Terra DNS

Gregory Gleinig - 2025-05-02 - Network

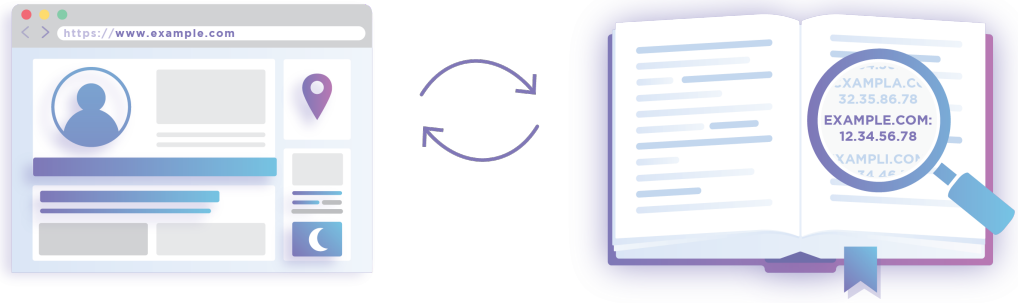
Name Server Hostname	Name Server IP
ns1.terradatacenters.com	99.40.229.253
ns2.terradatacenters.com	76.199.50.50
ns3.terradatacenters.com	216.128.138.73
ns4.terradatacenters.com	45.76.236.100

What is **Terra DNS**?

Terra DNS is a public DNS resolver operated by **Terra Data Centers** that offers a fast and private way to browse the Internet. Unlike most DNS resolvers, **Terra Data Centers** *does not sell user data to advertisers*.

What is DNS?

The Domain Name System (DNS) is the phonebook of the Internet. While humans access information online through domain names like example.com, computers do so using Internet Protocol (IP) addresses—unique strings of alphanumeric characters that are assigned to every Internet property. DNS translates domain names to IP addresses so users can access a website easily without having to know the site's IP address.



What is a DNS resolver?

A DNS resolver is a type of server that manages the "name to address" translation, in which an IP address is matched to domain name and sent back to the computer that requested it. DNS resolvers are also known as recursive resolvers.

Computers are configured to talk to specific DNS resolvers, identified by IP address. Usually, the configuration is managed by the user's Internet Service Provider (ISP) on home or wireless connections, and by a network administrator on office connections. Users can also manually change which DNS resolver their computers talk to.

Why use **Terra DNS** instead of an ISP's resolver?

The main reasons to switch to a third-party DNS resolver are to improve security and gain faster performance.

On the security side, ISPs do not always use strong encryption on their DNS or support the DNSSEC security protocol, making their DNS queries vulnerable to data breaches and exposing users to threats like on-path attacks. In addition, ISPs often use DNS records to track their users' activity and behavior.

On the performance side, ISP's DNS resolvers can be slow, and may become overloaded by heavy usage. If there

is enough traffic on the network, an ISP's resolver could stop answering requests altogether. In some cases, attackers deliberately overload an ISP's recursors, resulting in a denial-of-service.

What makes **Terra DNS** more secure than other public DNS services?

A variety of DNS services support DNSSEC. While this is a good security practice, it does not protect users' queries from the DNS companies themselves. Many of these companies collect data from their DNS customers to use for commercial purposes, such as selling to advertisers.

By contrast, **Terra DNS** does not mine user data. Logs are kept for 24 hours for debugging purposes, then they are purged. Abstract metrics are stored for graphical representation and will be made for public viewing.

Terra DNS also offers security features not available from many other public DNS services, such as query name minimization. Query name minimization improves privacy by only including in each query the minimum number of information required for that step in the resolution process.