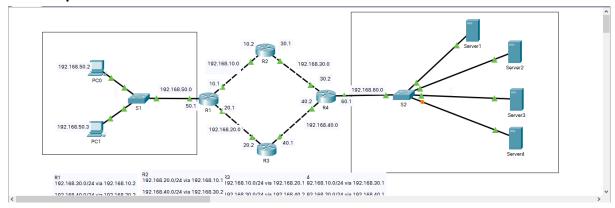
# Avaliação 06 - Rafael Pinheiro de Farias SOR 2 - P8 de Informática

### 1º Etapa:



#### 2º etapa: Configuração da interface do R1:

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #hostname R1
R1(config) #enable secret class
R1(config)#line console 0
R1(config-line) #passowrd cisco
% Invalid input detected at '^' marker.
R1(config-line) #password cisco
R1(config-line) #login
R1(config-line)#line vty 0 4
R1(config-line) #password cisco
Rl(config-line)#login
R1(config-line)#exit
Rl(config) #interface fastEthernet 0/0
R1(config-if) #description Enlace R1-R2 192.168.10.0
R1(config-if) #ip address 192.168.10.1 255.255.255.0
R1(config-if) #no shutdown
R1(config-if)#exit
Rl(config)#interface fastEthernet 1/0
R1(config-if) #description Enlace R1-R3
R1(config-if)#ip address 192.168.20.1 255.255.255.0
R1(config-if) #no shutdown
Rl(config-if)#exit
R1(config)#interface fastEthernet 6/0
R1(config-if)#description Enlace LAN 192.168.50.0
R1(config-if) #ip address 192.168.50.1 255.255.255.0
Rl(config-if) #no shutdown
R1(config-if)#exit
R1(config)#
```

### Configuração da interface do R2:

```
Press RETURN to get started!
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #hostname R2
R2(config) #enable secret class
R2(config) #line console 0
R2(config-line) #password cisco
R2(config-line)#login
R2(config-line) #line vty 0 4
R2(config-line) #password cisco
R2(config-line)#login
R2(config-line)#exit
R2(config)#interface fastEthernet 0/0
R2(config-if) #description Enlace R2-R1 192.168.10.0
R2(config-if)#ip address 192.168.10.2 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#exit
R2(config)#intrface fastEthernet 1/0
% Invalid input detected at '^' marker.
R2(config)#interface fastEthernet 1/0
R2(config-if)#description Enlace R2-R4
R2(config-if)#ip address 192.168.30.1 255.255.255.0
R2(config-if)#no shutdown
R2(config-if)#exit
R2(config)#
```

### Configuração da Interface do R3:

```
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)
Press RETURN to get started!
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #hostname R3
R3(config) #enable secret class
R3(config)#line console 0
R3(config-line) #password cisco
R3(config-line)#login
R3(config-line) #line vty 0 4
R3(config-line) #password cisco
R3(config-line)#login
R3(config-line)#exit
R3(config)#interface fastEthernet 0/0
R3(config-if) #description Enlace R3-R1 192.168.20.0
R3(config-if)#ip address 192.168.20.2 255.255.255.0
R3(config-if) #no shutdown
R3(config-if)#exit
R3(config)#interface fastEthernet 1/0
R3(config-if) #description Enlace R3-R4
R3(config-if)#ip address 192.168.40.1 255.255.255.0
R3(config-if)#no shutdown
R3(config-if)#exit
R3(config)#
```

## Configuração da interface de R4:

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet6/0, changed state to up
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #hostname R4
R4(config) #enable secret class
R4(config)#line console 0
R4(config-line) #password cisco
R4(config-line)#login
R4(config-line)#line vty 0 4
R4(config-line) #password cisco
R4(config-line)#login
R4(config-line)#exit
R4(config)#interface fastEthernet 0/0
R4(config-if) #description Enlace R4-R2 192.168.10.0
R4(config-if) #ip address 192.168.30.2 255.255.255.0
R4(config-if)#no shutdown
R4(config-if)#exit
R4(config)#interface fastEthernet 1/0
R4(config-if) #description Enlace R4-R3
R4(config-if)#ip address 192.168.40.2 255.255.255.0
R4(config-if) #no shutdown
R4(config-if)#exit
R4(config)#interface fastEthernet 6/0
R4(config-if) #description Enlace Lan 192.168.60.0
R4(config-if)#ip address 192.168.60.1 255.255.255.0
R4(config-if)#no shutdown
R4(config-if)#exit
R4(config)#
```

