Markmonitor™

Web3 Report

2024

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/01 Letter From the Editor

Shane Layman

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Fall is upon us in the Northern Hemisphere, leaving behind summer's heatwaves, pool parties, BBQs, and fireworks on the 4th of July for our American audience. And with it, more and more discussions are happening about the new and emerging internet, Web3. Before we dive into the core of this report and Markmonitor's ability to demystify some of Web3 and its concepts, I'd like to introduce myself.

My name is Shane Layman, I'm a Boise, Idaho native who has a love of all things outdoors and spent a lot of my youth (and adult life) playing baseball. As this is my first report I've published for Markmonitor, I thought it was neat to publish around the same time my wife and I welcomed our first child, a daughter. Just like the domains world that is ever changing, and to quote *The Fresh Prince of Bel Air* theme song, "My life [will get] flipped turned upside down"[1] — in the best way possible.

At Markmonitor, I lead our Web3 and NFT Domains teams, working to ensure our clients are protected and their assets managed with the level of white glove service that has come to be expected from Markmonitor. This report stems from a desire to keep our audience and the global community aware of what is happening in Web3 and what's to be expected in the future. As a member of the INTA Emerging Issues Committee for the 2024-2025 term and a member of the NFT Task Force, it's the perfect opportunity to dive into these concepts and share our expertise.

1. genius.com/Dj-jazzy-jeff-and-the-fresh-prince-the-fresh-prince-of-bel-air-lyrics

What is Web3?

An Introduction to Web3 and What Enterprise Brands Should Consider

/02 What is Web3? An Introduction

Web3 makes the news almost every day — but what is it exactly? And why should brands care?

What is Web3?

To better understand Web3, let's take a step back and look at Web2, the DNS-based internet as we know and use it today, and the evolution from Web2 to Web3.

Web2, or the traditional internet, has been at the core of the user-experience since the 1990s. Think of it as an information economy, where people and brands create websites, social media accounts, and more, and it's all made possible by centralized servers that exchange great quantities of information every day.

Web3 takes the centralized DNS-model of the internet and turns it on its head. It boasts decentralization at its core and is built on user-powered blockchain technology.

Blockchain technology is a digital form of record keeping, it's what underlies cryptocurrency, non-fungible tokens (NFTs), smart contracts, and more. It's the result of sequential blocks of information that build upon one another, creating a permanent and unchangeable ledger of transactions or other data. Web3 may be decentralized, but that doesn't mean that there aren't some forms of consensus mechanisms. In fact, prior to new blocks of information being added to the blockchain or "minted" in Web3 lingo, the blockchain, community has processes to vet and approve the data before the new blocks are added to their respective blockchains.

In Web3 there are many blockchains, though not all are created equal. Some are more well-known, like the Ethereum[1] and Polygon[2] blockchains, whereas others may be created in someone's basement and don't have multiple stakeholders invested in them.

Why Should Brands Care About Web3?

Brands should discuss investing in a Web3 strategy so that they can protect their names and intellectual property, just as they would in any other commercial or public arena.

You may not have any plans for your brand in Web3 — but rest assured, someone does. Where there is a lack of preparation or participation, someone will take note and capitalize on that absence — so it's important that brands claim their domain name(s) in Web3 so that others cannot.

What is a Web3 Domain Name?

Web3 domain names function a bit differently than domain names powered by the traditional DNS (Domain Name System). You may hear them referred to as "Blockchain domains" or "NFT domains" in addition to Web3 domains — those labels all refer to the same thing.

Unlike Web2 domain names, when you mint an NFT domain, it's yours indefinitely. NFT domains don't expire.

When an NFT domain is created it's appended to a blockchain and then minted to an individual's or brand's respective wallet.

In Web3 terms, wallets are how domains are stored after creation. We'll discuss wallets and Web3 domain custody later in the report in the "Guide to Web3 Asset Management" section. For now, understand that there are two main types of wallets — cold and hot. Cold wallets are, in essence, taken offline. They can be physical or digital, but they are not actively connected to any underlying blockchains, which gives them an added layer of security against malicious attacks. Hot wallets are actively connected to blockchains and Web3 technologies.

Currently, over 2 million Web3 domains have been minted via the Ethereum Name Service (ENS)[3] and over 4 million domains have been minted via Unstoppable Domains[4] alone, and that number increases each day.

Intellectual Property, Infringement, and Brand Protection in Web3

In Web2, brands have certain Rights Protection Mechanisms (RPMs) and recourses should their trademarked names be owned and/or used in bad faith by others. There are institutions like the Trademark Clearinghouse, an outcome of ICANN policy work from 2012,[5] and processes like the UDRP, Uniform Domain Name Dispute Resolution Policy.[6] The former provides brand owners and mark holders with ways to actively prevent infringement, and the latter offers a path to gaining ownership of domains that are being used or held in bad faith.

> *An ounce of prevention is worth a pound of cure.*
>
> *-Benjamin Franklin*

In Web 3, brand owners have no such recourse or RPMs. This fact makes some brand owners hesitant to enter into Web3, but the reality is this — if you're not going to actively acquire your names and marks in Web3 then someone else will. If that happens there's no guarantee that you'll be able to acquire it, ever. In fact, if you do happen to get ahold of the entity that owns your Web3 domain, they could even choose to "burn" it, i.e., delete it from the blockchain so that it no longer exists and can't be recreated.

