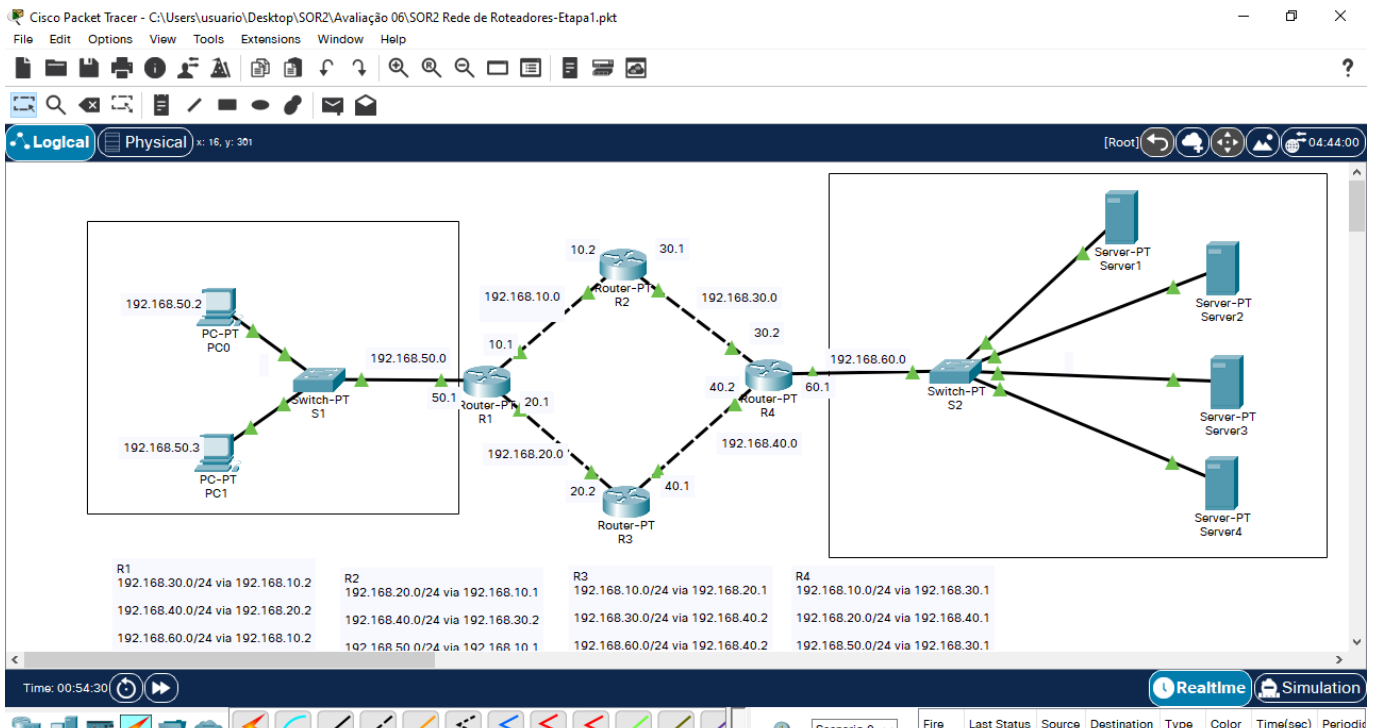


Avaliação 06 — Sistemas Operacionais de Redes 2

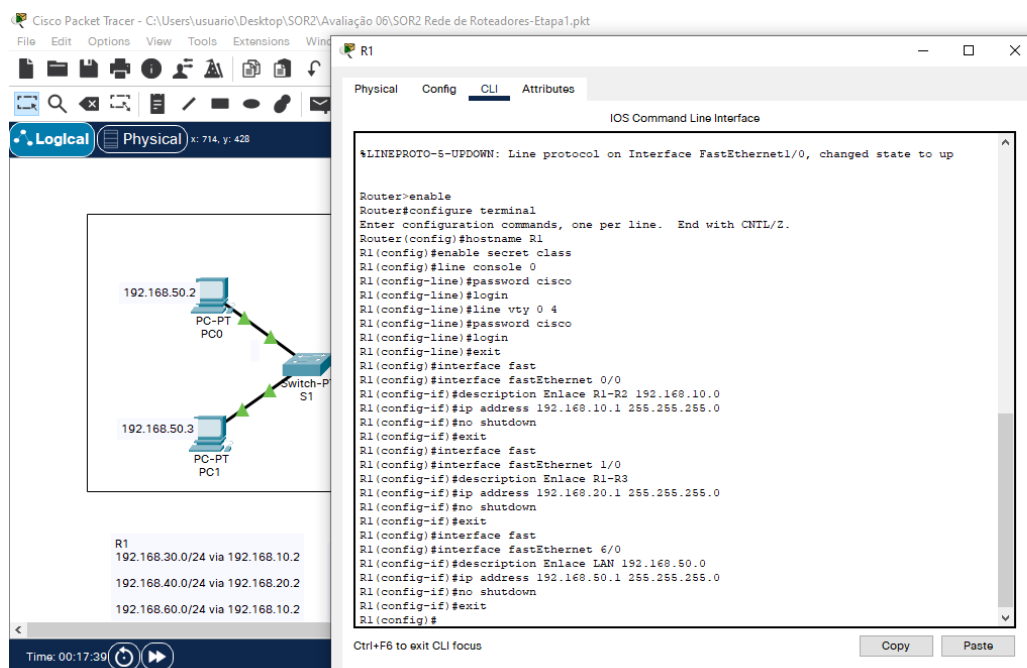
Paulo Victor Souza Rodrigues — P8 de Informática

