5 things to do after Linux Installation – RHEL/CentOS 7 Configuration

After installing the any Linux Operating System( [**RHEL/CentOS 7** **Installation**](https://www.techinformant.in/rhelcentos-7-installation-steps/) ), it is mandatory to RHEL/CentOS 7 Configuration which is required to proceed further.

In this article, I’m going to explain you about the very important 5 steps that are very useful when you installed fresh Linux Server. I hope every Linux Admin will do the same task after a fresh installation of the Linux OS. Every Linux engineer performs these below configuration settings before starting deploying anything on the server.

To change the IP Address and hostname to Static, following command will help you to set the static IP for RHEL/CentOS 7 systems,in traditional version RHEL/CentOS 5&6 we have used “setup” command to make static changes, but coming to the latest version of RHEL/CentOS 7 unlike we use different command here.

The following command will help you to set the static entries of IP address and Hostname and basic  RHEL/CentOS 7 configuration.

**RHEL/CentOS 7 Configuration**

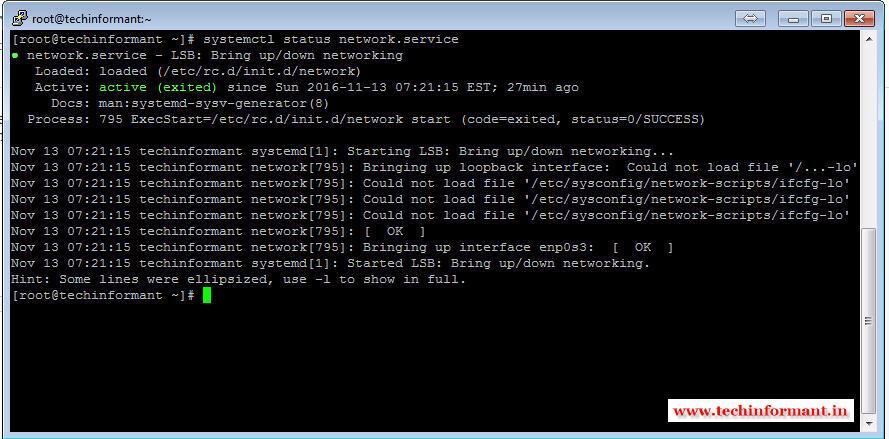
**1. Network Configuration – Static IP Address adding**

**Suggestable Read:**  [Network settings in Red Hat / CentOS 7](https://www.techinformant.in/static-ip-address-configuration-in-linux-centos-7/)

**nmtui – NETWORK CONFIGURATION USING A TEXT USER INTERFACE (NMTUI)**  
RHEL – 7 Network Management – nmcli or nmtui  
# nmtui is an alternative command for nmcli which is based on “Text User Interface”.

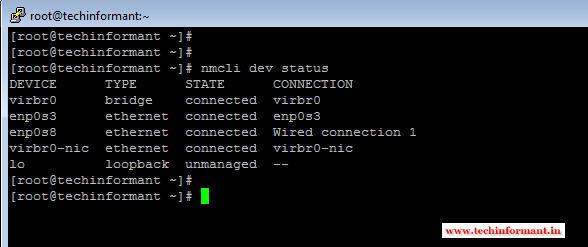
**Step 1: To verify the status of Network service**

|  |
| --- |
| [root@techinformant ~]# systemctl status network.service |

[**[](https://i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-0000-1.jpg)**](https://i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-0000-1.jpg)

**Step 2: To check which network interface is managed by Network Manager, run:**

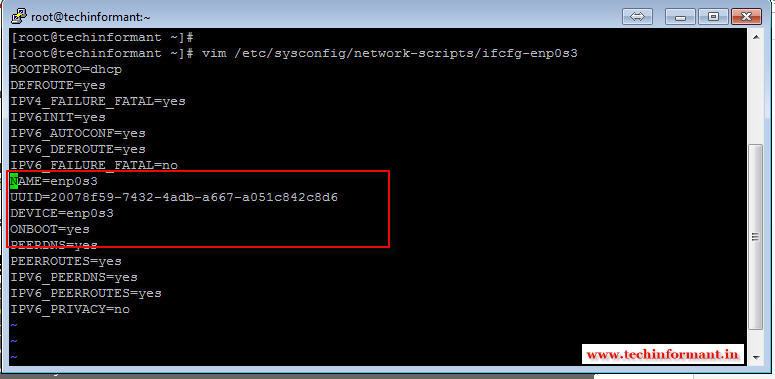
|  |
| --- |
| [root@rhel ~]# nmcli dev status |

