




16 DE FEBRERO DE 2026

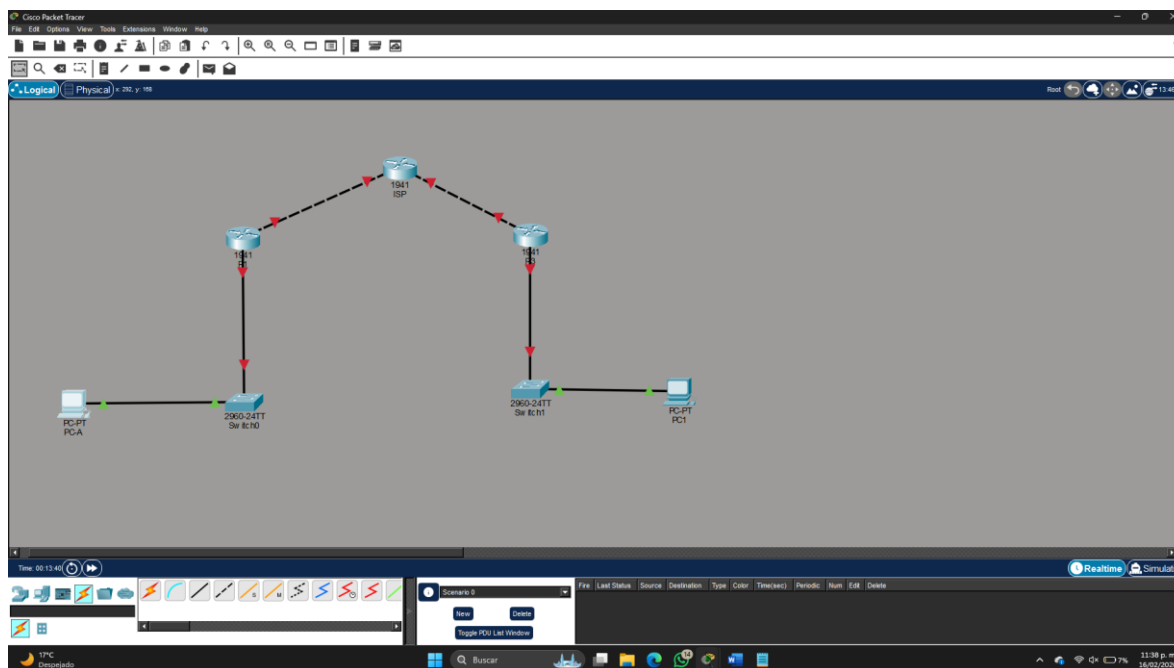
# IMPLEMENTACIÓN IPSEC VPN

CIBERSEGURIDAD

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## Armar el circuito



### 1) Configuración inicial

R1

```
Router#
Router#
Router#
Router#enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R1
R1(config)#interface g0/0
R1(config-if)#ip address 209.165.100.1 255.255.255.0
^
% Invalid input detected at '^' marker.

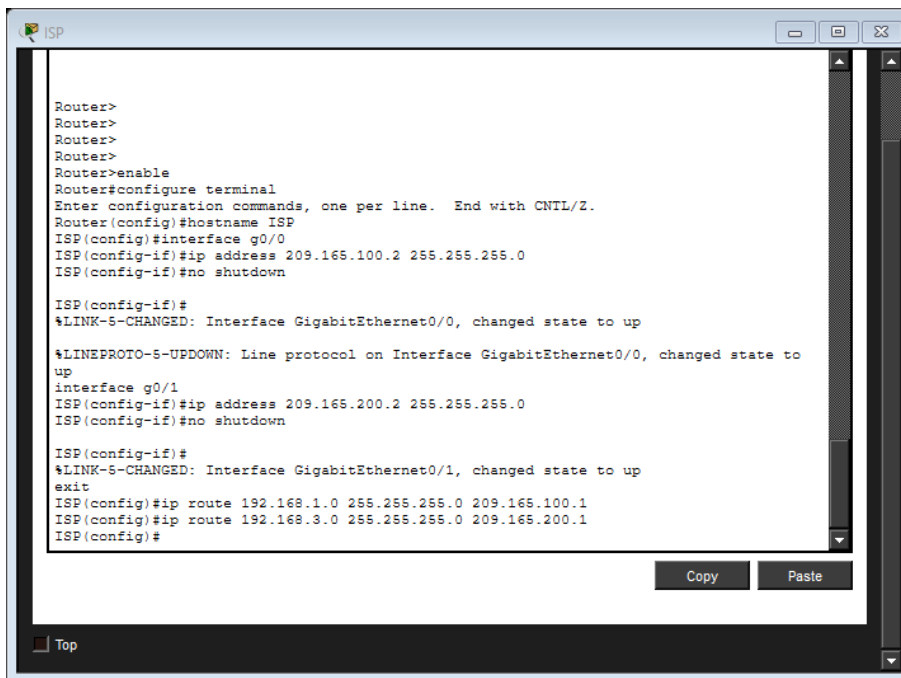
R1(config-if)#ip address 209.165.100.1 255.255.255.0
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up
interface g0/1
R1(config-if)#ip address 192.168.1.1 255.255.255.0
R1(config-if)#no shutdown

R1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
exit
R1(config)#ip route 0.0.0.0 0.0.0.0 209.165.100.2
R1(config)#
```

