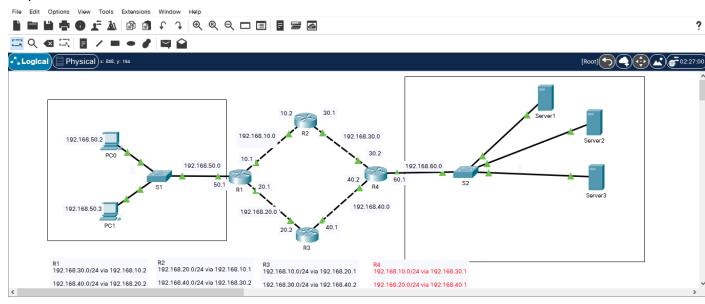
# Atividade SOR 2 Israel Leite Filho

### Etapa 1:



Etapa 2: Roteador 1

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config) #hostname Rl
R1(config)#
R1(config) #enable secret class
R1(config)#line console 0
R1(config-line) #password cisco
R1(config-line)#login
R1(config-line)#line vty 0 4
R1(config-line) #password cisco
R1(config-line) #login
R1(config-line)#
R1(config-line)#exit
Rl(config)#interface fas
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 fash
R1(config)#interface fast
R1(config)#interface fastEthernet 1/0
R1(config-if)#description R1-R3
R1(config-if)#ip address 192.168.20.1 255.255.255.0
Rl(config-if)#no shutdown
R1(config-if)#exit
R1(config)#interface fas
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
R1(config-if) #no shutdown
R1(config-if)#exit
R1(config)#
```

#### Roteador 2

```
Router#conf
Router#configure t
Router#configure terminal
Enter configuration commands, one per line. End with {\tt 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)#interface fas
R2(config-line)#interface fast
R2(config-line)#interface fastE
R2(config-line)#exit
R2(config)#interface fast
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)#interface fast
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)#
```

#### Roteador 3

```
Router>enable
Router#config
Router#configure t
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 co
R3(config)#line console 0
R3(config-line) #pass
R3(config-line) #password cisco
R3(config-line)#login
R3(config-line)#line v
R3(config-line) #line vty 0 4
R3(config-line) #password cisco
R3(config-line)#log
R3(config-line)#login
R3(config-line)#interf
R3(config-line)#exit
R3(config)#inter
R3(config)#interface fas
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 fas
R3(config)#interface fastEthernet 1/0
R3(config-if)#des
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)#
```

#### Roteador 4:

```
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)#pas
R4(config-line) #password cisco
R4(config-line)#login
R4(config-line) #line vty 0 4
R4(config-line) #pass
R4(config-line) #password cisco
R4(config-line)#login
R4(config-line)#interfa
R4(config-line)#exit
R4(config)#inter
R4(config)#interface fas
R4(config)#interface fastEthernet 0/0
R4(config-if) #description Enlace R4-R2 192.168.10.0
R4(config-if)#ip addre
R4(config-if)#ip address 192.168.30.2 255.255.255.0
R4(config-if)#no shutdown
R4(config-if)#exit
R4(config)#inter
R4(config)#interface fas
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 fas
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)#
```

#### Etapa 3:

#### Configuração das rotas do Roteador 1

```
User Access Verification
Password:
R1>enable
Password:
Rl#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#ip rou
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
% Incomplete command.
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
Rl#copy running
Rl#copy running-config startup
Rl#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R1#
```

Configuração do Roteador 2

```
User Access Verification
Password:
R2>enable
Password:
R2#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R2(config)#ip rou
R2(config) #ip route 192.168.20.0 255.255.255.0 192.168.10.1
R2(config)#ip r
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
C
    192.168.30.0/24 is directly connected, FastEthernet1/0
S
    192.168.40.0/24 [1/0] via 192.168.30.2
    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 r
R2#copy running-config
R2#copy running-config st
R2#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R2#
```

Configuração do Roteador 3

```
User Access Verification
Password:
R3>enable
Password:
R3#conf t
Enter configuration commands, one per line. End with {\tt 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
       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 192.168.20.1
    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
     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#copv
R3#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R3#
```

Configuração do Roteador 4

