

CSE-322: Network Sessional

Basic Config:

Router:

- CPU
- RAM \Rightarrow Running-config
- ROM
- NV-RAM \Rightarrow Startup-Config (copy of running-config)
- Flash \Rightarrow IOS (Inter-networking OS)

*Switch has a port named "Console"

*Switch এর console port-এ console cable (blue color wire)

দিয়ে ওটা PC-এর RS-232 port-এ connect করব।

*Putty software দিয়ে switch-এর console access করব।

switch> \rightarrow user mode

switch# \rightarrow privilege mode (administrator)

switch(config)# line console 0
password cisco
login

} console password set

switch(config)# enable secret class } administrator mode
এবং password set

*telnet is used for remote administration

Switch# show run || (to show detailed running config)

service password-encryption (Run config - এ এখন
password গুলি encrypted
দেখাবে)

banner motd #write msg#

*Switch is a layer-2 device, তাই ip address থাকার কথা না,
ip address দিও হলে vlan 1 interface use করতে হবে।

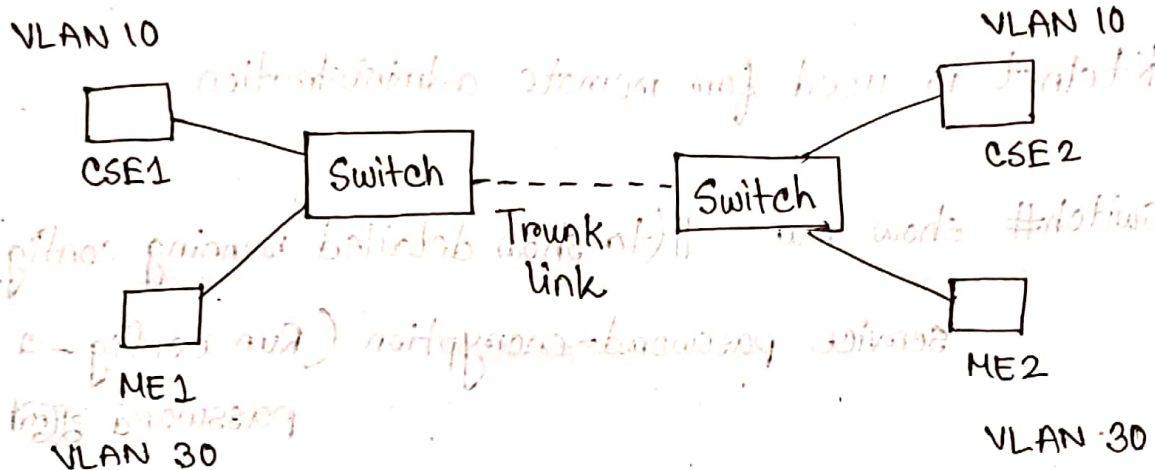
*ip না দিলে switch-এ telnet করা যাবে না।

*"no shutdown" command দিলে uplink থাকবে।

R1# show ip interface brief

|| to check status of inter-
face

Virtual LAN :



* Similar device connect ~~to~~ cable : crossover cable (black dashed)

VLAN 10 — F0/1
VLAN 30 — F0/2

Step 1:

VLAN creation :

VLAN 10

name CSE

VLAN 30

name ME

Step 2:

port assign :

int F0/1

switchport mode access

" access vlan 10

int F0/2

switchport mode access

" access vlan 30

Step-3:

trunk line config:

```
int g0/1
```

```
switchport mode trunk
```

```
" trunk native vlan 1
```

```
" " allowed vlan 10, 30, 1
```

