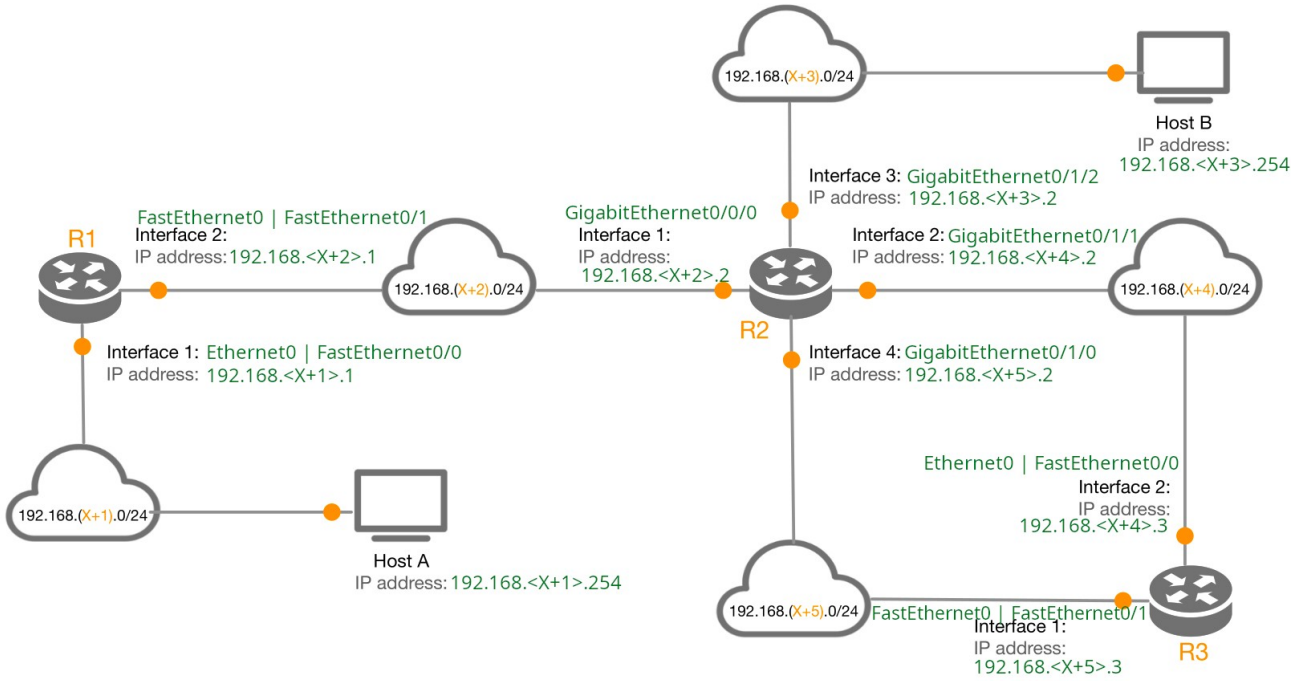
Ficha 3 - Encaminhamento

Passos básicos gerais

1. Ligar computador e preencher password em minúsculas.
2. Iniciar sessão no Hyperterminal. Escolher nome para a sessão, selecionar o porto COM1 e utilizar os parâmetros de configuração seguintes:
   - 9600 bits per second
   - 8 Data bits
   - No parity
   - 1 Stop bits
   - No flow control
3. Ligar router e esperar que complete o processo de arranque. Modo de configuração **DESATIVADO**.
4. Router: Ethernet – espaço de cima
5. Router: Fast Ethernet – espaço de baixo

