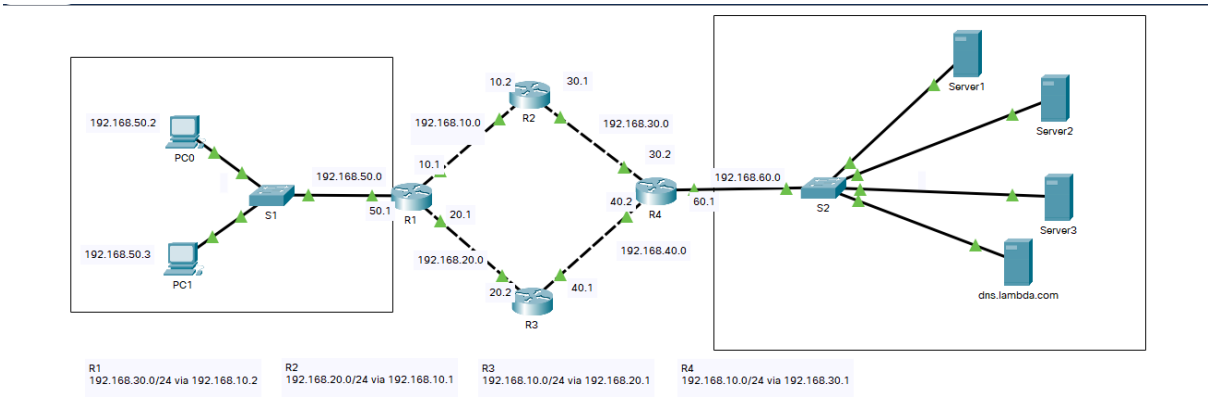
Instituto Federal do Ceará

Aluna: Brenda Mendonça Godoy
Disciplina: Sistema Operacional de Redes

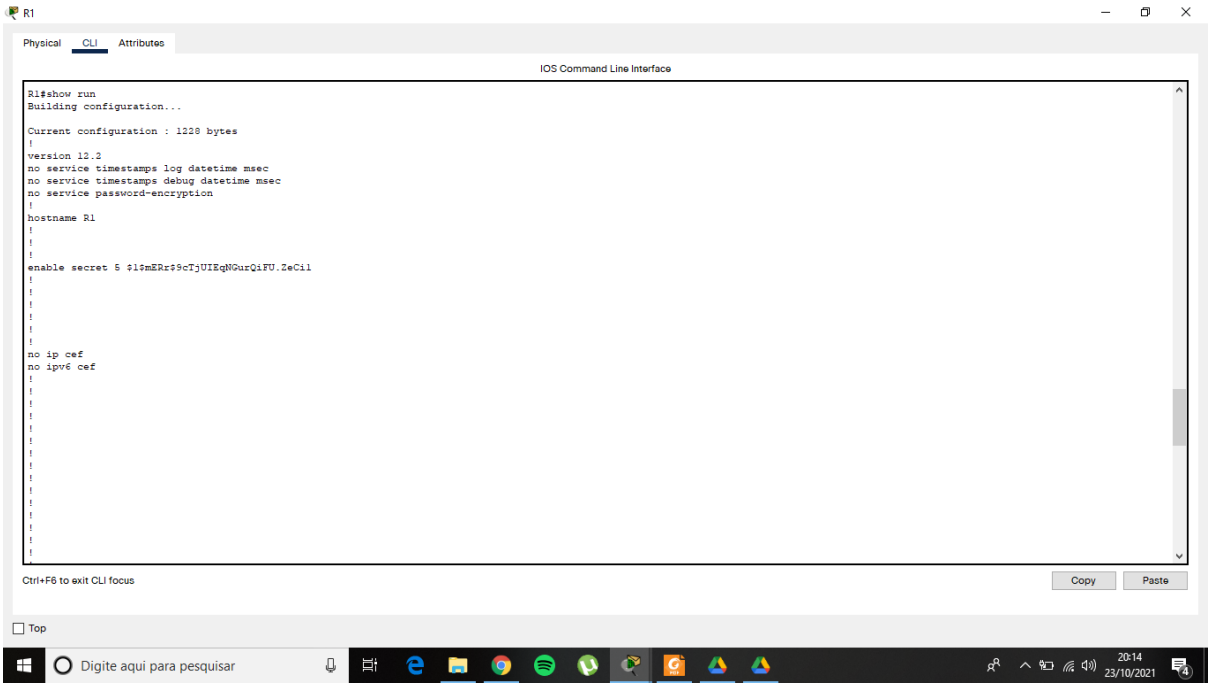
Atividade de Avaliação 04

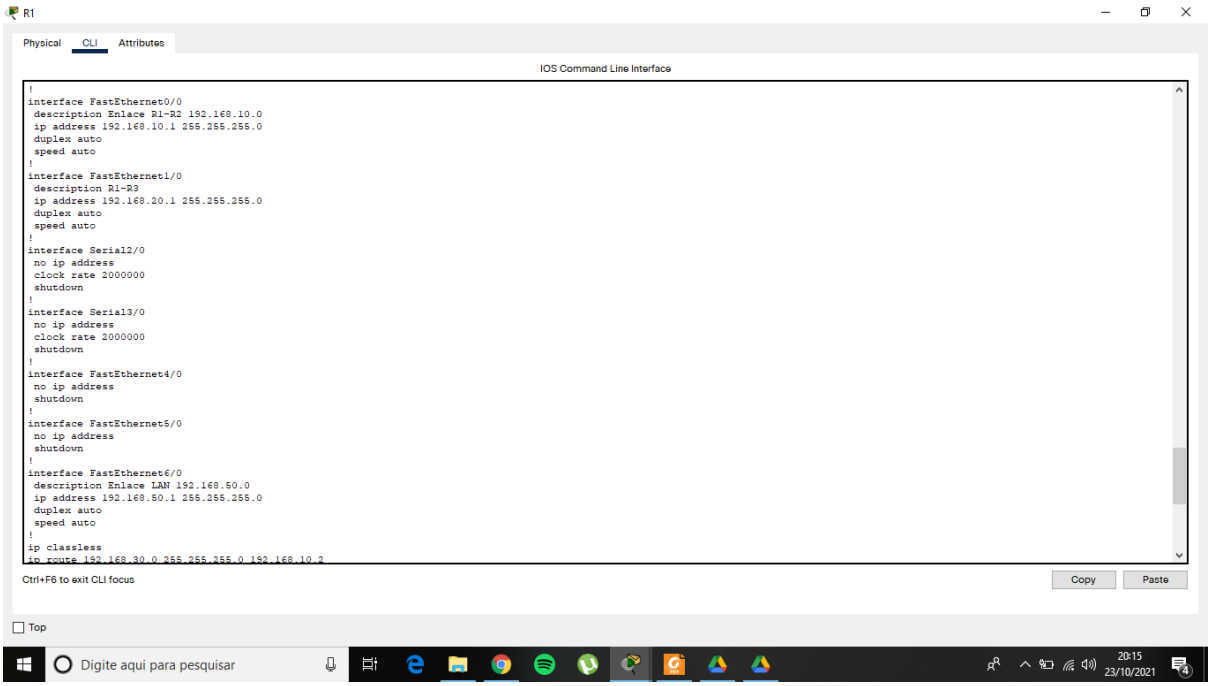
Etapa 01: montando a rede

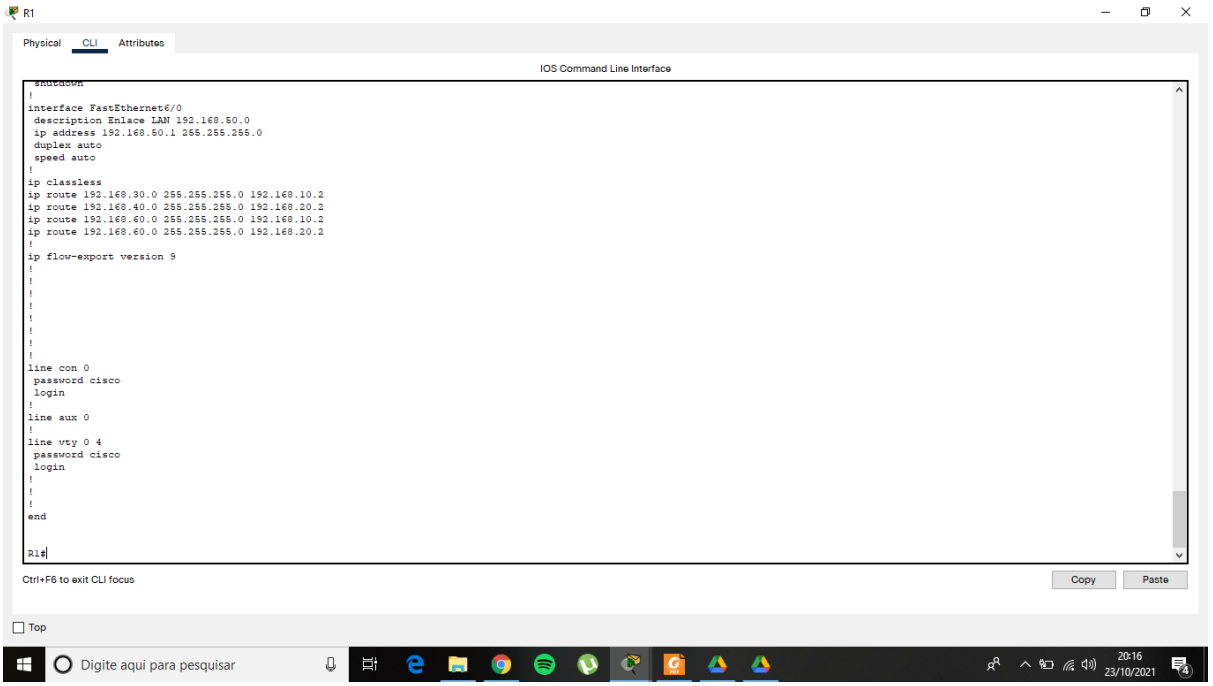


Etapa 02:

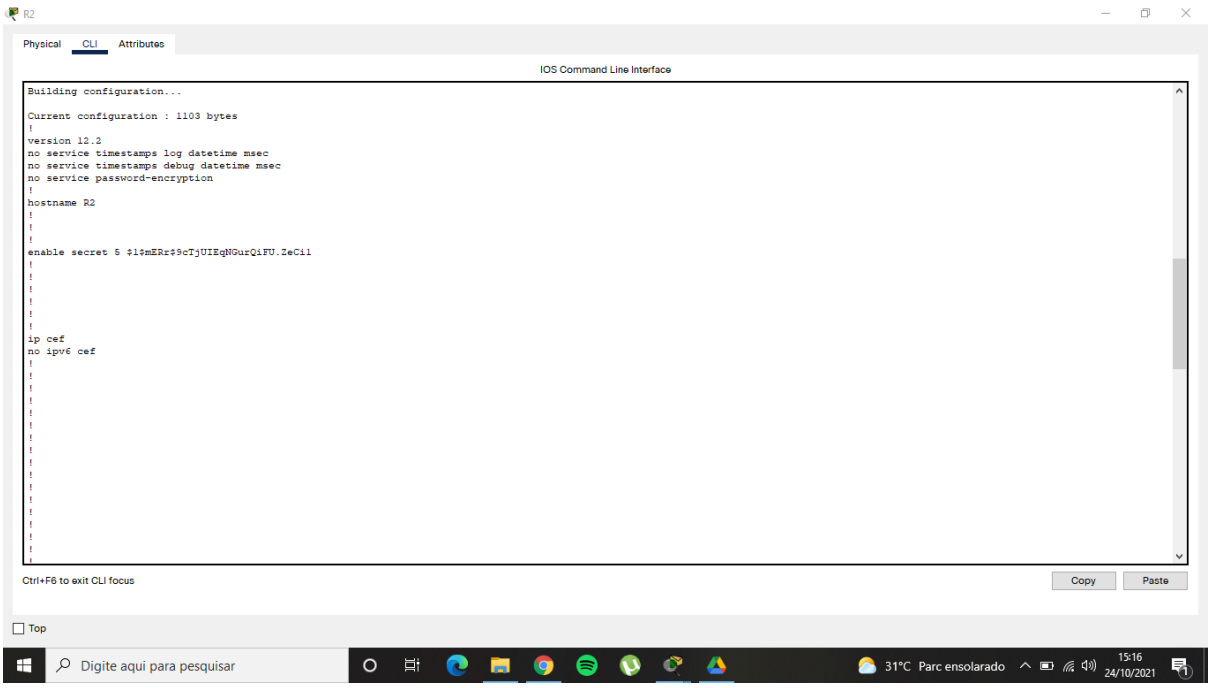
Configurações Roteador R1:

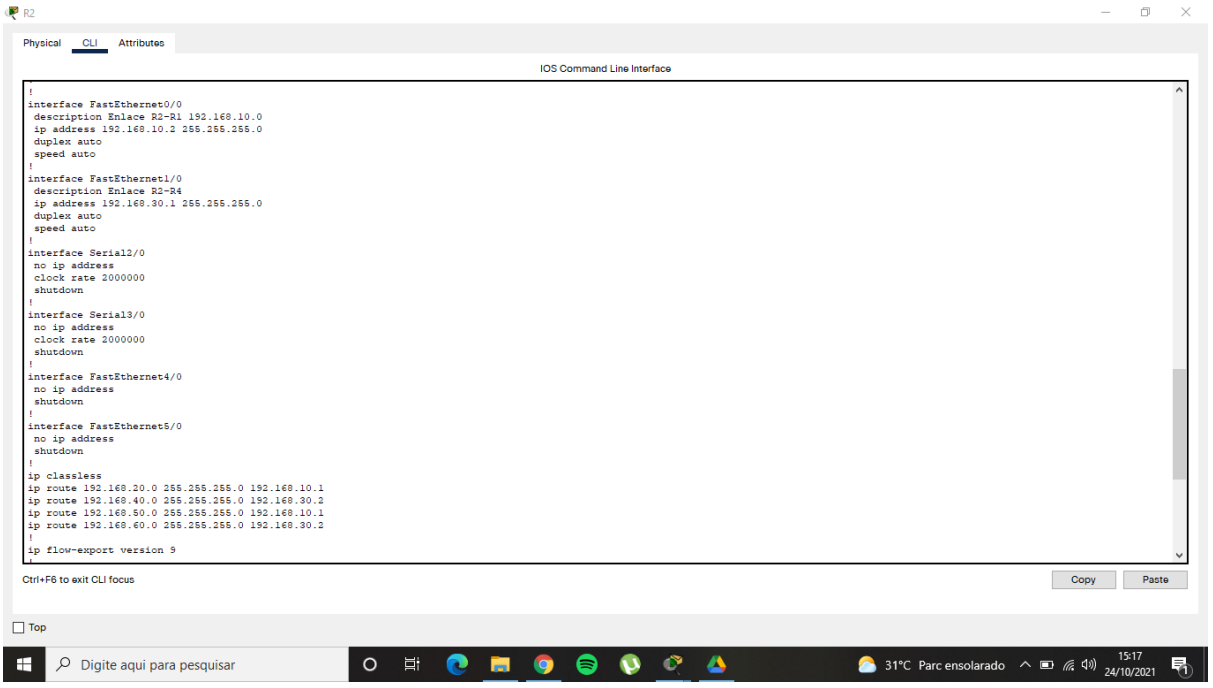


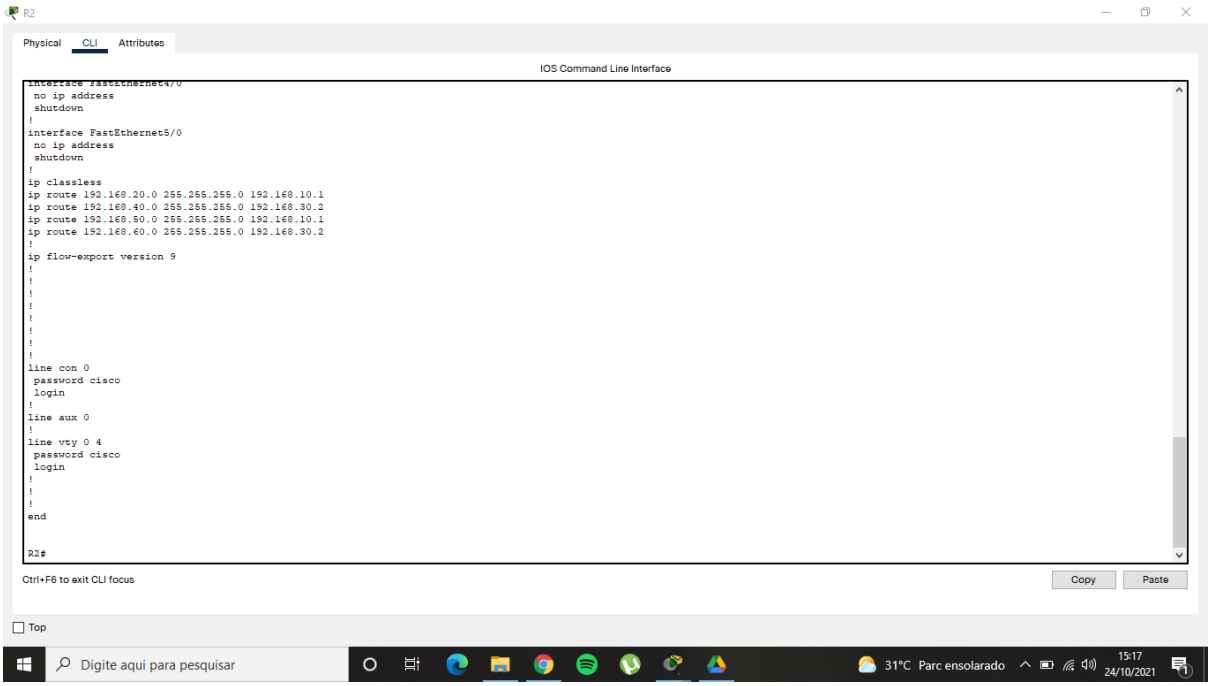

R1
Physical
CLI
Attributes
IOS Command Line Interface
!
interface FastEthernet0/0
 description Enlace R1-R2 192.168.10.0
 ip address 192.168.10.1 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet1/0
 description R1-R3
 ip address 192.168.20.1 255.255.255.0
 duplex auto
 speed auto
!
interface Serial2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface FastEthernet4/0
 no ip address
 shutdown
!
interface FastEthernet5/0
 no ip address
 shutdown
!
interface FastEthernet6/0
 description Enlace LAN 192.168.50.0
 ip address 192.168.50.1 255.255.255.0
 duplex auto
 speed auto
!
ip classless
ip route 192.168.30.0 255.255.255.0 192.168.10.2
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Digite aqui para pesquisar
20:15
23/10/2021


R1
Physical
CLI
Attributes
IOS Command Line Interface
 shutdown
!
interface FastEthernet6/0
 description Enlace LAN 192.168.50.0
 ip address 192.168.50.1 255.255.255.0
 duplex auto
 speed auto
!
ip classless
ip route 192.168.30.0 255.255.255.0 192.168.10.2
ip route 192.168.40.0 255.255.255.0 192.168.20.2
ip route 192.168.60.0 255.255.255.0 192.168.10.2
ip route 192.168.60.0 255.255.255.0 192.168.20.2
!
ip flow-export version 9
!
!
!
!
!
!
!
!
line con 0
 password cisco
 login
!
line aux 0
!
line vty 0 4
 password cisco
 login
!
!
!
end
R1#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Digite aqui para pesquisar
20:16
23/10/2021

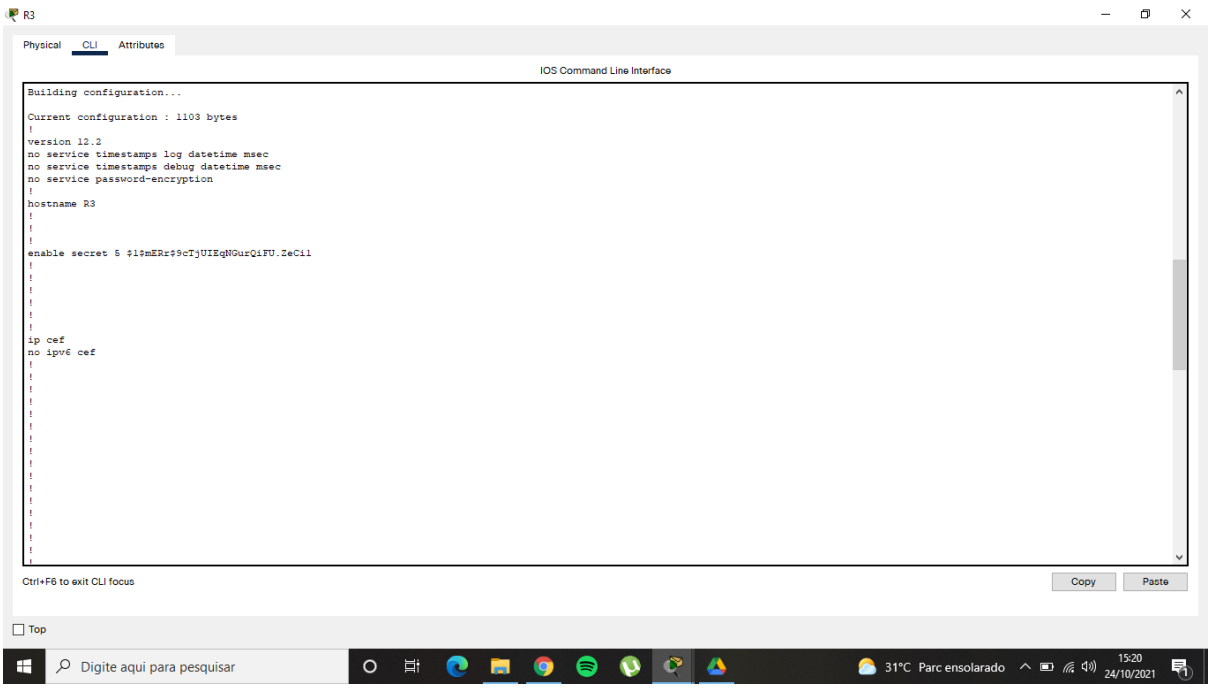
Configurações Roteador R2:

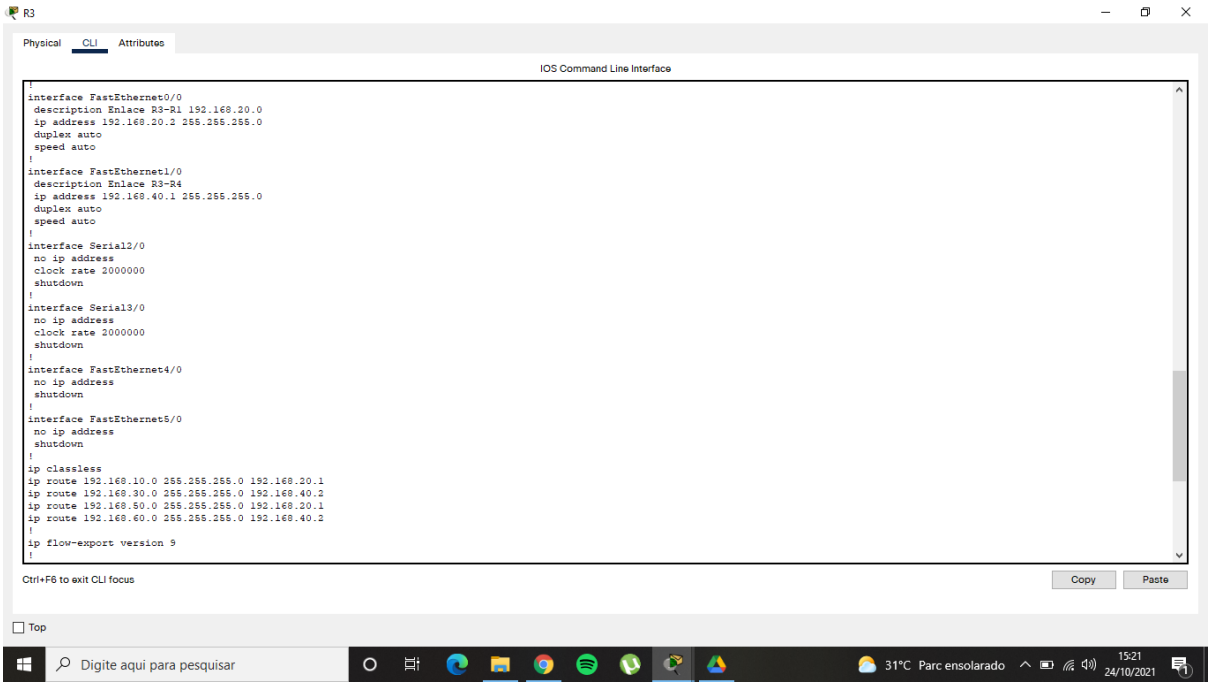


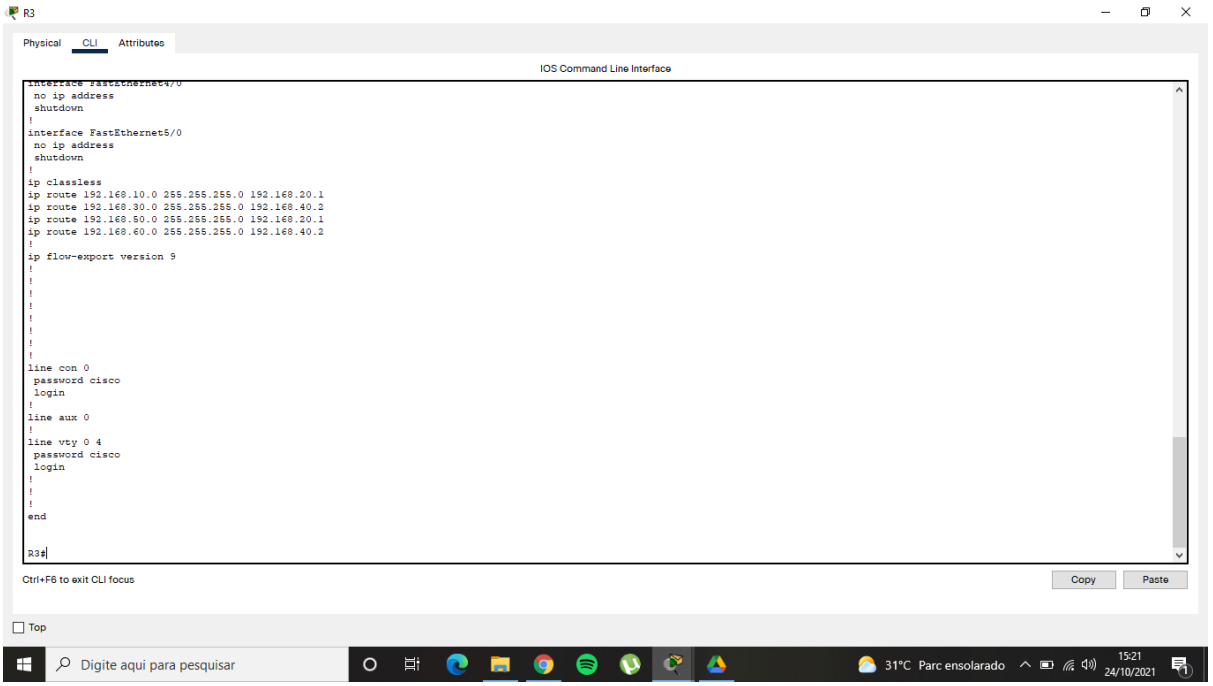




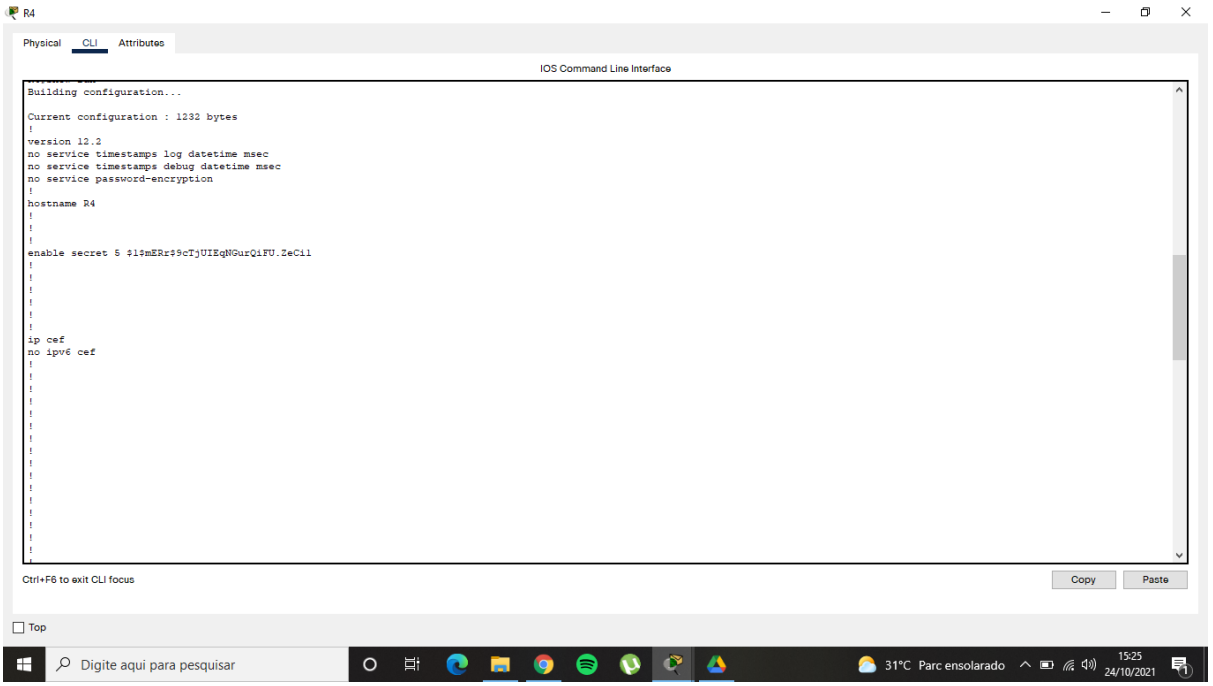
Configurações Roteador R3:

