

Web2 Woes & Web3 Warfare: Detecting & Dissecting DNS Abuse

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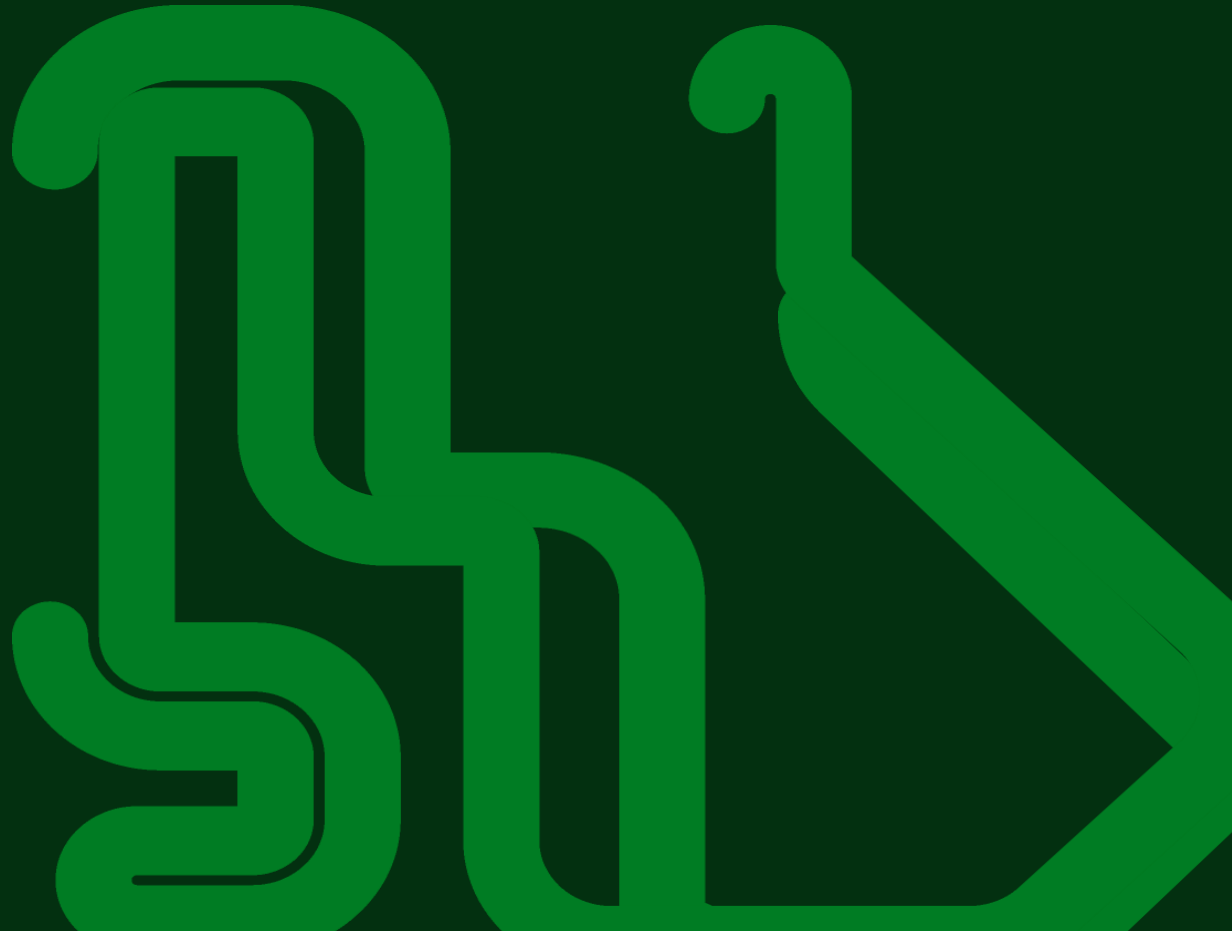
.uni

whoami

- General Counsel / CISO of ENS
- Former CISO of NFL
- Professor of Law, King's College, London
- DNS-based cyber threat intel platform creator
- Technology Advisory Board of Human Rights First
- Member of the UL Security Council
- Background in defense and intelligence in the US
- Co-host of a Hacker-focused radio show in NY
- Published in FT, CNN, The Intercept, 2600 Magazine
- Was a hacker way before it was cool



