Twitter Thread by Jonty Wareing



Jonty Wareing
@jonty

Out of curiosity I dug into how NFT's actually reference the media you're "buying" and my eyebrows are now orbiting the moon

Short version:

The NFT token you bought either points to a URL on the internet, or an IPFS hash. In most circumstances it references an IPFS gateway on the internet run by the startup you bought the NFT from.

Oh, and that URL is not the media. That URL is a JSON metadata file

Here's an example. This artwork is by Beeple and sold via Nifty:

https://t.co/TlJKH8kAew

The NFT token is for this JSON file hosted directly on Nifty's servers:

https://t.co/GQUaCnObvX

```
{
  "description": "LIMITED EDITION 1/1 | includes
    signed limited edition prints of all 3 states (pre
    -election, Trump win, Biden win)\r\nThis piece is
    a first for Nifty, a token that will change based
    on the outcome of the election.  If anything is
    constant about the times we now live in, it's
    uncertainty. This uncertainty is perfectly
    encapsulated in this piece of artwork as the
    person buying the piece will not know the final
    artwork. The artwork will be one state at auction
    before the election, and after the results of the
    election are known, will forever change to reflect
    a Trump or Biden win.\r\nPLEASE FUCKING NOTE: If
    trump wins, this token will change to that video
    of sexy boi king trump stomping through hell
    FOREVER. I don't want you coming back to me
    bitching that you spent $2M* on this and now it's
    a video of orangeman going HAM and it's keeping u
    up at night popping mad boners.  should have voted
    bruh.\r\n*and stfu that this isn't gonna be worth
    a fuckton more when I hit 30 years of everydays
    and have a permanent collection in the MOMA. smh."
    ,
  "background_color": "ffffff",
  "external_url": "https://niftygateway.com/#/",
  "image": "https://res.cloudinary.com/nifty-gateway
    /video/upload/v1603975875/Beeple/BIDEN_WIN_iwkosh
    .png",
  "name": "CROSSROAD #1/1",
  "animation_url": "https://res.cloudinary.com/nifty
    -gateway/video/upload/v1603975875/Beeple
    /BIDEN_WIN_iwkosh.mp4"
}
```


THAT file refers to the actual media you just "bought". Which in this case is hosted via a @cloudinary CDN, served by Nifty's servers again.

So if Nifty goes bust, your token is now worthless. It refers to nothing. This can't be changed.

"But you said some use IPFS!"

Let's look at the $65m Beeple, sold by Christies. Fancy.

https://t.co/1G9nCAdetk

That NFT token refers directly to an IPFS hash (https://t.co/QUdtdgtssH). We can take that IPFS hash and fetch the JSON metadata using a public gateway:

https://t.co/CoML7psBhF



So, well done for referring to IPFS - it references the specific file rather than a URL that might break!

...however the metadata links to "https://t.co/RzXLzsqegH"

This is an IPFS gateway run by https://t.co/yR25JR9mkk, the NFT-minting startup.

Who will go bust one day

You might say "Just refer to the IPFS hash in _both_ places!"

Well ...no. IPFS only serves files as long as a node in the IPFS network _intentionally_ keeps hosting it.

Which means when the startup who sold you the NFT goes bust, the files will probably vanish from IPFS too

In fact, this is already happening: https://t.co/UdUfMuyurw

> IPFS would prevent the original creator from changing the artwork, but it would not ensure that files remain available. I've already in my very limited search found some NFTs with IPFS resources that are no longer hosted anywhere. https://t.co/vwfv2dfXAP
>
> — high speed optical citrus (@scanlime) March 15, 2021

In short: Right now NFT's are built on an absolute house of cards constructed by the people selling them.

It is likely that _every_ NFT sold so far will be broken within a decade.

Will that make them worthless? Hard to say

"NFT startups are long-game blackmailers" is an entertaining concept

https://t.co/Jtu2e1Q9Em

> This creates a pretty solid exit plan for makersplace if they run into financial problems - whoever owns the $65M Beeple is going to pretty motivated to buy the site or fund it
>
> — Andrew S (@andrew___myname) March 17, 2021

Eagerly awaiting the day when I can buy the bankrupt startup domains and start charging NFT owners to serve their files

"WELL ACTUALLY you just pin the file to your own IPFS node":

You absolutely can! But the metadata file generally points to a specific HTTP IPFS gateway URL - NOT the IPFS hash.

This means when the gateway operator goes bust I can buy the domain and start serving cat pictures

So @CheckMyNFT has been tracking NFTs created on Nifty, and apparently most of them are already broken ■

https://t.co/7zvXpQNC2N

> Btw we\u2019ve been tracking this for 7 days now and most of the files we check from @niftygateway on IPFS fail https://t.co/cQu1cPBXhF
>
> — Check My NFT \U0001f50e \U0001f5bc\ufe0f (@CheckMyNFT) March 17, 2021

I can't believe I have to say this but: Not ALL NFTs

Yes I know there are plenty of NFTs that do not suffer from these problems. I was just covering the mainstream ones that have been hitting the news.

Next time I promise to inject the words "most" and "many" in every sentence

Honestly I'm not just making this up
https://t.co/S3nzWBKXqg

> As an Ethereum engineer with plenty of IPFS experience, the technical claims made in this thread are all true. The technology is new, and we are still iterating and creating best practices. Criticism is welcome! It will make us better. We need better tooling around IPFS & NFTs.
>
> — Sam Walker (@cloudonshore) March 17, 2021

Apparently it isn't clear and some people are very angry, so:

This thread is specifically criticising the vendors currently selling fragile NFTs, not the concept of NFTs in general. Ok?

Ok.