## ISP



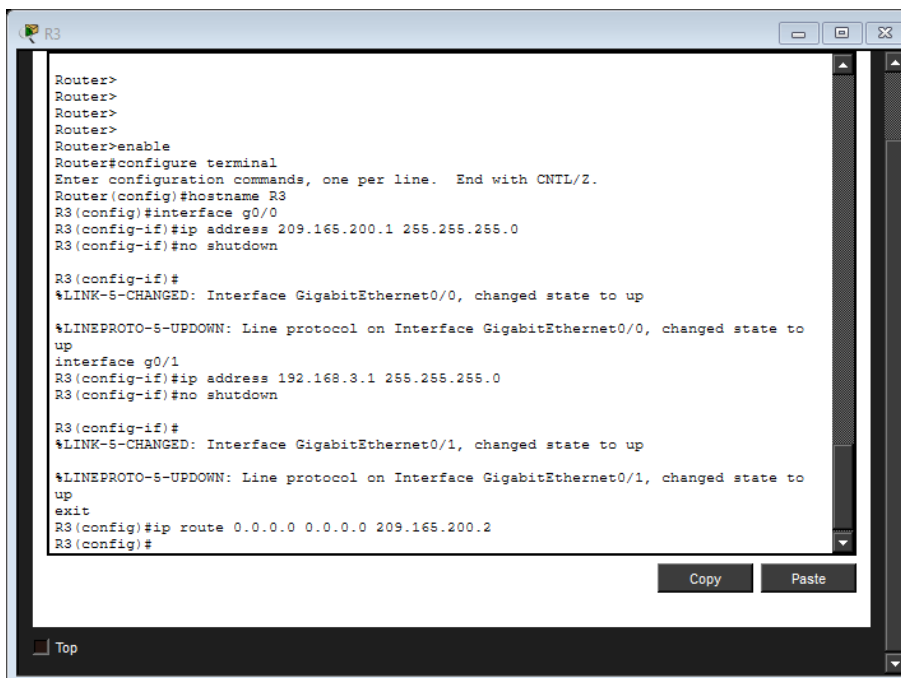
```
Router>
Router>
Router>
Router>
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname ISP
ISP(config)#interface g0/0
ISP(config-if)#ip address 209.165.100.2 255.255.255.0
ISP(config-if)#no shutdown

ISP(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up
interface g0/1
ISP(config-if)#ip address 209.165.200.2 255.255.255.0
ISP(config-if)#no shutdown

ISP(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up
exit
ISP(config)#ip route 192.168.1.0 255.255.255.0 209.165.100.1
ISP(config)#ip route 192.168.3.0 255.255.255.0 209.165.200.1
ISP(config)#
```

