

DHCP

1. Install DHCP in your system with the superuser access

#yum install dhcp

```
[root@localhost etc]# yum install dhcp
Updating Subscription Management repositories.
Unable to read consumer identity

This system is not registered with an entitlement server. You can use "rhc" or "
subscription-manager" to register.

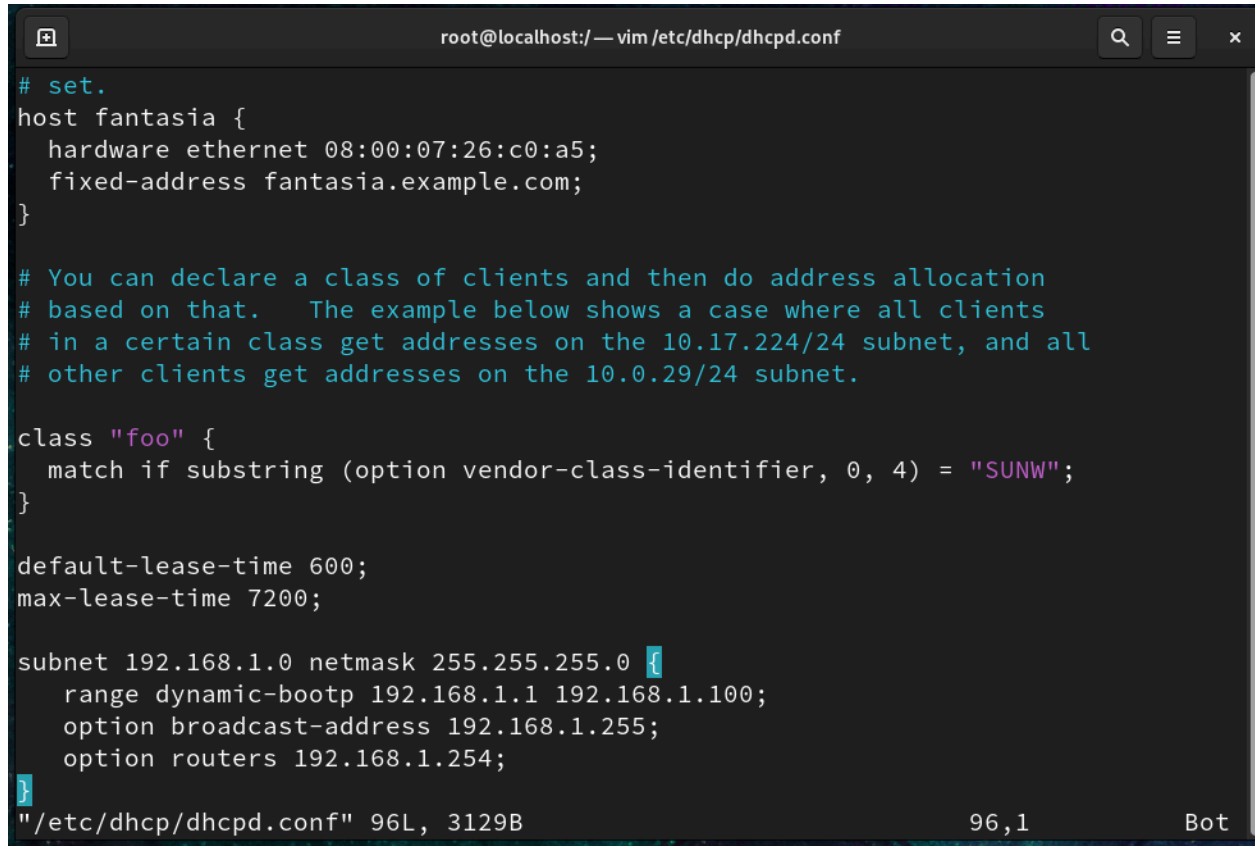
Last metadata expiration check: 0:52:30 ago on Monday 30 September 2024 10:46:38
PM.
No match for argument: dhcp
Error: Unable to find a match: dhcp
[root@localhost etc]#
```

2. Run this command to edit the configuration file

#vim /etc/dhcp/dhcpd.conf

```
root@localhost:/
[root@localhost /]# vim /etc/dhcp/dhcpd.conf
[root@localhost /]#
```

