1 CheatSheet: Linux Networking LINUX

- PDF Link: cheatsheet-networking-A4.pdf, Category: linux
- Blog URL: `https://cheatsheet.dennyzhang.com/cheatsheet-networking-A4`
- Related posts: CheatSheet: Cloud Virtualization, #denny-cheatsheets

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1.1 Linux Networking

Name	Comment
Scan tcp listening ports for a given server	`sudo nmap -O 192.168.1.103`
Check dns naming	`sudo nslookup www.google.com`
Print routing table	`netstat -rn`
List all the router hops	`traceroute`
DNS lookup utility	`host www.google.com`
Get detail report for a given NIC	`ethtool -S eth0`
Check system configuration	`sysctl -a`
Linux mapping from well-known services to ports	`cat /etc/services`
	`netstat -i`
	`arp -a`

1.2 Networking testing

Name	Comment
tc	Adding simulated network latency
Add 97ms latency to eth0	`tc qdisc add dev eth0 root netem delay 97ms`
Check status	`tc -s qdisc`
Remove the rule	`tc qdisc del dev eth0 root netem`
Test your network speed	`http://www.att.com/speedtest/`

1.3 TCP sockets workflow

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

1.4 TCP

Name	Comment
Tcp manual	`man 7 tcp`
Reference	Tcpdump CheatSheet

1.5 HTTP

Name	Comment
Reference	Curl CheatSheet

1.6 References

Name	Comment
RFC793	`http://www.ietf.org/rfc/rfc793.txt`
Reference	Tcpdump CheatSheet, Curl CheatSheet, SSH CheatSheet

1.7 More Resources