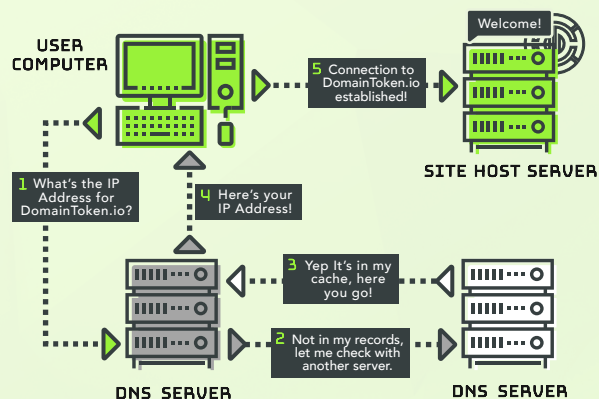


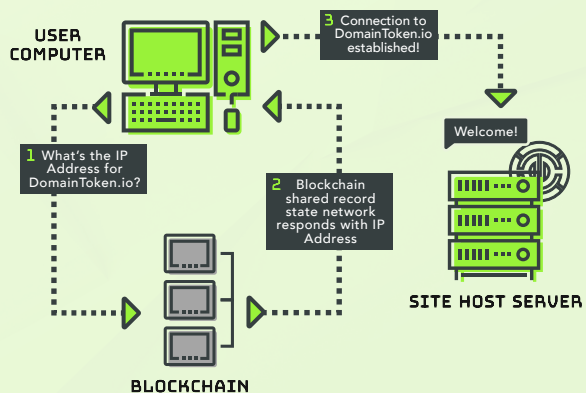
ICANN IS THE GOVERNING AUTHORITY OF DNS.

While DNS originally started off as a more local, distributed system, vulnerabilities encountered early on, such as rogue servers, led to the centralization of its management which shaped the industry in ways that have persisted to this day. Commerce and activity on the internet relies heavily on trusted third parties. And few at that.

CURRENT DNS TRAFFIC



DOMAIN TOKEN NETWORK TRAFFIC



DOMAIN TOKEN IN THE CONTEXT OF

embermine

Embermine is a decentralized, creative commerce platform that provides creative entrepreneurs a network of talent and purpose, programmable contracts that reduce friction in collaboration, automated revenue/royalty share, granular distribution methods, a persistent monetization model, provenance of creative assets, and other capabilities which give individuals more agency and sustainability in their endeavors.

While the current demo of Domain Token is an Ethereum construct intended as proof of concept, the goal of the project is for it to be the method by which projects and individuals on Embermine (with the Techne Protocol) can manage their name assets to further augment and secure their personal capabilities and branding of their projects.



an embermine project | embermine



DOMAINTOKEN.IO

EMBERMINE.COM

DOMAIN [DOH-MEYN] NOUN. (LAW)

LAND TO WHICH THERE IS SUPERIOR TITLE AND ABSOLUTE OWNERSHIP.



DOMAIN
— TOKEN —

MASTER OF YOUR DOMAIN

an embermine project | embermine



PROBLEMS WITH THE CURRENT DNS MODEL

- DIFFICULT SET OF INITIAL CONDITIONS
- INFLUENCED BY CUSTODIANS OF THE SYSTEM
- CARTELIZATION
- SUSCEPTIBLE TO DOMAIN "SQUATTING"
- IDENTIFIABLE ROOT ZONE
- LACK OF P2P MARKET
- GROWING PAINS WITH SCALABILITY
- RESOLVES ONLY TO IP ADDRESSES
- BUILT WITHOUT SECURE IDENTITY LAYER
- NOT FIT FOR MULTI-MODAL RESOLUTION
- ARBITRARY PRICING MECHANISMS
- MIXED REALITY TECH EMERGING

DOMAIN STATISTICS

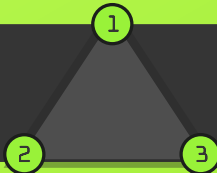
330.7

Domain name registrations across all TLD's through Q3 in 2017

1.1%

Year by year growth of domain name registrations

SOLVING ZOOKO'S TRIANGLE



Zooko's triangle is a trilemma of three properties that are generally considered desirable for names of participants in a network protocol.

- ① **Human/Meaningful:**
Meaningful and memorable (low-entropy) names are provided to the users.
- ② **Secure:**
The amount of damage a malicious entity can inflict on the system should be as low as possible.
- ③ **Decentralized**
Names correctly resolve to their respective entities without the use of a central authority or service.

All 3 properties can be secured

with a neutral source of truth in the persistent, shared record of a **blockchain**, which can provide:

- SHARED STATE ENFORCED BY INGRAINED PROTOCOLS
- LACK OF CENTRAL VULNERABILITY IN THE BACK END
- BYZANTINE FAULT TOLERANCE ; RESILIENCE
- CRYPTOGRAPHICALLY VERIFIABLE DATA
- PROVABLY UNIQUE INTANGIBLE ASSETS
- VERIFIABLE, SECURE PROPERTY RIGHTS
- IDEAL FOR SUPPORTING SCARCE OBJECT MARKETS

THE DOMAIN TOKEN ALTERNATIVE

Rather than define a new, universal technical standard, the project proposes an alternative that can utilize the current DNS system as well as other addressable protocols. One's domain on the internet is multifaceted. It should be treated as such.

The goal is to provide a method for people to manage their name assets, which is approached differently than strictly DNS. Names on the internet have power and value in many contexts and this should be managed client side as much as possible. Decentralized markets are possible, so people could become their own registrars if the tools are available.

BENEFITS OF THE DOMAIN TOKEN SYSTEM



Shared state, rather than centrally managed records



Personalized, digital rolodex



Minimal cost to entry



Implications outside of strictly IP addresses (email, blockchain addressing, cloud storage, other addressable protocols)



Cryptographically unique and secure



Can be logged and transferred



Expands the frontiers of domains with the possibility of multi-modal resolution (unique symbols)



Eventually leads to users running their own local DNS