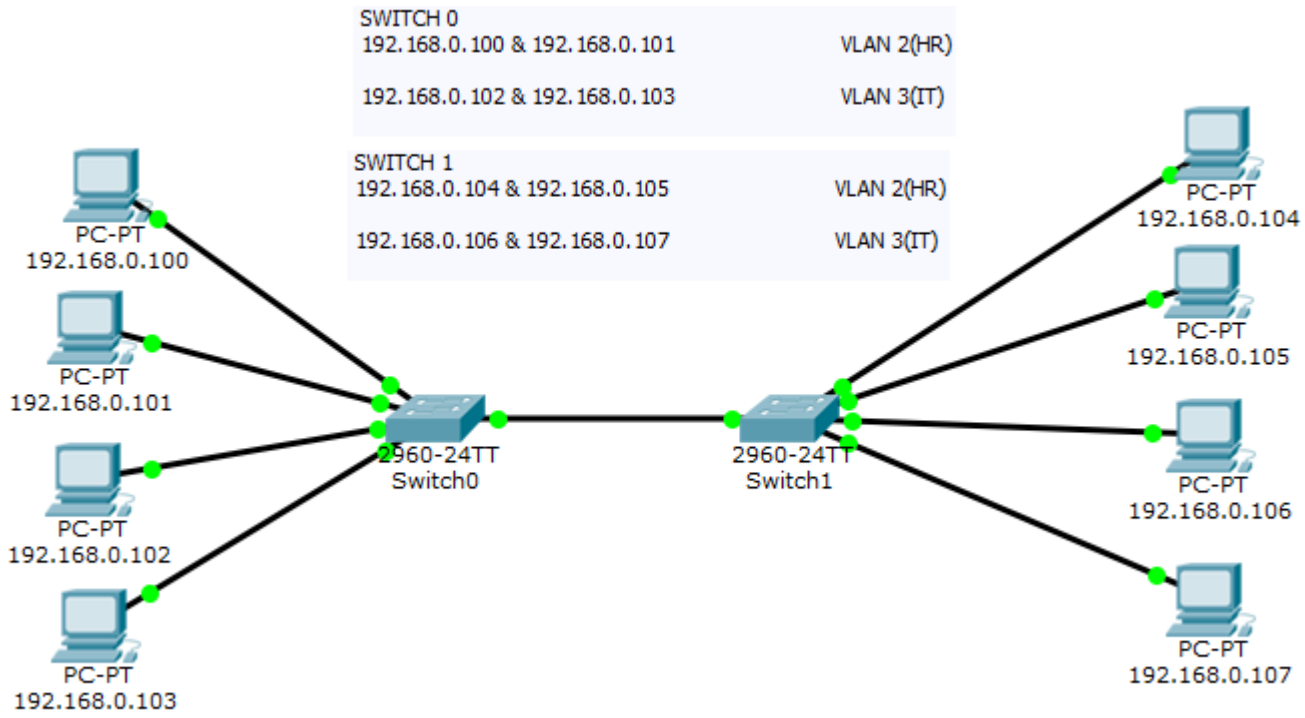
Experiment No. 06

Object: To Use two switches to allow trunk mode for same VLANS of different switches.

Date: March 10, 2018

Configuration Figure:



Coding: For *Switch0*

```
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#vlan 2
Switch(config-vlan)#name
% Incomplete command.
Switch(config-vlan)#name  HR
Switch(config-vlan)#ex
Switch(config)#vlan 3
Switch(config-vlan)#name IT
Switch(config-vlan)#ex
Switch(config)#
Switch(config)#
Switch(config)#interface r
Switch(config)#interface range f
Switch(config)#interface range fastEthernet 0/1-2
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 2
Switch(config-if-range)#no shutdown
Switch(config-if-range)#ex
Switch(config)#interface range fastEthernet 0/3-4
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 3
```

```
Switch(config-if-range)#no shutdown
Switch(config-if-range)#ex
Switch(config)#
Switch(config)#interface gigabitEthernet 0/1
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

Switch(config-if)#no shutdown
Switch(config-if)#ex
Switch(config)#ex
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#
```

Coding: For *Switch1*

```
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#vlan 2
Switch(config-vlan)#name
% Incomplete command.
Switch(config-vlan)#name  HR
Switch(config-vlan)#ex
Switch(config)#vlan 3
Switch(config-vlan)#name IT
Switch(config-vlan)#ex
Switch(config)#
Switch(config)#
Switch(config)#interface r
Switch(config)#interface range f
Switch(config)#interface range fastEthernet 0/1-2
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 2
Switch(config-if-range)#no shutdown
Switch(config-if-range)#ex
Switch(config)#interface range fastEthernet 0/3-4
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 3
Switch(config-if-range)#no shutdown
Switch(config-if-range)#ex
Switch(config)#
Switch(config)#interface gigabitEthernet 0/1
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up

Switch(config-if)#no shutdown
Switch(config-if)#ex
Switch(config)#ex
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#
```

Command Prompt Result:

For VLAN 3 (IT)

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.0.107

Pinging 192.168.0.107 with 32 bytes of data:

Reply from 192.168.0.107: bytes=32 time=2ms TTL=128
Reply from 192.168.0.107: bytes=32 time=0ms TTL=128
Reply from 192.168.0.107: bytes=32 time=0ms TTL=128
Reply from 192.168.0.107: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.0.107:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 2ms, Average = 0ms

PC>ping 192.168.0.103

Pinging 192.168.0.103 with 32 bytes of data:

Reply from 192.168.0.103: bytes=32 time=1ms TTL=128
Reply from 192.168.0.103: bytes=32 time=0ms TTL=128
Reply from 192.168.0.103: bytes=32 time=3ms TTL=128
Reply from 192.168.0.103: bytes=32 time=14ms TTL=128

Ping statistics for 192.168.0.103:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 14ms, Average = 4ms

PC>
```

```
PC>ping 192.168.0.100

Pinging 192.168.0.100 with 32 bytes of data:

Reply from 192.168.0.100: bytes=32 time=1ms TTL=128
Reply from 192.168.0.100: bytes=32 time=0ms TTL=128
Reply from 192.168.0.100: bytes=32 time=0ms TTL=128
Reply from 192.168.0.100: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.0.100:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

PC>ping 192.168.0.104

Pinging 192.168.0.104 with 32 bytes of data:

Reply from 192.168.0.104: bytes=32 time=13ms TTL=128
Reply from 192.168.0.104: bytes=32 time=0ms TTL=128
Reply from 192.168.0.104: bytes=32 time=3ms TTL=128
Reply from 192.168.0.104: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.0.104:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
```

For VLAN 2 (HR)