Exercício 1



Exercício 2

Configuração do Router 1

R1> enable

R1# config t

!Interface 1

R1(config)# int e0

R1(config-if)# ip address 192.168.<X+1>.1 255.255.255.0

R1(config-if)# no shut

R1(config-if)# exit

!Interface 2

R1(config)# int f0

R1(config-if)# ip address 192.168.<X+2>.1 255.255.255.0

R1(config-if)# no shut

R1(config-if)# end

Configuração do Router 2

R2> enable

R2# config t

!Interface 1

R2(config)# int g0/0/0

R2(config-if)# ip address 192.168.<X+2>.2 255.255.255.0

R2(config-if)# no shut

R2(config-if)# exit

!Interface 4

R2(config)# int g0/1/0

R2(config-if)# switchport mode access

R2(config-if)# switchport access vlan 10

R2(config-if)# no shut

R2(config-if)# exit

R2(config)# int vlan 10

R2(config-if)# ip address 192.168.<X+5>.2 255.255.255.0

R2(config-if)# no shut

R2(config-if)# exit

!Interface 2

R2(config)# int g0/1/1

R2(config-if)# switchport mode access

R2(config-if)# switchport access vlan 20

R2(config-if)# no shut

R2(config-if)# exit

R2(config)# int vlan 20

R2(config-if)# ip address 192.168.<X+4>.2 255.255.255.0

R2(config-if)# no shut

R2(config-if)# exit

!Interface 3

R2(config)# int g0/1/2

R2(config-if)# switchport mode access

R2(config-if)# switchport access vlan 30

R2(config-if)# no shut

R2(config-if)# exit

R2(config)# int vlan 30

R2(config-if)# ip address 192.168.<X+3>.2 255.255.255.0

R2(config-if)# no shut

R2(config-if)# end

Configuração do Router 3

R3> enable

R3# config t

!Interface 2

R3(config)# int e0

R3(config-if)# ip address 192.168.<X+4>.3 255.255.255.0

R3(config-if)# no shut

R3(config-if)# exit

!Interface 1

R3(config)# int f0

R3(config-if)# ip address 192.168.<X+5>.3 255.255.255.0

R3(config-if)# no shut

R3(config-if)# end

Configuração do Host A

1. Abrir Control Panel → Network & Internet → Network & Sharing Center
2. Carregar em **Change adapter settings**
3. Clique direito na rede → Properties
4. Selecionar TCP/IPv4
5. Carregar em Properties
6. Selecionar **Use the following IP address** e preencher os detalhes do endereço IP
   - IP address: 192.168.<X+1>.254
   - Subnet mask: 255.255.255.0
   - Default gateway: 192.168.<X+1>.1
7. Carregar em OK e fechar
8. Ver a configuração de rede no terminal com ipconfig /all

HostA> ping 192.168.<X+1>.1 (R1 – int 1)

HostA> ping 192.168.<X+2>.1 (R1 – int 2)

HostA> ping 192.168.<X+2>.2 (R2 – int 1)

HostA> ping 192.168.<X+3>.2 (R2 – int 3)

HostA> ping 192.168.<X+4>.2 (R2 – int 2)

HostA> ping 192.168.<X+5>.2 (R2 – int 4)

HostA> ping 192.168.<X+4>.3 (R3 – int 2)

HostA> ping 192.168.<X+5>.3 (R3 – int 1)

HostA> ping 192.168.<X+3>.254 (Host B)

Configuração do Host B

1. Abrir Control Panel → Network & Internet → Network & Sharing Center
2. Carregar em **Change adapter settings**
3. Clique direito na rede → Properties
4. Selecionar TCP/IPv4
5. Carregar em Properties
6. Selecionar **Use the following IP address** e preencher os detalhes do endereço IP
   - IP address: 192.168.<X+3>.254
   - Subnet mask: 255.255.255.0
   - Default gateway: 192.168.<X+3>.2
7. Carregar em OK e fechar
8. Ver a configuração de rede no terminal com ipconfig /all

HostB> ping 192.168.<X+2>.2 (R2 – int 1)

HostB> ping 192.168.<X+3>.2 (R2 – int 3)

HostB> ping 192.168.<X+4>.2 (R2 – int 2)

HostB> ping 192.168.<X+5>.2 (R2 – int 4)

HostB> ping 192.168.<X+4>.3 (R3 – int 2)

HostB> ping 192.168.<X+5>.3 (R3 – int 1)

HostB> ping 192.168.<X+1>.1 (R1 – int 1)

HostB> ping 192.168.<X+2>.1 (R1 – int 2)

HostB> ping 192.168.<X+1>.254 (Host A)

Exercício 3

!Rotas em R1 (comando exit no final)

R1# config t

R1(config)# ip route 192.168.<X+3>.0 255.255.255.0 192.168.<X+2>.2

R1(config)# ip route 192.168.<X+4>.0 255.255.255.0 192.168.<X+2>.2

R1(config)# ip route 192.168.<X+5>.0 255.255.255.0 192.168.<X+2>.2

!Rotas em R2 (comando exit no final)

R2# config t

R2(config)# ip route 192.168.<X+1>.0 255.255.255.0 192.168.<X+2>.1

!Rotas em R3 (comando exit no final)

R3# config t

R3(config)# ip route 192.168.<X+1>.0 255.255.255.0 192.168.<X+5>.2

R3(config)# ip route 192.168.<X+2>.0 255.255.255.0 192.168.<X+5>.2

R3(config)# ip route 192.168.<X+3>.0 255.255.255.0 192.168.<X+4>.2

Exercício 4

R1# config t

R1(config)# no ip route 192.168.<X+3>.0 255.255.255.0 192.168.<X+2>.2

R1(config)# no ip route 192.168.<X+4>.0 255.255.255.0 192.168.<X+2>.2

R1(config)# no ip route 192.168.<X+5>.0 255.255.255.0 192.168.<X+2>.2

R1(config)# ip route 0.0.0.0 0.0.0.0 192.168.<X+2>.2

R1(config)# exit

R1# show ip route

Exercício 5

!Router 1

R1#config t

R1(config)#router rip

R1(config-router)#version 2

R1(config-router)#network 192.168.<X+1>.0

R1(config-router)#network 192.168.<X+2>.0

R1(config-router)#passive-interface e0

R1(config-router)#end

!Router 2

R2#config t

R2(config)#router rip

R2(config-router)#version 2

R2(config-router)#network 192.168.<X+2>.0

R2(config-router)#network 192.168.<X+3>.0

R2(config-router)#network 192.168.<X+4>.0

R2(config-router)#network 192.168.<X+5>.0

R1(config-router)#passive-interface g0/1/2

R2(config-router)#end

!Router 3

R2#config t

R2(config)#router rip

R2(config-router)#version 2

R2(config-router)#network 192.168.<X+4>.0

R2(config-router)#network 192.168.<X+5>.0

R2(config-router)#end