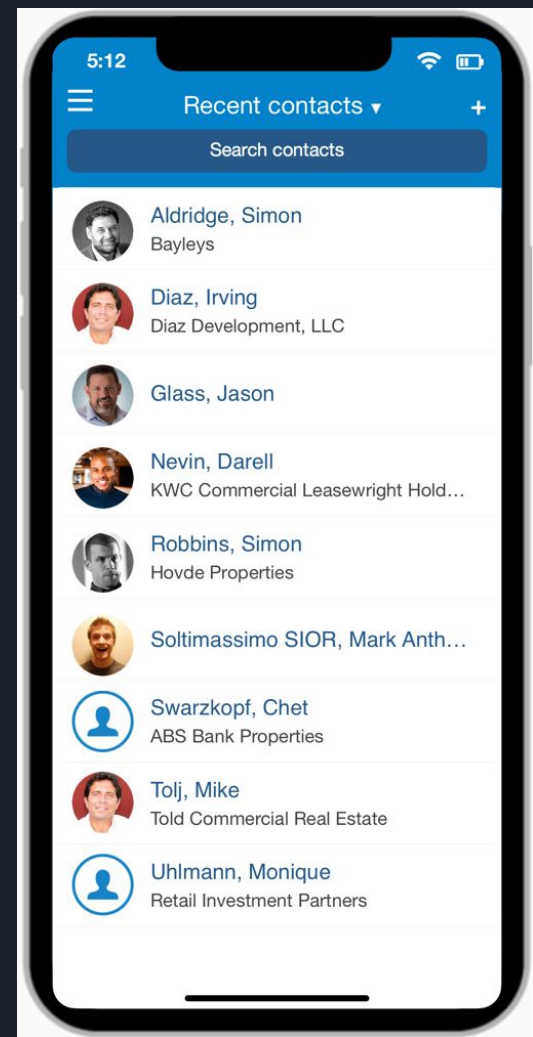# *DNS*

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Réalisation : Abderrahmane Merradou

Introduction :

When you want to call someone using your cell phone, it is highly unlikely you punch in the exact phone number. Instead, you load the contact list and search using the person's name. **DNS** does the same thing when you want to load a website.

What is DNS :

Domain Name System, or DNS for short, is what happens in the time between someone typing a URL into the search bar and the page loading. Technically speaking, it is **a process that translates URLs (like www.google.com) into IP addresses**

- It is much easier to remember to type `Google.com` into your browser than **108.177.11.105**
- When you want to visit a website, your computer needs to know the exact IP address; it does not care about the domain name.
- DNS keeps the record of all domain names and the associated IP addresses. When you type in a URL in your browser, DNS resolves the domain name into an IP address.
- In other words, **DNS is a service that maps domain names to corresponding IP addresses**

the importance of dns :

the latest report shows there were **367.3 million** domain names in the second quarter of 2021 and we would have been lost without DNS to resolve them into IP address

BLOG

Verisign Q2 2021 The Domain Name Industry Brief: 367.3 Million Domain Name Registrations in the Second Quarter of 2021

Today, we released the latest issue of The Domain Name Industry Brief, which shows that the second q...

