**Experiência 1:**

**Cabos:**

**T4-Switch Console**

**T3-Tux51S0**

**Tux51E0-Porta 11**

**Tux54E0-Porta 2**

**Reset switch:**

* Configure terminal
* no vlan 2-4094
* exit
* reload

**Tux1:**

* ifconfig eth0 172.16.50.1/24

**Tux4:**

* ifconfig eth0 172.16.50.254/24

Experiência 2:

**Cabos:**

**Tux52E0-Porta 3**

**Tux2:**

* ifconfig eth0 172.16.51.1/24

**Switch:**

* configure terminal
* vlan 50
* end
* configure terminal
* interface fastethernet 0/11
* switchport mode access
* switchport access vlan 50
* end
* configure terminal
* interface fastethernet 0/2
* switchport mode access
* switchport access vlan 50
* end
* configure terminal
* vlan 51
* end
* configure terminal
* interface fastethernet 0/3
* switchport mode access
* switchport access vlan 51
* end

Experiência 3:

**Cabos:**

**T3-Tux54S0**

**Tux54E1-Porta 15**

**Tux4:**

* ifconfig eth1 172.16.51.253/24
* echo 1 > /proc/sys/net/ipv4/ip\_forward
* echo 0 > /proc/sys/net/ipv4/icmp\_echo\_ignore\_broadcasts

**Switch:**

* configure terminal
* interface fastethernet 0/15
* switchport mode access
* switchport access vlan 51
* end

**Tux1:**

* route add -net 172.16.51.0/24 gw 172.16.50.254

**Tux2:**

* route add -net 172.16.50.0/24 gw 172.16.51.253

**All tuxes:**

**arp -a**

**arp -d …**

Experiência 4:

**Cabos:**

**RouterGE0/0-Porta 23**

**T3-Tux54S0**

**T4-Router Console**

**5.1-RouterGE0/1**

Reinicializar serviços de rede

/etc/init.d/networking stop and then restart

**Router:**

* conf terminal
* interface gigabitethernet 0/0
* ip address 172.16.y1.254 255.255.255.0
* no shutdown
* exit
* interface gigabitethernet 0/1
* ip address 172.16.1.y9 255.255.255.0
* no shutdown
* exit
* access-list 1 permit 172.16.y0.0 0.0.0.7
* access-list 1 permit 172.16.y1.0 0.0.0.7
* ip route 0.0.0.0 0.0.0.0 172.16.1.254
* ip route 172.16.y0.0 255.255.255.0 172.16.y1.253
* end

**Switch:**

* configure terminal
* interface fastethernet 0/23
* switchport mode access
* switchport access vlan 51
* end

**Tux1:**

* route add default gw 172.16.50.254

**Tux2:**

* route add default gw 172.16.51.254
* echo 0 > /proc/sys/net/ipv4/conf/eth0/accept\_redirects
* echo 0 > /proc/sys/net/ipv4/conf/all/accept\_redirects
* route del -net 172.16.50.0/24 gw 172.16.51.253
* route add -net 172.16.50.0/24 gw 172.16.51.253
* route del -net 172.16.50.0/24 gw 172.16.51.253
* echo 1 > /proc/sys/net/ipv4/conf/eth0/accept\_redirects
* echo 1 > /proc/sys/net/ipv4/conf/all/accept\_redirects

**Tux4:**

* route add default gw 172.16.51.254

**Router add nat:**

* conf t
* interface gigabitethernet 0/0 \*
* ip address 172.16.y1.254 255.255.255.0
* no shutdown
* ip nat inside
* exit
* interface gigabitethernet 0/1\*
* ip address 172.16.1.y9 255.255.255.0
* no shutdown
* ip nat outside
* exit
* ip nat pool ovrld 172.16.1.y9 172.16.1.y9 prefix 24
* ip nat inside source list 1 pool ovrld overload
* access-list 1 permit 172.16.y0.0 0.0.0.7
* access-list 1 permit 172.16.y1.0 0.0.0.7
* ip route 0.0.0.0 0.0.0.0 172.16.1.254
* ip route 172.16.y0.0 255.255.255.0 172.16.y1.253
* end

Experiência 5:

**Em todos os tuxs:**

vi /etc/resolv.conf search netlab.fe.up.pt nameserver 172.16.1.1\*

:x

Ver foto de como ler configurações do router e switch