How Should A Brand Approach A Web3 Strategy?

Markmonitor believes that brand owners and mark holders should take an active interest in Web3 to acquire and protect their marks — and we're here to help.

We've developed partnerships with respected and established Web3 organizations, like the Ethereum Name Service and Unstoppable Domains, to enable brand holders to acquire their names and to advocate on behalf of our clients and brand owners everywhere.

We believe it is in the interest of Web3 stakeholders to seek a better understanding of the needs of trademark holders and brands if they want to protect end-users by creating a more trusted environment and drive adoption of their technologies.

That said, any brands who are interested in protecting their IP in Web3 should start by taking stock of their top brands. What are your well-known trademarks or trade names? Those should be priority acquisitions in Web3 and should be registered (i.e.- minted) in the most popular spaces and blockchains.

We repeat — *not all Web3 marketplaces are created equal*. There are three major players in Web3 distributing NFT domains and naturally, they're the most popular registration marketplaces: Unstoppable Domains, Ethereum Name Service (ENS), and Handshake Naming Service (HNS).[7]

If a brand seeks to acquire a name that's already been minted and is owned by a third-party, there are respected marketplaces like OpenSea that make acquiring aftermarket NFT domains possible.

Markmonitor has vetted many Web3 registry operators to determine which are worthy of your time and engagement. We've done so by leveraging our decades of experience and expertise to conduct thorough reviews and checks, including reviews of terms and conditions, policy documents, and by engaging with executives and c-suite level employees of Web3 registries. This due diligence on our part is for our clients' benefit — we want to ensure brand holders have an extra layer of security in their brand protection efforts.

Is Web3 the Future of the Internet?

Whether Web3 will become the predominant internet infrastructure that people use on a daily basis remains to be seen.

What we can say is that the lines between Web2 and Web3 domains continue to blur and there have been significant efforts made to enable Web3 domains to resolve in the DNS environment and vice versa, which helps address a significant challenge that Web3 faced, that is, many Web2 browsers cannot interact with and resolve to Web3 properties, sites, and projects. Additionally, some Web3

operators have partnered with Web2 registries in anticipation of ICANN's Next Round of New gTLDs, set to launch in 2026. We'll explore these ideas in greater detail later in this report.

1. ethereum.org
2. polygon.technology
3. ens.domains
4. unstoppabledomains.com/about
5. markmonitor.com/report/new-gtld-report-q1-2024
6. markmonitor.com/domain-dispute-recovery-solutions
7. handshake.org

.locker: An Inside Look at an NFT Domain

An Interview with Orange Domains, Trust Machines, and Tucows

/03 .locker: An Inside Look at an NFT Domain

Raedene McGary
VP, Tucows

Don Ruiz
General Manager, Orange Domains

Rena Shah
COO, Trust Machines

Shane Layman
Manager, Global Industry Relations

For this interview, I sat down with Don Ruiz, General Manager of Orange Domains,[1] Rena Shah, COO of Trust Machines,[2] and Raedene McGary, VP Registry Services at Tucows,[3] to learn more about their partnership in the launch of .locker[4] and their integration with the Bitcoin Blockchain. Keep reading to discover how Orange Domains came to be, and what their vision[5] for the future of Web2 and Web3 hybrid coexistence looks like.

A bit of background: .locker was initially delegated to DISH DBS Corporation in 2016 and was then transferred to Orange Domains LLC in January of 2024. Orange Domains is an entity created by the joint venture of Trust Machines, Tucows, and Hiro Systems, and is an ICANN-accredited registry for .locker. They control the Web3 version of .locker on the Bitcoin Naming System (BNS) namespace, while Tucows Registry acts as the backend operator for the Web2 space. The .locker solution offers end users a seamless connection between Web2 domains and the corresponding Web3 digital identities.[6]

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Shane Layman: *Don, thank you for being here. First off, I want to start with a little introduction, could you please let us know a little about yourself? Where are you from and what's something you're passionate about?*

Don Ruiz: My name is Don Ruiz and I am the General Manager of Orange Domains, a Joint Venture Partnership between Trust Machines, Tucows, Hiro and Dish. I currently live in Halifax, Nova Scotia, Canada with my wife of 15 years, our two boys (12 and 10), and two golden retrievers. Like most Canadian dads, when I am not working, I can be found at the rink.

Shane: *As a new parent myself, I'm excited to see what sports my kid gets into. I'll likely be in the same boat whether that's the rink or the court.*

When did you get your start in domains and what led you to Orange Domains?

Don: I have been in the domains and web hosting space for over 20 years. After purchasing a.my first domain name in 1997 (with a fax machine), I worked for a web hosting start-up in Halifax, Nova Scotia, Canada for several years. Following this, I moved into encrypted email and public key infrastructure with my own start-up. In 2007, I moved on and landed at Tucows. Domains are something I am passionate about and so after 8 years, I left the registrar side of the industry to gain registry experience. I helped launch and run the .blog registry for Automattic Inc, the founders of WordPress, from 2016-2023. Last year, this new challenge with .locker was presented to me. Designing and launching an innovative solution in the domain name and Web3 digital identity space is what drew me to it.

