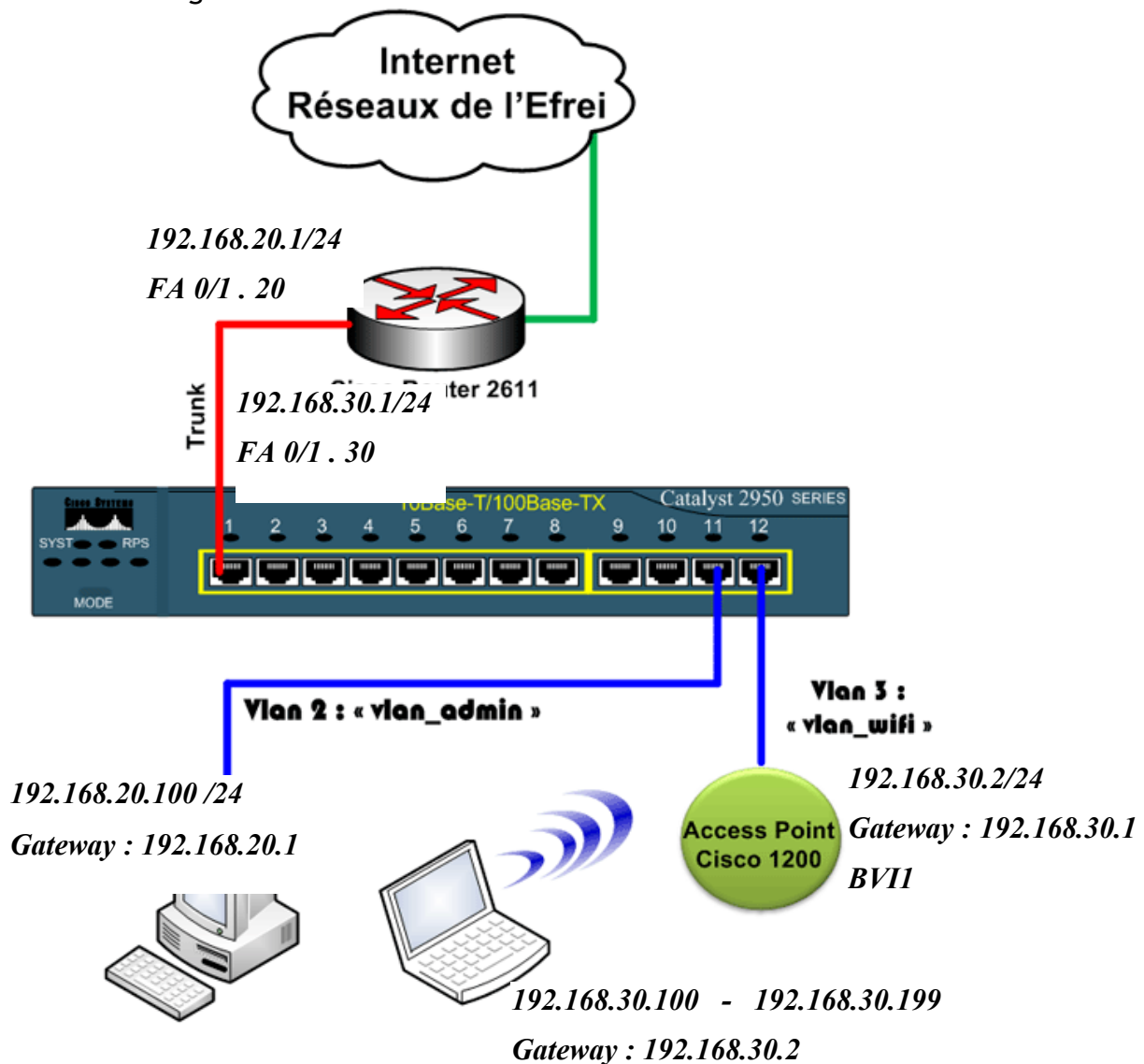


Etape 1

Plan d'adressage :



Les questions ou les précisions à apporter à ce schéma?

Les VLAN doivent pouvoir communiquer entre-elles (par le routeur).

