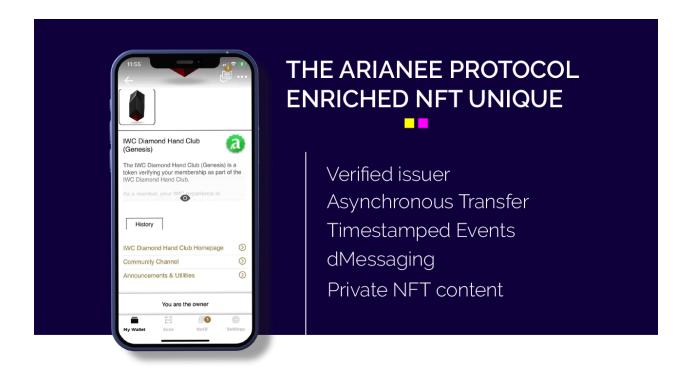
# Meet the Arianee Enriched NFT: the most feature-packed NFT on the market!



web3 is expected to reach one billion users between 2030 to 2031. NFTs and wallets will be part and parcel of any digital experience, enabling new forms of digital interactions and paving the way for a new service economy. In this next phase of the internet, tokens and wallets will generate new social graphs that are fully decentralized and no longer controlled by centralized tech giants.

As more and more brands are eagerly embracing web3 and starting to build their web3 strategy, the basic features offered by the ERC-721 standards start to show their limitations. The constraints we anticipated early on when designing the *Arianee protocol* back in 2018 are increasingly proving their relevance.

The Arianee Enriched NFTs answer the key problems: how do we make sure anyone can easily get an NFT, regardless of their knowledge level about web3 and how they got the NFT in the first place (buy or claim with a purchase or an experience)? How do we make the NFT dynamic and avoid painful processes like burning when redeeming a utility? How do we exchange with a user and let them know that a utility is available?

The Arianee Enriched NFT is the most advanced NFT on the ERC-721 standard. Experienced within an Arianee compatible wallet, Arianee Protocol's Enriched NFTs offer unique features never seen before in the web3 space.

NFT creators can now provide a thought-out user journey to ease the steep learning curve for first-time users, while giving web3 purists the full advantages of decentralization they are craving for.

Here's all you need to know about the Arianee Enriched NFT.

### What is the Arianee Enriched NFT?

The Arianee Enriched NFT is built upon the ERC-721 standard, which means it functions in a similar manner to a conventional NFT in that it's unique, indivisible, transferable, publicly-verifiable, and capable of proving its scarcity. These NFTs can be digital assets (YSL Beauty), digital passports for physical products (Breitling) or proof of experiences, memberships, or loyalty programs (IWC).

Here are the five groundbreaking features that make the Arianee Protocol Enriched NFT unique:

- **Verified Issuers:** a security measure that verifies an NFT comes from an authentic brand
- **Asynchronous Transfer:** enabling anyone to visualize an NFT, have a wallet generated on the fly, and become the owner of an NFT with a simple link.
- Timestamped Events: blockchain-recorded events that can be added to the NFT by the issuer or any third party with an API call to stamp an event in the NFT life cycle (redeem, participation, forge, repair for physical goods for example)
- **dMessaging:** direct-to-wallet message push
- Private NFT content: content could be set as private, and served only to authorized users

To interact with the Enriched NFT users need a wallet compatible with the Arianee protocol. Here we want to dispel a myth right off the bat: no, this wallet is *not* a closed, walled app. It's an *interface* that provides an easy UI for users to manage their assets, unlock innovative features, and connect to the wider ecosystem of web3. Our wallets are fully interoperable with other dApps that have implemented

the Wallet Connect protocol (e.g. The Sandbox, Oncyber, Opensea) and are non-custodial!

Now that you are primed, let us walk you through the key features of the Enriched NFT.

### **Verified Issuers**

#### The problem we're solving

Blockchains are pseudo-anonymous, meaning verifying the authorship of an NFT in the wild is not an easy job. Most of the time, we have to take the wallet address & contract address of the NFT and do some additional investigation.

To spare users the process, Arianee added on top of the ERC-721 standard a feature to verify the legitimacy of the issuing brand.



#### How does it work?

It's an identity registration process. When a brand wants to use the Arianee protocol, they need to pass <u>our KYB</u> and provide their wallet public address. It's then confirmed by our committee.

Next, the brand needs to publish their "brand identity", which is a set of information about the brand (e.g. name, logo, description) that could be used by any interface builder.

These "brand identities" are validated by our committee through <u>multisig</u>. We commit the hash of the content on the blockchain to ensure a brand can't pretend to be another brand.

As a result, the NFTs minted on our platform by legit brands will bear a green Verified badge. The user can now prove the "on-chain" origin of their NFT and be confident with it.

## **Asynchronous Transfer**

#### The problem we're solving

In the ERC721 standard, the standard way to transfer an NFT is to call the "safeTransferFrom" function. This method has three limitations:

- You need to know the public address of the recipient
- You need to understand "what it is" which could be hard to grasp for a non-crypto-native person
- Only the owner could initiate the transfer

To avoid this, we implemented a "claim" method.

#### How does it work?

The owner sets the NFT as "transferable" with a random "passphrase" (technically a public address). With the corresponding private key, a user can create a signature. When this signature is passed to the smart contract, it will unlock the transfer and the user can transmit the NFT to his/her own wallet.

With this, nobody has to understand what a public address is. The sender just has to send a link or a QR code with the passphrase included.

The transfer could be asynchronous. The recipient could call this method even when the owner is offline. We need two transactions: one to set the NFT as transferable, and one to claim it. It's simple and seamless to use for a non-crypto-native person.