3. It will open this page in that you have added the subnet and netmask



```
root@localhost:~# vim /etc/dhcp/dhcpd.conf

# set.
host fantasia {
    hardware ethernet 08:00:07:26:c0:a5;
    fixed-address fantasia.example.com;
}

# You can declare a class of clients and then do address allocation
# based on that.  The example below shows a case where all clients
# in a certain class get addresses on the 10.17.224/24 subnet, and all
# other clients get addresses on the 10.0.29/24 subnet.

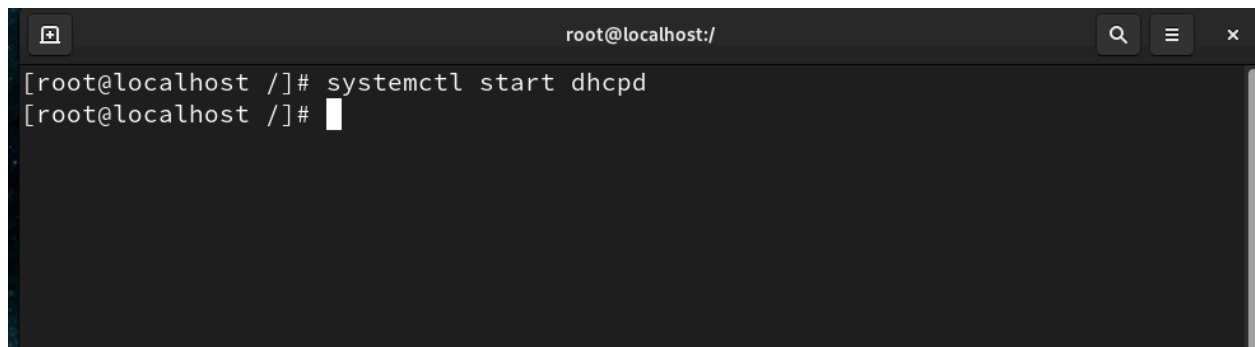
class "foo" {
    match if substring (option vendor-class-identifier, 0, 4) = "SUNW";
}

default-lease-time 600;
max-lease-time 7200;

subnet 192.168.1.0 netmask 255.255.255.0 {
    range dynamic-bootp 192.168.1.1 192.168.1.100;
    option broadcast-address 192.168.1.255;
    option routers 192.168.1.254;
}

"/etc/dhcp/dhcpd.conf" 96L, 3129B                                     96,1                               Bot
```

4. Then start the dhcpcd
#systemctl start dhcpcd



```
root@localhost:~# systemctl start dhcpcd
[root@localhost ~]#
```

5. Enable the dhcpd

#systemctl enable dhcpd

```
[root@localhost ~]# systemctl enable dhcpd
[root@localhost ~]#
```

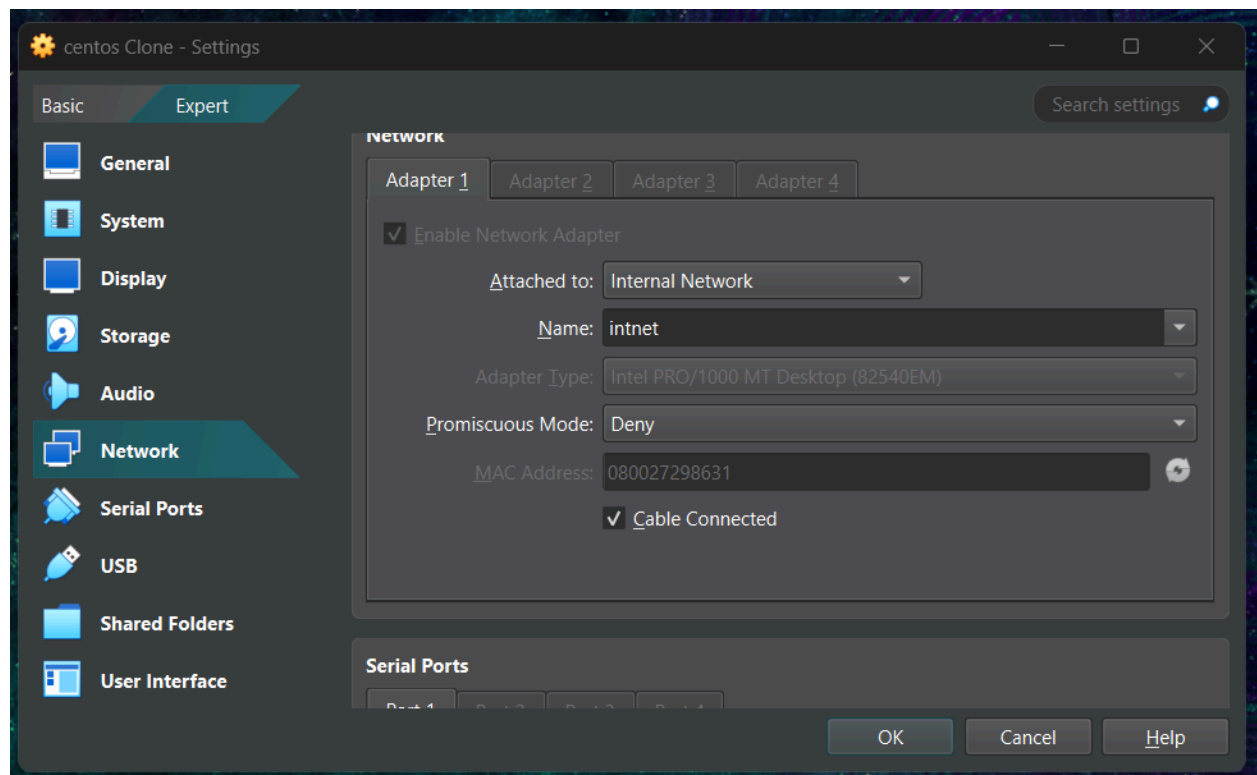
6. You can check the service it is active