3º etapa: Configuração das rotas de R1:

```
Rl#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#ip route 192.168.30.0 255.255.255.0 192.168.10.2
R1(config) #ip route 192.168.40.0 255.255.255.0 192.168.20.2
R1(config)#ip route 192.168.60.0 255.255.255.0 192.168.10.2
R1(config) #ip route 192.168.60.0 255.255.255.0 192.168.20.2
R1(config)#exit
R1#
%SYS-5-CONFIG_I: Configured from console by console
Rl#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
     192.168.10.0/24 is directly connected, FastEthernet0/0
     192.168.20.0/24 is directly connected, FastEthernet1/0
     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
С
    192.168.50.0/24 is directly connected, FastEthernet6/0
     192.168.60.0/24 [1/0] via 192.168.10.2
                      [1/0] via 192.168.20.2
R1#
Rl#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
R1#
```

#### Configuração das rotas de R2:

```
R2>enable
Password:
R2#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#ip route 192.168.20.0 255.255.255.0 192.168.10.1
R2(config)#ip route 192.168.40.0 255.255.255.0 192.168.30.2
R2(config) #ip route 192.168.50.0 255.255.255.0 192.168.10.1
R2(config) #ip route 192.168.60.0 255.255.255.0 192.168.30.2
R2(config)#exit
R2#
%SYS-5-CONFIG_I: Configured from console by console
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
     192.168.10.0/24 is directly connected, FastEthernet0/0
    192.168.20.0/24 [1/0] via 192.168.10.1
С
    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
     192.168.60.0/24 [1/0] via 192.168.30.2
R2#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R2#
```

### Configuração das rotas de R3:

```
R3>enable
Password:
R3#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R3(config) #ip route 192.168.10.0 255.255.255.0 192.168.20.1
R3(config)#ip route 192.168.30.0 255.255.255.0 192.168.40.2
R3(config)#ip route 192.168.50.0 255.255.255.0 192.168.20.1
R3(config)#ip route 192.168.60.0 255.255.255.0 192.168.40.2
R3(config)#exit
R3#
%SYS-5-CONFIG_I: Configured from console by console
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
       El - 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
     192.168.10.0/24 [1/0] via 192.168.20.1
     192.168.20.0/24 is directly connected, FastEthernet0/0
    192.168.30.0/24 [1/0] via 192.168.40.2
    192.168.40.0/24 is directly connected, FastEthernet1/0
s
     192.168.50.0/24 [1/0] via 192.168.20.1
     192.168.60.0/24 [1/0] via 192.168.40.2
R3#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
R3#
```

Configuração das rotas de R4:

```
Password:
R4#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R4(config) #ip route 192.168.10.0 255.255.255.0 192.168.30.1
R4(config) #ip route 192.168.20.0 255.255.255.0 192.168.40.1
R4(config)#ip route 192.168.50.0 255.255.255.0 192.168.30.1
R4(config) #ip route 192.168.50.0 255.255.255.0 192.168.40.1
R4(config)#exit
R4#
%SYS-5-CONFIG_I: Configured from console by console
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
     192.168.10.0/24 [1/0] via 192.168.30.1
S
s
     192.168.20.0/24 [1/0] via 192.168.40.1
    192.168.30.0/24 is directly connected, FastEthernet0/0
C
С
    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
    192.168.60.0/24 is directly connected, FastEthernet6/0
R4#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R4#
```

#### Conectividade das redes:

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.50.1

Pinging 192.168.50.1 with 32 bytes of data:

Reply from 192.168.50.1: bytes=32 time<lms TTL=255
Reply from 192.168.50.1: bytes=32 time=lms TTL=255
Reply from 192.168.50.1: bytes=32 time<lms TTL=255
Reply from 192.168.50.1: bytes=32 time<lms TTL=255
Reply from 192.168.50.1: bytes=32 time<lms TTL=255

Ping statistics for 192.168.50.1:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

```
C:\>ping 192.168.10.2
Pinging 192.168.10.2 with 32 bytes of data:
Reply from 192.168.10.2: bytes=32 time<1ms TTL=254
Ping statistics for 192.168.10.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds:
     Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping 192.168.20.2
Pinging 192.168.20.2 with 32 bytes of data:
Reply from 192.168.20.2: bytes=32 time<1ms TTL=254
Reply from 192.168.20.2: bytes=32 time<1ms TTL=254 Reply from 192.168.20.2: bytes=32 time<1ms TTL=254
Reply from 192.168.20.2: bytes=32 time<1ms TTL=254
Ping statistics for 192.168.20.2:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping 192.168.40.2
Pinging 192.168.40.2 with 32 bytes of data:
Reply from 192.168.40.2: bytes=32 time<1ms TTL=253
```

