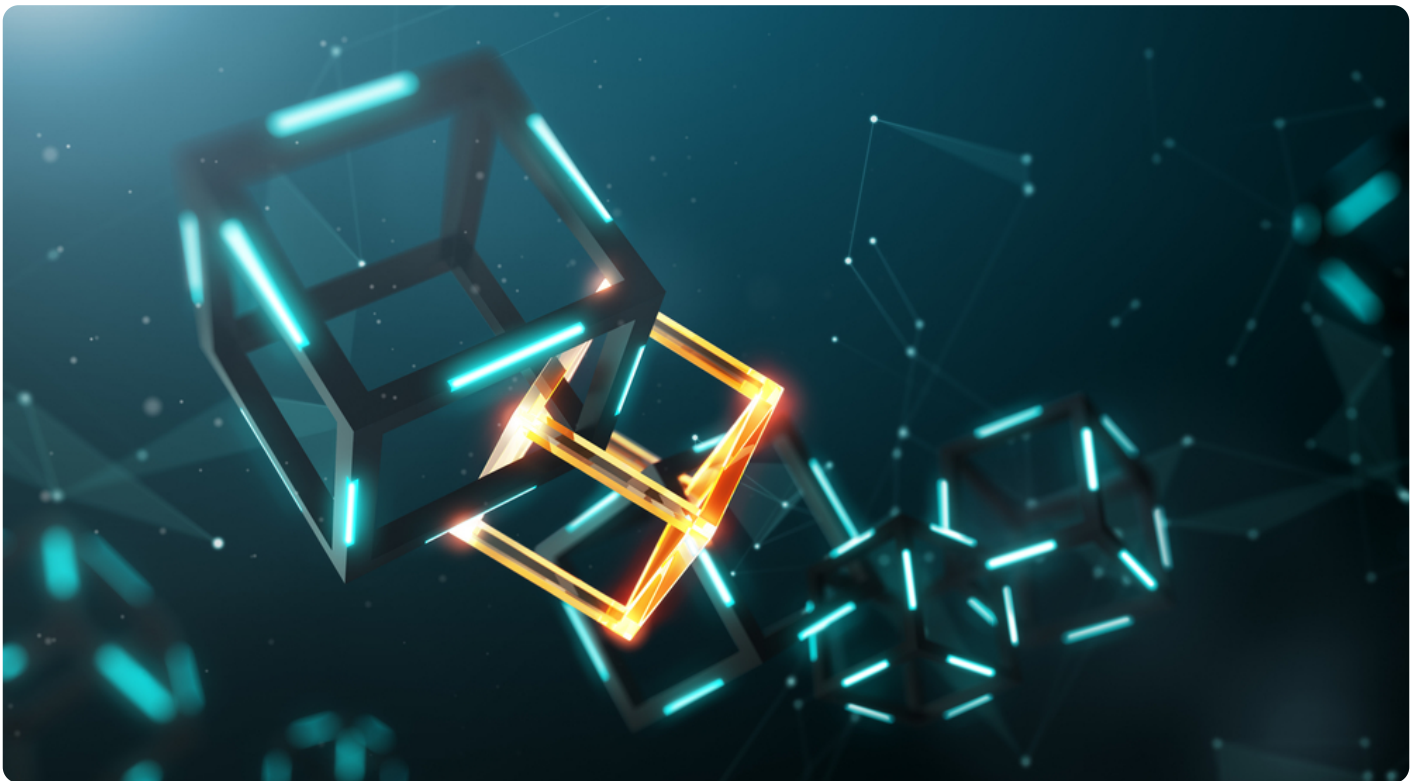


Blockchain Domains: What Are They? How Do They Work?

Posted on June 3, 2021



If you've heard the news about the [Disaster Girl meme](#) going for \$500,000 as a nonfungible token (NFT), then you know that the blockchain is becoming increasingly more common in people's lives. The technology is felt in finance, music, and insurance, among many other sectors.

