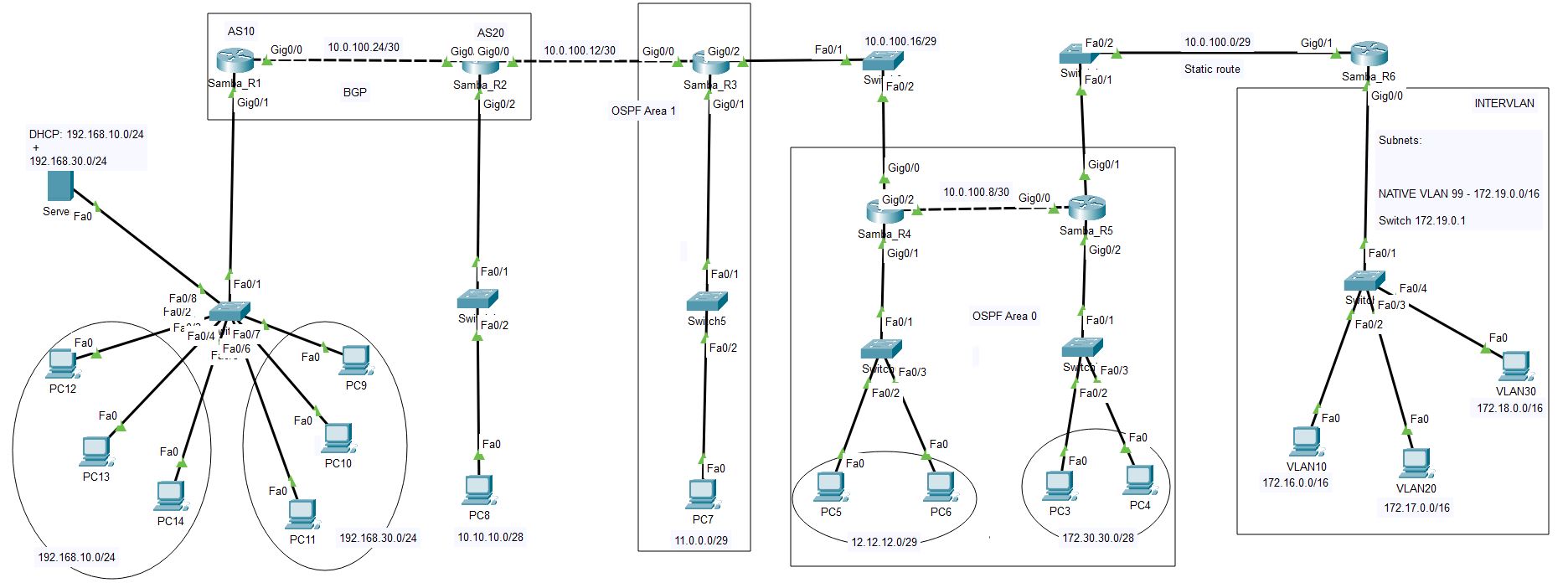
RAPPORT TP

PAPA SAMBA THIAM & CYLIA HADDOUCHE



**Config de tous les routeurs:**

Samba\_R1#sho run

Current configuration : 1120 bytes

!

version 15.1

hostname Samba\_R1

!

ip cef

no ipv6 cef

license udi pid CISCO2911/K9 sn FTX152475QO-

!

spanning-tree mode pvst

!

interface GigabitEthernet0/0

ip address 10.0.100.26 255.255.255.252

duplex auto

speed auto

!

interface GigabitEthernet0/1

no ip address

duplex auto

speed auto

!

interface GigabitEthernet0/1.10

encapsulation dot1Q 10

ip address 192.168.10.1 255.255.255.0

ip helper-address 192.168.30.3

!

interface GigabitEthernet0/1.30

encapsulation dot1Q 30

ip address 192.168.30.1 255.255.255.0

ip helper-address 192.168.30.3

!

interface GigabitEthernet0/2

no ip address

duplex auto

speed auto

shutdown

!

interface Vlan1

no ip address

shutdown

!

router bgp 10

bgp router-id 1.1.1.1

bgp log-neighbor-changes

no synchronization

neighbor 10.0.100.25 remote-as 20

network 192.168.30.0

network 192.168.10.0

!

ip classless

ip route 172.16.0.0 255.252.0.0 10.0.100.25

!

ip flow-export version 9

!

line con 0

!

line aux 0

!

line vty 0 4

login

!

end

Samba\_R1

Samba\_R2#sho run

!

