



When Chroma Signet uses NFTs to create thousands of "digital twins" across the global consumer packaged goods supply chain, they use Unlock Protocol.

Chroma Signet uses blockchain-based solutions to provide supply chain transparency and provenance across the entire consumer packaged goods (CPG) industry. When brands want to share seed-to-sale supply chain data, in-depth ingredient details, or their brand story with customers, they choose Chroma Signet.

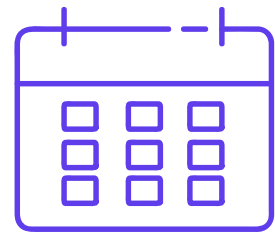
When Chroma Signet wanted to enhance their offering and additionally offer a "digital twin" for every instance of every product in the supply chain in the form of an NFT, they went searching for a solution and found their answer in the Unlock Protocol.



Supply chain transparency meets NFTs



Digital twins are created for 1000s of products



Unlock Protocol implementation in days, not months



"The Unlock Protocol and reference implementation literally saved us 6 months of development time."

- Leif Shackelford, CTO of Chroma

About Chroma Signet

Signet was created by Chroma, a protocol design studio founded in 2013. Originally developed as a supply chain transparency and provenance protocol for the cannabis market, Signet is now publicly available to any consumer packaged goods company that wants to show the world how their products are made.

With Signet, a product's provenance is accessible from the package itself, which makes it easier for customers to make informed decisions.

Objectives

In addition to using blockchain to track each product's provenance, Signet wanted to automatically create a digital twin of every unit of every product sold in the form of an NFT to bridge the physical and digital worlds.

Chroma Signet's vision was that when a customer claims an NFT that is paired with the purchase of a physical product, that customer now owns a provably unique digital asset and token. This NFT can grant the customer access to exclusive perks and benefits and unlock community membership, discounts, early-bird drops, and more.

Now, they just needed to implement their vision.

Challenges

As the Chroma Signet team advanced the digital twin idea from concept toward implementation, they knew they wanted to use a blockchain-based approach that provided utility, in addition to being provably scarce. They also knew that token-gating limited-edition drops and access was an interaction model they wanted to implement.

At first, the team explored a "we'll build it ourselves" approach, and quickly found that there are many complexities and details to creating a robust, NFT-based token gating solution. At this point, they started looking for web3 standards and protocols that solved the problem, and discovered Unlock.

Results

Thanks to Unlock, Chroma Signet has been able to enter the market months faster than they could have using conventional approaches.

After exploring multiple implementation options, the Chroma Signet team felt that using Unlock Protocol was the only path to seriously consider. Chroma CEO Marcus Estes notes, "Unlock solved a number of hairy problems for us — we could have tried to do this ourselves, and I am so glad that we didn't."

Customers of Chroma Signet, including Viola Brands (feat. a collaboration with NBA legend Allen Iverson), Sonoma Hills Farm, and Neighborhood Essentials, are on track to create over 10,000 unique NFT-based keys using Unlock during 2021, each tied to a specific real-world item. These keys connect that item with a set of unique customer perks that are only available to key-holders.

