Virtual IP SETUP: RHEL-8.4

Mount the ISO provided: rhel-8.4-x86_64-dvd.iso high availability setup

Master Server Setup:

[root@vcc-etisalat manish]# mount -o loop rhel-8.4-x86_64-dvd.iso /mnt

[root@vcc-etisalat Packages]# cp /mnt/media.repo /etc/yum.repos.d/

[root@vcc-etisalat yum.repos.d]# mv media.repo redhat-ha.repo

[root@vcc-etisalat yum.repos.d]# vim redhat-ha.repo

[HighAvailability]

name=Red Hat Enterprise Linux 8.4.0

mediaid=1620068883.971630

baseurl=file:///mnt/

#metadata_expire=-1

gpgcheck=0

enabled=1

#cost=500

```
[root@vcc-etisalat Packages]# cat /etc/yum.repos.d/redhat-ha.repo
[HighAvailabilit]
name=Red Hat Enterprise Linux 8.4.0
mediaid=1620068883.971630
baseurl=file:///mnt/
#metadata_expire=-1
gpgcheck=0
enabled=1
#cost=500
```

[root@vcc-etisalat yum.repos.d]# cd /mnt/Packages/

[root@vcc-etisalat yum.repos.d]# yum localinstall *.rpm –y

```
[root@vcc-etisalat Packages]# yum localinstall *.rpm -y
Updating Subscription Management repositories.
Red Hat Enterprise Linux 8.4.0                                          85 MB/s | 507 kB      00:00
Dependencies resolved.
================================================================================================
 Package                      Arch       Version                          Repository         Size
================================================================================================
Installing:
 awscli                       noarch     1.14.50-5.el8                    @commandline       1.1 M
 booth                        x86_64     1.0-199.1.ac1d34c.git.el8        @commandline        10 k
 booth-arbitrator             noarch     1.0-199.1.ac1d34c.git.el8        @commandline        12 k
 booth-core                   x86_64     1.0-199.1.ac1d34c.git.el8        @commandline       108 k
 booth-site                   noarch     1.0-199.1.ac1d34c.git.el8        @commandline        18 k
 booth-test                   noarch     1.0-199.1.ac1d34c.git.el8        @commandline        70 k
 clufter-bin                  x86_64     0.77.1-5.el8                     @commandline        34 k
 clufter-cli                  noarch     0.77.1-5.el8                     @commandline        50 k
 clufter-common               noarch     0.77.1-5.el8                     @commandline        81 k
 clufter-lib-ccs              noarch     0.77.1-5.el8                     @commandline        18 k
 clufter-lib-general          noarch     0.77.1-5.el8                     @commandline        19 k
 clufter-lib-pcs              noarch     0.77.1-5.el8                     @commandline        19 k
 corosync                     x86_64     3.1.0-3.el8                      @commandline       272 k
 corosync-qdevice             x86_64     3.0.1-1.el8                      @commandline        95 k
 corosync-qnetd               x86_64     3.0.1-1.el8                      @commandline        76 k
 corosynclib-devel            i686       3.1.0-3.el8                      @commandline       187 k
 corosynclib-devel            x86_64     3.1.0-3.el8                      @commandline       187 k
 fence-agents-aliyun          x86_64     4.2.1-65.el8                     @commandline       6.7 M
 fence-agents-aws             noarch     4.2.1-65.el8                     @commandline        24 k
 fence-agents-azure-arm       noarch     4.2.1-65.el8                     @commandline        33 k
 fence-agents-gce             noarch     4.2.1-65.el8                     @commandline        25 k
 libknet1                     i686       1.18-1.el8                       @commandline        86 k
 libknet1                     x86_64     1.18-1.el8                       @commandline        79 k
 libknet1-compress-bzip2-plugin  x86_64  1.18-1.el8                      @commandline        15 k
 libknet1-compress-lz4-plugin    x86_64  1.18-1.el8                      @commandline        16 k
 libknet1-compress-lzma-plugin   x86_64  1.18-1.el8                      @commandline        15 k
 libknet1-compress-lzo2-plugin   x86_64  1.18-1.el8                      @commandline        15 k
 libknet1-compress-plugins-all   x86_64  1.18-1.el8                      @commandline        11 k
```

