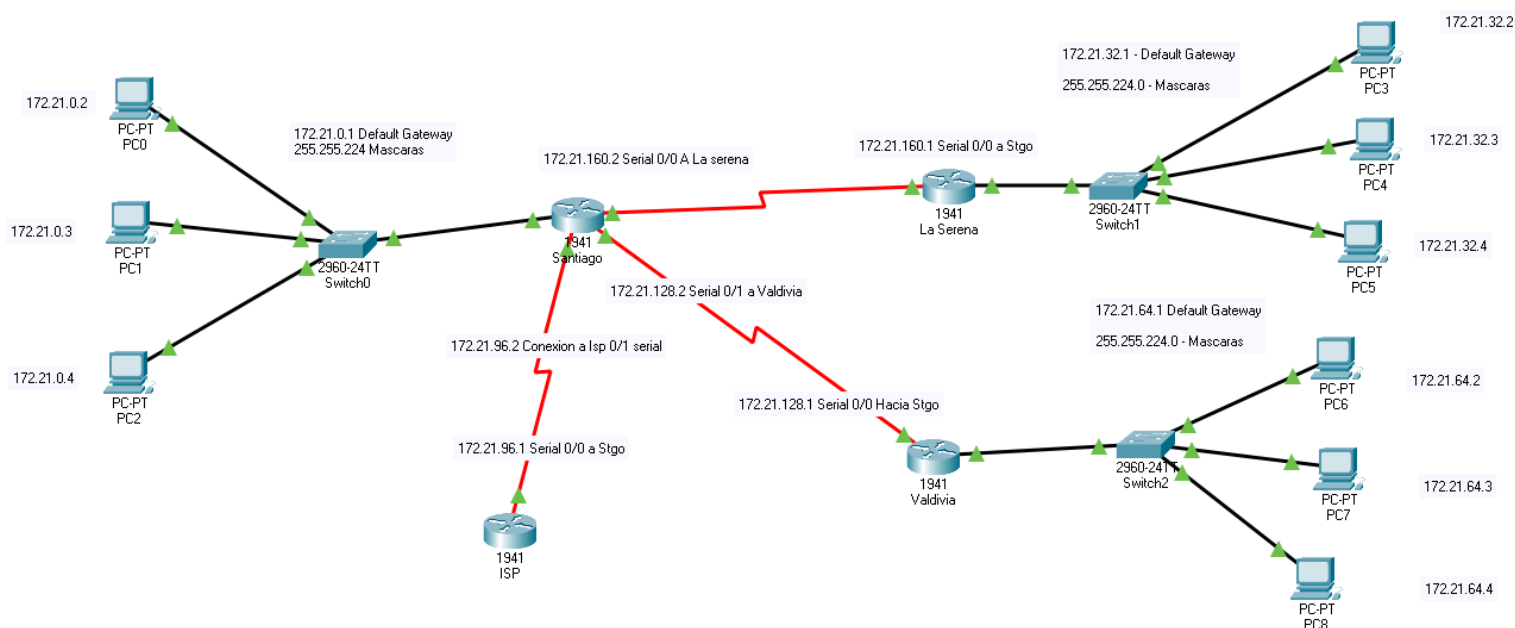


Taller 6 – Benjamin Parraguez

La red ACME a trabajar es la siguiente:



Configurando el NAT con sobrecarga en los dispositivos de región (La Serena y Valdivia), las direcciones de región tomaron como ip pública las direcciones que conectaban los enrutadores, haciendo las pruebas de verificación de conectividad, tenemos las siguientes capturas de pantalla:

Pc de La Serena (172.21.32.2 privada, 172.21.160.1 pública) a pc de Santiago (172.21.0.2)

```
PC3
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.0.2

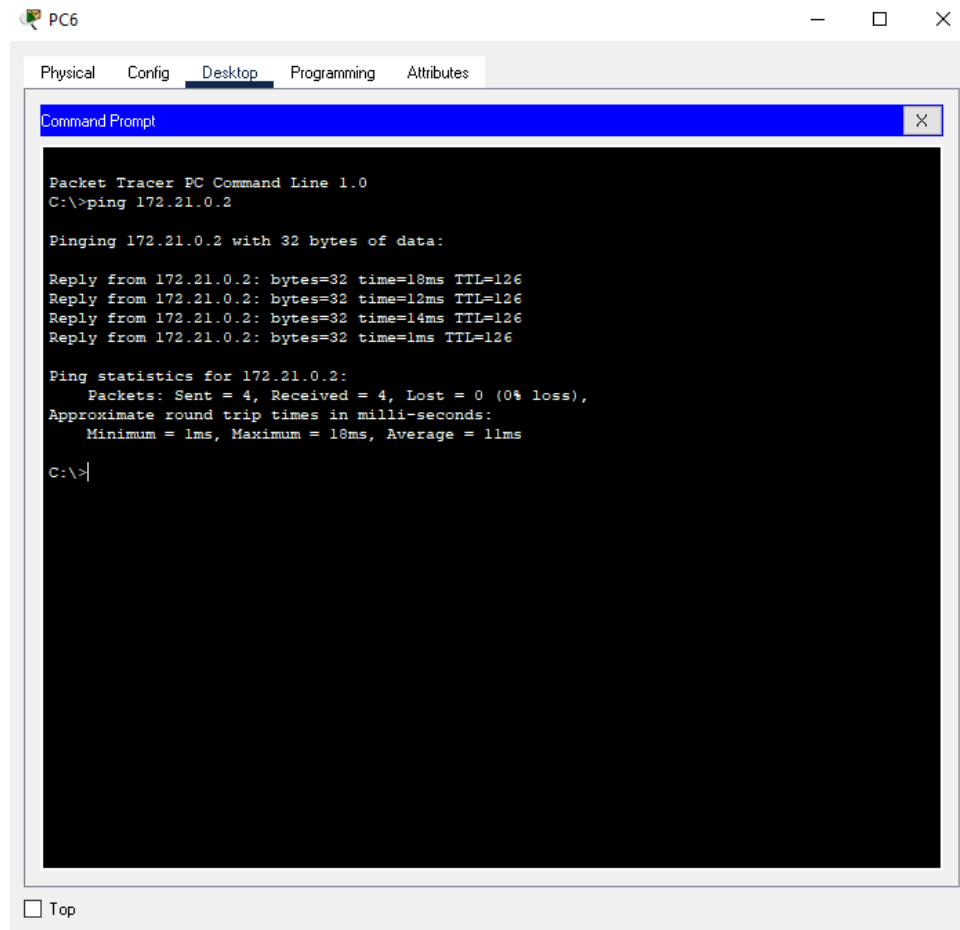
Pinging 172.21.0.2 with 32 bytes of data:

Reply from 172.21.0.2: bytes=32 time=10ms TTL=126
Reply from 172.21.0.2: bytes=32 time=10ms TTL=126
Reply from 172.21.0.2: bytes=32 time=10ms TTL=126
Reply from 172.21.0.2: bytes=32 time=10ms TTL=126

Ping statistics for 172.21.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 10ms, Maximum = 10ms, Average = 10ms
C:\>|
```

Podemos apreciar que la conexión entre un computador de Santiago y uno de la Serena si es posible utilizando PAT.

Pc de Valdivia (172.21.64.2 privada, 172.21.128.1 pública) a pc de Santiago (172.21.0.2)



The screenshot shows a Packet Tracer PC window for PC6. The 'Desktop' tab is active, displaying a 'Command Prompt' window. The command prompt shows the execution of a ping command from 172.21.64.2 to 172.21.0.2. The output indicates that 4 packets were sent and received successfully with 0% loss. The round trip times are: Minimum = 1ms, Maximum = 18ms, Average = 11ms.

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.0.2

Pinging 172.21.0.2 with 32 bytes of data:

Reply from 172.21.0.2: bytes=32 time=18ms TTL=126
Reply from 172.21.0.2: bytes=32 time=12ms TTL=126
Reply from 172.21.0.2: bytes=32 time=14ms TTL=126
Reply from 172.21.0.2: bytes=32 time=1ms TTL=126

Ping statistics for 172.21.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 18ms, Average = 11ms

