Computer Networking lab

NAT

Course Code: CSE 314

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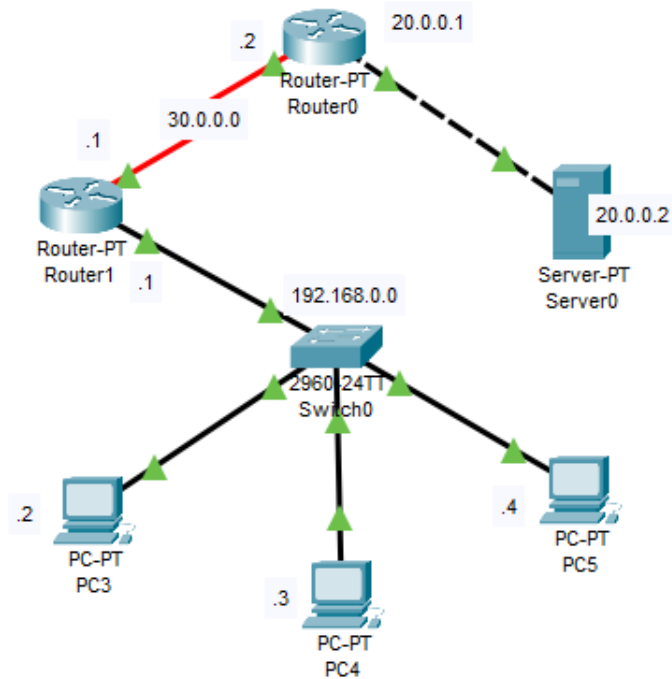Daffodil International University

Diagram

1st Pc Ip Address

2ⁿᵈ Pc Ip Address

PC4 — □ ✕

Physical | Config | Desktop | Programming | Attributes

IP Configuration X

Interface: FastEthernet0

IP Configuration

○ DHCP   ◉ Static

IPv4 Address: 192.168.0.3

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.0.1

DNS Server: 0.0.0.0

IPv6 Configuration

○ Automatic   ◉ Static

IPv6 Address: _____ / ____

Link Local Address: FE80::2E0:B0FF:FEB2:9571

Default Gateway: _____

DNS Server: _____

802.1X

3ʳᵈ Pc Ip Address

PC5 — □ ✕

Physical | Config | Desktop | Programming | Attributes

IP Configuration X

Interface: FastEthernet0

IP Configuration

○ DHCP   ◉ Static

IPv4 Address: 192.168.0.4

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.0.1

DNS Server: 0.0.0.0

IPv6 Configuration
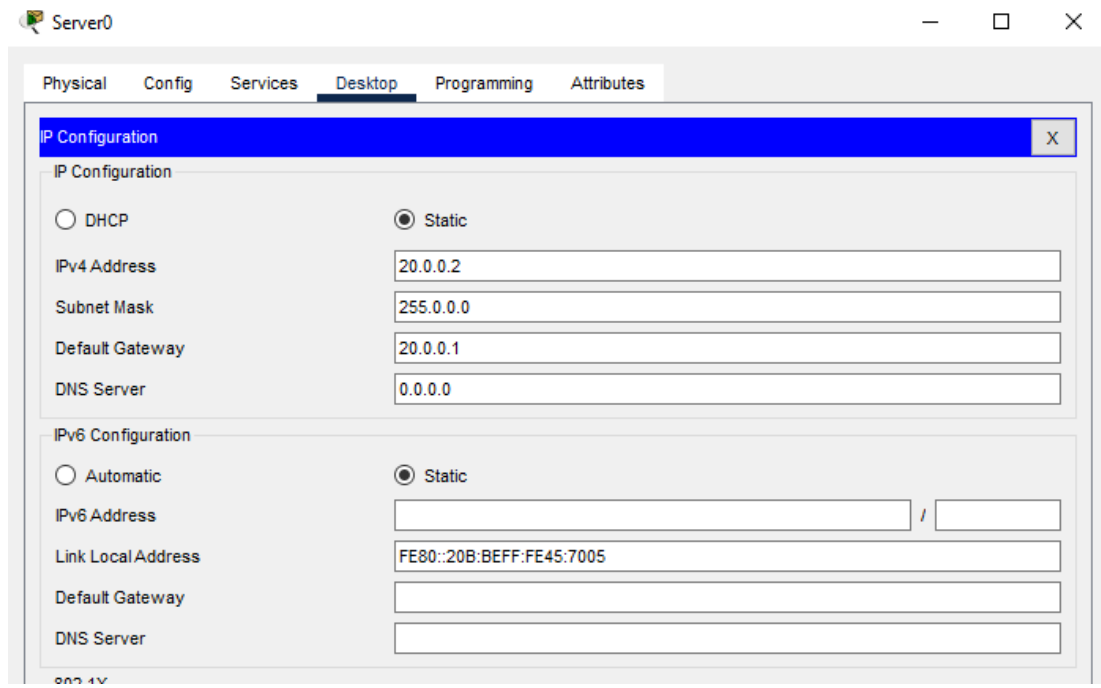
○ Automatic   ◉ Static