Enable Services before Configuration:

```
[root@vcc-etisalat Packages]# systemctl enable pcsd
Created symlink /etc/systemd/system/multi-user.target.wants/pcsd.service →
/usr/lib/systemd/system/pcsd.service.
[root@vcc-etisalat Packages]# systemctl enable corosync
Created symlink /etc/systemd/system/multi-
user.target.wants/corosync.service →
/usr/lib/systemd/system/corosync.service.
[root@vcc-etisalat Packages]# systemctl enable pacemaker
Created symlink /etc/systemd/system/multi-
user.target.wants/pacemaker.service →
/usr/lib/systemd/system/pacemaker.service.
```

Starting PCSD Service:

```
[root@vcc-etisalat Packages]# systemctl start pcsd
```

Set HA password:
Passwd 1234 used for testing
```
[root@vcc-etisalat Packages]# passwd hacluster
Changing password for user hacluster.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
```

```
[root@vcc-etisalat Packages]# systemctl enable pcsd
Created symlink /etc/systemd/system/multi-user.target.wants/pcsd.service → /usr/lib/systemd/system/pcsd.service.
[root@vcc-etisalat Packages]# systemctl enable corosync
Created symlink /etc/systemd/system/multi-user.target.wants/corosync.service → /usr/lib/systemd/system/corosync.service.
[root@vcc-etisalat Packages]# systemctl enable pacemaker
Created symlink /etc/systemd/system/multi-user.target.wants/pacemaker.service → /usr/lib/systemd/system/pacemaker.servic
e.
[root@vcc-etisalat Packages]# systemctl start pcsd
[root@vcc-etisalat Packages]#
[root@vcc-etisalat Packages]#
[root@vcc-etisalat Packages]#
[root@vcc-etisalat Packages]#
[root@vcc-etisalat Packages]# passwd hacluster
Changing password for user hacluster.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
[root@vcc-etisalat Packages]# hostname
vcc-etisalat
[root@vcc-etisalat Packages]#
```

Master Server Configuration:

```
[root@vcc-etisalat Packages]# hostnamectl set-hostname VCC-ETISALAT
[root@vcc-etisalat ~]# cat /etc/hosts
127.0.0.1    localhost localhost.localdomain localhost4
localhost4.localdomain4
::1          localhost localhost.localdomain localhost6
localhost6.localdomain6
192.168.1.63   VCC-AIRTEL
192.168.1.53    VCC-ETISALAT
```

[root@vcc-etisalat ~]# pcs host auth VCC-ETISALAT VCC-AIRTEL

Username: hacluster

Password:

VCC-AIRTEL: Authorized

VCC-ETISALAT: Authorized

[root@vcc-etisalat ~]# pcs cluster setup hacluster_appserver VCC-ETISALAT VCC-AIRTEL

No addresses specified for host 'VCC-ETISALAT', using 'vcc-etisalat'

No addresses specified for host 'VCC-AIRTEL', using 'vcc-airtel'

Destroying cluster on hosts: 'VCC-AIRTEL', 'VCC-ETISALAT'...

