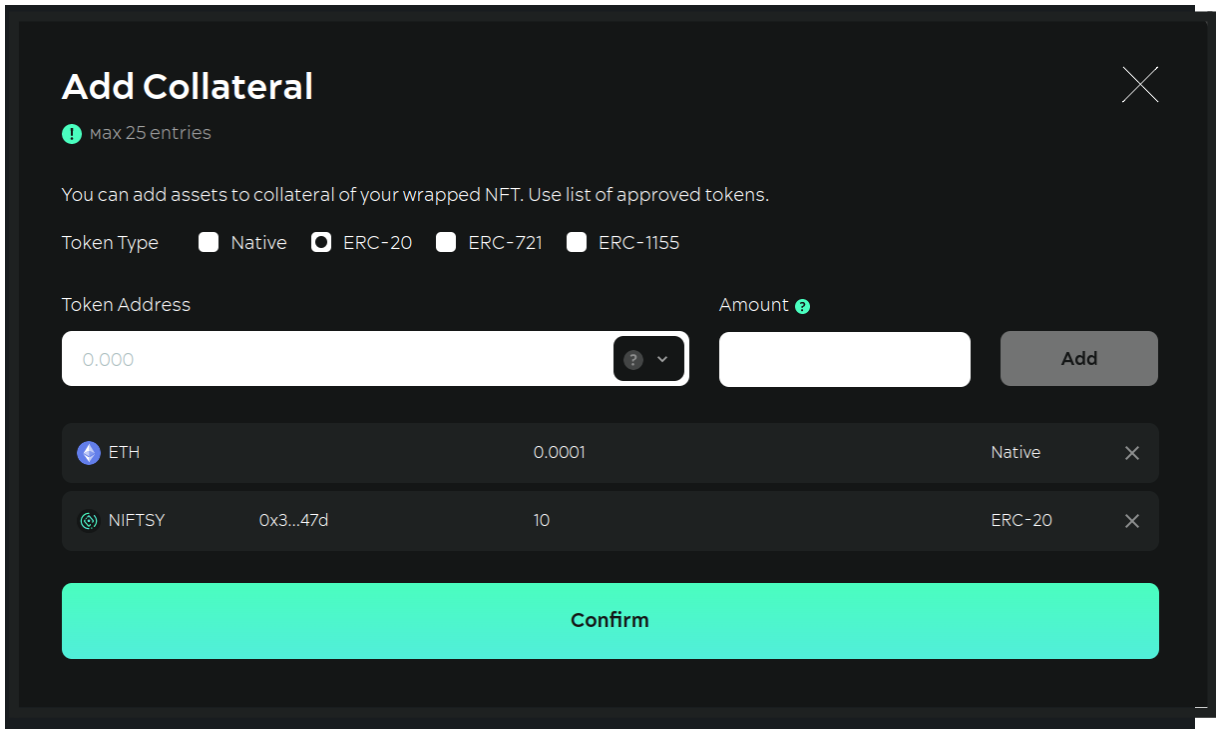
Token	Contract	Amount	Type
ETH		0.001	Native
	0x0...578	ID 187	ERC-721
NIFTSY	0x3...47d	0.01	ERC-20
WETH	0xc...5ab	0.01	ERC-20
DAI	0xc...735	1	ERC-20
vENVLP	0xe...e42	0.001	ERC-20

Royalty 0.001

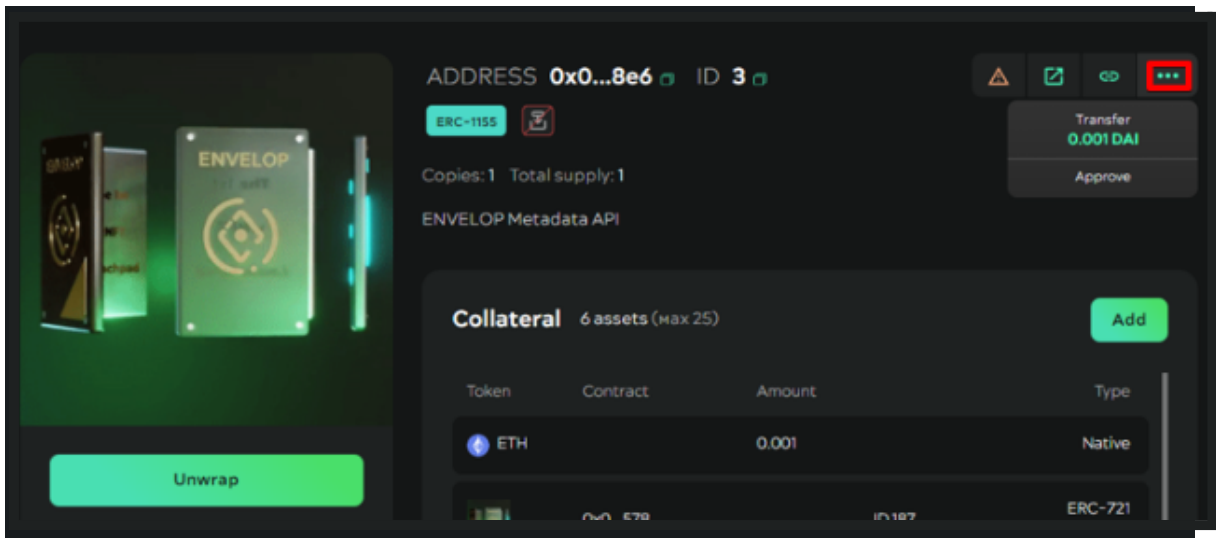
List of royalty income receivers with personal percents

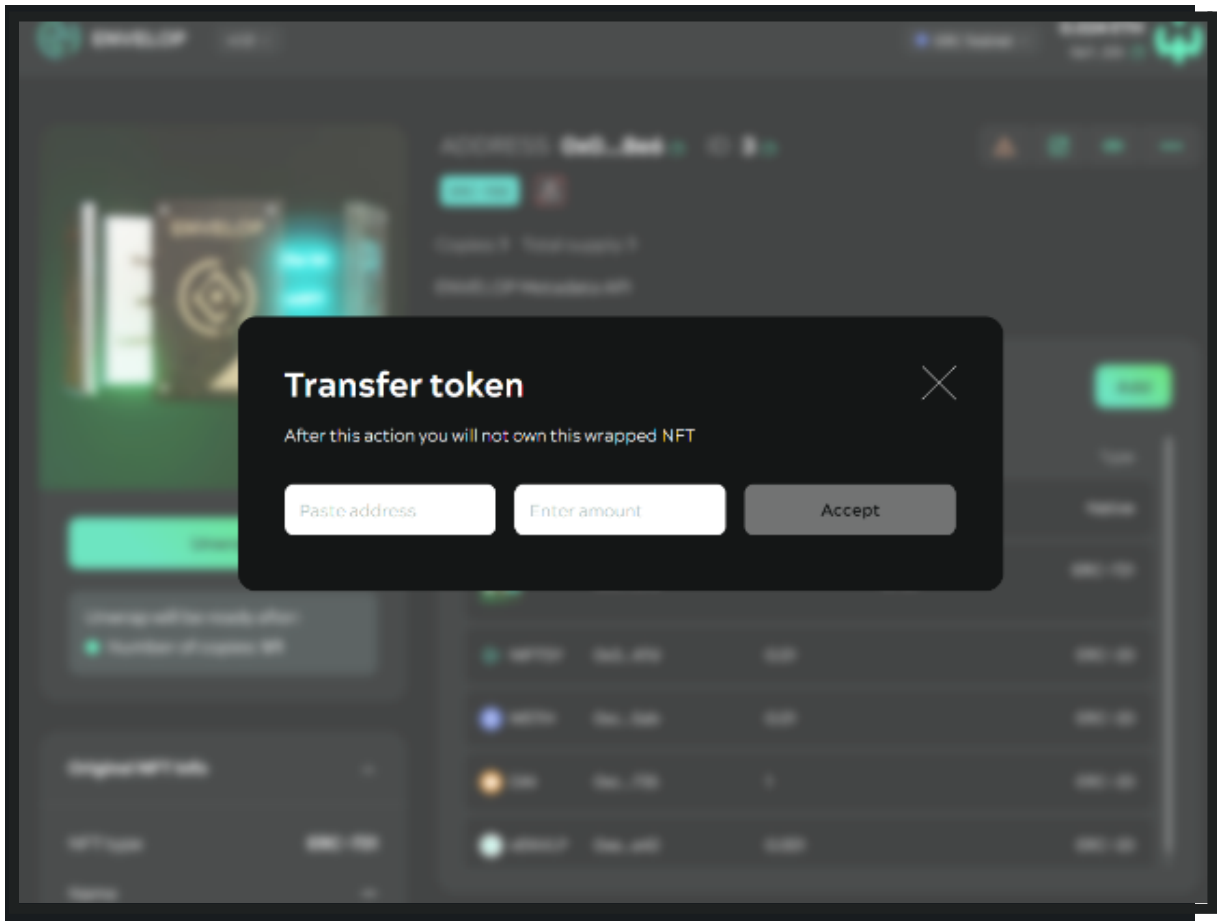
	Recipient	Percent	Amount
#1	0x7...513	50%	0.0005
#2	0x9...aA1	50%	0.0005

Here you can add more collateral,

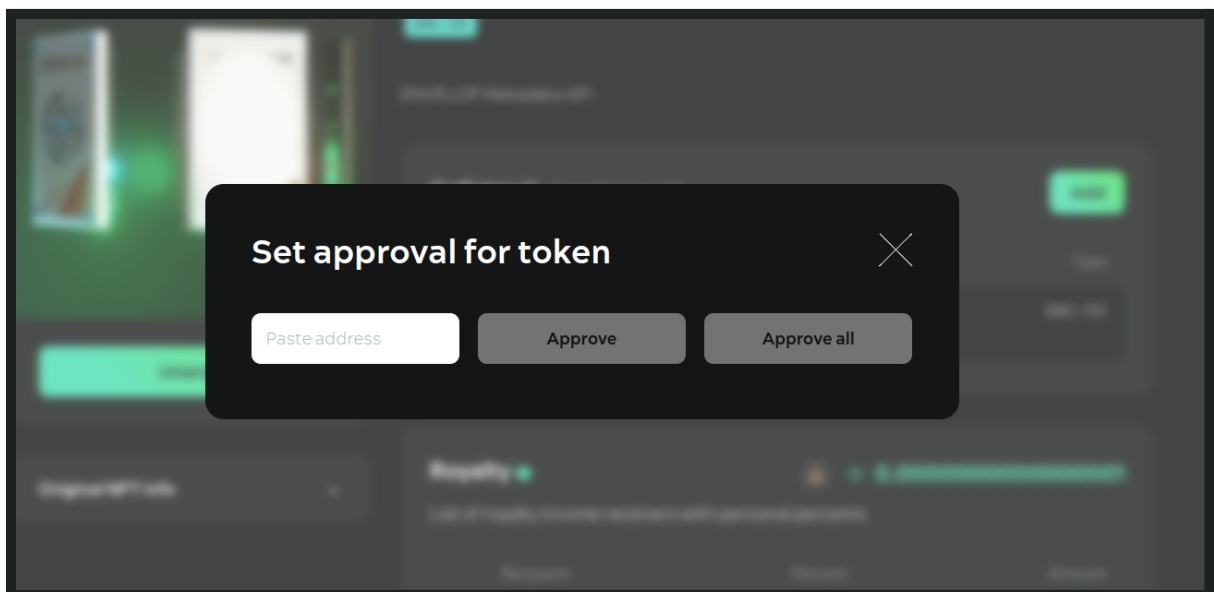


- unwrap if all conditions of the bounding are satisfied
- transfer your tokens to another address





- set approval for token



Dynamic NFTs (dNFTs)

Metadata problems and how to fix them

Metadata is one of the most important elements of any NFT. But there are several problems associated with them.

On chain (i.e., inside the blockchain) storing data is expensive. Off chain (outside the blockchain, such as on your computer or in cloud storage) storing is insecure. At any

time, the storage server can "fail" or they can be stolen and the metadata simply disappears.

How to solve the problem of NFT metadata storage?

- One solution is to use the Interplanetary File System (IPFS). You can also use Filecoin, a more advanced add-on to IPFS, but it's not 100% implemented there yet, as well as its competitors (such as Storj, Sia, etc.).
- Another solution is storage in decentralized and/or distributed storage of the last generation, such as torrent trackers. But there are more problems there, as sids and peers can be disconnected and access is always equal to the slowest network connection, which may not be suitable for some sectors of the NFT market, e.g. where liquidity is important.

But are there optimal solutions to NFT storage? Yes, and there are several, too.

- Optimize (in terms of storage space) the data sent to on chain,
- Make "unstoppable NFTs" based on some kind of storage. If we're talking about blockchains compatible with Ethereum virtual machine, it's best to use SWARM, which is inherently integrated with Ethereum.

Here's the approach Envelop suggests:

- Mint NFT;
- The data is sent to the decentralized storage SWARM;
- Set royalties. Part of the royalty (or all of it, as you set it up) goes to the creator of the NFT, and goes to pay for the storage of the NFT metadata stored in SWARM.

So, in this way, we have a programmable asset that pays for its own space on a distributed storage. But these are not yet dynamic NFTs. What do we need to do to make them so?

Modifiable content that we trust. Approaches to building dynamic NFTs.

The first, in which data is changed via a decentralized oracle (e.g. Chainlink).

- Dynamic NFTs in Aavegotchi. Here, the oracle helps to guarantee fair determination of the unique characteristics of Aavegotchi's dNFTs, and ensures unpredictable game scenarios and random selection of DAO participants.
- **Insurance on the blockchain**. Insurance policies can be tokenized into dNFTs, enabling the creation of customizable policies, such as crop insurance based on weather data that Chainlink oracles receive from the outside world. Because they provide real-time coverage across territories and improve payout efficiency, dNFTs are an alternative to traditional forms of insurance, which are often subject to delays due to manual processing and subjective evaluation.
- **The approach used in the Sharkrace project**. There are unique super-sharks - they are a limited collection of ERC-721 standard NFTs. But they have customizable (at a certain stage) properties that are initially stored on the

ERC-1155 standard contract. That is, each shark can have not just a fin, but, for example, a unique diamond fin, not just eyes, but glasses, and so on. The set of properties is limited by imagination and time: as soon as the shark is ready - the final mint occurs and the rarer the shark (this is determined through the set of unique properties for each sub-collection), the more rewards the player can get afterwards. Thus, in this approach, the data is dynamic in each particular round for each particular batch of sharks and the final result is not known. But once a round is closed, the shark metadata no longer changes. **There is no oracle here, but a direct change of metadata according to given conditions through a smart contract.**

- **cNFT (community NFTs)**. Different participants collaboratively pixel by pixel draw an NFT. Once the final version is fixed, the work is sent to the blockchain. In this way it's possible to create pseudo-generative and fully dynamic NFTs, but not through the use of neural networks or contracts, but directly **through the joint labor of several people.**

Dynamic NFTs can therefore affect several industries at once:

- Digital Arts;
- Gaming;
- Insurance and reinsurance markets;
- The collateralized derivatives market;
- A number of others.

NFT2.0 Use Cases

Mint NFT to IPFS and SWARM with Envelop

To provide a better user experience, Envelop has developed a NFT mint dApp that can be used to wrap and create smart NFTs. But our developers, following their vision, decided to offer the community the unique features of Envelop's mint dApp.

The key differences of Envelop's Mint dApp is to provide unique reliability for storing your NFTs and usability. We plan to achieve this through the following features:

- You can choose where to store your NFTs, on IPFS, SWARM or simple storage;
- The NFT mint will be seamlessly connected to other Envelop's features such as batch wrapping, collateral variation, royalties, etc.

Mint NFTs to Swarm or IPFS

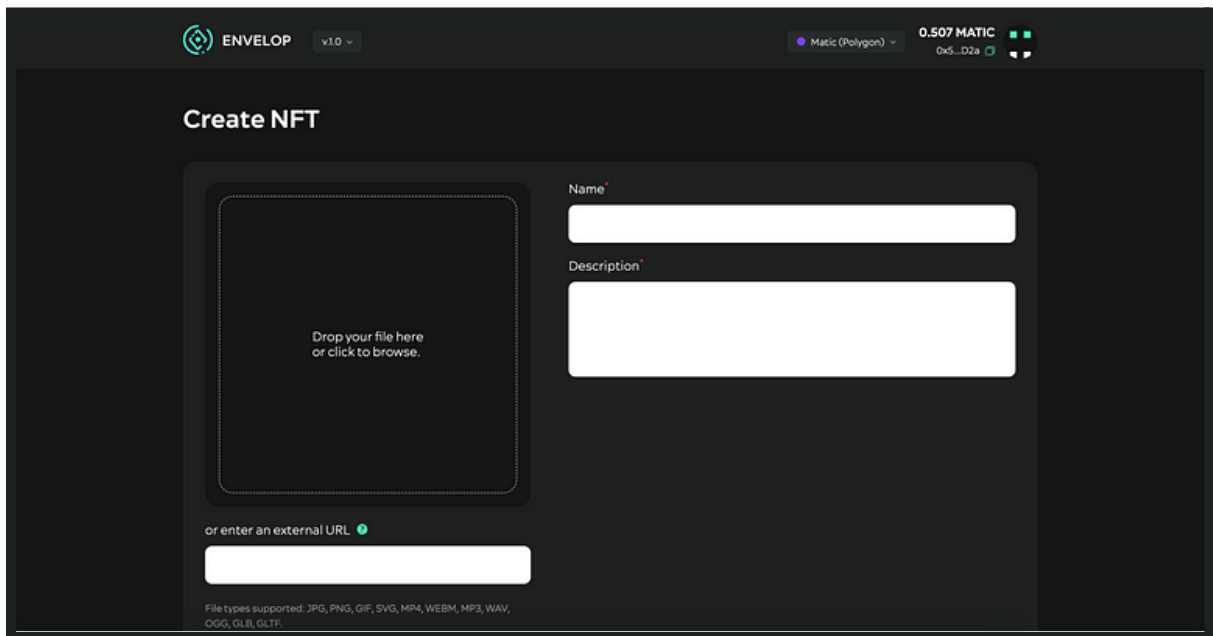
This approach will allow to create “unstoppable” NFT, which will be able to automatically pay for its storage on decentralized file storages.

So Envelop has the whole set of technologies to build a closed loop development of “unstoppable” NFTs.

How To Mint NFT with Envelop (Guide)

If you want to create an NFT with unique metadata in order to display that data in a wrap NFT, it's time to go to <https://app.envelop.is/mint/>

You will see a window like this (or about this if you are using a smartphone).



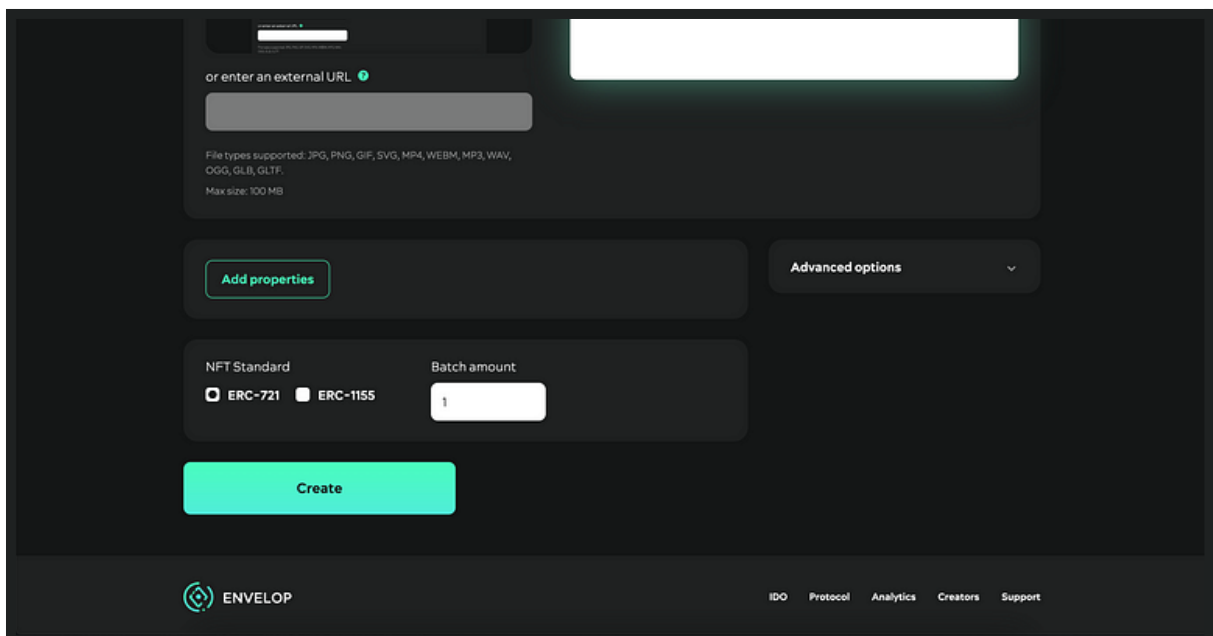
How To Mint NFT with Envelop

Next, you need to specify:

- Name – name for your NFT;
- Description – description for your NFT;

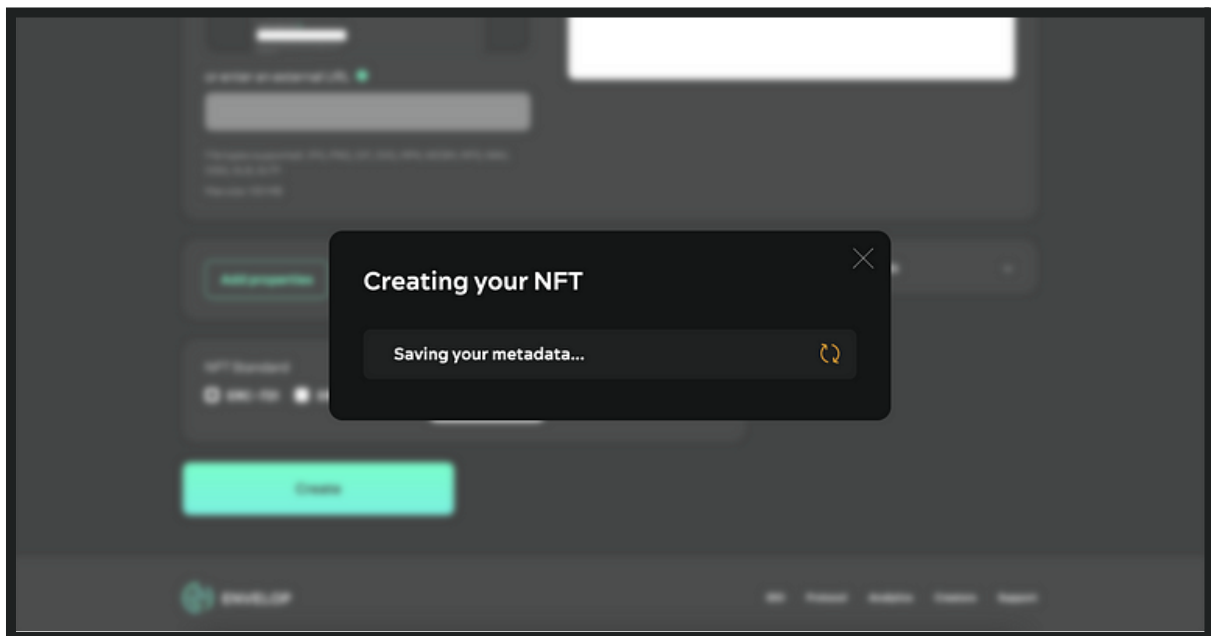
And upload the file for your NFT: via URL or drop (you can use JPG, PNG, GIF, SVG, MP4, WEBM, MP3, WAV, OGG, GLB, GLTF).

After that, you **should** choose the NFT's standard ERC-721 or ERC-1155.



How To Mint NFT with Envelop

Next, click the “Create” button and sign the transaction:



How To Mint NFT with Envelop

Your NFT will be minted and can be given a smart NFT function in the application <https://app.envelop.is/>

Or you can use batch transfer in the app <https://saft.envelop.is/>

If you get an idea for an original collection, we can put it up for sale on Envelop's launchpad.

INO – Initial NFTs Offering. A new way to IDO from DAO ENVELOP

The world's first wNFT startup platform was created by Envelop, and it crosses several ideas at once:

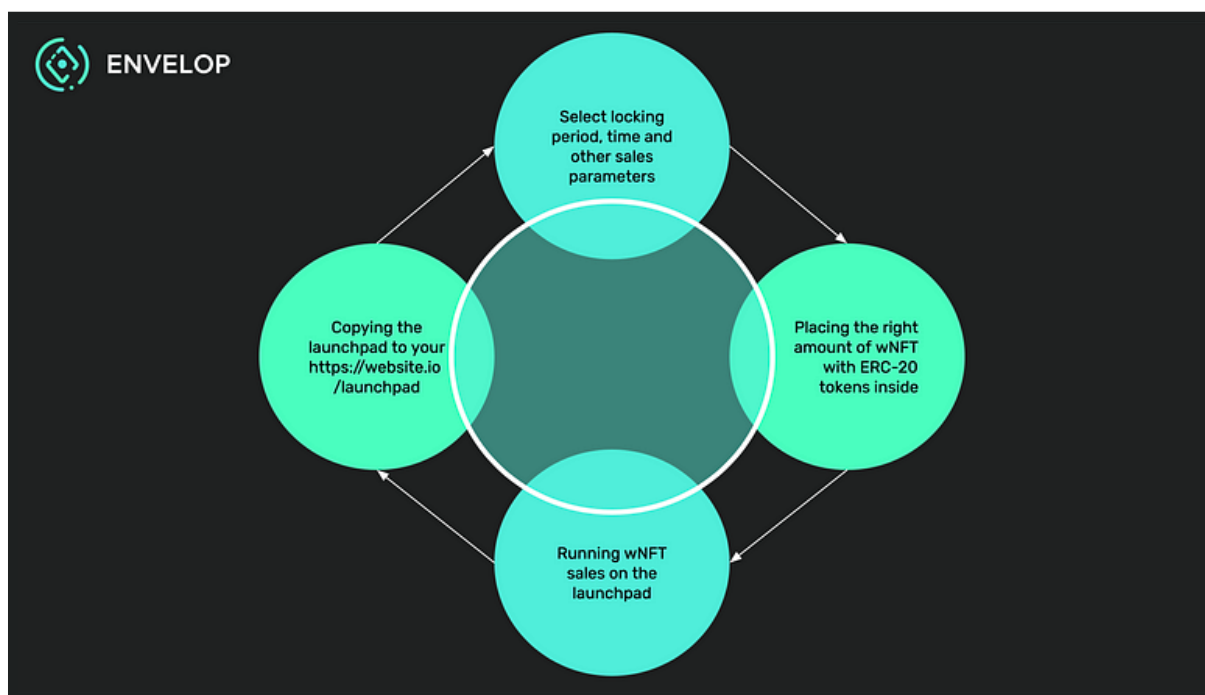
- DAICO and other escrow agent technologies, created, on the one hand, so that the team can't just dump tokens in the early stages (for this purpose it is enough to deposit their % stake in wNFT with a lock time); on the other hand, so that this is not repeated by counter-borrowers: but all working together for the benefit of the future project.
- A simple and reliable tool for ICO/IDO of any level, which will not depend on any external factors, copycats and agents. Put it on your website and make everything beautiful.
- Finally, it's also a secondary market for tokens: either before the IDO, during, or right after.

Why it's important to distribute tokens through wNFTs

Buying on such a launchpad is very simple. You can buy a wNFT (with a beautiful design or an empty wrapper - it doesn't matter) - then the same wNFT can be sold, but inside will be ERC-20 tokens of the project. In the future - many projects.

This approach is much more honest. If you want to buy tokens of the project not for speculation, but to use and maintain the project, then locking these tokens for a certain period of time is not a problem. No gas wars. But if you do decide to sell your stake, you can always sell a liquid wNFT with the tokens inside locked for the blocking period. In doing so, you will not be able to drop the token price

The scheme is as follows:



Envelop has arranged a 1st-ever VC contribution deal via NFT

11 November 2021. Envelop, a cross-chain NFT protocol, conducted one of the first venture deals on the market using the NFT mechanism. A well-known visionary and venture investor, Head of Ethereum Competence Center Russia, and co-founder of BlockGeeks, Vladislav Martynov, who received an NFT containing a certain number of locked project tokens and became the first venture investor who participated in the deal.

NFT technology enables interaction between business and the venture capital industry in a completely new format. Due to the use of the Envelop protocol, projects, attracting funds from participants in the venture capital industry, have the opportunity to allocate tokens to NFTs and put certain time locks to unlock tokens. The use of NFTs also makes it easier to enter and exit venture deals and gives constant access to

liquidity, since the wrapped NFTs with tokens inside can be freely traded by investment funds on NFT or OTC trading platforms and marketplaces.

“The Envelop team is highly convinced that this product will once and forever remove the communication gap between the VCs and businesses. Funding should be made easy for all,” says the CEO of Envelop, Alexander Shedugubov. “The solution is extremely easy to use. A project wraps NFTs, sets up timelocks, and sends to investors wrapped NFTs corresponding to the number of unlocking periods.”

In addition, the Envelop solution significantly reduces security risks, since there is no need to rely on the security of the locking smart contract, which is most often used in venture deals nowadays.

“As a venture investor, I see a huge potential of the Envelop protocol for use in VC deals, since it greatly simplifies the investment process and provides a secure tool for liquidity without a time reference. I’m also glad to be one of the first representatives of the venture capital industry to try out this new feature and become the holder of the new type of NFT,” says Vladislav Martynov.

ENVELOP secures support for its wNFT technology from Animoca Brands

Animoca Brands, the legendary company driving digital property rights via NFTs and gaming to help build the open metaverse, is among the first to support wNFT technology developed by Envelop.

Envelop’s wNFTs make the interaction between venture capitalists and the projects they support more accessible by lowering the difficulty of entering and exiting investments deals because wNFTs eliminate risks that the “locker” contract may carry.

“We hope that other projects will adopt this format since it significantly improves the technical interaction between a VC and our protocol. We made investment a seamless process on both ends and provided that extra bit of breathing space to develop new business opportunities,” says Alexander Shedogubov, the CEO of ENVELOP. “A huge thanks goes to Animoca Brands for being a great believer and supporting this innovation.”

Yat Siu, the executive chairman and co-founder of Animoca Brands, commented: *“Animoca Brands is delighted to have been among the first to support the wNFT technology developed by ENVELOP. It presents interesting new opportunities in the area of crypto investment, and we see various benefits to using this format.”*

Liquid farming with NFTs

Let’s start with the basics and try to understand how staking differs from farming. Staking as a process of blocking tokens seems to be similar. The main point of staking is to provide a working network. When you farm with Envelop, you create a wNFT where interest rates, farming times and collateral tokens become one collateralized derivative, which is more flexible and honest than ERC-20 LP tokens. So you can sell farming wNFTs on any NFT marketplace, while it is impossible to sell your staking position, you can only delegate. This important difference **gives your farming wNFT positions the most important feature in any market – liquidity!**

Can staking work with a set of assets? Absolutely not. Can Envelop Farming be a basis for linking to other derivatives? Of course it can. Structurally, farming and, for example, NFT gifts could already be the collateral for even more complex financial tools.