#systemctl status dhcpd

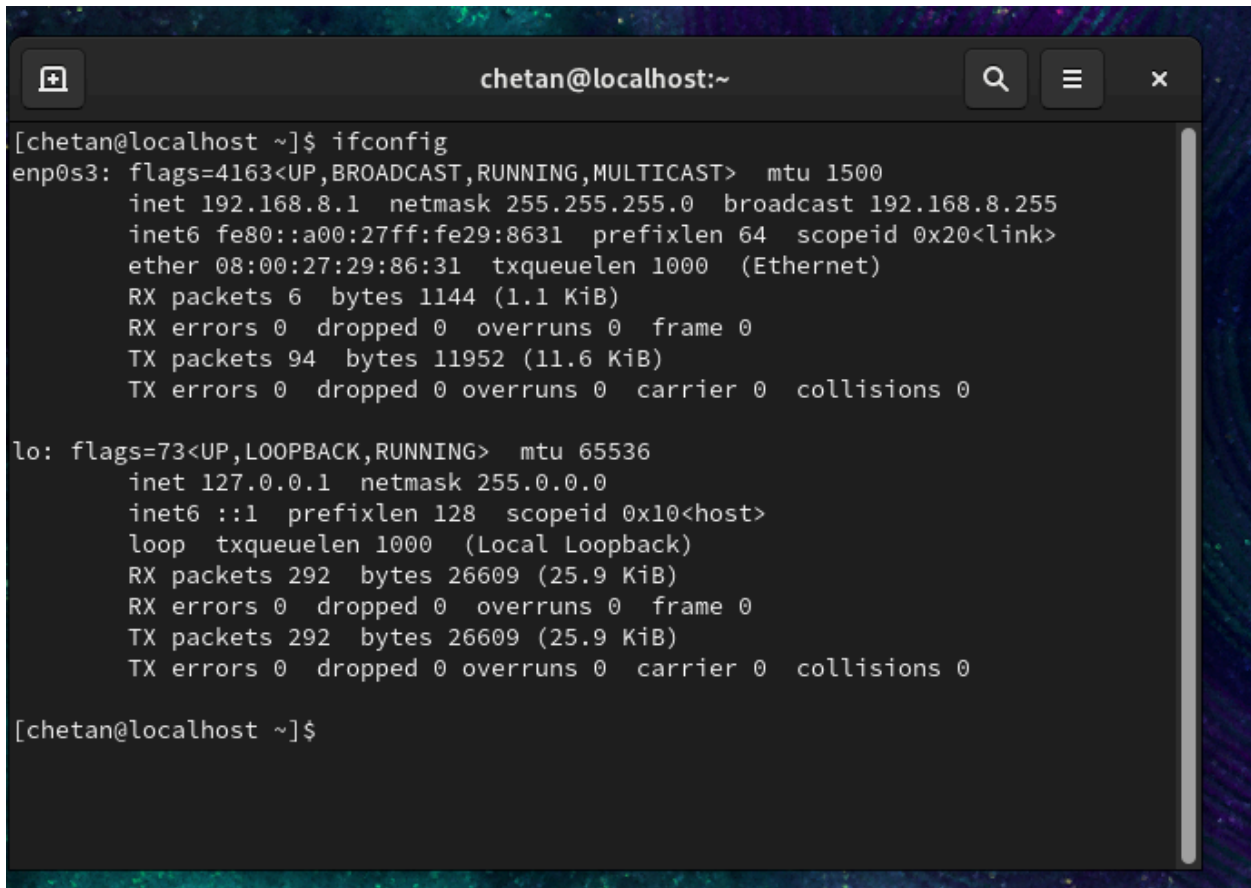
```
root@localhost:~ — systemctl status dhcpd
● dhcpd.service - DHCPv4 Server Daemon
   Loaded: loaded (/usr/lib/systemd/system/dhcpd.service; enabled; preset: disabled)
   Active: active (running) since Mon 2024-09-30 22:46:28 IST; 56min ago
     Docs: man:dhcpd(8)
           man:dhcpd.conf(5)
  Main PID: 3051 (dhcpd)
    Status: "Dispatching packets..."
     Tasks: 1 (limit: 23020)
    Memory: 7.5M
       CPU: 154ms
    CGroup: /system.slice/dhcpd.service
            └─3051 /usr/sbin/dhcpd -f -cf /etc/dhcp/dhcpd.conf -user dhcpd -group dhcpd --no-pid

Sep 30 23:32:06 localhost.localdomain dhcpd[3051]: ns2.example.org: host unknown.
Sep 30 23:32:06 localhost.localdomain dhcpd[3051]: DHCPACK on 192.168.1.8 to 08:00:27:29:86:31 via enp0s3
Sep 30 23:35:37 localhost.localdomain dhcpd[3051]: DHCPREQUEST for 192.168.1.4 from 2a:50:71:3b:8e:45 via enp0s3
Sep 30 23:35:37 localhost.localdomain dhcpd[3051]: ns1.example.org: host unknown.
Sep 30 23:35:38 localhost.localdomain dhcpd[3051]: ns2.example.org: host unknown.
Sep 30 23:35:38 localhost.localdomain dhcpd[3051]: DHCPACK on 192.168.1.4 to 2a:50:71:3b:8e:45 (V2040) via enp0s3
Sep 30 23:37:04 localhost.localdomain dhcpd[3051]: DHCPREQUEST for 192.168.1.8 from 08:00:27:29:86:31 via enp0s3
