IP Subnetting in Cisco Packet Tracer

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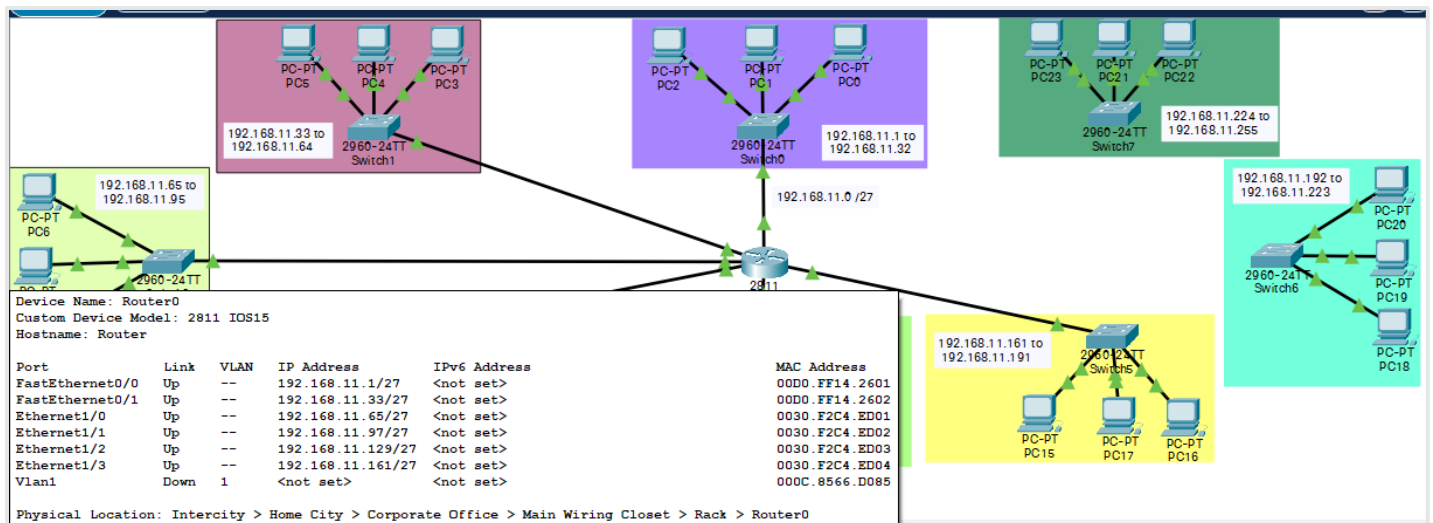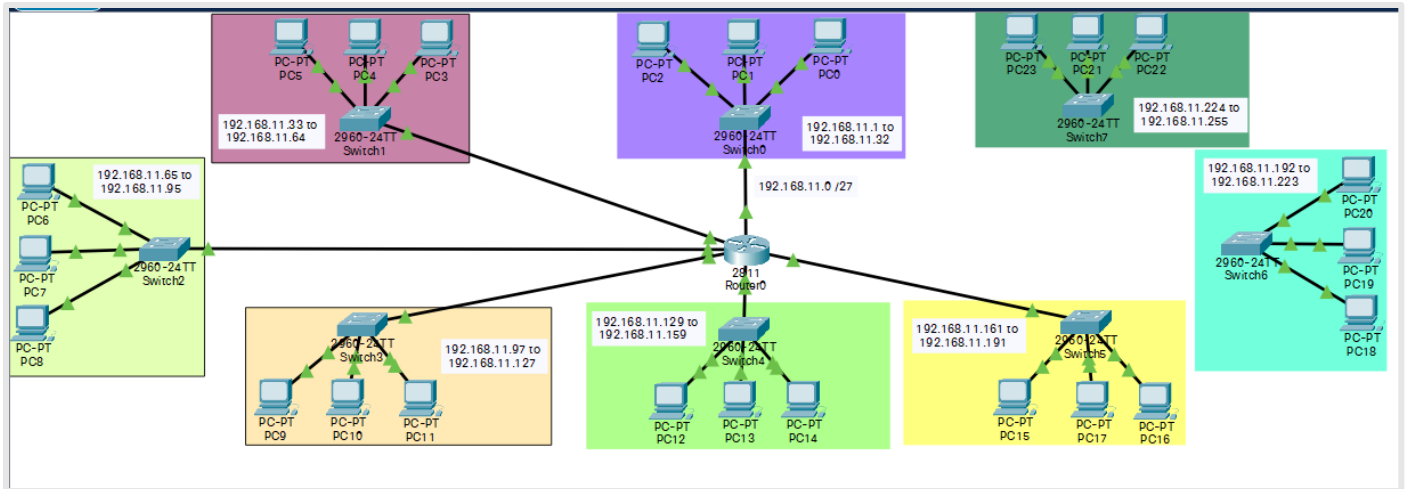Course Code: Data Communication and Computer Networking

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Packet Tracer Implementation

Create subnets of IP: 192.168.11.0 /27
Attach 3 PCs per network

Implement the scenario on cisco packet tracer


```
Device Name: Router0
Custom Device Model: 2811 IOS15
Hostname: Router

Port             Link   VLAN   IP Address         IPv6 Address      MAC Address
FastEthernet0/0  Up     --     192.168.11.1/27    <not set>         00D0.FF14.2601
FastEthernet0/1  Up     --     192.168.11.33/27   <not set>         00D0.FF14.2602
Ethernet1/0      Up     --     192.168.11.65/27   <not set>         0030.F2C4.ED01
Ethernet1/1      Up     --     192.168.11.97/27   <not set>         0030.F2C4.ED02
Ethernet1/2      Up     --     192.168.11.129/27  <not set>         0030.F2C4.ED03
Ethernet1/3      Up     --     192.168.11.161/27  <not set>         0030.F2C4.ED04
Vlan1            Down   1      <not set>          <not set>         000C.8566.D085

Physical Location: Intercity > Home City > Corporate Office > Main Wiring Closet > Rack > Router0
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Subnet-1

Router>
Router>enable
Router#config ter
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fastethernet0/0
Router(config-if)#ip address 192.168.11.0 255.255.255.224
Bad mask /27 for address 192.168.11.0
Router(config-if)#ip address 192.168.11.1 255.255.255.224
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#exit

Subnet-2

Router(config)#interface fastethernet0/1
Router(config-if)#ip address 192.168.11.33 255.255.255.224
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Router(config-if)#exit

Subnet-3

Router(config)#interface Eth1/0
Router(config-if)#ip address 192.168.11.65 255.255.255.224
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface Ethernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/0, changed state to up

Router(config-if)#exit

Subnet-4

Router(config)#interface Eth1/1
Router(config-if)#ip address 192.168.11.97 255.255.255.224
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface Ethernet1/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/1, changed state to up

Router(config-if)#exit

Subnet-5

Router(config)#interface Eth1/2
Router(config-if)#ip address 192.168.11.129 255.255.255.224
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface Ethernet1/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/2, changed state to up

Router(config-if)#exit

Subnet-6

Router(config)#interface Eth1/3
Router(config-if)#ip address 192.168.11.161 255.255.255.224
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface Ethernet1/3, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet1/3, changed state to up

Router(config-if)#exit