Le BVI1 est une « Basic Virtual Interface »

Les masques sont tous à 255.255.255.0

Validé par le formateur

Etape 2

Reset de l'Aironet (Cf annexe).

ap#show ip interface brief

Interface	IP-Address	OK?	Method	Status	Protocol
BVI1	192.168.30.2	YES	manual	up	up
Dot11Radio0	unassigned	YES	unset	administratively down	down
FastEthernet0	192.168.30.3	YES	manual	up	up

Configuration de l'Aironet :

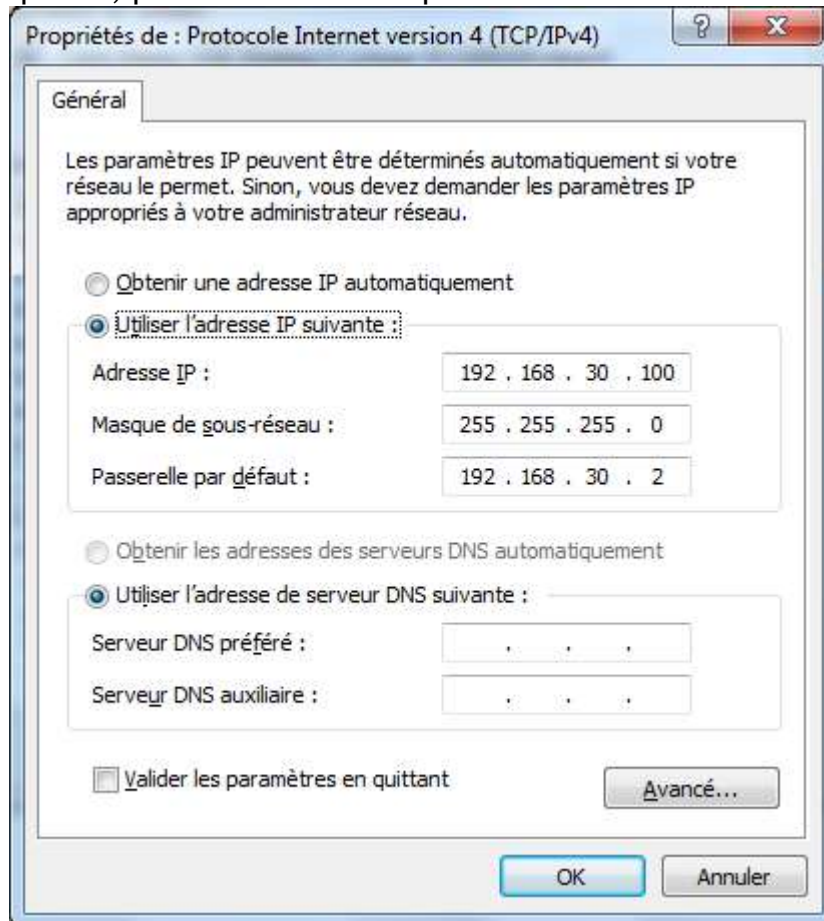
```
ap#show dot11 associations
```

802.11 Client Stations on Dot11Radio0:

SSID [SiTo] :

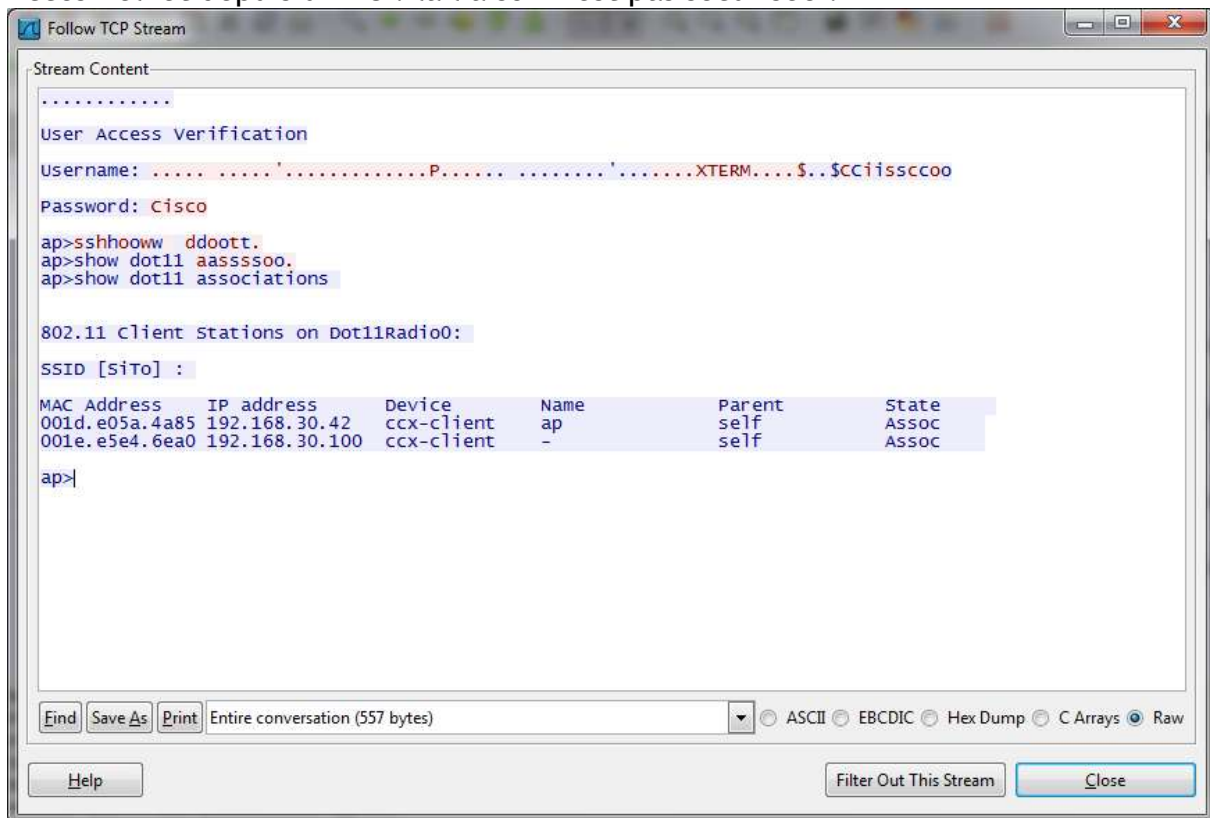
MAC Address	IP address	Device	Name	Parent	State
001d.e05a.4a85	169.254.110.252	ccx-client	ap	self	Assoc