Can staking be part of farming? Yes, of course it can. But can staking be bigger than farming? No, of course not. So farming via Envelop’s NFT is essentially next-generation farming 2.0, where you can tune quite a bit.

So Envelop changes many crypto concepts, leaving the heart of the processes, but making them more functional.

Farming is the transfer of cryptocurrency under the management of another entity with a predetermined term of return of assets plus interest for the service. In DAO Envelop architecture, it is the RIGHT to transfer cryptocurrency, interest on it and other programmable properties, through wNFT.

In this kind of programmable farming, the owner of the wNFT gets a reward for farming. Think of it as instant farming, holding your future harvest.


If you transferred or sold your farming NFT during staking, before the harvest, you will receive nothing. The new owner of the farming NFT will receive all the reward.

In the infographic below you can find the main differences between farming via LP-tokens and farming via NFT.

Farming NFT

Collateralized derivatives

Functionality	Farming via LP-token	Farming via NFT
Tradable	✗	✓
Transferable	✗	✓
Customizable	✗	✓
User experience	Low ▼	High ▲



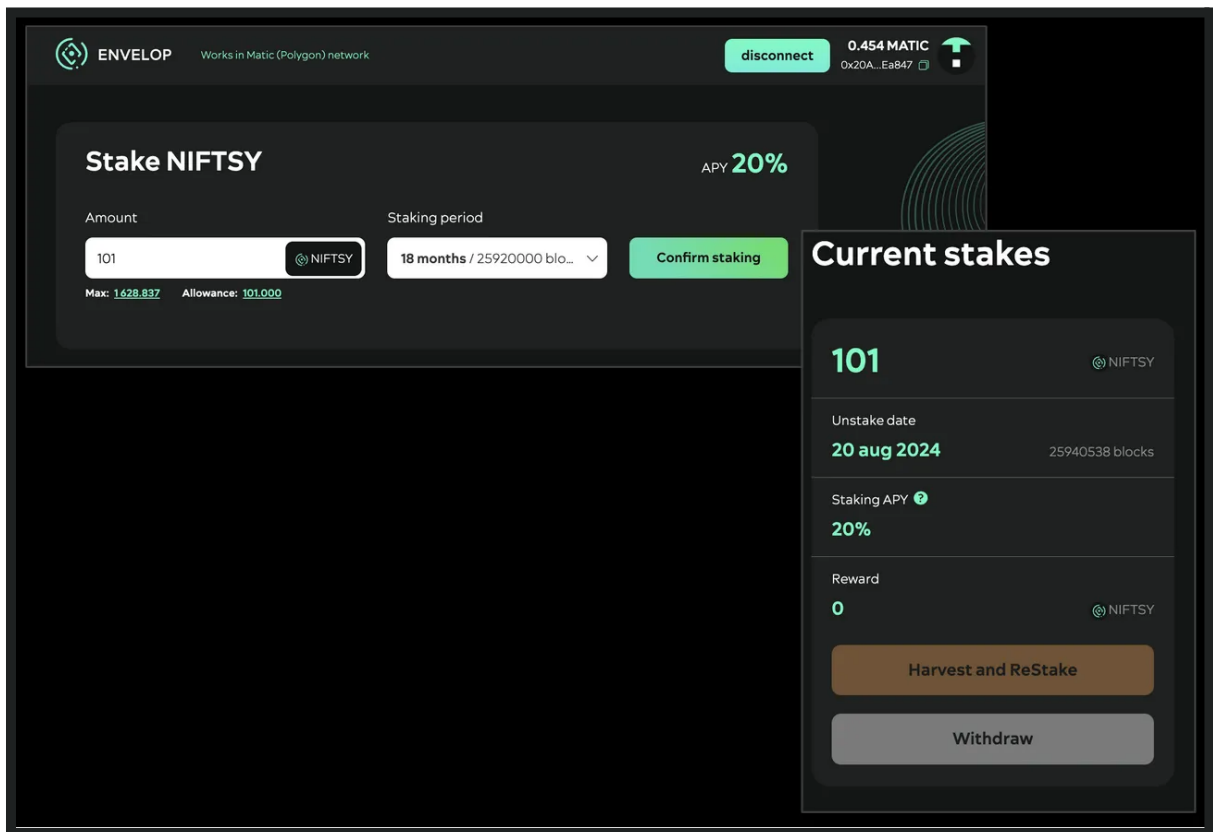
Liquid NFT Farming

This approach can be used to create more complex cases. When a network of partners joins together and adds several different tokens to the collateral of such an aggregating farming NFT. It turns out such a “multi-farming NFT”, which can still be sold or gifted in one transaction. In this case, you save on commission and transfer your entire portfolio (or you can think of it as an index) of farming tokens.

So, Liquid Farming is easy to plug tool to perform farming via wNFT concept. Projects can use this tool to offer their community farming options. Main advantage is that when tokens are farmed, the owner gets tradable wNFT, which stands as a right of rewards claiming, and un-staking of tokens – so the owner can resell all his vested tokens and future rewards by just selling wNFT. Also it is a useful mechanic when farming is limited by the quantity of farmers/pool of tokens.

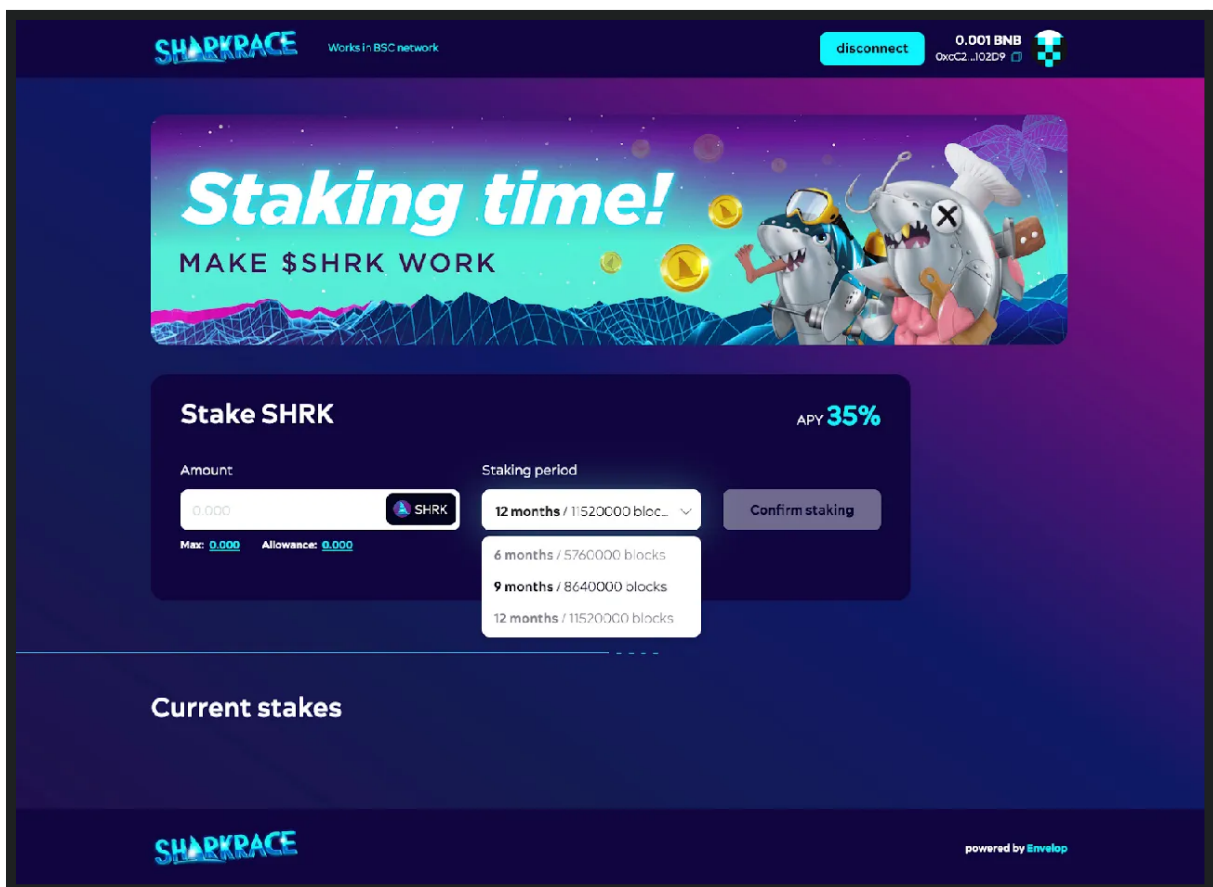
Liquid Farming Value proposition

- Attractive for project community members
- Tradable farming positions
- Easy rebalance
- No APY and transactional losses
- Simplicity – no need in LP-tokens



Example of white label implementation for Shark Race: sharkrace.envelop.is

Contract: bscscan.com/address/Ox40bc52774Dc8D59adf7e893543BDbe7a68a13a8f



SAFT wNFT – The New tool for Startups and VCs

DAO Envelop, cross-chain protocol that allows NFTs to store crypto assets and other NFTs inside. A standard NFT can be turned into a **wrapped NFT**, extra parameters like time-locks and royalties can also be added to upgrade the Original NFTs functionality. The Envelop team has been integrating and partnering with different projects that see value in this way of handling wrapped NFTs. One of the main ways this protocol can be used is to make a tool that both VCs and startups can use to make a win-win situation.

For the first time ever, an Animoca Brands wNFT contribution arrangement was tested in October 2021. Due to the success of this transaction, the Envelop team decided that it would be a good idea to make this service available to other start-ups, venture capitalists, and market speculators.

Yat Siu, the executive chairman and co-founder of Animoca Brands, said:

“We see great potential in the ENVELOP protocol and in the use of wrapped NFTs in the gaming industry, and we believe that these technologies will contribute to the emergence of new mechanics and use cases that will improve adoption of GameFi.”

The Envelop team carried out a customer development survey among VCs which showed the demand for the release of liquidity from two-thirds of the surveyed funds in the amount of 10 and 20% of all investments.

SAFT wNFT is a win/win option for both venture capitalists and businesses. The most significant advantages are token dump protection, obtaining liquidity for the secondary market, and automating the VC-startup connection via smart contracts.

The project wraps their tokens here: app.envelop.is/saft

Timelocks should be configured to correspond to vesting durations agreed upon in contracts with VC.

The value of collateral wrapped inside NFTs must comply with VC agreements.

These wNFTs may contain a full allocation within a single vesting period, or the VC may request that allocations be split across many vesting periods and into multiple wNFTs.

For example: The project features 5 vesting phases spread across 3, 6, 9, 12, and 15 months, with identical criteria of a 20% unlock for each step. The VC receives a USDT 100,000 allocation and requests that the project “pack” its tokens into wNFT in the equivalent of USDT 2,000. The project representative then creates 50 versions of the wNFT with the corresponding timelocks, with 10 wNFTs unlocked at each of the 5 vesting periods, for a total of 50 wNFT with USDT 2,000 tokens in each.

The project representative then either enters the VC recipient address when wrapping to save gas, which is more important if using the tool on the Ethereum network, or

sends everything first to their wallet and then sends wNFT to the VC wallet piece by piece from the application: <https://app.envelop.is>.

The VC receives 50 wNFT with a USDT 100,000 allocation, which it can immediately place on the secondary market or Envelop's Launchpad.

When compared to existing investment approaches, such as mechanical sending or "locker" smart contracts, wNFT provides more freedom to the VC fund and lowers operating costs. For example, a SAFT-contract "locker" development can cost between USD 4,000 and USD 7,000, whereas SAFT wNFT may be **free**.

Other advantages are that the project can profit from any activity with its tokens before the wNFT is unwrapped using staking or farming.

As a result, online transactions can be completed before the IDO without the project fearing a token dump.

The project can also benefit greatly from retail contributors with minimum allocations in wNFTs and vesting periods allowing retail contributors the ability to contribute in a project at an early stage before IDO on VC terms for the first time.

Access to a new pool of contributors is extremely beneficial to projects.

There are many advantages to using this protocol, including the ease with which wNFTs may be managed and the settings that can be configured.

The Evolution of fundraising

ICO stands for initial coin offering. The first ICO occurred in 2013. You must have heard something about it. But did you know that the ICO market is one of the most successful in terms of business loans?

History and mythology

Myth is a sort of cognition of reality that serves to capture reality's most significant parts through representations that are basic and easy to understand.

Myths, on the other hand, can be very negative. "ICO is a complete scam," one of them says. It was created by well-known media, but nearly no one bothered to investigate it after that. In addition to DAO Synergis and other enthusiast teams. And after more investigation, it was discovered that everything is not so awful, or rather, everything is just fine: the degree of scam in the ICO market is lower than in bank financing to enterprises, and even lower in the VC segment: approximately 16 percent versus 25–33 percent.

You've undoubtedly heard of Ethereum (2014), Tezos (2016), Bancor (2016), Chronobank (2016), Waves (2016), Tron (2017), Brave (2017), Cosmos (2017), Polkadot

(2017), Filecoin (2017), and more cryptocurrencies. All of these are huge and successful ICOs.

And the third thesis, which debunks a widespread misunderstanding, is that ICO goes by several names: let us try to grasp them while also tracing the growth of the phenomenon.

From ICO to ILAO

Let's take a quick look back.

Crowdfunding surfaced as a method for gathering investments without the assistance of institutional investors, however after raising funds, enterprises attempted not to repay monies to investors due to at an early stage of the project, investors did not have formal confirmation of participation.

ICO provided contributors with the chance to obtain a coin or token in exchange for contributions that serve as proof of the contributor's involvement in a specific project. But this sort of appeal did not instantly take off due to the caliber of the projects and the level of expertise among crowd investors..

IEO was advertised to the market as a sort of solution involving professional project verification by centralized exchanges, but it did not see much development: to some extent, the bear market did not have it, and it was also not a core area for the exchanges themselves, but only one of the channels for luring new projects for listing (although BNB is just the colossus of that era).

With the development of DEXs, IDOs and fresh market players emerged as go-betweens between the project and the crowd investor, called launchpads. Their job was to thoroughly assess ideas, assist with marketing and KOLs, and publish the project on DEXs following the initial token sale.

With the introduction of ILAO, projects now have a 24/7 opportunity to communicate directly with investors without the use of middlemen; all that is required to verify the value hypothesis is an MVP and a basic community. Additionally, aggregators can now replace launch pads where projects will attempt to obtain and maintain information about projects that is as relevant and appealing to investors as possible. Previously, aggregators stood aside and primarily monetized through advertising and referral links. But DEXs, CEXs, lunchboxes, and other players can't just stand by.

Now, in order to better appreciate the usefulness of ILAO, let's enumerate the ICO rebirths, specifically:

- **ICO** – Because nobody understood tokenization in 2013, the phrase “initial coin offering” (ICO) was created..
- **ITO** – Initial token offering already refers especially to a derivative entity, i.e., a token that, unlike a coin, is already formed on another party's blockchain and is derived from the currency itself (for instance, an ERC-20 token to ETH);

- **TGE** – an effort to avoid drawing comparisons to initial public offerings (IPOs), which are risky because of SEC persecution about the Howey test and other peculiarities, and instead refers to token generated events.
- **STO** – Security token offering is the term used by the SEC and those who want the “fastest integration” of the venture capital and Web 3.0 worlds, but the hype hasn’t materialized in 6 years because of the high entrance barrier and stringent regulation.
- **IEO** – Later (in 2019), major exchanges joined the ICO, and thus the Initial exchange offering was born.
- **IDO** – In 2020, DEX offerings (including launchpads) decisively won the race, hence the name was changed to Initial DEX offering.

In the meantime, other acronyms have always denoted the initial placement of crypto-assets and the gathering of payments on them for the project. Here are several examples:

- **WHO**: Wallet Holder Offering – initial offer to wallet owners.
- **IFO**: Initial Farm Offering – Initial Farming offering
- **OPT**: OpenPredict – predictive models for derivatives and other insurance instruments that may have an initial offering;
- **ILP**: Initial Placement Loan – A loan for an initial placement: an operation to purchase tokens after identification, where the token acts as a (investment) loan for the project’s development.
- **SCI**: Safe Coin Investments and here – citation “Safe crypto-currency venture capital investments in diverse business enterprises. The annual percentage yield (APY) is utilized to finance projects, as stipulated by SCI smart contracts.”
- **IGO**: Initial game offering – became popular in 2021 as a result of the introduction of the GameFi sector.
- **INO**: Initial (w)NFT offering – also rose to prominence in 2020–2022 due to the NFT craze in GameFi, Metaverses, digital art, and a great deal more. According to us, one of the most promising areas being implemented is DAO Envelop comprising SAFT and additional micro DAOs
- **IAO**: Initial airdrop offering is a collective phrase including multiple token accumulation mechanisms for active action service users. Examples include ENS, 1inch, Uniswap, ShapeShift, Optimism, etc. (also see references: 1, 2, 3);
- **IDaO**: The initial DAO offering will be discussed later, as DAOs have only gained momentum since 2016;
- **ILAO**: Initial Lock Allocation Offering... and more about it below. And yes, not to be confused with ILOs – Initial Liquidity Offerings nor Initial Listing Offerings.

ILAO. Details

ILAO (Initial Locked Allocation Offering) – solution for crowd and/or institutional investors.

In this case, it’s crucial to start with the project-related principles that were in place prior to the ILAO. Almost the same set of responsibilities were included in all actions linked to bringing the project to any of the ICO-like events:

1. Start with an alpha or minimal MVP version of your product.

2. Whitepaper, tokenomics, pitch deck, onepager, website.
3. Attract the first private (at least) or venture capitalist (preferably) investors.
4. Create a community – here, channels and methods change every 3–6 months with the market: for example, in 2017, it was viable to “pour” visitors through Google or Facebook, but in 2021, AMA sessions and KOLs were effective.
5. Negotiate with Launchpad/s, whose market was built and changed by the hype of IDO trends (DeFi->Art NFT->GameFi/Metaverse (play2earn/move2earn))
6. Develop a CEX/DEX listing plan.
7. Find and select MarketMaker, as well as accept the risks linked with the transfer of funds to management (at least for CEXs).

All these complex tasks, except for developing an actual product, require the bulk of the time and resources of the project.

Imagine the efficiency and speed of product creation if projects didn't have to decide where to conduct IDO and which MM to shift to liquidity management. These efforts made sense until a technology arose that could secure the safe distribution of tokens for the project before listing on CEX/DEX and without the need to implement marketing, launchpads, and listing.

Everything changed in the spring of 2021 when the DAO ENVELOP team introduced the idea of “time-lock” (also known as “vesting period”), which gave the market the opportunity to wrap project tokens in wNFT with a variety of smart settings to ensure that all functionality is closed within a wNFT.

As a result of these features, **DAO Envelop** team tried out **ILAO** on themselves and distributed **NIFTSY** tokens on their own wNFT for the first time via the wNFT Launchpad (then it was called that) just prior to the main IDO in October of 2021.” At the same time, the ENVELOP team and Tier-1 VC Animoca Brands made history by partnering with SAFT wNFT for the first time.

Research revealed that there were many more benefits of SAFT wNFT and ILAO as a new ICO format than were initially apparent at first glance.

Following customer development with several dozen VCs, it was discovered that 23 of predominantly medium VCs, who typically invest in 70–150 projects per year and up to \$70M each, confirmed their interest in using SAFT wNFT in their activities with an assessment of readiness to increase investments (frequency and volume) up to 50% – in other words, projects that communicate with VC and are ready to ship their tokens in the form of SAFT wNFT increase the chance of success.

Consider the traditional methods of token distribution:

1. manual sending by projects and/or
2. branding of tokens by funds from “scanners.” In either case, the fund must wait until the conclusion of the subsequent vesting term before receiving access to the eagerly expected tokens.
3. creating a unique smart contract, more commonly referred to as a “locker,” to which a pool of project tokens is deposited, vesting schedules are established, and a white list of fund addresses is developed, for which tokens will be

unlocked in accordance. Solidity's Middle/Senior developers spend 2–4 weeks creating a smart contract of this caliber, which has a \$4–7k market value. If the project has the necessary skills, the cost will range from \$2 to 3.5k. And that's the bare minimum.

There are a lot of SAFT wNFT's subscription plans. Also you can order subscriptions even for HOLD NIFTSY tokens, which are returned to you in the form of wNFT after a time-lock. This means that SAFT wNFT is only available for a subscriptions period under the terms of the deposit of the NIFTSY token, where a derivative backed by the same tokens is available. This can be relatively painless for users.

The user can immediately sell wNFT with locked NIFTSY tokens inside after subscribing. Users who opt to keep their wNFT tokens will be able to deploy them and withdraw previously locked NIFTSY tokens after 12 months to use for new subscriptions, staking, or to sell on CEX/DEX if they like.

NFT tokens issued to contributors as wNFT minimize the possibility of them being dumped on the CEX or DEX as they can only be exchanged on NFT marketplaces or OTC platforms..

Timelock is only one of many smart settings that make SAFT wNFT use cases more reasonable for projects because it is based on the Envelop protocol. Other smart settings include profiting from secondary market resales, which enables projects to benefit from the speculation market even when prices are falling. It is difficult to deploy wNFT and level all accessible parameters prior to the Timelock before which it is impossible.

Example. *The project and VC agreed on a 100k USDT investment, and VC verified its long-term objectives during the negotiations. VC requested that he be sent 100 SAFT wNFT with project tokens worth \$1,000 apiece, even though the project, for example, has ten vesting periods, for the sake of expediency. An **optional commission** of 500 USDT is established for each transfer of 100 SAFT wNFT from one wallet to another, and a 100 percent royalty is set for the transfer of all 100 SAFT wNFT VC that are generated as a result. In order to sell SAFT wNFT before the vesting period, VC must have 500 USDT on the wallet to perform the transfer operation. This means that for a sale that is not below cost, VC will have to sell at a price of 1,500 USDT at least for each of 100 SAFT wNFT, the second buyer (VC or crowd investor), for resale to zero, will have to set the price at 2'000 USDT, and so on. It doesn't matter what the VC chooses, the project will receive an additional \$500 USDT from each resale. The project receives an economic MM if VC sells at or above zero, resulting in a profit for the project and a rise in the secondary OTC market price of the project token.*

Launchpad Killer?

The VC community driving audience should also be taken into account; some investors join syndicates in order to acquire huge allocations on the best conditions from

projects. With SAFT wNFT, the project may connect with these investors in a secure manner, release its tokens in greater quantities than the typical Launchpad ticket (200–500 USDT), and quickly draw in new contributors.

The product turned out to be so convenient that the DAO ENVELOP team decided to give access to it to every user and now this service is available in a few clicks – yes, yes, you were right: in a few minutes you can issue wNFTs containing any ERC / BEP-20 tokens, with established vesting periods (aka Time-locks) and offer them to contributors by direct transfer or through a specialized OTC Engine Tool.

This is also where the abbreviation ILAO comes from: Initial Locked Allocated Offering – as an initial offer of locked tokens inside wNFT or SAFT wNFT.

What does this mean and how will the life of projects change with the advent of ILAO?

Fundraising models / approaches					
Parameters	ICO (2013-2018)	IEO (2018-2019)	IDO (2019-2022)	IGO/INO (2021-2022)	ILAO (2021-...)
1. Abbreviation	initial coin offering	initial exchange offering	initial DEX offering	initial game/NFT offering	initial locked allocation offering
2. Token standart	ERC-20	ERC-20	ERC-20	ERC-721, ERC-1155	ERC-20 in form of ERC-721
3. Innovation	New fundraise model via token distribution as guarantee of fundraise participation	No	Decentralised token distribution via smart-contract	Verification via NFT	New fundraise model via SAFT wNFT that automates the relationship between the project and the investor
4. Hosted by	Project	CEX	Launchpad	NFT Marketplace or Launchpad	Any traffic generators
5. Project stage to launch the event	idea / MVP >10k community members	MVP / Alpha >10k community members	MVP / Alpha >10k community members	MVP / Alpha >10k community members	idea / MVP / Alpha / Beta / Release 0 community members can be paralleled with pre/during/post IDO events
6. Preparation time	3-6 month	1-2 month	1-2 month	1-2 month	4 hours (no-code)
7. During preparation and event project team focused on	Marketing	Marketing	Marketing	Marketing	Product value Tech development
8. Marketing powered by	100% project	80% CEX 20% project	80% project 20% launchpad	80% NFT Marketplace 20% project	80% traffic generators 20% project
9. Entry threshold	>\$100k marketing costs + 0-20% commission	>\$20k marketing costs + 10-20% commission	\$5-50k marketing costs + 5-20% commission	>\$50k marketing costs + 30-50% commission	<\$1k costs to launch + 5% commission
10. Added value for the project	No	CEX infrastructure (UI+ community + listing)	Launchpad infrastructure (UI + community + smart-contract + network)	NFT Marketplace or Launchpad infrastructure (UI + community)	free marketing powered by traffic generators, investment attractiveness for the VCs, income from the secondary market
11. Timeline for investor to take part	- exact date/time - a few weeks	- exact date/time - a few hours	- exact date/time - a few minutes	- exact date/time - a few minutes	- as soon SAFT wNFT appeared - 24/7
12. Round & token price	public round	public round	public round	public round	early stage (the crowd can get the same conditions as the VCs have)
13. Dump protection	No	No	No	not applicable	yes, in terms of any CEX/DEX
14. Access to the secondary market for the VCs	in part, according to the vesting schedule	in part, according to the vesting schedule	in part, according to the vesting schedule	not applicable	yes 100% immediately after the deal

1. Teams can now concentrate more on generating the final product rather than promoting it.
2. Less time will be required to test the hypothesis of the project product's value; projects will be able to implement MVP and immediately offer the market to participate in the project, thereby collecting feedback from the community, ready to "vote with a coin" for the project idea at any time, without incurring marketing costs.
3. The focus of projects will shift from launchpads to information and analytical resources that bring together large numbers of users who look at the project market for "instant" investments without waiting for a specific IDO date, which is what happens now on launchpads.
4. The risks of sniping bots will decrease, respectively, there will also be fewer companies offering anti-sniping bots -> the market will receive new decentralized tokens.
5. Profit from resales in the secondary market may exceed the volume of attracted investments for popular projects.

6. Conducting an ILAO in terms of resources will be comparable to conducting a custom development.
7. Many infrastructure projects will appear around and based on SAFT wNFT.

Therefore, regardless of what the media and various analytical agencies from earlier eras claim, it is quite obvious that ICO not only hasn't died as a phenomenon, but has also evolved and received many incarnations. This means that Web 3.0 markets will continue to develop further as people begin to put openness, anonymity, and decentralization into practice, and DAO Envelop will contribute to this by developing more and more new tools for startups in this amazing, complex industry.

NFT 2.0 Launchpad

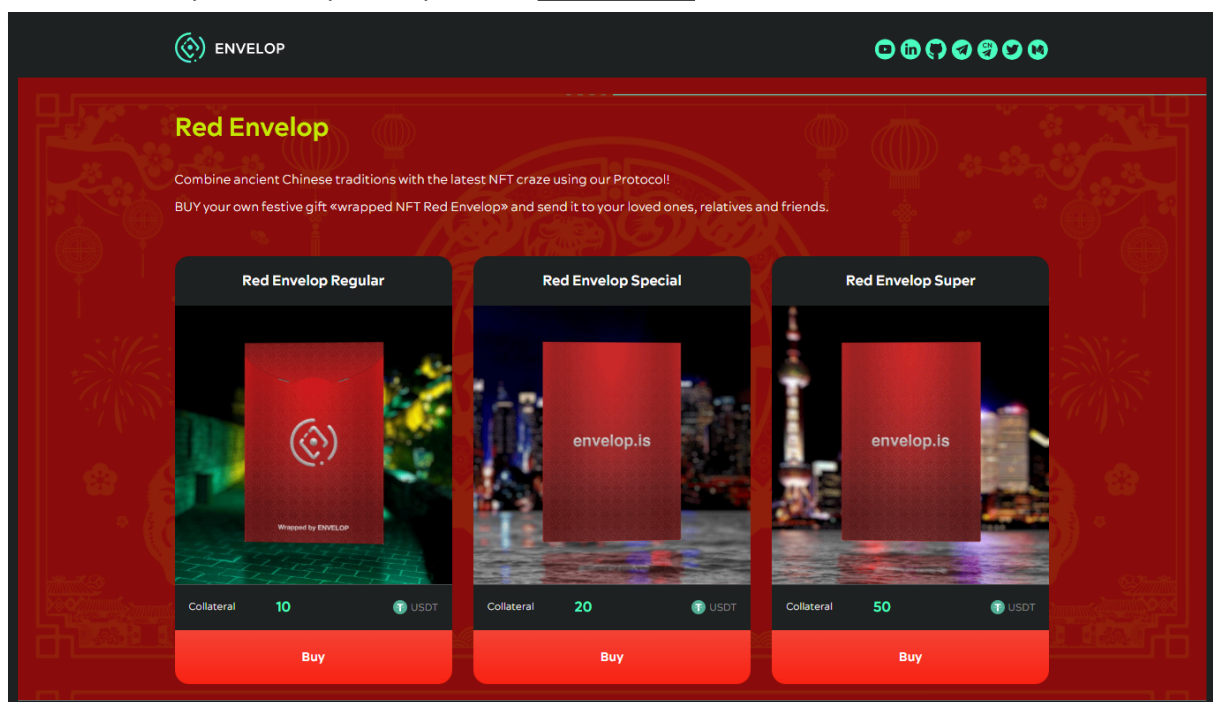
In the world of classic e-commerce, aggregators have long been at the top: Amazon, Aliexpress, and others. After the first decentralized exchanges and NFT marketplaces appeared, aggregators that combine several protocols began to appear in Web 3.0. One example here is 1inch, one of the first DEX-aggregators and Gem.xyz, an aggregator of NFT marketplaces.

And in this respect, Envelop's decision to launch Launchpad is quite obvious. **Launchpad is a platform for starting the initial token offering.**

Benefits of the Envelop NFT Launchpad

Let's list just a few of the obvious features. With the Envelop Launchpad, you can create:

1. Regular NFT cards for holidays,
2. NFT cards with collateral where tokens can be placed (artist, DAO, some sponsors, etc.). This opens up a new way of primary distribution of tokens. Envelop has a separate product SAFT wNFT for this.



Chinese New Year NFT Launchpad

It can be more than just a card. A ticket to a conference or exhibition can also act as an NFT, and inside it there will be nice gifts waiting.

The Envelop protocol allows you to put collateral (gifts in the form of tokens) into already sold tickets, for example, if you want to give additional incentives to participants.

In addition, inside such NFT-cards you can put a lot of things, from game activation keys to VIP-access to rooms inside the metaverse.