version 15.1

!

hostname Samba\_R2

!

ip cef

no ipv6 cef

!

license udi pid CISCO2911/K9 sn FTX1524E546-

!

spanning-tree mode pvst

!

interface GigabitEthernet0/0

ip address 10.0.100.14 255.255.255.252

duplex auto

speed auto

!

interface GigabitEthernet0/1

ip address 10.0.100.25 255.255.255.252

duplex auto

speed auto

!

interface GigabitEthernet0/2

ip address 10.10.10.1 255.255.255.240

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router ospf 1

log-adjacency-changes

redistribute bgp 20 subnets

network 10.0.100.12 0.0.0.3 area 1

network 10.10.10.0 0.0.0.15 area 1

!

router bgp 20

bgp router-id 2.2.2.2

bgp log-neighbor-changes

no synchronization

neighbor 10.0.100.26 remote-as 10

network 10.10.10.0 mask 255.255.255.240

redistribute ospf 1

!

ip classless

!

ip flow-export version 9

!

!

line con 0

!

line aux 0

!

line vty 0 4

login

!

!

!

end

Samba\_R2

Samba\_R3#sho run

Current configuration : 879 bytes

!

version 15.1

no service password-encryption

!

hostname Samba\_R3

!

ip cef

no ipv6 cef

!

license udi pid CISCO2911/K9 sn FTX1524PB8S-

!

spanning-tree mode pvst

!

interface GigabitEthernet0/0

ip address 10.0.100.13 255.255.255.252

duplex auto

speed auto

!

interface GigabitEthernet0/1

ip address 11.0.0.1 255.255.255.248

duplex auto

speed auto

!

interface GigabitEthernet0/2

ip address 10.0.100.18 255.255.255.248

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router ospf 1

log-adjacency-changes

network 10.0.100.16 0.0.0.7 area 0

network 10.0.100.12 0.0.0.3 area 1

network 11.0.0.0 0.0.0.7 area 1

!

ip classless

!

ip flow-export version 9

!

!

!

!

!

line con 0

!

line aux 0

!

line vty 0 4

login

!

!

!

end

Samba\_R3

Samba\_R4#sho run

Current configuration : 882 bytes

!

version 15.1

no service password-encryption

!

hostname Samba\_R4

!

ip cef

no ipv6 cef

!

!

!

!

license udi pid CISCO2911/K9 sn FTX15246196-

!

spanning-tree mode pvst

!

interface GigabitEthernet0/0

ip address 10.0.100.17 255.255.255.248

duplex auto

speed auto

!

interface GigabitEthernet0/1

ip address 12.12.12.1 255.255.255.248

duplex auto

speed auto

!

interface GigabitEthernet0/2

ip address 10.0.100.10 255.255.255.252

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router ospf 1

log-adjacency-changes

network 10.0.100.8 0.0.0.3 area 0

network 12.12.12.0 0.0.0.7 area 0

network 10.0.100.16 0.0.0.7 area 0

!

ip classless

!

ip flow-export version 9

!

line con 0

!

line aux 0

!

line vty 0 4

login

!

!

!

end

Samba\_R4

Samba\_R5#show run

Building configuration...

!

version 15.1

no service password-encryption

!

hostname Samba\_R5

!

ip cef

no ipv6 cef

!

license udi pid CISCO2911/K9 sn FTX15245RWD-

!

spanning-tree mode pvst

!

interface GigabitEthernet0/0

ip address 10.0.100.9 255.255.255.252

duplex auto

speed auto

!

interface GigabitEthernet0/1

ip address 10.0.100.2 255.255.255.248

duplex auto

speed auto

!

interface GigabitEthernet0/2

ip address 172.30.30.1 255.255.255.240

duplex auto

speed auto

!

interface Vlan1

no ip address

shutdown

!

router ospf 1

log-adjacency-changes

redistribute static subnets

network 10.0.100.8 0.0.0.3 area 0

network 172.30.30.0 0.0.0.15 area 0

network 10.0.100.0 0.0.0.7 area 0

!

ip classless

ip route 172.16.0.0 255.240.0.0 10.0.100.1

!

ip flow-export version 9

!

line con 0

!

line aux 0

!

line vty 0 4

login

!

!