Configurer les postes, puis vérifier l'interopération PA.



Etape 3

Accès Telnet depuis un PC : la liaison n'est pas sécurisée :



Configuration du PA pour SSH (putty) :

```
ap(config)#ip domain name SiTo
```

```
ap(config)#crypto key generate rsa
```

The name for the keys will be: ap.SiTo

Choose the size of the key modulus in the range of 360 to 2048 for your General Purpose Keys. Choosing a key modulus greater than 512 may take a few minutes.

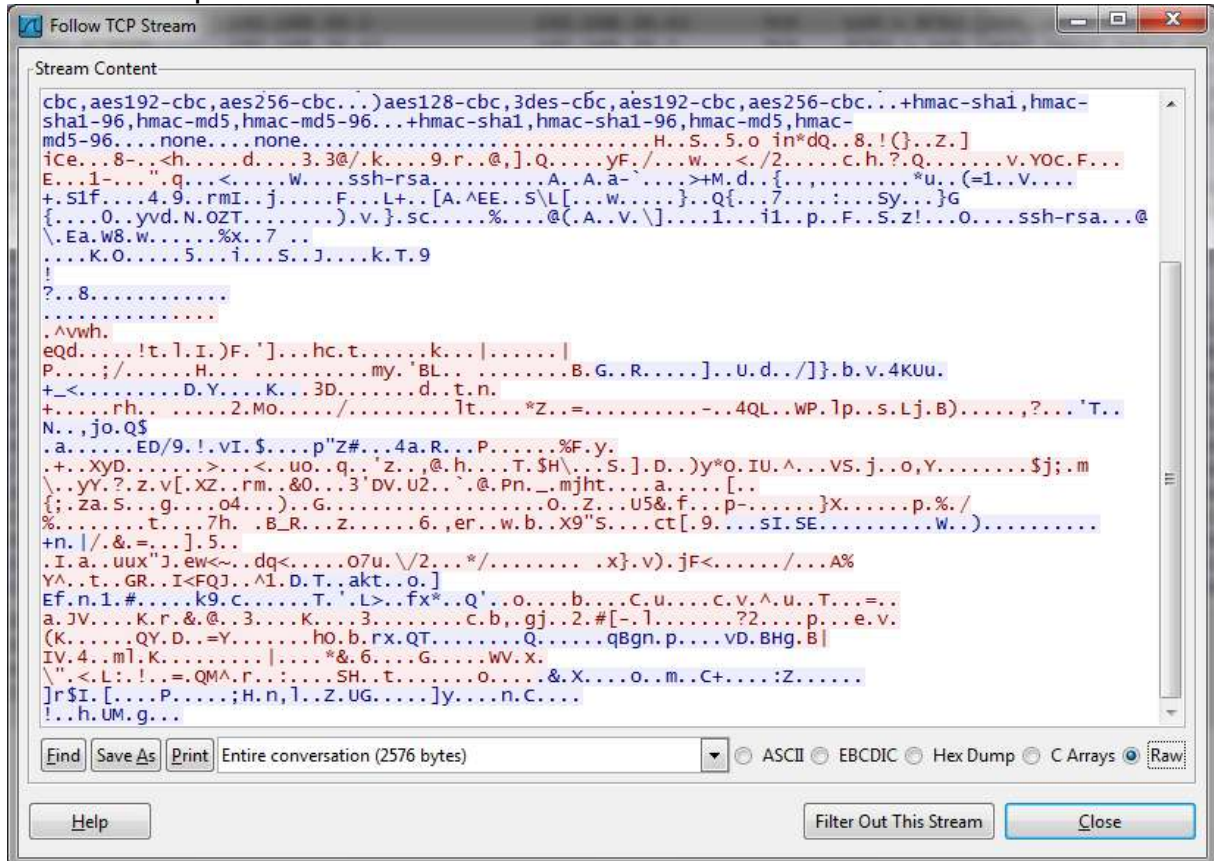
```
How many bits in the modulus [512]: 512
```

```
% Generating 512 bit RSA keys ...[OK]
```

```
ap(config)#
```

```
*Mar 1 00:46:15.034: %SSH-5-ENABLED: SSH 1.99 has been enabled
```

