BASIC NETWORK CONFIGURATION IN RHEL7.x , CENTOS 7.x

This is document tells about how to setup static IP address , setting hostname etc…in Linux environment….

Steps as follows…

Basic requirements:

1. OS installed Centos7 and above versions /rhel7 and above versions.

Let's start…

Step1:

Open terminal and enter the following command.

```
[root@gurubhat /]# ifconfig
```

Here u will see all the network devices and there status and configurations such as ipaddress, device name, net mask etc.

Step2:

Change the directory to "**network-scripts"** by entering the following command.

```
[root@gurubhat /]# cd /etc/sysconfig/network-scripts
[root@gurubhat network-scripts]#
```

Enter "**ls**" command to view the devices and there status.

```
[root@gurubhat network-scripts]# ls
ifcfg-ens192  ifdown-bnep  ifdown-ipv6  ifdown-routes    ifdown-tunnel  ifup-eth   ifup-isdn
ifcfg-ens224  ifdown-eth   ifdown-isdn  ifdown-sit       ifup           ifup-ib    ifup-plip
ifcfg-lo      ifdown-ib    ifdown-post  ifdown-Team      ifup-aliases   ifup-ippp  ifup-plusb
ifdown        ifdown-ippp  ifdown-ppp   ifdown-TeamPort  ifup-bnep      ifup-ipv6  ifup-post
[root@gurubhat network-scripts]#
```

Step3:

Edit the device configuration using any of the text editors, here I am using **Vi Editor,** enter the following command to edit

```
[root@gurubhat network-scripts]# vi ifcfg-ens192
```

Now you will see like below …..and edit the configuration as below by pressing "**I"**

Set "**Bootproto** to static and **Ipaddress** to any ipaddress you want to give here I am taking as below set net mask depending upon your **ip** range and set gateway and **DNS** . I believe that you know the basic terminologies as mentioned above if not I am sorry…in my coming tutorial I am going to tell you how to find those things if your using window and virtual box "vms"….

If you know them you can further move..

```
[root@gurubhat network-scripts]# vi ifcfg-ens192
TYPE=Ethernet
BOOTPROTO=static
DEFROUTE=yes
PEERDNS=yes
PEERROUTES=yes
IPV4_FAILURE_FATAL=no
IPV6INIT=yes
IPV6_AUTOCONF=yes
IPV6_DEFROUTE=yes
IPV6_PEERDNS=yes
IPV6_PEERROUTES=yes
IPV6_FAILURE_FATAL=no
NAME=ens192
UUID=c9dbc7de-5054-433f-ab3e-67492f4f2f73
DEVICE=ens192
ONBOOT=yes
IPADDR=192.168.2.167
NETMASK=255.255.255.0
GATEWAY=192.168.2.1
DNS1=8.8.8.8
~
```

Save and Exit the editor by entering "**Escape**" and as Below..

```
~
~
:wq!
```

Now your network device is set to the configuration you configured just now..

Step4:

Well …now you need to restart the network you can do that by entering following command.

```
[root@gurubhat network-scripts]# systemctl restart network.service
```

Lets check …

```
[root@gurubhat /]# ifconfig
ens192: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        inet 192.168.2.167  netmask 255.255.255.0  broadcast 192.168.2.255
        inet6 fe80::20c:29ff:fe71:1df1  prefixlen 64  scopeid 0x20<link>
        ether 00:0c:29:71:1d:f1  txqueuelen 1000  (Ethernet)
        RX packets 2868792  bytes 4210019048 (3.9 GiB)
        RX errors 0  dropped 75  overruns 0  frame 0
        TX packets 1470012  bytes 91356486 (87.1 MiB)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

ens224: flags=4163<UP,BROADCAST,RUNNING,MULTICAST>  mtu 1500
        ether 00:0c:29:71:1d:fb  txqueuelen 1000  (Ethernet)
        RX packets 6478  bytes 416555 (406.7 KiB)
        RX errors 0  dropped 74  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        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 0  (Local Loopback)
        RX packets 4  bytes 340 (340.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 4  bytes 340 (340.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

virbr0: flags=4099<UP,BROADCAST,MULTICAST>  mtu 1500
        inet 192.168.122.1  netmask 255.255.255.0  broadcast 192.168.122.255
        ether 52:54:00:8a:96:b1  txqueuelen 0  (Ethernet)
        RX packets 0  bytes 0 (0.0 B)
        RX errors 0  dropped 0  overruns 0  frame 0
        TX packets 0  bytes 0 (0.0 B)
        TX errors 0  dropped 0 overruns 0  carrier 0  collisions 0

[root@gurubhat /]#
```

Now we have successfully set static ipaddress to our machine..

Now lets set hostname to our machine as follows..

Step5:

Check the current hostname by entering the following command.

```
[root@gurubhat /]# hostname
gurubhat
```

change hostname by using following command.

```
[root@gurubhat /]# hostnamectl set-hostname gurubhat.GB.com
```

Check the hostname by entering hostname command.

```
[root@gurubhat /]# hostname
gurubhat.gb.com
[root@gurubhat /]#
```

>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>Thank you<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<<