

# CheatSheet: Linux Networking

LINUX

- PDF Link: [cheatsheet-networking-A4.pdf](#), Category: linux
- Blog URL: <https://cheatsheet.dennyzhang.com/cheatsheet-networking-A4>
- Related posts: [CheatSheet: Linux File](#), [CheatSheet: Linux Process](#), [#denny-cheatsheets](#)

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## 1.1 Linux Networking

Name	Comment
Examine network nic traffic	<code>ethtool -S eth0</code>
Check system configuration	<code>sysctl -a</code>
Ports for well-known services	<code>cat /etc/services</code>
Reference	SSH CheatSheet, Tcpdump CheatSheet, CheatSheet: Curl & Wget
Reference	CheatSheet: Linux File, CheatSheet: Linux Process, CheatSheet: Linux Networking

## 1.2 HTTP

Name	Command
See HTTP request statistics	<code>httpstat https://www.google.com</code> (brew install httpstat)
Monitor HTTP URLs	SaaS: <a href="https://uptimerobot.com">uptimerobot.com</a>
Examine web page performance	SaaS: <a href="https://pingdom.com">pingdom.com</a>
Test webpage from different browsers	SaaS: <a href="https://www.browserling.com">www.browserling.com</a>
Export local http service to Internet	SaaS: <a href="https://ngrok.com">ngrok.com</a>
Reference	CheatSheet: Curl & Wget, GitHub: <a href="#">free-for-dev</a>

## 1.3 TCP

Name	Comment
List all listening tcp ports	<code>netstat -tunlp</code>
Port scan for a given host	<code>sudo nmap -O 192.168.1.103</code> , SaaS: <a href="https://viewdns.info/portscan">viewdns.info/portscan</a>
Add 97ms latency to eth0	Link: <code>tc, tc qdisc add dev eth0 root netem delay 97ms</code>
Check tc status	<code>tc -s qdisc</code>
Remove tc rule	<code>tc qdisc del dev eth0 root netem</code>
Check network speed	SaaS: <a href="https://www.att.com/speedtest">www.att.com/speedtest</a>
Tcp manual	<code>man 7 tcp</code>
Reference	Tcpdump CheatSheet

## 1.4 Route

Name	Comment
List route rules	<code>route -n, netstat -nr</code>
Add default rule	<code>route add default gw 10.0.0.1 netmask 255.255.255.0 dev eth0</code>
Add route rule	<code>route add -net 0.0.0.0 gw 192.168.1.1 netmask 0.0.0.0 dev eth0</code>
Del route rule	<code>route del -net 192.168.3.0 netmask 255.255.255.0 dev eth1</code>

## 1.5 DNS

Name	Comment
Check dns naming	<code>sudo nslookup www.google.com</code>
Print routing table	<code>netstat -rn</code>
List all the router hops	<code>traceroute</code>
DNS lookup utility	<code>host www.google.com</code>
DNS pin test	SaaS: <a href="https://viewdns.info">viewdns.info</a>
Websites To Register DNS	Link: <a href="#">Google Domain DNS</a> , Link: <a href="#">GoDaddy</a> , Link: <a href="#">Amazon Route 53</a>

## 1.6 CDN

Name	Command
CDN services	<code>cloudflare, jsDelivr</code>

## 1.7 TCP sockets workflow

Name	Comment
create a new anonymous socket	<code>s = socket(&lt;parameters&gt;)</code>
Bind tcp port to a socket	<code>bind(s, &lt;local IP:port&gt;)</code>
Create a socket to remote endpoint	<code>connect(s, &lt;remote IP:port&gt;)</code>
Create local socket and make it eligible to take requests	<code>listen(s, ...)</code>
Accept client requests	<code>s2 = accept(s)</code>
Read n bytes from a socket	<code>n = read(s, buffer, n)</code>
Write n bytes to a socket	<code>n = write(s, buffer, n)</code>
Close a socket	<code>close(s)</code>
Shutdown stdin and stdout/stderr for a socket	<code>shutdown(s, &lt;side&gt;)</code>
Read socket options	<code>getsockopt(s, ..)</code>
Change socket options	<code>setsockopt(s, ..)</code>

## 1.8 More Resources

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<https://github.com/trimstray/the-book-of-secret-knowledge>