The DNS is
Dangerous



Bad Guys Abound

```
-----  
| ENSxxx.TLD | 1 new hits | 14:14 |  
-----
```

```
1. ens-send15.com
```

```
-----  
| xxx-ENS.TLD | 1 new hits | 14:14 |  
-----
```

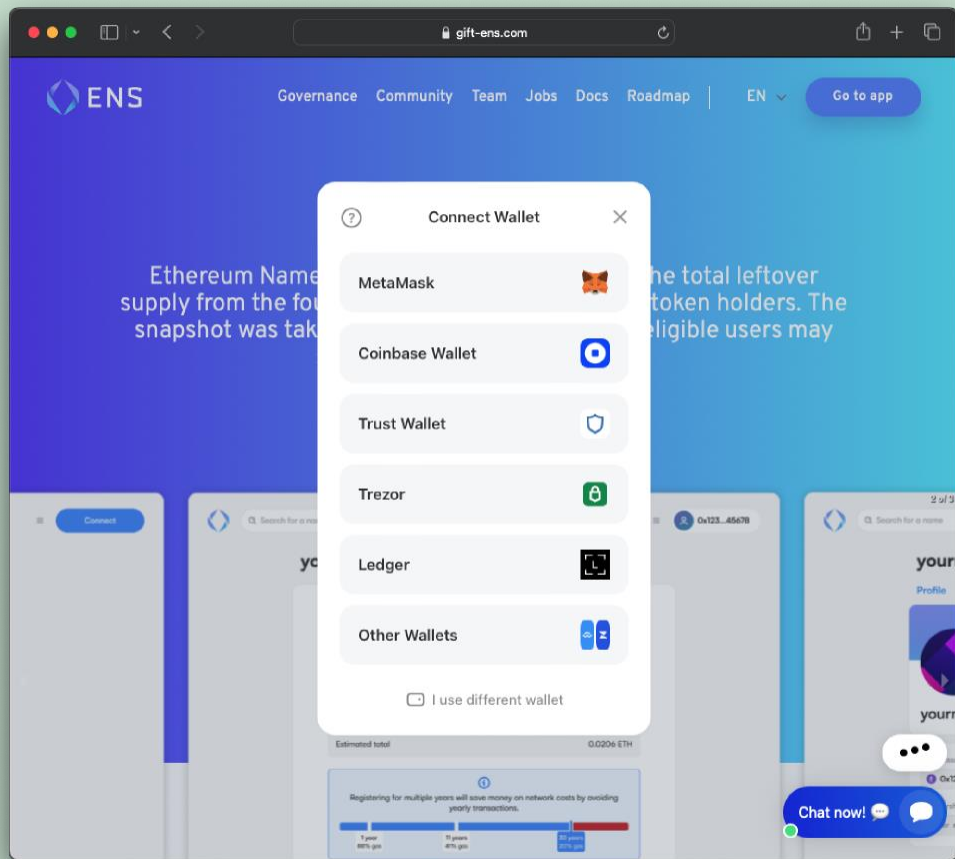
```
1. airdrop-ens.domains
```

```
-----  
| ENS + Strings | 2 new hits | 14:14 |  
-----
```

```
1. airdrop-ens.domains
```

```
2. ens-send15.com
```

- Created a DNS-based threat intel system
- We identify malicious domains daily
- Cloudflare -> Hiding the host
- Attacks / fraud persist
- Volume and velocity are alarming
- Propelled on X / Twitter
- Linktree usage is common
- Wallet drainer smart contract
- Attacks stood up surprisingly quickly



