



SNS COLLEGE OF TECHNOLOGY
Coimbatore-35
An Autonomous Institution



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'A+' Grade
Approved by AICTE, New Delhi & Affiliated to Anna University,
Chennai

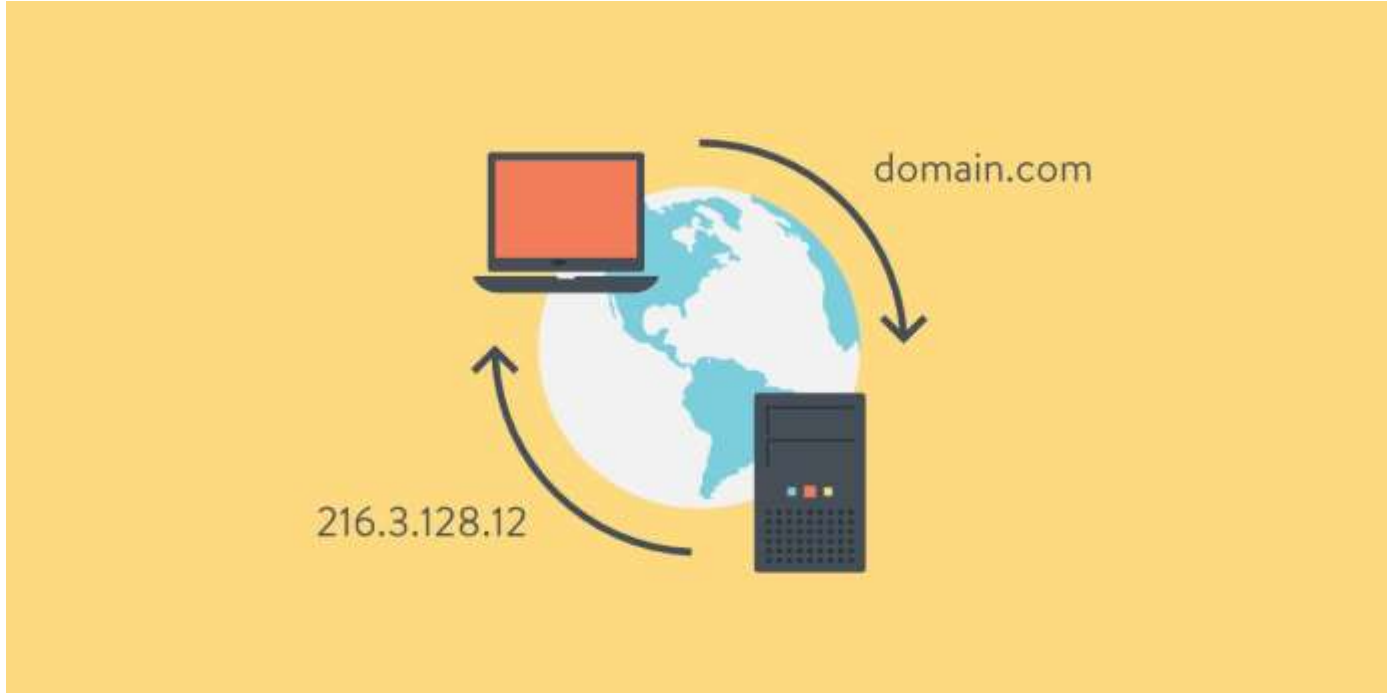
19ECT301-COMMUNICATION NETWORKS
III YEAR/ V SEMESTER

UNIT 3- TRANSPORT LAYER & APPLICATION
LAYER

TOPIC- DNS (Domain Name server)



