ERC721N: Unlocking Crypto Onboarding

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Abstract. The advent of blockchain technology heralds a transformative era in digital transactions, introducing unprecedented levels of transparency, security, and decentralization. Despite its potential, the mass adoption of this technology is hampered by significant entry barriers, chiefly among them the complex user onboarding processes exacerbated by exhaustive Know Your Customer (KYC) requirements and antiquated user interfaces (UIs). ERC721N emerges as a groundbreaking solution, ingeniously amalgamating the ERC721 and ERC20 token standards to devise a Non-Fungible Token (NFT) treasury reserve system. This system not only enhances the UI/UX for crypto onboarding but also democratizes access to Decentralized Applications (DApps), potentially catalyzing a paradigm shift in blockchain adoption. Through a meticulous integration with NoRamp.io's infrastructure, ERC721N aims to refine the blockchain landscape by facilitating seamless, intuitive, and expedited user onboarding.

Keywords: Crypto, Web3, NFTs, Smart Contracts, Treasury Management

1 Introduction

Blockchain technology provides a revolutionary framework for executing digital transactions. However, considerable obstacles hinder its widespread adoption. New users are often deterred by the complex processes involved in interacting with blockchain networks and DApps. ERC721N directly addresses these challenges, proposing an innovative solution that combines the utility of ERC721 and ERC20 standards to improve the blockchain onboarding experience. This initiative not only simplifies user interaction with blockchain applications but also establishes a new standard for accessibility in the decentralized digital landscape.

2 Background

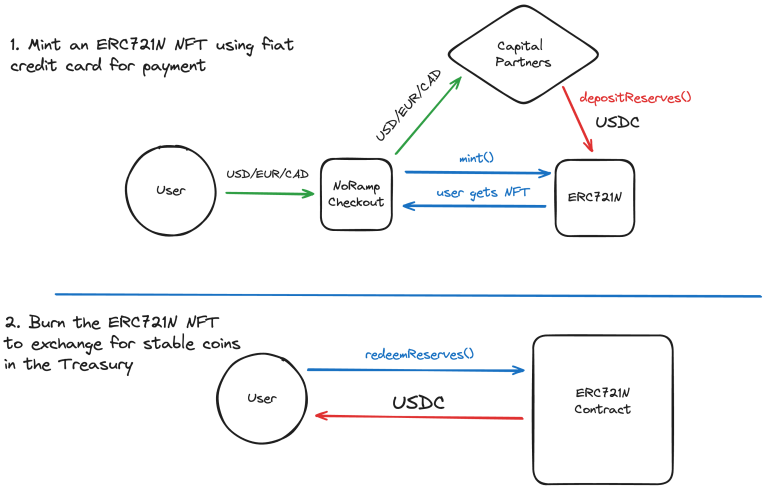
The evolution of blockchain technology has paved the way for novel forms of digital assets, such as NFTs and utility tokens, each with unique attributes and uses within the digital economy. Despite these advancements, the onboarding of users onto blockchain platforms remains fraught with complexities. NoRamp.io stands at the forefront of efforts to streamline this process, offering a suite of

tools designed to bridge the gap between traditional finance and blockchain technology. Through its partnership with global payment processors and dedication to an exceptional developer experience, NoRamp.io exemplifies the potential for innovative solutions to foster global blockchain accessibility.

3 Onboarding Obstacle

At the heart of the slow blockchain adoption rate is the intimidating user onboarding process. Prospective users are often overwhelmed by the complex KYC verifications and the unintuitive UIs that characterize many blockchain interfaces. These challenges create significant barriers to entry, deterring a broader demographic from engaging with blockchain technologies and reaping their benefits. The need for a solution that can simplify and speed up the onboarding process, making it as seamless as interacting with traditional online platforms, has never been more critical.

4 Making Blockchain Invisible



ERC721N introduces a novel solution to the onboarding challenges identified within the broader blockchain community. By integrating the robust features of ERC721 (NFT standard) and ERC20 (Token standard), ERC721N creates a treasury system where NFTs can act as token warrant contracts for tokens held in the treasury reserve. This merger not only simplifies transactions but also significantly enhances the user experience, providing an intuitive and accessible

gateway to blockchain technology. Since NFTs do not face the same regulatory headwinds as directly purchasing fungible tokens, ERC721N is able to utilize the best parts of both standards to deliver the user experience expected in the Web2.0 world. The system's architecture is designed with security, scalability, and user-friendliness in mind, ensuring that ERC721N stands as a beacon of innovation in the quest for universal blockchain adoption.

Treasury management works as follows: a capital partner creates a merchant account on the NoRamp.io developer platform. After onboarding with NoRamp, the capital partner can proceed to deploy their own ERC721N smart contract. During their deployment, they will pass in the constructor the token address they would like to manage as treasury reserves. For instance, let's propose that the ERC20 reserve token is USDC; the ERC721N will only manage USDC. Following deployment, the capital partner will run depositReserves() on the ERC721N contract in which they will deposit their chosen reserve token, in this case USDC, and transfer it to the contract to manage. Once the contract's reserve balance is properly filled, the contract can begin minting NFTs representing a token warrant on the reserve tokens. The last step is for the capital partner to set up the NoRamp Checkout payment suite in their Dapp so that users can seamlessly onboard using fiat.

ERC721N Step by Step

1. User pays using their credit card in NoRamp Checkout for 105(+5 of gas) USD
2. NoRamp's backend triggers a mint() transaction on the ERC721N contract
3. The user receives an ERC721N NFT representing a claim to 100 USDC
4. The user then runs the redeemReserves() function on the ERC721N contract to burn their NFT and receive their 100 USDC warrant from the ERC721N Treasury

5 Implementation and Use Cases

The implementation of ERC721N through NoRamp.io's infrastructure exemplifies the practical application of this innovative solution. By facilitating a more user-friendly blockchain experience, ERC721N has the potential to revolutionize a wide array of sectors, including digital art, gaming, real estate, and beyond. The ease of onboarding and transacting could dramatically increase participation across these domains, fostering a more inclusive digital economy where the benefits of blockchain technology can be universally accessed and enjoyed. ERC721N can be used to seamlessly onboard users into Dapps through purchasing NFTs with ease due to the regulatory arbitrage NFTs exhibit.

6 Conclusion

ERC721N marks a significant milestone in the evolution of blockchain technology. By addressing the pivotal challenge of user onboarding, it paves the way

for a new era of digital interaction that is accessible, intuitive, and secure. As blockchain technology continues to mature, solutions like ERC721N will be instrumental in unlocking its full potential, heralding a future where the barriers between traditional and digital finance are seamlessly bridged.

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