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## Packet Tracer - Configure NAT for IPv4

### Addressing Table

Device	Interface	IP Address
R1	S0/0/0	10.1.1.1/30
	F0/0	192.168.10.1/24
R2	S0/0/0	10.1.1.2/30
	S0/0/1	10.2.2.1/30
	S0/1/0	209.165.200.225/27
	F0/0	192.168.20.1/24
R3	S0/0/1	10.2.2.2/30
	F0/0	192.168.30.1/24
PC1	NIC	192.168.10.10/24
PC2	NIC	192.168.30.10/24
local.pka	NIC	192.168.20.254/24
Outside PC	NIC	209.165.201.14/28
cisco.pka	NIC	209.165.201.30/28

### Objectives

- Configure Dynamic NAT with PAT
- Configure Static NAT

### Background / Scenario

In this lab, you will configure a router with dynamic NAT with PAT. This will translate addresses from the three internal LANs to a single outside address. In addition, you will configure static NAT to translate an internal server address to an outside address.

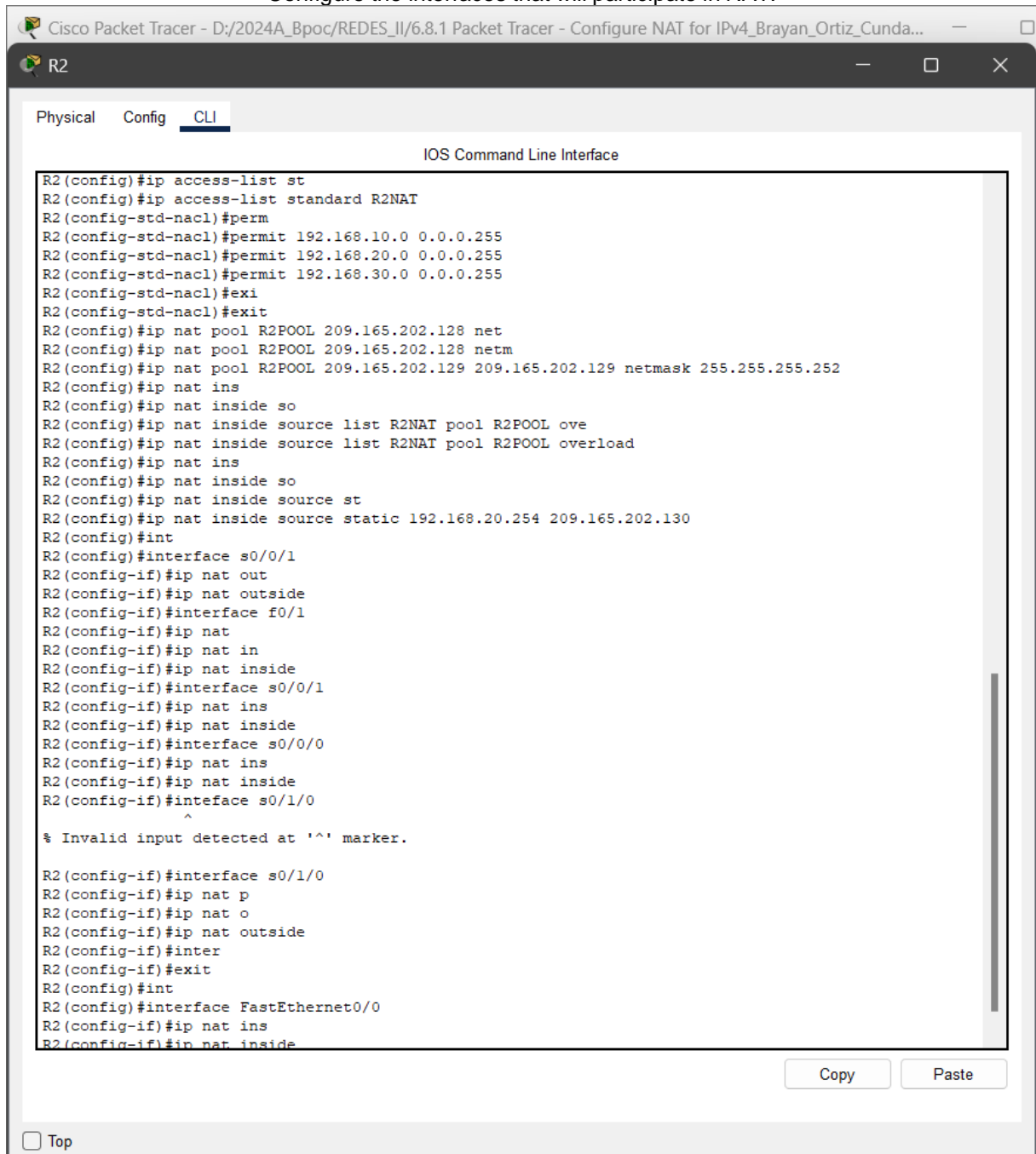
### Instructions

In this activity you will only configure router R2.