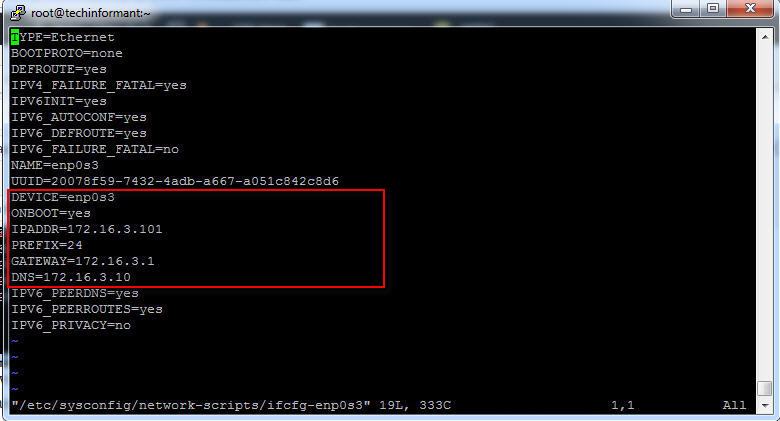
[[](https://i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-0001-1.jpg)<img class="aligncenter wp-image-2486 size-full" title="RHEL/CentOS 7 Configuration" src="data:image/gif;base64,R0lGODlhAQABAIAAAAAAAP///yH5BAEAAAAALAAAAAABAAEAAAIBRAA7" data-src="//i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-0001-1.jpg" alt="redhat-centos-7-static-ip-techinformant-0001" width="588" height="247" />](https://i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-0001-1.jpg)Go to the **/etc/sysconfig/network-scripts** directory, and locate its configuration file (ifcfg-enp0s3). Create it if not found.

**Step 3: Configure a Static IP Address without Network Manager**

First, need to verify the network settings and its proper configuration as below

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| --- |
| [root@techinformant ~]# vim /etc/sysconfig/network-scripts/ifcfg-enp0s3 |

[[](https://i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-0002-1.jpg)<img class="aligncenter wp-image-2487 size-full" title="RHEL/CentOS 7 Configuration" src="data:image/gif;base64,R0lGODlhAQABAIAAAAAAAP///yH5BAEAAAAALAAAAAABAAEAAAIBRAA7" data-src="//i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-0002-1.jpg" alt="redhat-centos-7-static-ip-techinformant-0002" width="775" height="379" />](https://i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-0002-1.jpg)

**Configuring Static IP:** put your IP Address details as  below[](https://i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-00011111-1.jpg)

If you want to use Network Manager to manage the interface, you can use nmtui (Network Manager Text User Interface) which provides a way to configure Network Manager in a terminal environment.

Before using nmtui, first set “NM\_CONTROLLED=yes” in **/etc/sysconfig/network-scripts/ifcfg-enp0s3**

Now let’s install nmtui as follows.

|  |
| --- |
| [root@techinformant ~]# yum install NetworkManager-tui |

Then go ahead and edit the Network Manager configuration of **ifcfg-enp0s3** interface:

|  |
| --- |
| [root@techinformant ~]# nmtui |

Use the arrow keys to navigate this screen, press Enter to select from a list of values (or fill in the desired values), and finally click OK at the bottom right:

Finally, restart the network service.

|  |
| --- |
| [root@techinformant ~]# systemctl restart network.service |

After configuring the Static IP, you can free to use open source software called [PuTTY](http://www.putty.org/), this is an SSH and telnet client Service.

**2. Hostname – hostname and proper FQDN configuration**

**Suggestable Read**: [How to configure hostname in Red Hat / CentOS 7.](https://www.techinformant.in/hostname-in-redhat-centos-7/)

To check the hostname details below command will give an output of the hostname and complete system architecture details.