Etapa 1

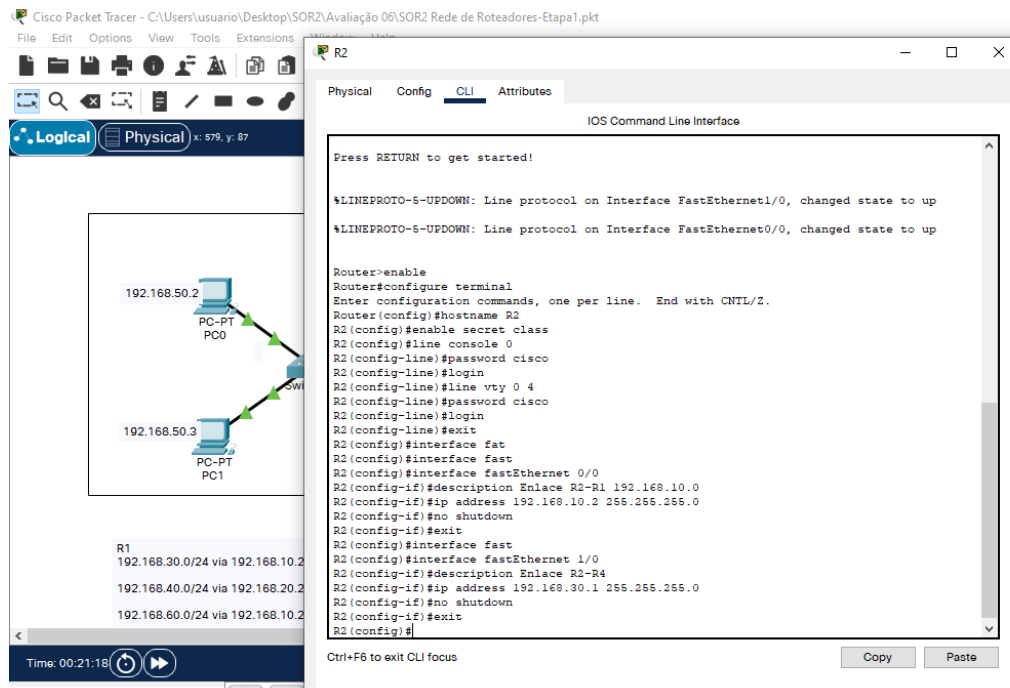


Etapa 2

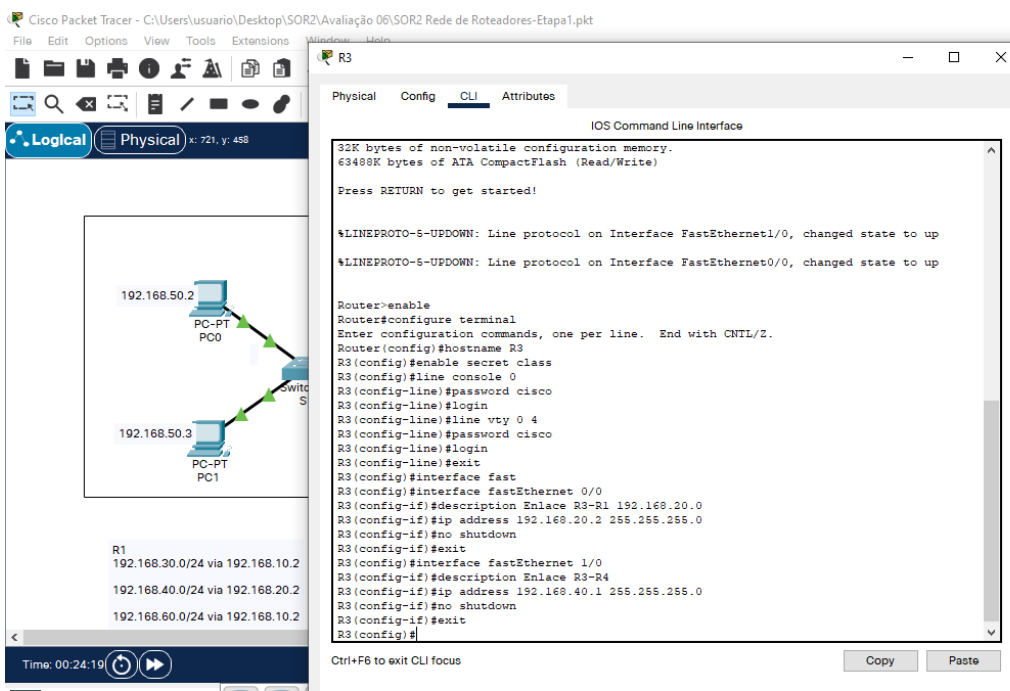
Configuração das interfaces do Roteador R1



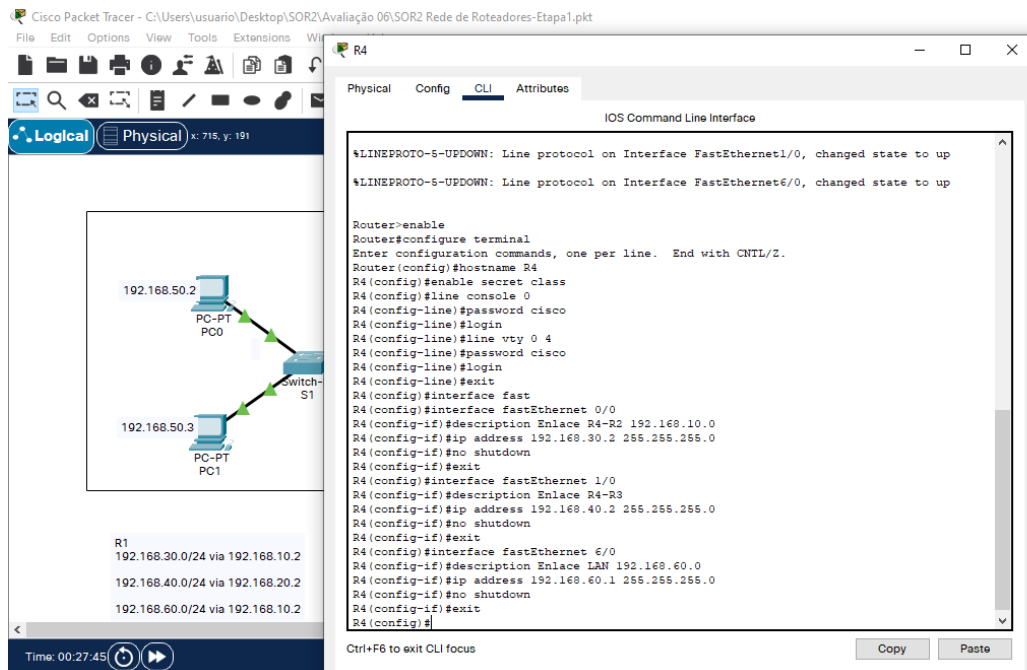
Configuração das interfaces do Roteador R2