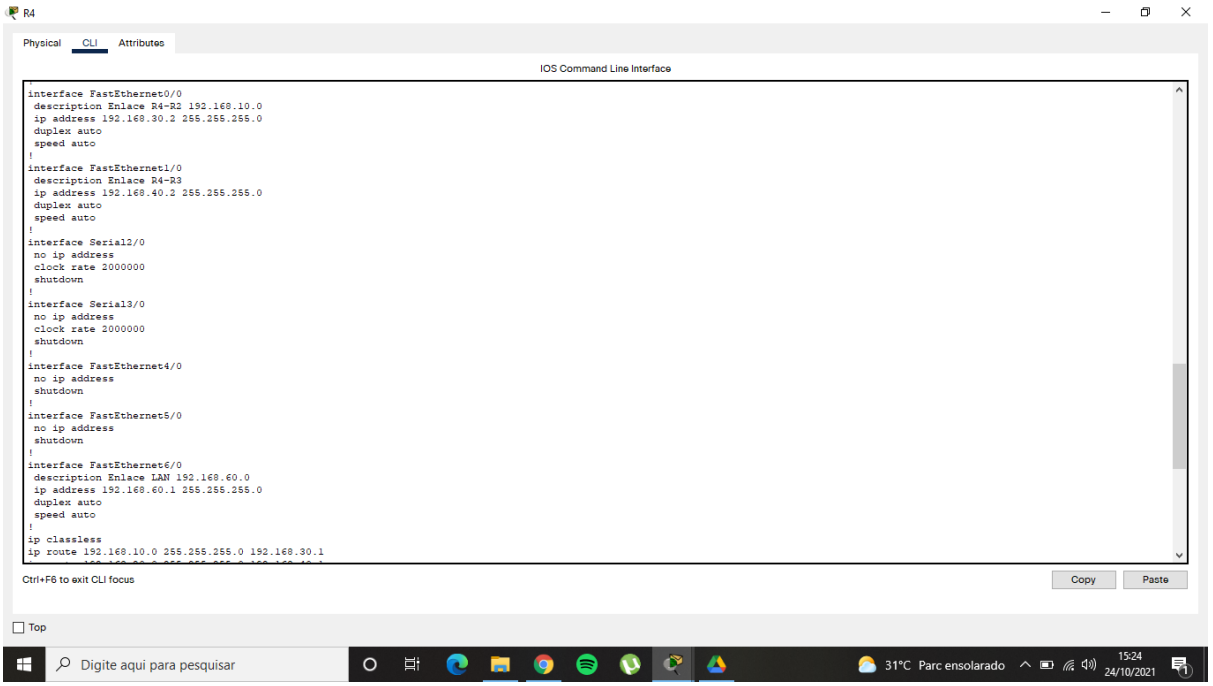


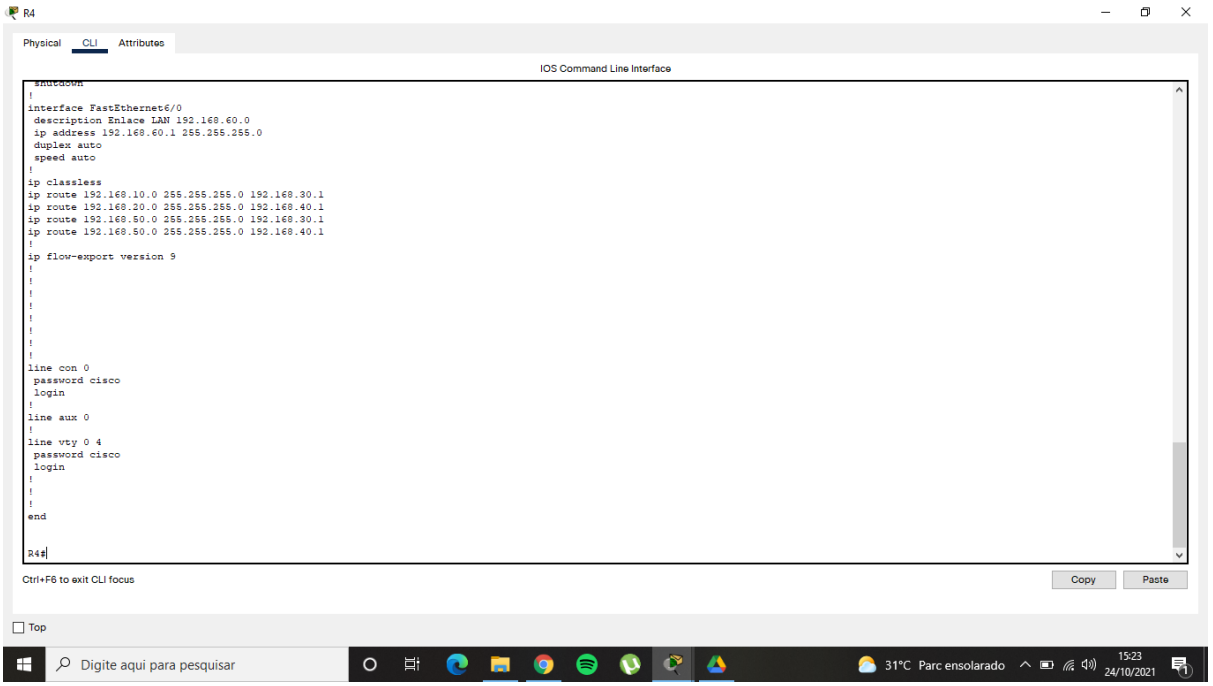

R3
Physical
CLI
Attributes
IOS Command Line Interface
!
interface FastEthernet0/0
 description Enlace R3-R1 192.168.20.0
 ip address 192.168.20.2 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet1/0
 description Enlace R3-R4
 ip address 192.168.40.1 255.255.255.0
 duplex auto
 speed auto
!
interface Serial2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface FastEthernet4/0
 no ip address
 shutdown
!
interface FastEthernet5/0
 no ip address
 shutdown
!
ip classless
ip route 192.168.10.0 255.255.255.0 192.168.20.1
ip route 192.168.30.0 255.255.255.0 192.168.40.2
ip route 192.168.50.0 255.255.255.0 192.168.20.1
ip route 192.168.60.0 255.255.255.0 192.168.40.2
!
ip flow-export version 9
!
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Digite aqui para pesquisar
31°C Parc ensolarado
15:21
24/10/2021


R3
Physical
CLI
Attributes
IOS Command Line Interface
interface FastEthernet4/0
 no ip address
 shutdown
!
interface FastEthernet5/0
 no ip address
 shutdown
!
ip classless
ip route 192.168.10.0 255.255.255.0 192.168.20.1
ip route 192.168.30.0 255.255.255.0 192.168.40.2
ip route 192.168.50.0 255.255.255.0 192.168.20.1
ip route 192.168.60.0 255.255.255.0 192.168.40.2
!
ip flow-export version 9
!
!
!
!
!
!
!
line con 0
 password cisco
 login
!
line aux 0
!
line vty 0 4
 password cisco
 login
!
!
!
end
R3#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Digite aqui para pesquisar
31°C Parc ensolarado
15:21
24/10/2021

Configurações Roteador R4:




R4
Physical
CLI
Attributes
IOS Command Line Interface
interface FastEthernet0/0
 description Enlace R4-R2 192.168.10.0
 ip address 192.168.30.2 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet1/0
 description Enlace R4-R3
 ip address 192.168.40.2 255.255.255.0
 duplex auto
 speed auto
!
interface Serial2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface FastEthernet4/0
 no ip address
 shutdown
!
interface FastEthernet5/0
 no ip address
 shutdown
!
interface FastEthernet6/0
 description Enlace LAN 192.168.60.0
 ip address 192.168.60.1 255.255.255.0
 duplex auto
 speed auto
!
ip classless
ip route 192.168.10.0 255.255.255.0 192.168.30.1
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Digite aqui para pesquisar
31°C Parc ensolarado
15:24
24/10/2021


R4
Physical
CLI
Attributes
IOS Command Line Interface
 shutdown
!
interface FastEthernet6/0
 description Enlace LAN 192.168.60.0
 ip address 192.168.60.1 255.255.255.0
 duplex auto
 speed auto
!
ip classless
ip route 192.168.10.0 255.255.255.0 192.168.30.1
ip route 192.168.20.0 255.255.255.0 192.168.40.1
ip route 192.168.50.0 255.255.255.0 192.168.30.1
ip route 192.168.50.0 255.255.255.0 192.168.40.1
!
ip flow-export version 9
!
!
!
!
!
!
!
!
line con 0
 password cisco
 login
!
line aux 0
!
line vty 0 4
 password cisco
 login
!
!
!
end
R4#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Digite aqui para pesquisar
31°C Parc ensolarado
15:23
24/10/2021

Etapa 03:

IP Route R1:

```
User Access Verification

Password:

R1>enable
Password:
R1#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

C    192.168.10.0/24 is directly connected, FastEthernet0/0
C    192.168.20.0/24 is directly connected, FastEthernet1/0
S    192.168.30.0/24 [1/0] via 192.168.10.2
S    192.168.40.0/24 [1/0] via 192.168.20.2
C    192.168.50.0/24 is directly connected, FastEthernet6/0
S    192.168.60.0/24 [1/0] via 192.168.10.2
                     [1/0] via 192.168.20.2

R1#
```

Ctrl+F6 to exit CLI focus

IP Route R2:

```
R2#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

C    192.168.10.0/24 is directly connected, FastEthernet0/0
S    192.168.20.0/24 [1/0] via 192.168.10.1
C    192.168.30.0/24 is directly connected, FastEthernet1/0
S    192.168.40.0/24 [1/0] via 192.168.30.2
S    192.168.50.0/24 [1/0] via 192.168.10.1
S    192.168.60.0/24 [1/0] via 192.168.30.2

R2#
```

Ctrl+F6 to exit CLI focus

Copy

IP Route R3:

```
R3#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

S    192.168.10.0/24 [1/0] via 192.168.20.1
C    192.168.20.0/24 is directly connected, FastEthernet0/0
S    192.168.30.0/24 [1/0] via 192.168.40.2
C    192.168.40.0/24 is directly connected, FastEthernet1/0
S    192.168.50.0/24 [1/0] via 192.168.20.1
S    192.168.60.0/24 [1/0] via 192.168.40.2

R3#
```