And that's a lot more than platforms like Collab or Spatial can offer you. They specialize in niches, whereas Envelop's NFT2.0 is an absolutely universal tool.

NFT Launchpad Interface

Let's take a look at an example of a Halloween NFT collection:

Halloween Envelop Common	Halloween Envelop Special	Halloween Envelop Ultra
Collateral 1000 NIFTSY	Collateral 2000 NIFTSY	Collateral 4000 NIFTSY
Buy in Ethereum	Buy in Ethereum	Buy in Ethereum
Buy in BSC	Buy in BSC	Buy in BSC
Buy in Polygon	Buy in Polygon	Buy in Polygon
Non-Phoenix plot - 60 Common NFTs with 1000 NIFTSY as collateral in price 2 USDT (or 0.00147 ETH, 0.0068 BNB, 2.38 MATIC)	Plot with phoenix and key - 30 Special NFTs with 2000 NIFTSY as collateral in price 4 USDT. (or 0.00294 ETH, 0.01361 BNB, 4.76 MATIC)	Plot with phoenix, no key, and open cage - 10 Ultra NFTs with 4000 NIFTSY as collateral in price 8 USDT. (0,00588 ETH, 0,02721 BNB, 9.52 MATIC)

Halloween NFT Launchpad

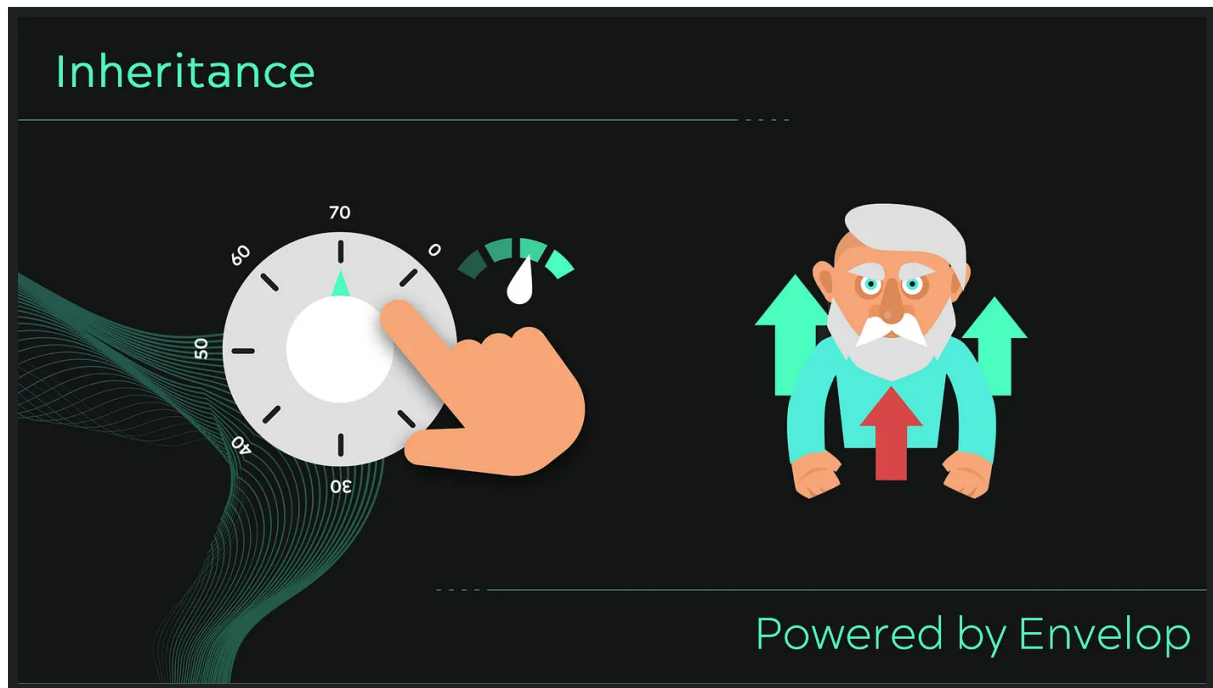
1. Unique NFT with image (the rarer the NFT - the more detailed the image);
2. Type and quantity of collateral within the NFT.
3. Links to payment in different blockchains: BSC (BNB Smart Chain), Ethereum, Polygon (Matic)).

Note that the collateral sets the so-called Floor Price - the lowest price for which an NFT can be bought on the secondary market.

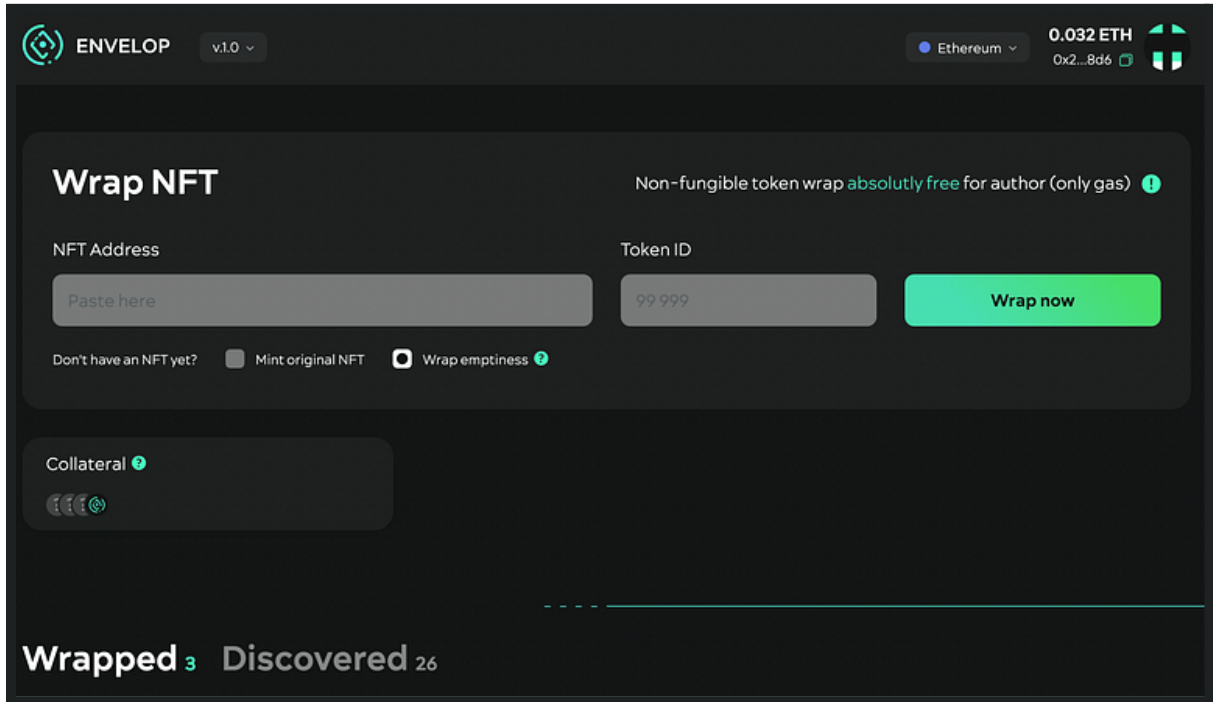
Knowing the exchange price of the tokens in the collateral and the value of the NFT opens up new arbitrage opportunities.

The collateral of such NFT2.0 can be replenished either by the owner or by another user!

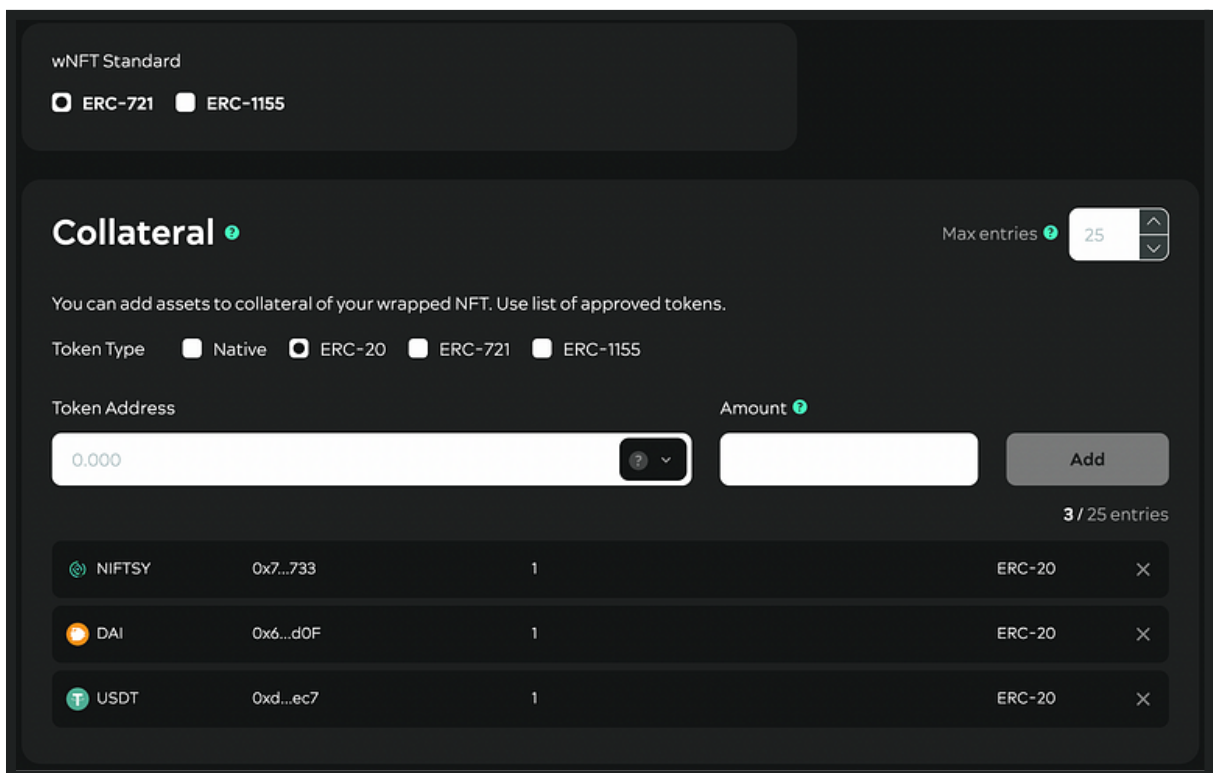
Inheritance and other delayed payments via NFT by ENVELOP



Let's look at an example of using DAO Envelop technology in different cases where the payment should be received by the recipient not today but at some date in the future. The simplest example is inheritance (realization through events is also possible, but today we will talk about time lock only). So, we go to the main Protocol v1: app.envelop.is/list dApp and select "Wrap emptiness" checkbox (actually here is the process of "wrapping" the NFT without any independent metadata, to make the process faster and easier) and click the "Wrap now" button.



If necessary, we can add collateral. It can be native coins (such as ETH, Matic, etc.), ERC-20 tokens, NFT as ERC-721 or ERC-1155:

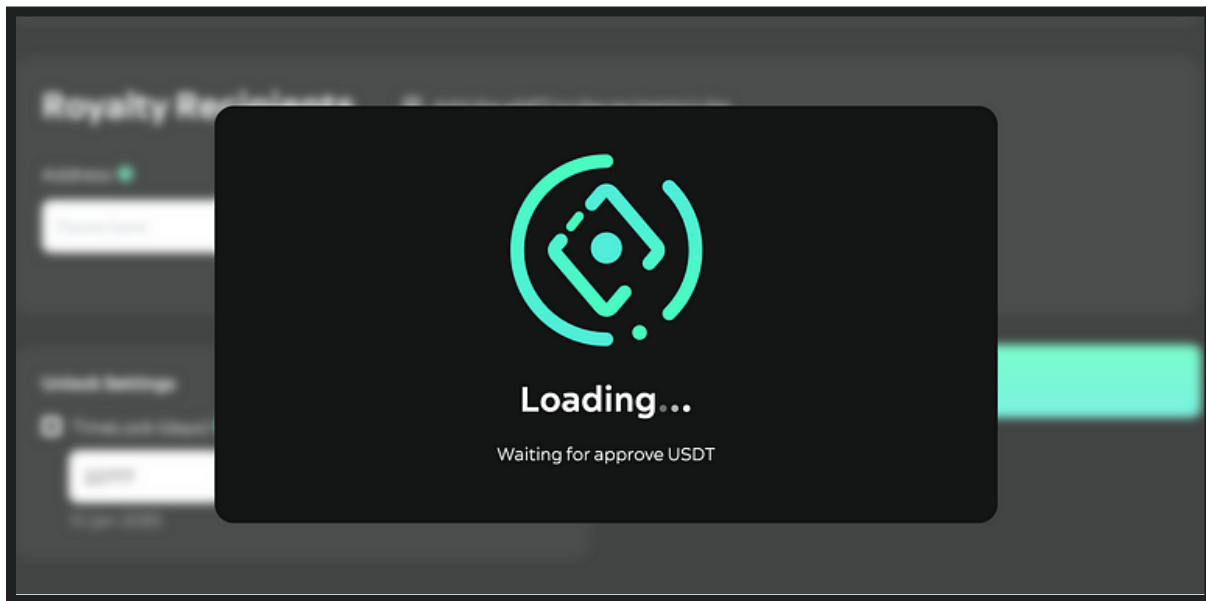


In the upper right corner there are advanced wrapping options: use them very carefully, but in the described case you definitely should not disable unwrapping and SBT, because in this case your recipient will not be able to “take out” Collateral.

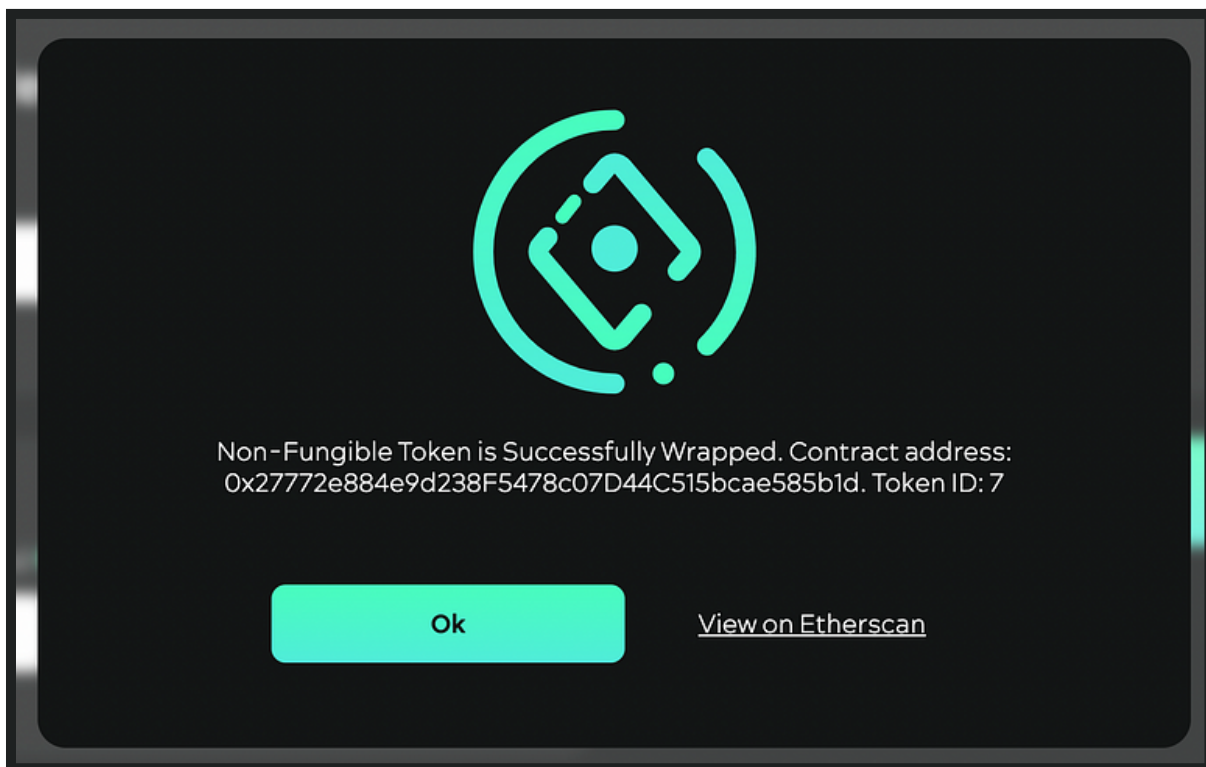
In the menu “Advanced options” you need to specify a purse of the recipient – the future owner, different from the purse of the one who turns the assets (if you want to transfer funds this way in the future and automatically).

When all the tokens are added to the collateral, you can specify a timelock (in my case it is January 2085):

After you confirm the transaction the wNFT will be minted



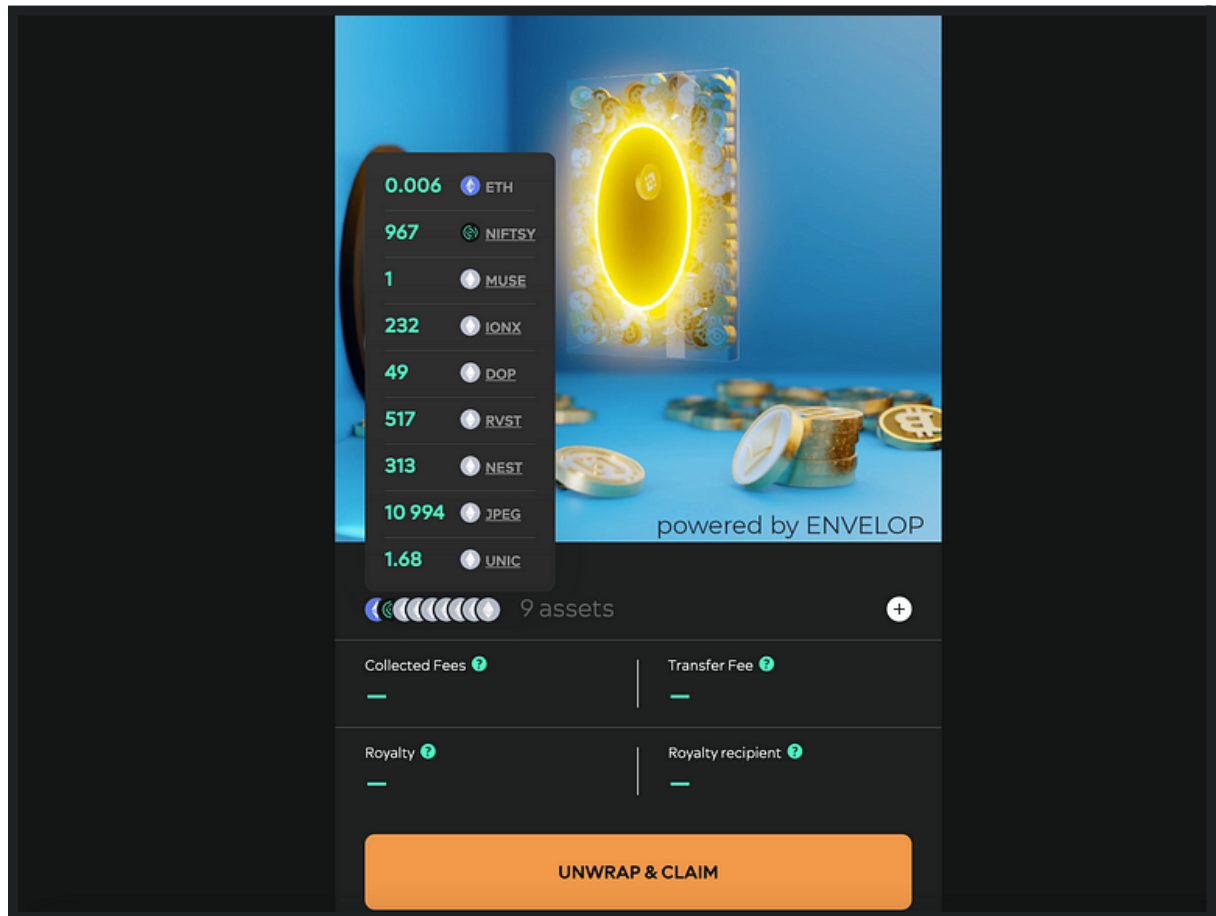
The transaction information and wNFT will be available through the standard block explorer. In my case this is: <https://etherscan.io//tx/0x363aa29526ee0d69cc96be9aa8b09a929ad34dd083192acfb255358bbb108cbe#eventlog> (you can see your wNFT after loading here <https://app.envelop.is/list>)



Congratulations: you have taken care of the future together and thanks to DAO Envelop.

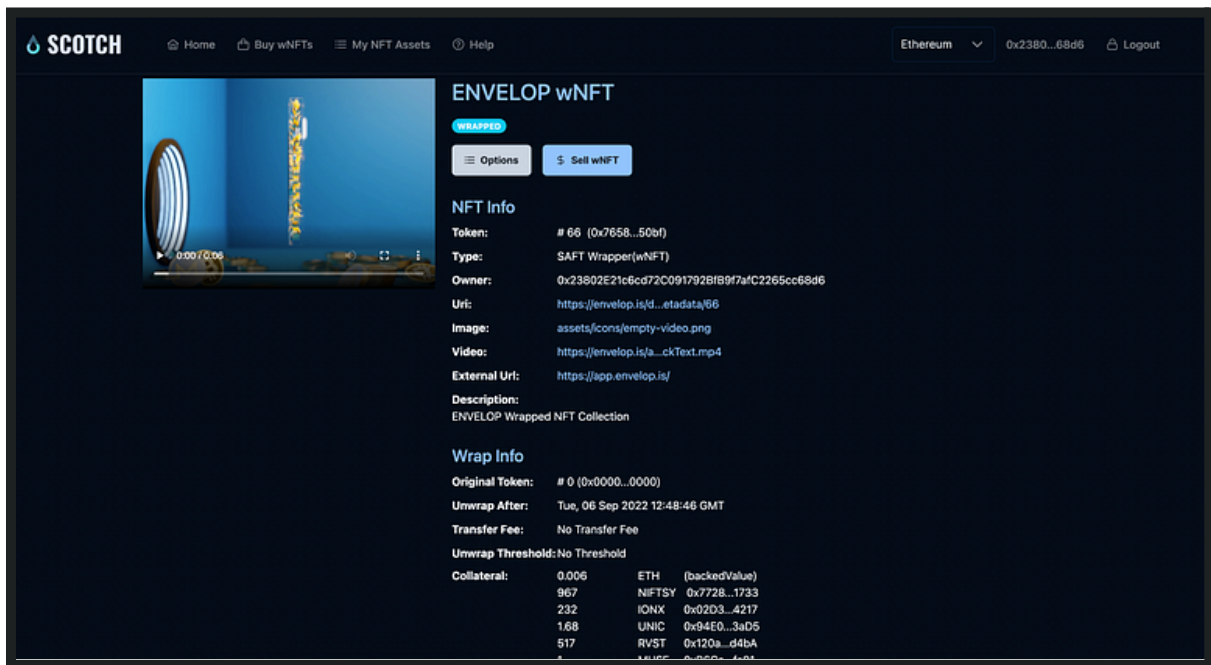
The index by DAO Envelop

The index is the most complex, but also the most promising part of DAO ENVELOP. To date, the following elements of the index have been realized:



Index by Envelop

- The ability to create simple indexes with SAFT: <https://app.envelop.is/saft>. An example of a wrapped NFT index consisting of 9 assets is here: <https://app.envelop.is/#/token?chain=1&contractAddress=0x765886A9f388ca58092Bba5b6191b1e57e0950Bf&tokenId=66> (see also above – screenshot #02);
- The ability to cross-chain transfer indexes (as well as other wNFTs): <https://app.envelop.is/crossings>;
- A model for selling index tokens using the OTC Marketplace Scotch has been created. An example for the above token: <https://scotch.sale/nft/1/0x765886A9f388ca58092Bba5b6191b1e57e0950Bf/66>;



Index by Envelop

How to make a Dynamic NFT index MVP in half an hour with ChatGPT

This article will tell you how to create a tradable, transferable, verifiable index for any asset pool you are interested in.

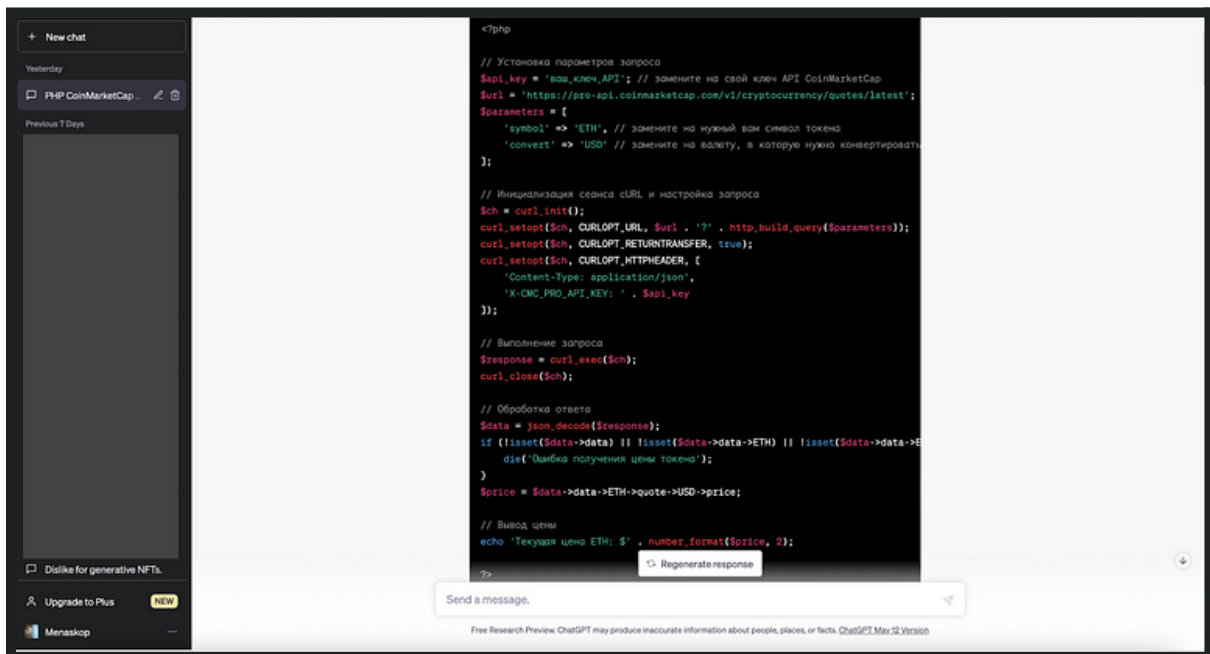
Some code from ChatGPT

Let me tell you right away that you don't even need to do any coding for everything described. It is enough to ask the right question for ChatGPT. You don't even need to buy access, the free version is enough.

An example request to ChatGPT:

can you write code in php that determines the price of a token through Coinmarketcap in a moment?

I had a VDS with PHP, so I chose it, but you can specify any language, such as ruby, python, js, etc.



An example request to ChatGPT

First you set the request parameters:

- `$api_key = 'your_API_key';` // replace it with your CoinMarketCap API key: you can get it for free (up to 10,000 requests per month) from here: <https://coinmarketcap.com/api/>.
- `$url = 'https://pro-api.coinmarketcap.com/v1/cryptocurrency/quotes/latest';` // this is the actual URL for the request;
- `$parameters = [`
`'symbol' => 'ETH',` // replace with the token symbol you need: I took SUSHI, CAKE, ZEE from the BNB SmartChain;
`'convert' => 'USD'` // replace with the currency you want to convert the price to
`];`

This is where the cURL session is initialized and the query is configured:

- `$ch = curl_init();`...

Next is the query execution itself:

- `$response = curl_exec($ch);`
- `curl_close($ch);`

Then processing the response:

- `$data = json_decode($response);`
`if (!isset($data->data) || !isset($data->data->ETH) || !isset($data->data->ETH->quote) || !isset($data->data->ETH->quote->USD)) {`
`die('Error getting token price');`
`}`
`$price = $data->data->ETH->quote->USD->price;`

And finally, show the price:

- echo 'Current ETH price: \$' . number_format(\$price, 2);

Source Code:

```
<?php
$api_key = 'your_API_key';
$url = 'https://pro-api.coinmarketcap.com/v1/cryptocurrency/quotes/latest';
$params = [
    'symbol' => 'ETH',
    'convert' => 'USD'
];

$ch = curl_init();
curl_setopt($ch, CURLOPT_URL, $url . '?' . http_build_query($params));
curl_setopt($ch, CURLOPT_RETURNTRANSFER, true);
curl_setopt($ch, CURLOPT_HTTPHEADER, [
    'Content-Type: application/json',
    'X-CMC_PRO_API_KEY: ' . $api_key
]);

$response = curl_exec($ch);
curl_close($ch);

$data = json_decode($response);
if (!isset($data->data) || !isset($data->data->ETH) || !isset($data->data->ETH->quote) ||
    !isset($data->data->ETH->quote->USD)) {
    die('Error getting token price');
}
$price = $data->data->ETH->quote->USD->price;

// Price display
echo 'Current price ETH: $' . number_format($price, 2);
?>
```

One file (see code above), one ticket, one asset respectively. And then you will need to call these files and display the image with the data from them (in my case it is require_once 'ZEE.php'; require_once 'CAKE.php'; require_once 'SUSHI.php'). You can do this with standard PHP commands:

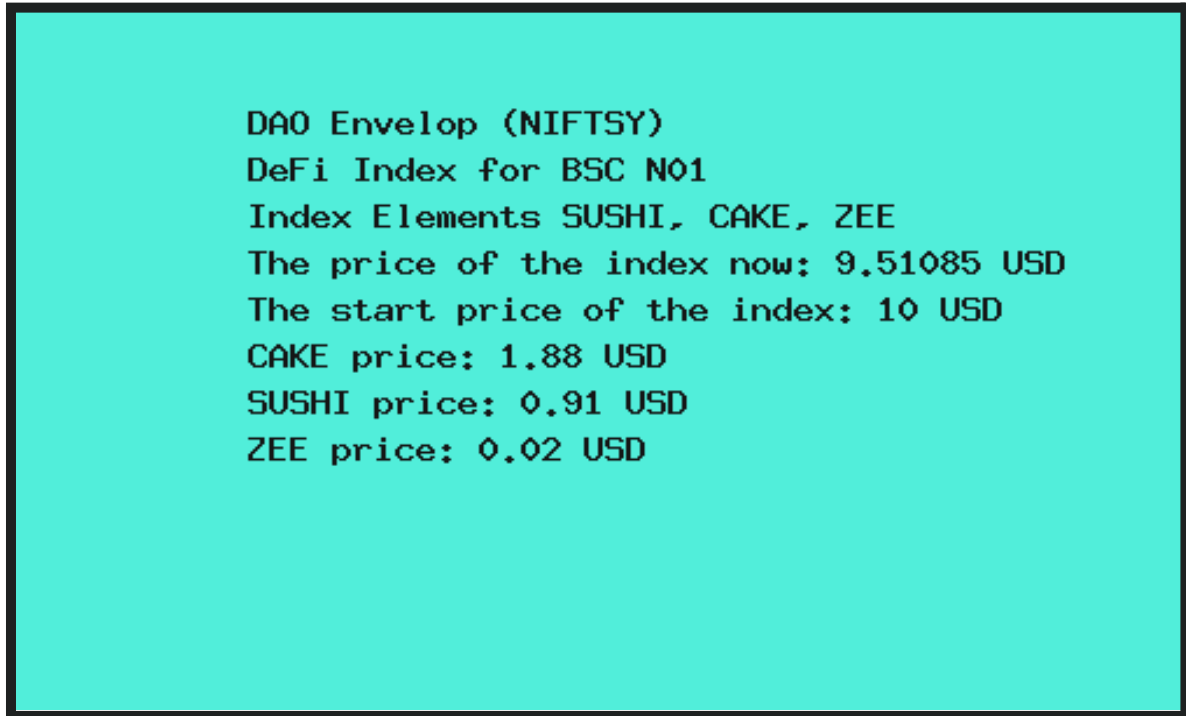
```
$filename = 'index_2023_01.png'; // Set the path and file name to save
$img = imagecreate(500, 300); // Write the width and length of the image
$bgcolor = imagecolorallocate($img, 81, 238, 218); // Set the background color
$fontcolor = imagecolorallocate($img, 20, 22, 22); // Set the text color
```

And then there are the captions on the image:

```
imagestring($img, 12, 100, 180, «ZEE price: $price_ze USD», $fontcolor);
imagestring($img, 12, 100, 160, «SUSHI price: $price_sushi USD», $fontcolor);
imagestring($img, 12, 100, 140, «CAKE price: $price_cake USD», $fontcolor);
imagestring($img, 12, 100, 120, «$text_01», $fontcolor);
imagestring($img, 12, 100, 100, «$text_02», $fontcolor);
imagestring($img, 12, 100, 80, «Index Elements SUSHI, CAKE, ZEE», $fontcolor);
imagestring($img, 12, 100, 60, «DeFi Index for BSC N01», $fontcolor);
imagestring($img, 12, 100, 40, «DAO Envelop (NIFTSY)», $fontcolor);
```

```
//imagepng($img); // You can use it if you don't want to save data in a separate file, and look
directly from your php-file where the code is written. If in doubt, just delete this and the line
click. //imagedestroy($img);
header(«Content-Type: image/png»);
imagepng($img, $filename); // Save the image to file.
imagedestroy($img); // Clear memory, free up resources.
```

That's it! Congratulations! You will get something like this:



Dynamic metadata for Index

This image dynamically changes the data (note the line “The price of the index now” and the current prices of the assets: CAKE, SUSHI, ZEE). Next you can improve the code and add curl updates, optimize the call code, etc.

