Cloud Computing and Virtualization Lab

Presented by:

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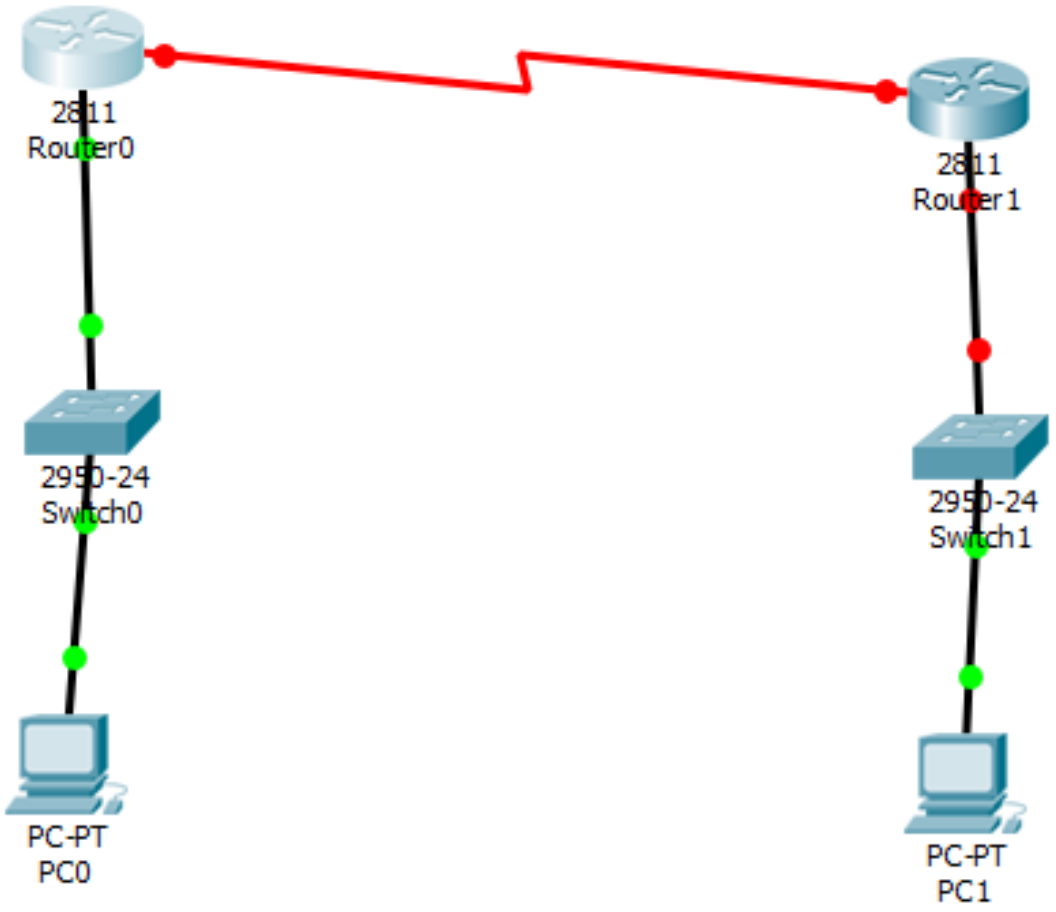
Assistant Professor