!

end

Samba\_R5

Samba\_R6#sho run

Current configuration : 1121 bytes

!

version 15.1

no service password-encryption

!

hostname Samba\_R6

!

ip cef

no ipv6 cef

!

license udi pid CISCO2911/K9 sn FTX15245QFG-

!

spanning-tree mode pvst

!

interface GigabitEthernet0/0

no ip address

duplex auto

speed auto

!

interface GigabitEthernet0/0.10

encapsulation dot1Q 10

ip address 172.16.0.1 255.255.0.0

!

interface GigabitEthernet0/0.20

encapsulation dot1Q 20

ip address 172.17.0.1 255.255.0.0

!

interface GigabitEthernet0/0.30

encapsulation dot1Q 30

ip address 172.18.0.1 255.255.0.0

!

interface GigabitEthernet0/0.99

encapsulation dot1Q 99 native

ip address 172.19.0.1 255.255.0.0

!

interface GigabitEthernet0/1

ip address 10.0.100.1 255.255.255.248

duplex auto

speed auto

!

interface GigabitEthernet0/2

no ip address

duplex auto

speed auto

shutdown

!

interface Vlan1

no ip address

shutdown

!

ip classless

ip route 0.0.0.0 0.0.0.0 GigabitEthernet0/1

!

ip flow-export version 9

!

!line con 0

!

line aux 0

!

line vty 0 4

login

!

end

Samba\_R6

**Config de tous les switch**

A screenshot of a computer

Description automatically generated

Switch0

As part of the requirements of the exercise, no interface on the switch was left connected to VLAN 1. A new native VLAN was created, which is 99. And all ports were added to it.