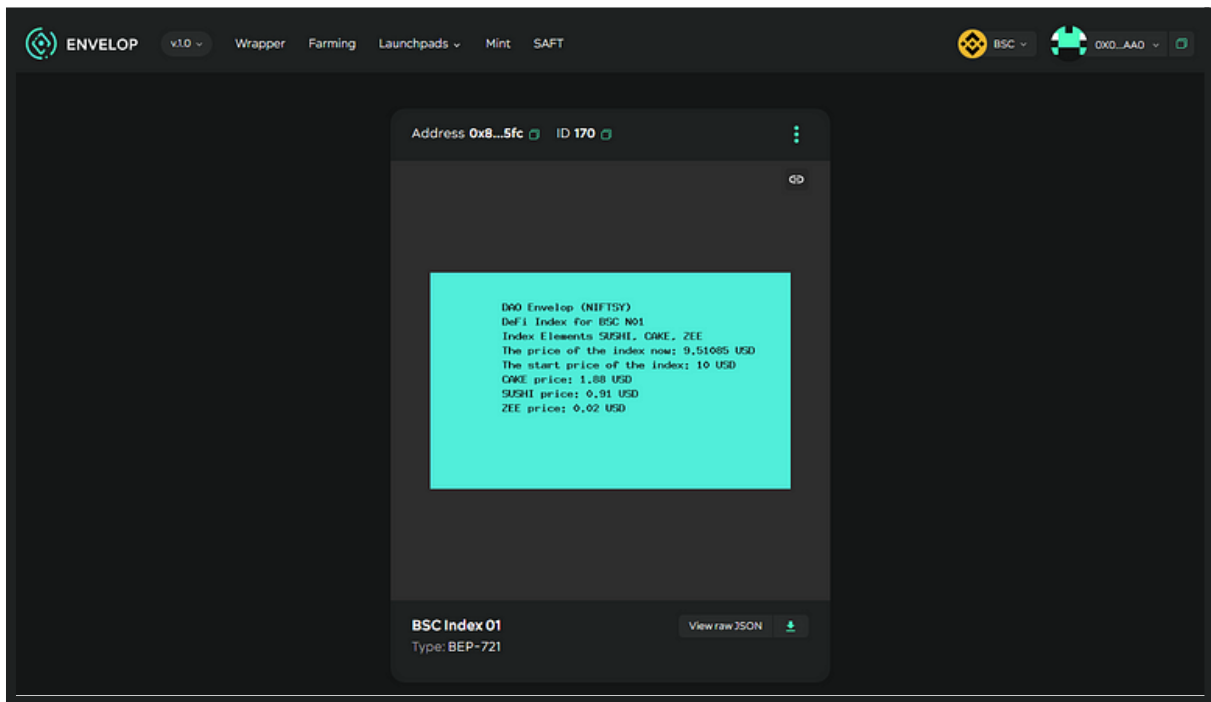
NFT & wNFT for Index

This way you can make an NFT with access to URLs. In the MVP version it's enough, but if you want to use a decentralized solution, of course, you have to use services like IPNS.

The InterPlanetary Name System (IPNS) is a system for creating such mutable pointers to Content Identifiers (CIDs) known as names or **IPNS** names. IPNS names can be thought of as links that can be updated over time, while retaining the verifiability of content addressing.

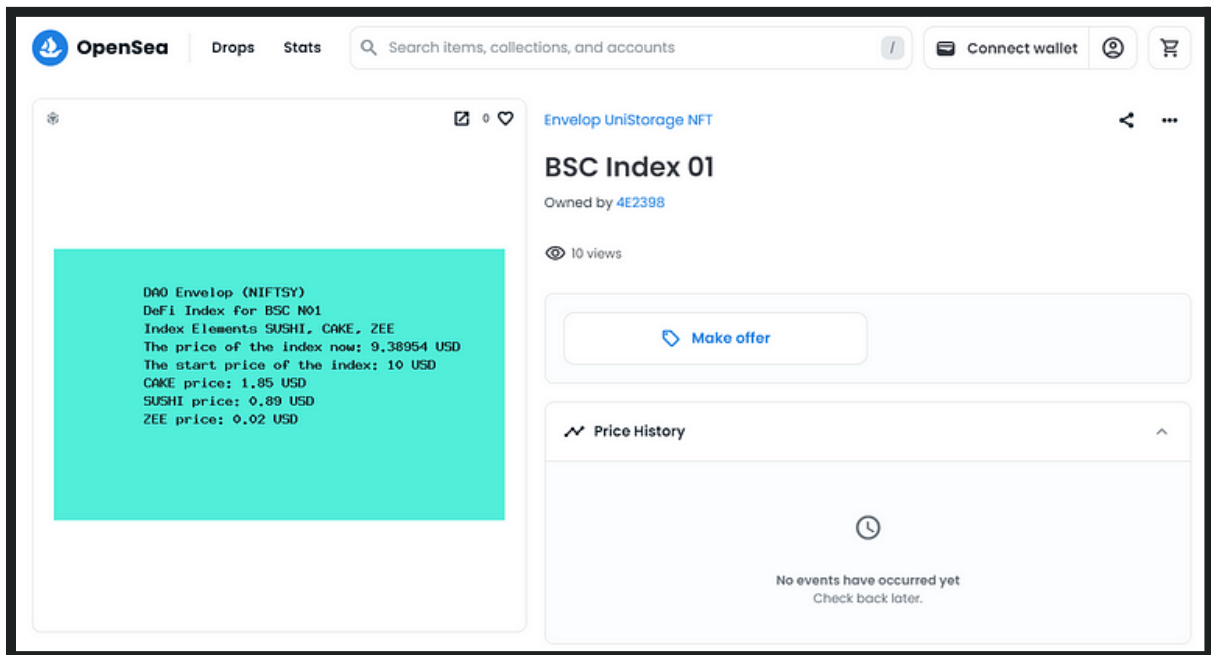
In this case, the URL as a resource for the image, which is the metadata of the NFT standard ERC-721. Examples:

- **Envelop**



NFT index in Envelop

- [Opensea](#)

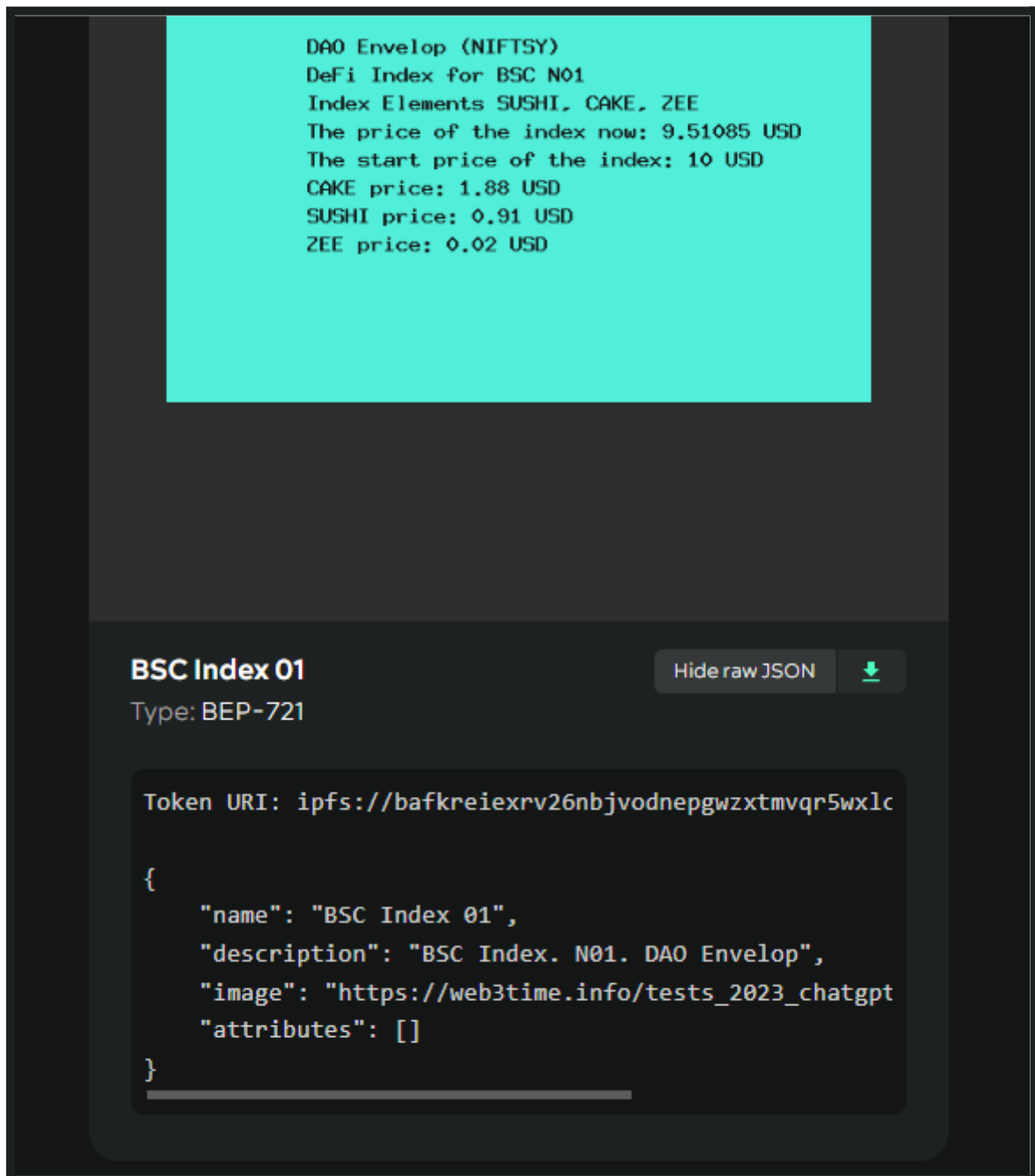


NFT index on Opensea

It should be understood that data on different sites are cached differently. Therefore, it is impossible to see metadata updates without updating the cache data. To do this in your browser is necessary:

- Delete cookies;
- Clear the cache;
- Refresh the page Ctrl+F5 (Command+R).

The main thing is to check the metadata. it should look like this:



NFT index metadata

Token URI: ipfs://bafkreiexrv26nbjvodnepgwzxtmvqr5wxlcnokqj6qilan2oxu5vxI53tu

```

{
  "name": "BSC Index 01",
  "description": "BSC Index. N01. DAO Envelop",
  "image": "https://web3time.info/tests_2023_chatgpt/indexes/index_2023_01.png",
  "attributes": []
}
  
```

Then you can use the smart contract address of the original NFT to create a wNFT index.

NFT as a Collateralized Derivative

Finally we get a dynamic wNFT with collateral in the form of 3 assets (BEP-20 tokens). The metadata of this wNFT (the wNFT data reads the metadata of the original NFT) is a script to determine the initial (“buy”) price of the index and its value at the moment. Similarly, you can form your own index. As an idea, you can consider categories, for example, from here: <https://coinmarketcap.com/cryptocurrency-category/>

And then you can sell these NFT 2.0 on any NFT marketplace, saving time for buyers and earning a fee on the sale (don't forget to set it up when you wrap NFT in [Envelop dApp](#)). Or you can bet on changes in the price of the index. The main thing to understand is that **this market is very young and very promising.**

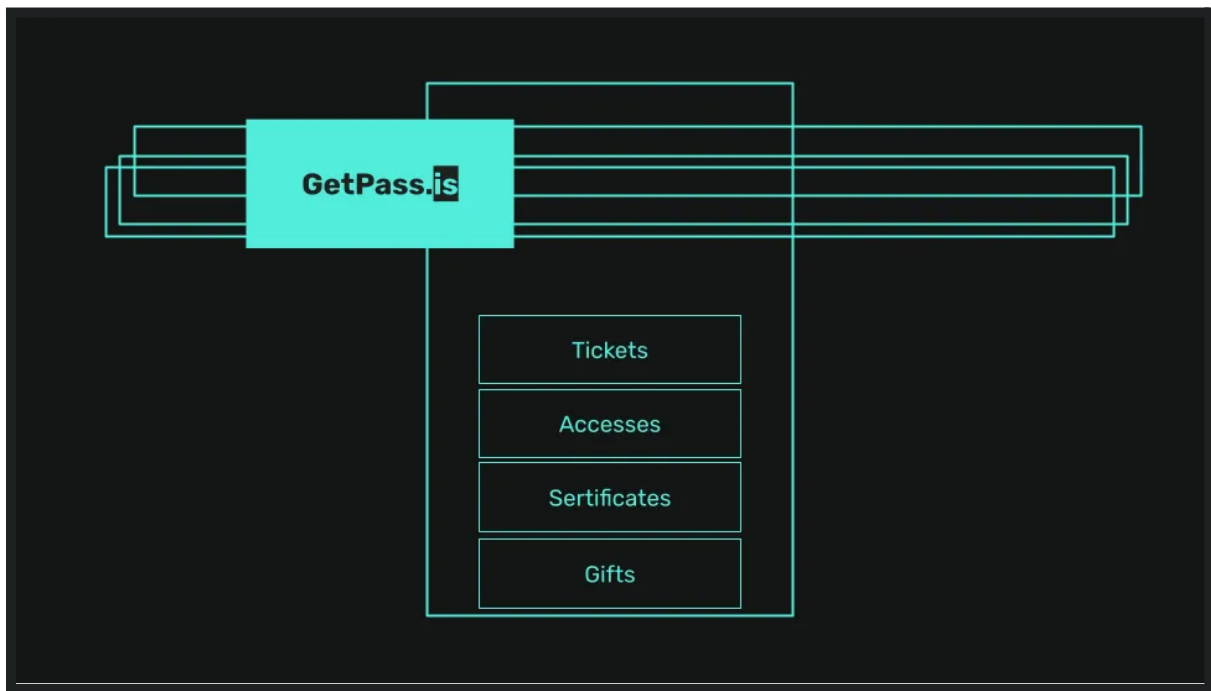
Calculating costs for NFT index

Let's try to calculate how much time and money it will take you to create such an index:

1. Code through ChatGPT using the templates above – free, about 5 minutes;
2. Upload to the cheapest server – from \$5/month; about 5 minutes;
3. Select assets – \$0; about 10 minutes. I chose these: [ZEE](#); [CAKE](#); [SUSHI](#);
4. Buy assets on any AMM DEXs – about \$1 fee, and how much you want to put in collateral is up to you: about 10 minutes: [buy 1](#) with \$0.16 fee; [buy 2](#) with \$0.24 fee; [buy 3](#) with \$0.23 fee;
5. **Total: half an hour and less than \$10.**

This market is very young right now, but isn't that the best time to experiment?

NFTs. Tickets. Accesses. Certificates. Gifts.



Getpass.is – a service where all this will be combined with the developed Envelop's Protocol and Oracle.

A brief analysis of the ticket market

None of the trends marked are key, but each is significant in its own way. Therefore, the project is not focused on the elimination of any competitors (are they even possible in Web 3.0?), but on the creation of a blue ocean, where growth opportunities are actually limitless.

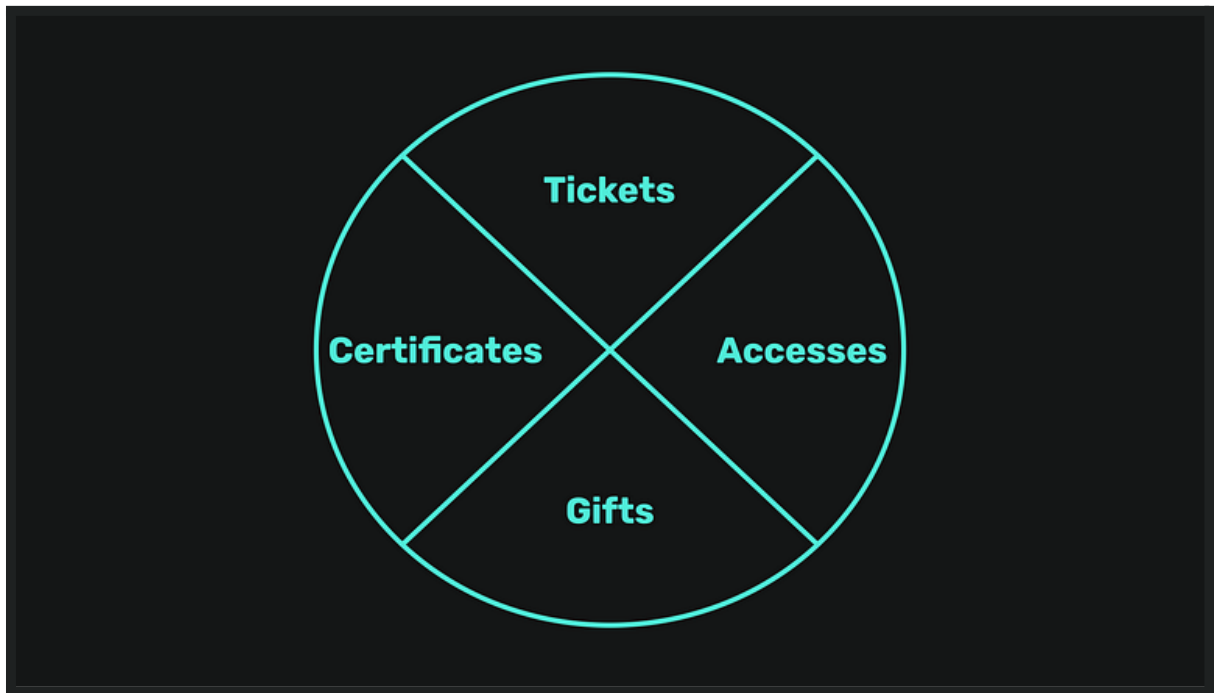
As for the highlighted trends of development, there are several, and they depend on a number of conditions specific to the current stage of market evolution:

1. There are established services that are essentially like online ticket offices: timepad, tkt, ticket cloud, and many others. They are difficult to compete with, because they are tied to the fiat system and, more importantly, have an organized distribution market;
2. There are crypto-services, each trying to close their own niche:
 - accesses to DAO services, messengers and other - Collab, Guild, ETHpass;
 - NFT-ticket services – Cardinal, W3Tickets and similar

And it turns out that there are a lot of tools and to use them consistently is not convenient, and most importantly – not profitable. Neither from the point of view of time spent, nor from the point of view of wasting other resources.

That's why the decision was made to develop GetPass, a simple and clear aggregator based on Envelop protocol.

What's under the hood of the NFT ticket service?

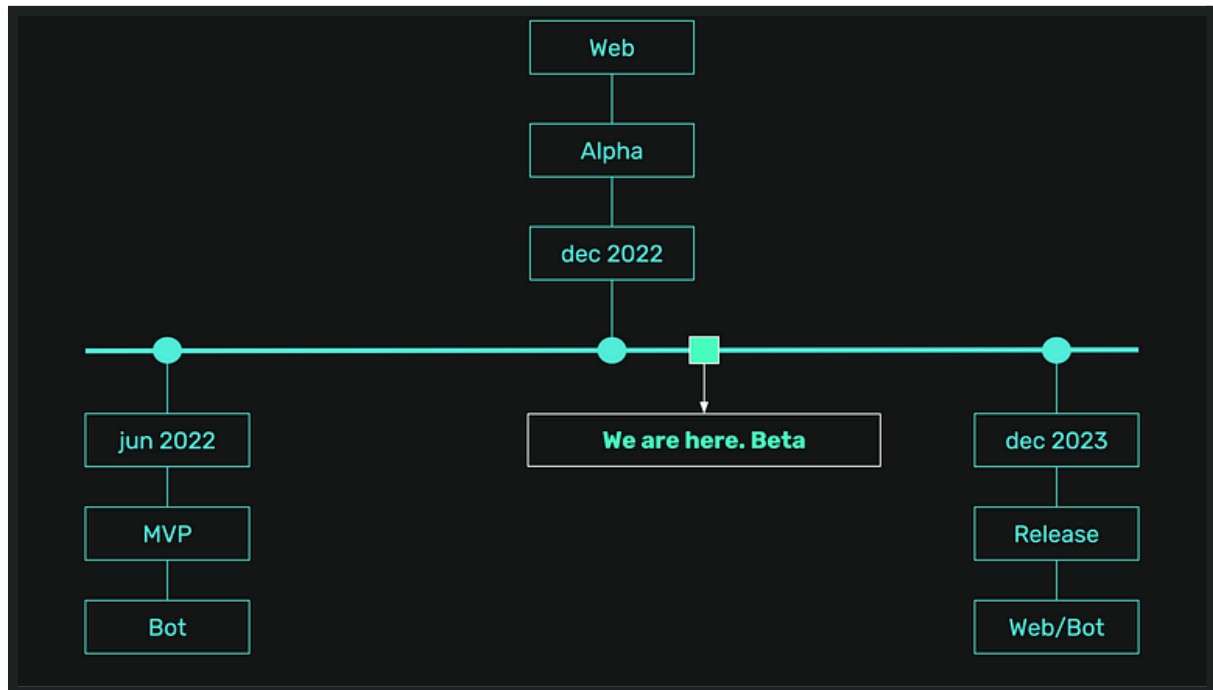


NFT ticker service diagram

So, we have four basic groups:

1. **Tickets.** With this function, you can create tickets ([try now – here](#)) in different EVM and non-EVM networks (we are talking about a full release service), check them “at the entrance” as a condition of access (offline checking is provided in the future), develop secondary and OTC market.
2. **Accesses.** [signer.envelop.is](#) already implemented – an analogue (so far – simplified) Collab and other similar services for authorization in various messengers, forums, etc;
3. **Gifts.** Ready service in beta-testing stage, which can be found on different dApps. For example, here: <https://app.envelop.is/saft> you can put inside wNFT any digital tokens, which will be a nice bonus for visitors of a meetup, conference or exhibition. [WOW Summit implemented](#) a similar Protocol-based functionality more than a year ago;
4. **Certificates.** It is possible to issue both NFT and SBT certificates, diplomas and other digital documents confirming a fact or achievement.

What are the core features of the ticketing service?



NFT ticket service roadmap

In 2023, we would like to achieve the following goals::

1. Mint wNFT and NFT tickets (ERC-721, ERC-1155, BEP-721, BEP-1155, etc;)
2. Tickets and accesses validation;
3. Deployment of different certificates into business processes;
4. Subscription service. Access to encrypted content, access to linked videos, access to metaverse, such as Spatial, The Sandbox, Decentraland;
5. NFT referral program;
6. Development of an event management system: calendar (for organizers, speakers and participants), event mini-lending, notification system, etc;
7. Support of work both through the web-interface and with the help of bots;
8. Integration with Ethereum, Polygon, BNB Smart Chain.

I must say that much of this is already ready in beta/alpha version, but requires further detailing and testing.

Ledger has fallen, but a CrossNFT wallet is an alternative

After the new key-recovery feature was announced by Ledger, the crypto community once again thought about the importance of holding. And today we are going to talk about a new approach to storing your coins, tokens and NFTs and the possibilities of enhancing trustless security.

But first, let's remember what Ledger declared:

1. Users are provided with a cloud service for alternative storage of the seed phrase. Although before they assured that the phrase never leaves the wallet.
2. Ledger can always change the firmware so that the seed-phrase can “get out” of the wallet.
3. Government agencies and other third parties can request data on those funds stored in this cloud service.

Not fun? That’s for sure. But DAO Envelop has a long-standing answer to that.

Update: Crypto Wallet Provider Ledger Delays Key-Recovery Service After Uproar. After criticism from the crypto community, the firm pledged to open-source the Ledger Recover code before releasing the controversial update.

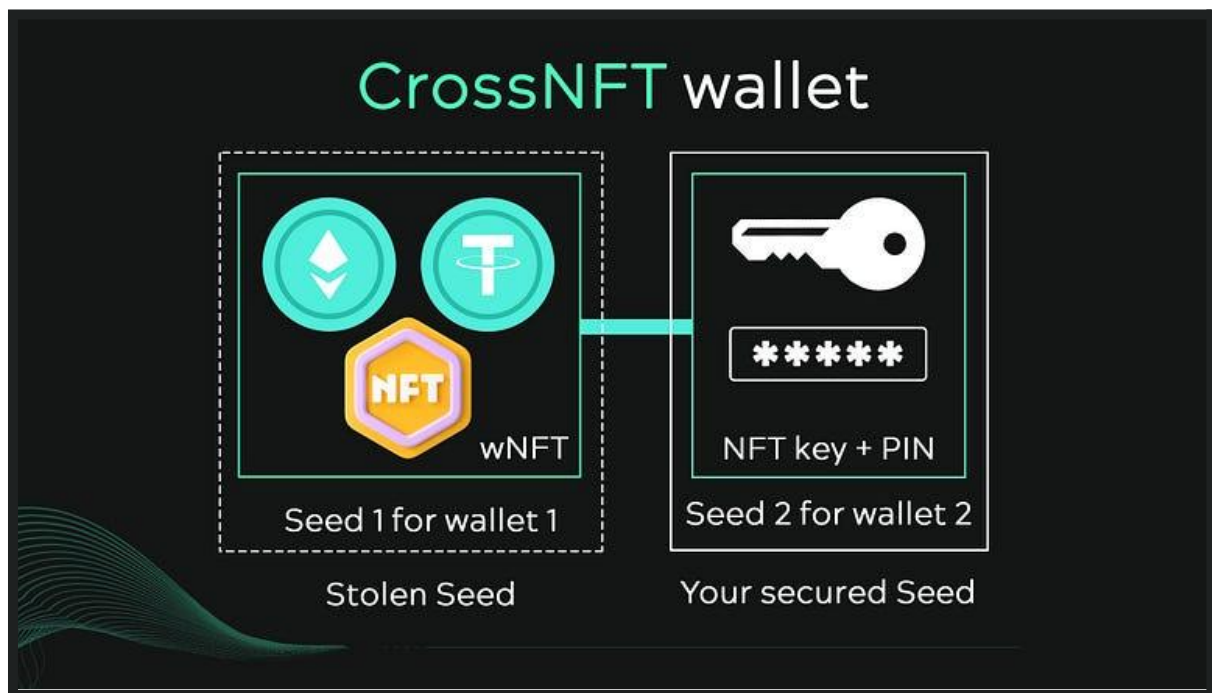
How to store crypto safely when your seed phrase is stolen?

Envelop offers to increase the security of your assets. You don’t just store your assets (coins, tokens, and NFTs) in a Metamask wallet, but store these assets wrapped in wNFTs. That is, you use just one Envelop feature and get a completely new solution.

Here’s how it helps you if your seed phrase is found out.

1. So, wrap all of your assets in wNFT here <https://app.envelop.is/>.
2. Create an NFT key for this wNFT and store it securely (for example, it could be a paper wallet or another Metamask wallet).
3. Create a PIN-code for the NFT key.
4. Despite all precautions, your seed phrase leaked to an intruder.
5. The attacker will be able to transfer wNFT with your assets and even trade on the OTC, but will not be able to access the assets.
- 6. Only those who have the NFT-key and the PIN-code to it can get access to the assets.**
7. You notice that your wNFT has been transferred from your wallet.
8. Go to <https://app.envelop.is/crossings>
9. Burn the NFT key by entering the PIN-code
10. You get all your assets in your uncompromised wallet.
11. You can find a step-by-step guide in the next chapter.

This can be shown even more simply in the diagram:



Cross-NFT wallet

CrossNFT wallet with zero-knowledge proof

Disclaimer: This solution is currently in the MVP stage, and therefore not all of the functionality works. So first we'll list the features that we have now. And what is planned to be realized later.

