

DORA

Client send broadcast using MAC to discover DHCP
IP MAC broadcast DHCP

DHCP Setting

Subnet 10.0.0.0/8
range 10.0.0.10
10.0.0.30
255.0.0.0
option
DNS 10.0.0.1
Router 10.0.0.5

lease time
short time
long time

DHCP



1- DHCP Discover Mes.
message

DHCP receive msg + send an offer details depend on DHCP Setting

2- DHCP Offer mess.
message

3- DHCP Req.
request

4- DHCP ACK

Client automatically

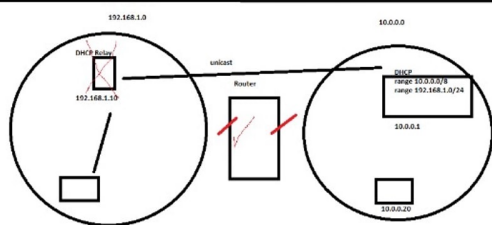


Linux Services has:

- 1- Package
- 2- Service
- 3- configuration files
- 4- data files

etc
var

داده ها
تنظیمات
پکیج
سرویس



DHCP Server

DHCP how it work

Package	repository	dhcp-server.x86_64
Service	systemctl	
configuration files	/etc	vim /etc/dhcp/dhcpd.conf
data files	/var	vim /var/lib/dhcpd/dhcpd.leases

yum install dhcp-server.x86_64 → repos under /etc/yum.repo.d/ exists?

tail -1 /etc/passwd
dhcpd:x:177:177:DHCP server:/sbin/nologin → this user has been created while installing DHCP service.
vim /etc/dhcp/dhcpd.conf

DHCP Server Configuration file.
see /usr/share/doc/dhcp-server/dhcpd.conf.example

<<<< the source Example to copy DHCP Configuration

see dhcpd.conf(5) man page
global options:
option domain-name "abc.com";
option domain-name-servers 10.0.0.1;

default-lease-time 600; → ask IP?
max-lease-time 7200; → max save IP?

log-facility local7; → for logs, to save log messages

subnet 10.0.0.0 netmask 255.0.0.0 {
range 10.0.0.20 10.0.0.30;
option routers 10.0.0.10;
} → gateway } options here only for specific subnet

vim /var/lib/dhcpd/dhcpd.leases view Address leases for DHCP / devices Infos, that has taken IP.

tail -f /var/log/messages → where logs are saved