DNS Lookup

URL: www.google.com | Lookup

IPv4 address for www.google.com

Domain Name Server IP: 108.177.11.105

Domain Name Server IP: 108.177.11.106

Domain Name Server IP: 108.177.11.147

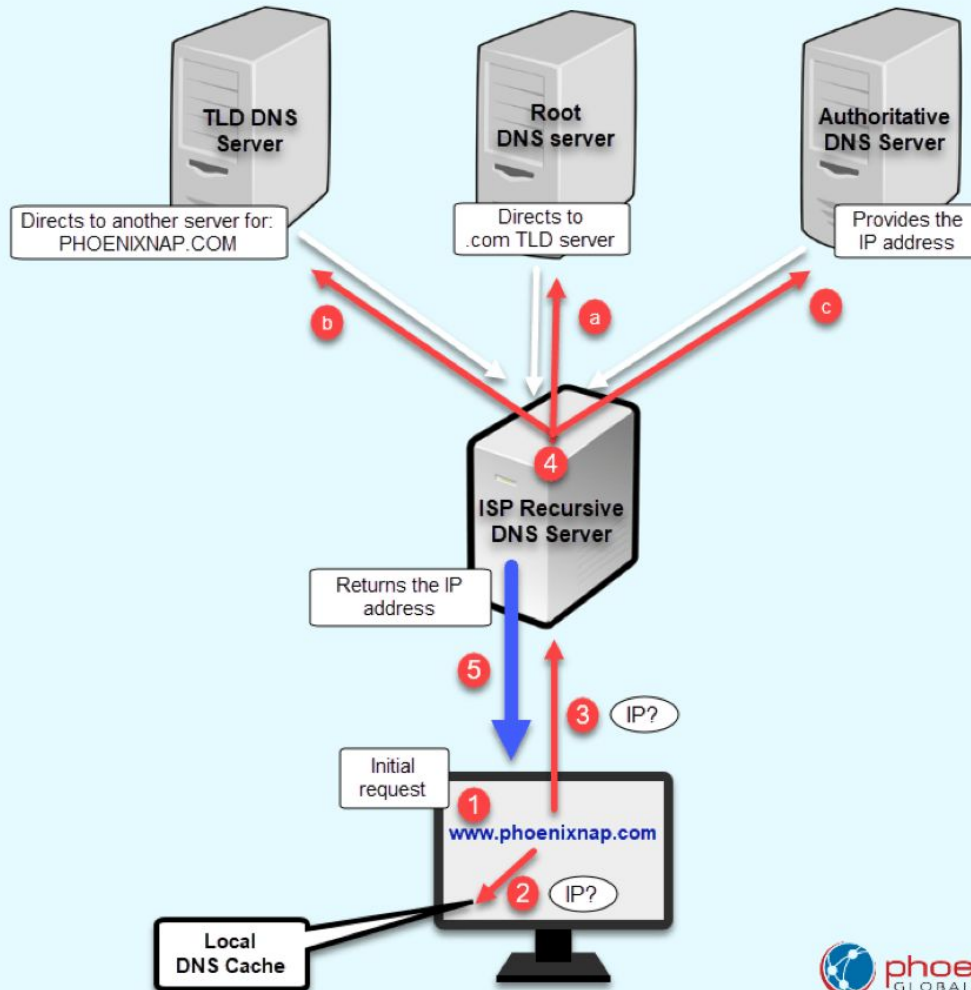Domain Name Server IP: 108.177.11.99

Domain Name Server IP: 108.177.11.104
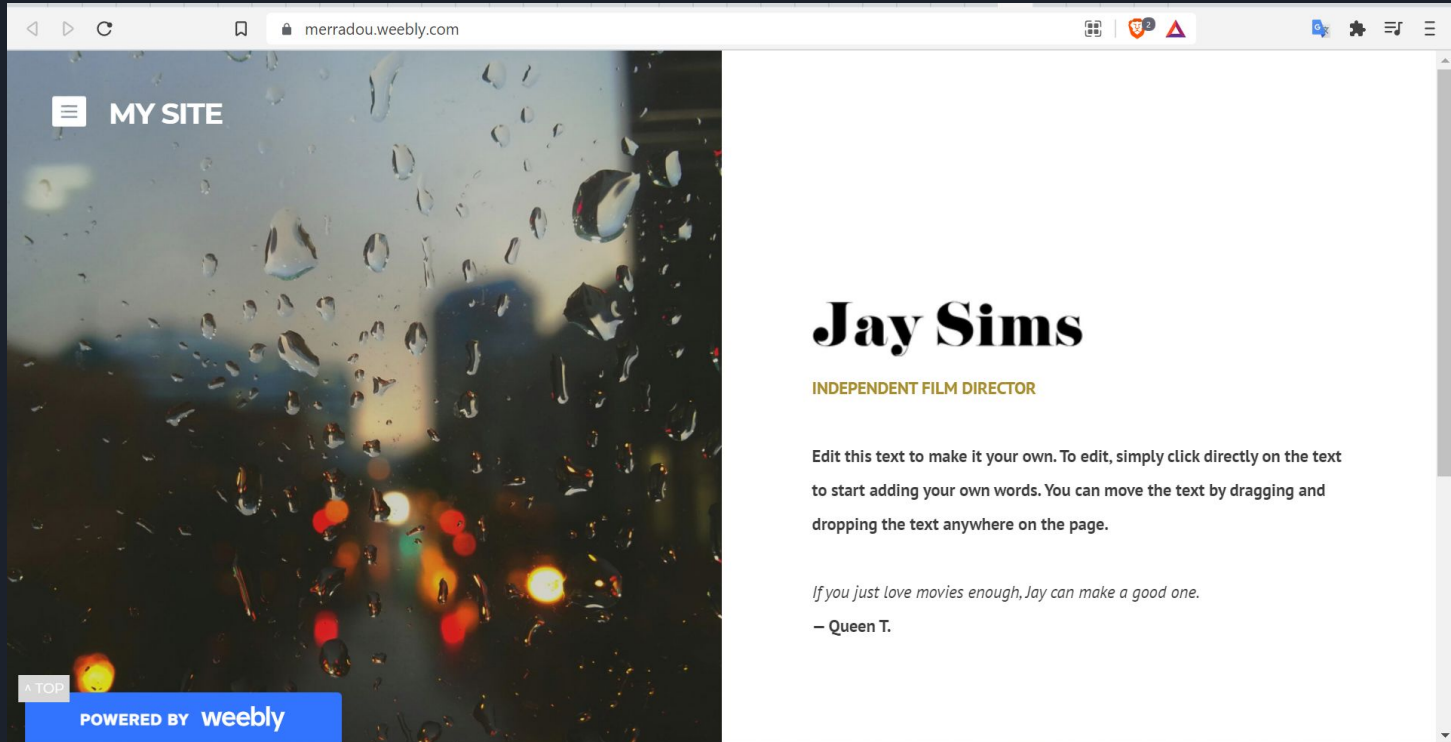
Domain Name Server IP: 108.177.11.103

How does DNS work ? :

Resolving a domain name or a hostname goes through several different phases .

On some occasions, DNS resolving is **a one-step process**, while on the other it involves contacting **multiple DNS servers** . The diagram below shows the necessary steps in this process and does not take into account the browser cache .

Example (1) : réservation de nom de domaine

DNS Lookup

URL: https://merradou.weebly.com/ **Lookup**

IPv4 address for merradou.weebly.com

Domain Name Server IP: 199.34.228.53

Domain Name Server IP: 199.34.228.54