Ctrl+F6 to exit CLI focus

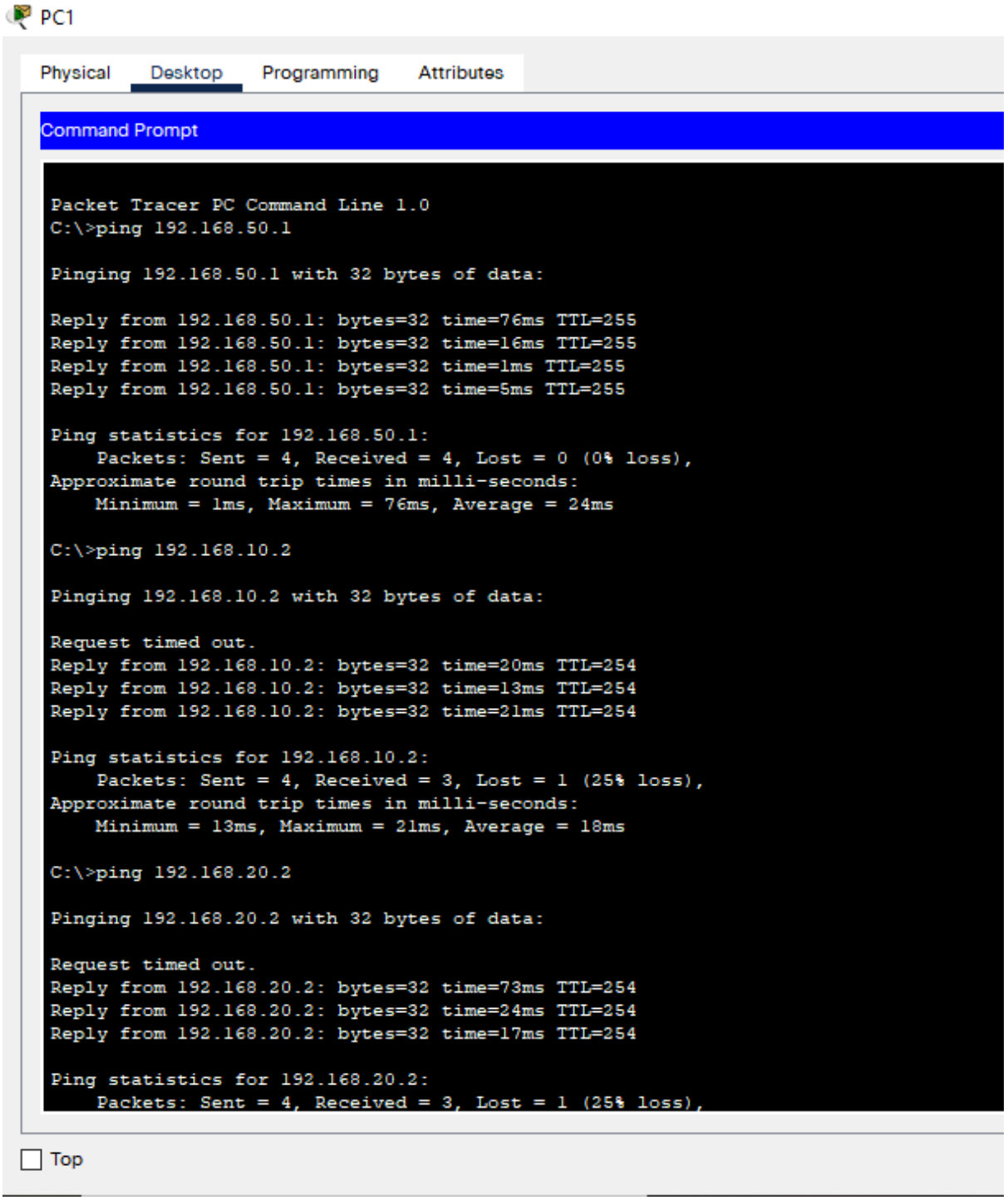
Copy

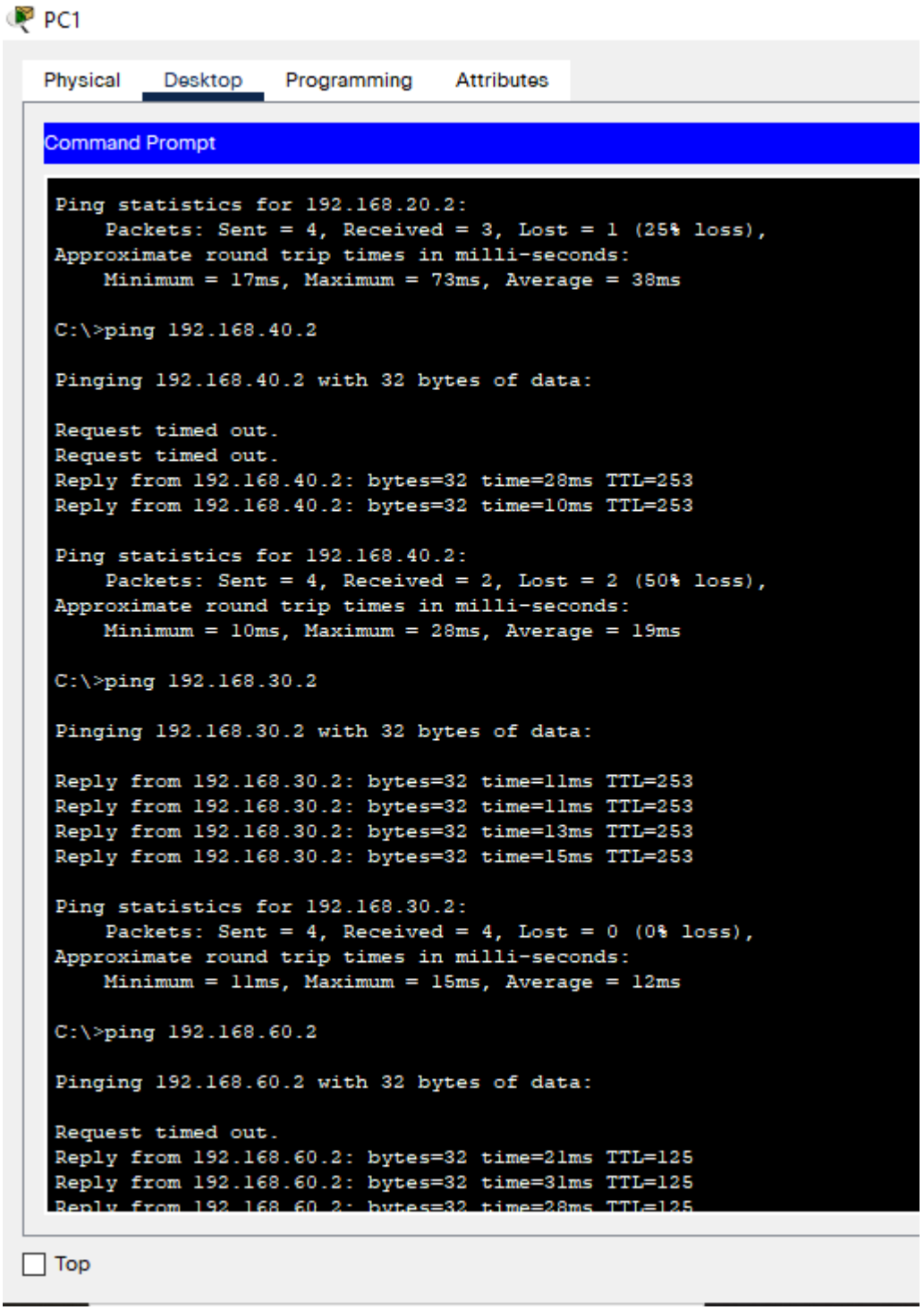
IP Route R4:

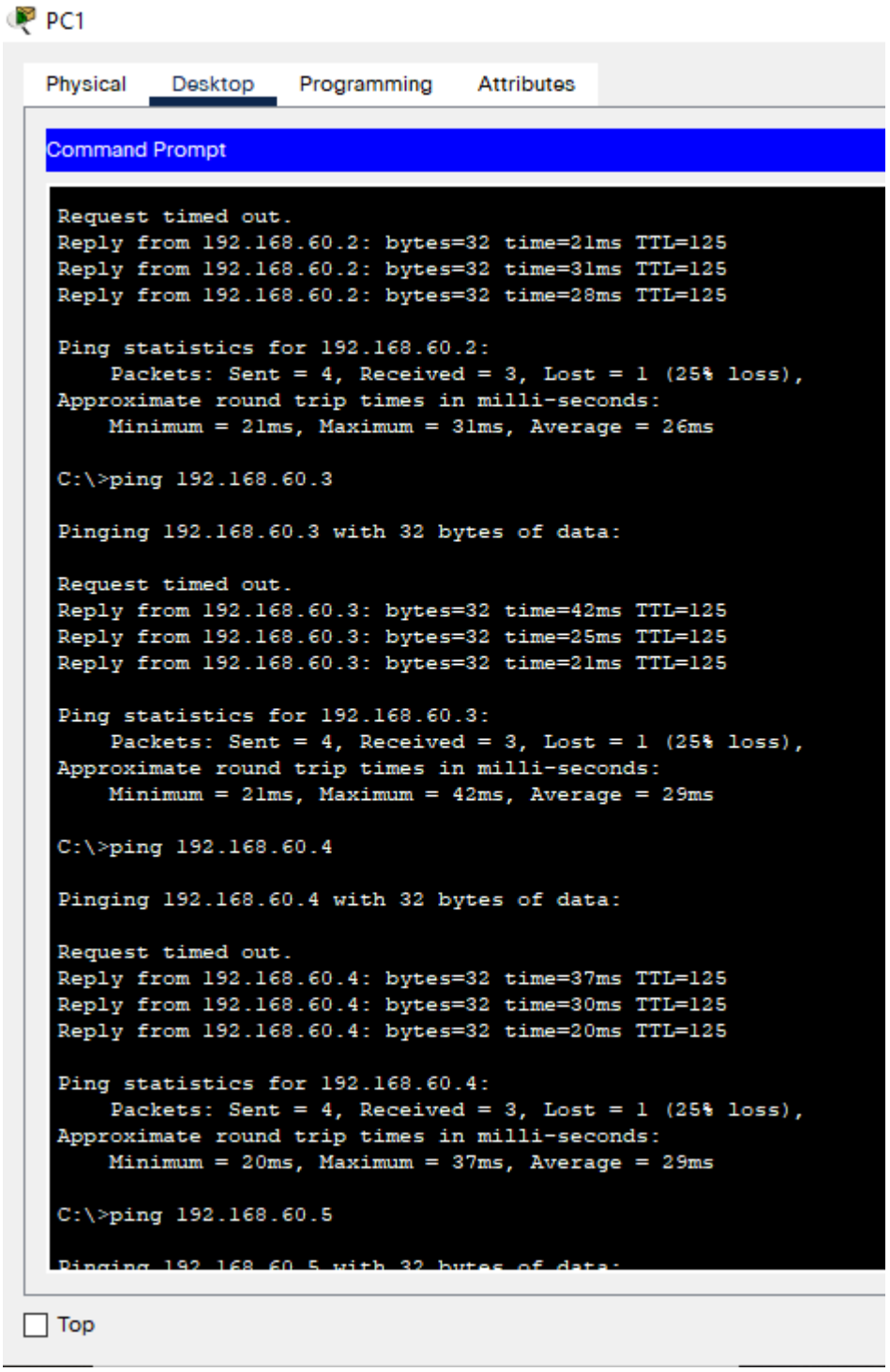
```
R4#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

S    192.168.10.0/24 [1/0] via 192.168.30.1
S    192.168.20.0/24 [1/0] via 192.168.40.1
C    192.168.30.0/24 is directly connected, FastEthernet0/0
C    192.168.40.0/24 is directly connected, FastEthernet1/0
S    192.168.50.0/24 [1/0] via 192.168.30.1
                     [1/0] via 192.168.40.1
C    192.168.60.0/24 is directly connected, FastEthernet6/0

R4#
```

