STI MEI/MIEBIOM

2022/2023

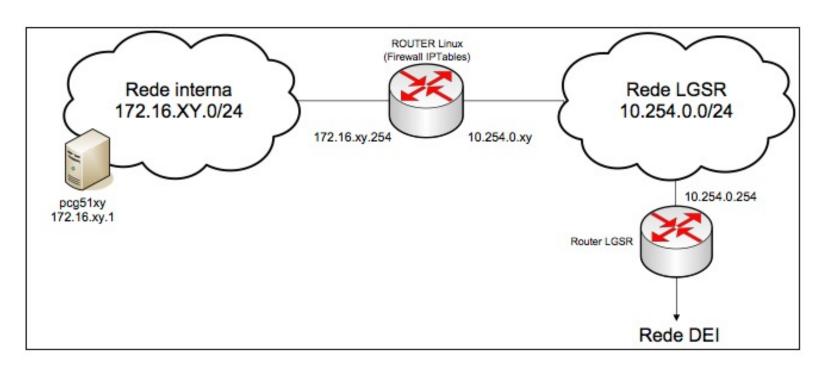
Practical class #5

Network packet filtering and NAT with IPTables

IPTables

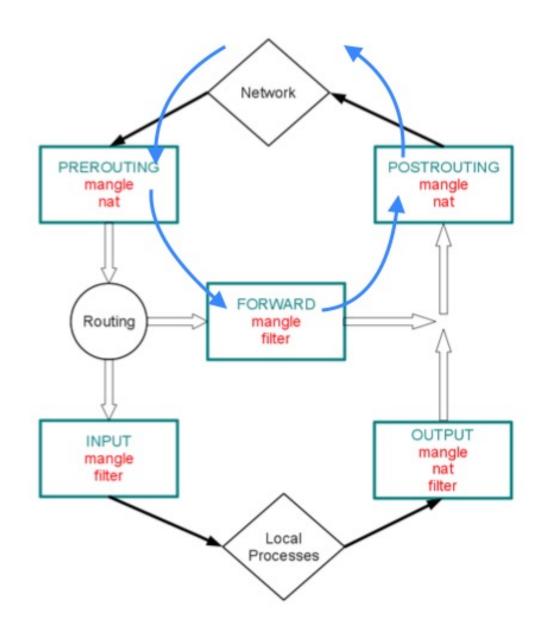
Linux as a router and network firewall:

- Packet filtering between different IP networks
- Network Address Translation (SNAT, Masquerading, DNAT, REDIRECT, ...)



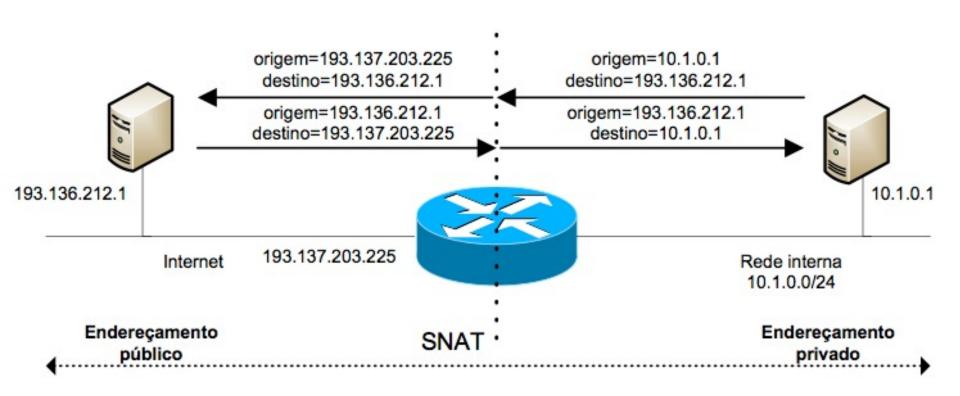
IPTables

filter, **nat** and **mangle** tables:



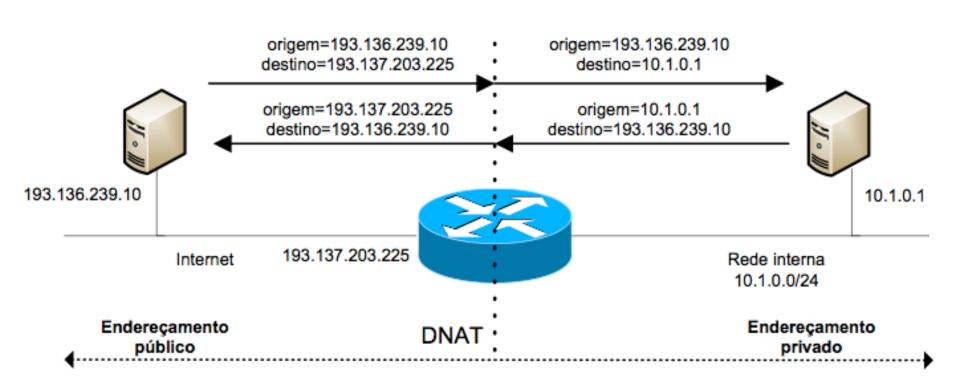
NAT (SNAT)

iptables -t nat -A POSTROUTING -s 10.1.0.0/24 -d 193.136.212.1 -j SNAT --to-source 193.137.203.225

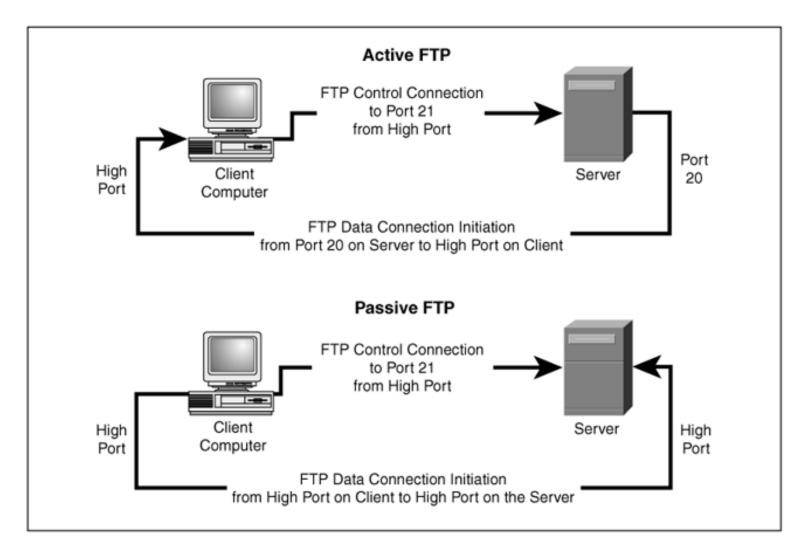


NAT (DNAT)

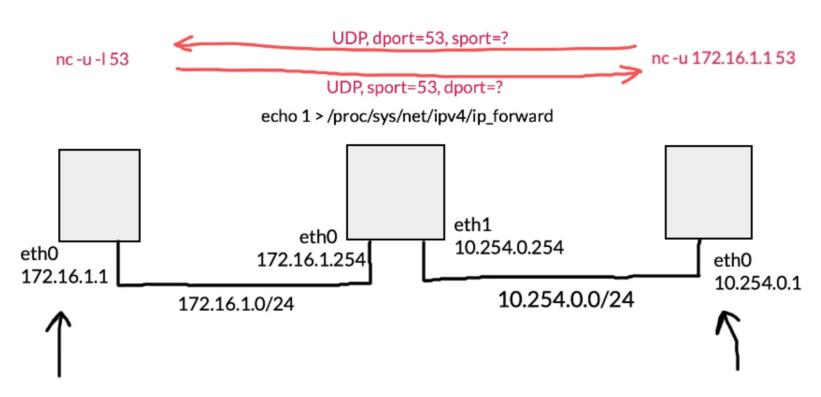
iptables -t nat -A PREROUTING -s 193.136.239.10 -d 193.137.203.225 -j DNAT --to-destination 10.1.0.1



FTP (Active and Passive modes)



Experimental scenario (example)



route add -net 10.254.0.0/24 gw 172.16.1.254 ou route add default gw 172.16.1.254 route add -net 172.16.1.0/24 gw 10.254.0.254 ou route add default gw 10.254.0.254