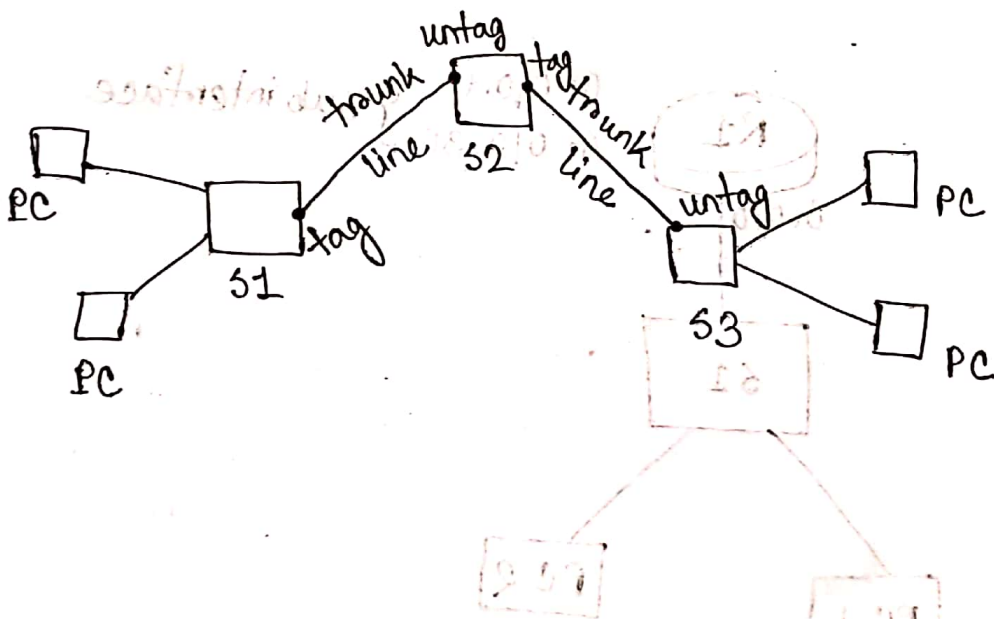
Management VLAN — switch, router

Data VLAN — CSE, ME

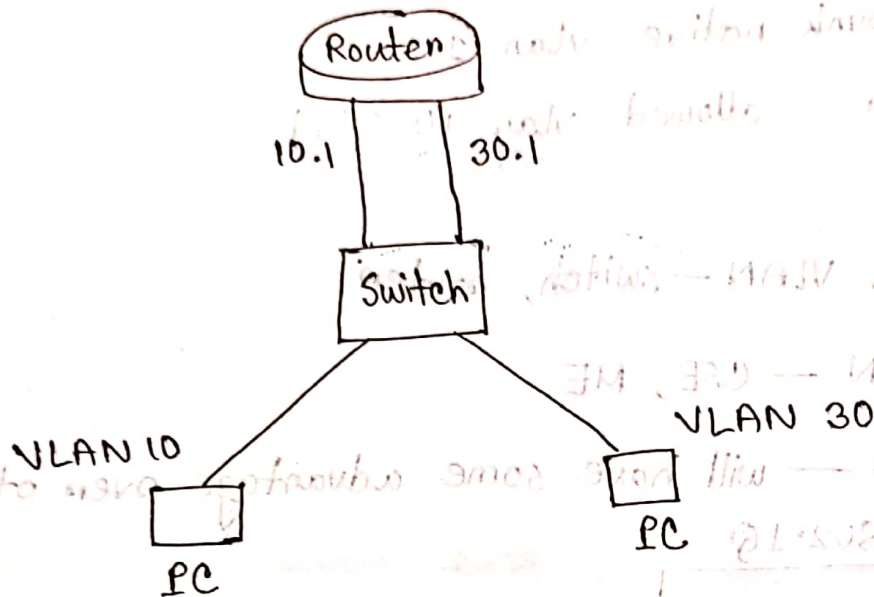
Native VLAN — will have some advantage over other VLANs.

IEEE 802.1Q

* VLAN tagging & untagging for non-native VLANs, packet will be comparatively slower.



* Router द्वारा inter VLAN Routing possible नहीं



* it is not scalable, because it requires one physical router interface per VLAN and router has limited no. of physical interface.

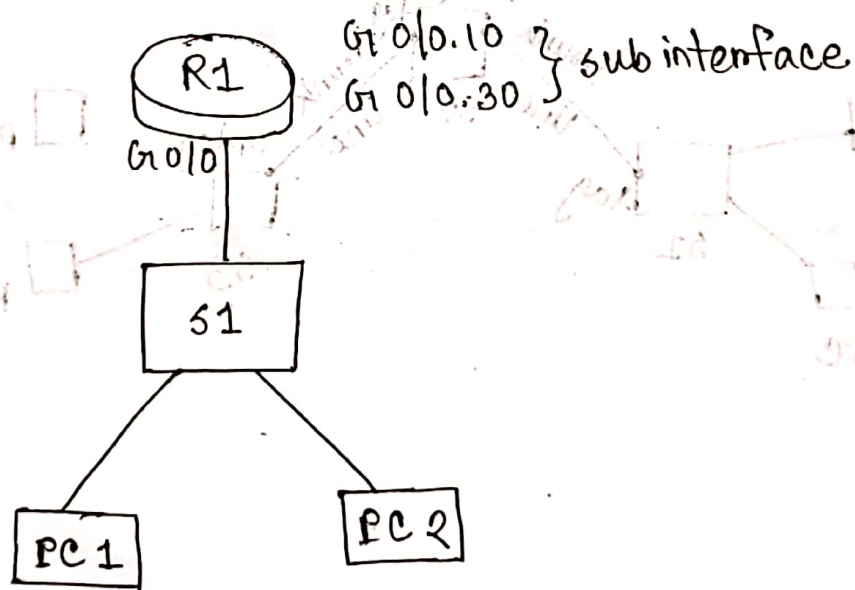


Fig: Router-On-a-Stick