Mint Transactions Overview

ERC721 Mint transactions

Adding an ERC721 asset to a collection is commonly known as "minting" that asset.

You can mint assets by running a mint transaction. You can perform this transactions through the Myria SDK. After the assets are minted, you can use them in your project or game, or show them together with other items in a collection.

Currently, Myria supports mint transactions for ERC721 tokens (also known as NFTs). An ERC721 token is used to identify something in a unique way. You can read more about ERC721 tokens here. Upcoming versions of Myria's developer platform will include support for fungible ERC20 tokens.

Creating ERC721 mint transactions

Prerequisites

- Generate a Web3 public key and Stark Key, and register your developer account entity as described in the quickstart
- Create a project as described here
- Create a collection as described here

ERC721 minting flow

1. Run a script to submit a new mint transaction
2. Myria will attempt to mint an asset based on the data provided
    - If the mint succeeds, the asset status is set to `MINTED,` and Myria creates a transaction with `Prepare` status. When a transaction is confirmed on the Myria chain, its status is set to `Success`
    - If the mint fails, Myria returns an asset object with `MINT_FAILED` status. No asset is minted and transaction details are not included

Asset Token Id

Each asset has a `tokenId` that represents a unique identifier of that asset within the collection. If you provided the correct metadataApiUrl format as an argument when you were creating a collection, then you will be able to access your minted asset via the following URL structure:

```
URI/TOKEN_ID
```

- `URI` - `metadataApiUrl` from a given collection
- `TOKEN_ID` - unique token identifier of the mintable asset within that collection, should be an incremental value

See an example here:

```
https://gateway.pinata.cloud/ipfs/QmSjWbBS3rPu5K2TnhyXmwGE1GcVZMRFKg5K3iMl
```

Limitations

The following are known limitations for all mint transactions:

- You can create a maximum of 50,000 mint transactions per collection every month.
- A mintable asset has to belong to a collection and cannot be removed after it's created.
- You cannot perform a mint transaction if the collection's contract doesn't implement the `mintFor()` function.
- The mintable assets should follow the ERC721 standard.
- Each `tokenId` should be unique. If a non-unique `tokenId` is submitted you won't be able to mint your asset.