Cisco CCNA (200-301)

Introducing Network Address Translation

Learning Objective: Describe Network Address Translation and configure and verify Static NAT

Description: The prevalent use of RFC 1918 addresses within a LAN doesn't allow for networks to connect to resources across the internet. You will learn the how to configure NAT to use static, pools and dynamictranslations.

Q: Why do we need Network Address Translation?

Diagram

Q: How do we configure Static NAT?

- Configuring Static NAT (One to One)
    - 1st Step configure Inside and Outside intefaces for NAT
    - ```
      NYEDGE1#configure terminal
      NYEDGE1(config)#interface gigabitethernet 0/0
      NYEDGE1(config-if)#ip nat inside
      Jul 22 09:11:52: %LINEPROTO-5-UPDOWN: Line protocol on
      Interface NVI0, changed state to up [NAT Virtual Interface]
      NYEDGE1(config-if)#interface gigabitethernet 0/1
      NYEDGE1(config-if)#ip nat outside
      NYEDGE1(config-if)#exit
      NYEDGE1(config)#
      ```
    - 2nd Step Configure the static address rule (translates inside IP to outside IP)
    - ```
      NYEDGE1(config)#ip nat inside source static 192.168.16.10 172.14.0.10
      NYEDGE1(config)#
      ```
    - ```
      `Shutdown int g0/0` on NYEDGE2 (only for this lab)
      ```
    - PLABCSCO01
        - `Ping 172.14.0.2`
    - Verify NAT on NYEDGE
        - ```
          NYEDGE1(config)#end
          NYEDGE1#show ip nat translation
          ```

Endnotes, External and Etc.

- 4.1 Configure and verify inside source NAT using static and pools