The Attacks

Pernicious and persistent

Can cause significant losses

Clear case of DNS Abuse

Chicken & egg reporting issue

Law enforcement not available

An onboarding concern for web3

|-|-| event-ens[.]net |-|-|

Consistent Thread

[-] Registrant Name: No Data Available
[-] Creation Date: 2024-05-27T04:36:56Z
[-] Registrar: NICENIC INTERNATIONAL GROUP CO., LIMITED
[-] Registrant Organization: lolita llc
[-] Location: US
[-] Host: CLOUDFLARENET
[-] IP Address: 172.67.131.246
[-] NS Records: dina.ns.cloudflare.com
[-] MX Records: No MX Records
[-] Certificate Authority: Google Trust Services LLC



2,200+ Attacks on web3 and defi entities

Tracking & Threat Detection

Consistent infrastructure

Consistent DNS configuration

Wrote bash script to track NS record changes every ten minutes

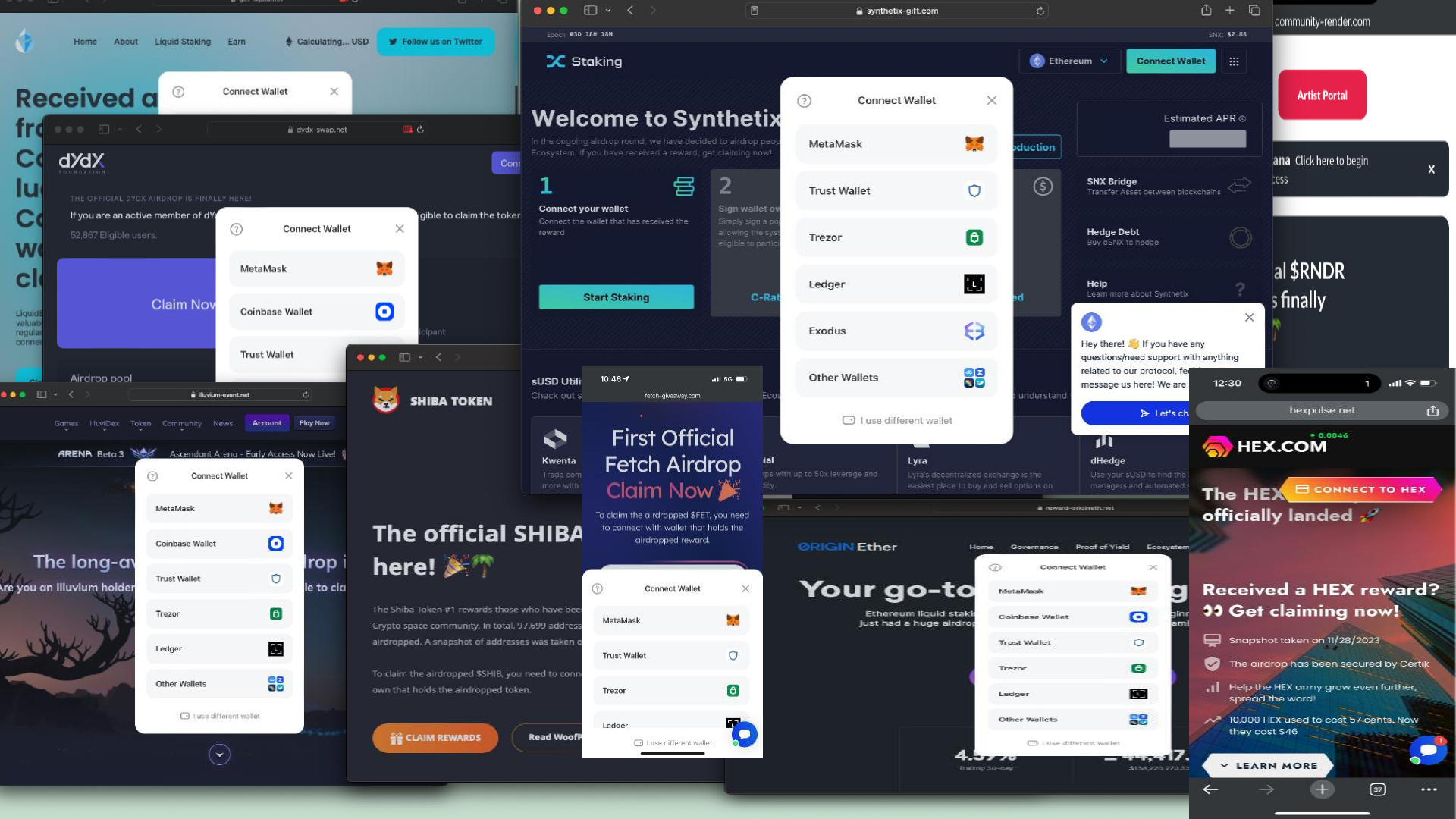
NS records -> Cloudflare = attack

wget -m [target domain]

Evidence and indicators

Reliable early warning system

```
-----
2086 / 2241 | events-dydx.com | ----- | -----
2087 / 2241 | gift-univ4labs.com | lola.ns.cloudflare.com | 104.21.43.6
172.67.215.13
2088 / 2241 | gifts-graph.com | mark.ns.cloudflare.com | 172.67.212.230
104.21.37.204
2089 / 2241 | gift-livepeer.com | yolanda.ns.cloudflare.com | 104.21.41.101
172.67.164.46
2090 / 2241 | reward-zknation.com | ----- | -----
2091 / 2241 | dashboard-realio.com | lee.ns.cloudflare.com | 104.21.29.97
172.67.148.188
2092 / 2241 | gifts-shib.com | desiree.ns.cloudflare.com | 172.67.175.45
104.21.40.38
