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# How to Restart Network Interface in Linux

Author: Vivek Gite • Last updated: March 31, 2022 • 4 comments

ow do I restart the network interface under Linux operating systems after making changes to IP configuration without rebooting the server?



You can restart the networking service in Linux using various command. Use the following commands as per your Linux distribution to restart the networking service. You must run the command as root user either using sudo or su commands. The ifup command bring a network interface up. The ifdown command take a network interface down. You must be careful with ifdown command if you are using it over SSH based session.

	Tutorial details
Difficulty level	<u>Easy</u>
Root privileges	<u>Yes</u>
Requirements	Linux terminal
Category	Processes Management
Prerequisites	Linux distribution
OS compatibility	Alma • <u>Alpine</u> • <u>Arch</u> • <u>Debian</u> • <u>Fedora</u> • Mint • <u>openSUSE</u> • Pop!_OS • <u>RHEL</u> • Rocky • <u>Stream</u> • <u>SUSE</u> • <u>Ubuntu</u> • WSL

	Tutorial details
Est. reading time	5 minutes
	ADVERTISEMENT

# Restart Network Interface Using Command Lines in Linux (generic method)

**WARNING!** These examples may result in loss of networking connectivity when run over ssh based sessions. Therefore for remote servers, use a console provided by your cloud service provider or <a href="IPMI">IPMI</a>. The nixCraft or author is not responsible for data loss.

First, you can <u>get a list of network interfaces on Linux</u> using the <u>ip command</u> (or ifconfig command):

```
$ ip link show
$ ifconfig -a
```

Then, the procedure to to turn off ethe interface is as follows (replace the ethe with your actual name). Run:

```
# ifdown eth0
```

To turn on eth0 interface run:

```
# ifup eth0
```

### See ip address info using the ip command:

```
# ip a show eth0
```

```
[root@centos-7 ~]# ip a show eth0
13: eth0@if14: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP qlen 1000
    link/ether 00:16:3e:d0:e8:8a brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 10.98.222.3/24 brd 10.98.222.255 scope global dynamic eth0
       valid_lft 3556sec preferred_lft 3556sec
    inet6 fe80::216:3eff:fed0:e88a/64 scope link
       valid lft forever preferred lft forever
[root@centos-7 ~]#
[root@centos-7 ~]# ifdown eth0
root@centos-7 ~]#
[root@centos-7 ~]#
root@centos-7 ~]# ip a show eth0
13: eth0@if14: <BROADCAST,MULTICAST> mtu 1500 qdisc noqueue state DOWN qlen 1000
    link/ether 00:16:3e:d0:e8:8a brd ff:ff:ff:ff:ff link-netnsid 0
[root@centos-7 ~]#
root@centos-7 ~]#
[root@centos-7 ~]# ifup eth0
Determining IP information for eth0... done.
[root@centos-7 ~]#
[root@centos-7 ~]#
root@centos-7 ~]# ip a show eth0
13: eth0@if14: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP qlen 1000
    link/ether 00:16:3e:d0:e8:8a brd ff:ff:ff:ff:ff:ff link-netnsid 0
    inet 10.98.222.3/24 brd 10.98.222.255 scope global dynamic eth0
    valid_lft 3598sec preferred_lft 3598sec
inet6 fe80::216:3eff:fed0:e88a/64 scope link
       valid lft forever preferred lft forever
root@centos-7 ~]#
[root@centos-7 ~]#
```

If you get error such as ifup or ifdown command not found, then use the <u>ip</u> <u>command</u> to turn off and on interface named eth0 or enp0s31f6:

```
$ sudo ip link set enp0s31f6 down
$ sudo ip link set enp0s31f6 up
```

# Debian / Ubuntu Linux restart network interface

To restart network interface, enter:

sudo /etc/init.d/networking restart

To stop and start use the following option (do not run them over remote ssh session as you will get disconnected):

```
sudo /etc/init.d/networking stop
sudo /etc/init.d/networking start
```

Debian/Ubuntu Linux with systemd, run:

```
$ sudo systemctl restart networking
```

The latest version of Ubuntu or Debian service name changed to NetworkManager. Hence, use the systematl command as follows:

\$ sudo systemctl restart NetworkManager

# Redhat (RHEL) / CentOS / Fedora / Suse / OpenSuse Linux – Restart network interface in Linux

To restart network interface, enter:

```
# /etc/init.d/network restart
```

To stop and start use the following option (do not run them over remote ssh session as you will get disconnected):

```
# /etc/init.d/network stop
```

```
# /etc/init.d/network start
```