Shane: *Rena, thank you as well for being here, I understand how busy your schedule has been as of late. Would you mind giving our audience some background and sharing about yourself?*

Rena Shah: I am the COO for Trust Machines, which is one of the joint venture partners of Orange Domains. We are focused on building the Bitcoin economy through our apps. Before Trust Machines, I was the Head of Exchange at Binance.US, where I grew the exchange from $30M to $3B in daily trading volume within 18 months. I first got interested in Bitcoin during my time on an offshore drilling rig where I began spinning up Bitcoin mining pools.

Shane: *Thanks, Rena! Sounds like you've had a really interesting journey in Web3.*

Raedene, it's always a pleasure to speak with you. Could you please tell us about yourself?

Raedene McGary: I'm the VP of Tucows Registry, Tucows is one of the joint venture partners of Orange Domains. We provide ICANN compliant back-end Registry services for gTLDs such as

.locker, which we migrated to our platform earlier this year. I've been in the domain name industry since 2001, and I was part of the acquisition of UNR/Unregistry's registry platform back in 2021. Before that I was the Head of Policy at CentralNic Registry.

Shane: *Thank you, Raedene. Great background on Tucows and what led you to .locker today.*

Rena, turning it back to you, our audience may not be familiar with Trust Machines. So, what is Trust Machines? What is your mission?

Rena: Trust Machines is a team of engineers, builders, marketers, and operators banding together for one mission: growing the Bitcoin economy. Our belief is that by unlocking the true potential of Bitcoin layers, we can take Bitcoin to a billion users. We currently have our onchain domain, .locker, and Leather, our Bitcoin and Stacks wallet, and stealth decentralized finance initiatives.

Shane: *Raedene, Tucows Registry Services has been busy in the past few years. What led you to Orange Domains and what excites you about the innovation in Web3?*

Raedene: Since the acquisition of Tucows Registry Services we have been growing from around 600K of domains under management to 1.7 million names in less than 3 years. We are looking forward to .locker being part of the growth and bringing potentially new customers to domains. This is a fantastic learning experience for us to work on this opportunity.

Shane: *As a follow up to that, do you foresee more traditional Web2 TLDs moving to a mirrored Web3 digital identifier in the future?*

Raedene: As .locker pioneers this to fruition, we will see more to follow.

Shane: A question for anyone who wishes to respond — what are some benefits and what are some issues that could occur with a matching Web2 and Web3 extension?

Rena: Private addresses for Bitcoin wallets can be difficult for many to wrap their heads around. Creating a solution, like .locker, gives us a chance to remove that complexity from the user's experience. Allowing them to access their assets, collectibles, and other onchain items stored in their digital wallet, with an easy, readable address.

Raedene: Domain names have the added benefit of being memorable and with .locker as a newly launched domain it has a vast potential inventory of names.

Shane: *Don and Raedene, I'd love to get your take on the following topic. As most have seen, many organizations are going to be applying for TLDs in the Next Round of New gTLDs that have ties to either*

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Web3 or are exact matches to a Web3 organization name. Could you comment on why you think that is happening?

Don: Simply put, for innovation. Blockchain technology has been around since 2009 and with advancements in the technology and more recent regulatory and institutional interest, companies and organizations are realizing that blockchain technology and bitcoin are a growing part of the internet with positive impact through its many benefits. Web3 digital identities are a core piece for users to interact with blockchain applications.

Shane: *That is an interesting point regarding innovation, and how organizations can leverage blockchain technology to their benefit. Raedene?*

Raedene: To add to what Don says, in Web3 there are name collisions and confusion with alt root names calling themselves domains but they are not part of the internet of TLDs. If you secure the matching TLD this removes this risk.

Shane: *That is a great point, name collision is an issue in the space that can cause issues and to mitigate that owning both the Web3 and Web2 version helps.*

Don, what is the background on the .locker assignment from Dish Corporation to Orange Domains and what was the contracting process with ICANN for Orange Domains like?

Don: .locker was awarded to Dish Corporation in the last round of nTLDs back in 2012. As a JV partner, it was decided Orange Domains would acquire .locker and go through ICANN's process to transfer it to our registry. Since .locker was never launched and had no restrictions, the transfer process with ICANN was fairly straightforward.

Shane: *With that background, what led you to bridge the .locker TLD between Web2 and Web3?*

Don: There is a gap in the market that .locker fills — a simple solution mapping domain names to bitcoin digital identities. .locker allows users to have all of the wonderful features traditional domains on DNS offer, like a website and email and through trusted ICANN accredited parties, users can also claim their corresponding bitcoin naming system Web3 digital identity through a curated onboarding process.

Shane: *Rena, .locker Web3 digital identifiers are minted to the Bitcoin blockchain, there are multiple blockchains that have digital identifiers enabled such as Polygon and Ethereum so what are the benefits of a .locker digital identifier on the Bitcoin blockchain? What should users know about the Bitcoin blockchain?*

Rena: The benefit is the Bitcoin blockchain itself. Users want the sound fundamentals, network effects and utility that Bitcoin provides, while not losing the

innovation we've witnessed on other chains. So .locker provides that digital identifier benefits you mention from Polygon or Ethereum, all while being built around the ethos of the world's most stable, secure and decentralized blockchain.