- Create a wrapped NFT wallet with collateral in the form of native coins, fungible (ERC-20/BEP-20/etc.) and non-fungible (NFT) tokens. **Done.**
- Create the NFT-key to this wNFT in a chain different from the collateral storage chain. **Done.**
- Create the NFT-key to this wNFT in the same chain. **Planned.**
- Specify the receiver when burning the NFT key, and that would make the process even more secure. **Planned.**
- Add multi-signatures. **Planned.**
- Add a zero-knowledge proof for collateral. **Planned.**
- Add a zero-knowledge proof for a link between wNFT and NFT. **Planned.**
- Decentralization of the Oracle wNFT and its link with the NFT-key. **Planned.**
- Multi-distribution several NFT keys to one wNFT; and several wNFTs to one NFT-key. **Planned.**

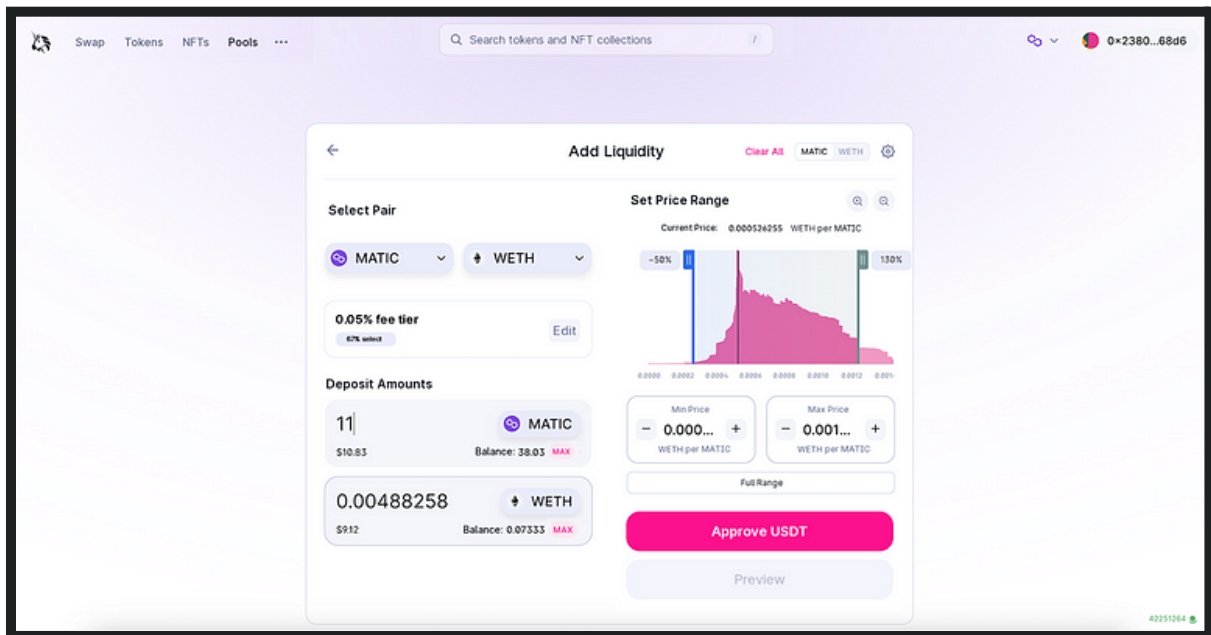
DAO Envelop invites cooperation from all interested in implementing this approach.

Decentralized liquidity

Step 1. Create NFT liquidity pools on Uniswap v3

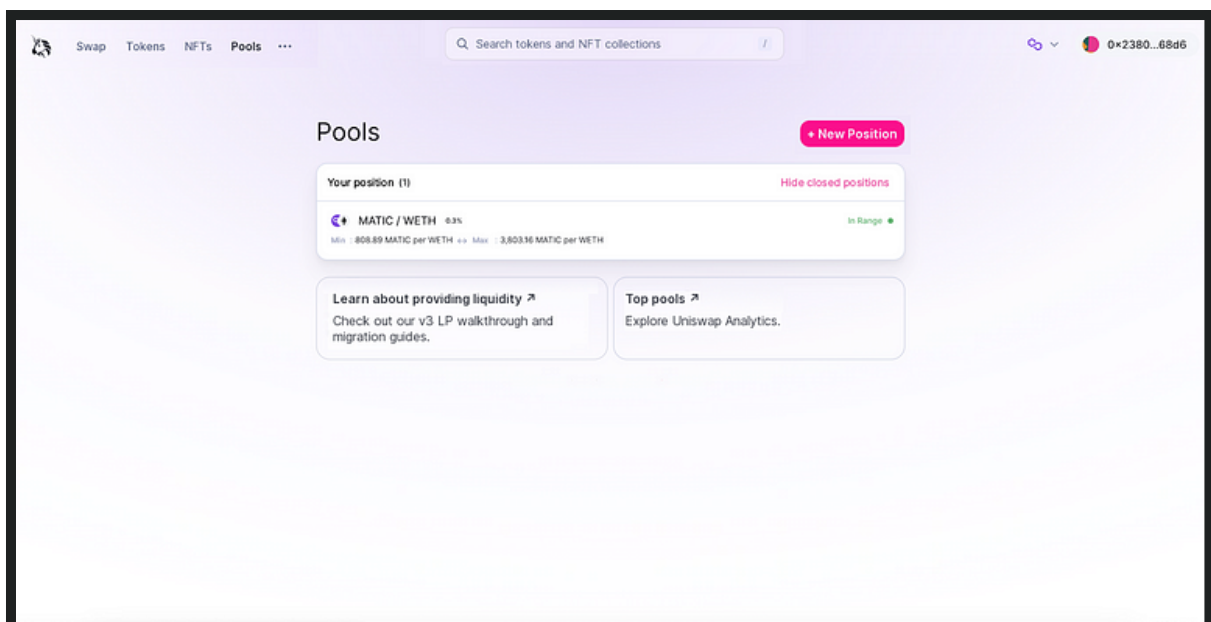
In the Uniswap v3, when you create a pool, you get the NFT, which, to simplify, serves as the key to your liquidity, unclaimed (unreceived) fees. Uniswap V3 Positions on Opensea:

On the <https://app.uniswap.org/#/pools> page, create a pool (e.g. MATIC to wETH in the Polygon network).

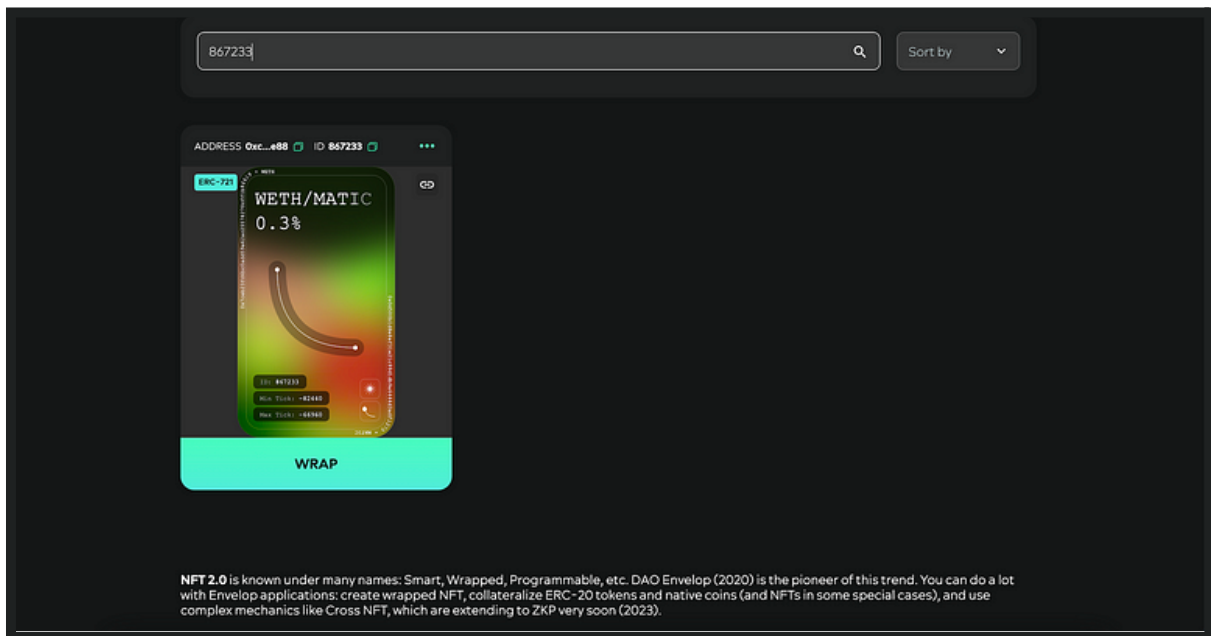


Add liquidity to Uniswap

Transaction id.



For this pool, we received an NFT key with ID 867233.



NFT-key for Uniswap v3 liquidity pool

Now let's similarly add liquidity to the pool USdt - MATIC (BEP-20) in the Binance Smart Chain. [Transaction id.](#)

In total we have

- **4 ERC/BEP-20 tokens and**
- **2 ERC-721 NFTs**

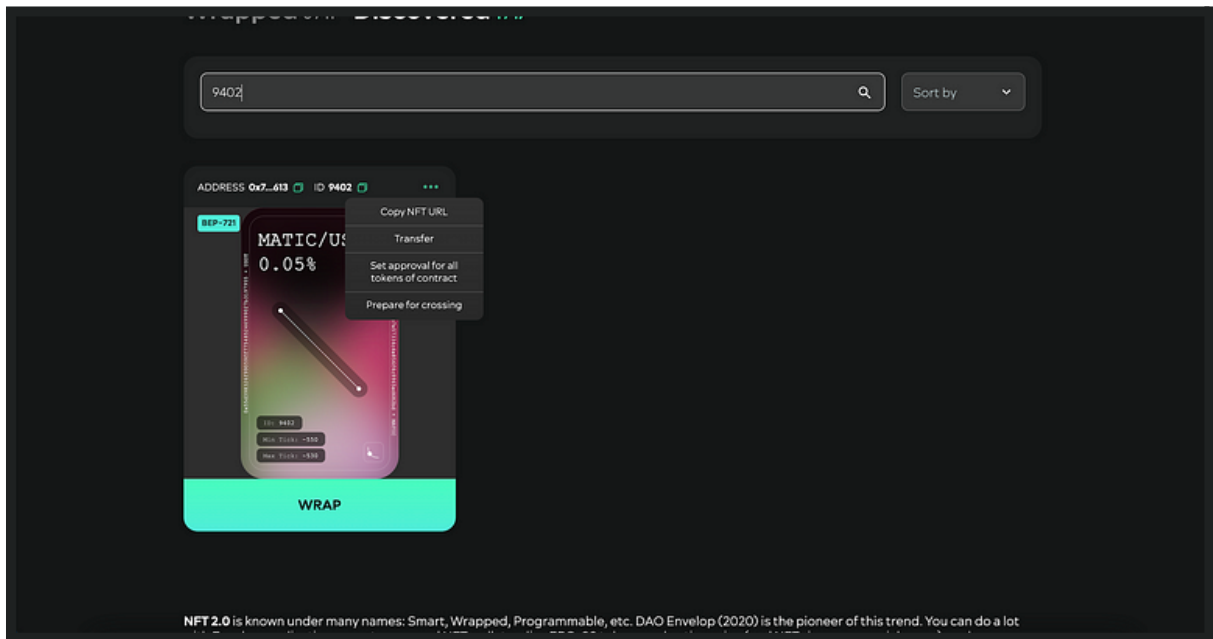
in which the liquidity is "locked".

What's next?

Let's try to combine NFT (Uniswap v. 3) from the Polygon and NFT (Uniswap v. 3) in the Binance Smart Chain via the Ethereum network. But how is it possible? With the help of cross chain by programmable asset protocols. For example, let's take DAO Envelop, which specializes in creating NFT 2.0, in the form of wNFT (wrapped NFT).

Step 2. Combine multichain liquidity via Cross-NFT

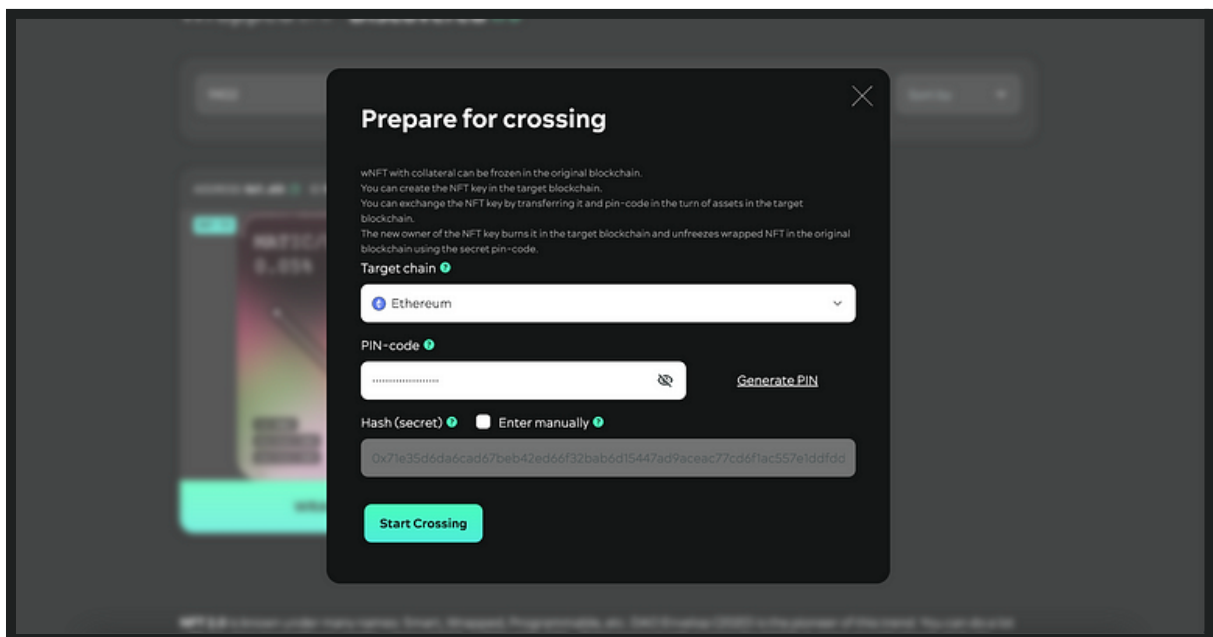
Go to <https://app.envelop.is/list> on the BSC, find the NFT key by ID and click on "breadcrumbs". Select the item "Prepare for crossing"



Prepare NFT for crossing

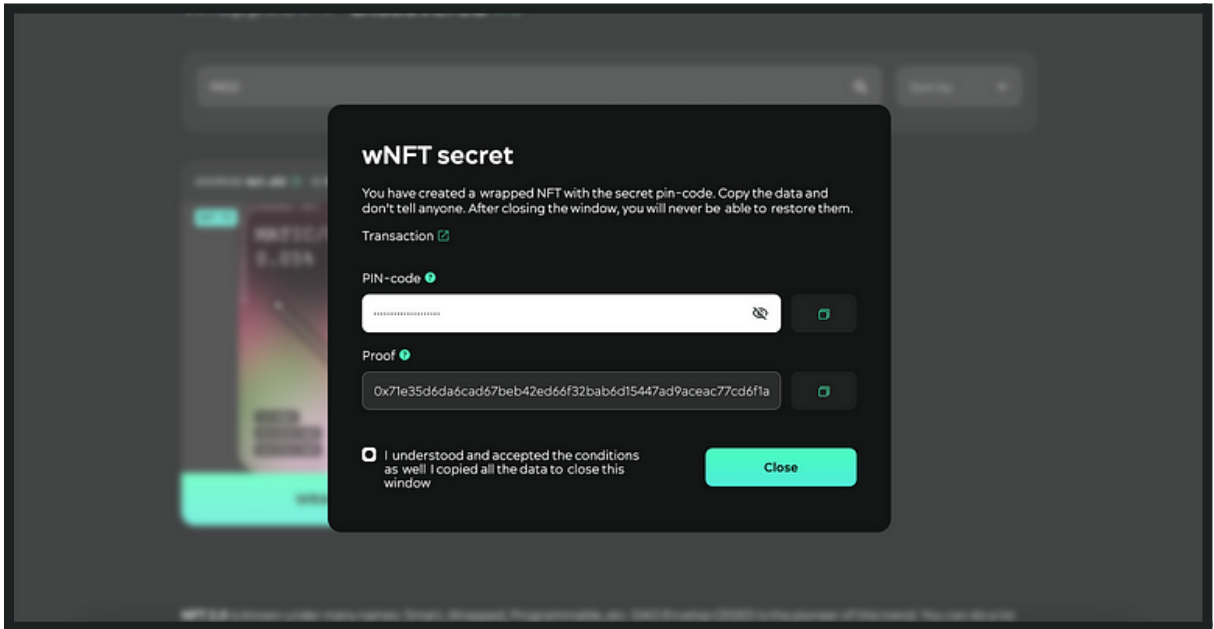
The complete instructions for crossing are at this link, so this article will focus more on general concepts.

So we agreed to build NFT from 2 different chains (BSC & Polygon) through one Ethereum network. So we specify it. Next, we specify a pin code, which serves as an additional protection.



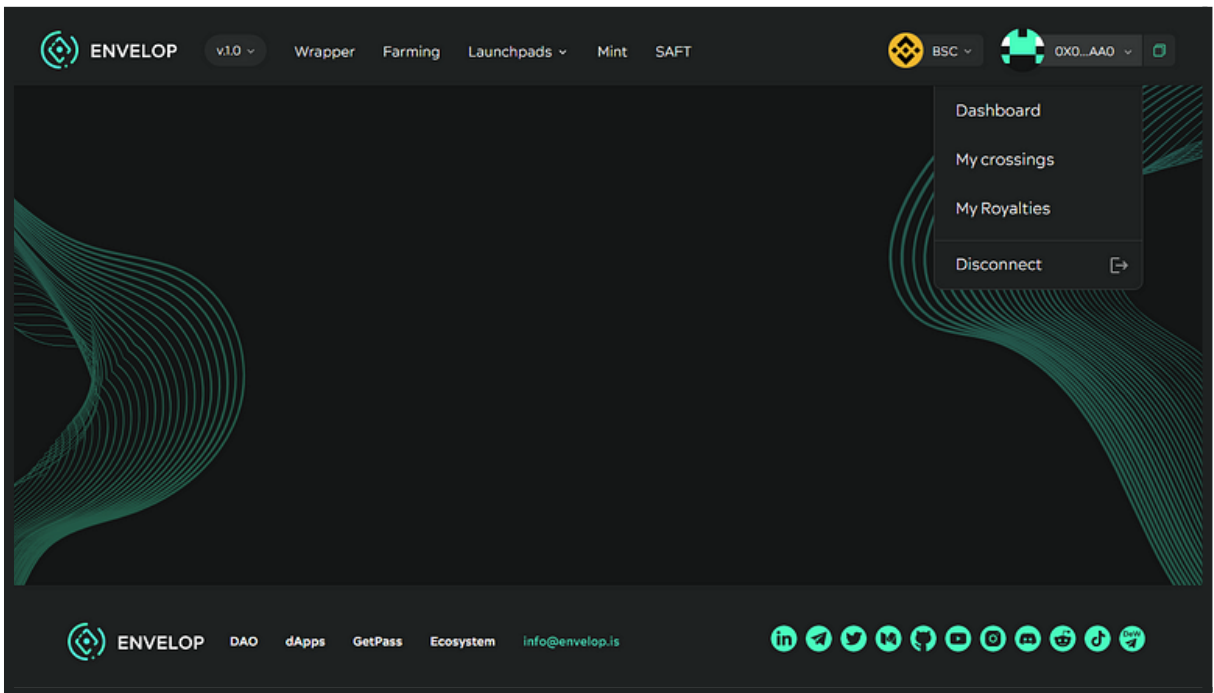
Set-up NFT crossing features

It is important, when you create a key and see the confirmation, first carefully check the pin-code and only then click the checkbox that all read, understood and copied.



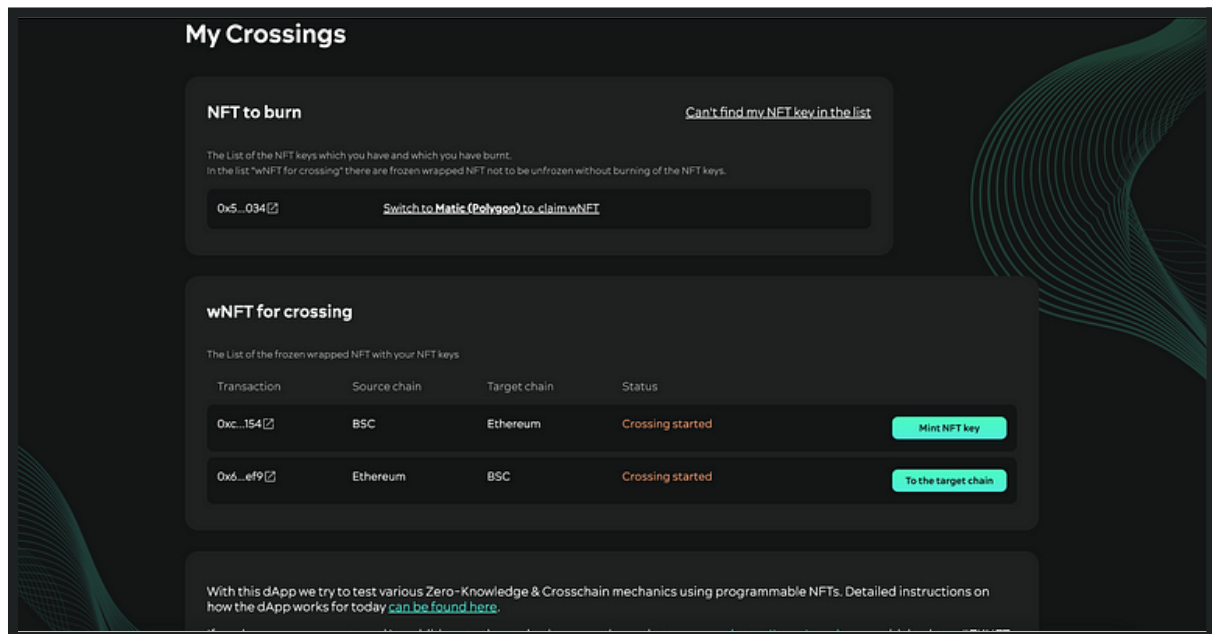
wNFT secret for crossing

Then select the “My crossing” menu in the upper right corner:



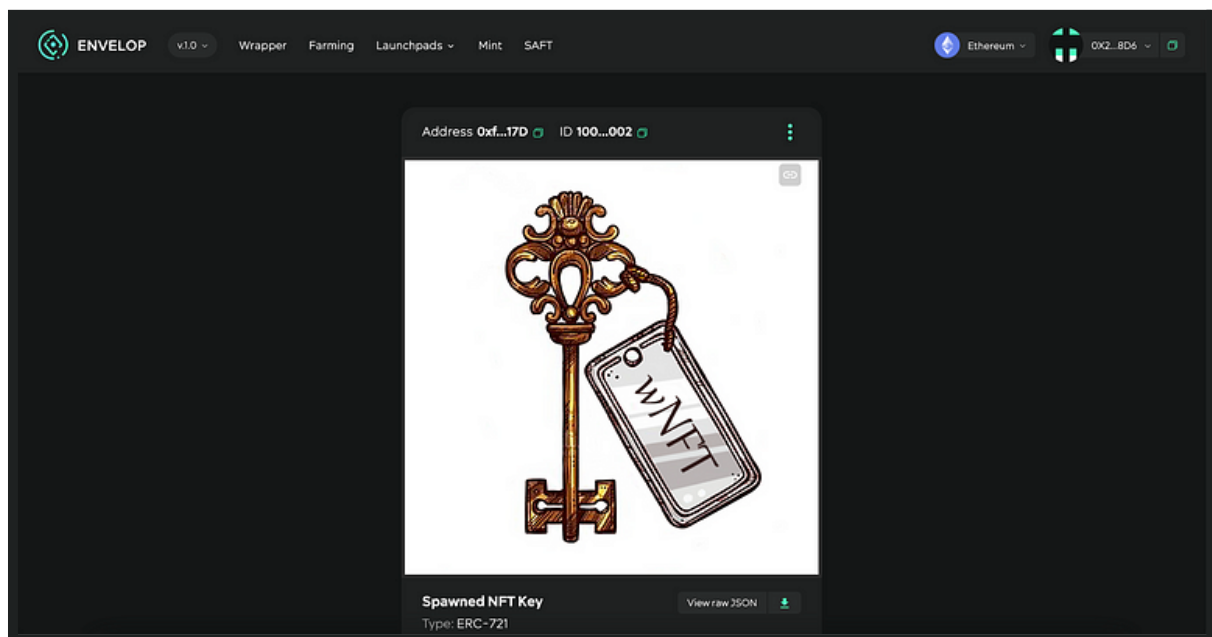
My crossing menu

And go to <https://app.envelop.is/crossings>, where you see the NFTs prepared for crossing:



NFT for crossing

Next, you need to **create an NFT key on the selected network (Ethereum) for each of the selected NFT** Uniswap v.3. The key looks like this for today:



NFT-key for Uniswap v3 liquidity

So,

1. You have made a pool of two Uniswap NFTs (v.3) on 2 chains;
2. Got an NFT access key to this pool;
3. This pool is connected via Envelop crossing to the NFT key in Ethereum;
4. And now anyone who owns the Ethereum PIN and NFT key is the actual owner of the Uniswap v.3 pool on the BSC and Polygon.

wNFT for crossing

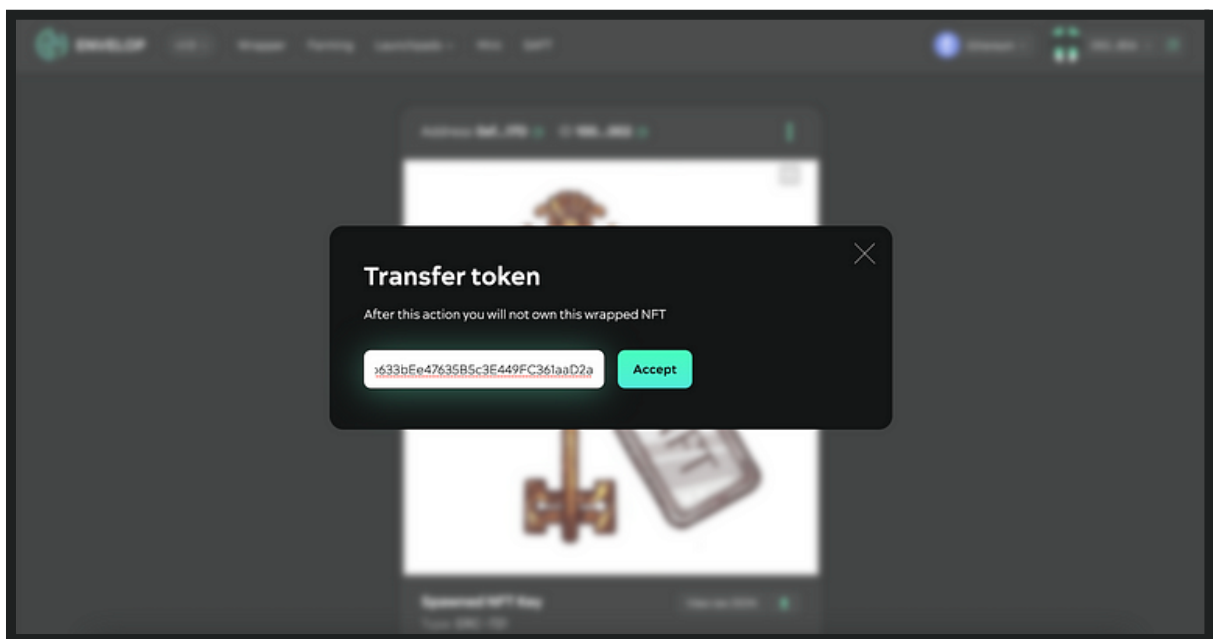
The List of the frozen wrapped NFT with your NFT keys

Transaction	Source chain	Target chain	Status	
Ox0...90b	Matic (Polygon)	Ethereum	Has NFT in the target chain	Transfer NFT key
Oxc...154	BSC	Ethereum	Has NFT in the target chain	Transfer NFT key

Transfer NFT key

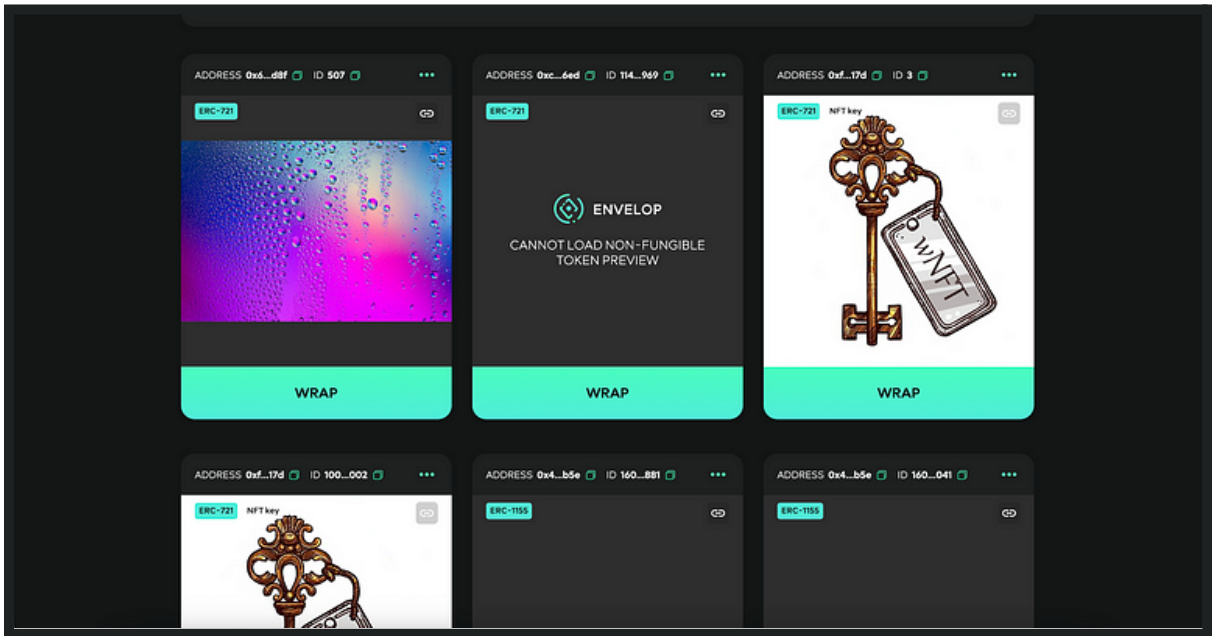
Step 3. Transfer liquidity

So we can safely transfer the NFT key in Ethereum to another account (in our case, from menaskop.eth to netstalking.eth) and thereby transfer the claim for assets in the BSC and Polygon:



Transfer the claim for assets

The keys can also be seen on the page of all NFTs: <https://app.envelop.is/list>

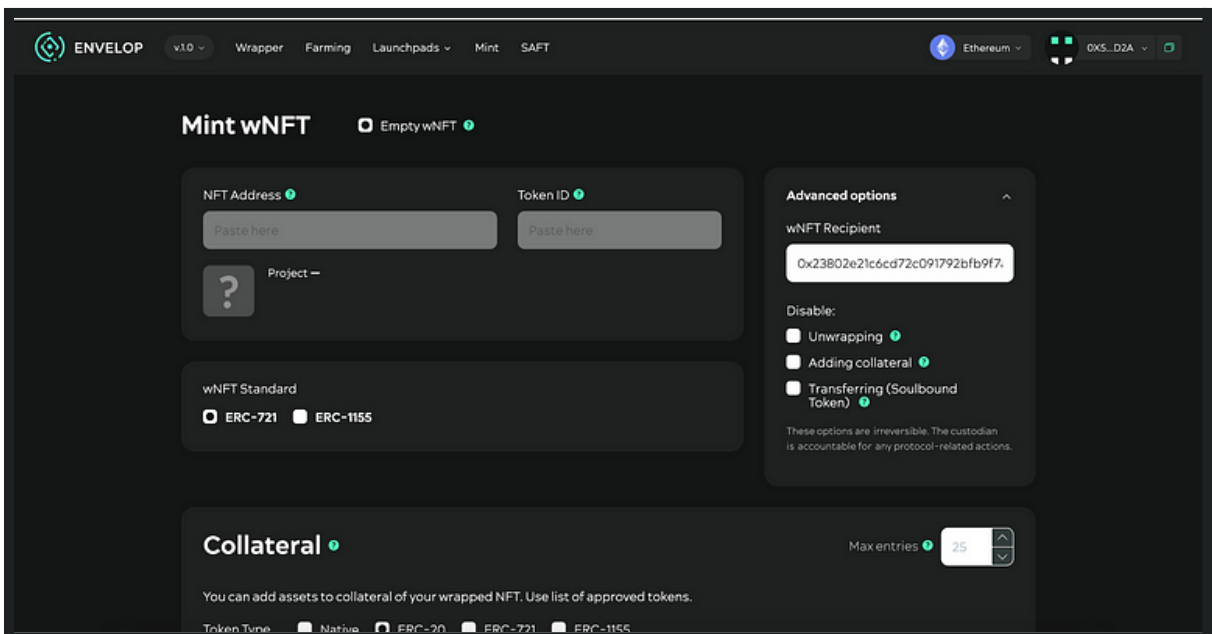


Envelop NFT Dashboard

But **you can go beyond** that and combine both keys into 1 wNFT using a Wrapper dApp by Envelop.

