Decentralized DNS: What is it good for?

Published on July 19, 2024 | Edit post | Del

I am a curious person. A pretty frequently curious person. Of course, I am curious about some things in technology more than others, such as energy efficiency, and internet infrastructure. My interest in decentralized DNS goes as far back as the late 00's, although I have used computers since the late 80s.

In 2009, the presidential election in Iran was my first real exposure to reading about censorship in real time. Twitter, back then, was an ad-free experience, and a pleasant one at that. One could read tweets from users around the world, without knowing where they were-some of this was intentional, and others, unplanned.

Due to the contested election, internet services were shutdown, and geolocations were anonymized or unified to help prevent users from determining who was actually in Iran's timezone. For example, the Iranian Green Movement was also termed the "Twitter Revolution," because of the number of green-colored backgrounds/avatars indicating a twitter account in support of Iranian citizens, making searching for accounts like a needle in a haystack.

As I was in my mid-20s by this time, I hadn't exactly grown out of my university mind, where my default mode of thinking is curiosity. While my university career was not yet over, I had continued to probe into emerging technological and political trends shaping the world- this was before the 2011 Arab Spring.

Some tools I had discovered then, were YaCy, a distributed search engine; identi.ca (a federated microblogging service), and a number of other free and open-source tools. I soon realized, of course, that a network effect was really what makes or breaks a community. If no one is on a platform, it doesn't often (or really) matter if it's superior in various technical ways.

Around late 2012, after not wanting to work for over a year, decided I needed to "grow up" and find a 9-5 job. I had become too consumed in my idealism, and whatever I read didn't have a direct path to a stable career. As much as I found many things fascinating, I could not list them in any cogent way on a resume. How I managed to do this for nearly 6 years after my bachelors occasionally baffles me. After looking back nearly 18 years from graduation, I am starting to wonder similar things.

Is society just not interested in the future? Why is Web3 a blockchain? Why not just a lightweight and non-blockchain Web3? DNS, of course, is the least of my worries- it's not even a major research interest of mine. But many of the earliest ideals of the internet were shaped by decentralized structure of ARPANET and other networks. It can be said that, the goal of internet research is to make a more Global Village (as McLuhan once described). This was not viewed by McLuhan and other theorists necessarily as a positive, but as an opportunity to increase communication where it might benefit. Obviously the good can't always arrive without the bad, and much of that can be unforeseen.

What then, is meant by future? Space ships and moon bases? Or simply a more peaceful world? With more powerful smartphones, the opposite appears to be true. Minds are becoming more narrow-thinking, when the capabilities of 5G cellular towers are able to transmit even more data than ever before. Why then, have people become so tribal and thick-headed? Strongmen and pariahs, or inability to think critically due to societal values? Why do people believe strong leaders will help them more than working with their peers?

If the latter were possible, then DNS would not require as much centralized trust and certificates, since there would be sufficient local trust networks to verify an internet packet/route. I am using very non-technical concepts, and some of these figures of speech are not specific to actual trust authorities as used in SSL certificates.

The benefit of DNS is a universal and easy to access mega-network- the world wide web. The downside is reliance on more centralized systems. In stable and non-corrupt societies, this is not a major issue. In highly censored and surveilled ones, it limits and suppresses freedom.

I write this blog because I still think about the 2009 election that I watched from across the globe, wondering how little of an impact a single person had, yet could observe an entire society's internet access throttled due to a contested vote count.

Of course, I hadn't *not* thought how foreign countries' willingness to assist Iranian citizens might be perceived as interference, and how intervention by foreign nations in my country may be construed/resisted with double standards.

I guess the question remains is, whether decentralized internet becomes not just feasible, but necessary, whenever democracy is in danger. Whether it's too early to suggest that doesn't seem to be the case.

Subscribe via RSS / via Email.

Powered by mataroa.blog.