

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

File me Issues or star this repo.

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: uptimerobot.com |
| Examine web page performance | SaaS: pingdom.com |
| Test webpage from different browsers | SaaS: www.browserling.com |
| Export local http service to Internet | SaaS: ngrok.com |
| Reference | CheatSheet: Curl & Wget, GitHub: free-for-dev |

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: viewdns.info/portscan |
| 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: www.att.com/speedtest |
| 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: viewdns.info |
| Websites To Register DNS | Link: Google Domain DNS , Link: GoDaddy , Link: Amazon Route 53 |

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(<parameters>)</code> |
| Bind tcp port to a socket | <code>bind(s, <local IP:port>)</code> |
| Create a socket to remote endpoint | <code>connect(s, <remote IP:port>)</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, <side>)</code> |
| Read socket options | <code>getsockopt(s, ..)</code> |
| Change socket options | <code>setsockopt(s, ..)</code> |

1.8 More Resources

License: Code is licensed under MIT License.

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