Setup IPTABLES to secure common ports

1. install packages (iptables are present by default on latest ubuntu releases)

# apt-get install iptables

# service iptables start

2. configure IPTables

Create an empty rules file and add a few rules to it

# vim /etc/iptables.temp.rules

## rules start here

\*filter  
# Allows all loopback traffic and drop all traffic to 127/8 that doesn't use lo  
  
-A INPUT -i lo -j ACCEPT  
-A INPUT ! -i lo -d 127.0.0.0/8 -j REJECT  
  
# Accepts all established inbound connections  
-A INPUT -m state --state ESTABLISHED,RELATED -j ACCEPT  
  
# Allows all outbound traffic  
-A OUTPUT -j ACCEPT  
  
#SSH  
-A INPUT -p tcp -m tcp --dport 22 -j ACCEPT  
#HTTP  
-A INPUT -p tcp -m tcp --dport 80 -j ACCEPT  
#HTTPS  
-A INPUT -p tcp -m tcp --dport 443 -j ACCEPT  
#SMTP  
-A INPUT -p tcp -m tcp --dport 25 -j ACCEPT  
#IMAP  
-A INPUT -p tcp -m tcp --dport 143 -j ACCEPT  
#POP3  
-A INPUT -p tcp -m tcp --dport 110 -j ACCEPT  
#PING  
-A INPUT -p icmp -m icmp --icmp-type 8 -j ACCEPT  
  
# Log  
-I INPUT 5 -m limit --limit 5/min -j LOG --log-prefix "iptables denied: " --log-level 7  
  
# Reject all other inbound - default deny unless explicitly allowed  
policy  
-A INPUT -j REJECT  
-A FORWARD -j REJECT  
  
COMMIT

##rules end here

3. Apply the rules to the currently running iptables instance

# iptables-restore < /etc/iptables.temp.rules

4. make sure that they are loaded correctly

# iptables -L

5. save the rules

# iptables-save > /etc/iptables.up.rules

6. setup rules as default for an interface (edit /etc/network/interfaces)

edit auto lo to look like below

auto lo

iface lo inet loopback

pre-up iptables-restore < /etc/iptables.up.rules