Shane: *I find the usage of the Bitcoin blockchain and it's benefits unique, up until now there's been a lot of projects launched on the Ethereum blockchain and ENS.*

So Rena, how does a user claim their .locker Web3 digital identifier?

Rena: I find it unique the usage of the Bitcoin blockchain and it's benefits, up until now it's been a lot of projects launched on the Ethereum blockchain and ENS.

Shane: *Security is one of the issues end users have in the Web3 space, that said, what securities are in place at Trust Machines to help the owners protect themselves?*

Rena: Security is an interesting discussion in Web3. Bitcoin is perhaps the most secure and decentralized solution for users, but with that comes the education piece. The more secure we make something, and the more independence a user has over their assets, the more ownership a user has to have over doing their own research to understand how to maintain that security. With .locker, we are building out a wealth of Web3 educational resources to help every user do their own research.

Shane: *Rena, I attended NFT.NYC in 2023 and heard an investor giving advice on a panel and he said, "When building in Web3, make your product or service look and act like Web2 but function in Web3." Do you have any thoughts on that statement? Do you agree or disagree? Why?*

Rena: There are a lot of positive aspects of Web2 user experience, which we should all be considering when building user-friendly services onchain. I do believe it is also important not to hide the benefits Web3 apps have over Web2 ones. We have to balance the comfortability of Web2 user experience, with proper education for people to take full advantage of what Bitcoin can offer them.

Shane: *I agree, education is a major point of user engagement and experience in Web3 and something we're working on at Markmonitor to keep our clientele as informed as possible.*

Raedene, how does Tucows fit into the .locker TLD with regards to the Web3 digital identifiers? Does the user need to interact with Tucows to manage their Web3 asset?

Raedene: As with all other domain names, registrants manage their domains through registrars. In this case of .locker, Orange Domains is supporting the Web3 digital identities. Registrars have customer

services, and the online resources to manage their accounts, payments, renewals and any additional services. The role of Tucows Registry is to ensure that all those domains work and each domain name is unique and registrars are managed globally.

Shane: *Raedene and Don, with the Web2 and Web3 versions being linked, what happens if a registrant decides to let their .locker name expire and delete? Does the Web3 version stay minted?*

Raedene: From the TLD side registrants can let names expire and delete and that will continue to be the case for .locker.

Don: Domain names and their corresponding Web3 digital identities are always in sync and have the same expiry dates. When a domain name expires, nothing happens to the Web3 digital identity UNTIL the domain name is deleted and returned back into the available pool to be registered. At that time, the Web3 digital identity is burnt, which renders it useless and a new one is minted upon a subsequent successful domain registration.

Shane: *So, the domain name and Web3 digital identifier go back into circulation essentially?*

Don: Yes, essentially that's how it works.

Shane: *So, Don, what is the vision behind .locker? How do you see this TLD being used both in the Web2 space and Web3?*

Don: First, .locker is for Web3-Ready and Web3-Curious audiences. The primary audience is for individuals who want to buy, trade cryptocurrencies, content creators who want to expand their audience with Web3 social apps and utilize Web3 rewards and gamers who tend to be online most often and early entrants into Web3.

The secondary audience are businesses for Web3 innovation, brand alignment, and marketing with loyalty and rewards programs through NFTs. and companies who want to embark in using blockchain technologies.

Having a Web2 presence to consolidate content on a website or blog, an email address for communication, and the corresponding Web3 digital identity, is an all encompassing end-to-end solution for our target audiences.

Shane: *Rena, Trust Machines is one of the biggest organizations building on the Bitcoin blockchain, what areas are you looking to grow in and is there future for collaboration with the traditional DNS?*

Rena: There are a lot of exciting paths to explore for us in the traditional DNS space. Through the Orange Domains brand, we will continue to develop what .locker can do for users, with the Bitcoin Name Service community we will continue

to support and grow the Web3 side of domains, and in the future don't be surprised if you see more domain offerings from us or bespoke solutions for other TLD operators.

Shane: *Don, we've spoken about hybrid coexistence between Web2 and Web3, and it's something that I've written about in the past for Markmonitor. It is something gaining traction with regards to the next round of New gTLD applications — so the question is, how do you foresee Web2 and Web3 working together going forward? Where does .locker fit into this? And finally, do you have any predictions on how the next round of New gTLDs will be handled with regards to the Web2/Web3 applications?*

Don: We don't know for sure how Web2 and Web3 will work together moving forward. These are two different infrastructures, cultures, and utilities. However, it is in the best interest of ICANN and Web3 communities to find solutions to bridge these technologies for a better future. .locker is the first of many solutions Orange Domains will offer.

Though we don't know how the new gTLDs will be handled by ICANN with regards to the Web2/Web3 applications, we hope there is strong consideration for how these ecosystems can be bridged to work more seamlessly with one another.

Shane: *I tend to agree with that, a decision on how Web3 will be handled in the next round is paramount for the future.*

As a follow-up to the question above, Don, what is something that the average Web2 user needs to know about Web3?

Don: Web3 is part of the evolution of how we interact with technology through decentralization, offering more ownership and control. It will continue to grow, improve, and play a vital part in our everyday lives.

