



Lecture (07)

Design and Configuration LAN – Practicing, working on CISCO equipment (2)



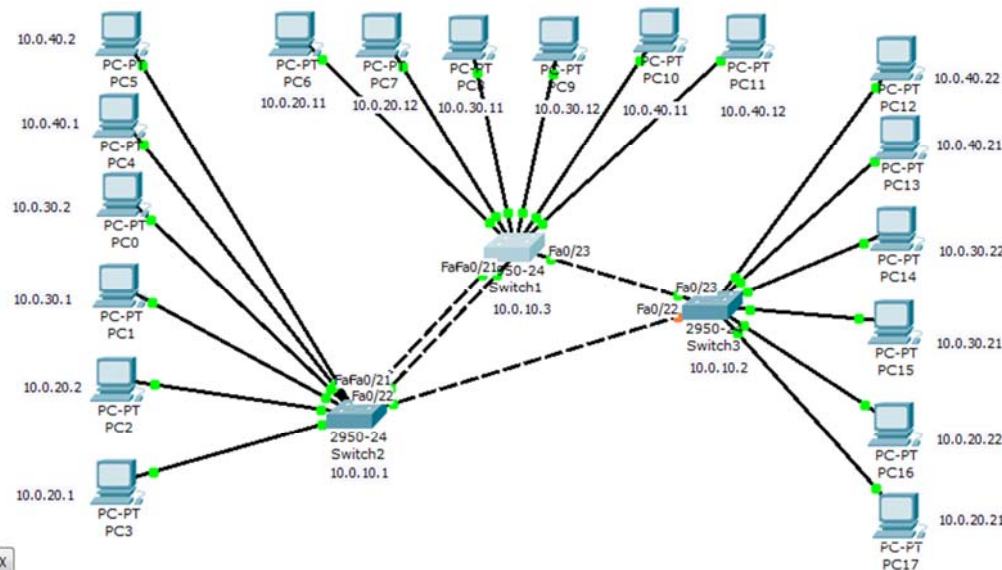
By:

Dr. Ahmed ElShafee

Dr. Ahmed ElShafee, ACU : Fall 2015, Practical App.
Networks II

Part II

Dr. Ahmed ElShafee, ACU : Fall 2015, Practical App. Networks II



SW01 steps

- Open your switch, all 4 PCs.
- Run configuration file found in console PC desktop.
- Co-operate with team 2 to share the exchanged traffic of SW1 & SW2 between the two redundant link.
- Co-operate with team 3 to connect redundant link between SW1 & SW3 (choose port 20 on each switch).
- co-operate with team 3 to share exchanged traffic of SW1 & SW3 between the two redundant link.

-
- consult team 2 and team 3 is that possible to make the direct link between SW2 & SW3 designated forward (both ports @ each switch) instead of alternative blocked.
 - Configure port 7 to be exclusively accept one machine. Explain what happen when you connect multiple machines. Explain how to solve the problem
 - Configure port 8 to be exclusively accept certian machine. Explain what happen when you connect multiple machines. Explain how to solve the problem

SW 02 steps

- Open your switch, all 4 PCS.
- Run configuration file found in console PC desktop.
- Co-operate with team 1 to share the exchanged traffic of SW1 & SW2 between the two redundant link.
- consult team 1 and team 3 is that possible to make the direct link between SW2 & SW3 designated forward (both ports @ each switch) instead of alternative blocked.

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- Configure port 7 to be exclusively accept one machine. Explain what happen when you connect multiple machines. Explain how to solve the problem
 - Configure port 8 to be exclusively accept certian machine. Explain what happen when you connect multiple machines. Explain how to solve the problem

SW 03 Steps

- Open your switch, all 4 PCS.
- Run configuration file found in console PC desktop.
- Co-operate with team 1 to connect redundant link between SW1 & SW3 (choose port 20 on each switch).
- co-operate with team 1 to share exchanged traffic of SW1 & SW3 between the two redundant link.
- consult team 1 and team 2 is that possible to make the direct link between SW2 & SW3 designated forward (both ports @ each switch) instead of alternative blocked.

- Configure port 7 to be exclusively accept one machine. Explain what happen when you connect multiple machines. Explain how to solve the problem
- Configure port 8 to be exclusively accept certian machine. Explain what happen when you connect multiple machines. Explain how to solve the problem

Switch 1

```
enabl
config t
hostname SW01

line vty 0 4
password cisco
login

line console 0
password cisco
login

enable password cisco

enable secret cisco1

interface vlan 1
ip address 10.0.10.1 255.255.255.0
no shutdown

vtp domain ACU
vtp mode server
```

```
vlan 2
name Finance

vlan 3
name HR

vlan 4
name Admin

interface range fa0/1-24
speed auto
duplex auto

interface range fa0/21-24
switchport mode trunk

interface range fa0/1-5
switchport mode access
switchport access vlan 2

interface range fa0/6-10
switchport mode access
switchport access vlan 3
```

```
interface range fa0/11-15
switchport mode access
switchport access vlan 4

spanning-tree vlan 1,2,3,4 root primary

end

*****
show vlan
show ip interface brief
show spanning-tree vlan 1
show spanning-tree interface FastEthernet
0/21
```

Switch 2

```
enabl
config t
hostname SW02
```

```
line vty 0 4
password cisco
login
```

```
line console 0
password cisco
login
```

```
enable password cisco
```

```
enable secret cisco1
```

```
interface vlan 1
ip address 10.0.10.2 255.255.255.0
no shutdown
```

```
vtp domain ACU
vtp mode client
```

```
interface range fa0/1-24
speed auto
duplex auto
```

```
interface range fa0/21-24
switchport mode trunk
```

```
end
```

```
show vlan
```

```
config t
```

```
interface range fa0/1-5
switchport mode access
switchport access vlan 2
```

```
interface range fa0/6-10
switchport mode access
switchport access vlan 3
```

```
interface range fa0/11-15
switchport mode access
switchport access vlan 4
```

```
end
*****
show vlan
show ip interface brief
show spanning-tree vlan 1
show spanning-tree interface FastEthernet
0/21
```

Switch 3

```
enabl
config t
hostname SW03

line vty 0 4
password cisco
login

line console 0
password cisco
login

enable password cisco

enable secret cisco1

interface vlan 1
ip address 10.0.10.3 255.255.255.0
no shutdown

vtp domain ACU
vtp mode client
```

```
interface range fa0/1-24
speed auto
duplex auto

interface range fa0/21-24
switchport mode trunk

end

show vlan

config t

interface range fa0/1-5
switchport mode access
switchport access vlan 2

interface range fa0/6-10
switchport mode access
switchport access vlan 3
```

```
interface range fa0/11-15
switchport mode access
switchport access vlan 4

end
*****

show vlan
show ip interface brief
show spanning-tree vlan 1
show spanning-tree interface FastEthernet
0/21
```



**Thanks,..
See you next week (ISA),...**