

5 things you can do with netstat command

```
greys@maverick:~ $ netstat -lt | head
Active Internet connections
Proto Recv-Q Send-Q Local Address           Foreign Address         (state)
tcp4    0      0 192.168.1.222.61451    195.122.177.132.https  ESTABLISHED
tcp4    0      0 192.168.1.222.61450    195.122.177.132.https  ESTABLISHED
tcp4    0      0 localhost.nfsd-status  localhost.61448        ESTABLISHED
tcp4    0      0 192.168.1.222.61449    ec2-52-30-122-26.https ESTABLISHED
tcp4    0      0 localhost.61448        localhost.nfsd-status  ESTABLISHED
tcp4    0      0 localhost.nfsd-status  localhost.61428        ESTABLISHED
tcp4    0      0 192.168.1.222.61429    17.248.145.180.https  ESTABLISHED
tcp4    0      0 localhost.61428        localhost.nfsd-status  ESTABLISHED
greys@maverick:~ $ netstat -r | head
Routing tables

Internet:
Destination      Gateway           Flags           Refs      Use    Netif Expire
default          192.168.1.1      UGSc           171        0      en8
default          192.168.1.1      UGScI          2          0      en0
127              localhost        UCS            0          0      lo0
localhost        localhost        UH             76 4064242    lo0
169.254          link#8           UCS            1          0      en8      !
169.254          link#10          UCSI           0          0      en0      !
You have mail in /var/mail/greys
greys@maverick:~ $
```

The [netstat command](#), which stands for “network statistics”, can show you a lot of information about your network including statistics on connections to and from others on the network, used network interfaces, services, ports, and routing tables.

So what could all this information be used for? Just running *netstat* alone will give you an overview of your network, which will show a list of addresses connected to your system, over which port they’re connected, and what services or programs they’re talking to.

Here are five relatively simple examples of what you can actually do with netstat.

Show who is connected to your

system

One of the most useful things you can do with netstat is show exactly who is connected to your system either through an incoming or outgoing connection (whether it is your system which initiated it or the other system). This will simply list all of them:

```
netstat -a
```

Look at the “Foreign Address” column to see where the connection is coming from, and “Local Address” to see what on the local machine is it connected.

The following command will show just the TCP (-t) and UDP (-u) connections:

```
netstat -tua
```

If you want to turn off hostnames, or domain names, and display only IP numbers just add the -n option.

```
netstat -tuan
```

If you want it to display this continuously to see as connections come and go add the -c option.

```
netstat -tuanc
```

Needless to say, perhaps, with IP addresses of everyone connecting revealed you can use other tools like traceroute to determine where exactly is it coming from.

Show listening ports with netstat

If you'd like to see which services are actually listening for incoming connections, perhaps to ensure you don't have something listening that you don't want to be listening, just use the -l option.

```
netstat -l
```

You can also limit this to only a specific type of traffic, like TCP in this example (for UDP just use `-u`):

```
netstat -lt
```

Find the port used by a program

We can get a little bit more specific by combining the `netstat` command with other common UNIX utilities like `grep`, in this example, where we make it easier to find which port is used by a program. We use `grep` to conveniently dig this info out of the `netstat` output:

```
netstat -ap | grep znc
```

In this example we get a list of all connections mentioning ZNC with the ports it is using, and addresses it is connected to.

Show the network routing table

With `netstat` you can easily see the kernel IP routing table being used on your system using the `-r` option:

```
netstat -r
```

Show all netstat statistics

Being a statistics utility you can of course see a summary of a great number of statistics about your system's networking. Just run the `netstat` command with the `-s` option:

```
netstat -s
```

This will display a huge list of statistics, but you'll immediately recognize the most interesting ones depending on what you're looking for. For example you can see a total number of packets received, number of active TCP connections, and a number of extended more detailed statistics for each

protocol.

Note

These examples are based on `netstat` in Linux, where it has been succeeded by the `ss` command from the `iproute2` package, but it should apply to most UNIX and UNIX like systems. You can also check the manual page readily available via the `man netstat` command for more information.

See Also

- [netstat unix](#)
- [Advanced Unix commands](#)