Shane: *In closing, is there anything else you'd like our audience to know about your organization, .locker, or Web3 in general?*

Don: .locker is just the start for Orange Domains. With decades of experience in both Web3 and Web2, we plan to continue to experiment and explore the possibilities of introducing new users to the expanding part of the internet we refer to as Web3.

Shane: *Thank you all for being here, your insights are incredibly valuable, and we look forward to seeing the innovation that .locker brings to the traditional domain space and Web3.*

1. orangedomains.com
2. trustmachines.co
3. tucows.com
4. my.locker
5. my.locker/blogs/introducing-locker-bitcoin-web3
6. my.locker/blogs/introduction-web3-identities

The Minting Process in Action

Minting is the name for the process of creating unique tokens, or blocks, on Web3 blockchains. NFT Minting is specific to the process of creating a unique block that represents an individual asset, like a Web3 domain. During the process, that individual asset is assigned a unique identifier that is recorded to the blockchain so as to verify its authenticity and ownership.

/04 The Minting Process in Action

/01
User request/initiates transaction

/02
Requested transactions transmits to the peer-to-peer computer network (nodes)

/03
Nodes validate the transaction using their consensus mechanism(s)

/04
Once confirmed by the majority of nodes as valid, a new block of data is created

/05
The new block of data is appended to the end of the blockchain, becoming virtually impossible to alter or corrupt

/06
The transaction, now recorded in the blockchain ledger, is complete

The Traditional Web2 Internet and Web3 Crossover

Introducing Our Web2/Web3 Lineup

As the world of domain names continues to expand and evolve, innovative ideas start coming to fruition. One such idea is that of interoperability between Web2 and Web3, a crossover (or for the *Glee*[1] fans out there, a mashup of sorts). Some traditional DNS gTLD registries have made the jump to duplicating their gTLDs on the blockchain. So, let's look at this as if it were a baseball team. Crossover between Web2 and Web3 is the goal for this makeshift team we've put together, just as any team would work together in sports to achieve a common goal. Each player on the team has their part to play in achieving this goal, and in this case it's the specific gTLDs and registry operators that have parts to play.

Order	Player	Position
1	.xyz	Leadoff Batter
2	.luxe	Two-Spot
3	.kred	Three-hole
4	.cfd	Cleanup
5	.art	Heart of the Order
6	.box	Heart of the Order
7	.locker	A Different Approach
8	tbd	On the Horizon
9	tbd	On the Horizon

/05 The Traditional Web2 Internet & Web3 Crossover

① Leadoff Batter

Leading us off, we've got .xyz — .xyz is in the leadoff spot because it was the first gTLD that worked to bridge the gap between the traditional DNS and Web3.[2] This gTLD launched in March 2014, and as the gTLD evolved from their initial launch, the registry enabled .xyz domains with Ethereum (ETH) wallets in September 2018. This marks the first case of gTLD enablement on the blockchain ecosystem through DNSSEC integration with the Ethereum Name Service.[3]

② Two-Spot

In the game of baseball, the leadoff batter sets the table for the two-spot batter. In most cases it's the two-spot's job to enhance what the leadoff batter has done. Batting second from the traditional DNS model is .luxe.[4] With the .xyz integration leading off with a single for Ethereum Name Service (ENS) integration, .luxe was set up to follow suit as the "first natively ENS enabled" Web2 gTLD. The .luxe gTLD was created to allow end users the ability to link their .luxe name as a wallet shortener, connect to decentralized apps (dApps), or to whatever you want.

③ Three-Hole

With the table being set by .xyz and .luxe, our three-hole of today's matchup is .kred.[5] The three-hole's responsibility is to drive in the leadoff and two-spot batters to score runs for the team and to set the table for the cleanup batter. This gTLD was launched in early 2015 and the registry operator chose to expand the .kred offering to allow for DNS records for the Web2 domain to be stored on the ENS records of the Web3 domain, essentially a Web2 .kred and a Web3 .kred would have the same records associated to them.

④ Cleanup

Batting cleanup for our makeshift domains lineup is .cfd[6] (or "Clothes, Fashion, & Design" for those not familiar with it). The .cfd gTLD followed suit as the first three batters in our lineup with an ENS integration that allowed for .cfd domain names to be used as wallet address shorteners. In essence, this reason is why domains were created in the first place — to remove long IP address strings from browsers and replace them with human readable characters that are easily remembered and navigable. As the name suggests, "cleaning up" refers to cleaning up the long wallet addresses that are associated with wallets, for example replacing "0xf7005e56457E6E9DE690cbD9F4F68b50804Ddc91" with "mywallet.cfd".

⑤ Heart of the Order

Our RBI (Runs batted in) machine filling in the fifth spot in our lineup is .art. In the sport of baseball, runs are what win the game and RBIs are the statistical way of measuring a players ability to score runs. With it's most recent integration with ENS in March 2023, .art is offering matching and linked ENS and DNS domains.[7] Registering domainshane.art through the traditional DNS matches exactly to domainshane.art in the ENS ecosystem. This measured matching serves to be collision proof as "only the owner of a DNS .art domain can register the matching ENS .art domain. Similarly, if an ENS .art domain is registered for an available DNS .art domain, only the person who owns the ENS .art domain can use the DNS .art domain. This ensures that there can be no confusion or conflict between different owners of similar names."

