Module 2: Linux Fundamentals PT11

Windows command for checking IP details
ipconfig
ipconfig /all

Linux command for checking IP details
ifconfig
ip
ip a addr show
ip r

Network Manager:
nmcli (command line interface)
nmtui (text-based menu)

IPv4, Subnet, Default Gateway, DNS Server
DNS - "Name Server", "Domain Name Server" - *Resolver*

Domain Name -> IP Address IPv4 X.X.X.X
-> IP Address IPv6 128 bit Hex

DHCP Server - Assigns IP Addresses
DHCP Client - requests IP Address to connect to a network
DNS (Domain Name Server) - Maps / Resolves IP address vs name address to connect to Internet

ARP (Address Resolution Protocol) - IP Address to the MAC Address

MAC Address - 48 bit - uses 32 bits, loves hex
IPv4 - 32 bit
IPv6 - 128 bit

tcpdump - Looks at and collects/capturings packets(Network) or frames(Data Link) or segments of datagrams (Transport) Layer and generates a file.

System and & System Administration
systemctl - command that controls systemd system and services
systemctl status (name.service) - checks the status of a service
systemctl start (name.service) - starts a service
systemctl stop - stops a service

systemctl restart - restarts a service
systemctl reload - refreshs a service
systemctl enable - automatically starts on bootup

Installed and used apache2 server on Ubuntu server
Two web services - apache2 and nginxd