# Networking In Linux

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## Domain Name System(DNS)

➢ Computers tell each other apart using IP addresses. Humans, on the other hand, identify things with names. Humans and computers have to interact, but it would be really hard for humans to interpret IP addresses and impossible for computers to communicate with names. This is where the Domain Name System (DNS) comes it.

➢ When a user types a domain name into their web browser, the browser requests a DNS resolver to find the corresponding IP address.

A host wants the IP address of cse.dtu.in
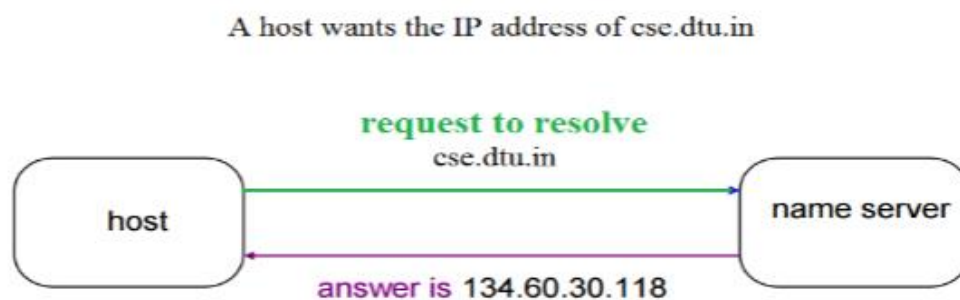
# Network troubleshooting tools

SSH: It allows you to login into machine and execute commands on them, it also encrypt data by allowing secure communication via untrusted network.

Ping : Used to test the internet network connection and also used to diagnoise the location of        connectivity.

Traceroute: it is a diagnostic command that can show you possible routes across an IP network and calculate trasist delay in that route.

Telenet: It is used to transfer commands and responses between two nodes on the internet

Curl: curl is an open source data transfer tool that support multiple application layer protocols. Mostly used for sending http requests.

Netstat: it shows active TCP connections as well as ports on which the server is listening

Scp: secure copy protocol used to perform action between local and remote host to transfer files

# Network Security

UFW's default is to deny all incoming connections and allow all outgoing connections. This means anyone trying to reach your server would not be able to connect, while any application within the server is able to connect externally. To update the default rules set by UFW

first address the incoming connections rule:

➢ sudo ufw default deny incoming

address the outgoing connections rule:

➢ sudo ufw default allow outgoing

[Allowing Connections to the Firewall](#)

enabling SSH connections to your server:

➢ sudo ufw allow ssh

link :
https://www.loom.com/share/6bad9876405b4a92817a8bcc151 4fef5?sid=35fd58da-ec51-4c63-ba1d-20f4d2fb7a35