Sep 30 23:37:04 localhost.localdomain dhcpd[3051]: ns1.example.org: host unknown.
Sep 30 23:37:04 localhost.localdomain dhcpd[3051]: ns2.example.org: host unknown.
Sep 30 23:37:04 localhost.localdomain dhcpd[3051]: DHCPACK on 192.168.1.8 to 08:00:27:29:86:31 via enp0s3
~
~
lines 1-23/23 (END)
```

7. You had to set to internal network in your virtual box setting and it will give the ip address automatically in this range



8. Check the if of your client



```
[chetan@localhost ~]$ ifconfig
enp0s3: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
    inet 192.168.8.1  netmask 255.255.255.0  broadcast 192.168.8.255
    inet6 fe80::a00:27ff:fe29:8631  prefixlen 64  scopeid 0x20<link>
    ether 08:00:27:29:86:31  txqueuelen 1000  (Ethernet)
    RX packets 6  bytes 1144 (1.1 KiB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 94  bytes 11952 (11.6 KiB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

lo: flags=73<UP,LOOPBACK,RUNNING>  mtu 65536
    inet 127.0.0.1  netmask 255.0.0.0
    inet6 ::1  prefixlen 128  scopeid 0x10<host>
    loop txqueuelen 1000  (Local Loopback)
    RX packets 292  bytes 26609 (25.9 KiB)
    RX errors 0  dropped 0  overruns 0  frame 0
    TX packets 292  bytes 26609 (25.9 KiB)
    TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[chetan@localhost ~]$
```

9. In your client choose the internal network setting in your virtual box