C:\>
```

La conexión entre el pc de Valdivia y el pc de Santiago fue exitosa, mandando 4 paquetes y recibiendo posteriormente los 4 paquetes.

Además, Tenemos las siguientes tablas de traducción de NAT.

En el caso de La Serena:

Physical Config CLI Attributes

IOS Command Line Interface

A summary of U.S. laws governing Cisco cryptographic products may be found at:
<http://www.cisco.com/wwl/export/crypto/tool/stqrg.html>

If you require further assistance please contact us by sending email to
export@cisco.com.

Cisco CISC01941/K9 (revision 1.0) with 491520K/32768K bytes of memory.
Processor board ID FTX152400KS
2 Gigabit Ethernet interfaces
2 Low-speed serial(sync/async) network interface(s)
DRAM configuration is 64 bits wide with parity disabled.
256K bytes of non-volatile configuration memory.
249856K bytes of ATA System CompactFlash 0 (Read/Write)

Press RETURN to get started!

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up

Router>

Router>

Router>en

Router#show ip nat trans

Router#show ip nat translations

Pro	Inside global	Inside local	Outside local	Outside global
icmp	172.21.32.1:1024	172.21.32.3:2	172.21.160.2:2	172.21.160.2:1024
icmp	172.21.32.1:1025	172.21.32.4:2	172.21.160.2:2	172.21.160.2:1025
icmp	172.21.32.1:2	172.21.32.2:2	172.21.160.2:2	172.21.160.2:2

Router#

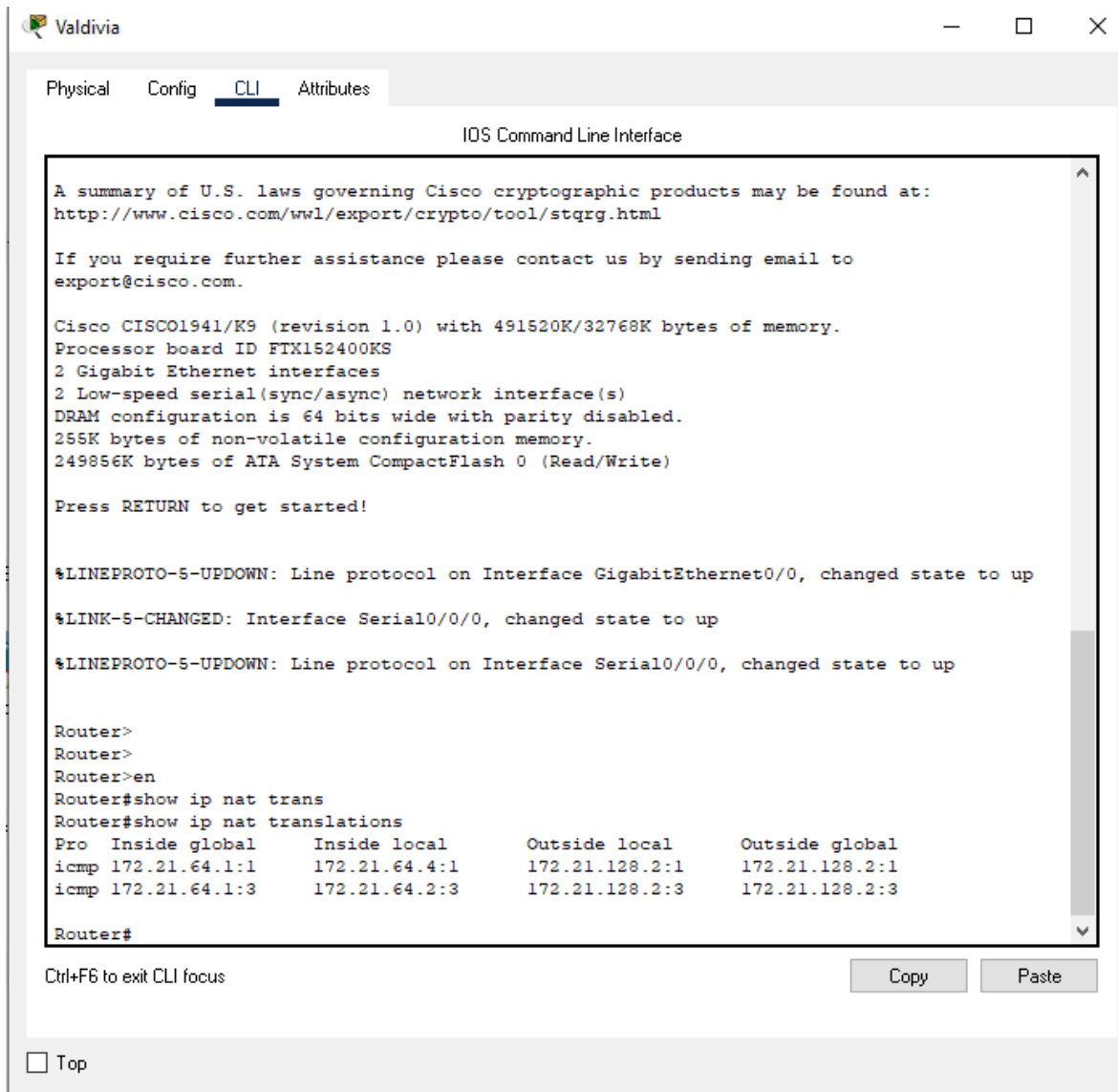
Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top

Mientras que para el caso de Valdivia es la siguiente:



```
Valdivia
Physical Config CLI Attributes
IOS Command Line Interface

A summary of U.S. laws governing Cisco cryptographic products may be found at:
http://www.cisco.com/wwl/export/crypto/tool/stqrg.html

If you require further assistance please contact us by sending email to
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Cisco CISC01941/K9 (revision 1.0) with 491520K/32768K bytes of memory.
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DRAM configuration is 64 bits wide with parity disabled.
255K bytes of non-volatile configuration memory.
249856K bytes of ATA System CompactFlash 0 (Read/Write)

Press RETURN to get started!

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up

Router>
Router>
Router>en
Router#show ip nat trans
Router#show ip nat translations
Pro Inside global      Inside local           Outside local          Outside global
icmp 172.21.64.1:1      172.21.64.4:1          172.21.128.2:1         172.21.128.2:1
icmp 172.21.64.1:3      172.21.64.2:3          172.21.128.2:3         172.21.128.2:3

Router#
```

Ctrl+F6 to exit CLI focus

Copy Paste

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Podemos notar que en ambas tablas de traducción, se ocupa NAT sobrecargado, teniendo ip pública e ip privada para los dispositivos tanto de la Serena como para Valdivia.