

Module 2: Linux Fundamentals PT10

Router - NAT - Network Address Translation

Private Address

Class A: 10.x.x.x are for home network and don't show up in IPv4 "Internet"

Class B: 172.16.x.x - 172.31.x.x

Class C: 192.168.x.x / 192.168.0.1 - 192.168.255.254

IPv4 uses 8 bits called Octets.

IPv6 uses 16 bit 8 blocks called Quartets.

Configure Network Interface

Manual configuration

Dynamic configuration - Dynamic Host Configuration Protocol (DHCP)

****DHCP****

Static 192.168.8.10

There are times when you'd prefer to manually configure the IP address. See below

email --> 192.168.8.1

file --> 192.168.8.2

dbase --> 192.168.8.3

printer --> 192.168.8.4

DHCP

DNS

****DHCP Server****

Ip Addresses

Subnet Mask ???

Default Gateway - Router, Firewall, NAT

DHCP Server

DNS Server

Host - Anything network related

Client - devices lease IP config info from DHCP server

Device - a device that

D.O.R.A. - Discover, Offer, Request, Acknowledge

Windows - ipconfig /release - releases all information given by the DHCP server
- ipconfig /renew

Linux - dhclient -r
- dhclient

Domain Name Space - retrieve numeric values corresponding to computer hostnames.
Below the root '.' is the TLD (Top Level Domain).