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| --- |
| [root@techinformant ~]# hostnamectl status |

**Configuring Static Hostname:**

|  |
| --- |
| [root@techinformant ~]# hostnamectl set-hostname “your new hostname” –static |

Add the fully Qualified hostname into the **/etc/hostname** and **/etc/hosts** files.

|  |
| --- |
| [root@techinformant ~]# vim /etc/hostname |

|  |
| --- |
| [root@techinformant ~]# vim /etc/hosts |

**Verifying DNS name to resolve with the local domain.** Add name server(DNS) details in resolve.conf file.

|  |
| --- |
| [root@techinformant ~]# cat /etc/resolv.conf |

# Generated by NetworkManager  
search techinformant.in  
nameserver 192.168.1.1

**3. SELinux – Secure Linux configuration**

First check the sestatus, by default it will in enable state.  most of the time will set SELinux as disable or permissive mode. In my case, I’m disabling the SELinux to allow incoming and outgoing connections without any restrictions.

This command is used to check the selinux status. if it is in enforcing mode, you can disable temporarily by using **setenforce 0** commands or you disable it permanently from the **/etc/selinux/config** configuration file.

|  |
| --- |
| [root@techinformant ~]# sestatus |

Selinux configuration file and set the correct mode which is suitable for your environment.

|  |
| --- |
| [root@techinformant ~]# vim /etc/selinux/config |

   Note: – Reboot is required when SElinux configuration changes. until reboot changes will be temporaty.

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**Step 4: IPTABLES :** iptables is a user-space application program that allows a system administrator to configure the tables provided by the Linux kernel firewall (implemented as different Netfilter modules) and the chains and rules it stores. Different kernel modules and programs are currently used for different protocols

To list out the enabled iptables rules with below command. If it is enabled with long list following next command will help you to flush those firewall rules.

|  |
| --- |
| [root@techinformant ~]# iptables -L |

Flush (Deleting) the iptables rules.

|  |
| --- |
| [root@techinformant ~]# iptables -F |

Then Stop/Disable the Firewall Daemon service with the help of below commands.

|  |
| --- |
| [root@node2 ~]# systemctl stop firewalld |

|  |
| --- |
| [root@techinformant ~]#  systemctl status firewalld.service |

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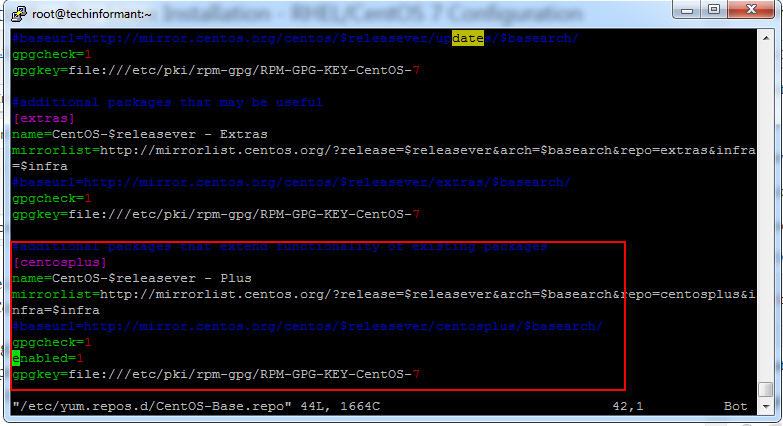
**5. YUM(Yellow Dog Updater, Modifier) Repository Configuration and verification**

**Also Read:** [Local Yum Repository Server Configuration](https://www.techinformant.in/creating-local-yum-repository-red-hat-centos-7/)

Go to the yum repository configuration and enable the centosplus repo setup to auto enable all the above links.

simply put this parameter **Enable =1**

|  |
| --- |
| [root@techinformant ~]# vim /etc/yum.repos.d/CentOS-Base.repo |

[[](https://i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-yum-repo.jpg)](https://i0.wp.com/www.techinformant.in/wp-content/uploads/2016/11/Redhat-CentOs-7-Static-IP-Techinformant-yum-repo.jpg)

After enable the repo link, need to clean and update the repolist with blow command.

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| --- |
| [root@techinformant ~]#yum clean all |

|  |
| --- |
| [root@techinformant ~]#yum repolist |

Finally reboot the server, then deploy the services what you need. This is all about RHEL/CentOS 7 Configuration.