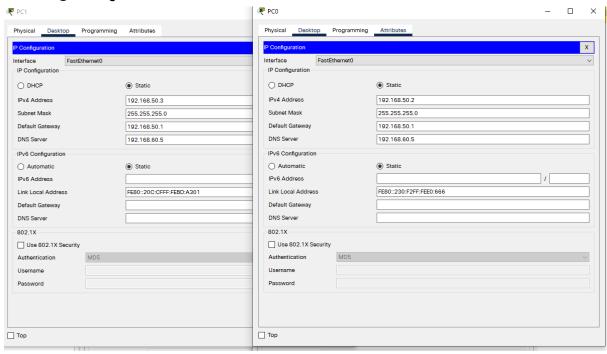
```
C:\>ping 192.168.60.2
Pinging 192.168.60.2 with 32 bytes of data:
Request timed out.
Reply from 192.168.60.2: bytes=32 time<1ms TTL=125
Reply from 192.168.60.2: bytes=32 time<1ms TTL=125
Reply from 192.168.60.2: bytes=32 time<1ms TTL=125
Ping statistics for 192.168.60.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
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<1ms TTL=125
Reply from 192.168.60.3: bytes=32 time<1ms TTL=125
Reply from 192.168.60.3: bytes=32 time=15ms 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 = Oms, Maximum = 15ms, Average = 5ms
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<1ms TTL=125
Reply from 192.168.60.4: bytes=32 time<1ms TTL=125
Reply from 192.168.60.4: bytes=32 time=7ms TTL=125
Ping statistics for 192.168.60.4:
```

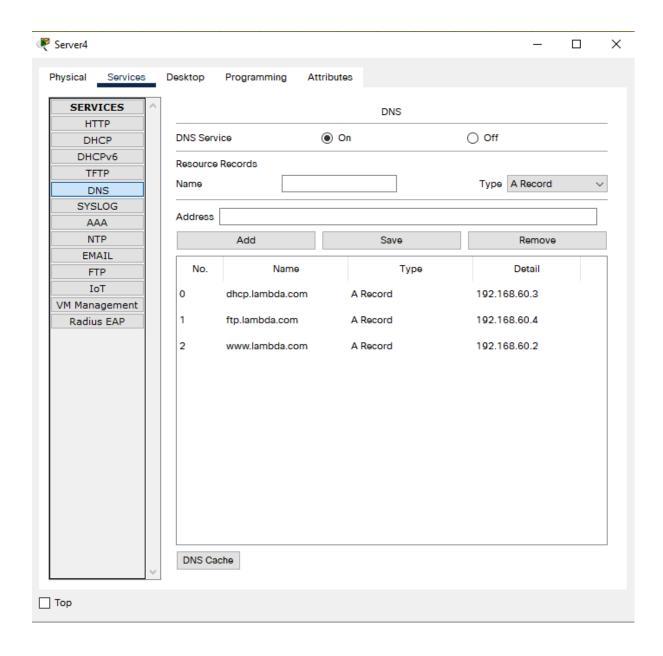
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),

Approximate round trip times in milli-seconds: Minimum = 0ms, Maximum = 7ms, Average = 2ms

