**NAT Pool Overload and PAT**

**Part 1: Build the Network**

* + 1. Create a static route from the ISP router to the Gateway router.

ISP(config)# **ip route 209.165.200.224 255.255.255.248 209.165.201.18**

* + 1. Create a default route from the Gateway router to the ISP router.

Gateway(config)# **ip route 0.0.0.0 0.0.0.0 209.165.201.17**

**Part 2: Configure and Verify NAT Pool Overload**

1. **Define an access control list that matches the LAN private IP addresses**

ACL 1 is used to allow the 192.168.1.0/24 network to be translated.

Gateway(config)# **access-list 1 permit 192.168.1.0 0.0.0.255**

1. **Define the pool of usable public IP addresses**

Gateway(config)# **ip nat pool public\_access 209.165.200.225 209.165.200.230 netmask 255.255.255.248**

1. **Define the NAT from the inside source list to the outside pool**

Gateway(config)# **ip nat inside source list 1 pool public\_access overload**

1. **Specify the interfaces**

Gateway(config)# **interface g0/1**

Gateway(config-if)# **ip nat inside**

Gateway(config-if)# **interface s0/0/1**

Gateway(config-if)# **ip nat outside**

1. **Verify the NAT pool overload configuration**

Gateway# **show ip nat statistics**

Gateway# **show ip nat translations**

**Part 3: Configure and Verify PAT**

1. **Clear NATs and statistics on the Gateway router**
2. **Verify the configuration for NAT**
3. **Remove the pool of useable public IP addresses**

Gateway(config)# **no ip nat pool public\_access 209.165.200.225 209.165.200.230 netmask 255.255.255.248**

1. **Remove the NAT translation from inside source list to outside pool.**

Gateway(config)# **no ip nat inside source list 1 pool public\_access overload**

1. **Associate the source list with the outside interface.**

Gateway(config)# **ip nat inside source list 1 interface serial 0/0/1 overload**

1. **Test the PAT configuration.**

Gateway# **show ip nat statistics**

Gateway# **show ip nat translations**