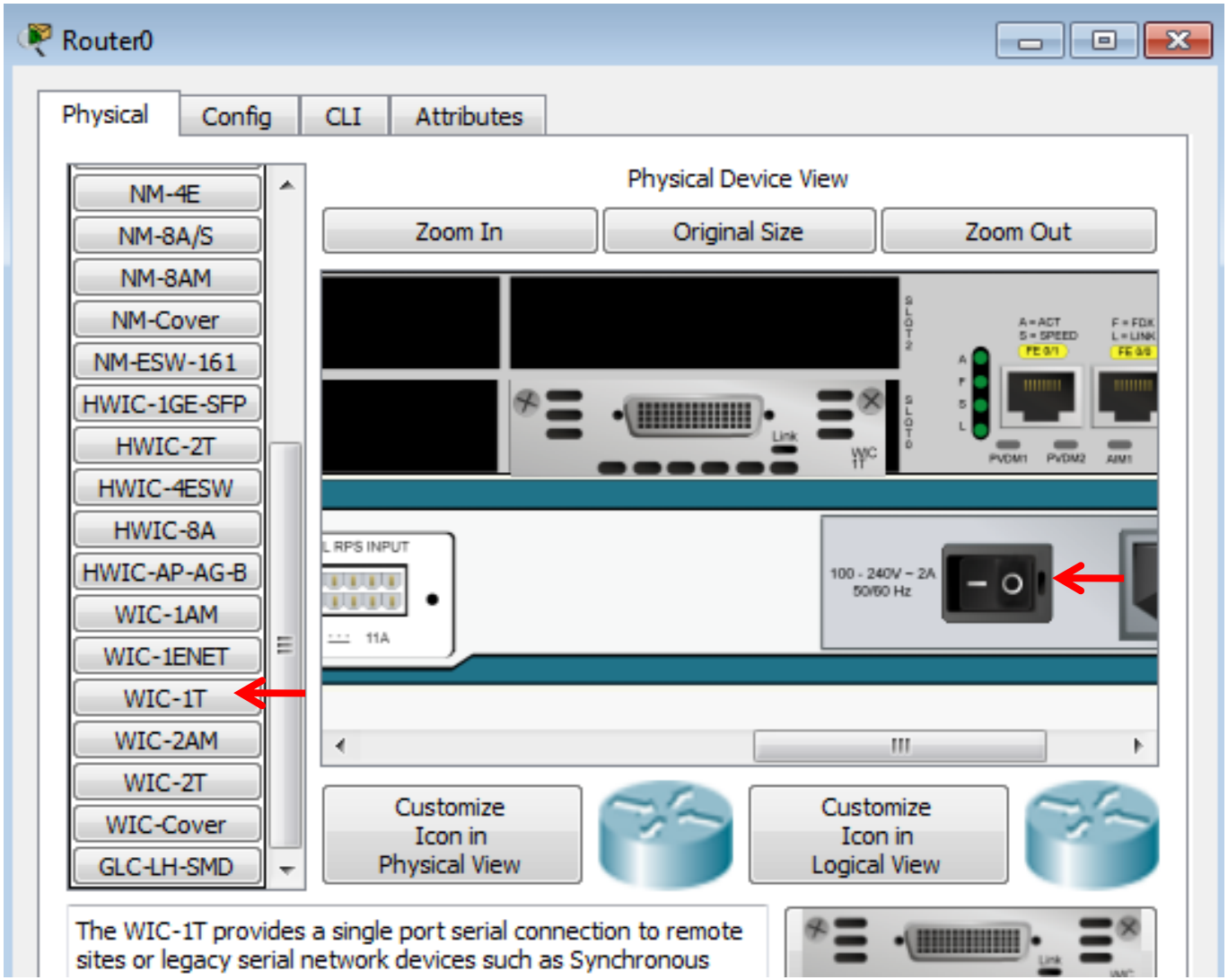
Static Routing

- 2 routers-2811
- 2 switch-2950-24
- 2 PC
- cables



Static Routing

- Click on Router and add WIC-1T to it
- Do it for both the routers



Static Routing

- Click on Router0 and Type:
  - No
  - **Router>**en
  - **Router#**conf t
  - **Router(config)#**int s0/0/0
  - **Router(config-if)#**ip address 192.168.30.1 255.255.255.0
  - **Router(config-if)#**clock rate 72000
  - **Router(config-if)#**no sh
  - **Router(config-if)#**int fa0/0
  - **Router(config-if)#**ip address 192.168.10.1 255.255.255.0
  - **Router(config-if)#**no sh
  - **Router(config-if)#**ctrl+Z
  - **Router#**copy running-config startup-config
  - Destination filename [startup-config]?
  - Building configuration...
  - [OK]