2093 / 2241 | allocation-orbiterfinance.net | ----- | -----
2094 / 2241 | allocation-zapper.net | ----- | -----
2095 / 2241 | allocation-azuro.net | ----- | -----
2096 / 2241 | allocation-holdstation.net | ----- | -----
2097 / 2241 | allocation-nostrafinance.net | ----- | -----
2098 / 2241 | launchpad-axondao.net | ----- | -----
2099 / 2241 | vote-kelp.net | ----- | -----
2100 / 2241 | dashboard-livepeer.com | rene.ns.cloudflare.com | 104.21.84.21
172.67.185.5
2101 / 2241 | exchange-illuvium.com | tate.ns.cloudflare.com | 104.21.6.159
172.67.135.2
2102 / 2241 | exchange-livepeer.com | olivia.ns.cloudflare.com | 104.21.79.220
172.67.171.144
2103 / 2241 | events-stether.com | ----- | -----
2104 / 2241 | reward-agixtoken.com | ----- | -----
2105 / 2241 | reward-hamsterkombat.com | ----- | -----
2106 / 2241 | reward-kinzafinance.com | ----- | -----
2107 / 2241 | reward-kontos.com | ----- | -----
2108 / 2241 | reward-origineth.com | saanvi.ns.cloudflare.com | 172.67.218.39
104.21.24.96
2109 / 2241 | token-livepeer.com | trevor.ns.cloudflare.com | 172.67.209.34
104.21.53.53
2110 / 2241 | gifts-ousd.net | vida.ns.cloudflare.com | 172.67.220.71
104.21.67.96
2111 / 2241 | gifts-liquidether.net | aarav.ns.cloudflare.com | 104.21.28.208
```

What to do
about all this?



UDRPs /

Takedowns / Blocklists

/

Reports /

Always reactive, always chasing

How to get ahead of the game?



Ethereum Name Service Labs Limited,)

38 North Canal Road)

Singapore 059294)

(Complainant))

v.)