INTRODUCTION



Reference: <https://kinsta.com/wp-content/uploads/2018/05/what-is-dns.png>



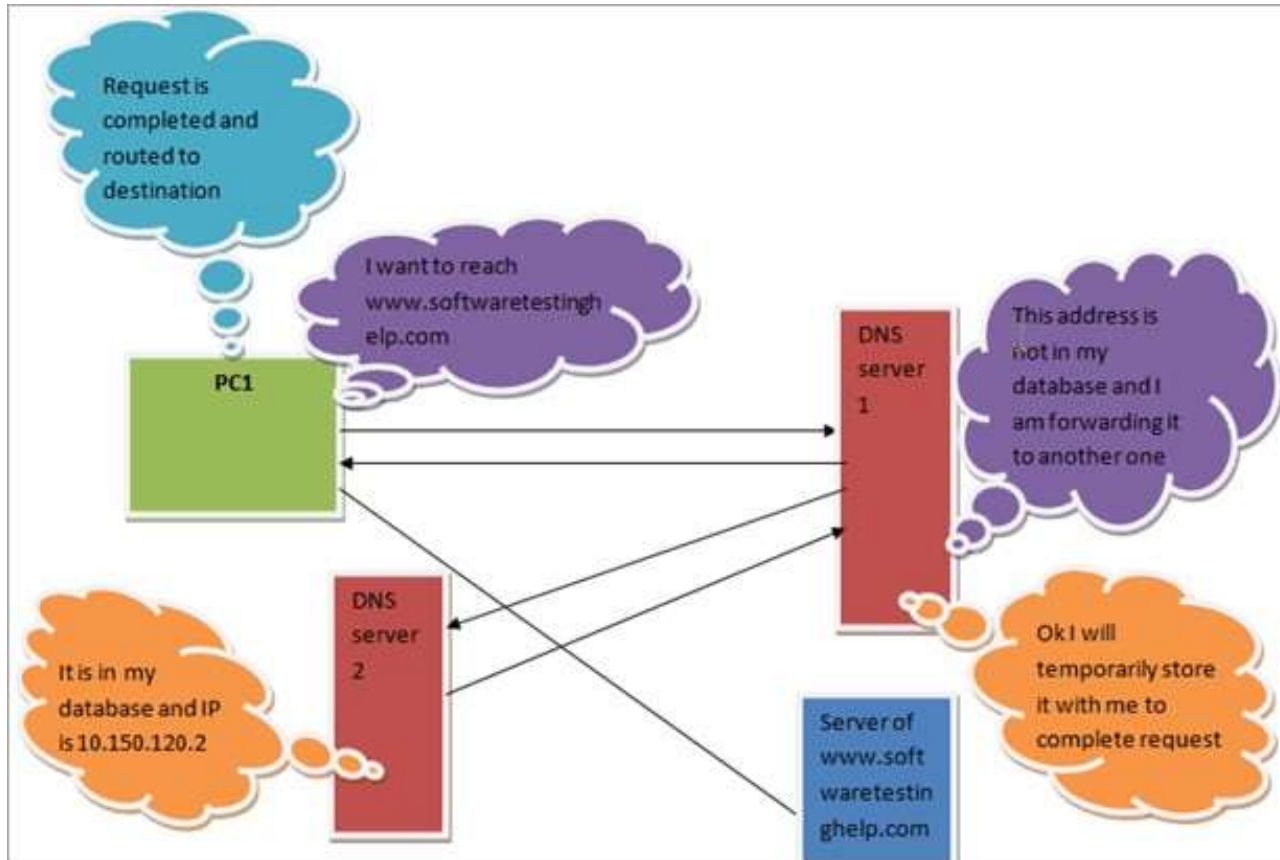
DNS ROLE



- ❑ DNS, or the Domain Name System, **translates human readable domain names (for example, `www.amazon.com`) to machine readable IP addresses (for example, `192.0.2.44`).**
- ❑ Thus DNS came into the role and **provides the host with the mapped IP address in respect to the domain name of the website.**



DNS WORKING



Source: <https://www.softwaretestinghelp.com/wp-content/qa/uploads/2019/01/DNS-communication.png>



PRIMARY SERVER



- ❑ The *primary server* is the **authoritative server** for the zone.
- ❑ All **administrative tasks associated** with the zone (such as creating subdomains within the zone, or other similar administrative tasks) must be performed on the primary server.



SECONDARY SERVER



- ❑ Secondary servers are backup DNS Servers. Secondary servers receive all of their zone files from the primary server zone files in a zone transfer
- ❑ Multiple secondary servers can exist for any given zone — as many as necessary to provide load balancing, fault tolerance, and traffic reduction.



