**ECE404**

**HW9**

**0026402011**

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**Code:**

#! /bin/bash

##clean filter table

iptables -t filter -F

iptables -t filter -X

iptables -t nat -F

iptables -t nat -X

##place no restrictions on outbound packets

iptables -A OUTPUT -j ACCEPT

##block list of specific ip addresses

iptables -A INPUT -s 128.46.75.61 -j DROP

iptables -A INPUT -s 128.46.75.62 -j DROP

iptables -A INPUT -s 128.46.75.63 -j DROP

iptables -A INPUT -s 128.46.75.64 -j DROP

iptables -A INPUT -s 128.46.75.65 -j DROP

##block ohter computers ping my computer

iptables -A INPUT -p icmp --icmp-type echo-request -j DROP

##port-forawrding

iptables -t nat -A PREROUTING -p tcp -d 10.211.55.3 --dport 8005 -j DNAT --to-destination 10.211.55.3:22

##Only allow ecn.purdue.edu for SSH access

iptables -A INPUT -s ecn.purdue.edu -p tcp --dport 22 -j ACCEPT

iptables -A INPUT -p tcp --dport 22 -j REJECT

##ONLY single IP access machine for the http service

iptables -A INPUT -p tcp -s 10.186.47.211 --dport 80 -j ACCEPT

iptables -A INPUT -p tcp --dport 80 -j REJECT

##Permit Auth/Iden packets on port 113

iptables -A INPUT -p tcp --dport 113 -j ACCEPT

**Filter table output**

Chain INPUT (policy ACCEPT)

target prot opt source destination

DROP all -- ee220cpc1.ecn.purdue.edu anywhere

DROP all -- ee220cpc2.ecn.purdue.edu anywhere

DROP all -- ee220cpc3.ecn.purdue.edu anywhere

DROP all -- ee220cpc4.ecn.purdue.edu anywhere

DROP all -- ee220cpc5.ecn.purdue.edu anywhere

DROP icmp -- anywhere anywhere icmp echo-request

ACCEPT tcp -- poole.ecn.purdue.edu anywhere tcp dpt:ssh

ACCEPT tcp -- wadsworth.ecn.purdue.edu anywhere tcp dpt:ssh

ACCEPT tcp -- jarvis.ecn.purdue.edu anywhere tcp dpt:ssh

ACCEPT tcp -- jeeves.ecn.purdue.edu anywhere tcp dpt:ssh

ACCEPT tcp -- lurch.ecn.purdue.edu anywhere tcp dpt:ssh

ACCEPT tcp -- alfred.ecn.purdue.edu anywhere tcp dpt:ssh

REJECT tcp -- anywhere anywhere tcp dpt:ssh reject-with icmp-port-unreachable

ACCEPT tcp -- pal-nat186-47-211.itap.purdue.edu anywhere tcp dpt:http

REJECT tcp -- anywhere anywhere tcp dpt:http reject-with icmp-port-unreachable

ACCEPT tcp -- anywhere anywhere tcp dpt:auth

Chain FORWARD (policy ACCEPT)

target prot opt source destination

Chain OUTPUT (policy ACCEPT)

target prot opt source destination

ACCEPT all -- anywhere anywhere

**Nat table output**

Chain PREROUTING (policy ACCEPT)

target prot opt source destination

DNAT tcp -- anywhere ubuntu-linux.shared tcp dpt:8005 to:10.211.55.3:22

Chain INPUT (policy ACCEPT)

target prot opt source destination

Chain OUTPUT (policy ACCEPT)

target prot opt source destination

Chain POSTROUTING (policy ACCEPT)

target prot opt source destination