

Enter interface configuration mode for the Gi0/0 interface by issuing the **interface gi0/0** command:

```
R1(config)#interface gi0/0
```

Set the interface to be the NAT inside interface by issuing the **ip nat inside** command:

```
R1(config-if)#ip nat inside
```

Enter interface configuration mode for the serial 0/0/0 interface by issuing the **interface s0/0/0** command:

```
R1(config-if)#interface s0/0/0
```

Set the interface to be the NAT outside interface by issuing the **ip nat outside** command:

```
R1(config-if)#ip nat outside
```

Exit back to global configuration mode by issuing the **exit** command:

```
R1(config-if)#exit
```

Set up a dynamic NAT IP pool, which will be used to give outside NAT addresses, by issuing the **ip nat pool dynamicnatpool 128.107.10.5 128.107.10.10 netmask 255.255.255.0** command:

```
R1(config)#ip nat pool dynamicnatpool 128.107.10.5 128.107.10.10 netmask 255.255.255.0
```

Tell R1 for which IP addresses R1 should translate addresses by matching the IP addresses in the enterprise internetwork. To do so, add the **access-list 1 permit 172.16.0.0 0.0.255.255** command:

```
R1(config)#access-list 1 permit 172.16.0.0 0.0.255.255
```

Finally, complete the dynamic NAT configuration by creating a pool of addresses on the serial link subnet that R1 can use. To do so, issue the **ip nat inside source list 1 pool dynamicnatpool** command:

```
R1(config)#ip nat inside source list 1 pool dynamicnatpool
```

Exit config mode using the **end** command, and then view the IP NAT translation table by entering the **show ip nat translations** command.

```
R1(config)#end
```

```
R1#sh ip nat translations
```

| Pro | Inside global | Inside local | Outside local | Outside global |
|-----|---------------|--------------|---------------|----------------|
|-----|---------------|--------------|---------------|----------------|

How many NAT table entries exist at this point? **ZERO**

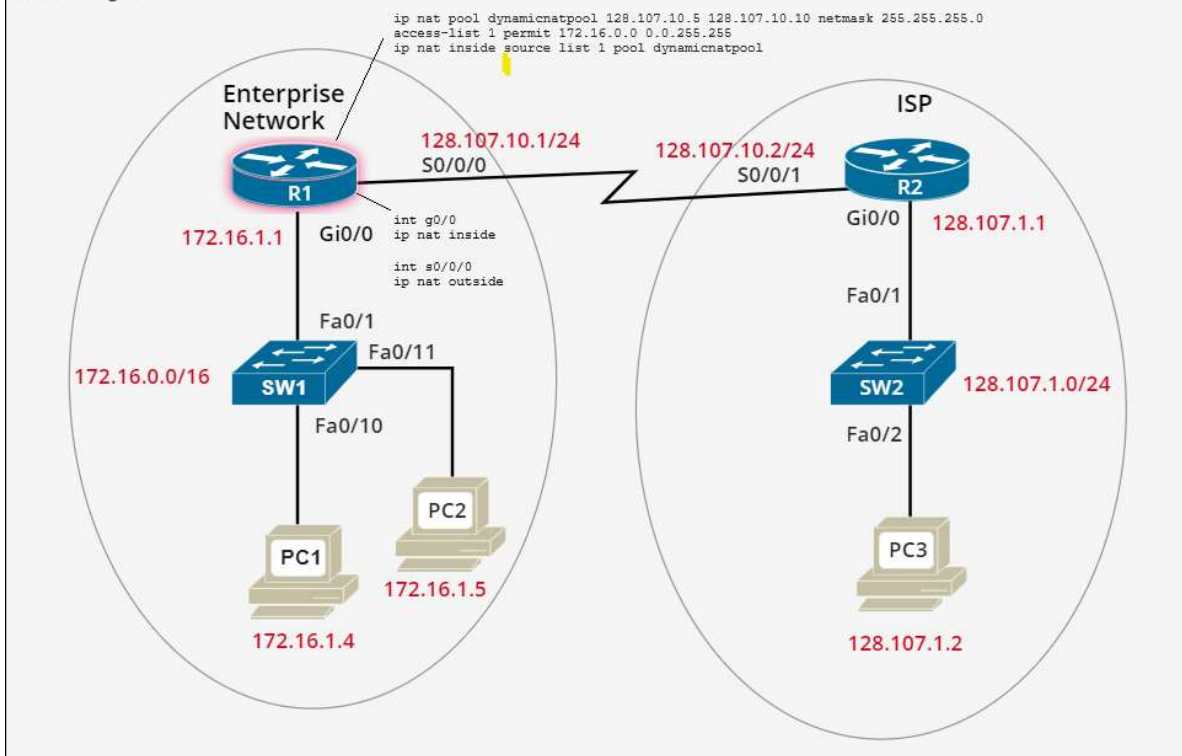
Connect to PC1 and PC2 from the simulator user interface and ping PC3 by issuing the **ping 128.107.1.2** command.

Go back to R1 from the simulator user interface and again display the IP NAT translation table by entering the **show ip nat translations** command. How many table entries exist? To what IP address is PC1's IP address (172.16.1.4) translated? How about PC2's IP address (172.16.1.5)?

```
R1#sh ip nat translations
```

| Pro  | Inside global | Inside local | Outside local | Outside global |
|------|---------------|--------------|---------------|----------------|
| icmp | 128.107.10.5  | 172.16.1.4   | 128.107.1.2   | 128.107.1.2    |
| ---- | 128.107.10.5  | 172.16.1.4   | -----         | -----          |
| icmp | 128.107.10.6  | 172.16.1.5   | 128.107.1.2   | 128.107.1.2    |
| ---- | 128.107.10.6  | 172.16.1.5   | -----         | -----          |

## NAT Configuration II



```

R1(config)#int g0/0
R1(config-if)#ip nat inside
R1(config-if)#int s0/0/0
R1(config-if)#ip nat outside
R1(config-if)#ex
R1(config)#ip nat pool dynamicnatpool 128.107.10.5 128.107.10.10 netmask 255.255.255.0
R1(config)#access-list 1 permit 172.16.0.0 0.0.255.255
R1(config)#ip nat inside source list 1 pool dynamicnatpool
R1(config)#end
  
```

```

R1#sh ip nat translations
Pro    Inside global    Inside local    Outside local    Outside global
  
```

-----GENERATE SOME TRAFFIC BY PINGING FROM PCs-----

```

R1#sh ip nat translations
Pro    Inside global    Inside local    Outside local    Outside global
icmp   128.107.10.5      172.16.1.4      128.107.1.2      128.107.1.2
----   128.107.10.5      172.16.1.4      -----          -----
icmp   128.107.10.6      172.16.1.5      128.107.1.2      128.107.1.2
----   128.107.10.6      172.16.1.5      -----          -----
  
```