Configuração das interfaces do Roteador R3

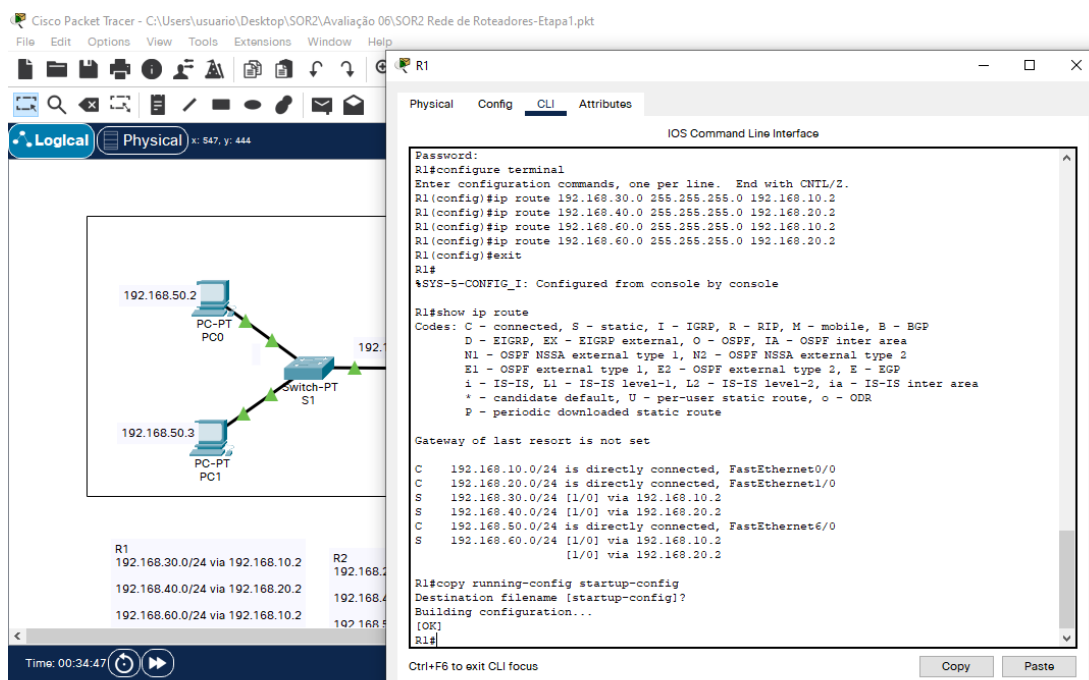


Configuração das interfaces do Roteador R4

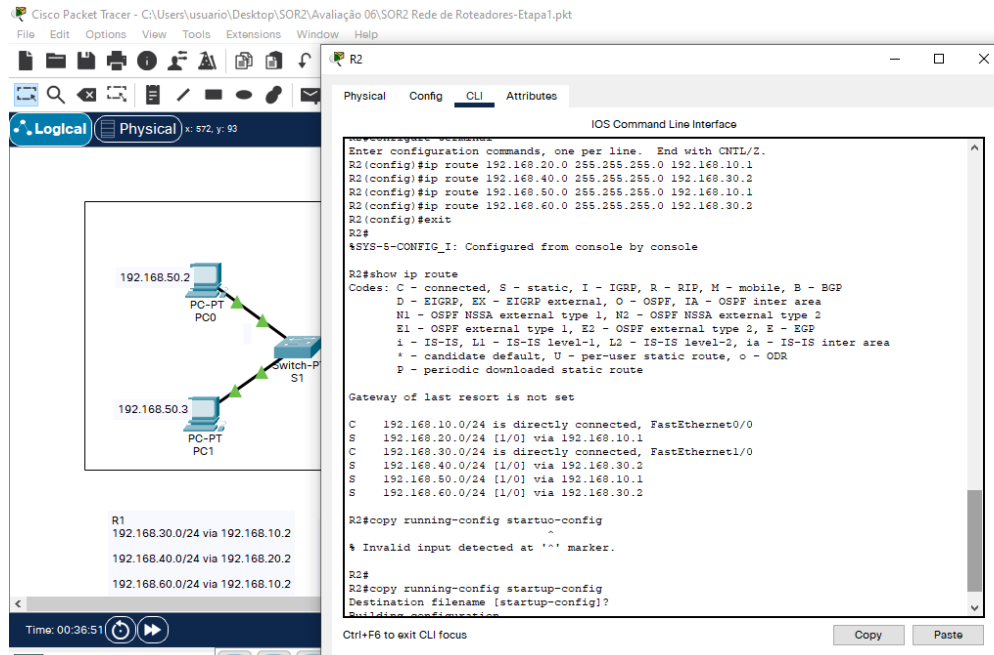


Etapas

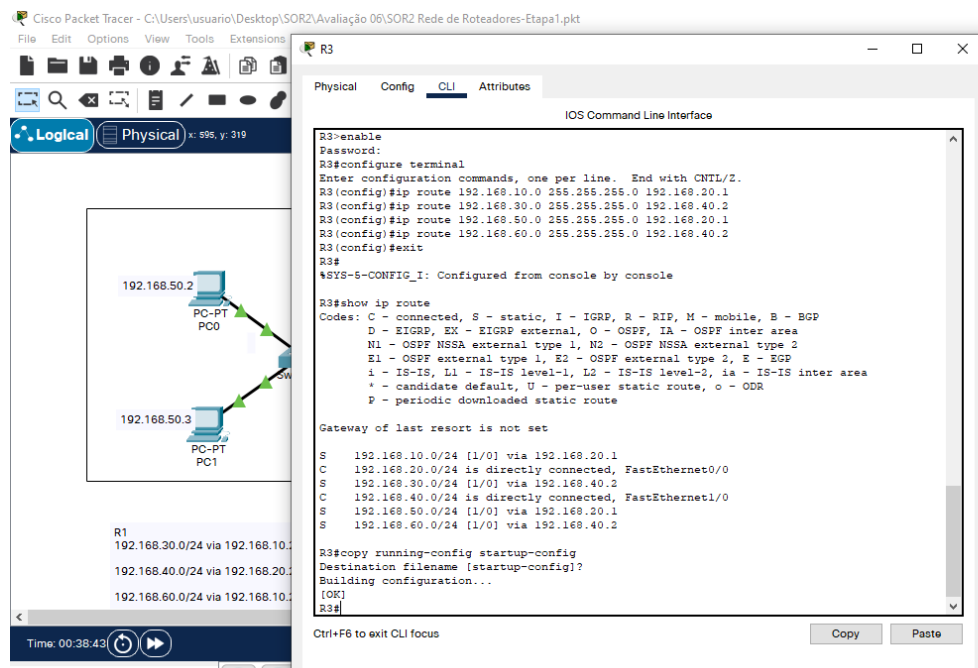
Configurar as rotas do Roteador R1



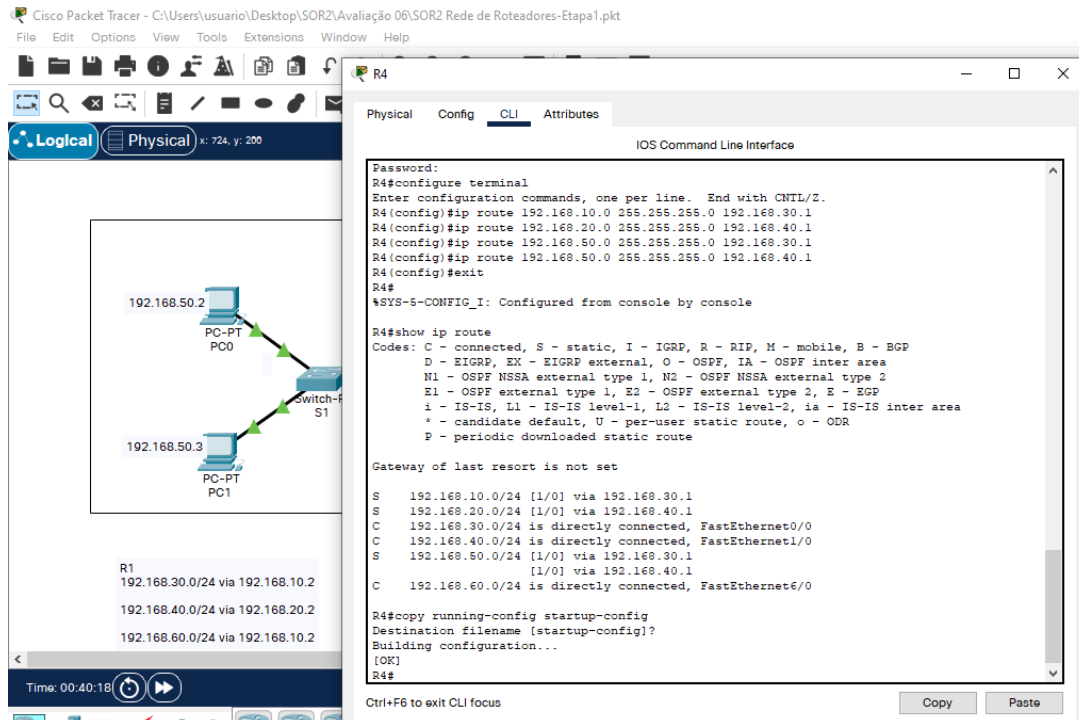
Configurar as rotas do Roteador R2



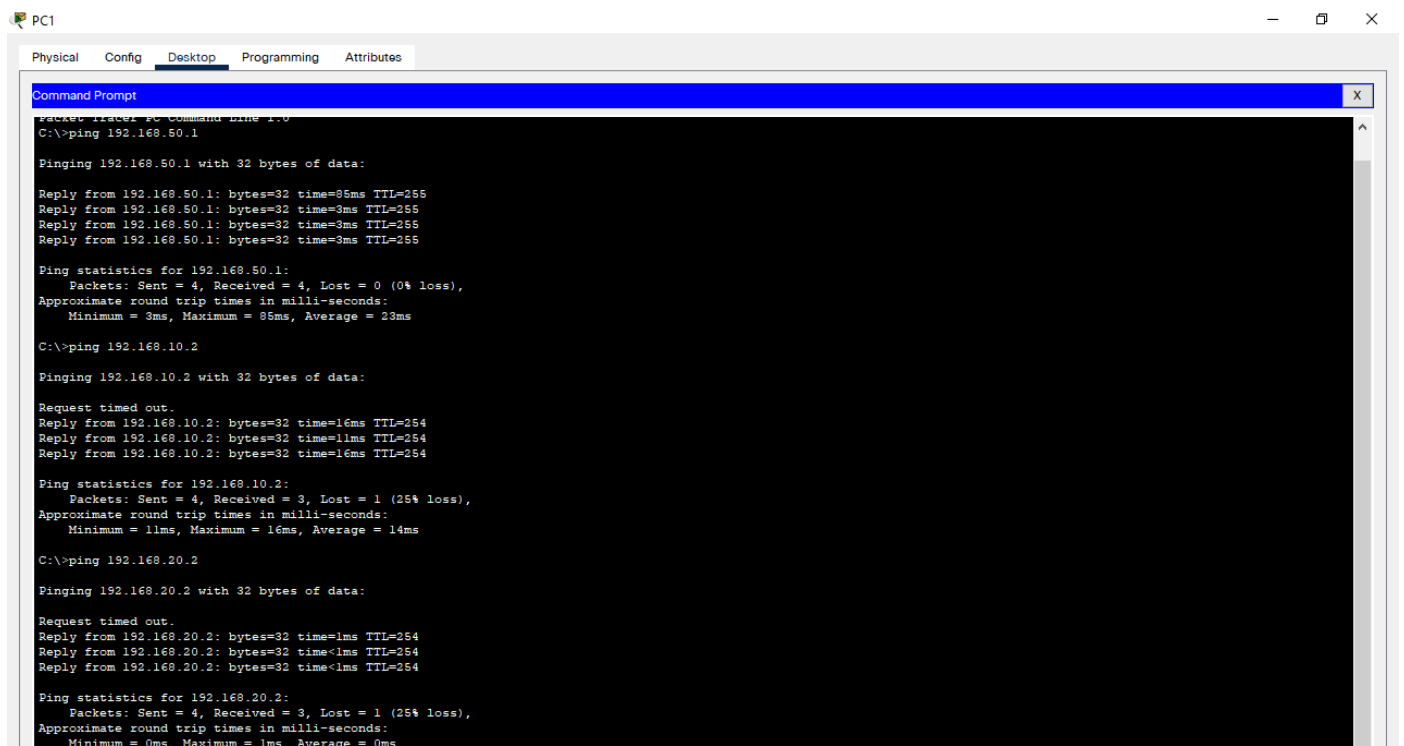
Configurar as rotas do Roteador R3



Configurar as rotas do Roteador R4



Testar a conectividade entre as duas redes locais



PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
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=17ms TTL=253
Reply from 192.168.40.2: bytes=32 time=16ms 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 = 16ms, Maximum = 17ms, Average = 16ms

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=22ms TTL=253
Reply from 192.168.30.2: bytes=32 time=13ms TTL=253
Reply from 192.168.30.2: bytes=32 time=10ms TTL=253
Reply from 192.168.30.2: bytes=32 time=10ms 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 = 10ms, Maximum = 22ms, Average = 13ms

