Packet Tracer - Configure NAT for IPv4 (Instructor Version)

Instructor Note: Red font color or gray highlights indicate text that appears in the instructor copy only.

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
	F0/0/0	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.

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- Configure NAT with the ACL and NAT pool that you have created.
- 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.

Answer Configurations

Router R2

```
enable
configure terminal
interface FastEthernet0/0
 ip nat inside
interface Serial0/0/0
 ip nat inside
interface Serial0/0/1
 ip nat inside
interface Serial0/1/0
 ip nat outside
ip nat pool R2POOL 209.165.202.129 209.165.202.129 netmask 255.255.255.252
ip nat inside source list R2NAT pool R2POOL overload
ip nat inside source static 192.168.20.254 209.165.202.130
ip access-list standard R2NAT
 permit 192.168.10.0 0.0.0.255
 permit 192.168.20.0 0.0.0.255
 permit 192.168.30.0 0.0.0.255
end
```

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