⑥ Heart of the Order

Next up, in the sixth spot, is .box.[8] The .box gTLD launched natively on the Ethereum Layer 2 OP Mainnet.[9] With registration of the Web3 NFT domain, an exact matching ICANN domain is assigned to the registered owner of the Web3 NFT domain. In this case, domainshane.box on the OP blockchain would automatically be allocated domainshane.box in the Web2 space. These names are bundled together with the Web3 NFT domain .box being the "parent" domain that controls what happens to the Web2 .box domain. Additionally, Intercap has released an application, my.box, that will allow for full management of the Web3 NFT domain and for Web3 NFT .box domains to host content in the Web3 space.

> *We want to be the naming system for every digital resource in the world.*
> *-Nick Johnson, Founder, ENS*[10]

⑦ A Different Approach

Step up to the plate, .locker. The seven-hole batter in our lineup is shaking things up, as the seven-hole does. The .locker domain, which launched in June of this year, set about to integrate with a different blockchain. Now, the Bitcoin blockchain steps in[11] — .locker is the first traditionally launched new gTLD to create exact matching .locker Web3 domains. When a .locker domain is registered through the traditional DNS its registry, Orange Domains, will send an email to the corresponding registrant email address to register/mint the exact matching Web3 digital identity of .locker.

⑧ & ⑨ On the Horizon

What TLDs will round out the 8 and 9 spot on our baseball team is to be determined in the future. Both spots present commercial opportunities for registries and new avenues to be found in the Web3 space, especially in light of ICANN's Next Round of New gTLD applications.[12]

In my opinion, ventures like batters 1-7 in our lineup will continue to grow — the crossover space is an untapped market, and traditional Web2 registries are recognizing and filling that need and catching on to the trend. Now, will we see .com enter the Web3 space? Probably not. But for some gTLDs whose market seems to have become stagnant and aren't seeing growth to scale, replicating their TLD in Web3 may be a way to generate more buzz.

The next round of new gTLD applications will be upon us before we know it — we're only 2 years away from the application phase. Organizations are creating action plans to apply for their new gTLDs in the next round, and as such, entities like Unstoppable Domains[13] and D3[14] have made clear their intentions to apply for Web3 matching gTLDs in 2026.

Applications for matching Web2/Web3 TLDs make sense; it removes the issue of collision between two spaces for brand owners and allows for coexistence between the two internets. Connecting infrastructures through a singular point as the registry operator enables cross compatibility that couldn't exist previously.

For interoperability between Web2 and Web3 to exist, the exact match TLD in the DNS will need to be delegated and operated by the Web3 entity controlling the Web3 TLD.

The game of baseball is a long game, both from a time perspective and nuances that exist within the game. Web2 and Web3 crossover is also a long game, from an adoption and usage perspective. We're just at the beginning of this innovation, with the next round of new gTLD applications in 2026 potentially creating waves in how domains function and the usage between each internet. With each member of our team building off what the other has done, contributing to an end goal of hybrid coexistence between Web2 and Web3. Batters 1-7 setting the table for batters 8-9 to move the concept of Web2 and Web3 crossover forward, and potentially hitting that big home run.

/05 The Traditional Web2 Internet & Web3 Crossover

1. imdb.com/title/tt1327801
2. markmonitor.com/report/gtld-report-q3-2023
3. circleid.com/posts/20230427-a-brief-history-and-recent-developments-in-the-co-existence-of-web2-and-web3-domains
4. weka.medium.com/introducing-luxe-on-ens-35a9ee2383ce
5. docs.domains.kred/docs/kred-domain-tokens-extending-dns-and-ens
6. shortdot.bond/new-domain-extensions-perfect-for-your-ens-wallet
7. art.art/blog/art-launches-matching-ens-and-dns-domains-for-the-web3-world
8. theblock.co/post/290373/ethereum-name-service-integrates-with-browser-compatible-box-web-domains
9. markmonitor.com/blog/box-web2-web3-interoperability
10. youtube.com/watch?v=2IU5YzI66aM&ab_channel=TheDefiant-DeFi%2CWeb3%26NFTInsights
11. my.locker/blogs/introducing-locker-bitcoin-web3
12. newgtldprogram.icann.org/en/about
13. unstoppabledomains.com/blog
14. d3.inc/blog

Safeguarding Web3 IP:

Security and Asset Management

How should brands manage and secure their Web3 IP, like blockchain domains?

In Web2, domain registrars allow for brands and individuals to register their domain names and offer client portals and tools, like Registry Lock, to manage and secure those same domains. So, how does it work in Web3?

As we've discussed, Web3 is built on blockchain technology. Web3, or NFT domains, can't be managed via the same methods as a traditional Web2 domain is managed. And yet, it's no less important to safeguard and secure your Web3 domains than it is to protect your more traditional Web2 domains.

In this article, we're going to explore the concepts of wallets, keys, and custody, all integral components to keeping your Web3 IP secure. We'll also explore some of the major players in the Web3 space that Markmonitor has partnered with to safeguard your assets.

What is a Web3 Wallet and Why Are They Necessary?