Static Routing

- Click on Router 1 and type:
  - No
  - **Router>**en
  - **Router#**conf t
  - **Router(config)#**int s0/0/0
  - **Router(config-if)#**ip address 192.168.30.2 255.255.255.0
  - **Router(config-if)#**no sh
  - **Router(config-if)#**int fa0/0
  - **Router(config-if)#**ip address 192.168.20.1 255.255.255.0
  - **Router(config-if)#**no sh
  - **Router(config-if)#**ctrl+z
  - **Router#**copy running-config startup-config
  - Destination filename [startup-config]?
  - Building configuration...
  - [OK]
  - **Router#**

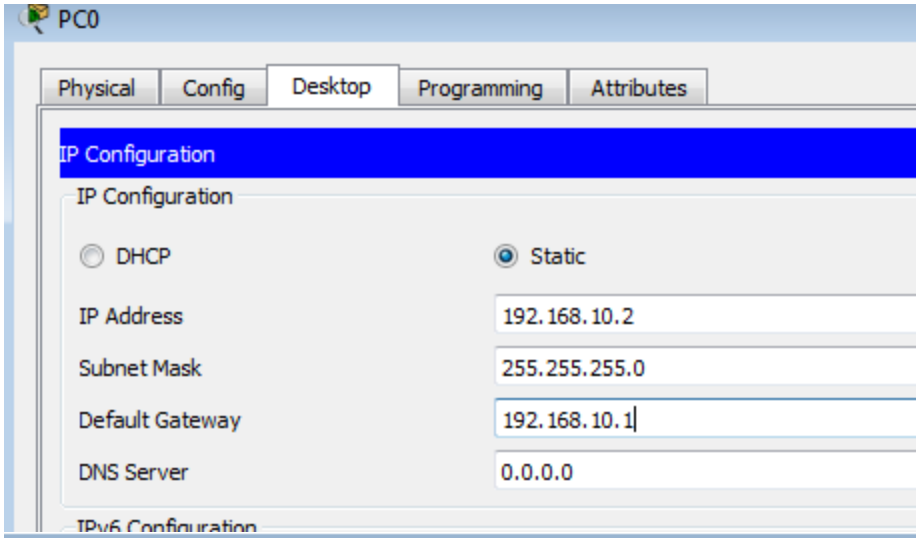
Static Routing

- Click on router0 and type:
  - **Router#**
  - **Router#**conf t
  - **Router(config)#**ip route 192.168.20.0 255.255.255.0 192.168.30.2
  - **Router(config)#**ctrl+Z
  - **Router#**copy running-config startup-config
  - Destination filename [startup-config]?
  - Building configuration...
  - [OK]
  - **Router#**exit

Static Routing

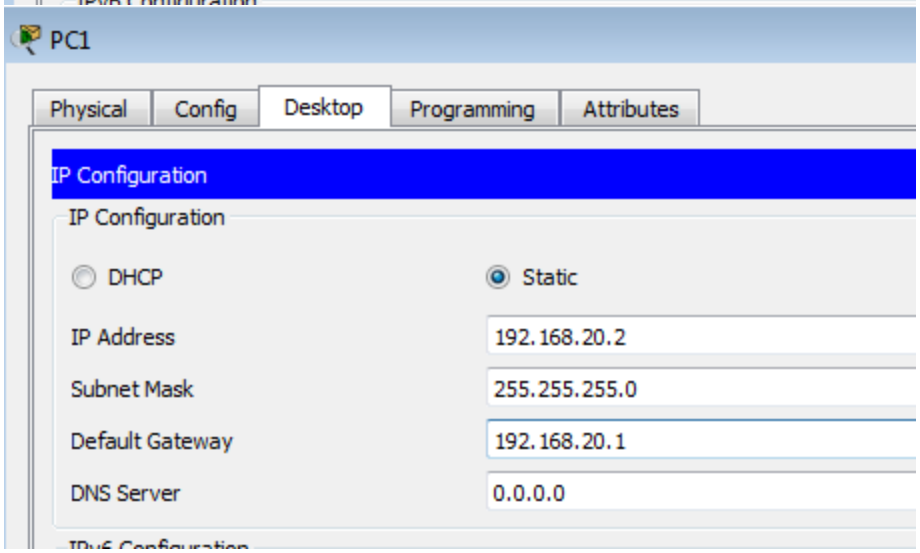
- Click on router1 and type:
  - **Router#**conf t
  - **Router(config)#**ip route 192.168.10.0 255.255.255.0 192.168.30.1
  - **Router(config)#**ctrl+Z
  - **Router#**copy running-config startup-config
  - Destination filename [startup-config]?
  - Building configuration...
  - [OK]
  - **Router#**exit

