

DHCP Server



What is DHCP

Dynamic Host Configuration Protocol.

It use port 67 & 68

It provide the every machine unique ip address dynamically.

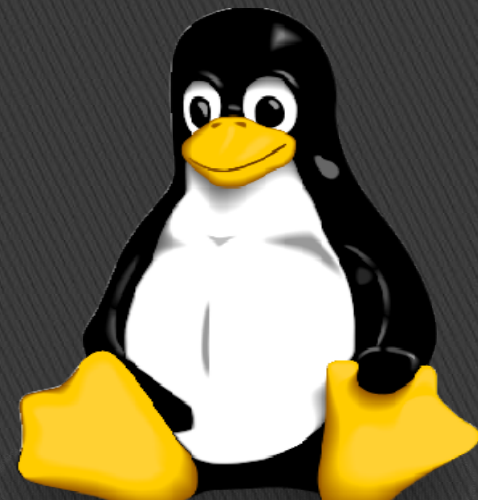
The Communication between client and server to assign automatic ip address is called DORA process.

D=Discovery

O=Offer

R=Request

A=Assignment/Ack



DORA Process



Configure DHCP Server

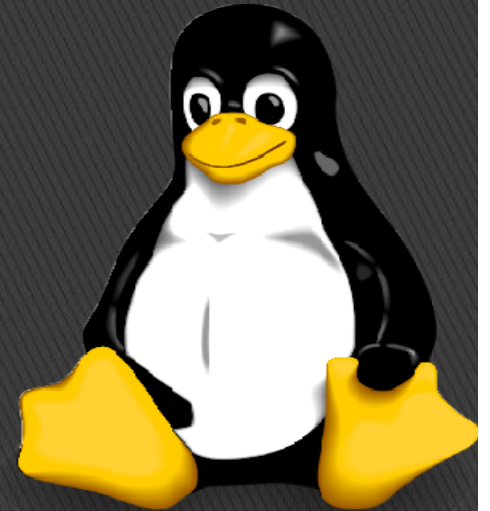
Step 1:

Configure network settings
(static IP – 192.168.1.2/24)

#nmtui

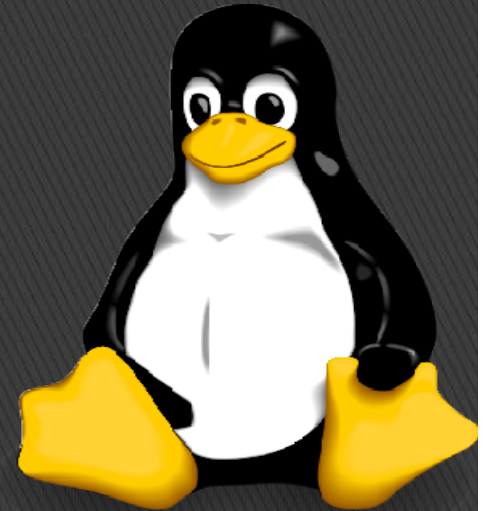
Or

#nmcli



Step 2: Install the Package

```
#yum install dhcp*
```



Step 3:

Edit DHCP Configuration file

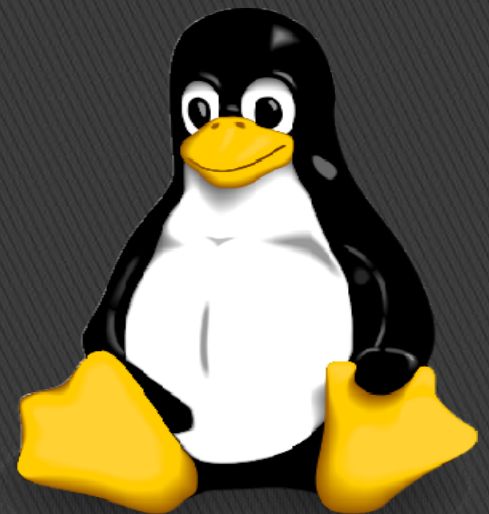
```
#vim /etc/dhcp/dhcpd.conf
```

Copy dhcpd.conf.example and paste as a dhcpd.conf

```
#cp -r /usr/share/doc/dhcp-server/dhcpd.conf.example  
/etc/dhcp/dhcpd.conf
```

