

For Linux users, mastering networking commands can open up a world of possibilities, from diagnosing network issues to optimizing performance.

Here's a quick guide to 30 essential Linux networking commands that you should know:

- 1. ping Test network connectivity.

 ping google.com
- 2. **ifconfig** Configure network interfaces. ♥ ifconfig
- 3. **netstat** Display network connections. **III** netstat -tuln
- 4. ssh Secure Shell for remote login. ssh user@hostname
- 5. scp Secure Copy for file transfer. \$\mathref{G}\$
 scp file_name user@hostname:/path/to/destination
- 6. traceroute Trace the route packets take to a network host. **
 traceroute google.com

7.	nslookup - Query Internet domain name servers. Q nslookup google.com
8.	<pre>dig - DNS lookup utility. dig google.com</pre>
9.	host - DNS lookup utility. host google.com
10.	nmap - Network exploration tool and security scanner. nmap localhost
11.	ip - Show or manipulate routing, devices, policy routing, and tunnels. III ip addr show
12.	ss - Another utility to investigate sockets. ss -tuln
13.	tcpdump - Capture and analyze network traffic. tcpdump -i eth0
14.	wget - Non-interactive network downloader. wget http://example.com/file.txt
15.	<pre>curl - Transfer data from or to a server. curl http://example.com</pre>
16.	ncat - Network utility for reading from and writing to network connections. & ncat -1 1234
17.	socat - Multipurpose relay for bidirectional data transfer. Socat - TCP4-LISTEN:1234, fork
18.	iptables - User-space utility program that allows a system administrator to configure the IP packet filter rules of the Linux kernel firewall. iptables -L

19.	firewall-cmd - Command line interface to firewall management (firewalld). firewall-cmdlist-all
20.	ufw - Uncomplicated Firewall.
21.	route - Show or manipulate the IP routing table. Remarks route -n
22.	arp - Address Resolution Protocol. ♥ arp -a
23.	ethtool - Utility for controlling network drivers and hardware. % ethtool eth0
	<pre>mtr - Diagnostic tool for network problems. mtr google.com</pre>
25.	nethogs - Monitor network traffic.
26.	iftop - Monitor bandwidth usage on an interface. 📊
27.	vnstat - Network traffic monitor. vnstat -i eth0
28.	bmon - Bandwidth monitor and rate estimator.
29.	<pre>iperf - Tool for active measurements of the maximum achievable bandwidth on IP networks. perf -c server_ip</pre>
30.	speedtest-cli - Command line interface for testing internet bandwidth using speedtest.net.