VCC-ETISALAT: Successfully destroyed cluster

VCC-AIRTEL: Successfully destroyed cluster

Requesting remove 'pcsd settings' from 'VCC-AIRTEL', 'VCC-ETISALAT'

VCC-ETISALAT: successful removal of the file 'pcsd settings'

VCC-AIRTEL: successful removal of the file 'pcsd settings'

Sending 'corosync authkey', 'pacemaker authkey' to 'VCC-AIRTEL', 'VCC-ETISALAT'

VCC-ETISALAT: successful distribution of the file 'corosync authkey'

VCC-ETISALAT: successful distribution of the file 'pacemaker authkey'

VCC-AIRTEL: successful distribution of the file 'corosync authkey'

VCC-AIRTEL: successful distribution of the file 'pacemaker authkey'

Sending 'corosync.conf' to 'VCC-AIRTEL', 'VCC-ETISALAT'

VCC-ETISALAT: successful distribution of the file 'corosync.conf'

VCC-AIRTEL: successful distribution of the file 'corosync.conf'

Cluster has been successfully set up

[root@vcc-etisalat ~]# pcs cluster start –all

[root@vcc-etisalat ~]# pcs cluster enable --all

```
[root@vcc-etisalat ~]# pcs host auth VCC-ETISALAT VCC-AIRTEL
Username: hacluster
Password:
VCC-AIRTEL: Authorized
VCC-ETISALAT: Authorized
[root@vcc-etisalat ~]# pcs cluster setup hacluster_appserver VCC-ETISALAT VCC-AIRTEL
No addresses specified for host 'VCC-ETISALAT', using 'vcc-etisalat'
No addresses specified for host 'VCC-AIRTEL', using 'vcc-airtel'
Destroying cluster on hosts: 'VCC-AIRTEL', 'VCC-ETISALAT' ...
VCC-ETISALAT: Successfully destroyed cluster
VCC-AIRTEL: Successfully destroyed cluster
Requesting remove 'pcsd settings' from 'VCC-AIRTEL', 'VCC-ETISALAT'
VCC-ETISALAT: successful removal of the file 'pcsd settings'
VCC-AIRTEL: successful removal of the file 'pcsd settings'
Sending 'corosync authkey', 'pacemaker authkey' to 'VCC-AIRTEL', 'VCC-ETISALAT'
VCC-ETISALAT: successful distribution of the file 'corosync authkey'
VCC-ETISALAT: successful distribution of the file 'pacemaker authkey'
VCC-AIRTEL: successful distribution of the file 'corosync authkey'
VCC-AIRTEL: successful distribution of the file 'pacemaker authkey'
Sending 'corosync.conf' to 'VCC-AIRTEL', 'VCC-ETISALAT'
VCC-ETISALAT: successful distribution of the file 'corosync.conf'
VCC-AIRTEL: successful distribution of the file 'corosync.conf'
Cluster has been successfully set up.
[root@vcc-etisalat ~]# pcs cluster start --all
VCC-ETISALAT: Starting Cluster ...
VCC-AIRTEL: Starting Cluster ...
[root@vcc-etisalat ~]# pcs cluster enable --all
VCC-ETISALAT: Cluster Enabled
VCC-AIRTEL: Cluster Enabled
```

[root@vcc-etisalat ~]# pcs status cluster

```
[root@vcc-etisalat ~]# pcs status cluster
Cluster Status:
 Cluster Summary:
   * Stack: corosync
   * Current DC: VCC-AIRTEL (version 2.0.5-9.el8-ba59be7122) - partition with quorum
   * Last updated: Mon Feb 19 15:14:00 2024
   * Last change:  Mon Feb 19 15:13:54 2024 by hacluster via crmd on VCC-AIRTEL
   * 2 nodes configured
   * 0 resource instances configured
 Node List:
   * Online: [ VCC-AIRTEL VCC-ETISALAT ]

PCSD Status:
  VCC-AIRTEL: Online
  VCC-ETISALAT: Online
[root@vcc-etisalat ~]# pcs property set stonith-enabled=false
[root@vcc-etisalat ~]# pcs property set no-quorum-policy=ignore
[root@vcc-etisalat ~]# pcs property list
Cluster Properties:
 cluster-infrastructure: corosync
 cluster-name: hacluster_appserver
 dc-version: 2.0.5-9.el8-ba59be7122
 have-watchdog: false
 no-quorum-policy: ignore
 stonith-enabled: false
```