Now, edit configuration file

```
#vim /etc/dhcp/dhcpd.conf
```



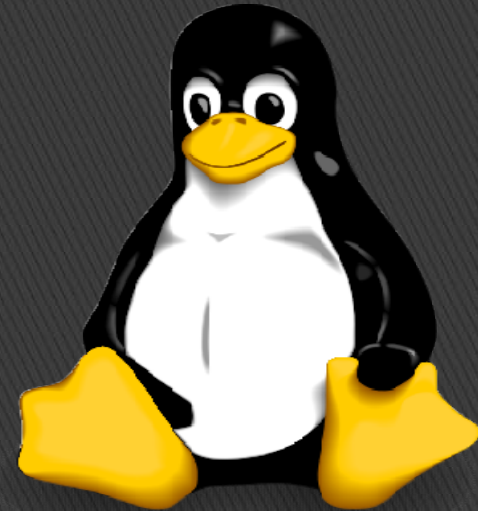
Step 4:

Go to the line "A slightly different configuration for an internal subnet (number 46)"

```
Subnet 192.168.1.0 netmask 255.255.255.0  
Range 192.168.1.3 192.168.1.103
```

:wq

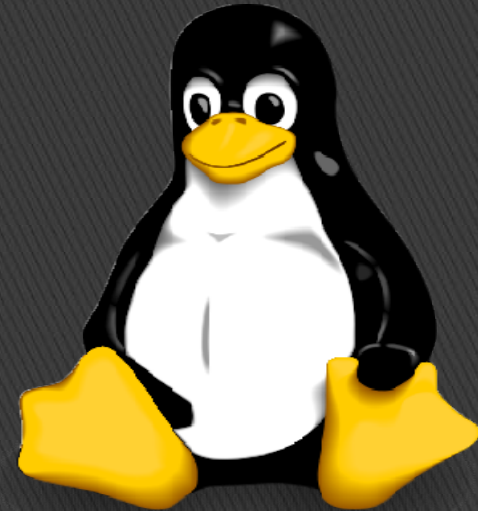
```
#systemctl start dhcpcd  
#systemctl enable dhcpcd
```



Step 5: Firewall setup

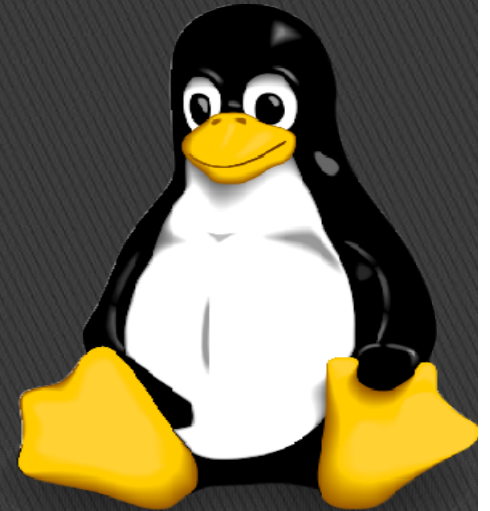
```
#firewall-cmd --permanent --add-service=dhcp  
#firewall-cmd --reload
```

```
#systemctl restart dhcpcd
```



Step :7

Go to client computer and set automatic ip configuration.

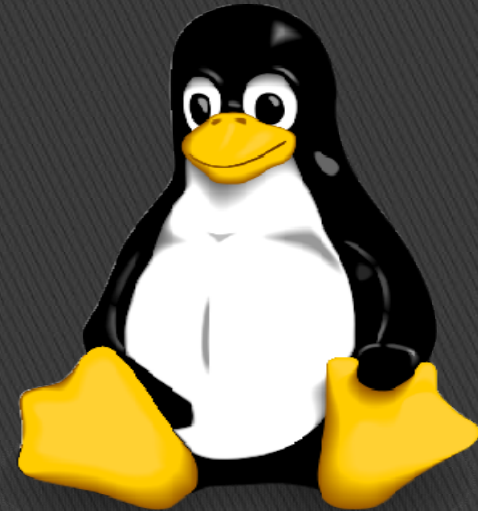


Step 8:Assign Fix ip to client

```
host rhel8
    hardware Ethernet 08:00:07:26:c0:a5;
    fixed-address 192.168.1.100;
} (line 75)
```

:wq

```
#systemctl restart dhcpd
```



Step 9:

Go to client computer and check ip configuration

