# **Iptables Cheat Sheet**

Iptables is a Linux kernel-level module allowing us to perform various networking manipulations (i.e. packet filtering) to achieve better network security.

# **View All Current Iptables Rules:**

iptables -L -v

#### **View All INPUT Rules:**

iptables -L INPUT -nv

## **How To Block An IP Address Using Iptables:**

iptables -I INPUT -s "201.128.33.200" -j DROP

# To Block A Range Of IP Addresses:

iptables -I INPUT -s "201.128.33.0/24" -j DROP

#### **How To Unblock An IP Address:**

iptables -D INPUT -s "201.128.33.200" -j DROP

# **How To Block All Connections To A Port:**

To block port 25:

iptables -A INPUT -p tcp --dport 25 -j DROP iptables -A INPUT -p udp --dport 25 -j DROP

### **How To Un-Block:**

To enable port 25:

iptables -A INPUT -p tcp --dport 25 -j ACCEPT iptables -A INPUT -p udp --dport 25 -j ACCEPT

## To Save All Rules So That They Are Not Lost In Case Of A Server Reboot:

/etc/init.d/iptables save

### Or, alternatively:

service iptables save
Delete A Rule By Line Number
Output all the ip tables rules with line numbers:
iptables -L INPUT -n --line-numbers
You'll get the list of all blocked IP. Look at the number on the left, then:
iptables -D INPUT [LINE NUMBER]
Open Port 3306 (MySQL) To IP 1.2.3.4

iptables -I INPUT -i eth0 -s 1.2.3.4 -p tcp --destination-port 3306 -j ACCEPT -m comment --comment " MySQL Access By IP "

ADD RULE with PORT and IPADDRESS

sudo iptables -A INPUT -p tcp -m tcp --dport port\_number -s ip\_address -j ACCEPT

#### ADD RULE for PORT on all addresses

sudo iptables -A INPUT -p tcp -m tcp --dport port\_number --sport 1024:65535 -j ACCEPT

### **DROP IPADRESS**

sudo iptables -I INPUT -s x.x.x.x -j DROP

### **VIEW IPTABLES with rule numbers**

sudo iptables -L INPUT -n --line-numbers

### **REMOVE A RULE**

#Use above command and note rule\_number sudo iptables -D INPUT rule number

#### **#DEFAULT POLICY**

- -P INPUT DROP
- -P OUTPUT DROP
- -P FORWARD DROP
- -A INPUT -i lo -j ACCEPT #allow lo input
- -A OUTPUT -o lo -j ACCEPT #allow lo output
- -A INPUT -m limit --limit 5/min -j LOG --log-prefix "iptables-INPUT denied: " --log-level 7 #log INPUT Denied
- -A OUTPUT -m limit --limit 5/min -j LOG --log-prefix "iptables-OUTPUT denied: " --log-level 7 #log OUTPUT Denied

#ALLOW OUTPUT PING/MTR (or traceroute -I, traceroute by default uses UDP - force with ICMP)

- -A OUTPUT -p icmp --icmp-type 8 -m state --state NEW,ESTABLISHED,RELATED -j ACCEPT
- -A INPUT -p icmp --icmp-type 0 -m state --state ESTABLISHED, RELATED -j ACCEPT
- -A INPUT -p icmp --icmp-type 11 -m state --state ESTABLISHED,RELATED -j ACCEPT

## #ALLOW INPUT PING/MTR

- -A INPUT -p icmp --icmp-type 8 -m state --state NEW,ESTABLISHED,RELATED -j ACCEPT
- -A OUTPUT -p icmp --icmp-type 0 -m state --state ESTABLISHED,RELATED -j ACCEPT

#### **#ALLOW OUTPUT**

- -A OUTPUT -p tcp -m multiport --dports 80,443 -m state --state NEW,ESTABLISHED -j ACCEPT
- -A INPUT -p tcp -m multiport --sports 80,443 -m state --state ESTABLISHED -j ACCEPT
- -A OUTPUT -p udp -m multiport --dports 53,123 -m state --state NEW,ESTABLISHED -j ACCEPT
- -A INPUT -p udp -m multiport --sports 53,123 -m state --state ESTABLISHED -j ACCEPT