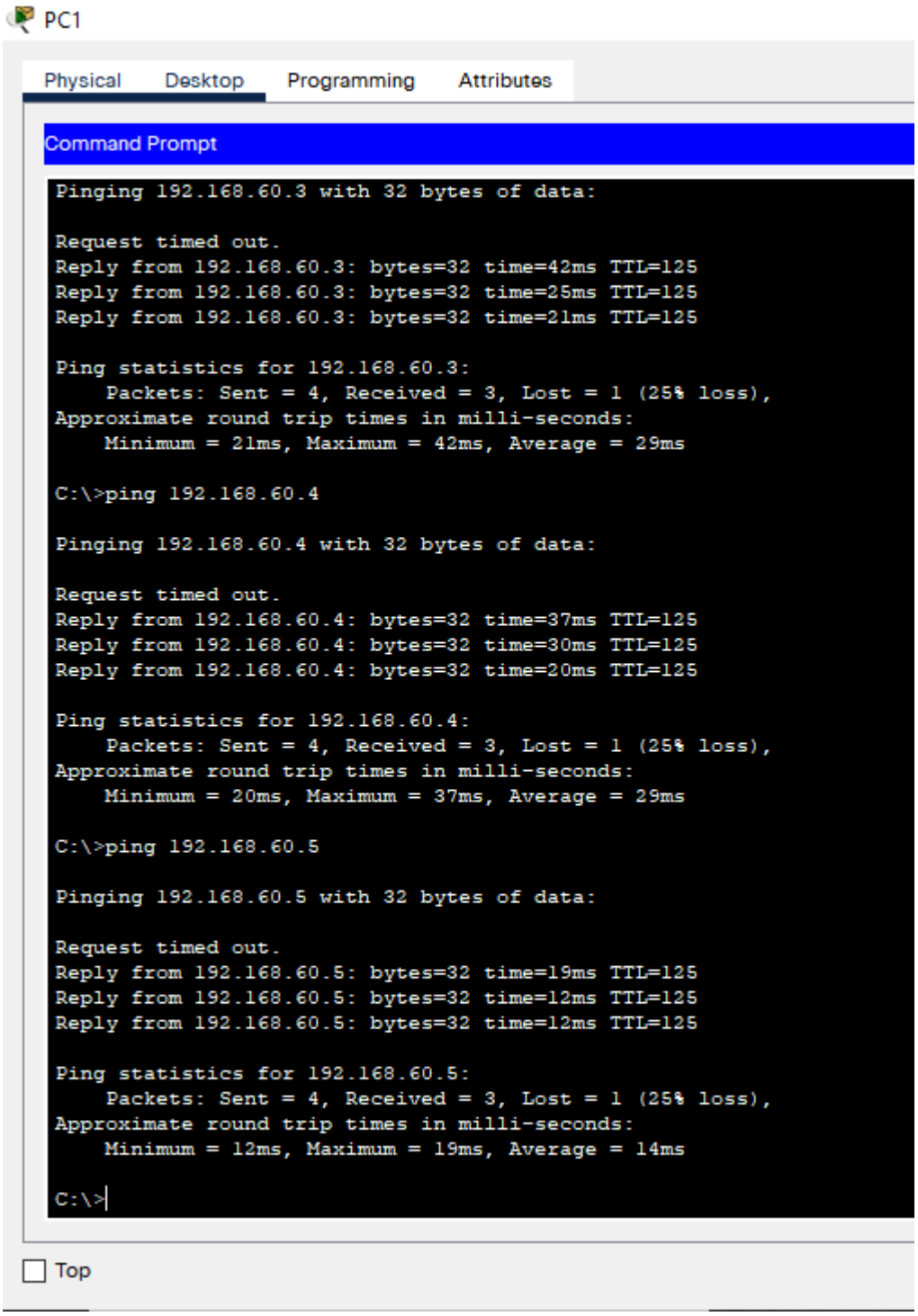
Ctrl+F6 to exit CLI focus

Ping do PC1 para testar a conectividade:



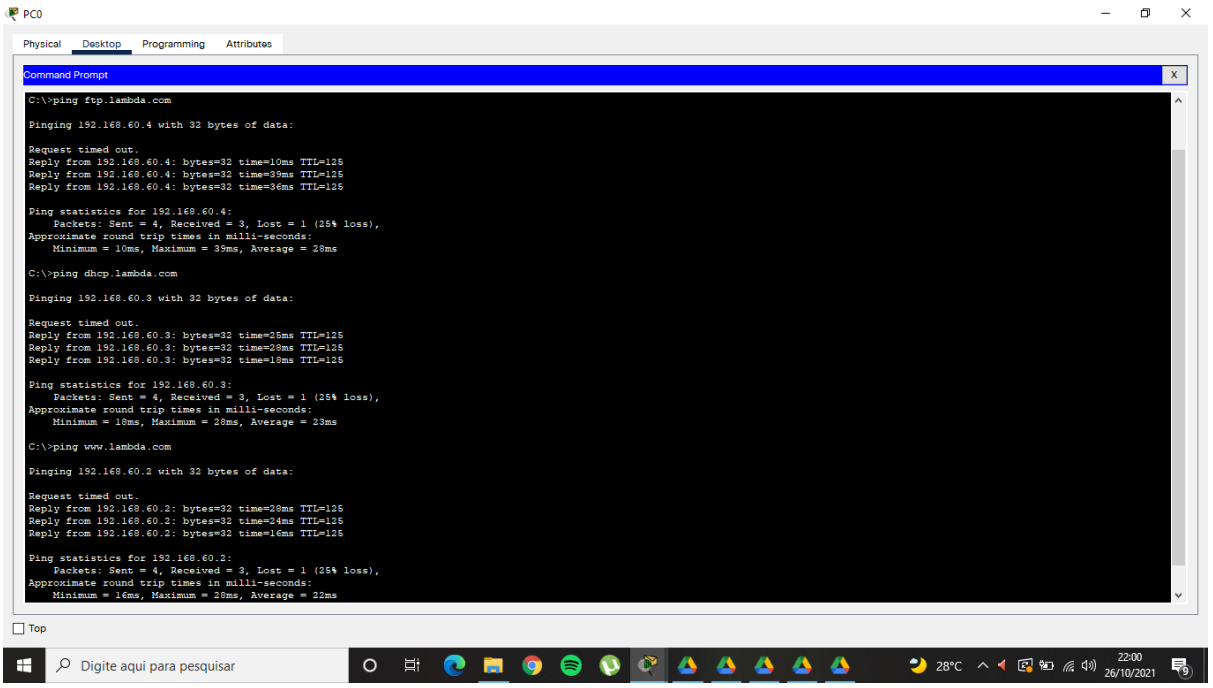

PC1
Physical
Desktop
Programming
Attributes
Command Prompt
Ping statistics for 192.168.20.2:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 17ms, Maximum = 73ms, Average = 38ms
C:\>ping 192.168.40.2
Pinging 192.168.40.2 with 32 bytes of data:
Request timed out.
Request timed out.
Reply from 192.168.40.2: bytes=32 time=28ms TTL=253
Reply from 192.168.40.2: bytes=32 time=10ms TTL=253
Ping statistics for 192.168.40.2:
Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
Approximate round trip times in milli-seconds:
Minimum = 10ms, Maximum = 28ms, Average = 19ms
C:\>ping 192.168.30.2
Pinging 192.168.30.2 with 32 bytes of data:
Reply from 192.168.30.2: bytes=32 time=11ms TTL=253
Reply from 192.168.30.2: bytes=32 time=11ms TTL=253
Reply from 192.168.30.2: bytes=32 time=13ms TTL=253
Reply from 192.168.30.2: bytes=32 time=15ms TTL=253
Ping statistics for 192.168.30.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 11ms, Maximum = 15ms, Average = 12ms
C:\>ping 192.168.60.2
Pinging 192.168.60.2 with 32 bytes of data:
Request timed out.
Reply from 192.168.60.2: bytes=32 time=21ms TTL=125
Reply from 192.168.60.2: bytes=32 time=31ms TTL=125
Top


PC1
Physical
Desktop
Programming
Attributes
Command Prompt
Request timed out.
Reply from 192.168.60.2: bytes=32 time=21ms TTL=125
Reply from 192.168.60.2: bytes=32 time=31ms TTL=125
Reply from 192.168.60.2: bytes=32 time=28ms TTL=125
Ping statistics for 192.168.60.2:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 21ms, Maximum = 31ms, Average = 26ms
C:\>ping 192.168.60.3
Pinging 192.168.60.3 with 32 bytes of data:
Request timed out.
Reply from 192.168.60.3: bytes=32 time=42ms TTL=125
Reply from 192.168.60.3: bytes=32 time=25ms TTL=125
Reply from 192.168.60.3: bytes=32 time=21ms TTL=125
Ping statistics for 192.168.60.3:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 21ms, Maximum = 42ms, Average = 29ms
C:\>ping 192.168.60.4
Pinging 192.168.60.4 with 32 bytes of data:
Request timed out.
Reply from 192.168.60.4: bytes=32 time=37ms TTL=125
Reply from 192.168.60.4: bytes=32 time=30ms TTL=125
Reply from 192.168.60.4: bytes=32 time=20ms TTL=125
Ping statistics for 192.168.60.4:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 20ms, Maximum = 37ms, Average = 29ms
C:\>ping 192.168.60.5
Top

