Intervlan routing:

inside of switch

en

conf t

vlan 12

name IT

exit

vlan 45

exit

vlan 20

exit

int range fa0/1-2

switchport access vlan 12

"Do these for other vlan and connection accordingly"

(config)int gig0/1

switchport mode trunk

wr

Inside of router:()

en

conf t

int gig0/0.12

encapsulation dot1q 12

ip address 192.168.10.1 255.255.255.0

exit

"Do these steps for other ip address sections"

go inside of computers add ip address subnet and default.

Switch router port to on

Static routing configuration:

Step1: add ip address subnet and default to computers

Step2:Routerleri birbirine tanit

routerin icinde

ip route 10.0.10.0 255.255.255.0 10.0.0.2

ip router 192.168.38.10 255.255.255.0 10.0.0.2

"Do these to all routers accordingly"

DHCP:

inside of router:

en conf t

int gig0/0

ip address 192.168.0.1 255.255.255.0

no shutdown

exit

ip dhcp pool ABC-POOL

network 192.168.0.0 255.255.255.0

default-router 192.168.0.254

dns-server 192.168.0.1

Optional => ip dhcp excluded address 192.168.0.2 192.168.05

exit

wr

OSPF:

Step1:Turn of routers add needed port to routers then swithc on

Step2: give ip address subnet and default gateway to computers

Step3: configure routers interfaces accordingly. Swicth ports on

Inside of routers

router ospf 100

router-id 1.1.1.1 (Another router write 2.2.2.2)

network 192.168.10.2 0.0.0.255(wild card subtract from) area 0

"do these for all network"

do these step for every router

VTP:

#server switch

Switch>en

Switch#conf t

Switch(config)#vlan 10

Switch(config-vlan)#name vlan10

Switch(config- vlan)#exit

Switch(config)#vlan 20

Switch(config-vlan)#name vlan20

Switch(config- vlan)#exit

Switch(config)#vtp mode server

Device mode already VTP SERVER.

Switch(config)#vtp domain khazar.org

Changing VTP domain name from NULL to khazar.org

Switch(config)#vtp password cisco

Setting device VLAN database password to cisco

# create trunk mode between all switches

Switch(config)#int range fastEthernet 0/1-3

Switch(config-if-range)#switchport mode trunk

Switch#show vlan

#client switch

Switch>en

Switch#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#vtp mode client

Setting device to VTP CLIENT mode.

Switch(config)#vtp domain khazar.org

Changing VTP domain name from NULL to khazar.org

Switch(config)#vtp password cisco

Setting device VLAN database password to cisco

Switch(config)#exit

Switch#show vlan

Switch(config)#int fastEthernet 0/2

Switch(config-if)#switchport access vlan 10

Switch(config-if)#switchport voice vlan 20

Switch(config-if)#exit

# TRANSPARENT switch

Switch>en

Switch#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#vtp mode transparent

Setting device to VTP TRANSPARENT mode.

Switch(config)#vtp domain khazar.org

Domain name already set to khazar.org.

Switch(config)#vtp password cisco

Setting device VLAN database password to cisco

Switch(config)#int range fastEthernet 0/1-2

Switch(config-if-range)#switchport mode trunk