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=22ms TTL=125
Reply from 192.168.60.2: bytes=32 time=11ms TTL=125
Reply from 192.168.60.2: bytes=32 time=14ms 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 = 11ms, Maximum = 22ms, Average = 15ms
```

PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
Approximate round trip times in milli-seconds:
    Minimum = 11ms, Maximum = 22ms, Average = 15ms

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=13ms TTL=125
Reply from 192.168.60.3: bytes=32 time=14ms TTL=125
Reply from 192.168.60.3: bytes=32 time=14ms 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 = 13ms, Maximum = 14ms, Average = 13ms

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=14ms TTL=125
Reply from 192.168.60.4: bytes=32 time=14ms TTL=125
Reply from 192.168.60.4: bytes=32 time=14ms 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 = 14ms, Maximum = 14ms, Average = 14ms

C:\>ping 192.168.60.5

Pinging 192.168.60.5 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.60.5:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
Minimum = 13ms, Maximum = 14ms, Average = 13ms

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=14ms TTL=125
Reply from 192.168.60.4: bytes=32 time=14ms TTL=125
Reply from 192.168.60.4: bytes=32 time=14ms 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 = 14ms, Maximum = 14ms, Average = 14ms

C:\>ping 192.168.60.5

Pinging 192.168.60.5 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.60.5:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 192.168.60.5

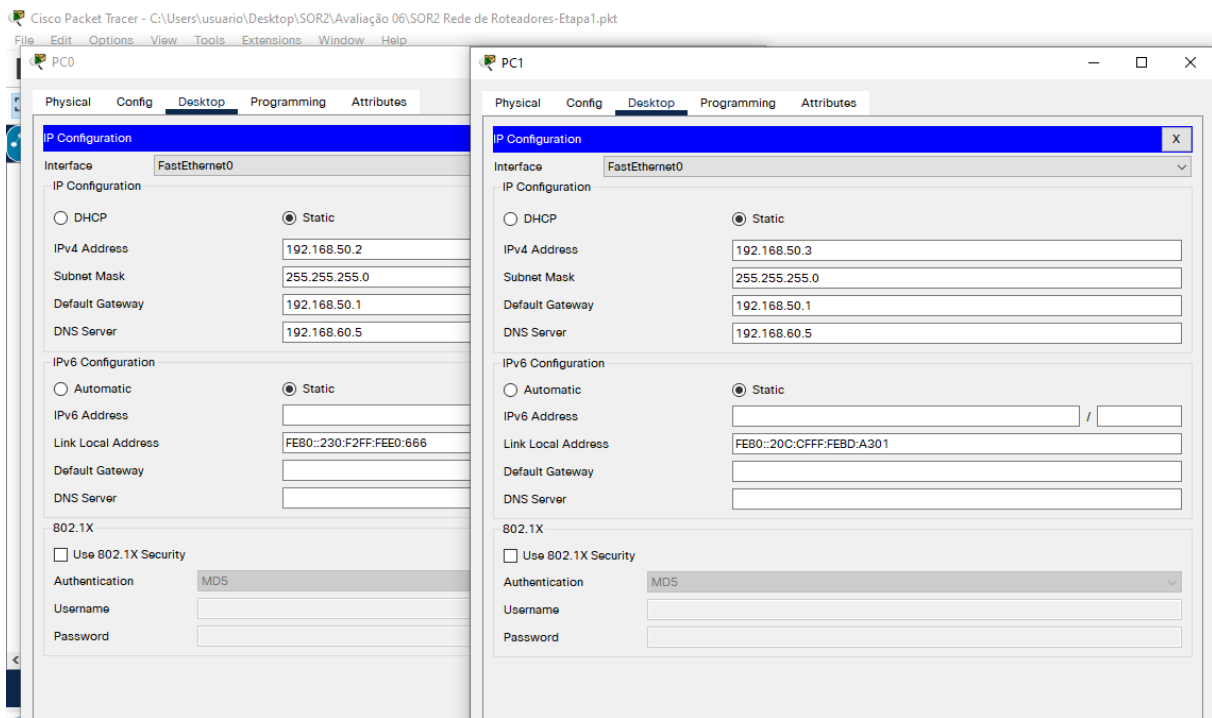
Pinging 192.168.60.5 with 32 bytes of data:

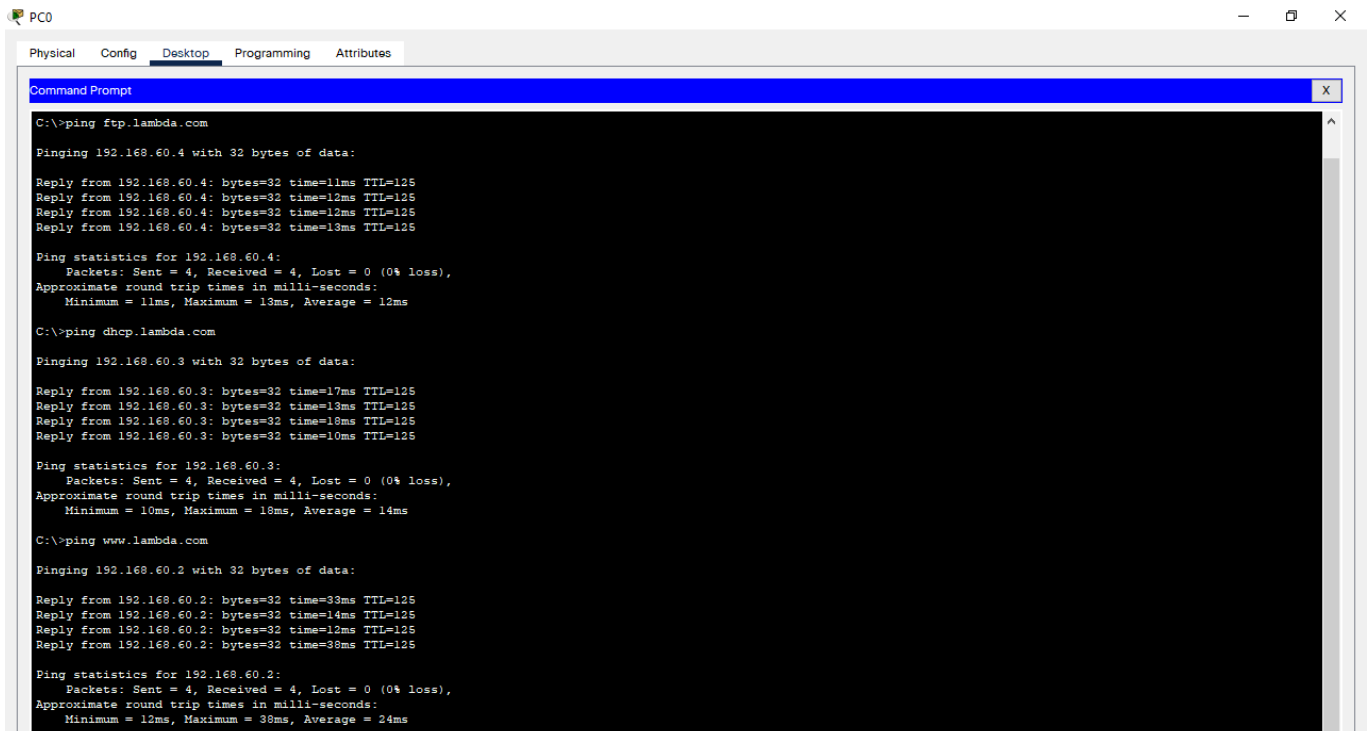
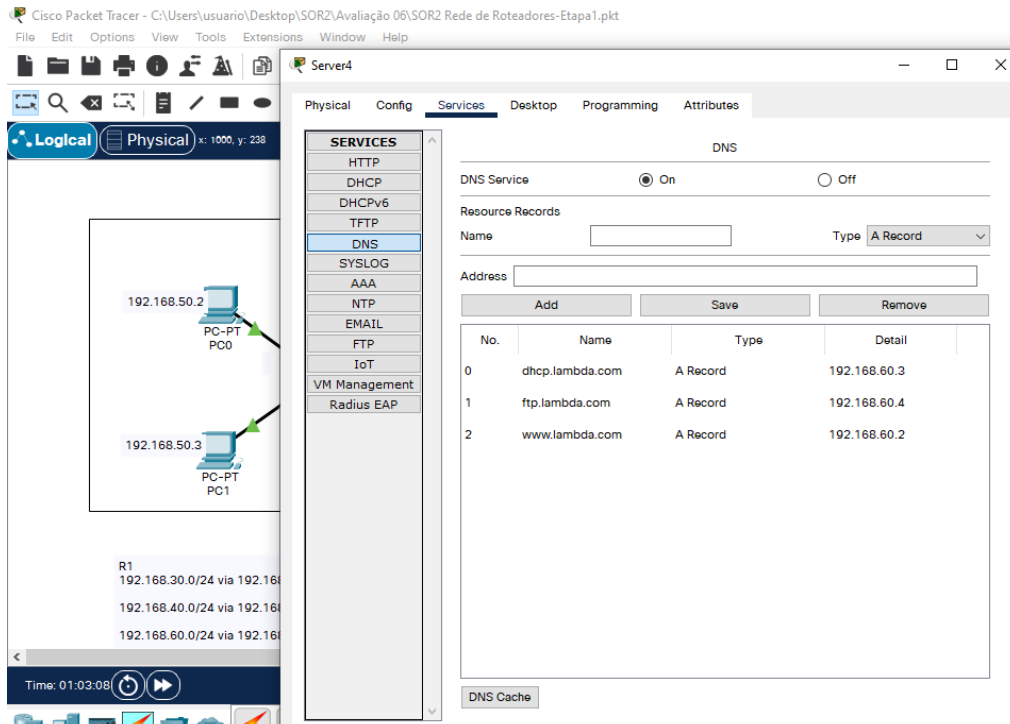
Request timed out.
Reply from 192.168.60.5: bytes=32 time=22ms TTL=125
Reply from 192.168.60.5: bytes=32 time=18ms TTL=125
Reply from 192.168.60.5: bytes=32 time=16ms TTL=125

Ping statistics for 192.168.60.5:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 15ms, Maximum = 22ms, Average = 17ms
```