## R3



```
Router>
Router>
Router>
Router>
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname R3
R3(config)#interface g0/0
R3(config-if)#ip address 209.165.200.1 255.255.255.0
R3(config-if)#no shutdown

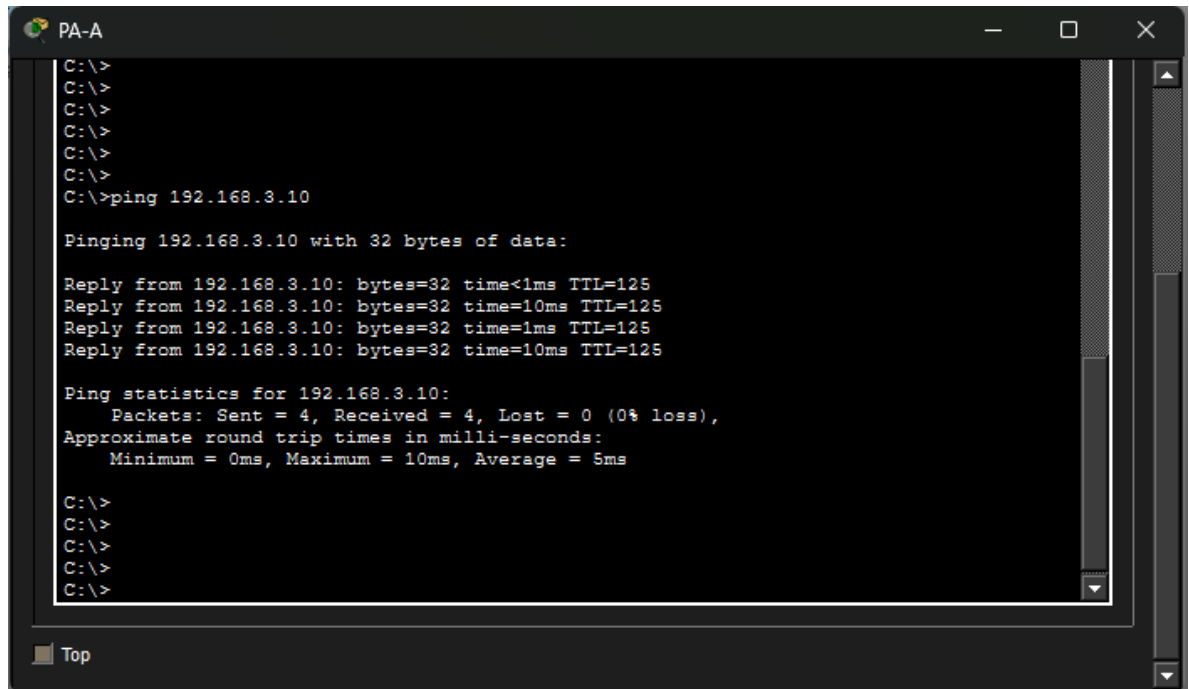
R3(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up
interface g0/1
R3(config-if)#ip address 192.168.3.1 255.255.255.0
R3(config-if)#no shutdown

R3(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
exit
R3(config)#ip route 0.0.0.0 0.0.0.0 209.165.200.2
R3(config)#
```

## 2) Probar conectividad



```
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>
C:\>ping 192.168.3.10

Pinging 192.168.3.10 with 32 bytes of data:

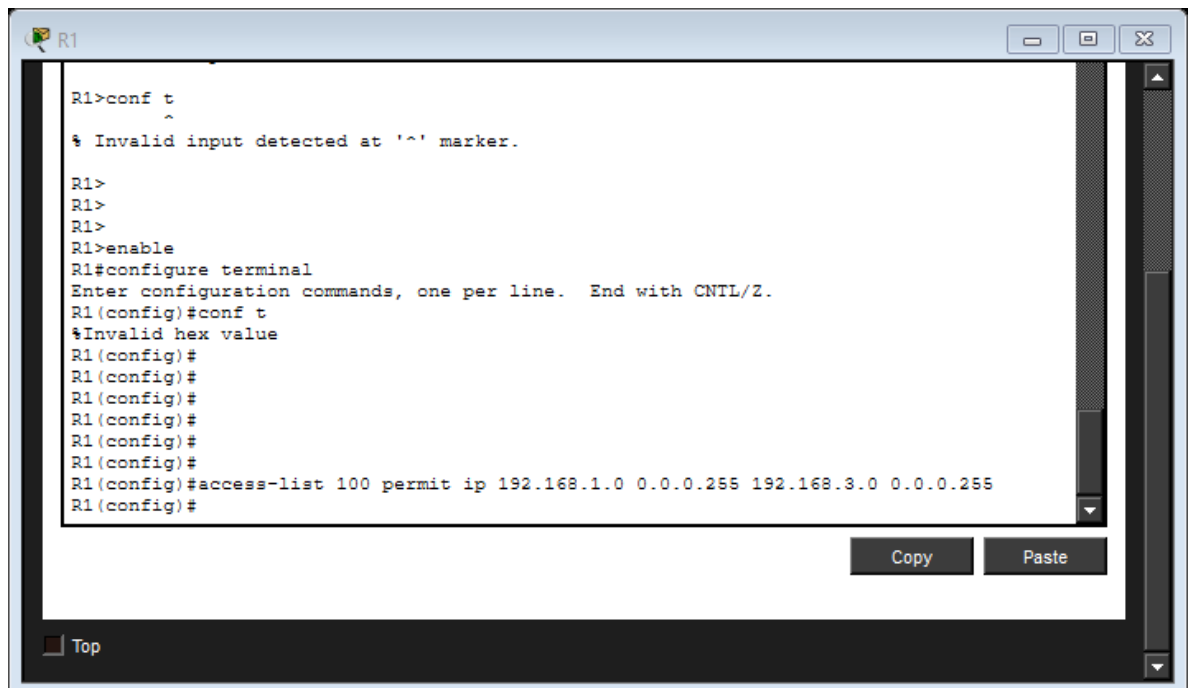
Reply from 192.168.3.10: bytes=32 time<1ms TTL=125
Reply from 192.168.3.10: bytes=32 time=10ms TTL=125
Reply from 192.168.3.10: bytes=32 time=1ms TTL=125
Reply from 192.168.3.10: bytes=32 time=10ms TTL=125

Ping statistics for 192.168.3.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 10ms, Average = 5ms

C:\>
C:\>
C:\>
C:\>
C:\>
```

