Packet Tracer - Configure Dynamic NAT (Instructor Version)

6.5.6 Packet Tracer - Configure Dynamic NAT Answers

Objectives

Part 1: Configure Dynamic NAT

Part 2: Verify NAT Implementation

Instructions

Part 1: Configure Dynamic NAT

Step 1: Configure traffic that will be permitted.

On **R2**, configure one statement for ACL 1 to permit any address belonging to the 172.16.0.0/16 network.

```
R2(config)# access-list 1 permit 172.16.0.0 0.0.255.255
```

Step 2: Configure a pool of address for NAT.

Configure **R2** with a NAT pool that uses two addresses in the 209.165.200.228/30 address space.

```
R2(config)# ip nat pool ANY_POOL_NAME 209.165.200.229 209.165.200.230 netmask
255.255.255.252
```

Notice in the topology there are 3 network addresses that would be translated based on the ACL created.

What will happen if more than 2 devices attempt to access the internet?

The additional devices would be denied access until one of the previous translations timed out freeing up an address to use.

Step 3: Associate ACL 1 with the NAT pool.

Enter the command that associates ACL 1 with the NAT pool that you just created.

```
R2(config)# ip nat inside source list 1 pool ANY_POOL_NAME
```

Step 4: Configure the NAT interfaces.

Configure **R2** interfaces with the appropriate inside and outside NAT commands.

```
R2(config)# interface s0/0/0
R2(config-if)# ip nat outside
R2(config-if)# interface s0/0/1
R2(config-if)# ip nat inside
```

Part 2: Verify NAT Implementation

Step 1: Access services across the internet.

From the web browser of **L1**, **PC1**, or **PC2**, access the web page for **Server1**.

Step 2: View NAT translations.

View the NAT translations on **R2**. Identify the internal source address of the PC and the translated address from the NAT pool in the command output.

```
R2# show ip nat translations
```

Answer script

Router R2

```
enable
configure terminal
access-list 1 permit 172.16.0.0 0.0.255.255
ip nat pool ANY_POOL_NAME 209.165.200.229 209.165.200.230 netmask 255.255.255.252
ip nat inside source list 1 pool ANY_POOL_NAME
interface s0/0/0
 ip nat outside
 interface s0/0/1
 ip nat inside
end
```