IPv6 Address: _____ / ____

Link Local Address: FE80::20B:BEFF:FE5E:9BC6

Default Gateway: _____

DNS Server: _____

802.1X

Server Ip Address

Coding part

Router-01

```
Router>en
Router#config t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int f0/0
Router(config-if)#ip add 192.168.0.1 255.255.255.0
Router(config-if)#no shut

Router(config-if)#ex
Router(config)#int s2/0
Router(config-if)#ip add 30.0.0.1 255.0.0.0
Router(config-if)#no shut

Router(config-if)#ex
Router(config)#ex
Router(config)#ip route 0.0.0.0 0.0.0.0 serial 2/0
Router(config)#access-list 1 permit 192.168.0.0 0.0.0.255
Router(config)#ip nat pool test 50.0.0.1 50.0.0.5 netmask 255.0.0.0
Router(config)#ip nat inside source list 1 pool test
Router(config)#int f0/0
Router(config-if)#ip nat inside
Router(config-if)#ex
```

Router(config)#int serial 2/0
Router(config-if)#ip nat outside
Router(config-if)#ex
Router(config)#ex
Router#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]

Router-02

Router>en
Router#config t
Router(config)#int s2/0
Router(config-if)#ip add 30.0.0.2 255.0.0.0
Router(config-if)#no shut

Router(config-if)#ex
Router(config)#int f0/0
Router(config-if)#ip add 20.0.0.1 255.0.0.0
Router(config-if)#no shut

Router(config-if)#ex
Router(config)#ex

Router#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
Router#

Router(config)#int f0/0
Router(config-if)#ex
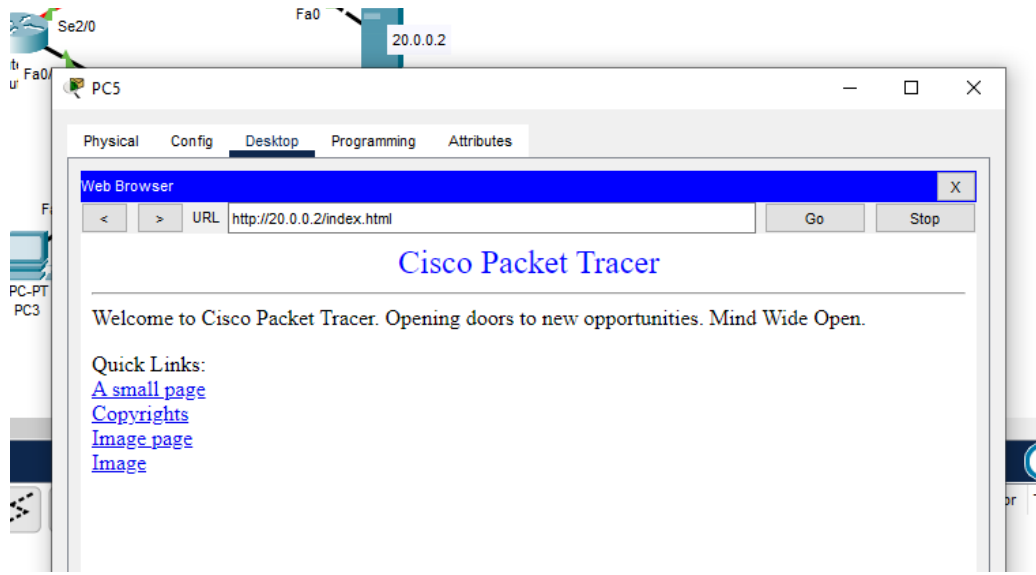Router(config)#ip route 0.0.0.0 0.0.0.0 s2/0
Router(config)#hostname R2

CMD

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 20.0.0.2
Pinging 20.0.0.2 with 32 bytes of data:
Request timed out.
Reply from 20.0.0.2: bytes=32 time=12ms TTL=126
Reply from 20.0.0.2: bytes=32 time=12ms TTL=126
Reply from 20.0.0.2: bytes=32 time=14ms TTL=126

Ping statistics for 20.0.0.2:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:

Packet transfer

CMD