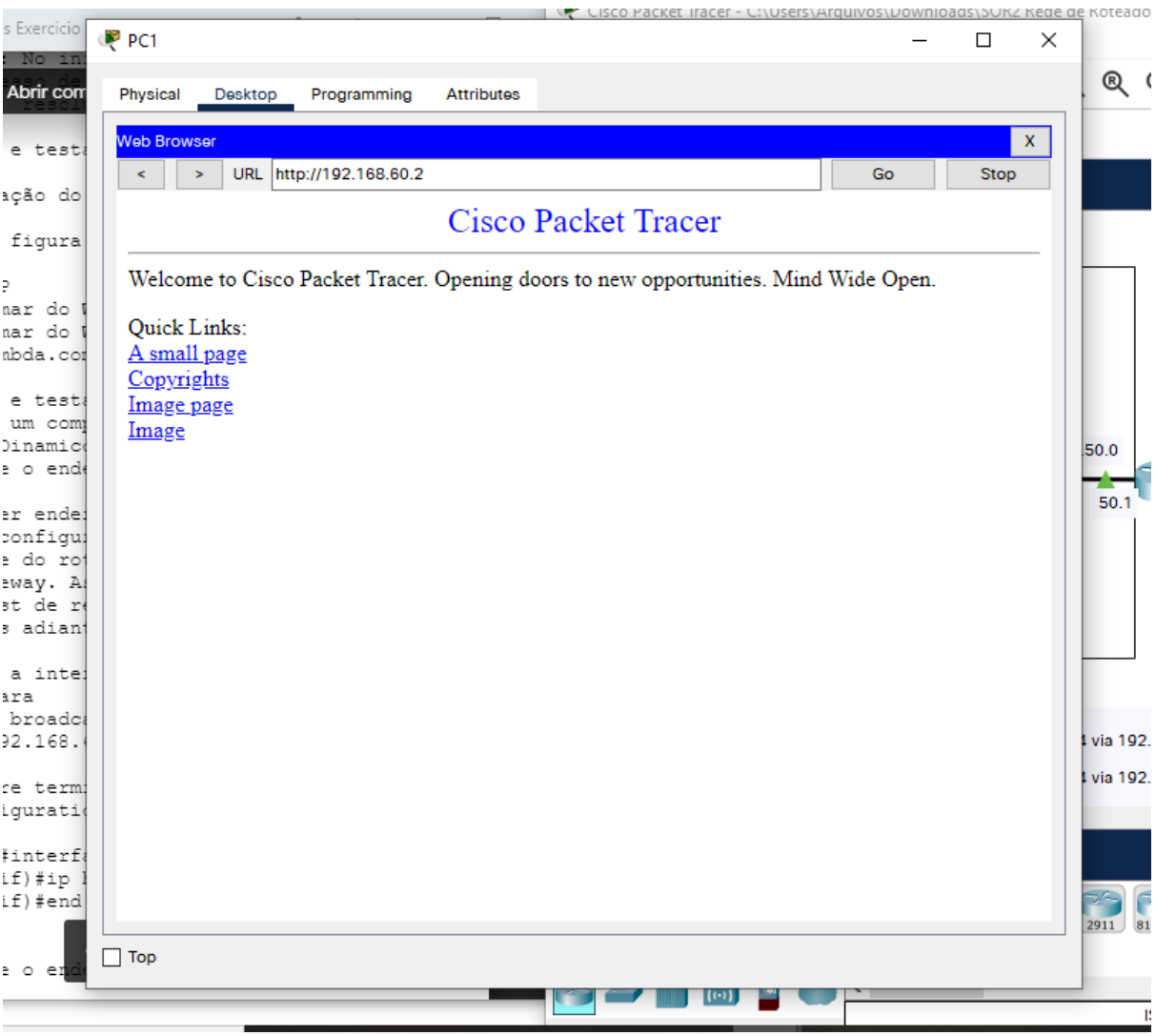

PC1
Physical
Desktop
Programming
Attributes
Command Prompt
Pinging 192.168.60.3 with 32 bytes of data:
Request timed out.
Reply from 192.168.60.3: bytes=32 time=42ms TTL=125
Reply from 192.168.60.3: bytes=32 time=25ms TTL=125
Reply from 192.168.60.3: bytes=32 time=21ms TTL=125
Ping statistics for 192.168.60.3:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 21ms, Maximum = 42ms, Average = 29ms
C:\>ping 192.168.60.4
Pinging 192.168.60.4 with 32 bytes of data:
Request timed out.
Reply from 192.168.60.4: bytes=32 time=37ms TTL=125
Reply from 192.168.60.4: bytes=32 time=30ms TTL=125
Reply from 192.168.60.4: bytes=32 time=20ms TTL=125
Ping statistics for 192.168.60.4:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 20ms, Maximum = 37ms, Average = 29ms
C:\>ping 192.168.60.5
Pinging 192.168.60.5 with 32 bytes of data:
Request timed out.
Reply from 192.168.60.5: bytes=32 time=19ms TTL=125
Reply from 192.168.60.5: bytes=32 time=12ms TTL=125
Reply from 192.168.60.5: bytes=32 time=12ms TTL=125
Ping statistics for 192.168.60.5:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 12ms, Maximum = 19ms, Average = 14ms
C:\>
Top

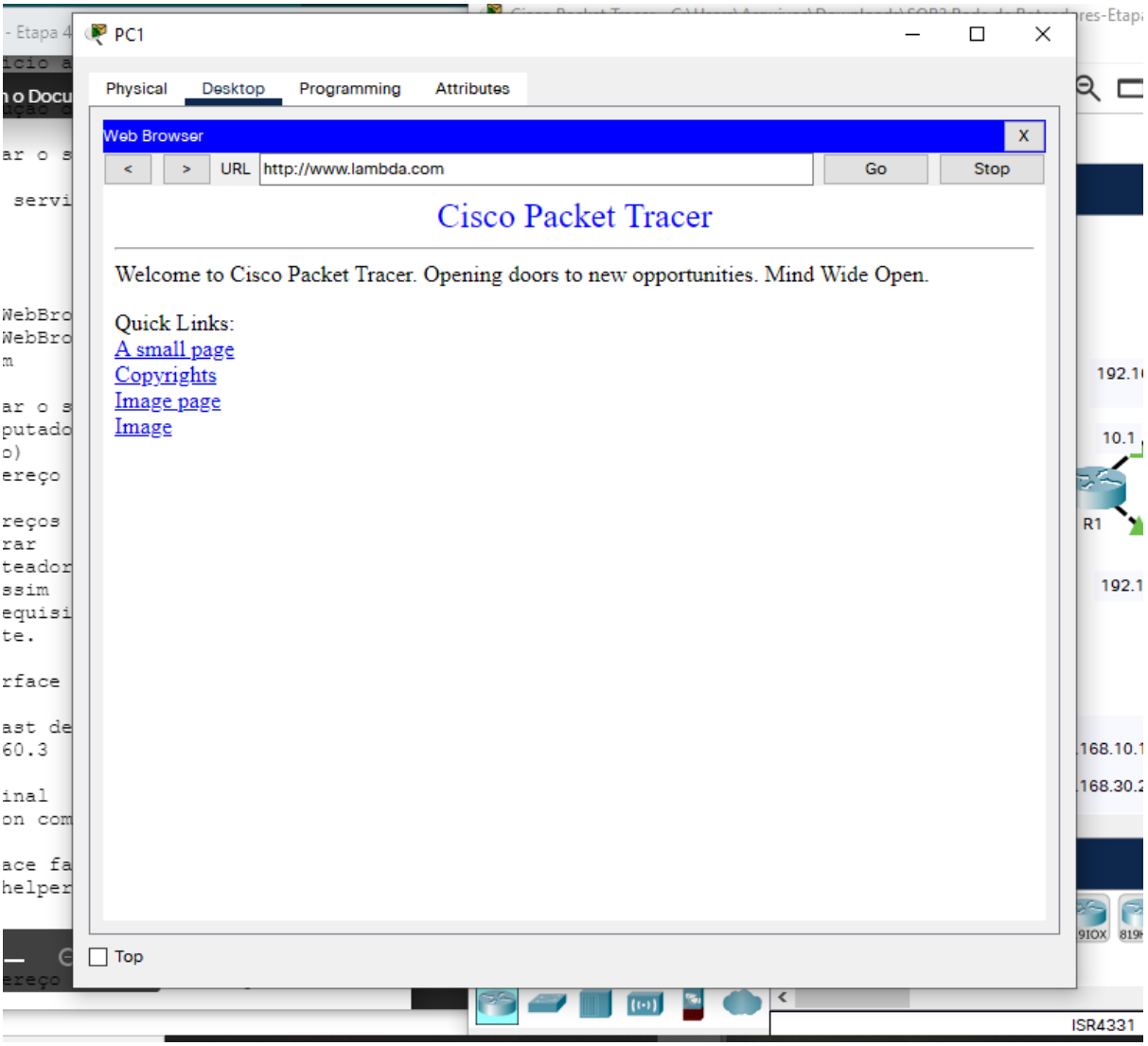
Etapa 04:

Teste de conectividade:



Teste HTTP:

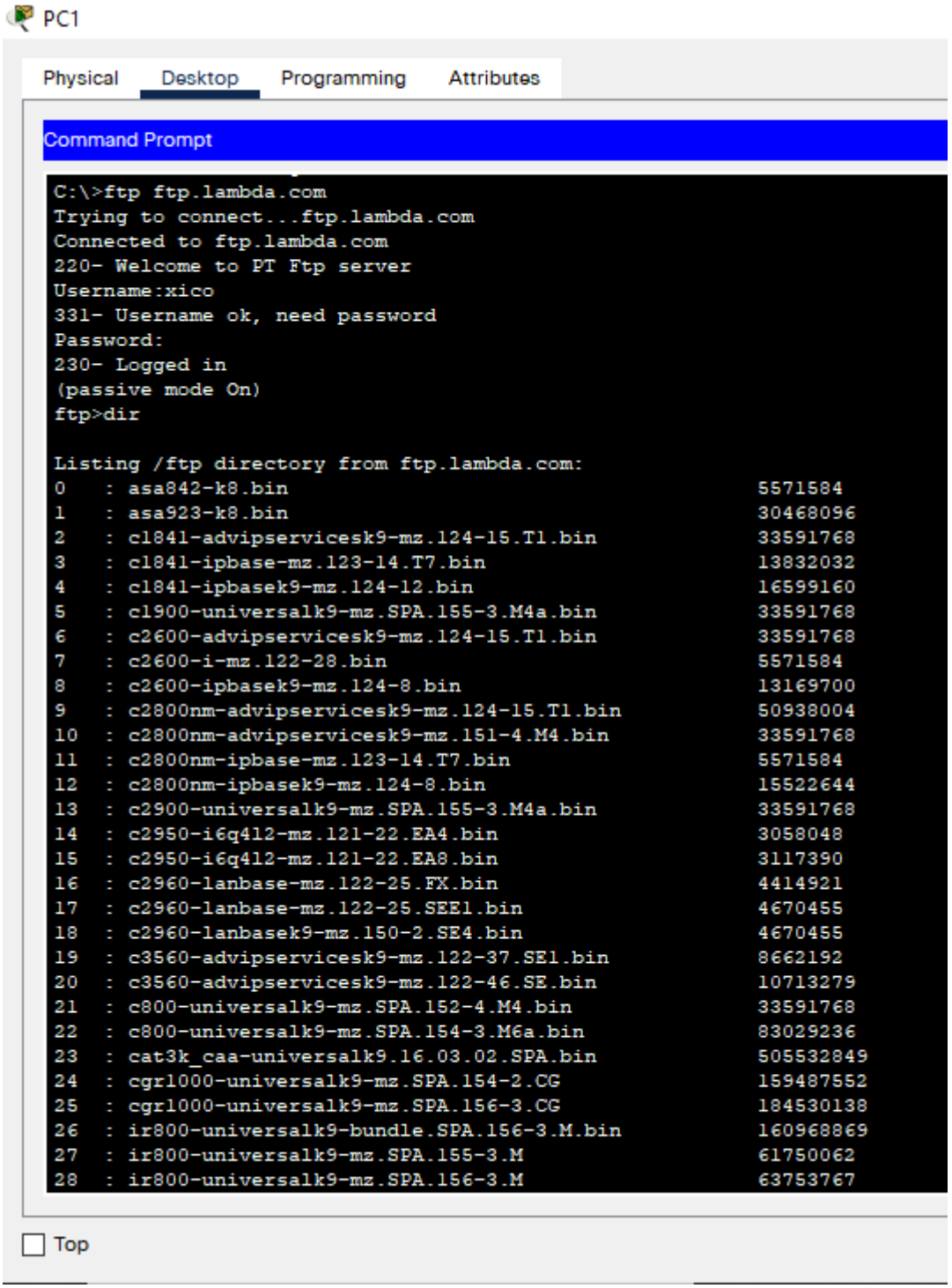

PC1
Physical
Desktop
Programming
Attributes
Web Browser
X
URL
http://192.168.60.2
Go
Stop
Cisco Packet Tracer
Welcome to Cisco Packet Tracer. Opening doors to new opportunities. Mind Wide Open.
Quick Links:
A small page
Copyrights
Image page
Image
Top

