Report of Day-5

Today's Objective:

Topic:

Inter-VLAN routing using Router on a Stick.

Practical:

1. Configure trunk port on Switch and Sub-interfaces on Router.
2. Enable communication VLAN's.

Step-1:

Setup the IP Address.

Step-2:

Create the VLAN's.

Step-3:

Set up the Ports for each of the VLAN's.

Step-4:

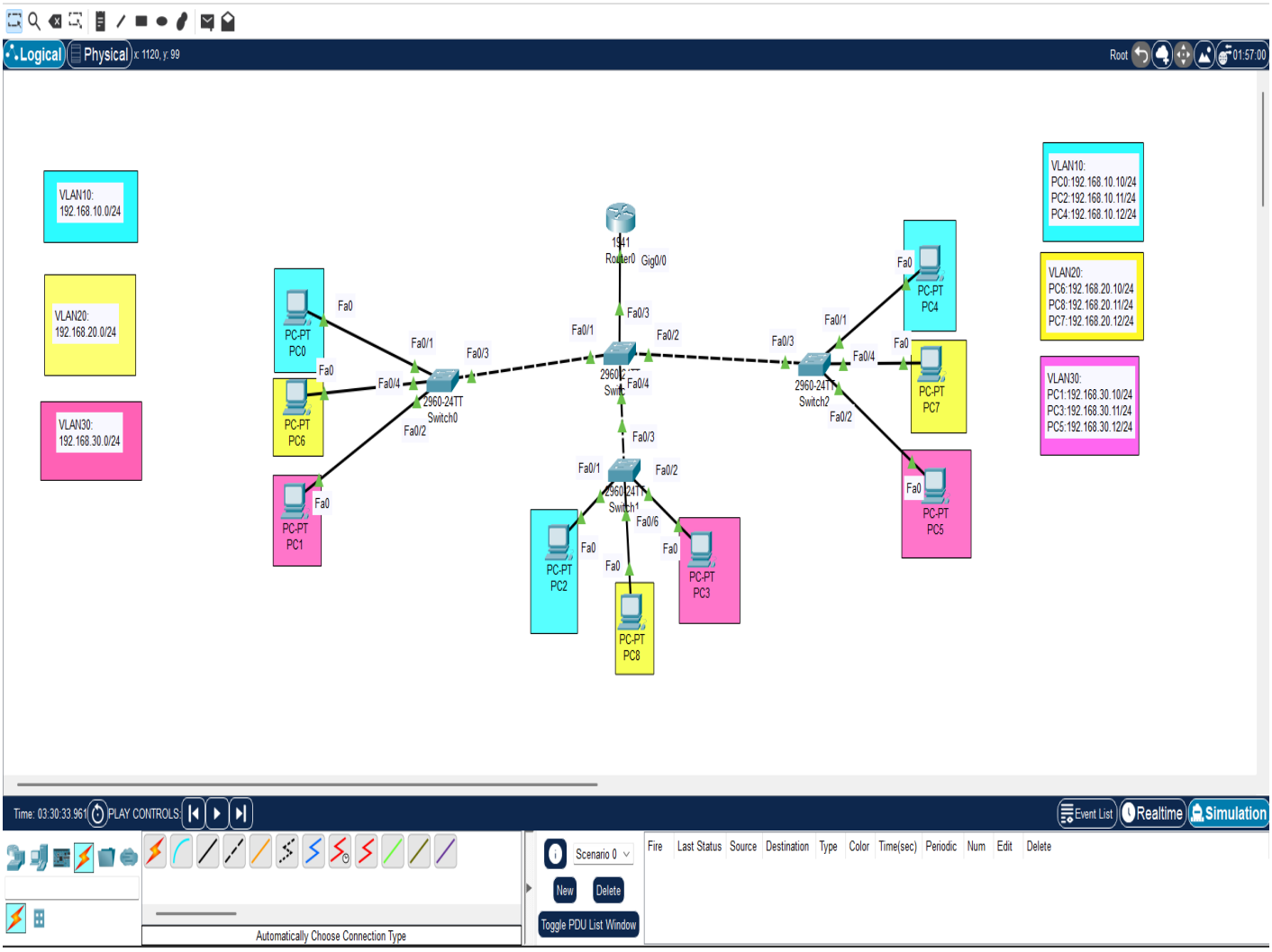
Setup the trunk ports.

Step-5:

Configure the Router.

Step-6:

Establish Connection and send message between different VLAN's.


Logical
Physical
x: 1120, y: 99
Root
01:57:00
VLAN10:
192.168.10.0/24
VLAN20:
192.168.20.0/24
VLAN30:
192.168.30.0/24
1941
Router0
Gig0/0
Fa0/3
Fa0/1
Fa0/2
Fa0/4
Fa0/6
2960-24TT
Switch0
2960-24TT
Switch1
2960-24TT
Switch2
PC-PT
PC0
PC-PT
PC1
PC-PT
PC2
PC-PT
PC3
PC-PT
PC4
PC-PT
PC5
PC-PT
PC6
PC-PT
PC7
PC-PT
PC8
Fa0
VLAN10:
PC0:192.168.10.10/24
PC2:192.168.10.11/24
PC4:192.168.10.12/24
VLAN20:
PC6:192.168.20.10/24
PC8:192.168.20.11/24
PC7:192.168.20.12/24
VLAN30:
PC1:192.168.30.10/24
PC3:192.168.30.11/24
PC5:192.168.30.12/24
Time: 03:30:33.961
PLAY CONTROLS
Event List
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Delete
Automatically Choose Connection Type

Switch3:

```
%SYS-5-CONFIG_I: Configured from console by console

Switch#show interface trunk
Port        Mode         Encapsulation  Status        Native vlan
Fa0/1       on           802.1q         trunking      1
Fa0/2       on           802.1q         trunking      1
Fa0/3       on           802.1q         trunking      1
Fa0/4       on           802.1q         trunking      1

Port        Vlans allowed on trunk
Fa0/1       1-1005
Fa0/2       1-1005
Fa0/3       1-1005
Fa0/4       1-1005

Port        Vlans allowed and active in management domain
Fa0/1       1,10,20,30
Fa0/2       1,10,20,30
Fa0/3       1,10,20,30
Fa0/4       1,10,20,30

Port        Vlans in spanning tree forwarding state and not pruned
Fa0/1       1,10,20,30
Fa0/2       1,10,20,30
Fa0/3       1,10,20,30
Fa0/4       1,10,20,30

Switch#
Switch#exit
```

Router:

```
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

%LINK-5-CHANGED: Interface GigabitEthernet0/0.10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.10, changed state to up

%LINK-5-CHANGED: Interface GigabitEthernet0/0.20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.20, changed state to up

%LINK-5-CHANGED: Interface GigabitEthernet0/0.30, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.30, changed state to up

Router(config-if)#exit
Router(config)#show ip interface brief
               ^
% Invalid input detected at '^' marker.

Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show ip interface brief
Interface              IP-Address      OK? Method Status                Protocol
GigabitEthernet0/0     unassigned      YES unset  up                    up
GigabitEthernet0/0.10  192.168.10.1    YES manual up                    up
GigabitEthernet0/0.20  192.168.20.1    YES manual up                    up
GigabitEthernet0/0.30  192.168.30.1    YES manual up                    up
GigabitEthernet0/1     unassigned      YES unset  administratively down down
Vlan1                  unassigned      YES unset  administratively down down
Router#
```

Establish Connection between the different VLAN’s and send message.