# 4° Etapa:

# Configuração e teste do DNS:





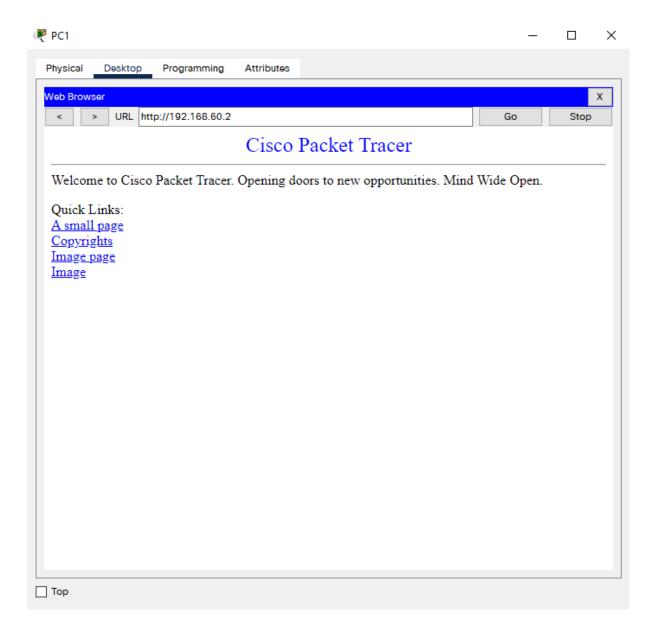
```
C:\>ping dhcp.lambda.com
Pinging 192.168.60.3 with 32 bytes of data:
Reply from 192.168.60.3: bytes=32 time=1ms TTL=125
Reply from 192.168.60.3: bytes=32 time<1ms TTL=125
Reply from 192.168.60.3: bytes=32 time<1ms TTL=125
Reply from 192.168.60.3: bytes=32 time<1ms TTL=125
Ping statistics for 192.168.60.3:
   Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
   Minimum = 0ms, Maximum = 1ms, Average = 0ms
C:\>
Packet Tracer PC Command Line 1.0
C:\>ping ftp.lambda.com
Ping request could not find host ftp.lambda.com. Please check the name and try again.
C:\>ping ftp.lambda.com
Pinging 192.168.60.4 with 32 bytes of data:
Reply from 192.168.60.4: bytes=32 time<1ms TTL=125
Reply from 192.168.60.4: bytes=32 time=1ms TTL=125
Reply from 192.168.60.4: bytes=32 time<1ms TTL=125
Reply from 192.168.60.4: bytes=32 time=11ms TTL=125
Ping statistics for 192.168.60.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = Oms, Maximum = 11ms, Average = 3ms
C:\>ping www.lambda.com
Pinging 192.168.60.2 with 32 bytes of data:
Reply from 192.168.60.2: bytes=32 time=10ms TTL=125
Reply from 192.168.60.2: bytes=32 time<1ms TTL=125
 Reply from 192.168.60.2: bytes=32 time<1ms TTL=125
Reply from 192.168.60.2: bytes=32 time=1ms TTL=125
```

Configuração e teste do HTTP:

Approximate round trip times in milli-seconds: Minimum = 0ms, Maximum = 10ms, Average = 2ms

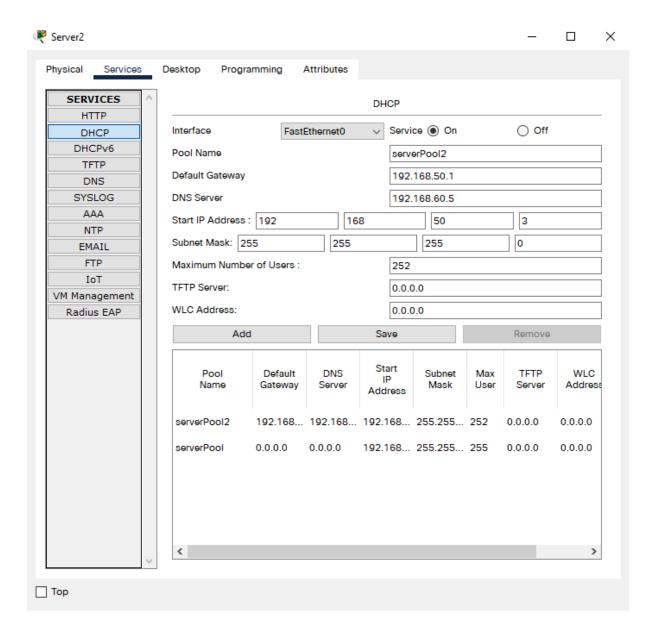
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

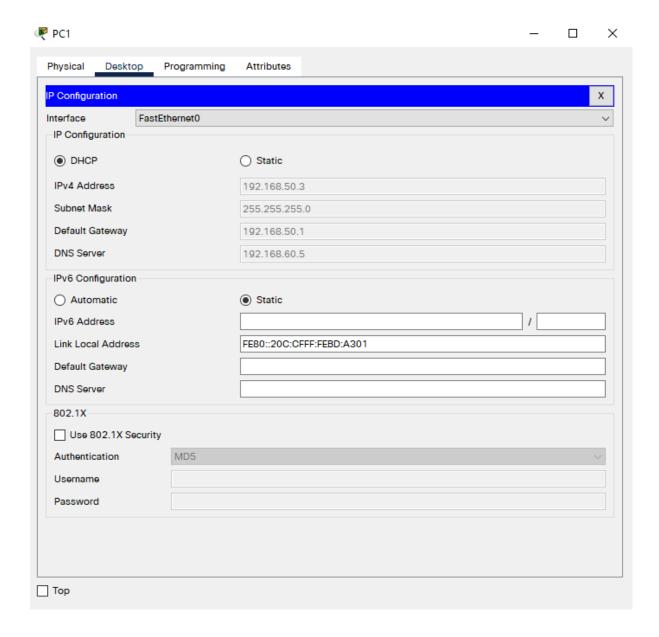
Ping statistics for 192.168.60.2:





Configuração e teste DHCP:

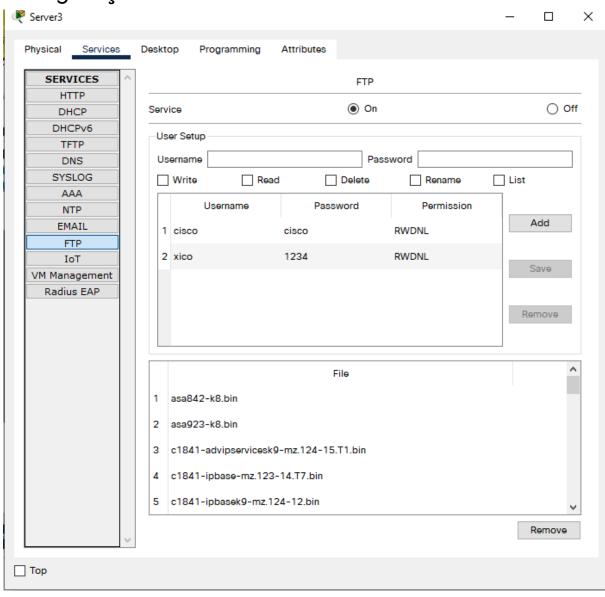




```
Press RETURN to get started!
User Access Verification
Password:
R1>enable
Password:
Rl#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#interface fastEthernet 6/0
Rl(config-if) #ip helper-address 192.168.60.3
R1(config-if)#end
R1#
%SYS-5-CONFIG_I: Configured from console by console
R1#
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<1ms TTL=125 Reply from 192.168.60.2: bytes=32 time<1ms TTL=125
Reply from 192.168.60.2: bytes=32 time<1ms TTL=125
Reply from 192.168.60.2: bytes=32 time<1ms 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 = 0ms, Maximum = 0ms, Average = 0ms
C:\>
```

# Configuração e teste FTP:



```
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:
    : asa842-k8.bin
                                                         5571584
    : asa923-k8.bin
                                                         30468096
2
    : c1841-advipservicesk9-mz.124-15.Tl.bin
                                                         33591768
   : c1841-ipbase-mz.123-14.T7.bin
                                                         13832032
    : c1841-ipbasek9-mz.124-12.bin
                                                         16599160
    : c1900-universalk9-mz.SPA.155-3.M4a.bin
                                                         33591768
6
    : c2600-advipservicesk9-mz.124-15.Tl.bin
                                                         33591768
    : c2600-i-mz.122-28.bin
                                                         5571584
    : c2600-ipbasek9-mz.124-8.bin
                                                         13169700
    : c2800nm-advipservicesk9-mz.124-15.Tl.bin
                                                         50938004
10
    : c2800nm-advipservicesk9-mz.151-4.M4.bin
                                                         33591768
    : c2800nm-ipbase-mz.123-14.T7.bin
                                                         5571584
   : c2800nm-ipbasek9-mz.124-8.bin
                                                         33591768
    : c2900-universalk9-mz.SPA.155-3.M4a.bin
14
    : c2950-i6q412-mz.121-22.EA4.bin
                                                         3058048
    : c2950-i6q412-mz.121-22.EA8.bin
                                                         3117390
15
   : 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
                                                         10713279
20
    : c3560-advipservicesk9-mz.122-46.SE.bin
   : c800-universalk9-mz.SPA.152-4.M4.bin
22
   : c800-universalk9-mz.SPA.154-3.M6a.bin
                                                         83029236
23
    : cat3k caa-universalk9.16.03.02.SPA.bin
                                                         505532849
    : cgr1000-universalk9-mz.SPA.154-2.CG
                                                         159487552
25
   : cgrl000-universalk9-mz.SPA.156-3.CG
                                                         184530138
   : 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
    : ir800_yocto-1.7.2.tar
                                                         2877440
29
   : ir800_yocto-1.7.2_python-2.7.3.tar
30
                                                         6912000
   : pt1000-i-mz.122-28.bin
                                                         5571584
   : pt3000-i6q412-mz.121-22.EA4.bin
                                                         3117390
```