- Use a named ACL to permit the addresses from LAN1, LAN2, and LAN3 to be translated. Specify the LANs in this order. Use the name **R2NAT**. The name you use must match this name exactly.
- Create a NAT pool named **R2POOL**. The pool should use the **first** address from the **209.165.202.128/30** address space. The pool name you use must match this name exactly. All translated addresses must use this address as their outside address.
- Configure NAT with the ACL and NAT pool that you have created.

## Packet Tracer - Configure NAT for IPv4

- Configure static NAT to map the local.pka server inside address to the **second** address from the 209.165.202.128/30 address space.
- Configure the interfaces that will participate in NAT.



The screenshot shows the Cisco Packet Tracer interface with the CLI window open for router R2. The window title is "R2" and the tabs are "Physical", "Config", and "CLI". The CLI window displays the following commands and their outputs:

```
R2(config)#ip access-list st
R2(config)#ip access-list standard R2NAT
R2(config-std-nacl)#perm
R2(config-std-nacl)#permit 192.168.10.0 0.0.0.255
R2(config-std-nacl)#permit 192.168.20.0 0.0.0.255
R2(config-std-nacl)#permit 192.168.30.0 0.0.0.255
R2(config-std-nacl)#exi
R2(config-std-nacl)#exit
R2(config)#ip nat pool R2POOL 209.165.202.128 net
R2(config)#ip nat pool R2POOL 209.165.202.128 netm
R2(config)#ip nat pool R2POOL 209.165.202.129 209.165.202.129 netmask 255.255.255.252
R2(config)#ip nat ins
R2(config)#ip nat inside so
R2(config)#ip nat inside source list R2NAT pool R2POOL ove
R2(config)#ip nat inside source list R2NAT pool R2POOL overload
R2(config)#ip nat ins
R2(config)#ip nat inside so
R2(config)#ip nat inside source st
R2(config)#ip nat inside source static 192.168.20.254 209.165.202.130
R2(config)#int
R2(config)#interface s0/0/1
R2(config-if)#ip nat out
R2(config-if)#ip nat outside
R2(config-if)#interface f0/1
R2(config-if)#ip nat
R2(config-if)#ip nat in
R2(config-if)#ip nat inside
R2(config-if)#interface s0/0/1
R2(config-if)#ip nat ins
R2(config-if)#ip nat inside
R2(config-if)#interface s0/0/0
R2(config-if)#ip nat ins
R2(config-if)#ip nat inside
R2(config-if)#inteface s0/1/0
R2(config-if)#
% Invalid input detected at '^' marker.
R2(config-if)#interface s0/1/0
R2(config-if)#ip nat p
R2(config-if)#ip nat o
R2(config-if)#ip nat outside
R2(config-if)#inter
R2(config-if)#exit
R2(config)#int
R2(config)#interface FastEthernet0/0
R2(config-if)#ip nat ins
R2(config-if)#ip nat inside
```

At the bottom of the CLI window, there are "Copy" and "Paste" buttons. Below the CLI window, there is a "Top" button.

## Captura de pantalla de verificación de completitud.

Cisco Packet Tracer - D:/2024A\_Bpoc/REDES\_II/6.8.1 Packet Tracer - Configure NAT for IPv4\_Brayan\_Ortiz\_Cunda...

File Edit Options View Tools Extensions Window Help

Activity Results Time Elapsed: 00:31:52

Congratulations Brayán Ortiz Cundar, Luis Pérez Señalín y Jossué Rivadeneira Ordoñez! You completed the activity.

Overall Feedback **Assessment Items** Connectivity Tests

Expand/Collapse All Show Incorrect Items

Assessment Items	Status	Points	Component
Network			
R2			
ACL		0	ACL
✓ R2NAT	Correct	20	ACL to Pe
NAT			
Inside Source List		0	NAT
✓ NAT Source Setting 1	Correct	15	Configure I
Inside Source Static		0	NAT
✓ NAT Source Setting 1	Correct	15	Configure :
Pools		0	NAT
✓ Pool Name 1	Correct	15	Configure I
Ports			
FastEthernet0/0		0	Other
✓ NAT Mode	Correct	9	Configure I
Serial0/0/0		0	Other
✓ NAT Mode	Correct	9	Configure I
Serial0/0/1		0	Other
✓ NAT Mode	Correct	9	Configure I
Serial0/1/0		0	Other
✓ NAT Mode	Correct	8	Configure I

Score : 100/100

Item Count : 8/8

Component	Items/Total	Score
ACL to Permit Translation	1/1	20/20
Configure Dynamic NAT	1/1	15/15
Configure NAT Interfaces	4/4	35/35
Configure NAT Pool	1/1	15/15
Configure Static NAT	1/1	15/15

Close