Disclaimer: Due to security requirements, adding NFT smart contracts is now whitelisted, but in general it is allowed in the protocol architecture.

Note the top right corner where the recipient of wNFT is listed! You can transfer a wNFT containing 2 keys to another wallet, which will not only own 1 wNFT in Ethereum, but also claim rights to 5 assets in different networks.



Mint NFT key to another address

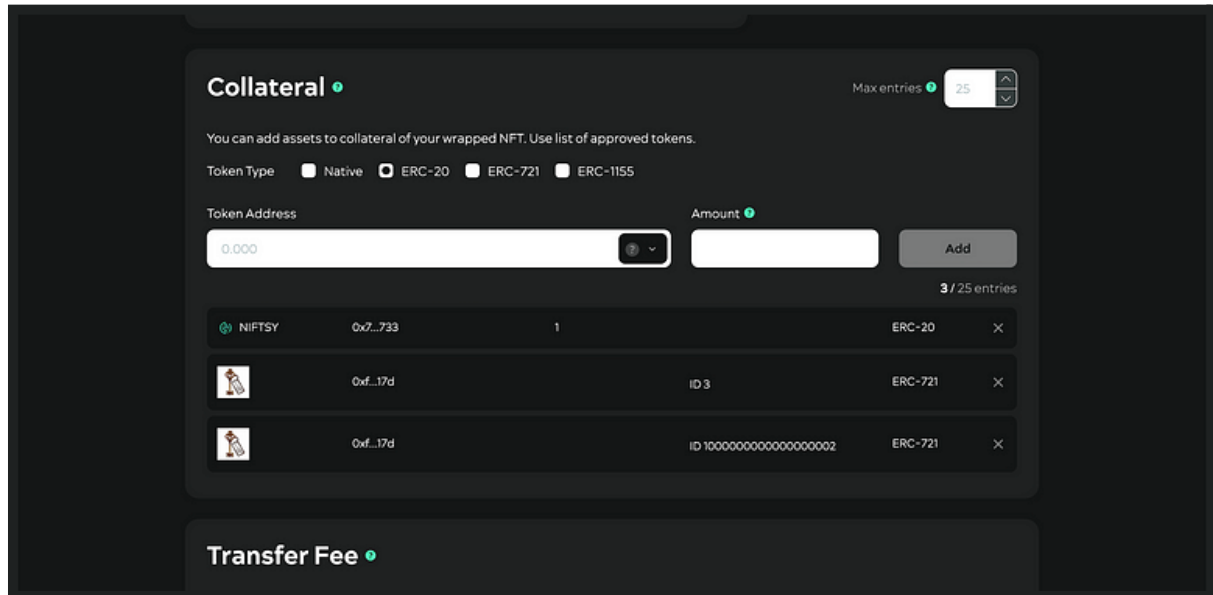
How's five? Do the math:

- MATIC (native token aka **coin**) on the Polygon network;
- wETH (ERC-20 token) in the Polygon network;

- MATIC (BEP-20 token) in the BSC network;
- USDt (BEP-20 token) in the BSC network;
- NIFTSY (ERC-20 token) on the Ethereum network.

Where did the latter come from? Decided to put it in the collateral of the newly created wNFT and have every right to do so. By the way, if you want to add any tokens to collateral – it can be done via saft.envelop.is.

And the new owner has a wNFT with collateral in 2 NFT keys and ERC-20 token NIFTSY.



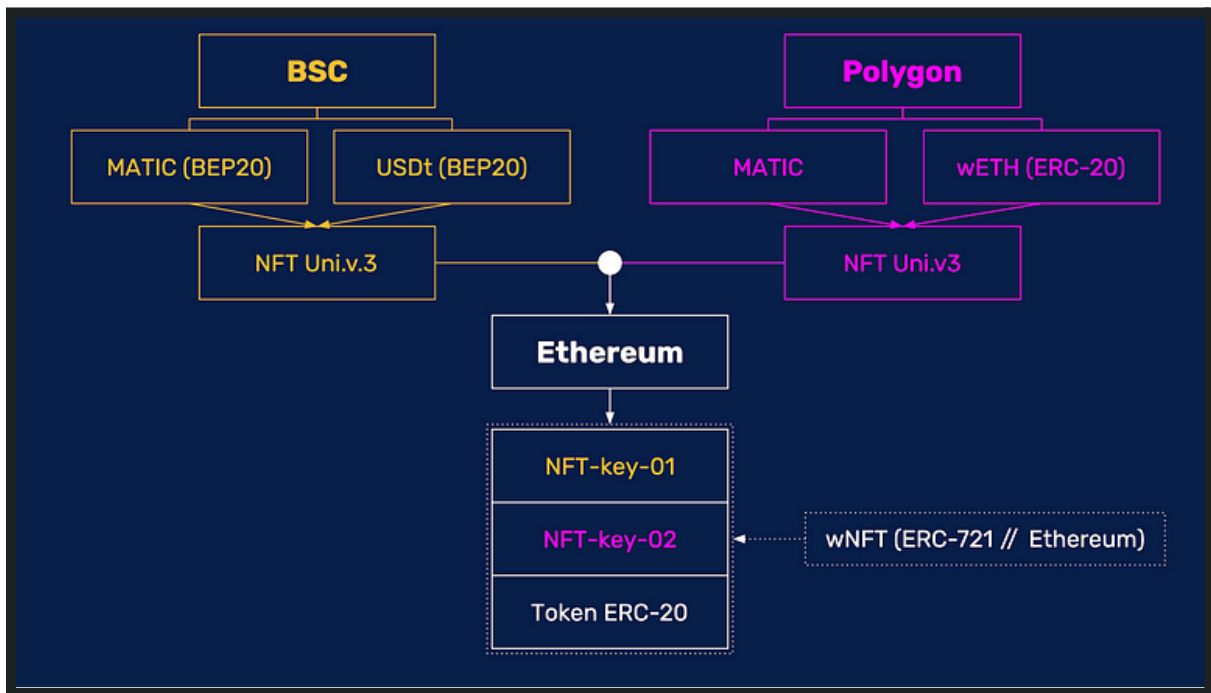
wNFT with collateral in 2 NFT keys and ERC-20 token NIFTSY

Why do we need cross-NFT?

1. This way you can lock liquidity in an expensive chain once and transact in a cheaper one using an NFT-key;
2. You can do bridgeless exchanges across networks;
3. It's a great substitute for cash and in the CBDC's time, believe me, such a tool will be in demand;
4. It gives an extra level of security, since Envelop is close to Zero-Knowledge Proof;
5. You can use the smart wallet of the future, but here and now, in the present. For example you have a wallet with 100 different tokens and coins in it. How can you **trustlessly** transfer all the assets in one transaction? You can't. You can transfer a seed phrase and/or a private key, but will the other party trust you in that case? I don't think so.

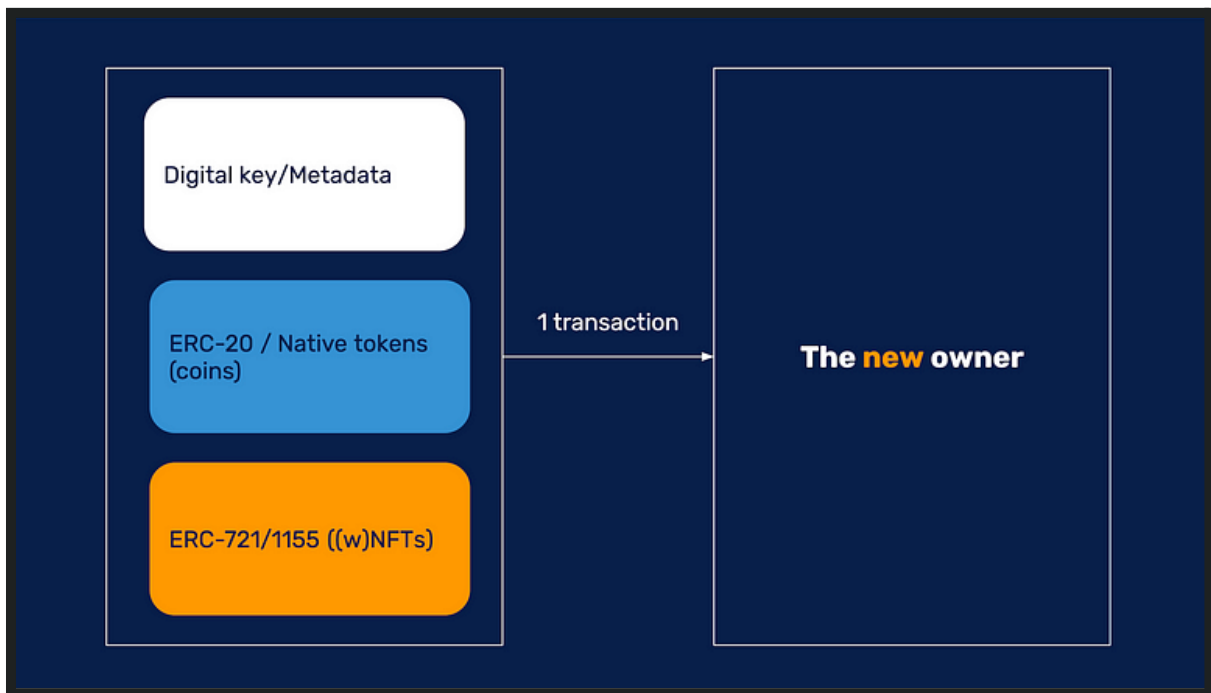
So you get 2 simple schemes:

- A scheme about claiming ownership in different chains through a single wNFT.



Claim ownership in different chains through a single wNFT

- A figure about WHAT is fundamental about owning wNFT as a smart-wallet



wNFT as a smart-wallet

How to transfer liquidity interchain via CrossNFT (Guide)

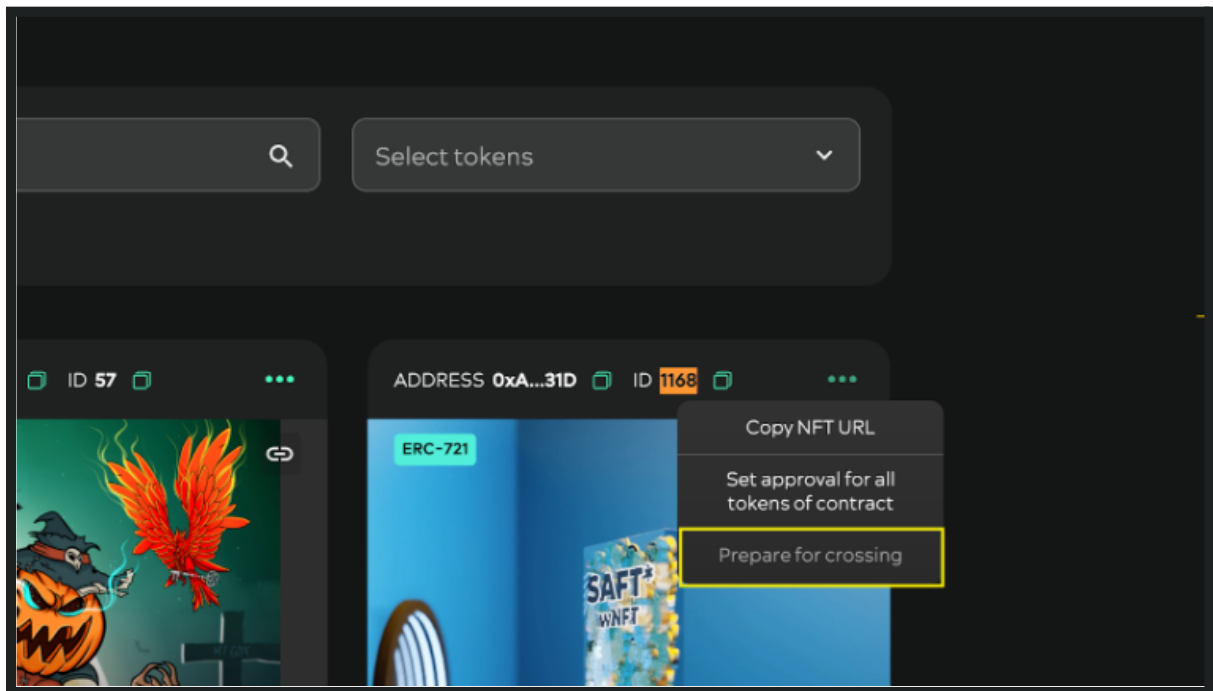
Cross-NFT is a crosschain assets exchange tool for asset owners in different networks. If you need to exchange, for example, USDT in Polygon network to DAI in Ethereum network, you have come to the right place.

Currently, exchanges are possible between Ethereum, Polygon, BSC networks.

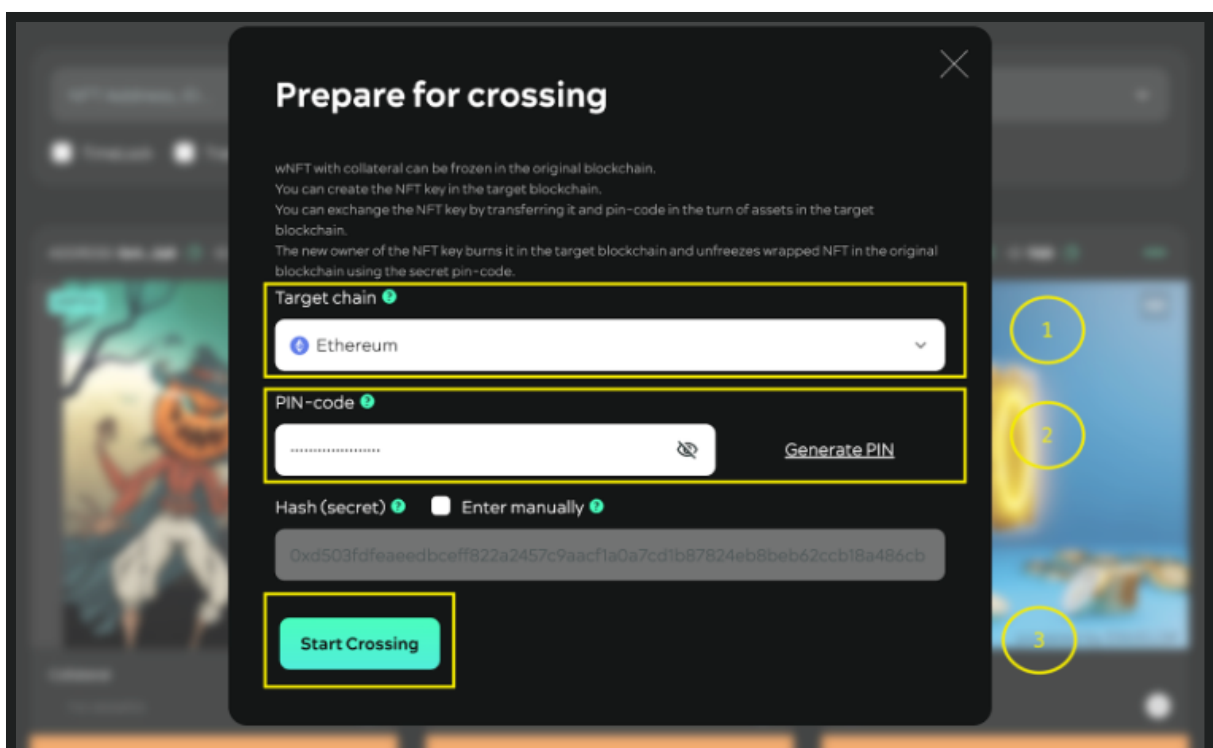
Requirements:

- To have wNFT in the Polygon network with USDT in Collateral
- To have an exchange partner with DAI in Ethereum network

On the selected wNFT in the application <https://app.envelop.is/list>, you need to click on "**breadcrumbs**" and select "Prepare for crossing":



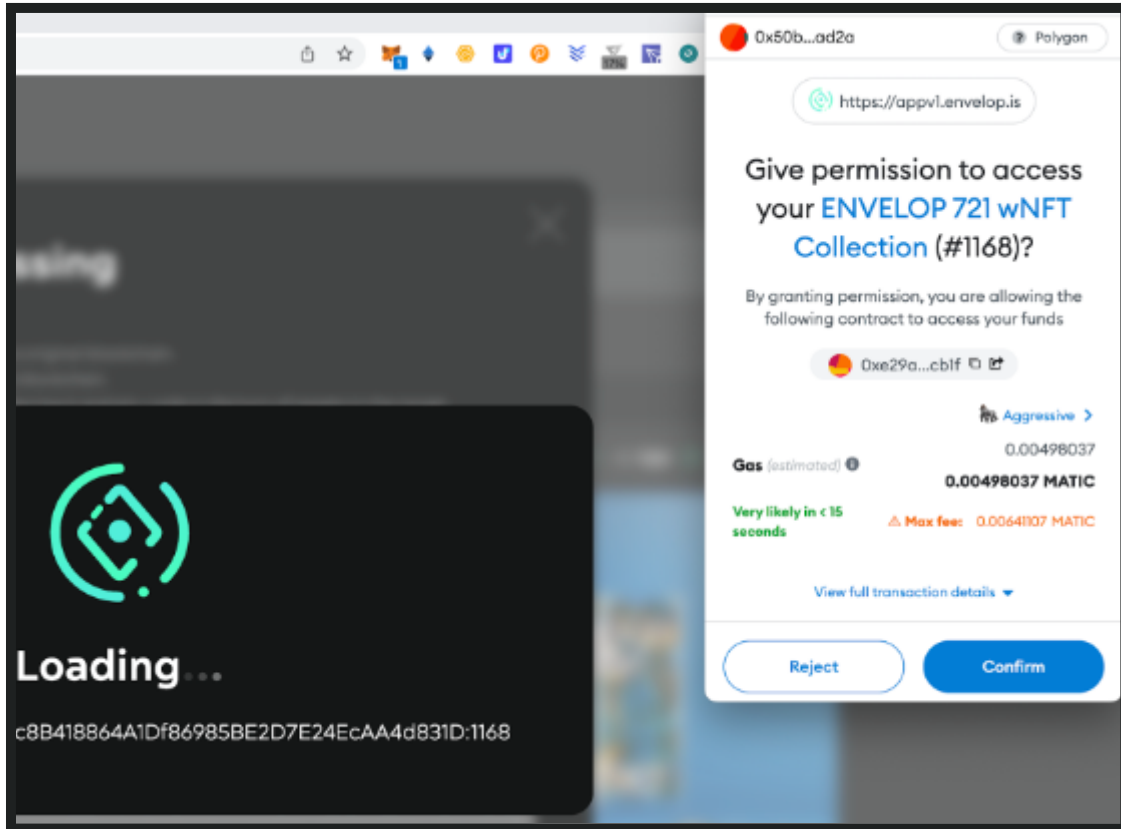
This will bring you to the Cross-NFT **preparation** window:



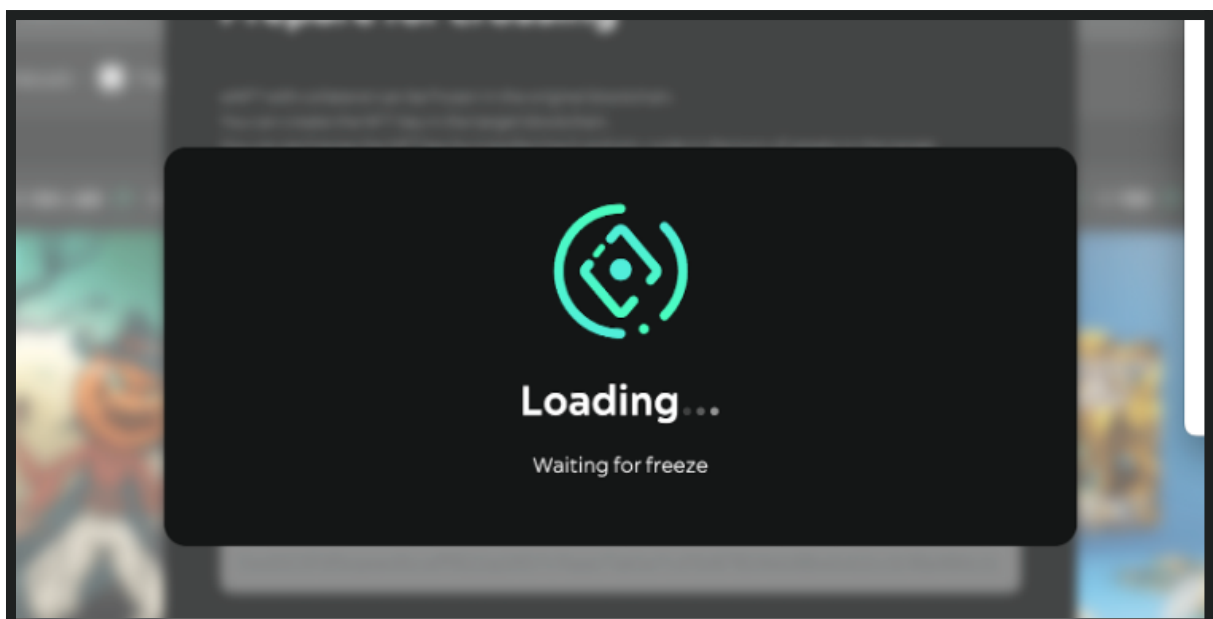
Here you need to **enter** (from top to bottom):

1. The network in which the cross-transaction will take place (Ethereum in our case);
2. Pin-code (better to generate, but you can also enter it manually);
3. After that you need to click "Start Crossing".

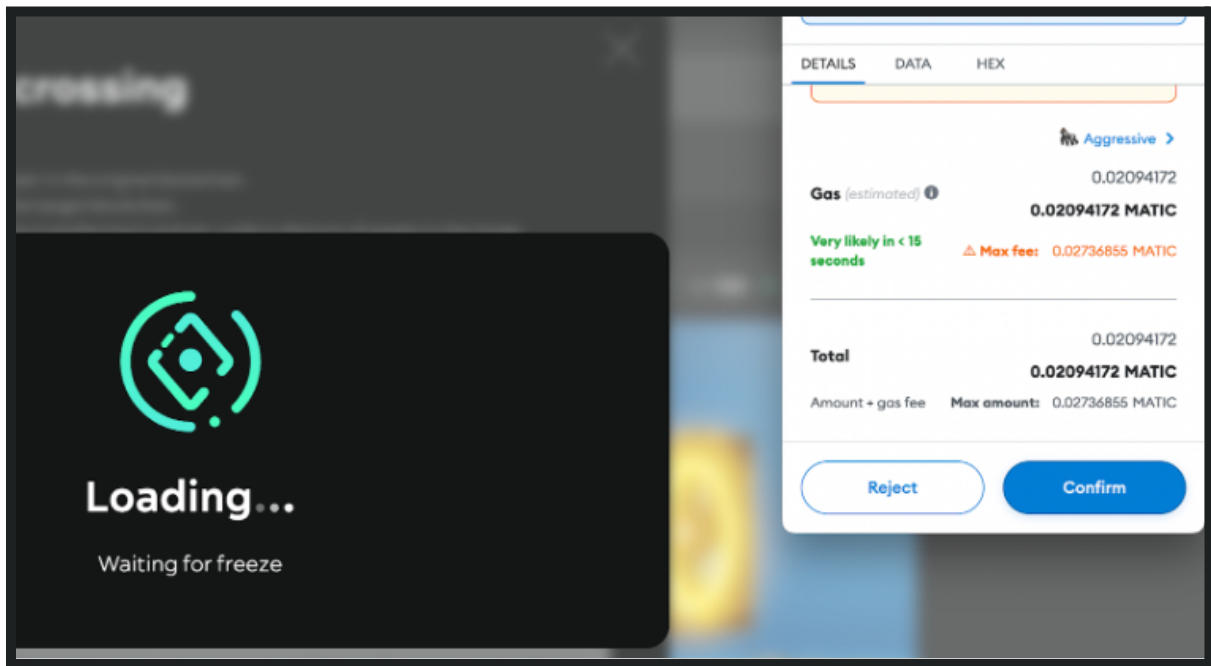
Next you will be taken to MetaMask to confirm the transaction (don't forget the gas):



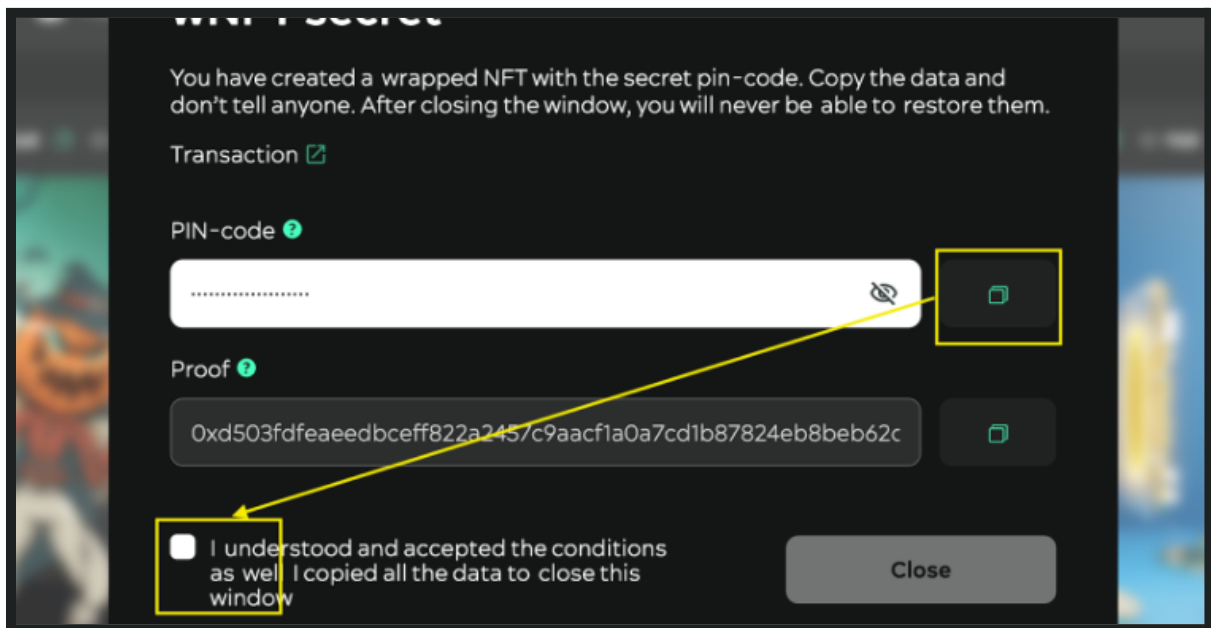
During confirmation, you may see a similar **window** (and more than once: it depends on the settings you chose earlier):



There can be **several** confirmations in MetaMask:



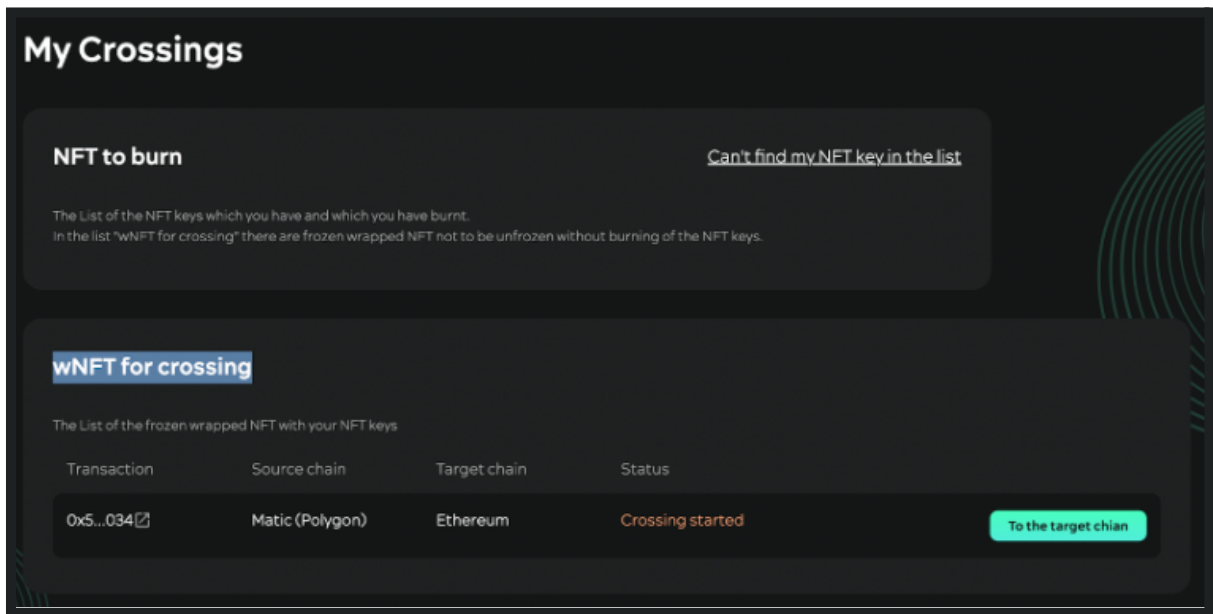
After these manipulations you will be taken to a window with a pin-code and a **proof** to it (this is a proof of the **correlation** of the key to a specific set of cross chain parameters):



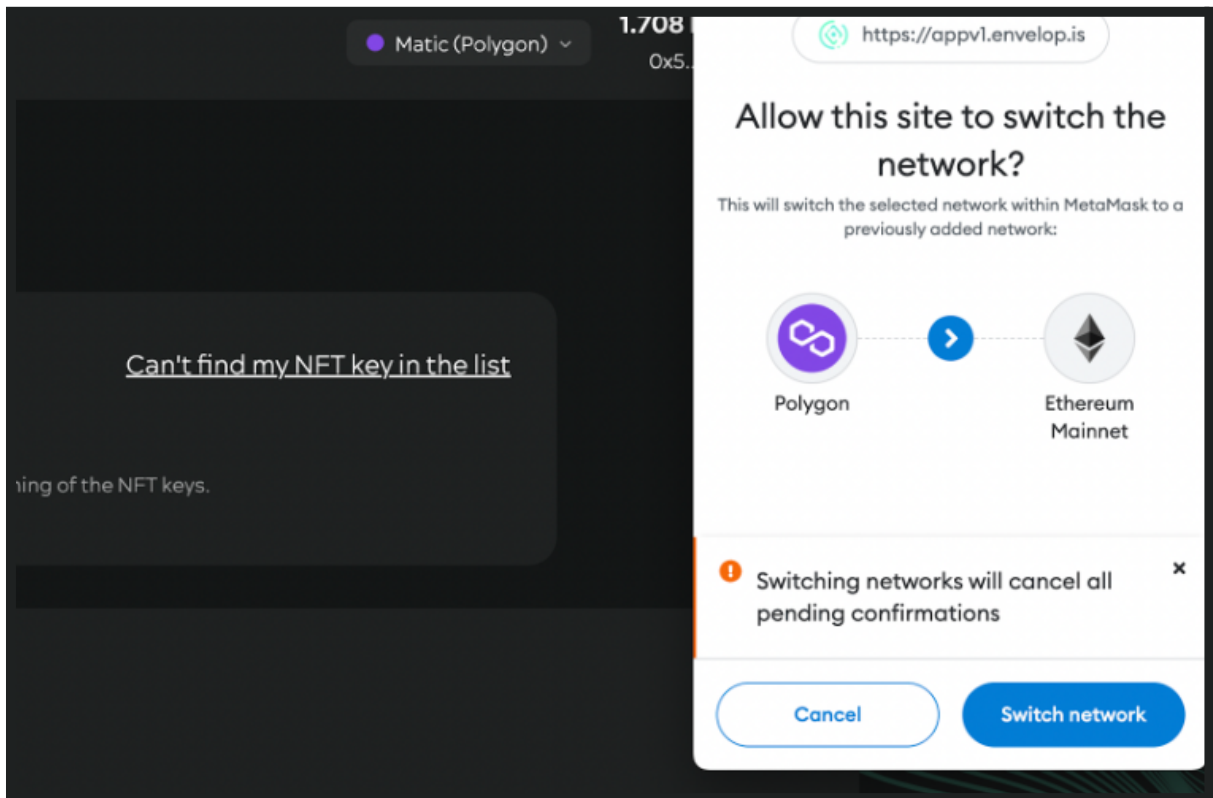
Attention! Be sure to first copy and check the key you entered before checking the "I understood..." box.