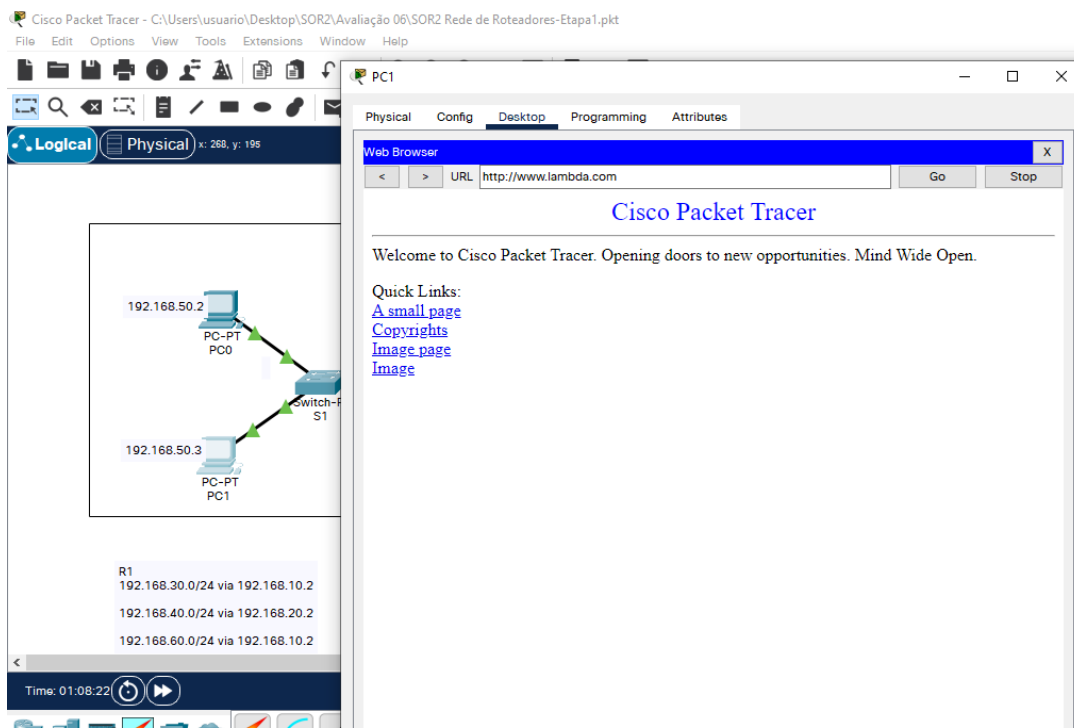
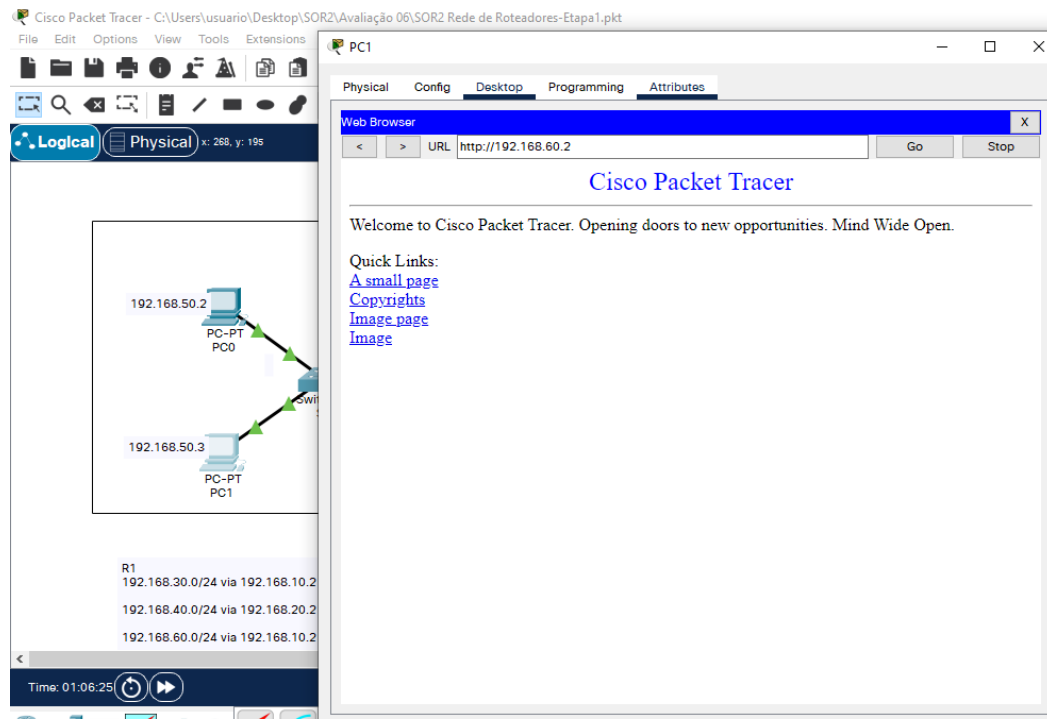
Etapas 4

Configurar e testar o serviço DNS





Configurar e testar o serviço HTTP



Configurar e testar o serviço DHCP

Cisco Packet Tracer - C:\Users\usuario\Desktop\SOR2\Avaliação 06\SOR2 Rede de Roteadores-Etapa1.pkt