CACHING SERVER



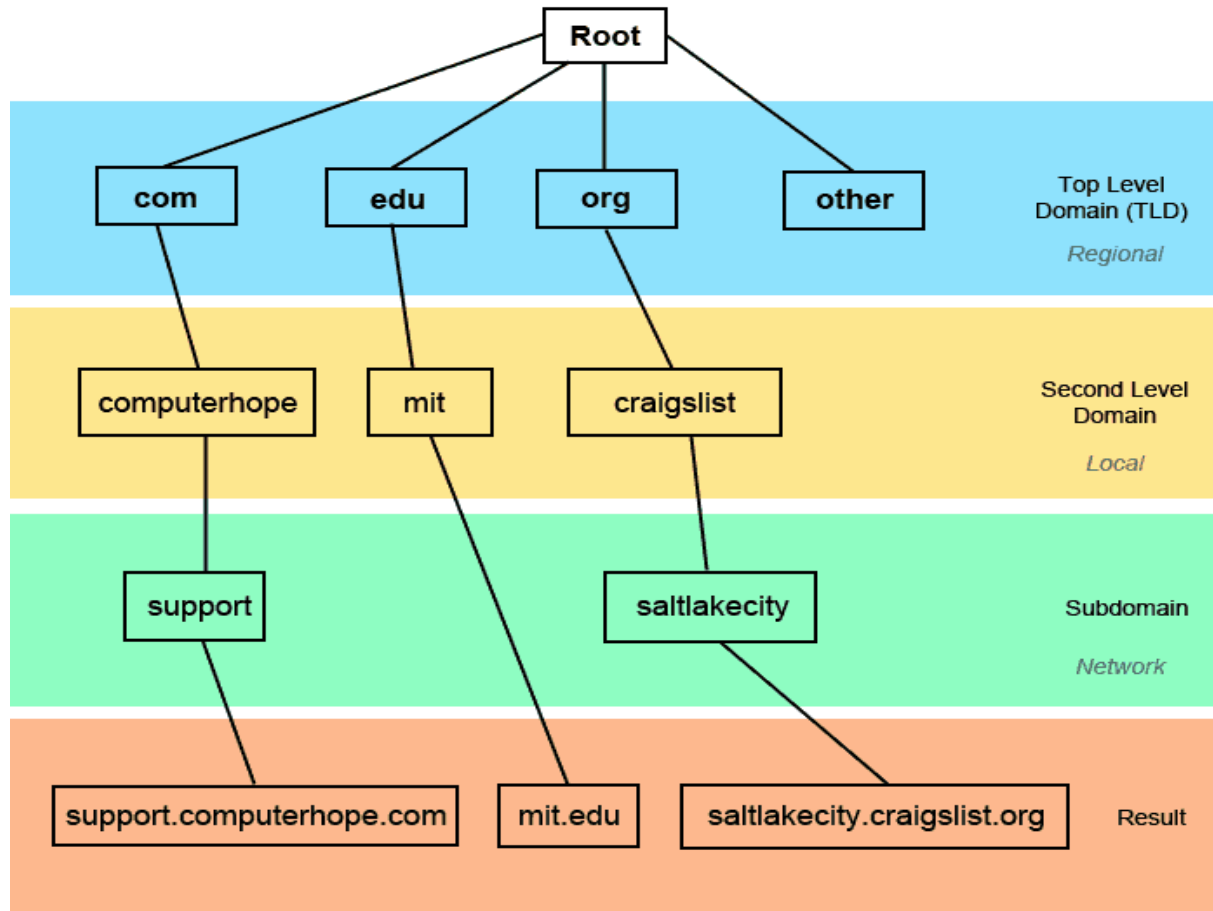
- ❑ Caching servers, also known as caching-only servers, perform as their name suggests; they provide only cached-query service for DNS responses.



DNS HIERARCHY



Domain Naming Hierarchy



ComputerHope.com



HOW TO KNOW YOUR SYSTEM DNS SERVER ADDRESS



- Open your Command Prompt from the Start menu (or type “Cmd” into the search in your Windows task bar).
- Next, type **ipconfig/all** into your command prompt and press Enter.
- Look for the field labeled “**DNS Servers.**” The first address is the primary DNS server, and the next address is the secondary DNS server.



ASSESSMENT



1. Why DNS is Used in Communication Networks?
2. How do you your DNS server address?



THANK YOU