The smart-contract does not store the pin-code in the blockchain. Only the hash of the pin-code (value in the **"Proof field"**).

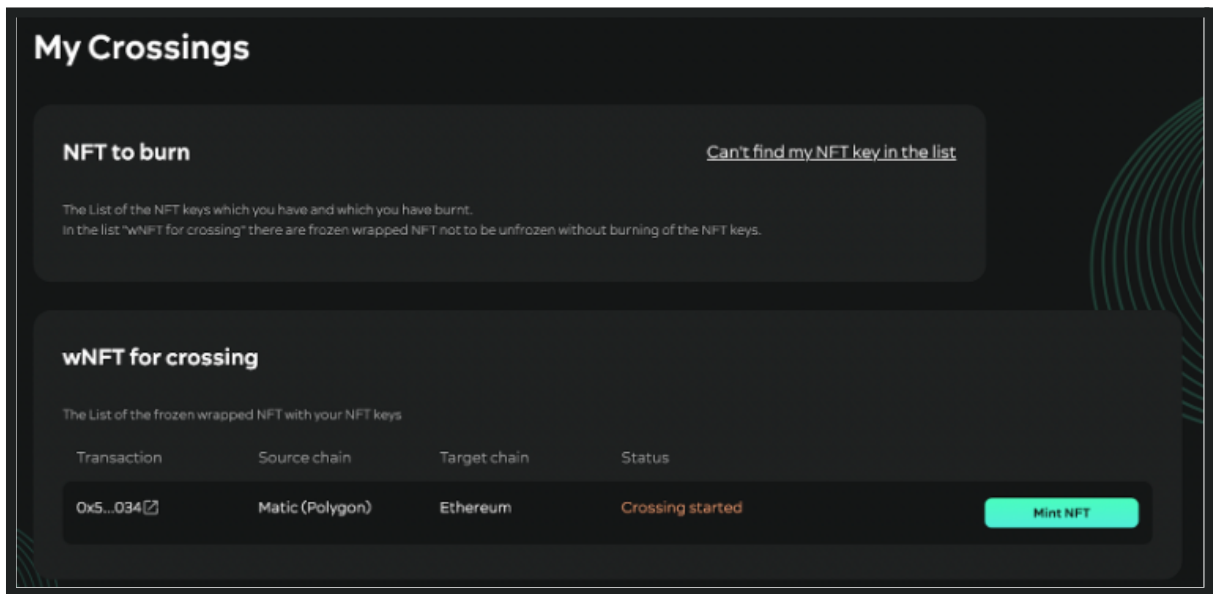
Next, the following table will appear on the page <https://app.envelop.is/crossings>



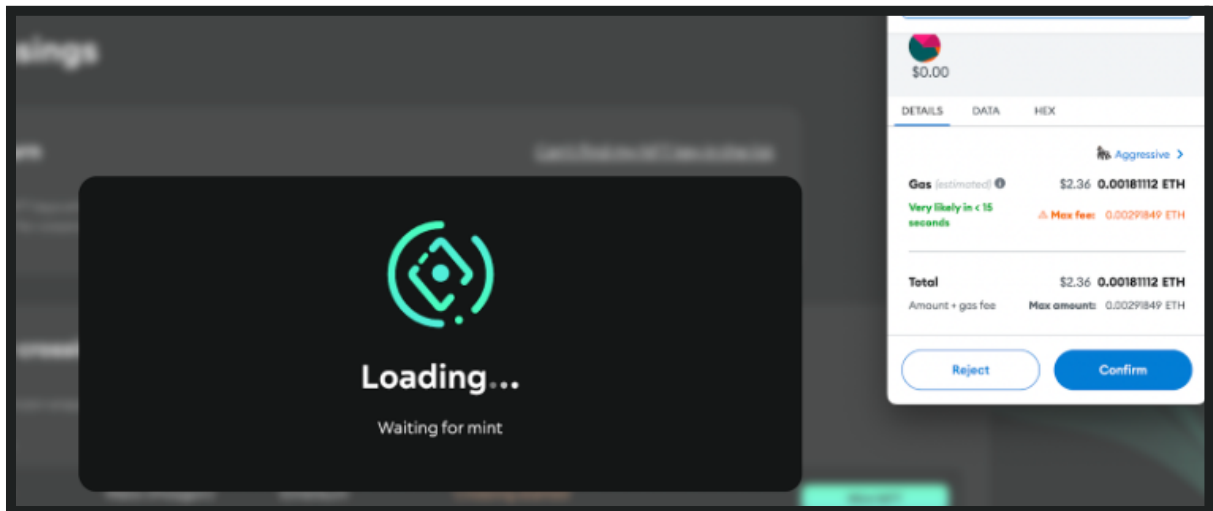
Click (press) “To the target chain” button



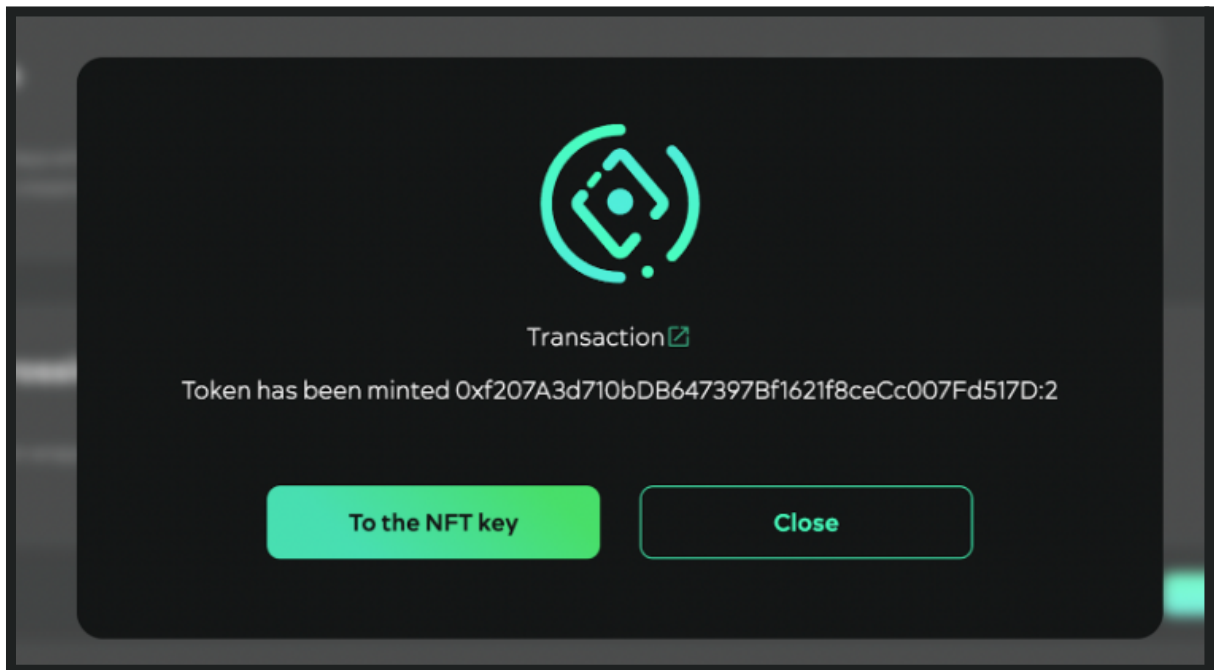
Switch network via MetaMask. This will take you to the same page <https://app.envelop.is/crossings> , but on a different network, where you will see the following:



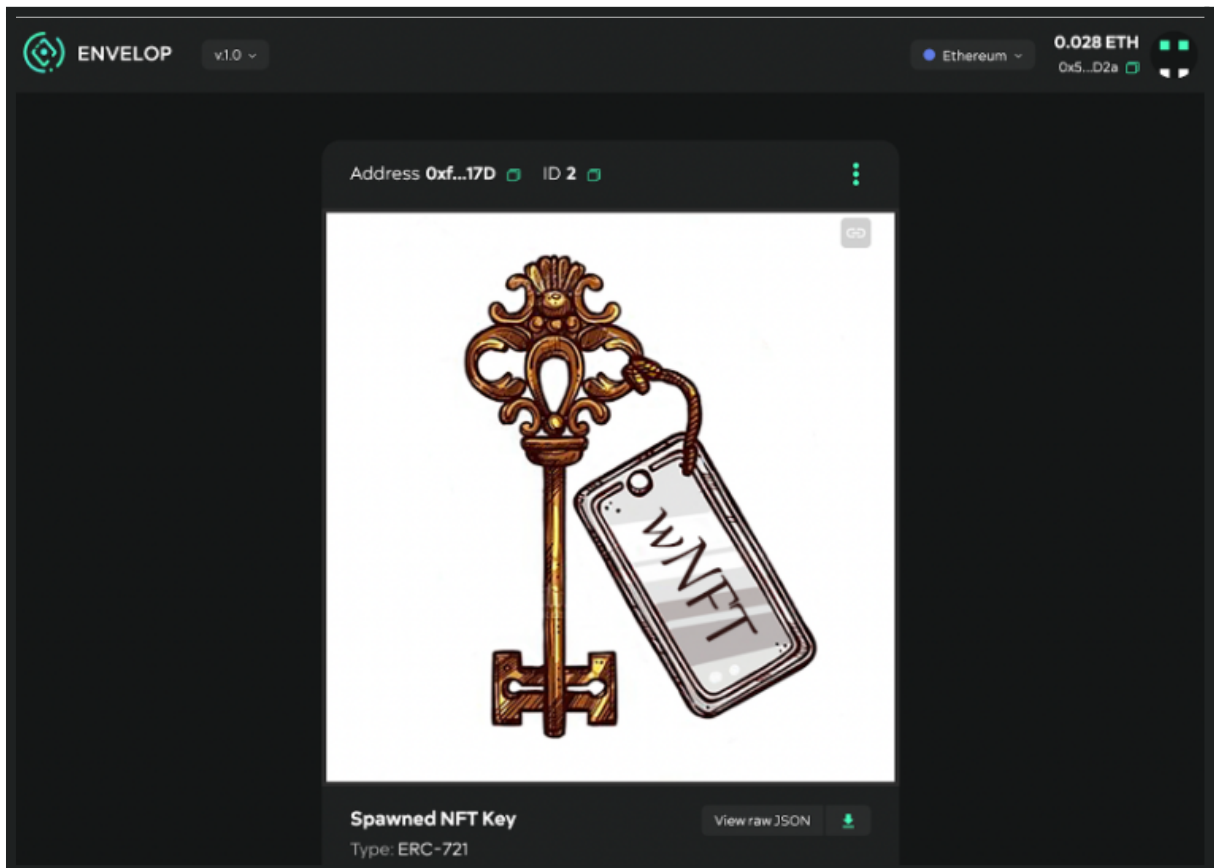
Here you will need to click (press) the "Mint NFT" button. MetaMask will then ask you to confirm the transaction again:



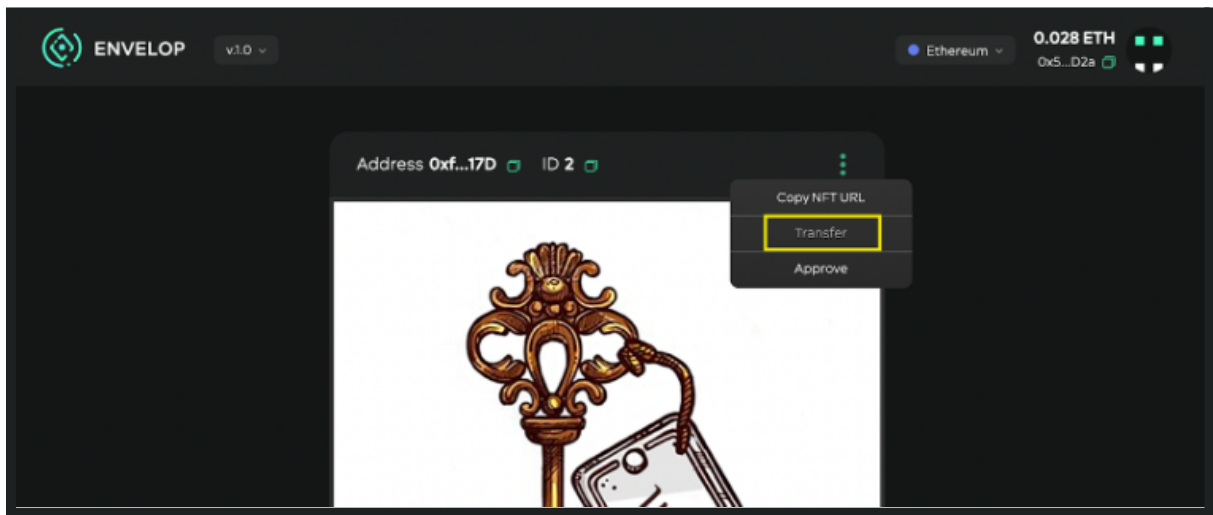
And then you will have an NFT-key created:



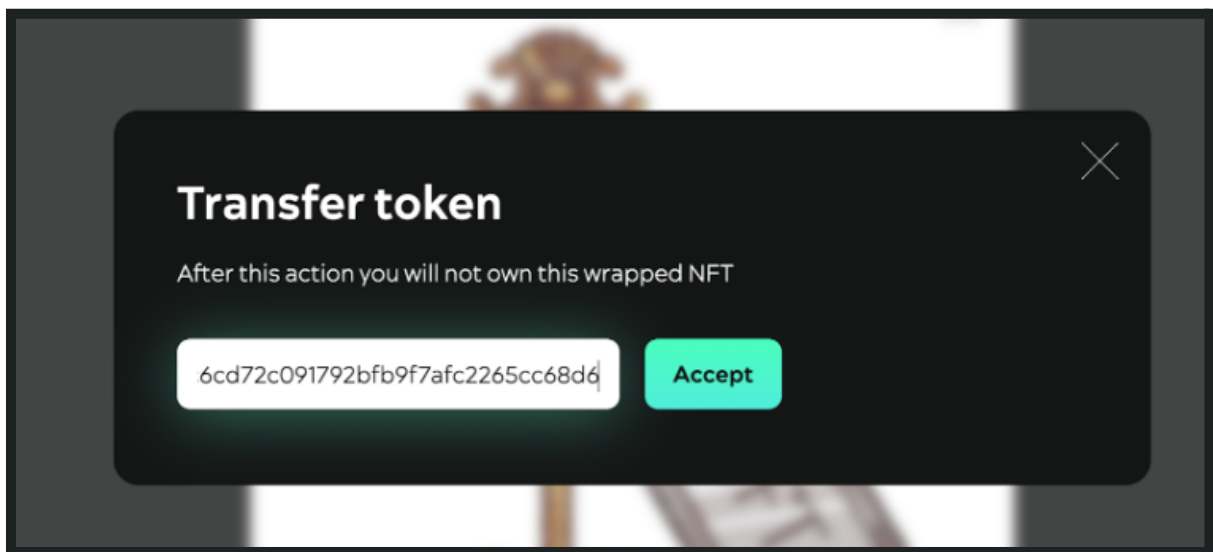
Click on "To the NFT key" button and you will be taken to the NFT-key page:



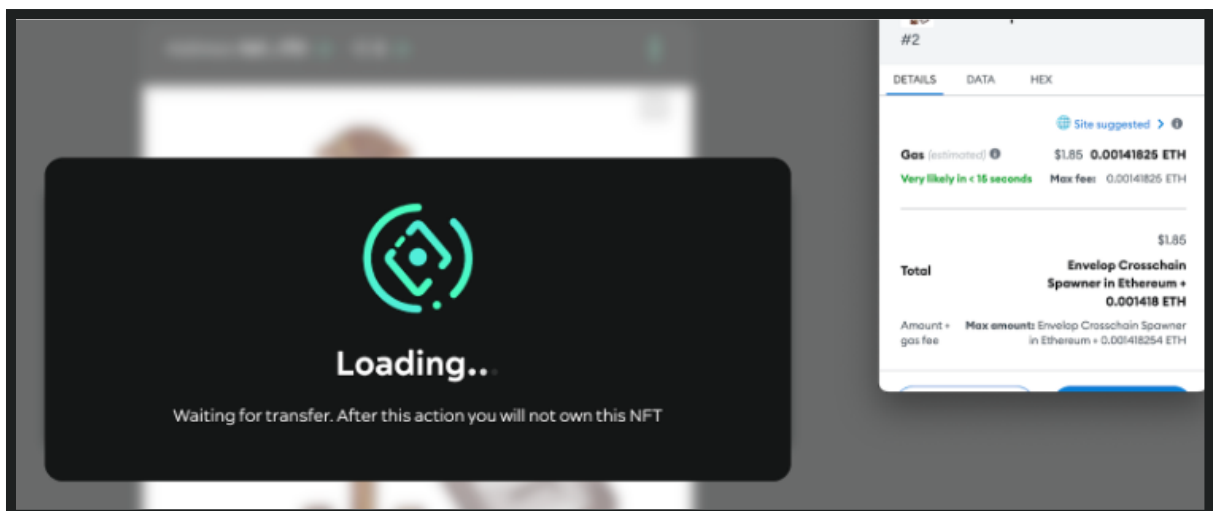
Next, click on the "breadcrumbs" on the key (top right corner of the **displayed** NFT):



And click on the "**Transfer**" button, indicating the recipient:

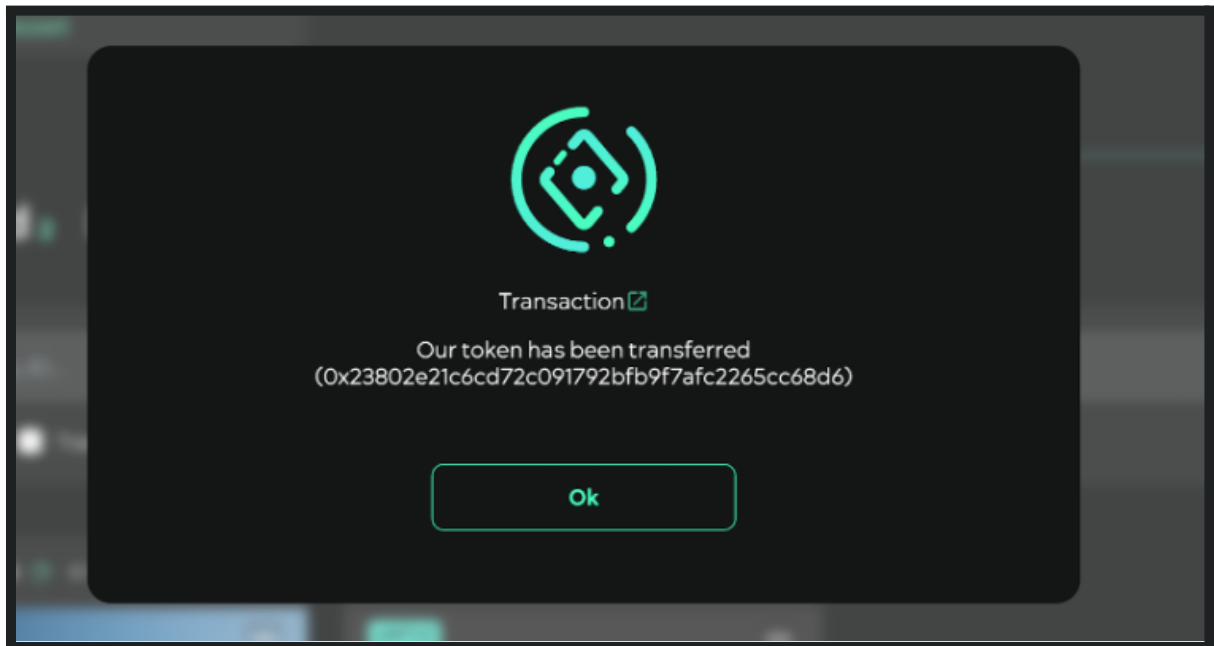


You have to enter the address of the recipient and click on the single "Accept" button. Then confirm the transaction in MetaMask:



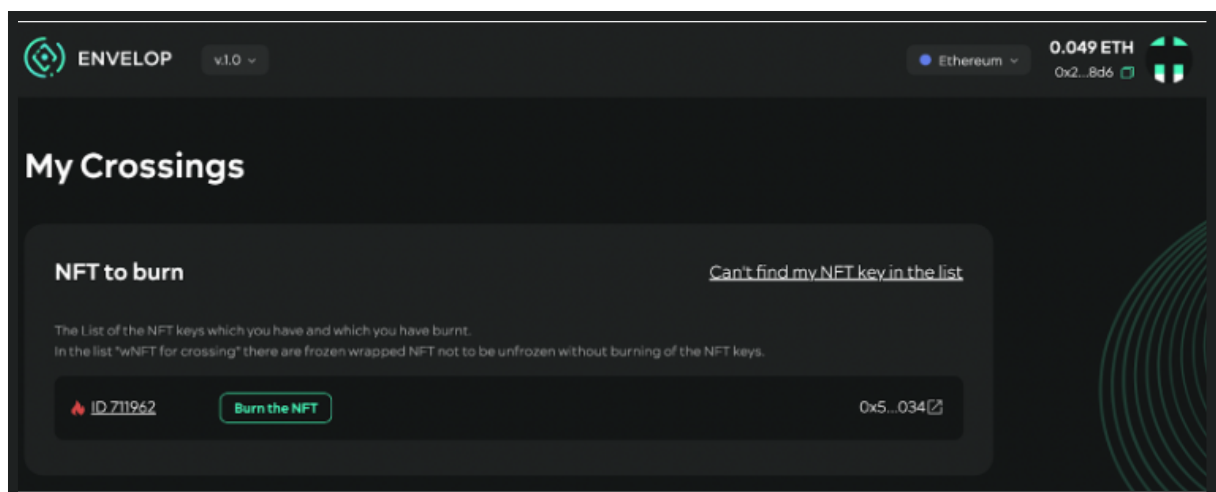
Your key will be transferred to the new owner.

Disclaimer! The exchange process starts as soon as you tell your **swap** partner your pin-code or transfer your NFT-key to him. At the moment the NFT-key and pin-code exchange process is not automated. In the next version this step will be automated. So please choose reliable, trustworthy partners for the exchange. **DAO Envelop is not responsible for the actions of exchange participants.**

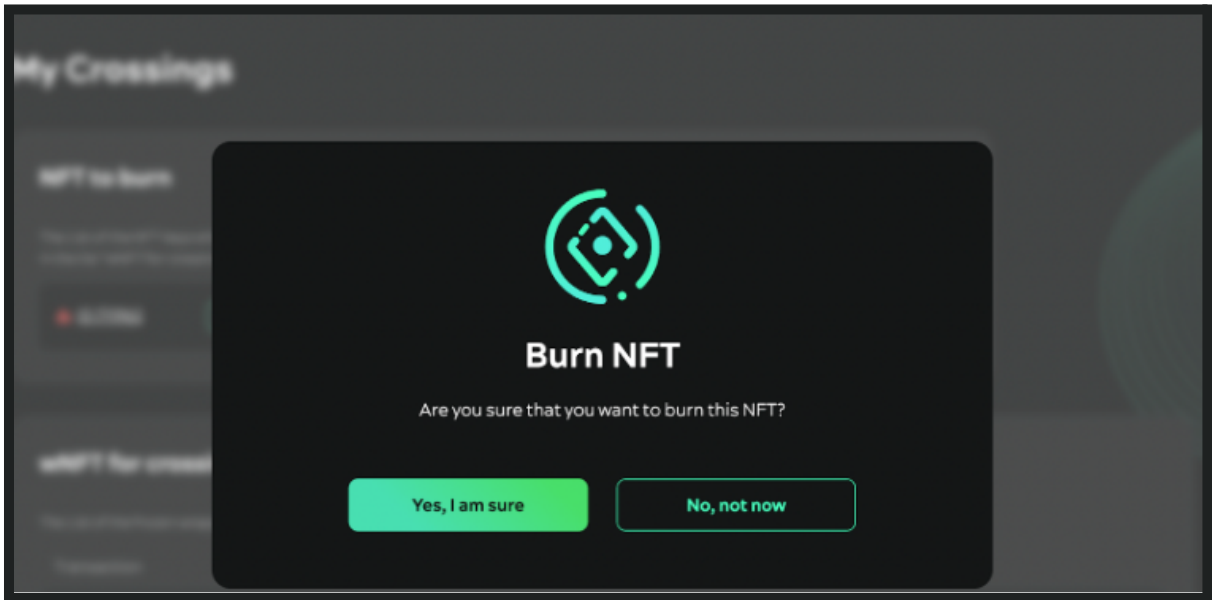


Tell the new owner the pin-code. And get the assets from him on the Ethereum network

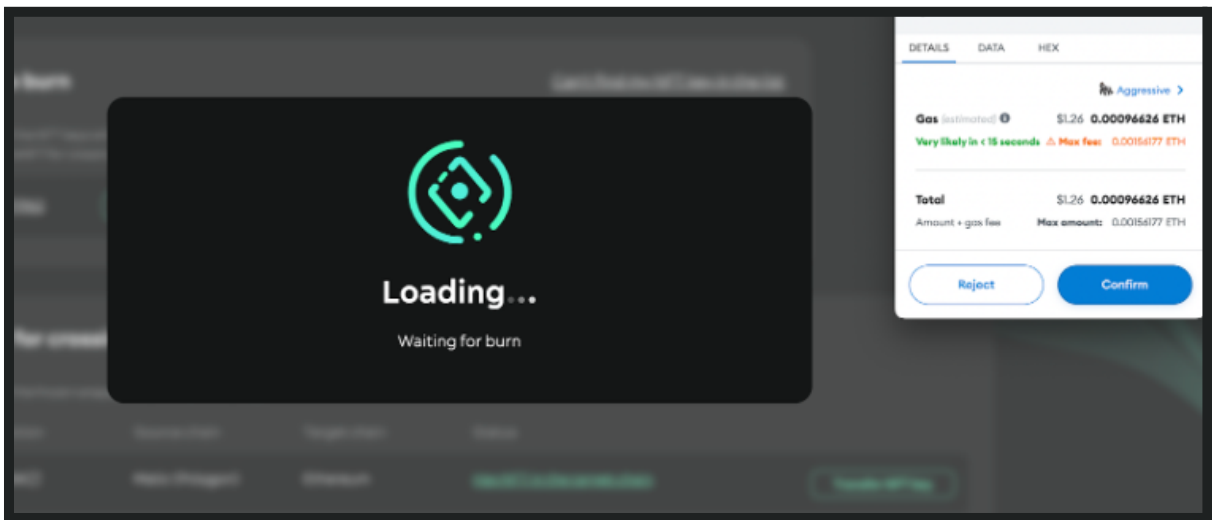
The new owner then needs to be on the Ethereum network and do NFT- key burning via the same page <https://app.envelop.is/crossings>