```
User Access Verification
Password:
R4>enable
Password:
R4#conf t
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
     192.168.20.0/24 [1/0] via 192.168.40.1
C
     192.168.30.0/24 is directly connected, FastEthernet0/0
С
     192.168.40.0/24 is directly connected, FastEthernet1/0
     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 r
R4#copy running-config st
R4#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
R4#
```

Testando conectividade

```
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<1ms 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 = 0ms, Average = 0ms
 C:\>ping 192.168.10.2
 Pinging 192.168.10.2 with 32 bytes of data:
 Request timed out.
 Reply from 192.168.10.2: bytes=32 time<1ms TTL=254
 Reply from 192.168.10.2: bytes=32 time<1ms TTL=254
 Reply from 192.168.10.2: bytes=32 time<1ms TTL=254
 Ping statistics for 192.168.10.2:
   Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
 Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping 192.168.20.2
Pinging 192.168.20.2 with 32 bytes of data:
Request timed out.
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 = 3, Lost = 1 (25% 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:
Request timed out.
Request timed out.
Reply from 192.168.40.2: bytes=32 time<1ms TTL=253
Reply from 192.168.40.2: bytes=32 time<1ms 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 = 0ms, Maximum = 0ms, Average = 0ms
```

```
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<1ms 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 = 0ms, Maximum = 0ms, Average = 0ms
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<1ms 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 = 0ms, Maximum = 0ms, Average = 0ms
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=5ms 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
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 = 5ms, Average = 1ms
C:\>ping 192.168.60.5
Pinging 192.168.60.5 with 32 bytes of data:
```

```
C:\>ping 192.168.60.5

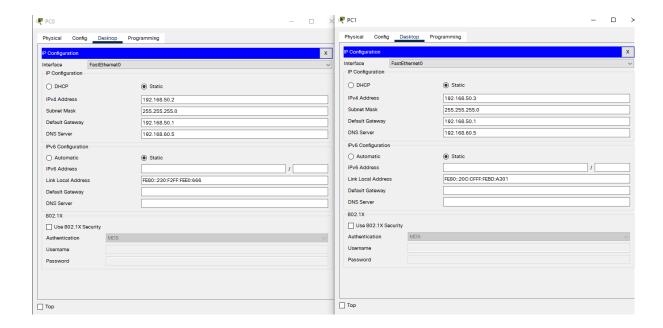
Pinging 192.168.60.5 with 32 bytes of data:

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),
```

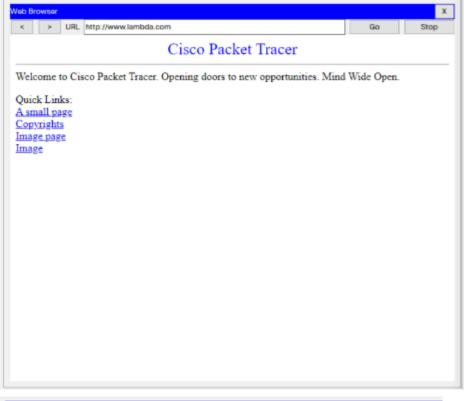
## Etapa 4: Configuração e teste do serviço DNS