Static Routing



- Assign the following IP to systems

PC0



PC1

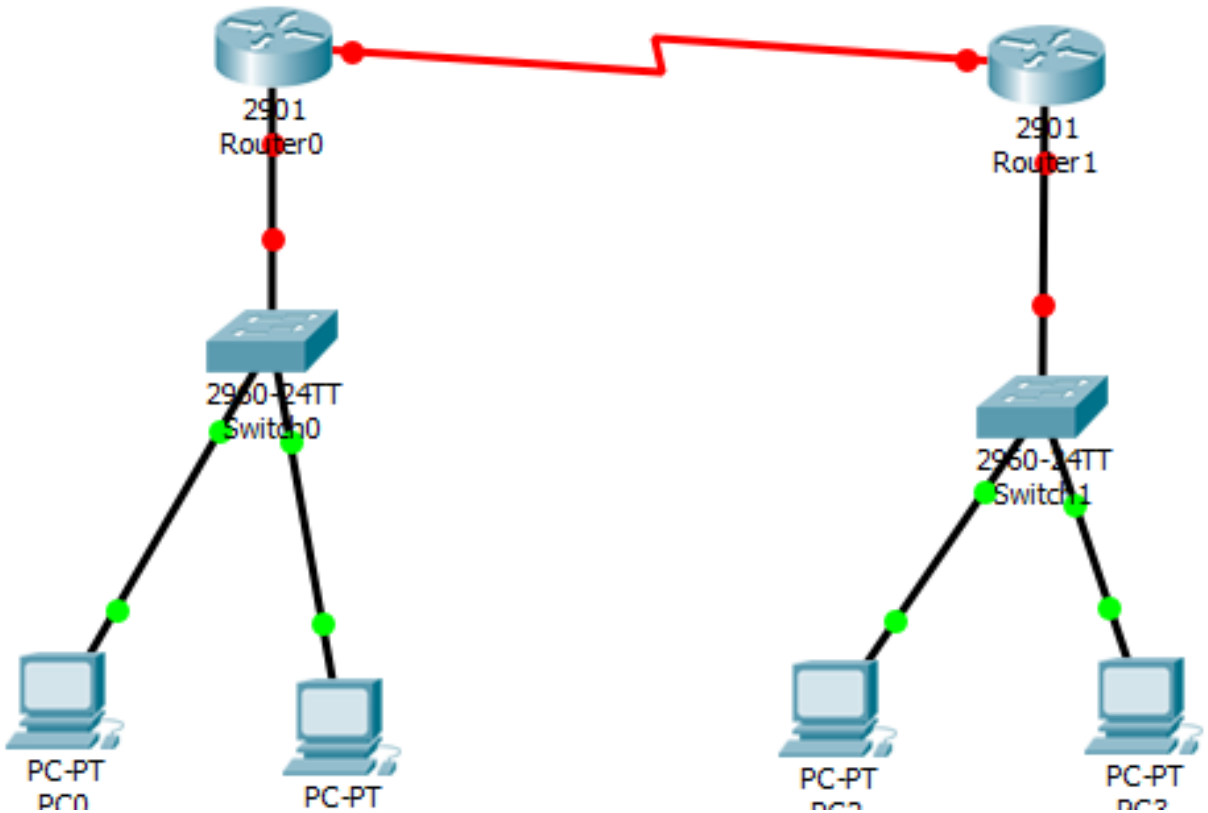
Static Routing

- Ping the PC from each other

Connect two different Networks with RIP

Connect two different Networks with RIP

- 2 Routers – 2901
- 2 Switch – 2960
- PCs
- Cable



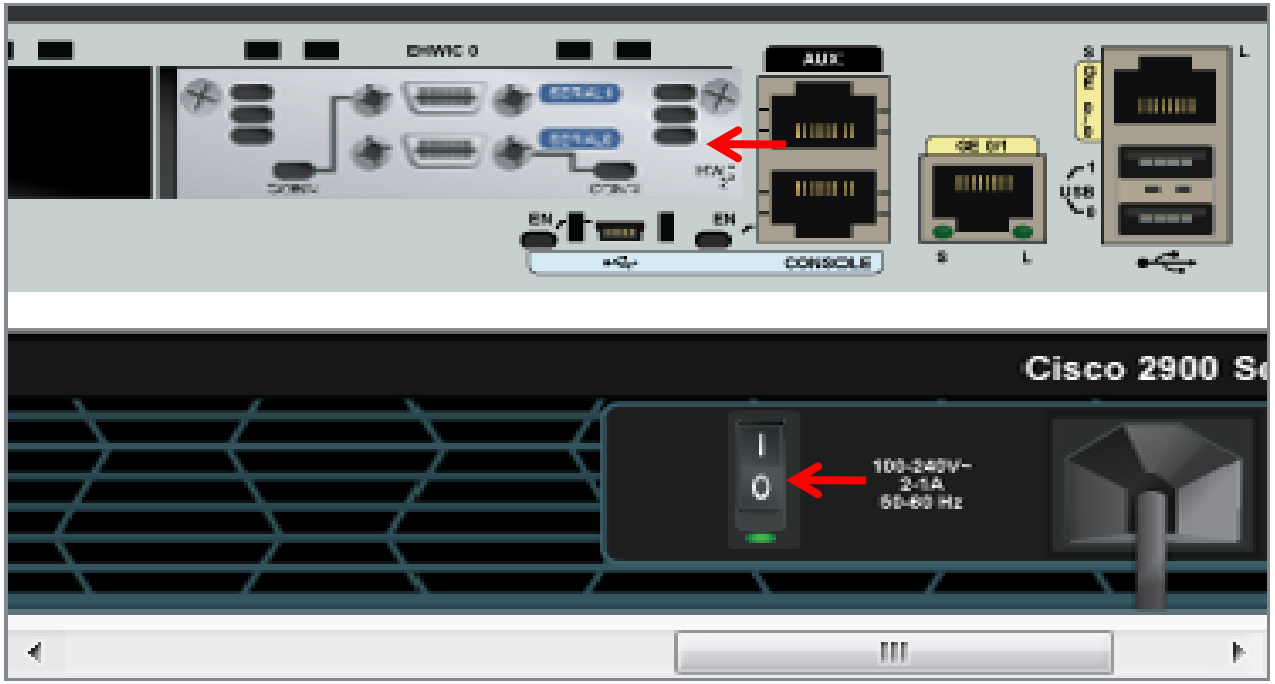
Router1

Physical | Config | CLI | Attributes

MODULES
HWIC-1GE-SFP
HWIC-2T
HWIC-4ESW
HWIC-8A
WIC-Cover
GLC-LH-SMD

Physical Device View

Zoom In | Original Size | Zoom Out

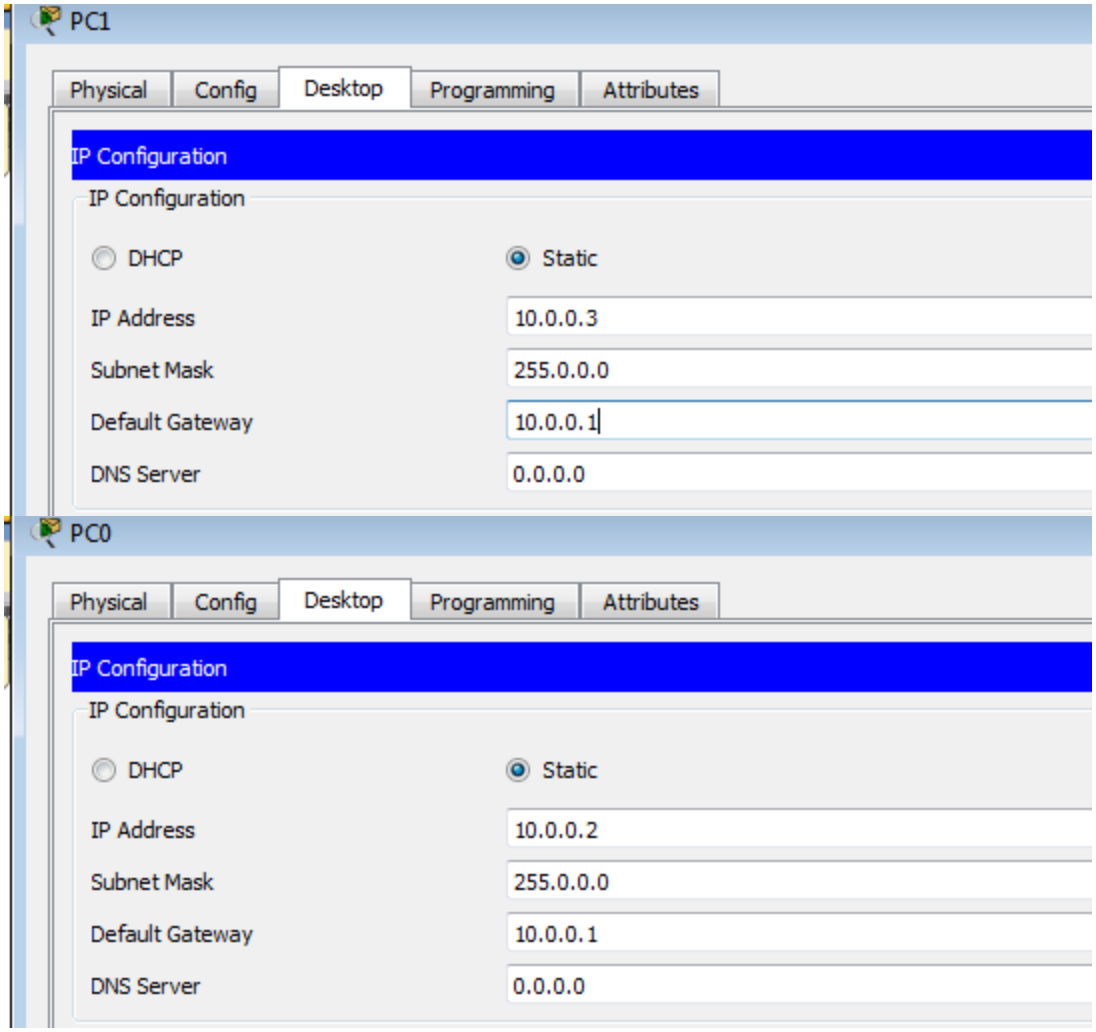


Customize Icon in Physical View

Customize Icon in Logical View

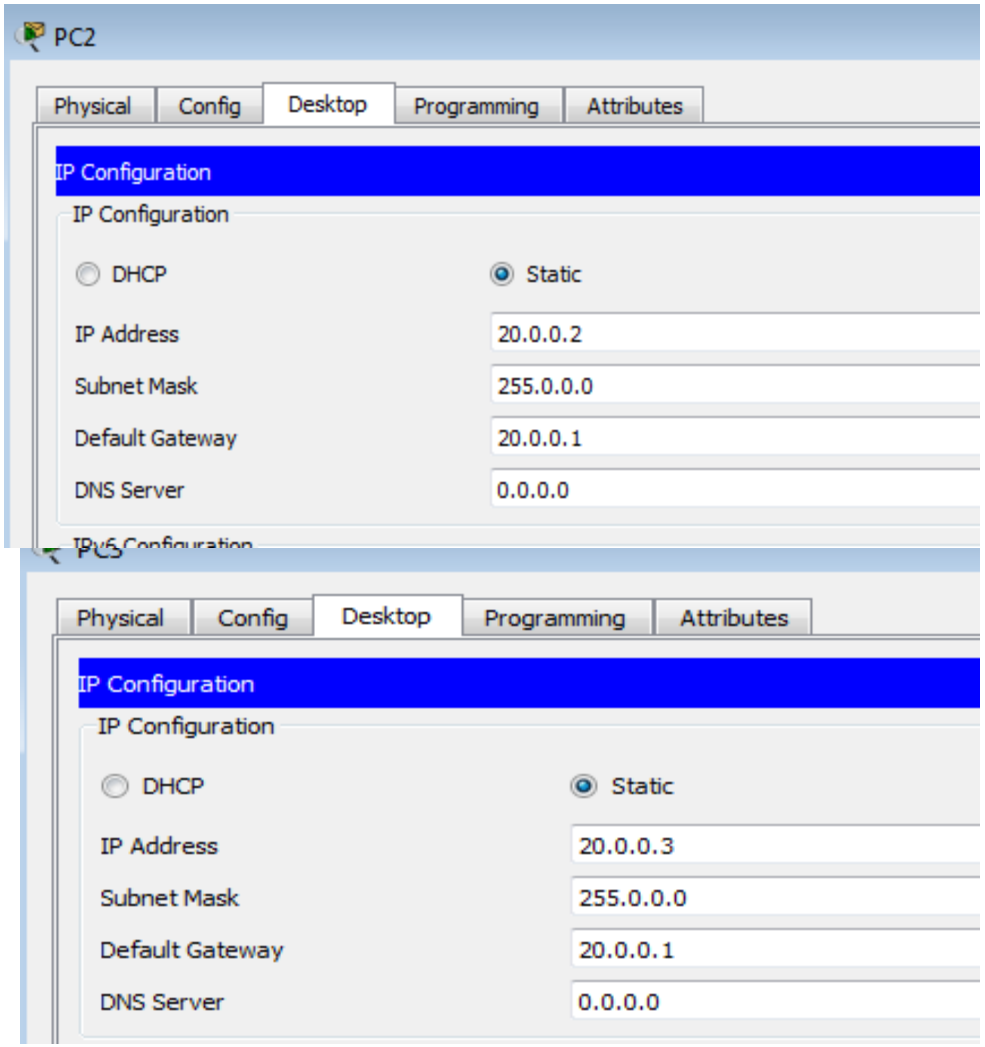