In Web3, a wallet is used much like your regular wallet is — to keep your important assets secured. Except in Web3, wallets contain your IP assets, such as your NFT domain(s). Wallets can be either digital or physical. You may hear terms such as "hot wallet" and "cold wallet." The former refers to wallets that are connected to the blockchain and the latter refers to wallets that have a degree of separation between them and the blockchain. Cold wallets provide an additional layer of security to asset and brand owners because they cannot be easily accessed, think of them more like a traditional safe. Keep in mind that if you have a physical cold wallet, you will need to protect that physical asset like any other physical item of importance so that it remains secure — no leaving it laying around where anyone could find it and walk off with it.

To conduct any transactions in Web3, wallets are a must-have. They can be used to access and manage other assets in addition to domains, like cryptocurrency, smart contracts, and the like. Unlike an average wallet, in Web3, you'll need keys access your wallet(s).

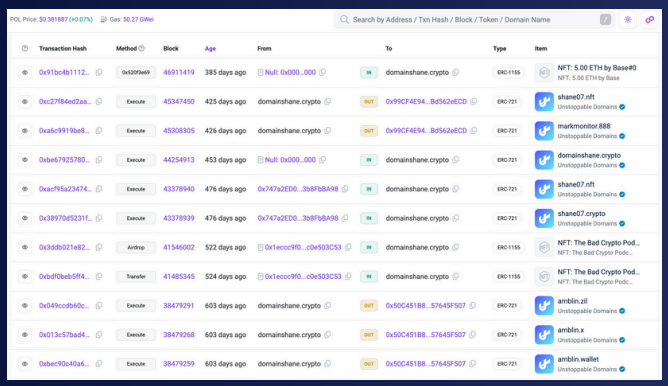
Understanding Private and Public Keys

Every wallet has a pair of cryptographic keys, one private and one public.

The private key is a unique code that should never be shared. Private keys are what enable access to wallets and the ability to transfer or sell your digital Web3 assets. Think of them kind of like a personal identification number, or PIN. When you conduct transactions with your credit or debit cards, you usually have to provide your PIN to prove that you are the rightful owner of that card, even if you

know the card numbers. Private keys function similarly to that PIN.

There are also public keys, and they're unique to you as they're a form of digital identifier, like a username would be. However, public keys are exactly that — public. They can be seen in Web3 transaction ledgers, like you see in the image below. This means that anyone who recognizes your public key can keep an eye out for the transactions you conduct in Web3.



Screenshot from polygonscan.com

Public keys prove that transactions in Web3 were conducted by specific wallets (or digital identities), and indicate what wallet initiated and/or completed the transaction. However, you'll also need your private key to prove ownership of any of your assets. They are also used to "sign" transactions that are minted to the blockchain. It's important that you remember that only a wallet owner should know the private keys, otherwise anyone may pretend to be you and conduct Web3 transactions with your assets — and there will be no way to otherwise prove that they aren't you.

Trusted Partners in Web3 Security and Asset Management

Now, at this point, you're probably thinking, "I work at an enterprise company. How is just one person supposed to keep control of the keys to our wallets?" And that is a very good question. It's never a best practice to have the "keys to the kingdom," so to speak, in one person's hands when they're business-critical assets. By doing so, you open up your business to a single point of failure — if that person leaves the organization or suffers a catastrophe, your Web43 business assets go with them.

That's where Markmonitor and our trusted partners can help. We've partnered with BitGo and MetaMask Institutional (MMI) to provide our clients with the most secure NFT domain management and wallet custody solutions available in the Web3 industry.

To conduct any transactions in Web3, wallets are a must-have. They can be used to access and manage other assets in addition to domains, like cryptocurrency, smart contracts, and the like. Unlike an average wallet, in Web3, you'll need keys access your wallet(s).

BitGo and Markmonitor

Having been around for over a decade, BitGo is a veteran in the Web3 blockchain

infrastructure and custody space. Their goal is to enable businesses to step into Web3 in a safe and compliant manner.

Their co-founder Mike Bell is well-versed in the internet industry — remember NetScape? He was an early employee there, helping with their move to Google and with the buildout of the Google Chrome engine that many of us use today. Back in 2013, he recognized that there was no truly secure way to hold blockchain assets. So, he developed a solution — BitGo — and pioneered a multi-signature wallet technology as a means of holding Web3 assets in a secure manner.

Beyond that, BitGo recognized the need to prove their trustworthiness and security so that it could be adopted by institutional and corporate enterprises. In 2018 they were recognized with a South Dakota trust charter, making them the first purpose-built qualified custodian for digital assets, like NFTs or Web3 domains. Since their inception they've grown to work with clients across many segments, such as institutional investors like hedge funds and asset managers, and the more B2B to C type of clients as well, like payment processors and exchanges.

So, how do they keep a corporate enterprise's Web3 assets secure? Their multi-signature model means that your business has more than one private key, or single point of failure. They use a three key system, where at least two of the three private keys need to come together in order for transactions to be validated and confirmed. In their history, they have had no losses, thefts, or breaches of client assets.[1]

Markmonitor offers qualified custody solutions to our clients, meaning that we help our clients acquire their Web3 domains and assets and work with BitGo who acts as a custodian of those assets, private keys, and for management of our clients' cold wallet storage.

