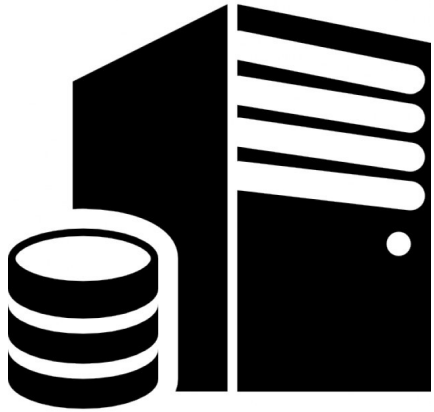# DHCP

SETUP

Server
Cent_Os6

Client
Cent_Os 6

Installing DHCP Server

Step 1: Installing DHCP Server in CentOS

1. Installing DCHP is quite straight forward, simply run the command below.

```
# yum -y install dhcp
```

2. Open the file **/etc/sysconfig/dhcpd**, add the name of the specific interface to the list of **DHCPDARGS**, for example if the interface is `eth0`, then add:

```
DHCPDARGS=eth0
```

Configuration

Therefore, start by copying the sample configuration file as the main configuration file like so:

```
# cp /usr/share/doc/dhcp-4.2.5/dhcpd.conf.example /etc/dhcp/dhcpd.conf
```

4. Now, open the main configuration file and define your DHCP server options:

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

```
# option definitions common to all supported networks...
option domain-name "cts.com";
option domain-name-servers ns1.example.org, ns2.example.org;
option domain-name-servers server.cts.com;

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

```
subnet 192.168.56.0 netmask 255.255.255.0 {
        option routers                          192.168.56.1;
        option subnet-mask                      255.255.255.0;
        option domain-search                    "tecmint.lan";
        option domain-name-servers              192.168.56.1;
        range    192.168.56.10    192.168.56.100;
        range    192.168.56.120  192.168.56.200;
}
```

```
[root@server ~]# cat /etc/sysconfig/network-scripts/ifcfg-eth0
DEVICE=eth0
ONBOOT=yes
BOOTPROTO=static
IPADDR=192.168.56.3
NETMASK=255.255.255.0
GATEWAY=192.168.56.3
[root@server ~]#
```

START THE SERVICE

```
---------- On CentOS/RHEL 7 ----------
# systemctl start dhcpd
# systemctl enable dhcpd


---------- On CentOS/RHEL 6 ----------
# service dhcpd start
# chkconfig dhcpd on
```

7. Next, do not forget to permit DHCP service (DHCPD daemon listens on port 67/UDP) as below:

```
---------- On CentOS/RHEL 7 ----------
# firewall-cmd --add-service=dhcp --permanent
# firewall-cmd --reload


