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Computer Network

CLASS ACTIVITY (1)

1) What are the types of DNS servers?

=> There are three types of DNS server.

DNS resolver:

A DNS resolver is design to receive one query. It is also responsible for hacking the IP address for host name.

DNS root server:

The DNS root server extends the top level domain from the users query. (e.g) www.google.com provides detail for the .com TLD name server.

Authoritative server:

Higher level servers in the DNS define which DNS server is the authoritative server for a specific host name. basically it holds up to date information for the hostname.

2=> What kind of information is stored on DNS?

Ans:—

DNS server store DNS syntax which can be defined as information that live in authoritative server and provide information about a domain including which IP address is associated with that domain and how to handle request for that domain these record consists of a series of text files written in a form that is called DNS records like a business listing on ~~web~~ IP.

3=> What type handles zone transfer and what information could be possibly store on it?

Ans:—

DNS handles zone transfer and name-server have DNS information of all URL's with that name server's domain in it.

DNS server stores domain names with corresponding identifier in called IP addresses.

It stores cache that saves your time when you revisit that website.

4 \Rightarrow Discuss the importance of DNS and the information stored on it according to the current context?

Ans:

— DNS is important.

The record that stored in authoritative server provides information about domain including its IP address for each domain. It stores information relevant to URL. So, it's important and professional for all domains to have a specific set of default records or cache.

5 \Rightarrow Why is it ideal for an organization to have more than one nameservers?

Ans:

— For organization with multiple websites which often have similar content, it's common to have domain spread across multiple hosts and have more than one nameserver.

With have multiple DNS the load on primary DNS reduced and hence customers get more seamless experience.

6. → Why do you think it is dangerous to transfer information without checking client?
Ans.

- It's dangerous to transfer information without checking client then they may be attackers which may install malware on user's system and change the local DNS setting to malicious sites.
- Many routers have default password vulnerability which may lead attackers to effect all users.

7. → Why do you think should be done to prevent such things?
Ans.

— DNS is highly sensitive infrastructure that requires strong security measures, one should do

- Watch for resolvers on your network.
- Severely restrict access to name server.
- Take actions against cache poisoning.
- Restrict zone transfer.
- Separate authoritative name server from resolver.