MetaMask Institutional and Markmonitor

MetaMask Institutional (MMI) is another well-known and respected name in Web3 and blockchain security.

MMI acts as an access point to allow qualified custodians (like BitGo) to connect with Web3 marketplaces and registrars, like OpenSea, the Ethereum Name Service, and Unstoppable Domains. They're owned by Consensys, which has been around since the first Ethereum block chain was mined. It was founded by Joe Lubin, one of the co-founders of Ethereum, and they've been fortunate enough to partner with some of the biggest companies in the world, like JP Morgan, MasterCard, and Microsoft. They're also Soc 2 Type 1 certified, and in the process of receiving their Soc 2 Type 2 certification, and are annually pen tested by third party auditors.

By acting as an access point to qualified custodians, they essentially allow any securely custodied asset to be deployed

or interact with other Web3 protocols as needed by the business who owns them. This ability is important if you plan on leveraging any of your Web3 assets instead to just securely holding them.[2]

Their partnership with Markmonitor allows Markmonitor to easily and effectively manage the accounts of our many institutional partners and clients while providing great visuals, insights, and transaction ledgers to keep track of all transactions.

Keep Your Web3 Domains and Assets Secure with Markmonitor

Through our partnerships with BitGo and MMI you can rest assured that your business assets and IP are safe with Markmonitor. We've implemented multiple best practice security procedures as part of our enterprise wallet custody service, including:

- IP Address Whitelisting
- Blockchain Address Whitelisting
- Multi-Factor Authentication
- Secure Admin Access Protocols
- Administrative Transaction Approval
- Multi-step Identity Verification
- Designated final Approvers

If you have any questions about keeping your Web3 IP secure, don't hesitate to reach out to your Domain Portfolio Advisor or Markmonitor Account Manager, we're always here to help.

1. markmonitor.com/webinar/web3-brand-security-asset-management-recording-transcript
2. Ibid

Glossary: Web3 Terms

/07 Glossary: Web3 Terms

Bitcoin Name Service
A decentralized naming database that allows users to register and manage their own .btc Web3 domain names that are associated with their wallets.

Blockchain
A shared and immutable ledger maintained by a peer-to-peer network (nodes) that records Web3 transactions

Blockchain Domain
Refers to a domain name that is minted on a blockchain. Also known as a Web3 or NFT domain.

Cryptocurrency
A type of currency that's digital and decentralized, i.e., not backed by any particular centralized power. Can be used transactionally or as a long-term store of value.

Custodian
The entity responsible for managing the private keys and access to a client's/user's Web3 wallet.

Domain Name System (DNS)
A systematic form of information architecture that converts IP addresses to human-readable domain names. This naming system is what we colloquially refer to as "Web2" or the "traditional Internet."

Exchange-Traded Fund (ETF)
A fund that owns shares of businesses that work together (in this case, on Web3) and benefit or gain from the development of it.

Ethereum Name Service (ENS)
Built on the Ethereum blockchain, ENS is a decentralized and open-source tech. It creates a mapping system bewteen Ethereum addresses (64-character hex string) and human-readable domain names (brand.eth).

Fiat
Currency, specifically legal tender, whose value is tied to a government-issued currency, like the U.S. dollar.

Gas Fee
A fee calculated in ether, the native cryptocurrency of the Ethereum network. Gas fees are charged by and paid to the Ethereum network whenever one uses it transactionally.

Mining
The process of verifying transactions on the blockchain network, done by miners using powerful computers to add new blocks to the blockchain.

Minting
Publishing an NFT, like a Web3 domain, to a blockchain via a wallet to gain full custody of the domain.

/07 Glossary: Web3 Terms

Non-Fungible Token (NFT)
Unit of value that represents ownership of a unique digital item(s), like domains or collectibles. NFTs are stored on blockchain technology.

OpenSea
A marketplace where one can browse, create, buy, sell, and auction NFTs.

Smart Contract
A computer code that automatically executes all or parts of an agreement and is stored on a blockchain-based platform. The code itself is replicated across multiple nodes of a blockchain and therefore, benefits from the security, permanence and immutability that a blockchain offers.

Unstoppable Domains
A Web3 domain name registrar that enables users to create blockchain domains and decentralized websites.

Wallet
A means of storing and exchanging NFTs, like domains, and cryptocurrencies. They can be hot or cold. Hot wallets are live, i.e., connected to the internet and online. Cold wallets are not live — they are offline by virtue of physicality or storage on a platform not readily-connected to the internet.

Web2
See definition of “Domain Name System (DNS)”

Web3
An emerging iteration of the Internet. Unlike Web2, or the traditional DNS-based Internet, Web3 is built on blockchain technologies and powered by peer-to-peer networks, it is decentralized.

Markmonitor™

Should you need any further information or assistance, please contact your Domain Portfolio Advisor (DPA) or email customer.service@markmonitor.com

Markmonitor provides strategic domain management solutions that help protect the revenue and reputation of the world's leading brands.

Since 1999, Markmonitor has served the domain portfolio needs of businesses around the globe, including many of the most visited websites in the world. An ICANN accredited domain registrar since its establishment, Markmonitor leverages its extensive industry relationships, innovative technology, and broad expertise to manage and protect company domain portfolios, all with data-driven, white-glove consultation designed to maximize domain portfolio value.