---------- On CentOS/RHEL 6 ----------
# iptables -A INPUT -p tcp -m state --state NEW --dport 67 -j ACCEPT
# service iptables save
```
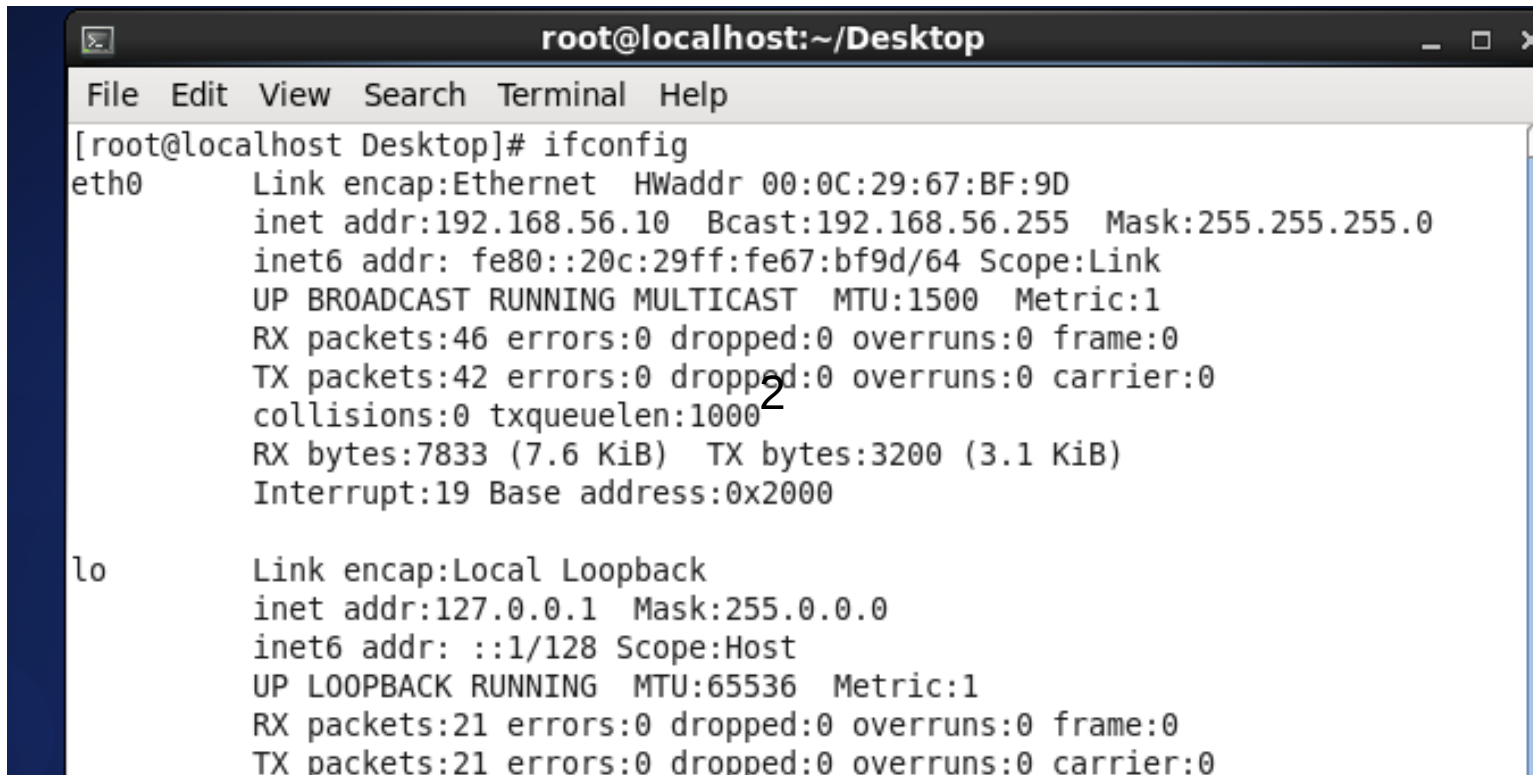
Configuring DHCP Clients

```
root@localhost:~/Desktop

File  Edit  View  Search  Terminal  Help

[root@localhost Desktop]# vi /etc/sysconfig/network
network            networking/       network-scripts/
[root@localhost Desktop]# vi /etc/sysconfig/network-scripts/eth0
[root@localhost Desktop]# cat  /etc/sysconfig/network-scripts/eth0
DEVICE=eth0
BOOTPROTO=dhcp
TYPE=Ethernet
ONBOOT=yes
[root@localhost Desktop]#
```

```
root@localhost:~/Desktop

File  Edit  View  Search  Terminal  Help

[root@localhost Desktop]# cat /etc/host
host.conf     hosts          hosts.allow  hosts.deny
[root@localhost Desktop]# cat /etc/host
host.conf     hosts          hosts.allow  hosts.deny
[root@localhost Desktop]# cat /etc/hosts
192.168.56.3              cts.com
[root@localhost Desktop]#
```

After Reboot

Ip is getting from dhcp server 192.168.56.10 {refer page 5}


```
root@localhost:~/Desktop

File  Edit  View  Search  Terminal  Help
[root@localhost Desktop]# ifconfig
eth0      Link encap:Ethernet  HWaddr 00:0C:29:67:BF:9D
          inet addr:192.168.56.10  Bcast:192.168.56.255  Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe67:bf9d/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:46 errors:0 dropped:0 overruns:0 frame:0
          TX packets:42 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:7833 (7.6 KiB)  TX bytes:3200 (3.1 KiB)
          Interrupt:19 Base address:0x2000

lo        Link encap:Local Loopback
          inet addr:127.0.0.1  Mask:255.0.0.0
          inet6 addr: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:21 errors:0 dropped:0 overruns:0 frame:0
          TX packets:21 errors:0 dropped:0 overruns:0 carrier:0
```

2