[root@vcc-etisalat ~]# pcs resource create virtual_ip ocf:heartbeat:IPaddr2 ip=192.168.1.73 cidr_netmask=24 op monitor interval=5s

[root@vcc-etisalat ~]# pcs constraint location virtual_ip prefers VCC-ETISALAT

[root@vcc-etisalat ~]# crm_simulate –sL

Current cluster status:

Online: [VCC-AIRTEL VCC-ETISALAT]

 virtual_ip   (ocf::heartbeat:IPaddr2):   Started VCC-ETISALAT

Allocation scores:

pcmk__native_allocate: virtual_ip allocation score on VCC-AIRTEL: 0

pcmk__native_allocate: virtual_ip allocation score on VCC-ETISALAT: INFINITY

Transition Summary:

[root@vcc-etisalat ~]# pcs cluster stop --all

VCC-ETISALAT: Stopping Cluster (pacemaker)...

VCC-AIRTEL: Stopping Cluster (pacemaker)...

VCC-AIRTEL: Stopping Cluster (corosync)...

VCC-ETISALAT: Stopping Cluster (corosync)...

[root@vcc-etisalat ~]# pcs cluster start --all

VCC-ETISALAT: Starting Cluster...

VCC-AIRTEL: Starting Cluster...

[root@vcc-etisalat ~]# pcs status resources

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* virtual_ip (ocf::heartbeat:IPaddr2):   Stopped

[root@vcc-etisalat ~]# pcs status nodes

Pacemaker Nodes:

 Online:

 Standby:

 Standby with resource(s) running:

 Maintenance:

 Offline: VCC-AIRTEL VCC-ETISALAT

Pacemaker Remote Nodes:

 Online:

 Standby:

 Standby with resource(s) running:

 Maintenance:

 Offline:

[root@vcc-etisalat ~]# corosync-cmapctl | grep members

runtime.members.1.config_version (u64) = 0

runtime.members.1.ip (str) = r(0) ip(192.168.1.53)

runtime.members.1.join_count (u32) = 1

runtime.members.1.status (str) = joined

runtime.members.2.config_version (u64) = 0

runtime.members.2.ip (str) = r(0) ip(192.168.1.63)

runtime.members.2.join_count (u32) = 1

runtime.members.2.status (str) = joined

[root@vcc-etisalat ~]# pcs status corosync

Membership information

    Nodeid   Votes Name

       1   1 VCC-ETISALAT (local)

       2   1 VCC-AIRTEL

[root@vcc-etisalat ~]# pcs cluster stop VCC-ETISALAT

VCC-ETISALAT: Stopping Cluster (pacemaker)...

VCC-ETISALAT: Stopping Cluster (corosync)...

[root@vcc-etisalat ~]# pcs cluster start --all

VCC-AIRTEL: Starting Cluster...

VCC-ETISALAT: Starting Cluster...

[root@vcc-etisalat ~]# pcs cluster start --all

VCC-ETISALAT: Starting Cluster...

VCC-AIRTEL: Starting Cluster...

[root@vcc-etisalat ~]# ip a

```
[root@vcc-etisalat ~]# pcs cluster start --all
VCC-ETISALAT: Starting Cluster ...
VCC-AIRTEL: Starting Cluster ...
[root@vcc-etisalat ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: ens3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 52:54:00:eb:6c:31 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.53/24 brd 192.168.1.255 scope global noprefixroute ens3
       valid_lft forever preferred_lft forever
    inet 192.168.1.73/24 brd 192.168.1.255 scope global secondary ens3
       valid_lft forever preferred_lft forever
    inet6 fe80::5054:ff:feeb:6c31/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
3: ens8: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 52:54:00:9d:76:7d brd ff:ff:ff:ff:ff:ff
    inet 192.168.122.180/24 brd 192.168.122.255 scope global noprefixroute ens8
       valid_lft forever preferred_lft forever
    inet6 fe80::5304:6328:5fc5:8020/64 scope link dadfailed tentative noprefixroute
       valid_lft forever preferred_lft forever
    inet6 fe80::6a5d:57c6:88f5:b355/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
```

