

Debian: Setup Static IP Address

NOTE: This works on Debian 13.4.

Here are notes and steps to assign a static IP address for a Debian host.

NOTE: If you are doing this for an Ubuntu host, see this page: [Ubuntu: Setup Static IP Address](#)

Net Tools (ipconfig) ▣

Install net tools, so we can use commands like: ipconfig

```
sudo apt install net-tools
```

Static IP Address ▣

Static addresses will be defined in a netplan file, configured below.

But, we need to do a few things, first:

- Get the Gateway IP
- Enable Adapters

Get the Gateway IP

You will need to know the gateway address that your host will use.

If the host is not on the desired network, you will need to determine the gateway IP, manually. Or, you can join the host to the network, and do the following to determine it.

If the host is up, you can run this command to get the current default gateway assigned to it:

```
ip r | grep default
```

This command will return the default gateway address, like this:

```
ubuntu@ip-10-0-1-10:/etc/netplan$ ip r | grep default
default via 10.0.1.1 dev eth0 proto dhcp src 10.0.1.10 metric 100
ubuntu@ip-10-0-1-10:/etc/netplan$ ls -l
```

Enable Adapters

If you added an adapter to the host, it may be in a down state.

To enable it, use this command to find the name:

```
sudo ip a | grep ^[:,digit:]
```

The above will give a list, like this:

```
glwhite@blissbuildvm:~/Desktop$ sudo ip a | grep ^[:,digit:]
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group default qlen 1000
2: ens160: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc mq state UP group default qlen 1000
3: br-414bf26d2e71: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue state UP group default
4: docker0: <NO-CARRIER,BROADCAST,MULTICAST,UP> mtu 1500 qdisc noqueue state DOWN group default
6: veth256ca6d@if5: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1500 qdisc noqueue master br-414bf26d2e71 state UP group default
glwhite@blissbuildvm:~/Desktop$
```

And, you can enable it with this:

```
sudo ifconfig eth1 up
```

NOTE: Be sure to use the name of the nic, from the previous call.

Network Interfaces

Open the interfaces file at: `/etc/network/interfaces`

```
sudo nano /etc/network/interfaces
```

```
auto ens192
iface ens192 inet static
    address 192.168.1.50/24
    gateway 192.168.1.1
    dns-nameservers 192.168.1.2 8.8.8.8
```

Replace:

- `ens192` with your actual interface name (found above)
- `192.168.1.50` with your desired static IP
- `192.168.1.1` with your gateway/router
- Set the dns-nameservers you need with a space between each.

Save and close the interfaces file.

Restart Networking

With the config updated, we need to restart networking.

Do this:

```
sudo systemctl restart networking
```

Now, check the IP address with this:

```
sudo ifconfig
```

You'll see something like this:

```
root@agentrpvm:/home/provisioner# ifconfig
docker0: flags=4099<UP,BROADCAST,MULTICAST> mtu 1500
    inet 172.17.0.1 netmask 255.255.0.0 broadcast 172.17.255.255
    ether 9a:be:52:0a:4b:b7 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 2 overruns 0 carrier 0 collisions 0

ens192: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
    inet 192.168.180.20 netmask 255.255.255.0 broadcast 192.168.180.255
    inet6 fe80::3575:186e:dbe:3852 prefixlen 64 scopeid 0x20<link>
    ether 00:50:56:9c:7f:a0 txqueuelen 1000 (Ethernet)
    RX packets 18 bytes 1842 (1.7 KiB)
    RX errors 0 dropped 0 overruns 0 frame 0
    TX packets 32 bytes 2766 (2.7 KiB)
    TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
```

Revision #3

Created 7 May 2026 04:40:38 by glwhite

Updated 7 May 2026 04:55:03 by glwhite