## 3) Implementación de ACL

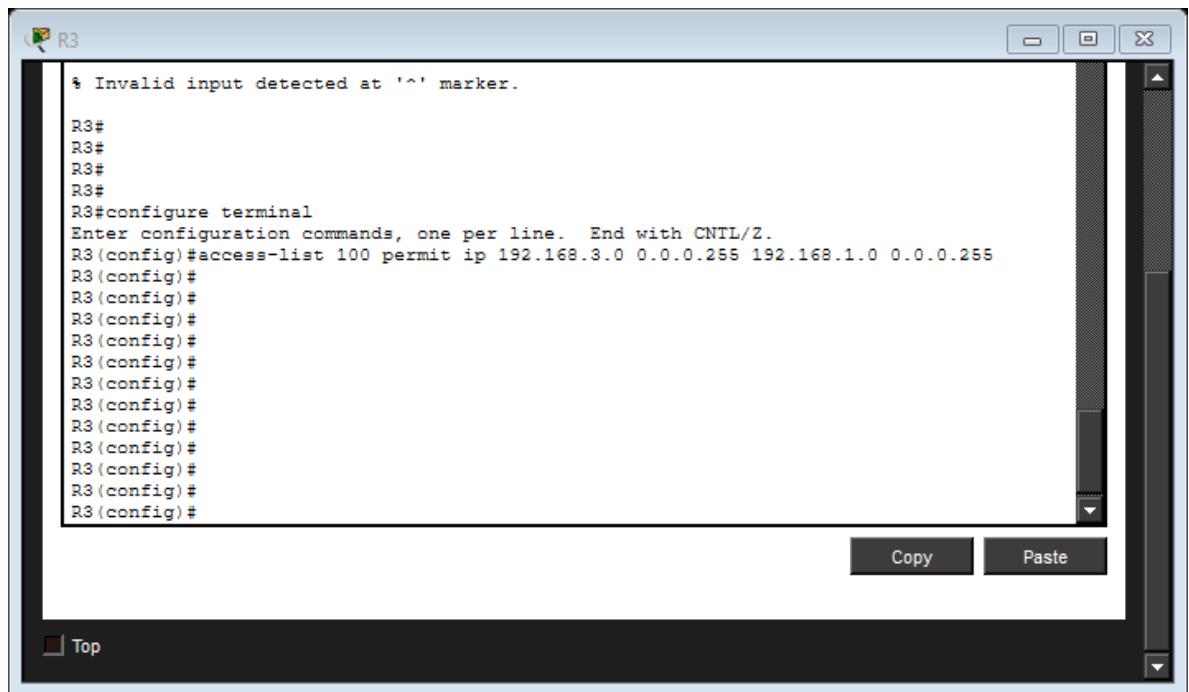
R1



```
R1>conf t
^
% Invalid input detected at '^' marker.

R1>
R1>
R1>
R1>enable
R1#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
R1(config)#conf t
%Invalid hex value
R1(config)#
R1(config)#
R1(config)#
R1(config)#
R1(config)#
R1(config)#access-list 100 permit ip 192.168.1.0 0.0.0.255 192.168.3.0 0.0.0.255
R1(config)#
```

R3



```
% Invalid input detected at '^' marker.

R3#
R3#
R3#
R3#
R3#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
R3(config)#access-list 100 permit ip 192.168.3.0 0.0.0.255 192.168.1.0 0.0.0.255
R3(config)#
R3(config)#
R3(config)#
R3(config)#
R3(config)#
R3(config)#
R3(config)#
R3(config)#
R3(config)#
R3(config)#
R3(config)#
R3(config)#
```

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- 4) Phase 01  
No me detecta isakmp