```
C:\>ping www.lambda.com
Pinging 192.168.60.2 with 32 bytes of data:
Reply from 192.168.60.2: bytes=32 time=13ms 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:
C:\>ping ftp.lambda.com
Pinging 192.168.60.4 with 32 bytes of data:
Reply from 192.168.60.4: bytes=32 time=12ms 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=1ms 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 = 0ms, Maximum = 12ms, Average = 3ms
C:\>ping dhcp.lambda.com
Pinging 192.168.60.3 with 32 bytes of data:
Reply from 192.168.60.3: bytes=32 time=10ms 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:
```

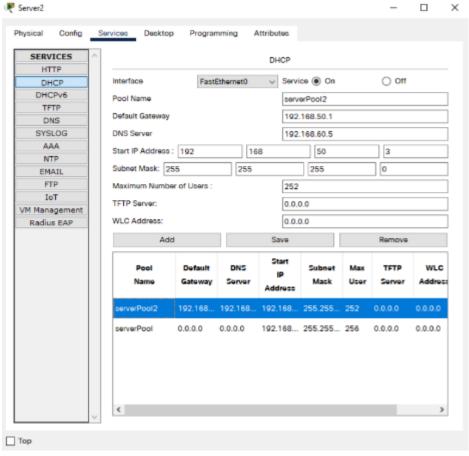
Minimum = 0ms, Maximum = 10ms, Average = 2ms

Configurando e testando o serviço HTTP

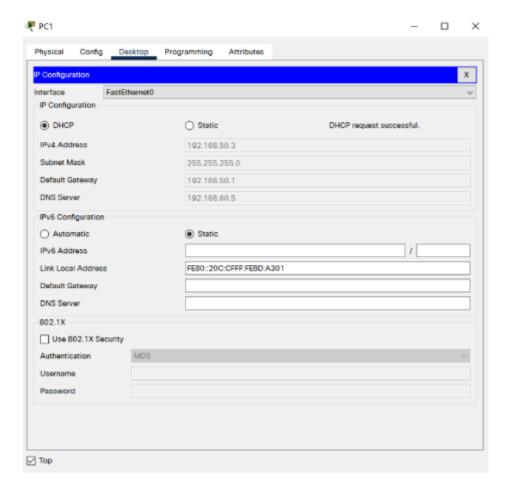




Configurando e testando o serviço DHCP

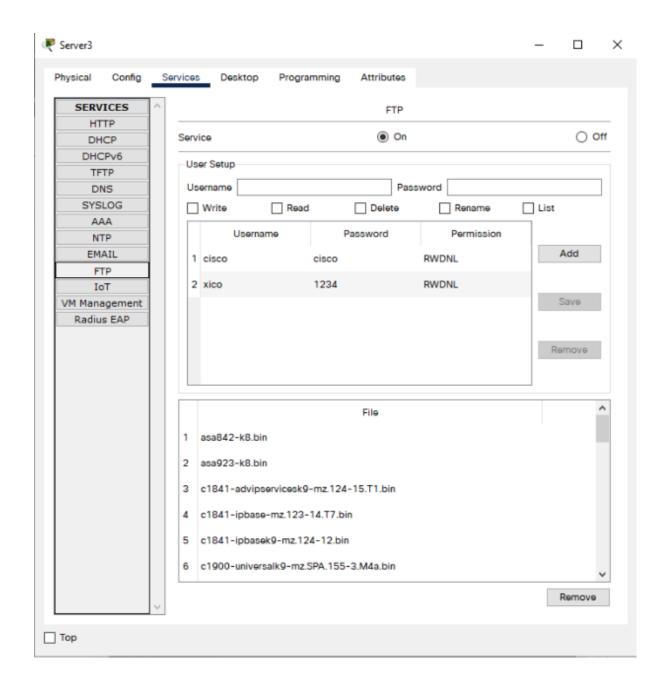


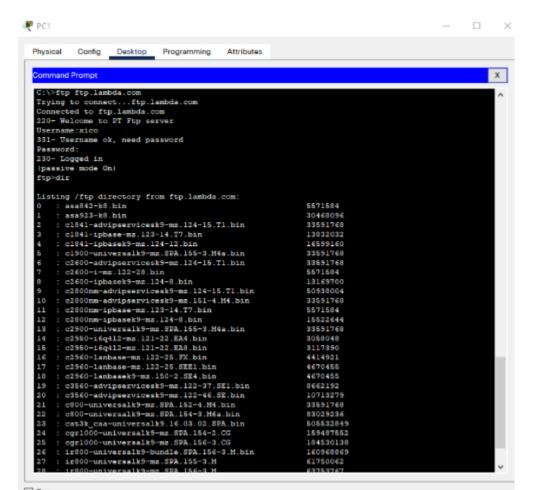
```
Press RETURN to get started!
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet6/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
User Access Verification
Password:
Password:
R1>ena
R1>enable
Password:
R1#conf t
Enter configuration commands, one per line. End with CNTL/Z.
R1(config) #inte
R1(config) #interface fase
Rl(config) #interface fast
R1(config) #interface fastEthernet 6/0
Rl(config-if) #ip he
Rl(config-if) #ip hel
Rl(config-if) #ip helper
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#
R1#
```



```
Packet Tracer PC Command Line 1.0
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=15ms 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 = 15ms, Average = 5ms
C:\>ping 192.168.60.3
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=7ms 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 = 7ms, Average = 1ms
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<1ms TTL=125
Ping statistics for 192.168.60.4:
```

Configuração e teste do serviço FTP





□ Тор