File Edit Options View Tools Extensions Window Help

Server2

Physical Config **Services** Desktop Programming Attributes

Logical Physical x: 365, y: 380

192.168.50.2 PC-PT PC0

192.168.50.3 PC-PT PC1

R1
192.168.30.0/24 via 192.168.30.1
192.168.40.0/24 via 192.168.40.1
192.168.60.0/24 via 192.168.60.1

Time: 01:19:20

SERVICES

- HTTP
- DHCP**
- DHCPv6
- TFTP
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

DHCP

Interface: FastEthernet0 Service: ☒ On ☐ Off

Pool Name: serverPool2

Default Gateway: 192.168.50.1

DNS Server: 192.168.60.5

Start IP Address: 192 168 50 3

Subnet Mask: 255 255 255 0

Maximum Number of Users: 252

TFTP Server: 0.0.0.0

WLC Address: 0.0.0.0

Add Save Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool2	192.168...	192.168...	192.168...	255.255...	252	0.0.0.0	0.0.0.0
serverPool	0.0.0.0	0.0.0.0	192.168...	255.255...	512	0.0.0.0	0.0.0.0

Cisco Packet Tracer - C:\Users\usuario\Desktop\SOR2\Avaliação 06\SOR2 Rede de Roteadores-Etapa1.pkt

File Edit Options View Tools Extensions

R1

Physical Config **CLI** Attributes

IOS Command Line Interface

User Access Verification

Password:

```
R1>enable
Password:
R1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#interface fast
R1(config)#interface fastEthernet 6/0
R1(config-if)#ip helper-address 192.168.60.3
R1(config-if)#end
R1#
%SYS-5-CONFIG_I: Configured from console by console

R1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#interface fast
R1(config)#interface fastEthernet 6/0
R1(config-if)#ip helper-address 192.168.60.3
R1(config-if)#end
R1#
%SYS-5-CONFIG_I: Configured from console by console

R1#
```

Ctrl+F6 to exit CLI focus

Copy Paste

Logical Physical x: 214, y: 485

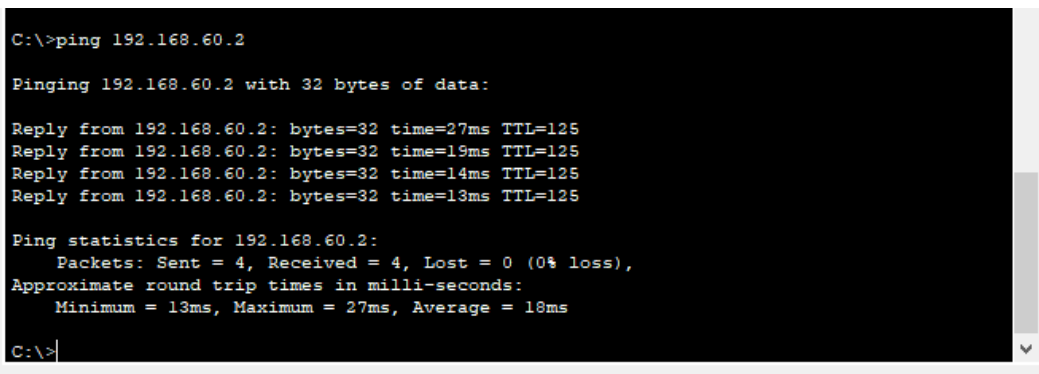
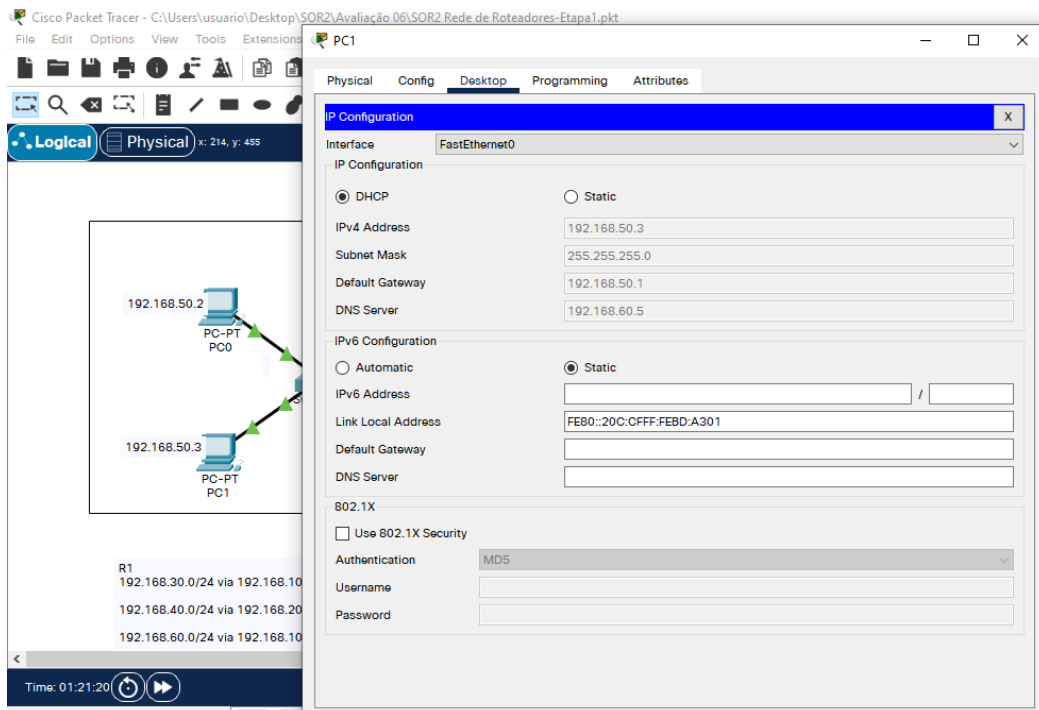
192.168.50.2 PC-PT PC0