Blockchain applications also go beyond cryptocurrency and NFTs, and are now starting to penetrate the domain name industry in the form of blockchain domains. This post explores some of the details about blockchain domains, including what they are, how they differ from regular domains, and what they can do.

What Is a Blockchain Domain?

A blockchain domain is a type of domain name that is stored on the blockchain. Therefore, it is decentralized and is not stored on any particular server.

Some examples of blockchain domain zones or extensions are .eth, .crypto, and .zil. Blockchain domains using the .crypto and .eth extension names live on the Ethereum blockchain, while those under .zil fall within the Zilliqa blockchain.

Blockchain versus Regular Domains

The most apparent difference between blockchain and regular domains is that the former is decentralized, like any innovation built on the blockchain. Blockchain domains are stored on the owner's cryptocurrency wallet, so only he/she has control over them.

On the other hand, regular domains, such as those under the .com and .org zones, are regulated by the Internet Corporation for Assigned Names and Numbers (ICANN). A successful complaint or court order against the domain would generally require ICANN to hand it over to the complainant.

Owning blockchain domains is pretty straightforward, as whoever owns the keys owns the domain. The owner can sell it anytime, which entails passing on the key to the buyer. Losing the key would also mean losing the domain forever.

Another difference is that instead of resolving to Internet Protocol (IP) addresses as regular domains do, blockchain domains are tied to the owner's crypto address.

How Do Blockchain Domains Work?

People interested in owning a blockchain domain would need to purchase one from blockchain domain providers, such as Unstoppable Domains and Ethereum Name Service (ENS).

Aside from the cost of registration, buyers of blockchain domains stored on Ethereum would also need to pay a gas price. Gas price refers to the cost involved in executing a contract on the Ethereum platform.

Blockchain domain owners can build applications and programs on a blockchain domain, which can't be done with regular domain names.

However, users can't access blockchain domains using just any browser. They may need to use browsers, such as Brave, which supports *.crypto domains. Browser extensions that enable users to access decentralized websites are also available.

What Can Blockchain Domains Do?

Among the primary reasons for developing blockchain domains is to make cryptocurrency transactions more convenient. Furthermore, the content hosted on blockchain domains can't be censored since they are not stored on a centralized server. We'll discuss these blockchain domain functionalities in more detail below.

Streamline Crypto Payments

Crypto addresses are unique identifiers that determine the exact destination of a cryptocurrency payment. To receive cryptocurrencies, you need to give a sender your crypto wallet address, which could look something like **bc1qxy2kgdygjrqtzq2n0yrf2493p83kkfjhx0wlh**.

Admittedly, it would be difficult to relay this information over the phone, so most people send their wallet addresses through email or messaging apps. But the development of blockchain domains would eventually remove the need to pass on this information every time someone sends you cryptocurrency payments. All the sender needs to know is your blockchain domain name.

The concept is similar to PayPal.Me, which removes the need for senders to know your email address. All you have to give is your PayPal.Me link (i.e., paypal.me/yourname).

Streamlining crypto payments this way also makes the process more secure, since crypto owners may expose their wallet addresses to malicious actors by copying and pasting these into emails or instant messaging (IM) platforms.

Moreover, typing the whole address is tedious and prone to error, and giving the wrong address means losing crypto coins with no way of getting them back. But threat actors use clipboard hijacker malware to steal data, which could ultimately include your cryptocurrency coins.

Create Uncensored Websites

Censorship is still a point of discussion today, with some countries blocking certain types of content. With regular domains, governments would only need to ask Internet companies like Google to censor certain content.

However, the content hosted on blockchain domains can't be blocked, as they are stored in different places (wallets). Another reason why blockchain domains can't be censored is that no central authority controls them.

Blockchain domain technology is still in its infancy. To put it into perspective, there are more than 400 million regular domains, while the total blockchain domain registration volume is only about 1 million or so.

Blockchain domain developers are still refining the system, looking for ways to keep the gas prices

down. But it would be interesting to see how it will evolve and affect the Domain Name System (DNS) as we know it today.