# Fedora/RHEL/CentOS/Suse Linux with systemd, run:

```
$ sudo systemctl restart network
```

Again, The latest version of RHEL/CentOS/Rocy/Alma Linux service name changed to NetworkManager. Hence, use the systemctl command as follows:

```
$ sudo systemctl restart NetworkManager
```

# Slackware Linux restart commands

### Type the following command:

```
/etc/rc.d/rc.inet1 restart
```

You can take down or restart particular interface such as eth1 as follows:

```
# /etc/rc.d/rc.inet1 eth1_restart
# /etc/rc.d/rc.inet1 eth1_start ### start eth1 ###
# /etc/rc.d/rc.inet1 eth1_stop ### stop eth1 ###
```

# How to see status of network/networking service

Run command as per your Linux distro version:

```
# CentOS/RHEL/Fedora/Rocky/Alma Linux #
$ systemctl status network #old
$ systemctl status NetworkManager #new
# Debian/Ubuntu/Linux mint and co #
```

```
$ systemctl status networking #old
$ systemctl status NetworkManager #new
# Suse/OpenSUSE Linux #
$ systemctl status network
# Alpine Linux #
# service networking status
```

#### Sample outputs from OpenSUSE:

# To see info about ip address run:

```
# ifconfig -a
```

#### OR

```
# ip a
# ip a show
# ip a show eth1
```

# How to restart the networking service on Gentoo

Run the following for eth0:

```
# /etc/init.d/net.eth0 restart
```

# Restating networking service on Alpine Linux

Use the service command:

```
# service networking restart
# OR #
# /etc/init.d/networking restart
```

# Arch Linux restart networking

Use the systemd-networkd.service on your Arch Linux. For example, on Linode cloud server, I use the following commands:

```
# Restart it #
$ sudo systemctl restart systemd-networkd.service
# Get the status #
$ systemctl status systemd-networkd.service
```

#### Sample outputs:

```
    systemd-networkd.service - Network Configuration
        Loaded: loaded (/usr/lib/systemd/system/systemd-networkd.service;
        Active: active (running) since Tue 2022-02-15 19:58:13 UTC; 3 days
    TriggeredBy: • systemd-networkd.socket
        Docs: man:systemd-networkd.service(8)
    Main PID: 245 (systemd-network)
    Status: "Processing requests..."
```

Tasks: 1 (limit: 4690)

Memory: 3.0M

CPU: 1min 41.703s

CGroup: /system.slice/systemd-networkd.service

└─245 /usr/lib/systemd/systemd-networkd

```
Feb 15 19:58:12 localhost systemd-networkd[245]: lo: Link UP
Feb 15 19:58:12 localhost systemd-networkd[245]: lo: Gained carrier
Feb 15 19:58:12 localhost systemd-networkd[245]: Enumeration completed
Feb 15 19:58:13 localhost systemd[1]: Started Network Configuration.
Feb 15 19:58:13 localhost systemd-networkd[245]: eth0: Link UP
Feb 15 19:58:13 localhost systemd-networkd[245]: eth0: Gained carrier
Feb 15 19:58:14 localhost systemd-networkd[245]: eth0: Gained IPv6LL
Notice: journal has been rotated since unit was started, output may be
```

# Summing up

Over the years, Linux distros changed the way we manage networking services. I hope this guide helps you. If your Linux distro is not mentioned or the command is not working, post it below and I will reply you. For more info see the following manual pages using the <a href="help command">help command</a> or <a href="management">man command</a>:

```
man service
man systemctl
```

**About the author:** Vivek Gite is the founder of nixCraft, the oldest running blog about Linux and open source. He wrote more than 7k+ posts and helped numerous readers to master IT topics. Join the nixCraft community via RSS Feed, Email Newsletter or follow on Twitter.

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**m** • Apr 17, 2021 @ 23:28

The part of the article on debian / ubuntu:

```
# How to see status of network/networking service
$ sudo systemctl status network #Debian/Ubuntu
```

Didn't work out for me . i'm currently using elementary os hera , and the 'network' service isn't defined . instead i have it as 'networking'

```
$ sudo systemctl status networking
```

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Anonymous • Feb 18, 2022 @ 13:59

আমার নেট অনেক স্লো কাজ করে

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Anonymous • Mar 31, 2022 @ 14:14

Small mistake on the Arch one, it says the command is "status" to restart but it's supposed to be "restart"

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O Vivek Gite • Mar 31, 2022 @ 14:47

Thanks for the heads up!

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