192.168.50.3 PC-PT PC1

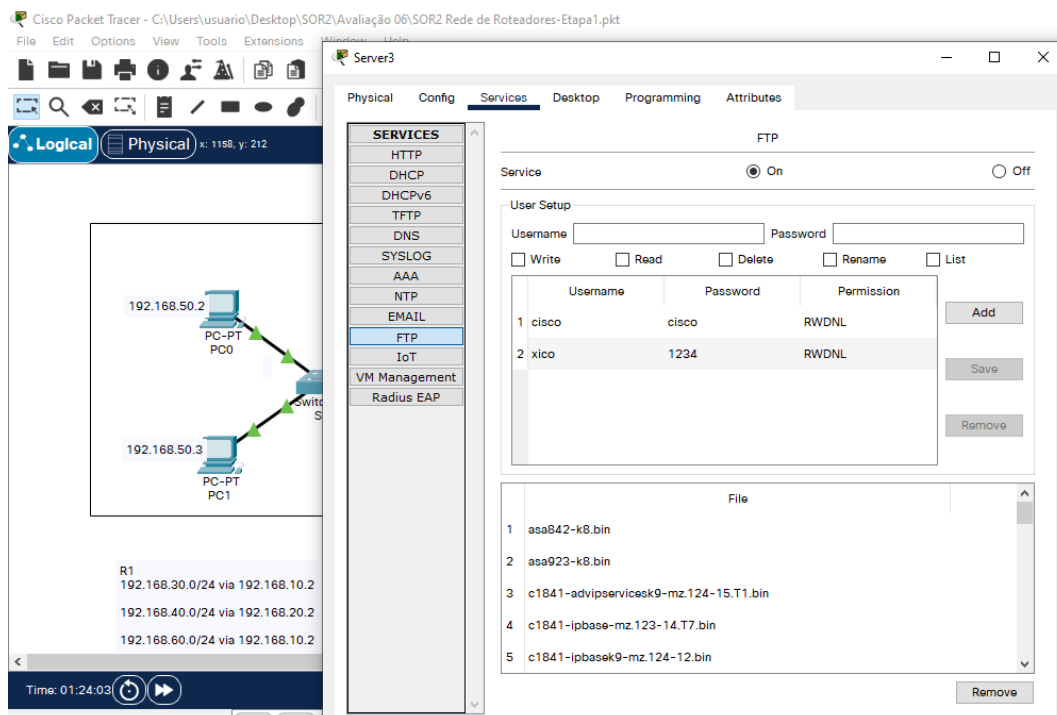
SWITCH S

R1
192.168.30.0/24 via 192.168.10.2
192.168.40.0/24 via 192.168.20.2
192.168.60.0/24 via 192.168.10.2

Time: 01:19:50



Configurar e testar o serviço FTP



Cisco Packet Tracer - C:\Users\usuario\Desktop\SOR2\Avaliação 06\SOR2 Rede de Roteadores-Etapa1.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 254, y: 191

192.168.50.2 PC-PT PC0

192.168.50.3 PC-PT PC1

Switch S1

R1
192.168.30.0/24 via 192.168.10.2
192.168.40.0/24 via 192.168.20.2
192.168.60.0/24 via 192.168.10.2

Time: 01:26:25

PC1

Physical Config 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 : asa802-k8.bin                               5571584
 1 : asa923-k8.bin                               30468096
 2 : c1841-advipservicesk9-ms.124-15.T1.bin      33591768
 3 : c1841-ibase-ms.123-14.T7.bin               13832032
 4 : c1841-ibasek9-ms.124-12.bin                16599160
 5 : c1900-universalk9-ms.SPA.155-3.M4a.bin      33591768
 6 : c2600-advipservicesk9-ms.124-15.T1.bin      33591768
 7 : c2600-i-ms.122-28.bin                      5571584
 8 : c2600-ibasek9-ms.124-8.bin                 13169700
 9 : c2800nm-advipservicesk9-ms.124-15.T1.bin    50938004
10 : c2800nm-advipservicesk9-ms.151-4.M4.bin     33591768
11 : c2800nm-ibase-ms.123-14.T7.bin             5571584
12 : c2800nm-ibasek9-ms.124-8.bin               15522644
13 : c2900-universalk9-ms.SPA.155-3.M4a.bin      33591768
14 : c2950-16q412-ms.121-22.EA4.bin            3058048
15 : c2950-16q412-ms.121-22.EA8.bin            3117390
16 : c2950-1anbase-ms.122-25.FX.bin             4414921
17 : c2950-1anbase-ms.122-25.SE1.bin            4670455
18 : c2950-1anbasek9-ms.150-2.SE4.bin           4670455
19 : c3560-advipservicesk9-ms.122-37.SE1.bin     8662192
20 : c3560-advipservicesk9-ms.122-46.SE1.bin     10713279
21 : c800-universalk9-ms.SPA.152-4.M4a.bin       33591768
22 : c800-universalk9-ms.SPA.154-3.M6a.bin       83029236
23 : cat3k_caa-universalk9.16.03.02.SPA.bin      505532849
24 : cgr1000-universalk9-ms.SPA.154-2.CG         159487552
25 : cgr1000-universalk9-ms.SPA.156-3.CG         184530138
26 : ir800-universalk9-bundle.SPA.156-3.M.bin    160968869
27 : ir800-universalk9-ms.SPA.155-3.M            61750062
28 : ir800-universalk9-ms.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-ms.122-28.bin                     5571584
32 : pt3000-16q412-ms.121-22.EA4.bin            3117390
```

Cisco Packet Tracer - C:\Users\usuario\Desktop\SOR2\Avaliação 06\SOR2 Rede de Roteadores-Etapa1.pkt

File Edit Options View Tools Extensions Window Help

Logical Physical x: 208, y: 456

192.168.50.2 PC-PT PC0

192.168.50.3 PC-PT PC1

Switch S1

R1
192.168.30.0/24 via 192.168.10.2
192.168.40.0/24 via 192.168.20.2
192.168.60.0/24 via 192.168.10.2

Time: 01:26:51

PC1

Physical Config Desktop Programming Attributes

Command Prompt

```
9 : c2800nm-advipservicesk9-ms.124-15.T1.bin    50938004
10 : c2800nm-advipservicesk9-ms.151-4.M4.bin     33591768
11 : c2800nm-ibase-ms.123-14.T7.bin             5571584
12 : c2800nm-ibasek9-ms.124-8.bin               15522644
13 : c2900-universalk9-ms.SPA.155-3.M4a.bin      33591768
14 : c2950-16q412-ms.121-22.EA4.bin            3058048
15 : c2950-16q412-ms.121-22.EA8.bin            3117390
16 : c2950-1anbase-ms.122-25.FX.bin             4414921
17 : c2950-1anbase-ms.122-25.SE1.bin            4670455
18 : c2950-1anbasek9-ms.150-2.SE4.bin           4670455
19 : c3560-advipservicesk9-ms.122-37.SE1.bin     8662192
20 : c3560-advipservicesk9-ms.122-46.SE1.bin     10713279
21 : c800-universalk9-ms.SPA.152-4.M4a.bin       33591768
22 : c800-universalk9-ms.SPA.154-3.M6a.bin       83029236
23 : cat3k_caa-universalk9.16.03.02.SPA.bin      505532849
24 : cgr1000-universalk9-ms.SPA.154-2.CG         159487552
25 : cgr1000-universalk9-ms.SPA.156-3.CG         184530138
26 : ir800-universalk9-bundle.SPA.156-3.M.bin    160968869
27 : ir800-universalk9-ms.SPA.155-3.M            61750062
28 : ir800-universalk9-ms.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-ms.122-28.bin                     5571584
32 : pt3000-16q412-ms.121-22.EA4.bin            3117390

ftp>help

?
cd
delete
dir
get
help
passive
put
pwd
quit
rename

ftp>
```