MULTILAYER SWITCH

sw trunk encapsulation dot1q

sw mode trunk

MAIN SW

VTP DOMAIN ue.edu.ph

VTP PASSWORD warrior

VTP MODE SERVER

VTP VERSION 2

CLIENT SW

VTP DOMAIN ue.edu.ph

VTP PASSWORD warrior

VTP MODE client

VTP VERSION 2

TRANSPARENT SW

VTP DOMAIN ue.edu.ph

VTP PASSWORD warrior

VTP MODE TRANSPARENT

VTP VERSION 2

int gig0/0.10

encap dot1q 10

ip add 192.168.10.1 255.255.255.0

int gig0/0.20

encap dot1q 20

ip add 192.168.20.1 255.255.255.0

int gig0/0.30

encap dot1q 30

ip add 192.168.30.1 255.255.255.0

int gig0/0.40

encap dot1q 40

ip add 192.168.40.1 255.255.255.0

ip dhcp pool VLAN10

network 192.168.10.0 255.255.255.0

default-router 192.168.10.1

ip dhcp pool VLAN20

network 192.168.20.0 255.255.255.0

default-router 192.168.20.1

ip dhcp pool VLAN30

network 192.168.30.0 255.255.255.0

default-router 192.168.30.1

ip dhcp pool VLAN40

network 192.168.40.0 255.255.255.0

default-router 192.168.40.1

Int range f0/3-5

sw mode access

PC

sw access vlan 10

LAPTOP

sw access vlan 20

PRINTER

sw access vlan 30

SERVER

sw access vlan 40

1st step

\* Identity trunk ports its either switch-switch or

switch - router just put notes on every switches)

\* Also put notes on end devices like pe and,

laptop

\* trunk all identified ports

code

int f0/1

switchport mode trunk or sw mode trunk

Verify

switch# sh int trunk

2nd step

\* consider switches as client if they have

access/connection on end devices

\* make the switch as main server if it has a lot of

switches connected to it

Code in main server (can modify vans)

VTP domain ve eduph

VTP password pass

VTP mode server

VTP ver 2

Code in client server

VTP domain ue.edu.ph

VTP password pass

VTP mode client

Verify

config # do show vtp status

Code for configuring Vlan

VLAN 1O

Name student

Vlan 20

name faculty and so on...

ex

Verify

config # do show VLAN brief

3rd step

\* configure DHCP by creating sub interface

Code in router

int gig o/o

no sh

ex

Given ip 192168. V. 0 /24

int gig 0/0. 10

encap dotlQ 10

ip add 192.68101 255.255.255.0

\* exclude addresses

Code

ip DHCP excluded-address 192.168.101 192.16

681010

ip DHCP pool VLAN1O

net 192.16810.0 255. 255.255.0

Default-router 192.168.10.1

4th step

\*Configure access ports or the end devices

\* configure those switches with connected

devices on it

Code on each devices

int range f0/2 -4

switchport mode access

ex

int f0/2

switchport access vlan 10

5th step

\* configure native VLAN

Code on each switches

switchport trunk native LAN 111

(Multi layer switch) "sw trunk encapsulation dot1q"

Every after int f switch ->>> "sw mode trunk"

(M) MAIN SW

VTP DOMAIN ue.edu.ph

VTP PASSWORD warrior

VTP MODE SERVER

VTP VERSION 2

(C) CLIENT SW

VTP DOMAIN ue.edu.ph

VTP PASSWORD warrior

VTP MODE client

VTP VERSION 2

(T) TRANSPARENT SW

VTP DOMAIN ue.edu.ph

VTP PASSWORD warrior

VTP MODE TRANSPARENT

VTP VERSION 2

(S) MULTILAYER SWITCH 0 TOP

vlan 10

name PC

VLAN 20

NAME LAPTOP

VLAN 30

NAME PRINTER

VLAN 40

NAME SERVER

For normal switch

int range f0/3-5 --> "sw mode access"

(ROUTER)

int gig0/0.10

encap dot1q 10

ip add 192.168.10.1 255.255.255.0

int gig0/0.20

encap dot1q 20

ip add 192.168.20.1 255.255.255.0

int gig0/0.30

encap dot1q 30

ip add 192.168.30.1 255.255.255.0

int gig0/0.40

encap dot1q 40

ip add 192.168.40.1 255.255.255.0

ip dhcp pool VLAN10

network 192.168.10.0 255.255.255.0

default-router 192.168.10.1

ip dhcp pool VLAN20

network 192.168.20.0 255.255.255.0

default-router 192.168.20.1

ip dhcp pool VLAN30

network 192.168.30.0 255.255.255.0

default-router 192.168.30.1

ip dhcp pool VLAN40

network 192.168.40.0 255.255.255.0

default-router 192.168.40.1

NORMAL SWITCH

INT F0/2

SWITCHPORT ACCESS VLAN40

EX

INT F0/2

SWITCHPORT ACCESS VLAN30

EX

INT F0/4

SWITCHPORT ACCESS VLAN20

EX

INT F0/4

SWITCHPORT ACCESS VLAN10

EX