Subject: Implementation of Host Firewalls on Linux Servers

To Management,

I am writing to report on the implementation of host firewalls on our Linux servers. The objective of this implementation was to control inbound packets to only permit those that are expected.

In order to achieve this objective, I used the iptables firewall tool on each Linux server. I created firewall policies using the following command: "sudo iptables -A INPUT -s 172.20.242.101 -p tcp --destination-port 22 -j DROP"

This command blocks inbound SSH (port 22) packets from IP address 172.20.242.101. All other inbound packets are permitted.

Please find attached screenshots of the server configuration used to implement these firewall policies, as well as log entries showing packets not fitting the profile being denied.

If you have any questions or need further information, please do not hesitate to reach out to me.

Best regards,

Group 9

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sysadmin@dodoator:~$ sudo iptables -A INPUT -s 172.20.242.101 -p tcp --destination-port 22 -j DROP
[sudo] password for sysadmin:
sysadmin@dodoator:~$ sudo iptables -L
Chain INPUT (policy DROP)
          prot opt source
target
                                        destination
ufw-before-logging-input all -- anywhere
                                                       anywhere
ufw-before-input all -- anywhere
                                               anywhere
ufw-after-input all -- anywhere
                                              anywhere
ufw-after-logging-input all -- anywhere
                                                      anywhere
                                               anywhere
ufw-reject-input all -- anywhere
ufw-track-input all -- anywhere
                                              anywhere
          tcp -- 192.168.0.0/24
                                        anywhere
DROP
                                                             tcp dpt:ssh
DROP
          tcp -- dodoator.local
                                        anywhere
                                                             tcp dpt:ssh
Chain FORWARD (policy DROP)
target
          prot opt source
                                        destination
ufw-before-logging-forward all --
                                   anvwhere
                                                         anvwhere
ufw-before-forward all --
                                                 anywhere
                           anvwhere
ufw-after-forward all -- anywhere
                                                anywhere
ufw-after-logging-forward all -- anywhere
                                                        anywhere
ufw-reject-forward all --
                            anywhere
                                                 anywhere
Chain OUTPUT (policy ACCEPT)
target
         prot opt source
                                        destination
ufw-before-logging-output
                                                        anywhere
```