**DHCP**

* DHCP is dynamic host configuration protocol. It is a network protocol used to distribute the network configuration parameters like ip address automatically. We don’t need to assign ip manually to all the systems. Dhcp will take care of it.
* Dhcp works on **DORA** process.
* **Discover =** When a client system connects to internet, it sends requests to all the devices in the network to search dhcp server.
* **Offer =** When the server recieved the request from the client, it offers an Ip address to that client.
* **Request =** When the client receives the ip from server, it broadcasta a message that it accepts the Ip.
* **Acknowledgement =** The server acknowledges the Ip that client can use the IP address.
* Set static ip to dhcp server and install dhcp.
* To install dhcp = **yum install dhcp\*.**
* Port = 67.
* Main configuration File = **/etc/dhcp/dhcpd.conf**.
* After installing dhcp, main config file won’t have any data. You have to copy from **/usr/share/doc/dhcp/dhcpd.conf.sample.**
* Go to /etc/dhcp/dhcpd.conf and edit these lines.

**option domain-name “your domain”;**

**option domain-name-servers dns-ip, dns-ip;**

**default lease time no;**

**max lease time no;**

**subnet 192.168.10.0.**

**range 192.168.10.3 192.168.10.242.**

**netmask = 255.255.255.0.**

**option routers 192.168.10.1(gateway).**

* Save and restart the dhcp service to apply changes.
* In client side,
* Go to /etc/sysconfig/network-scripts and edit the ethx(file will change based on your device).
* Change **BOOTPROTO=dhcp** in the ethx file and restart the network service to apply changes.
* Type ifconfig to check whether the ip is assigned in between your defined parameters.
* You can assign static address to clients by using their **MAC** address..
* Go to dhcpd.conf. Under host-declaration section.

**host hostname {**

**option host-name “hostname”;**

**hardware Ethernet Mac address;**

**fixed-address static-ip;**

* Save and Restart the service to apply changes.