Host Master /1337 Services LLC)

P.O. Box 590)

Charlestown, KN)

(Respondent))

Domain Names In Dispute:

enscom.domains

manage-ens.domains

config-ens.domains

ipfs-ens.domains

ens-domains-drop.com

claims-ens.com

tokens-ens.com

ensesp.net

cens.domains

ens-token.claims

ens.solar

my-ens.domains

governance-ens.exchange

ensaidrops.com

ensgiveway.com

sens.domains

ens-event.com

domains-ens.com

event-ens.com

free-ens.com

mint-ens.com

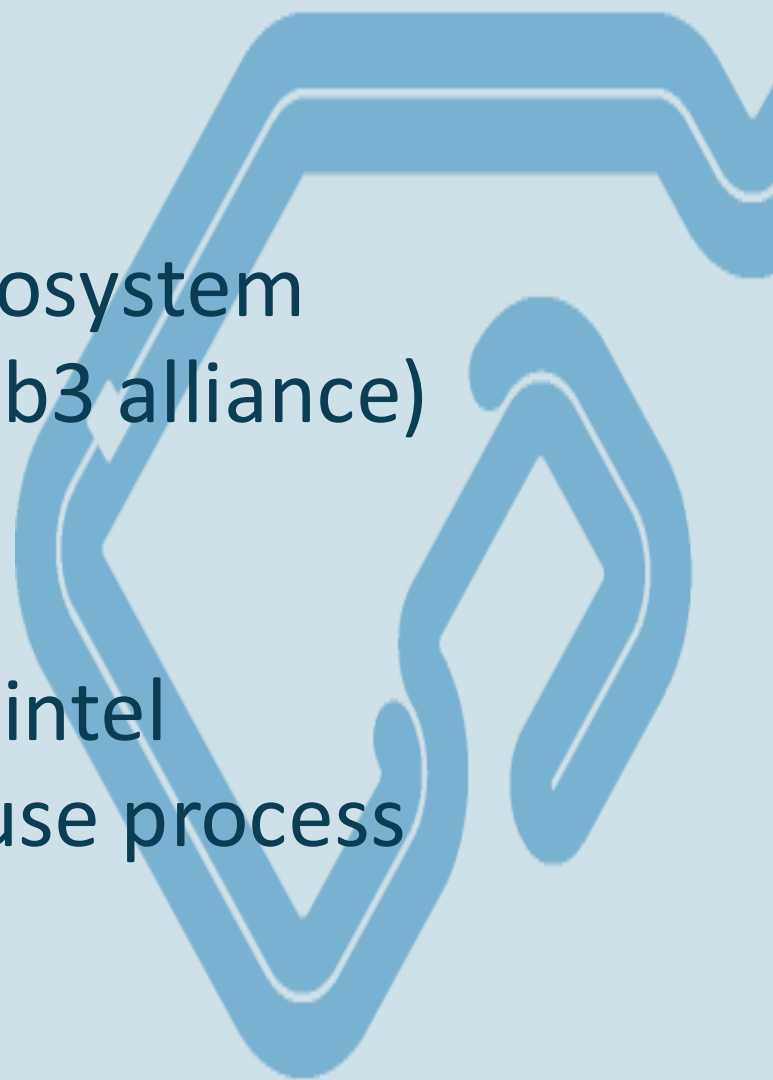
mainnet-ens.domains

clalm-ens.domains

COMPLAINT IN ACCORDANCE WITH
THE UNIFORM DOMAIN NAME DISPUTE RESOLUTION POLICY

A Modest Proposal

Share intel amongst the ecosystem
Disperse through SEAL (web3 alliance)
alliance)
Prioritize abuse reporting
Reclaim domains & collect intel
Evolve the UDRP / DNS abuse process



Web3 on the Offense

Common grievance | Registration pattern | Same rights at issue
Come together and file the largest UDRP Complaint ever
Reclaim thousands of malicious threat actor domains
Warning shot to threat actors that we are watching
Gather intel from registrations / domains / logs
Law enforcement involvement / US interest
Evolve DNS Abuse reporting process
Community is safer together

Thank You for Listening

Let's share intel, be in touch, and connect in Dublin
Dublin



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