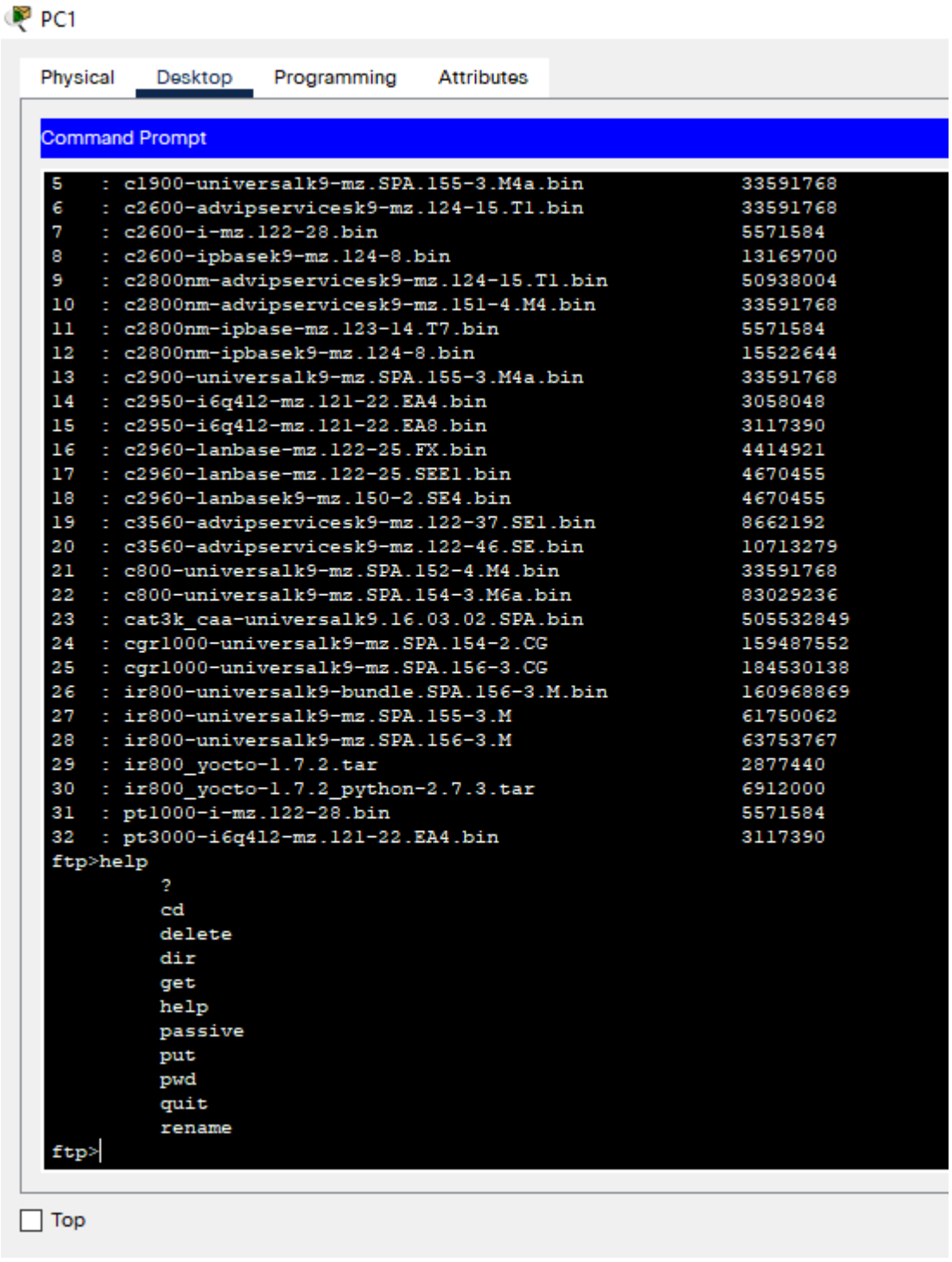


Teste de DHCP:

```
C:\>ping 192.168.60.2

Pinging 192.168.60.2 with 32 bytes of data:

Reply from 192.168.60.2: bytes=32 time=25ms TTL=125
Reply from 192.168.60.2: bytes=32 time=29ms TTL=125
Reply from 192.168.60.2: bytes=32 time=16ms TTL=125
Reply from 192.168.60.2: bytes=32 time=13ms TTL=125

Ping statistics for 192.168.60.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 13ms, Maximum = 29ms, Average = 20ms

C:\>
```

Teste de FTP:


PC1
Physical
Desktop
Programming
Attributes
Command Prompt
C:\>ftp ftp.lambda.com
Trying to connect...ftp.lambda.com
Connected to ftp.lambda.com
220- Welcome to PT Ftp server
Username:xico
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>dir
Listing /ftp directory from ftp.lambda.com:
0 : asa842-k8.bin 5571584
1 : asa923-k8.bin 30468096
2 : c1841-advipservicesk9-mz.124-15.T1.bin 33591768
3 : c1841-ipbase-mz.123-14.T7.bin 13832032
4 : c1841-ipbasek9-mz.124-12.bin 16599160
5 : c1900-universalk9-mz.SPA.155-3.M4a.bin 33591768
6 : c2600-advipservicesk9-mz.124-15.T1.bin 33591768
7 : c2600-i-mz.122-28.bin 5571584
8 : c2600-ipbasek9-mz.124-8.bin 13169700
9 : c2800nm-advipservicesk9-mz.124-15.T1.bin 50938004
10 : c2800nm-advipservicesk9-mz.151-4.M4.bin 33591768
11 : c2800nm-ipbase-mz.123-14.T7.bin 5571584
12 : c2800nm-ipbasek9-mz.124-8.bin 15522644
13 : c2900-universalk9-mz.SPA.155-3.M4a.bin 33591768
14 : c2950-i6q412-mz.121-22.EA4.bin 3058048
15 : c2950-i6q412-mz.121-22.EA8.bin 3117390
16 : c2960-lanbase-mz.122-25.FX.bin 4414921
17 : c2960-lanbase-mz.122-25.SEE1.bin 4670455
18 : c2960-lanbasek9-mz.150-2.SE4.bin 4670455
19 : c3560-advipservicesk9-mz.122-37.SE1.bin 8662192
20 : c3560-advipservicesk9-mz.122-46.SE.bin 10713279
21 : c800-universalk9-mz.SPA.152-4.M4.bin 33591768
22 : c800-universalk9-mz.SPA.154-3.M6a.bin 83029236
23 : cat3k_caa-universalk9.16.03.02.SPA.bin 505532849
24 : cgr1000-universalk9-mz.SPA.154-2.CG 159487552
25 : cgr1000-universalk9-mz.SPA.156-3.CG 184530138
26 : ir800-universalk9-bundle.SPA.156-3.M.bin 160968869
27 : ir800-universalk9-mz.SPA.155-3.M 61750062
28 : ir800-universalk9-mz.SPA.156-3.M 63753767
Top


PC1
Physical
Desktop
Programming
Attributes
Command Prompt
5 : c1900-universalk9-mz.SPA.155-3.M4a.bin 33591768
6 : c2600-advipservicesk9-mz.124-15.T1.bin 33591768
7 : c2600-i-mz.122-28.bin 5571584
8 : c2600-ipbasek9-mz.124-8.bin 13169700
9 : c2800nm-advipservicesk9-mz.124-15.T1.bin 50938004
10 : c2800nm-advipservicesk9-mz.151-4.M4.bin 33591768
11 : c2800nm-ipbase-mz.123-14.T7.bin 5571584
12 : c2800nm-ipbasek9-mz.124-8.bin 15522644
13 : c2900-universalk9-mz.SPA.155-3.M4a.bin 33591768
14 : c2950-i6q4l2-mz.121-22.EA4.bin 3058048
15 : c2950-i6q4l2-mz.121-22.EA8.bin 3117390
16 : c2960-lanbase-mz.122-25.FX.bin 4414921
17 : c2960-lanbase-mz.122-25.SEE1.bin 4670455
18 : c2960-lanbasek9-mz.150-2.SE4.bin 4670455
19 : c3560-advipservicesk9-mz.122-37.SE1.bin 8662192
20 : c3560-advipservicesk9-mz.122-46.SE.bin 10713279
21 : c800-universalk9-mz.SPA.152-4.M4.bin 33591768
22 : c800-universalk9-mz.SPA.154-3.M6a.bin 83029236
23 : cat3k_caa-universalk9.16.03.02.SPA.bin 505532849
24 : cgr1000-universalk9-mz.SPA.154-2.CG 159487552
25 : cgr1000-universalk9-mz.SPA.156-3.CG 184530138
26 : ir800-universalk9-bundle.SPA.156-3.M.bin 160968869
27 : ir800-universalk9-mz.SPA.155-3.M 61750062
28 : ir800-universalk9-mz.SPA.156-3.M 63753767
29 : ir800_yocto-1.7.2.tar 2877440
30 : ir800_yocto-1.7.2_python-2.7.3.tar 6912000
31 : pt1000-i-mz.122-28.bin 5571584
32 : pt3000-i6q4l2-mz.121-22.EA4.bin 3117390
ftp>help
?
cd
delete
dir
get
help
passive
put
pwd
quit
rename
ftp>
Top