The HWIC-2T is a Cisco 2-Port Serial High-Speed WAN Interface Card, providing 2 serial ports.

Connect two different Networks with RIP



- Assign the IP Address to the PC connected to Switch 0

Connect two different Networks with RIP



- Assign the IP Address to the PC connected to Switch 1

Connect two different Networks with RIP

- Click on Router0 and Type
  - **no]**: n
  - **Router>**en
  - **Router#**conf t
  - **Router(config)#**int g0/1
  - **Router(config-if)#**ip address 10.0.0.1 255.0.0.0
  - **Router(config-if)#**no sh
  - **Router(config-if)#**no sh
  - **Router(config-if)#**int s0/0/0
  - Router(config-if)#ip address 192.168.0.1 255.255.255.0
  - **Router(config-if)#**clock rate 250000
  - **Router(config-if)#**no sh
  - **Router(config-if)#**exit

Connect two different Networks with RIP

- Click on Router1 and Type
  - **no]**: n
  - **Router>**en
  - **Router#**conf t
  - **Router(config)#**int g0/1
  - **Router(config-if)#**ip address 20.0.0.1 255.0.0.0
  - **Router(config-if)#**no sh
  - **Router(config-if)#**int s0/0/0
  - Router(config-if)#ip address 192.168.0.2 255.255.255.0
  - **Router(config-if)#**no sh
  - **Router(config-if)#**exit

Connect two different Networks with RIP

- Click on Router0 and Type
  - **Router(config)#**router rip
  - **Router(config-router)#**network 10.0.0.0
  - **Router(config-router)#**network 192.168.0.0
  - **Router(config-router)#**exit

Connect two different Networks with RIP

- Click on Router1 and Type
  - **Router(config)#**router rip
  - **Router(config-router)#**network 20.0.0.0
  - **Router(config-router)#**network 192.168.0.0
  - **Router(config-router)#**exit

Connect two different Networks with RIP

- Click on simulation mode
- Click on show all/none
- Click on edit filters
- Select ICMP protocol
- Select PDU and click on any PC on Router0 and then on any PC on Router1

Connect two different Networks with RIP