

Dynamic hosting configuration protocol

It gives IP address automatically to the client requesting for an IP address. DHCP provides Centralized IP address management.

1. DHCP Prevents IP address conflicts and helps conserve the use of client IP address on the N/W

2. DHCP reduces the complexity and amount of administrative work by assigning TCP/IP configuration.

Client IP configuration is Updated automatically

Differences :

| Dynamic | Static |
|--|---------------|
| 1. IP address are entered manually supplied automatically | 1. IP address |
| 2. IP address could be entered incorrectly configuration is ensured. | 2. Correct |
| 3. Communication and N/W issues can result configuration is updated automatically. | 3. Client |
| 4. Frequent computer moves increase source of N/W problem is administrative effect eliminated. | 4. A common |

Why DHCP Reservation ?

Assigning IP address dynamically has some problem that every time a client system boots it is not sure that it will get the same IP, so it will be a tedious task for other systems to find the particular system. To solve the above problem we can do 'Mac address binding of the IP address for this Provide its entry in the fixed address portion.

Requirements:

packages = dhcp*

port no = 67-BBOTP

68-DHCP

Config file = /etc/dhcp.conf

service = dhcpd

Daemon = dhcpd

Server Side Configuration :

1) Install the package

rpm -ivh dhcp* --force --aid

(or)

yum install dhcp* -y

2) Copy the sample configuration file to main configuration file

cp /usr/share/doc/dhcp-3.0.5/dhcpd.conf.sample /etc/dhcpd.conf
/etc/dhcpd.conf

3) open the configuration file

vi /etc/dhcpd.conf

subnet 192.168.0.0 netmask 255.255.255.8 # in 4th line

range dynamic-bootp 192.168.0.50 192.168.0.100; # in 21th line

4) Restart the service

service dhcpd restart

Client Side :

1) Connect to the DHCP server:

net-tui

```
select use DHCP option => close => quit
```

Restart the network service

```
# service network restart
```

How to assign Fixed IP address?

Open the configuration file

```
# vi /etc/dhcpd.conf
```

Go to Last Line

```
host sun2 {  
  netxt-server sun2.india.com;  
  hardware ethernet 00:11:5B:21:1A:77;  
    Fixed address 192.168.0.79;  
};
```

Restart the DHCP service

```
# service dhcpd restart
```

Client Side :

Restart The service network:

```
# service network restart
```

Check the ip address:

```
# ifconfig eth0
```