Leveraging this cutting-edge technology, <u>YSL Beauty</u> was able to deploy a massive operation of 30k NFTs in a smooth and efficient way.

<Add YSL video here>

## **Timestamped Events**

The problem we're solving

Each NFT is a rich tapestry of events that happened throughout its life cycle. Blockchain transactions like the creation of an NFT, transfer of ownership, first sale, or repair are important pieces of information that should be passed from one owner to the next in order to provide a measure of reassurance in the resale market. Moreover, tokenized experiences like participation in an historical event can help build the owner's online credentials and augment the value of the asset.

So how do we integrate these events in an NFT?



#### How does it work?

Time-stamped events are like "soulbound tokens" attached to an Arianee Enriched NFT. Like any other content in the Arianee Protocol, the hash is recorded on the blockchain to guarantee the authenticity of the event content.

An event could be added by anyone on any Arianee NFT, but only the NFT owner, the issuer (the brand), or an authorized third party could confirm this event. The idea is to let the owner and the issuer double check if the event matches a real event related to this NFT.

These events will follow the NFT forever. It could transform the NFT as a service book.

History with an exhaustive list of events linked to an NFT will improve business intelligence capabilities for brands. For example, by looking at the history of an NFT-enabled watch: how often it is service, who was the previous owner, how active the owner is in the community judging by the events he went to, a brand can get a complete picture of their powerful user and come up with even more personalized programs.

## dMessages

#### The problem we're solving

Putting an NFT in the hands of your customers is just the first step. As brand owners, the crucial questions we need to ask ourselves are: how to stay in touch with them, let them know a utility is available to unlock, and activate your customers in important brand moments?

Using Arianee Protocol, you can send a dMessage directly to your customers' wallets without having to rely on a third party.

They can be leveraged to stay in contact with second-hand buyers, market new drops, or maintain customer satisfaction via loyalty programs. With dMessages, each Enriched NFT serves as the perpetual link between a brand and its customer, allowing the brand to add more layers of utilities to the same product.



#### How does it work?

dMessages are sent to NFT owners instead of public keys. Therefore, only the NFT owners can access the content.

The content of a dMessage is stored in its brand's Arianee Privacy Gateway. To fetch the content, the wallet has to sign a proof and send it to the Arianee Privacy Gateway. Only when a wallet can prove that it is the current owner, it can gain access to the content.

To be sure that the Arianee Privacy Gateway does not corrupt the dMessage content, when the dMessage is sent (minted on the blockchain), the content hash is stored on the blockchain, meaning the wallet can easily check the content's authenticity.

In addition, when a dMessage is minted, the Smart Contract emits a blockchain event that the wallet can listen to. It allows a native push notification system to notify the wallet mobile app and improve user engagement.

Last but not least, when the wallet reads a dMessage, it will mark it as "read" on the blockchain. dMessage, however, won't be readable after a change of ownership.

From our NFT Management Platform, brands can schedule auto dMessaging campaigns. Using our API, brands add and custom rules to their specific needs.



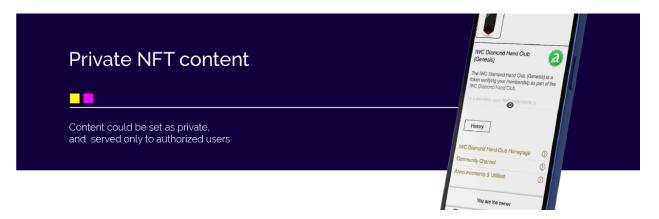
For the very first time, YSL as an NFT issuer has the possibility to message their 30k owners with the message-to-wallet feature. The level of engagement is staggering: 40% holders clicked on the CTA to participate in the token sales.

#### **Private NFT Content**

#### The problem we're solving

By default, the content of an NFT is public. However, very often, brands want to be able to make their certificate content private but still transferable and shareable.

Thanks to the Arianee Protocol, it's possible.



How does it work?

We developed a standard called <u>Arianee Privacy Gateway</u>. It is a way to have decentralized servers which serve content only to authorized users (owners or future owners).

Based on the issuer (the brand), an Arianee compatible wallet is able to forge a request proving the right to access to the content and request it. The server uses this proof to do a check on the blockchain. After that, content will be delivered to end users.

## Open-source and token-based

Good news: Arianee Enriched NFTs are part of the Arianee open-source protocol which is fueled by the native token \$ARIA20. To reward and incentivize developers who build on our protocol and enable them to benefit from the development of our decentralized system, a percentage of fees paid to issue NFT, timestamp events and send messages is shared with them.

## Compatibility and integration

At Arianee, we create Enriched NFTs for assets of any kind: digital twins, digital-native assets, attendance tokens, etc. Our protocol is deployed on POA and Polygon.

We provide brands with a universal UI toolkit to easily and quickly integrate Arianee NFTs within any existing HTTP environments (e.g. Android, iOS, browser, server) and authentication systems. With our white label solutions, brands can take the lead on the distribution of NFTs to a platform of choice in an interface that is customizable and aesthetically echoes your brand.

Most importantly, your customers, crypto-native or not, can interact with NFTs in a seamless manner. If you are curious about the Arianee way of onboarding new NFT users, read our article <a href="here">here</a>.

\$ARIA20 is key to the Arianee open source protocol, allowing our brands, users and partners to take part in the collaborative governance of our protocol. \$ARIA20 is used to pay for the creation of NFTs, send messages to an NFT the brand created, and create events to enrich an NFT. You can buy \$ARIA20 here or on any number of exchanges.

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