[root@vcc-etisalat ~]# pcs status cluster

Cluster Status:

 Cluster Summary:

   * Stack: corosync

   * Current DC: VCC-AIRTEL (version 2.0.5-9.el8-ba59be7122) - partition with quorum

   * Last updated: Mon Feb 19 15:36:28 2024

   * Last change: Mon Feb 19 15:16:30 2024 by root via cibadmin on VCC-ETISALAT

   * 2 nodes configured

   * 1 resource instance configured

 Node List:

   * Online: [VCC-AIRTEL VCC-ETISALAT]

PCSD Status:

  VCC-ETISALAT: Online

  VCC-AIRTEL: Online

[root@vcc-etisalat ~]# pcs resource status

 * virtual_ip (ocf::heartbeat:IPaddr2):   Started VCC-ETISALAT

```
[root@vcc-etisalat ~]#  pcs status cluster
Cluster Status:
 Cluster Summary:
   * Stack: corosync
   * Current DC: VCC-AIRTEL (version 2.0.5-9.el8-ba59be7122) - partition with quorum
   * Last updated: Mon Feb 19 15:36:28 2024
   * Last change:  Mon Feb 19 15:16:30 2024 by root via cibadmin on VCC-ETISALAT
   * 2 nodes configured
   * 1 resource instance configured
 Node List:
   * Online: [ VCC-AIRTEL VCC-ETISALAT ]

PCSD Status:
  VCC-ETISALAT: Online
  VCC-AIRTEL: Online
[root@vcc-etisalat ~]#  pcs resource status
  * virtual_ip  (ocf::heartbeat:IPaddr2):        Started VCC-ETISALAT
[root@vcc-etisalat ~]#
```

[root@vcc-etisalat ~]# pcs status

```
[root@vcc-etisalat ~]# pcs status
Cluster name: hacluster_appserver
Cluster Summary:
  * Stack: corosync
  * Current DC: VCC-AIRTEL (version 2.0.5-9.el8-ba59be7122) - partition with quorum
  * Last updated: Mon Feb 19 15:37:55 2024
  * Last change:  Mon Feb 19 15:16:30 2024 by root via cibadmin on VCC-ETISALAT
  * 2 nodes configured
  * 1 resource instance configured

Node List:
  * Online: [ VCC-AIRTEL VCC-ETISALAT ]

Full List of Resources:
  * virtual_ip  (ocf::heartbeat:IPaddr2):        Started VCC-ETISALAT

Daemon Status:
  corosync: active/enabled
  pacemaker: active/enabled
  pcsd: active/enabled
[root@vcc-etisalat ~]#
```

Now, we are testing VIP application by putting root@vcc-etisalat on Standby and making vcc-airtel master and reverting back to vcc-etisalat

[root@vcc-etisalat ~]# ip a

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[root@vcc-etisalat ~]# pcs standby VCC-ETISALAT

[root@vcc-etisalat ~]# ip a | grep ens3

```
[root@vcc-etisalat ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: ens3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 52:54:00:eb:6c:31 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.53/24 brd 192.168.1.255 scope global noprefixroute ens3
       valid_lft forever preferred_lft forever
    inet 192.168.1.73/24 brd 192.168.1.255 scope global secondary ens3
       valid_lft forever preferred_lft forever
    inet6 fe80::5054:ff:feeb:6c31/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
3: ens8: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 52:54:00:9d:76:7d brd ff:ff:ff:ff:ff:ff
    inet 192.168.122.180/24 brd 192.168.122.255 scope global noprefixroute ens8
       valid_lft forever preferred_lft forever
    inet6 fe80::5304:6328:5fc5:8020/64 scope link dadfailed tentative noprefixroute
       valid_lft forever preferred_lft forever
    inet6 fe80::6a5d:57c6:88f5:b355/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
[root@vcc-etisalat ~]# pcs node standby VCC-ETISALAT
[root@vcc-etisalat ~]# ip a | grep ens3
2: ens3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    inet 192.168.1.53/24 brd 192.168.1.255 scope global noprefixroute ens3
[root@vcc-etisalat ~]#
```

