Mediacoins: Introduction

Mediacoins are an experimental token standard that combines features from ERC-20 and ERC-1155 to create a new type of semi-fungible token. This opens up all sorts of creative possibilities—not just for memecoins, but for a ton of other ideas too. Here are a few examples:

- Memecoins that are directly tied to the memes they're based on
- Coins linked to music, videos, and games
- Two-sided coins where the ERC-20 side is labeled one way and the NFT side another

The only limit here is your imagination.

Origins

Non-Playable Coin (NPC) was born in July 2023 with the goal of creating the memecoin answer to NFTs. Not only did we create the first memecoin-NFT hybrid, but we also made the first real implementation of an NFT hybrid where both sides of the coin are equally important—not just an afterthought.

The Non-Player Character meme made total sense for this project, especially since billions of identical profile pictures are on-brand for the meme. To make it happen, we used the ERC-1155 multi-token

standard, which lets you store multiple assets within the same contract. Additionally, a key feature of many memecoin projects is a huge token supply. Unlike ERC-721, ERC-1155 supports batch transfers, meaning users can send large amounts of tokens all at once instead of one by one. This is crucial when you're dealing with a supply of over 8 billion tokens.

Enter the 404

About seven months after NPC launched, a new and bold token standard called ERC-20721 appeared, created by Serec Thunderson. The first project using this standard, Emeralds, introduced fresh dynamics with a simplicity and immediacy that traders and holders alike resonated with. Unfortunately, Emeralds was exploited pretty quickly, highlighting the risks of "testing in production." However, one of the users affected by the exploit, CTRL, saw the potential in the concept and wasn't ready to give up on it. So, with co-creator 0xAcme, they created a new and improved version called the ERC404. Since then, the 404 standard has blown up, kicking off a wave of NFT experimentation the crypto world hadn't seen since 2021.

Why Mediacoins?

The beauty of the ERC-404 lies in its immediacy and simplicity. We believe that for crypto to reach billions of users, it needs to be not only affordable, but also easy to use. The ERC-1155 is tried and tested, and it's efficient in terms of gas, but it requires wrapping/unwrapping to make full use of its multi-token features. One lesson we learned from Pandora's launch is that people really like being able to see both the NFT and ERC-20 tokens at once—without any wrapping.

The downside of the ERC-404 is that it doesn't support batch transfers, since it's based on the ERC-721 standard. This makes it less suited for projects with millions, or even billions, of tokens. Users would have to transfer each NFT one at a time. Mediacoins, however, support batch transfers, making them ideal for large-supply hybrid projects (think memecoin-NFT hybrids, music coins, etc.).

The Trade-offs

As much as we'd love to say Mediacoins are the perfect standard, the reality is that ERC-721, ERC-404, ERC-1155, and Mediacoins are just tools in a creator's toolbox. Each one has its strengths for specific use cases. There's no "one size fits all" solution. It all depends on what the project needs. One of the potential trade-offs of the ERC-404 and Mediacoins is higher gas costs compared to non-

experimental tokens. Also, since these standards are still experimental, they haven't been through years of testing or an official EIP process. The ERC-404 also comes with the risk of duplicate images over time. Mediacoins and ERC-1155 aren't ideal for projects with images that have unique traits, while ERC-404 and ERC-721 aren't great for projects with large token supplies.

Use Cases

We've launched a series of "experiMINTs" to show off what can be done with this experimental standard. These experiments are limited to 100 mints per wallet, and the total supply is capped at the maximum integer in Solidity. These aren't meant to be speculative, just proof-of-concept projects.

Here are some examples:

- **A Memecoin with a picture**: A straightforward idea where the memecoin is actually tied to the meme. We've done something similar with Non-Playable Coin, but this version doesn't require any "transformation."
- **A Music Coin**: Imagine trading the latest Taylor Swift track on Uniswap, longing something from Kendrick Lamar, or shorting a diss track from Drake. This opens up new possibilities that old-

school music NFTs didn't have.
• **A Two-sided token**: In this case, the ERC-20 side has one name, while the NFT side has another. One example we've created is a "Biden vs. Trump" coin, where the ERC-20 side is named Biden and the NFT side is named Trump.
• **A Coin tied to a video game**: A coin you can trade on Uniswap and is also playable on OpenSea.

As the name suggests, these "experiMINTs" (along with Mediacoins) are experimental. Our code has been audited, but that doesn't guarantee everything will work as expected. We highly recommend using a fresh wallet before minting any of these tokens.

Conclusion

Our goal with Mediacoins is to keep testing this standard over time, run more audits, and eventually go through the EIP process—assuming everything checks out and the concept holds up. We hope Mediacoins will inspire new and creative ideas in the crypto space, not only by using our experimental standard, but by making the most of whatever tools best fit your needs as a creator.

Non-Playable Community