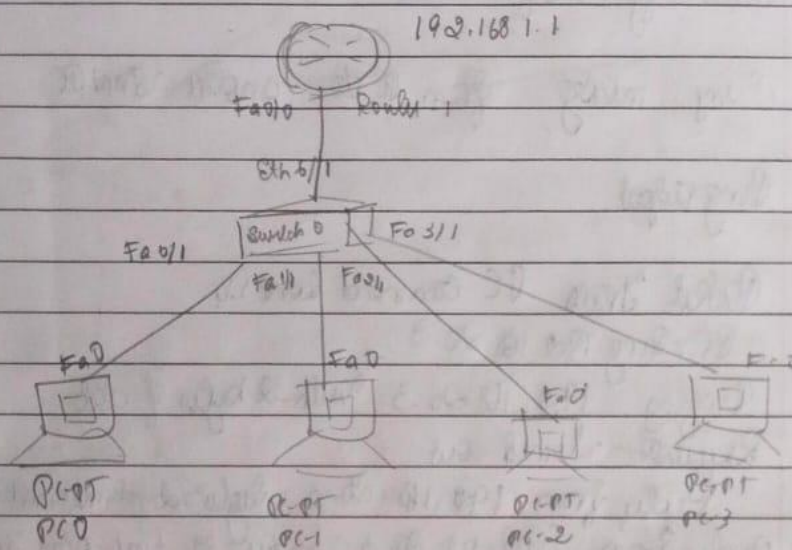


JOB-8

Date ___/___/___
Page ___

9/8/15 ^{Plm} Construct a Vlan and make the PCs communicate among a Vlan.

Topology



Procedure.

- Create a topology as shown above.
- Choose 1841 router
- In the switch go to config tab & select Vlan Database
- Give 2 as Vlan Number and add include name NEWVLAN. Click OK.
- Select the interface i.e. FastEthernet 0/1 and make it trunk
- Now go to config tab of router
 - select Vlan database & the number & name of the Vlan created
 - Go to C1 and type the following
- Router(Vlan) #exit

- Router # config 1
- Router(Config) # interface fast ethernet 0/0/1
- Router(Config-subif) # encapsulation dot1q 2
- Router(Config-subif) # ip address 192.168.2.1 255.255.255.255
- Router(Config-subif) # no shut
- Router(Config-subif) # exit

• Copy config from R to another VARP R

Ping output

Packet Tracer PC command line 1.0

PC > Ping 192.168.2.3

Pinging 192.168.2.3 with 32 bytes of data:

Request timed out

Reply from 192.168.2.3: bytes=32 time=0ms TTL=128

Reply from 192.168.2.3: bytes=32 time=0ms TTL=128

Reply from 192.168.2.3: bytes=32 time=0ms TTL=128

Ping statistics for 192.168.2.3:

Packets: Sent=4, Received=3, Lost=1 (25% loss),

Approximate round trip times in milliseconds:
Minimum=0ms, Maximum=5ms, Average=1ms

Observation

- We can have one device on one VLAN & another on another VLAN connected to the same switch. They will only hear other devices on their own VLAN, as if they were connected to two switches.
- The VLANs don't use IP address unless deal with subnets / VLAN type addresses.

TOPOLOGY & OUTPUT

Logical View of the network topology. The network consists of a central switch (Switch0) connected to four PCs (PC0, PC1, PC2, PC3) and a router (Router0). The router is connected to the switch via its Fa0/0 interface, and the switch is connected to the router via its Fa0/1 interface. The switch has four other interfaces (Fa0/2, Fa0/3, Fa0/4, Fa0/5) connected to the PCs.

Simulation Panel:

Vis.	Time(sec)	Last De	At Dev	Type	Info
	0.001	--	PC0	ICMP	
	0.002	PC0	Switch0	ICMP	
	0.002	Switch0	Rout...	ICMP	
	0.003	Switch0	Rout...	ICMP	
	0.003	Router0	Switch...	ICMP	

Reset Simulation ☒ Constant Delay Captured to: 0.003 s

Play Controls: Back Auto Capture / Play Capture / Forward

Event List Filters - Visible Events: ACL Filter, ARP, BGP, CDP, DHCP, DHCPv6, DNS, DTP, EIGRP, EIGRPv6, FTP, H.323, HSRP, HSRPv6, HTTP, HTTPS, ICMP, ICMPv6, IPsec, ISAKMP, LACP, NTP, NETFLOW, NTP, OSPF, OSPFv6, PAgP, POP3, RADIUS, RIP, RIPng, RTP, SCCP, SMTP, SNMP, SSH, STP, SYSLOG, TACACS, TCP, TFTP, Telnet, UDP, VTP

Edit Filters Show All/None

Scenario 0

Fire	Last Statu	Sourc	Destinatio	Type	Colo	Time(s)	Period	Num	Edit	Delete
	In Progr...	PC0	Router0	IC...		0.000	N	0	(ed...	(delete)
	In Progr...	PC0	PC3	IC...		0.000	N	1	(ed...	(delete)

Logical View of the network topology. The network consists of a central switch (Switch0) connected to four PCs (PC0, PC1, PC2, PC3) and a router (Router0). The router is connected to the switch via its Fa0/0 interface, and the switch is connected to the router via its Fa0/1 interface. The switch has four other interfaces (Fa0/2, Fa0/3, Fa0/4, Fa0/5) connected to the PCs.

PC0 Command Prompt:

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.20.3

Pinging 192.168.20.3 with 32 bytes of data:

Reply from 192.168.20.3: bytes=32 time=2ms TTL=127
Reply from 192.168.20.3: bytes=32 time=0ms TTL=127
Reply from 192.168.20.3: bytes=32 time=5ms TTL=127
Reply from 192.168.20.3: bytes=32 time=0ms TTL=127

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 5ms, Average = 1ms
PC>
```

Time: 00:01:19 Power Cycle Devices Fast Forward Time

Scenario 0

Fire	Last Statu	Sourc	Destinatio	Type	Colo	Time(s)	Period	Num	Edit	Delete
	Successful	PC0	Router0	IC...		0.000	N	0	(ed...	(delete)
	Successful	PC0	PC3	IC...		0.000	N	1	(ed...	(delete)