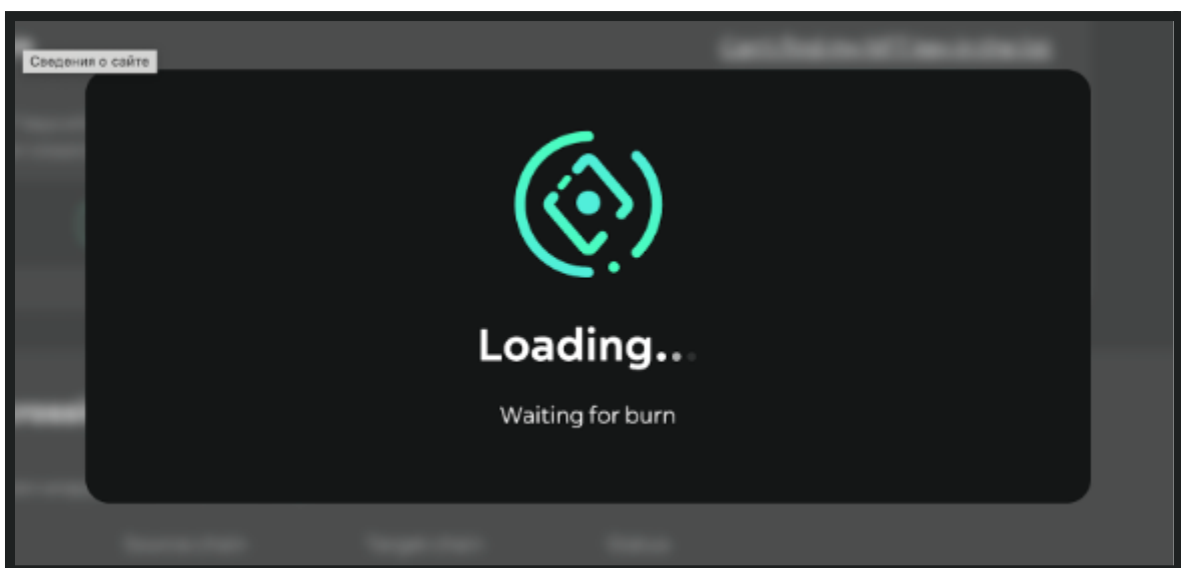
To do this, he clicks on "Burn the NFT" button and **confirms** in the window that appears:



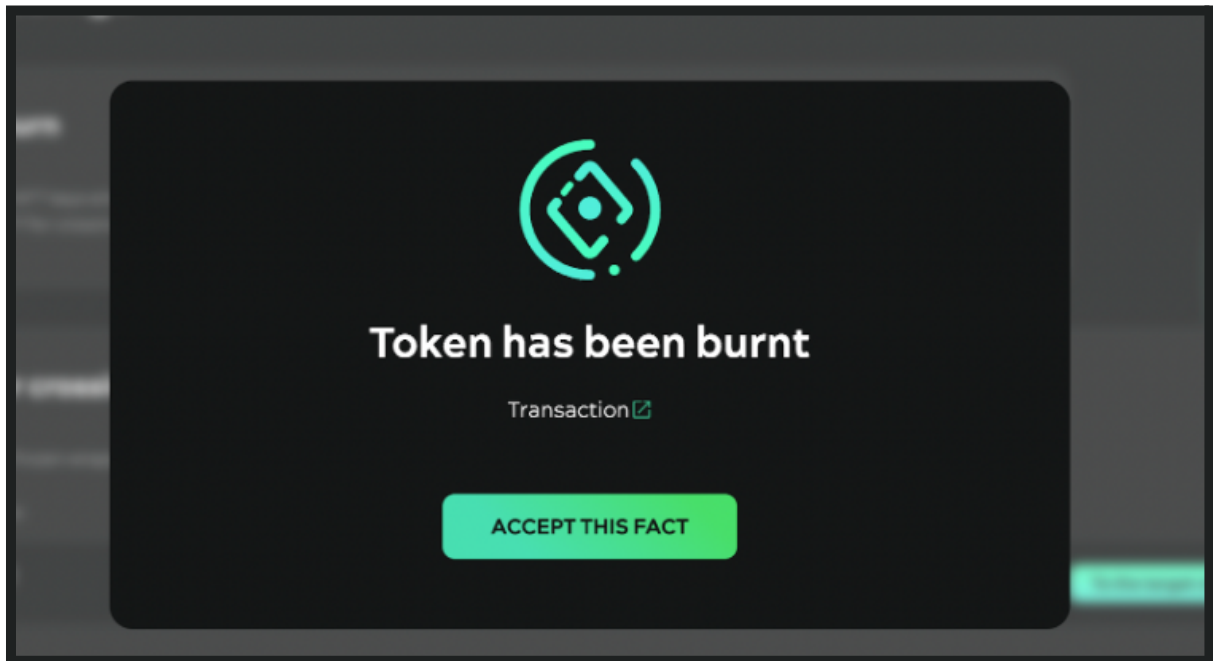
Confirms it in MetaMask:



If necessary, it waits a bit:

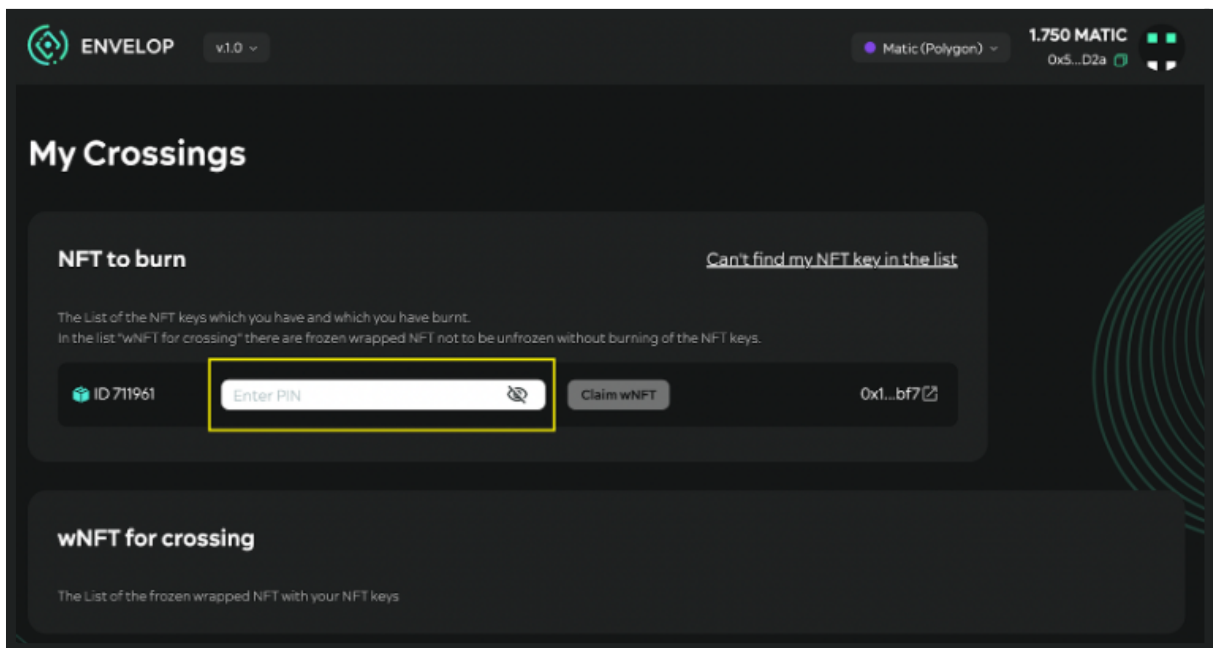


The transaction will be completed

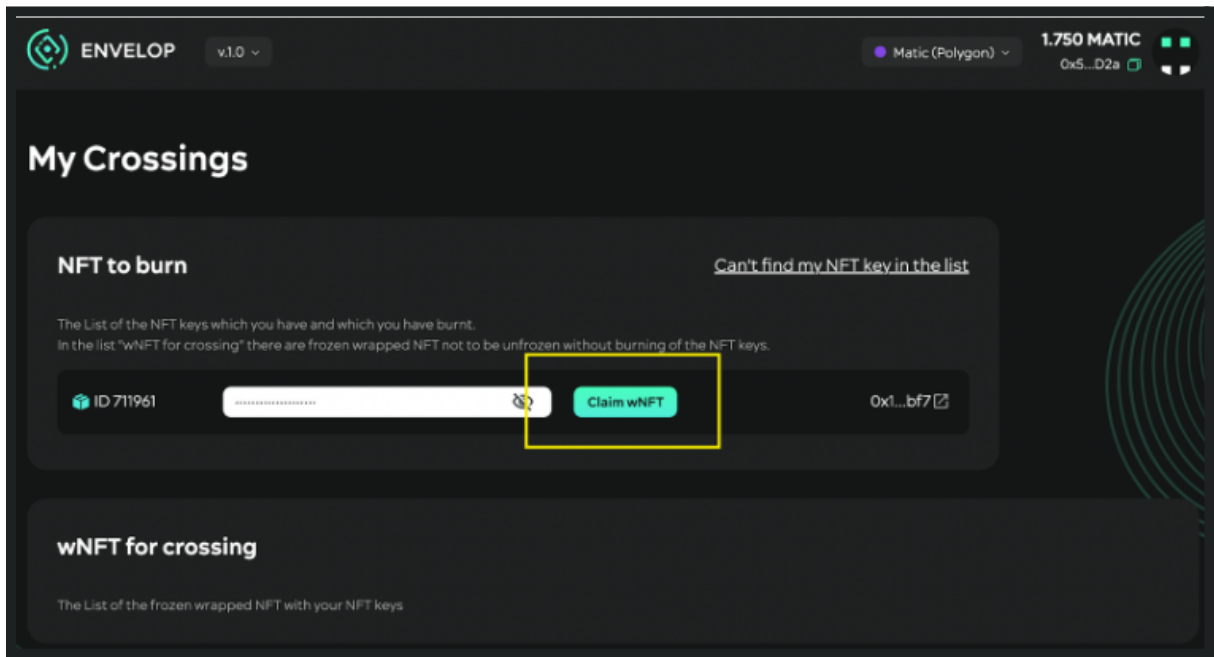


The new owner needs to switch to the Polygon network in MetaMask

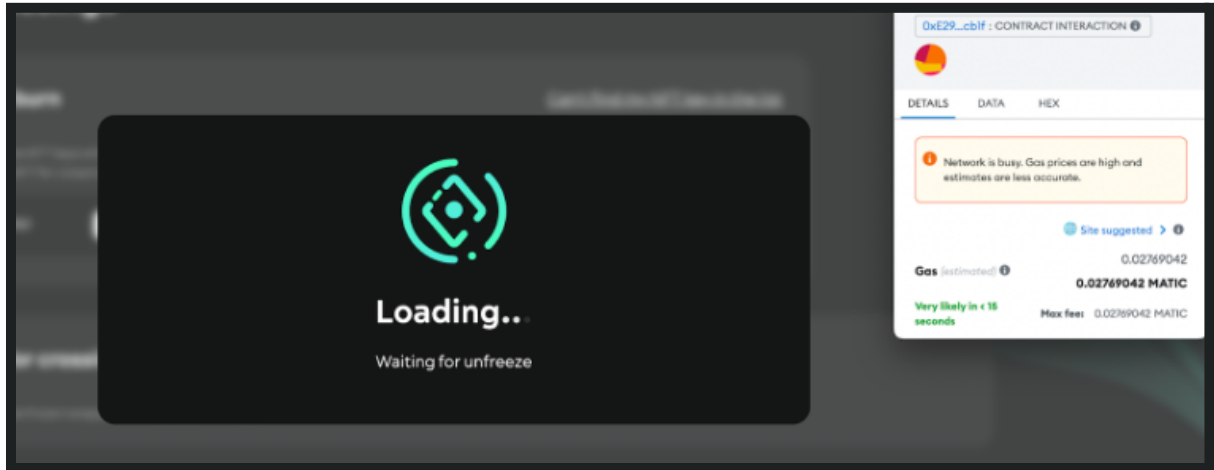
Next, the following table will appear on the page <https://app.envelop.is/crossings>



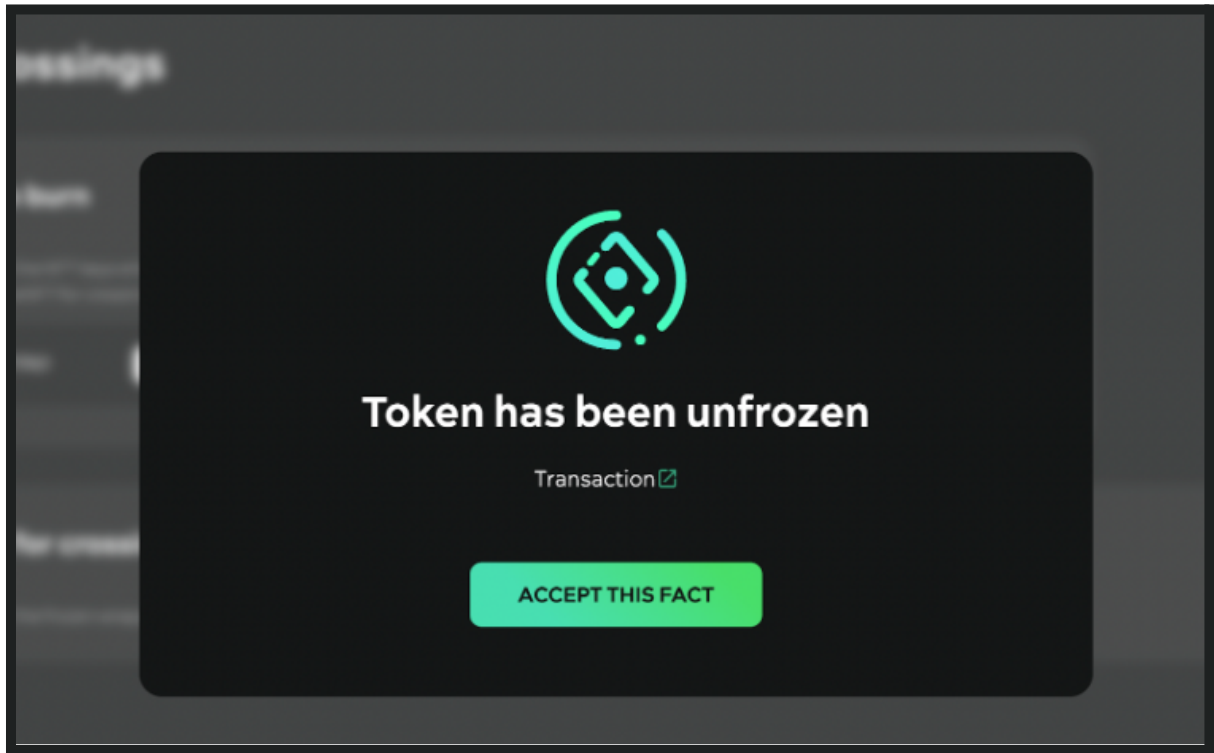
Where you will need to enter the pin code you received earlier. Only then will the "Claim wNFT" button be active:



The new owner will need to **reconfirm** the transaction in MetaMask:



The transaction will be completed successfully



The exchange is now complete. The new owner has received wNFT with Polygon network tokens. He can then unwrap wNFT and receive Polygon network tokens.

How to earn with NFT 2.0?

General ways to earn money on NFT

Airdrops

For simplicity, we will call all kinds of drops airdrops. But we can already distinguish the following types of airdrops:

- Retrospective (Uniswap, 1inch, ENS, etc.),
- Recurrent (Optimism),
- Prospective (zkSync, Metamask).

Airdrops have become popular in the Web 3.0 community because they are part of transactional reputation, which is known to replace subjective reputation in the field.

And NFT 2.0 projects are no exception.

In order to participate in airdrops, you usually need to perform a number of typical activities::

1. Subscribe to the socials of the project you are interested in;
2. Write posts, articles, translations, etc.
3. Wait for a test network or dAapp (this can be MVP, alpha, beta versions);
4. Do some necessary actions. This can be swap tokens, claim NFT, transfer tokens through the bridge, staking, etc;
5. Wait and hope that you passed the selection and the project will give you tokens.

What are the disadvantages of this approach?

1. **No one knows for sure if and when there will be a reward** in principle. The brightest example is OpenSea, whose tokens the community has been waiting for since its founding.
2. **Not all activities in airdrop can be accessed by an unskilled user.** Often it is required to have special knowledge (e.g. of zero-knowledge proof, DeFi, Bridge, etc.) to answer the questions or perform a certain action;
3. **A number of airdrops are only supposed to be available to developers**, who can install nodes, audit code, etc.

But still, in most cases, airdrops are available to everyone. You just have to be diligent and patient in completing your tasks. But not all projects are equally useful, so be sure to research them thoroughly at the beginning

Sources:

- airdropalert.com
- dappradar.com/hub/airdrops
- airdrops.io

Bounty

Unlike the previous category, funds here are earned in stages and paid out either at once or by periods.

Take the DAO Envelop bounty campaign as an example: docs.envelop.is/bounty/bounty-rules.

Anyone can earn NIFTSY (Envelop's token) by monetizing their skills:

1. For social media activity;
2. Translating documentation;
3. Looking for bugs in the code;
4. Make articles or videos with product reviews.

Usually a bounty campaign takes place in two stages:

1. Before crowdfunding, when the primary community is formed;
2. And after, when the main core of the community has already been formed.

Bug bounty has a much longer history than the crypto industry, but a number of services have already taken place here that greatly simplify the life of white hackers:

1. immunefi.com - one of the largest sources of bug bounty programs;
2. hackenproof.com/programs is one of its competitors.
3. hackerone.com and another one.

For those who do not have technical knowledge, I can recommend the following bounty trackers:

1. gitcoin.co
2. brightid.org
3. dropsearn.com
4. icodrops.com

All these services track new activities, providing the opportunity to earn money on crypto projects by completing simple tasks.

Often, when completing tasks in test networks, you may need a test cryptocurrency, which can be obtained from special services - faucets. Here are some examples:

1. portal.zksync.io/faucet
2. faucet.paradigm.xyz
3. scroll.io/prealpha/faucet
4. goerlifaucet.com

They are not directly related to NFT 2.0, but will definitely help you test products. For example:

1. You can get Goerli ETH on goerlifaucet.com
2. Create wNFT in the test network on app.envelop.is
3. And for constant tests - get real NIFTSY tokens

Action to Earn

The crypto industry is constantly evolving and still new ways to attract the mass user. In general, it is a logical evolution of bounty programs, which has recently been automated and often implemented at the level of protocols and dApps. But it is usually marked out in a special area, which we have called "Action to Earn". Here we included projects whose mechanics are built on the activity of a certain type: move-to-earn, play-to-earn, sleep-to-earn (yes, there is one), etc.

Generally accepted approaches to earning are used here:

1. Buying land and "property" which are NFTs and can later become collateral in NFT 2.0 services;
2. Buying collectable NFTs, which can then be added with extra features via wrapping;
3. Buying utility NFTs that grant access to various DAO, community, dApps, etc.

But these are all well-known and generally available ways. Let's talk about what others can only guess.

Sources:

- playtoearn.net/blockchaingames/Solana/All-Genre/All-Status/All-Device/All-NFT/All-PlayToEarn/All-FreeToPlay
- playtoearngames.com/games
- chainplay.gg/genre/move-to-earn/

Special ways to earn money on NFT

Indexes, or collateralized derivatives

In its most general form, an index is a calculated indicator that characterizes the change in a set of certain values. With NFT 2.0, indexes can be created in many different forms.

In most cases, these are collateralized derivatives, that is, derivatives, which are collateralized with primary assets, such as:

- native coins (ETH, MATIC, etc.),
- fungible tokens (ERC-20, BEP-20, etc.),
- and non-fungible tokens (ERC-721, ERC-1155, etc.).

And this is extremely important, because in most of the world, crises in one way or another, are related to the fact that liquidity in the derivatives markets is not collateralized and verifiable.

Now let's look at some examples.

Direct indexes

Direct indexes are the easiest thing you can do with wNFT by adding collateral inside. In this case they become financial NFTs. How to create such an NFT index? It's very simple.

1. Let's choose some ERC-20 tokens of projects related to the crypto sector we need, for example NFT 2.0.
2. After buy, add them all into one wrapped NFT in Envelop dApp: appv1.envelop.is/token/1/0xdf6f4408497dfe745b116138b9338490366b2303/5 ;
3. Then we'll have a collateralized (with ERC-20 tokens), tradable (e.g. on scotch.sale or on Envelop's Launchpad, or even OpenSea) index.

The indexes are limited only by your imagination. As an idea, you can go to coinmarketcap.com/cryptocurrency-category and make an index from these tokens.

Or, using Cross NFT from Envelop, you can make a multichain index for Polygon, BSC, Ethereum. networks.

SAFT wNFT and Launchpad

SAFT is one case of using the Envelop protocol. Other NFT 2.0 services have similar products. They may be called vouchers (Solv finance) or something else, but the essence remains the same:

1. In this case, SAFT wNFT stands for Safe Automated Future Tokens, wrapped Non Fungible Tokens;
2. The idea is to provide a secured derivative to funds that have limited liquidity, on the one hand, and to provide a fundraising tool for startups, with cliff and vesting period settings, on the other.

On the Launchpad, you can actually **buy tokens before the initial offering** and sell them at any time without directly affecting the market price. This is extremely important for the project, the community, and the contributors (who are not commonly called investors in the Web 3.0 space).

Liquid farming

Secured derivatives can be more complex than simple indexes. One of the clearest examples is farming using wNFT. It is often referred to as **liquid farming**.

It should not be confused with staking.

1. Just like with staking we lock up assets, but that's where the similarities end (although if we're talking about liquid staking, it's closest to wNFT farming).
2. In wNFT, it is possible to lock not only multiple assets, but also multiple asset types (coins, fungible and non-fungible tokens).
3. wNFT farming involves paying interest not for supporting the network, but for other useful actions

wNFT-Farming is a complex set:

1. Functions (time-lock, APY/etc.);
2. Locked tokens;
3. Over-the-counter (OTC) markets.

Farming via wNFT can be easily represented as liquid farming. Here you can transfer, sell, pledge not just tokens or NFTs, but future profitability in one transaction. And you can do this without affecting the rate of tokens in the collateral!

Imagine an aggregate/collective/index wNFT with cross-farming, where you

- add Token_1 (relating to Project_1),
- receive accruals on it,
- other partners of Project_1 (Partner_2, Partner_3, etc.) send additional Token_2, Token_3, etc.

Such "multi-Farming wNFT" can be sold/gifted in one transaction, saving time and fees. Projects get to develop their community of much higher quality, and contributors are motivated to hold and be focused.

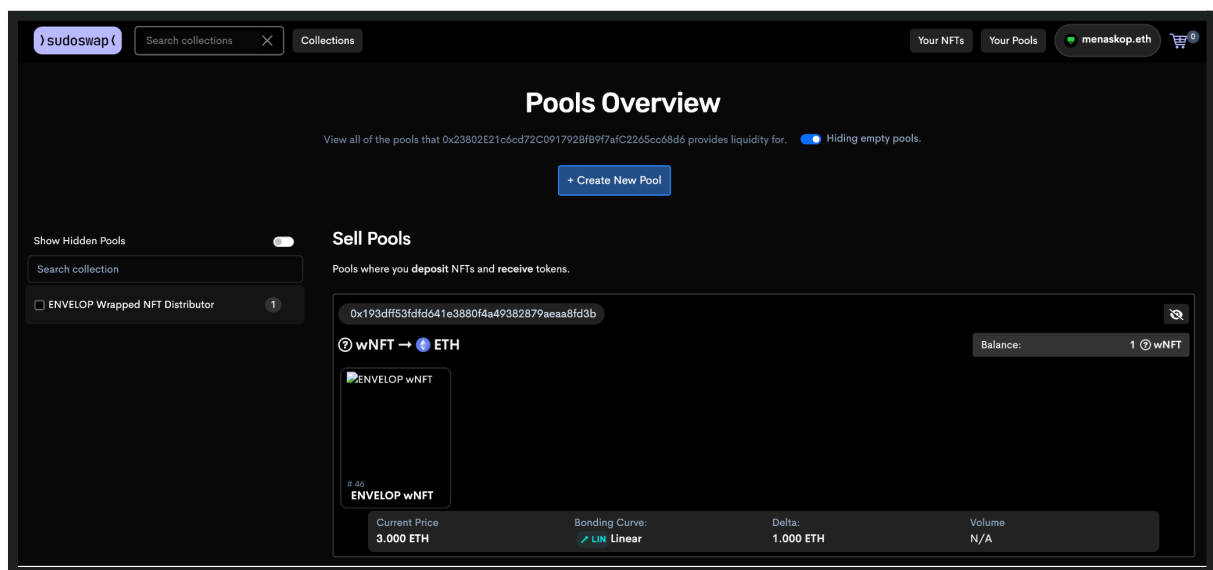
Hedging with dust

In this case, "dust" refers to various tokens received by the wallet: using the same airdrops. Often tokens aren't worth as much as you'd like, so it's a good idea to collect them in one place and sell them in a bunch.

If you think about it, the functionality of NFT 2.0 and collateralized wNFT derivatives is very relevant here. So far, no wallet of the first (Geth, Bitcoin.Core, etc.) or second (MetaMask, Trust, etc.) or third generation (Zapper, DeBank, etc.) have implemented such functionality. So **this is an idea for a real micro-startup** based on Envelop protocol.

Loan and borrow

Example. Go to sudowap.xyz and log in. Then go to pools and create the pool from NFT/wNFT:



Once we get the loan, we use it in DeFi mechanics, just like when you use AAVE or Compound.

Creating and maintaining oracles

An oracle in this case is a special program which receives data from outside (offchain) and helps to make some useful actions and/or make them itself.

In particular, if we analyze indexes, it is extremely difficult and, most importantly, incredibly expensive to do so on the chain. But with oracles it is quite possible.

How to make earnings from oracles:

1. A network of Oracles is created;
2. A simple consensus is accepted: for example, receiving a confirmation from $\frac{2}{3}$ oracles on some established fact (for example, on the number of blocked project tokens in SAFT);
3. The data is provided to the requestor for an oracle fee.

Oracles are one of the most promising sideways trends in NFT 2.0, which will get a boom in certain niches as well as in entire industries and even markets.

Supporting Protocols and DAOs

Most of today's decentralized applications (dApps) are managed by both simple DAOs and microDAOs, which are part of a larger DAO (superDAO).

How to get profits from the DAO:

1. Find NFT 2.0 projects accepting proposals to improve the Project (example: <https://dao.envelop.is/microdao/new>);
2. Submit as detailed an proposal;
3. Get a reward from the treasury for your proposal or
4. Run a fundraising campaign.

Sources:

- thepass.to/
- deepdao.io/organizations

Soulbound Token SBT

We have already studied Soulbound tokens, but here we will talk about ways to monetize with them.

No one knows yet exactly how to mint, distribute, and verify such non-transferable NFTs. In particular, any wallet can become a spam-SBT target, as it was with NFTs, and with fungible tokens.

Nevertheless, today there are services like <https://getpass.is/>, which help you earn by using NFT-tickets, and SBT-certificates. In addition to getpasses we can highlight:

- cardinal.so
- afisha.timepad.ru
- docs.login.xyz
- eventix.io
- events.nethouse.ru
- gatedpass.com
- guild.xyz
- rsq-frontend.vercel.app
- ticket.nonfungibleconference.com
- ticketscloud.com
- unlock-protocol.com
- collab.land
- ethpass.xyz

In addition, Envelop gives you the ability to create upgradable SBTs, which as your skills, achievements, will increase the relevant item within the SBT.

Unstoppable NFT

This is a breakthrough solution that has not yet been presented on the market. In fact, the features of NFT2.0, nodes and protocols capabilities are used together.

But how is it possible:

1. We mint an NFT with metadata in IPFS or any decentralized storage, such as SWARM;
2. The NFT itself will "live" onchain all the time, but what about metadata?
3. Nowadays the best way is to pin the data so that the storage "garbage collector" doesn't delete it;
4. But this is a paid process and so we need someone who will pay for the storage of our data;
5. **Who is this payer?** There are several options:
 - a. This may be a **royalty recipient** on this and other NFTs who is willing to share a part of the fees to cover the cost of storing the NFT metadata;
 - b. It could be the creator's **sponsor** who minted a such NFT;
 - c. This could be the **DAO or another community** interested in storing metadata;
 - d. These can be **other entities or actors**, such as interested neural networks;
6. So creating services where philanthropists, guarantors, token holders, DAOs, and other SaOs (subject-objects) can create Unstoppable NFTs is a startup idea.

Royalties and multi-royalties

With NFT2.0, creators (independent authors or even DAOs) can create their own royalties on the chain independently of any marketplace.

Such royalties can be added to any NFT, like NFT art, collectibles, or derivatives, for example indexes.

Pledge-free (Uncollateralized) rentals

NFT2.0 provides a decentralized, fair way to share revenue (Revenue sharing) onchain. This is a completely new approach to distributing the value earned by communities, DAOs, etc. The value is stored in wNFT and only selected addresses can call distribution functions.

By developing this approach in conjunction with time-locked conditions, Envelop and Unitbox provides a uncollateralized rental option.

For example, owners of valuable in-game NFT characters or artifacts can rent them out on their own or on NFT co-ownership terms and receive passive income, with a split proportional to ownership. Other players or guilds can be the lessor.

This approach eliminates the entry barrier into games. You don't have to buy or even pay rent. Just take it, play and earn, and then share the profits. Lands in metaverses, spaces for advertisers, passes, tickets, accounts, liquidity, virtual spaces, AR objects - can also be rented out.

Arbitrage

Due to the fact that NFT 2.0 is quite new on the market and contains many features, it opens up an order of magnitude more possibilities for arbitrage transactions such as:

- Collateral arbitrage between an exchange and a wNFT that holds traded coins, tokens or NFTs.
- Arbitrage interest rates among farming wNFTs, where you can trade such wNFTs at different yield levels.

- Managing the lowest (floor-price) NFT collection price by changing the collateral level:

Cross-NFT

We have described this case in detail [here](#)

You can also make profit from it by providing liquidity to decentralized pools:

1. Log in to <https://bridgeless.io/>;
2. Become an agent (an owner of wNFT pools);
3. Connect to the escrow system;
4. Take fees for exchanges.

Sounds simple? Yes, and Envelop is aiming to deliver the best experience to users. It will still be a little while before a complete release, but all the more valuable will be your experience from the early contribution.

wNFT pools, bridges and other solutions utilizing NFT2.0 are gaining traction and should not be overlooked.

Additional sources

1. Faucets for test networks:

- faucet.rinkeby.io
- goerlifaucet.com
- rinkebyfaucet.com
- goerlifaucet.com
- token-faucet.defillama.com
- faucet.polygon.technology
- mumbaifaucet.com
- sepolia-faucet.pk910.de
- testnet.bnbchain.org/faucet-smart
- faucet.avax.network
- faucet.triangleplatform.com/optimism/goerli
- faucet.triangleplatform.com/arbitrum/goerli
- allthatnode.com/faucet/ethereum.dsrv
- faucet.quicknode.com/ethereum/goerli
- sepoliafaucet.com
- stakely.io/en/faucet/polygon-matic

2. Documents:

- Colored Coins: bitcoil.co.il/BitcoinX.pdf
- Wiki: en.bitcoin.it/wiki/Colored_Coins
- Envelop White Paper and other documents: docs.envelop.is