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Slave Server configuration:

```
[root@vcc Packages]# hostnamectl set-hostname VCC_AIRTEL
```

[root@VCC-AIRTEL ~]# cat /etc/hosts

127.0.0.1   localhost localhost.localdomain localhost4 localhost4.localdomain4

::1   localhost localhost.localdomain localhost6 localhost6.localdomain6

192.168.1.63   VCC-AIRTEL

192.168.1.53   VCC-ETISALAT

```
[root@vcc-airtel Packages]# systemctl start pcsd
```

Set HA password: **Passwd 1234 used for testing**

```
[root@vcc-etisalat Packages]# passwd hacluster
Changing password for user hacluster.
New password:
BAD PASSWORD: The password is shorter than 8 characters
Retype new password:
passwd: all authentication tokens updated successfully.
```

[root@VCC-AIRTEL ~]# ip a

[root@VCC-AIRTEL ~]# pcs node unstandby VCC-ETISALAT

[root@VCC-AIRTEL ~]# ip a | grep ens3

```
[root@VCC-AIRTEL ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: ens3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 52:54:00:ca:c1:fc brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.63/24 brd 192.168.1.255 scope global noprefixroute ens3
       valid_lft forever preferred_lft forever
    inet 192.168.1.73/24 brd 192.168.1.255 scope global secondary ens3
       valid_lft forever preferred_lft forever
    inet6 fe80::5054:ff:feca:c1fc/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
3: ens8: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 52:54:00:fc:3b:56 brd ff:ff:ff:ff:ff:ff
    inet 192.168.122.190/24 brd 192.168.122.255 scope global noprefixroute ens8
       valid_lft forever preferred_lft forever
    inet6 fe80::5304:6328:5fc5:8020/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
[root@VCC-AIRTEL ~]# pcs node unstandby VCC-ETISALAT
[root@VCC-AIRTEL ~]# ip a | grep ens3
2: ens3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    inet 192.168.1.63/24 brd 192.168.1.255 scope global noprefixroute ens3
[root@VCC-AIRTEL ~]#
```

Checking VIP is up at vcc-etisalat or not

```
[root@vcc-etisalat ~]# ip a
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
       valid_lft forever preferred_lft forever
    inet6 ::1/128 scope host
       valid_lft forever preferred_lft forever
2: ens3: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 52:54:00:eb:6c:31 brd ff:ff:ff:ff:ff:ff
    inet 192.168.1.53/24 brd 192.168.1.255 scope global noprefixroute ens3
       valid_lft forever preferred_lft forever
    inet 192.168.1.73/24 brd 192.168.1.255 scope global secondary ens3
       valid_lft forever preferred_lft forever
    inet6 fe80::5054:ff:feeb:6c31/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
3: ens8: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc fq_codel state UP group default qlen 1000
    link/ether 52:54:00:9d:76:7d brd ff:ff:ff:ff:ff:ff
    inet 192.168.122.180/24 brd 192.168.122.255 scope global noprefixroute ens8
       valid_lft forever preferred_lft forever
    inet6 fe80::5304:6328:5fc5:8020/64 scope link dadfailed tentative noprefixroute
       valid_lft forever preferred_lft forever
    inet6 fe80::6a5d:57c6:88f5:b355/64 scope link noprefixroute
       valid_lft forever preferred_lft forever
[root@vcc-etisalat ~]#
```