A screenshot of a computer

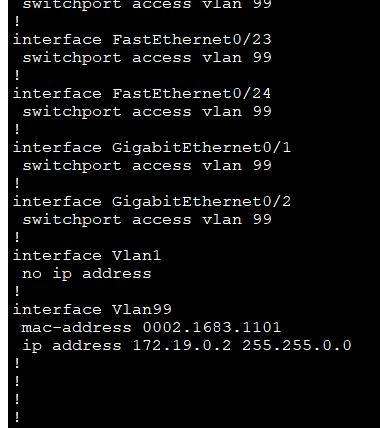
Description automatically generated

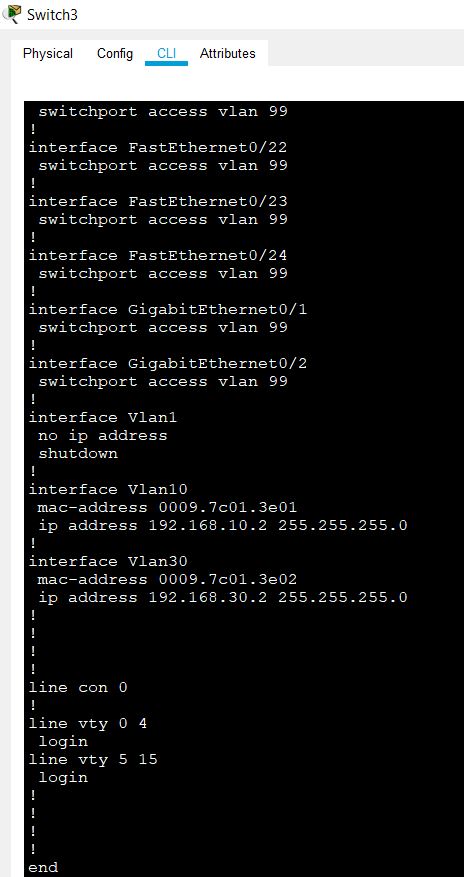
Switch1

Also, an IP address was assigned to each of the switches as seen in the figures

A screenshot of a computer

Description automatically generated





Switch3

A screenshot of a computer program

Description automatically generated

Switch4

A screenshot of a computer program

Description automatically generated

Switch5

A screenshot of a computer program

Description automatically generated

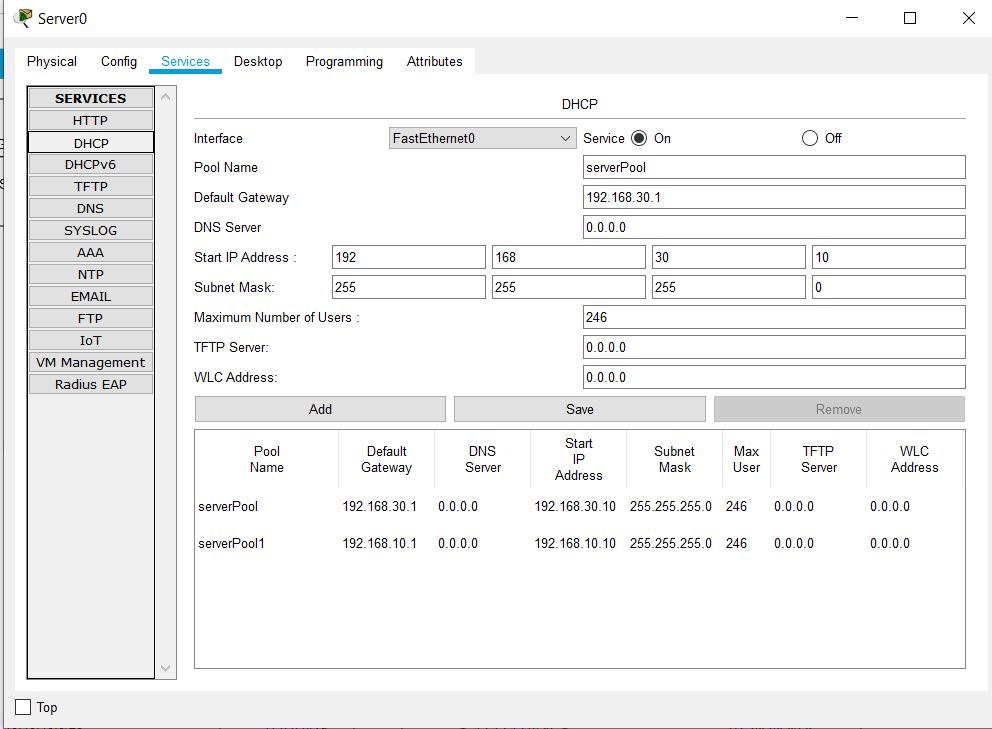
Switch6

A screenshot of a computer

Description automatically generated

Switch7

**DHCP Server**

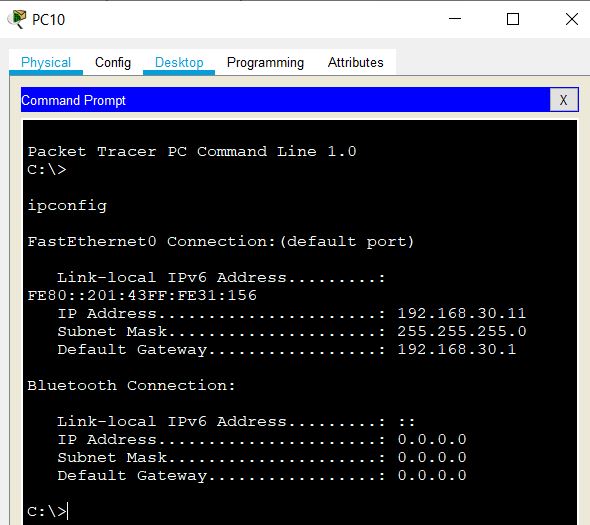


Using Ip helper address command on the router interfaces, client PCs were able to acquire IP addresses.

A screenshot of a computer

Description automatically generated

PC10



A computer screen shot of a computer

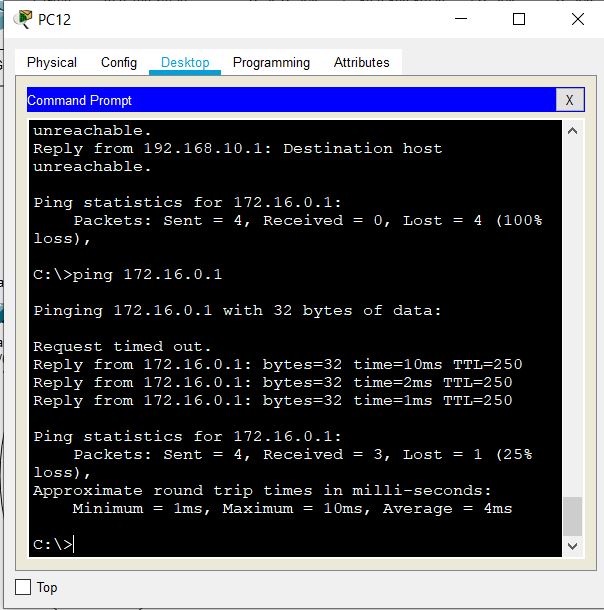
Description automatically generated

PC12

A computer screen shot of a computer

Description automatically generated

**Ping Test**



PC12 pings VLAN10

A screenshot of a computer program

Description automatically generated

PC10 pings PC4