Accès SSH depuis un PC : la liaison est maintenant sécurisée :



Etape 4

Configuration du DHCP sur le PA :

```
ap#show running-config
```

```
Building configuration...
```

```
Current configuration : 1399 bytes
```

```
!
```

```
version 12.3
```

```
no service pad
```

```
service timestamps debug datetime msec
```

```
service timestamps log datetime msec
```

```
service password-encryption
```

```
!
```

```
hostname ap
```

```
!
```

```
enable secret 5 $1$dPs8$tWOZWYzRTnqBy3qwR93br1
```

```
!
```

```
ip subnet-zero
```

```
no ip domain lookup
```

```
ip domain name SiTo
```

```
ip dhcp excluded-address 192.168.30.1 192.168.30.99
```

```
!
```

```
ip dhcp pool LE30
```

```
network 192.168.30.0 255.255.255.0
```

```
default-router 192.168.30.1
```

!

Etape 5

Configuration du switch

```
Switch(vlan)#vlan 2 name vlan_admin
```

```
VLAN 2 added:
```

```
  Name: vlan_admin
```

```
Switch(vlan)#vlan 3 name vlan_wifi
```

```
VLAN 3 added:
```

```
  Name: vlan_wifi
```

```
Switch(vlan)#exit
```

```
APPLY completed.
```

```
Exiting....
```

Etape 6

Configuration router

```
Router(config)#interface Ethernet 0/1.20
```

```
Router(config-subif)#encapsulation dot1Q 2
```

```
Router(config-subif)#ip address 192.168.20.1 255.255.255.0
```

```
Router(config-subif)#exit
```

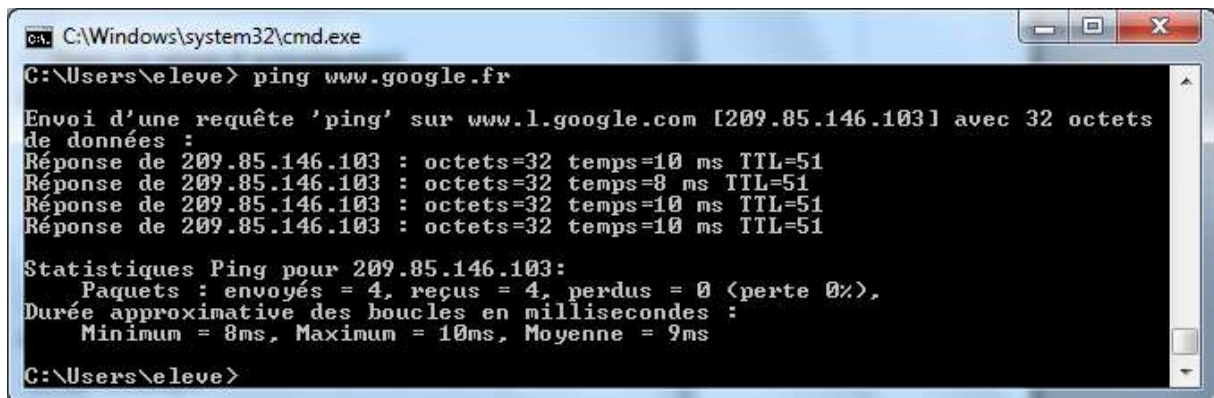
```
Router(config)#interface Ethernet 0/1.30
```

```
Router(config-subif)#encapsulation dot1Q 3
```

```
Router(config-subif)#ip address 192.168.30.1 255.255.255.0
```

```
Router(config-subif)#exit
```

Etape 7



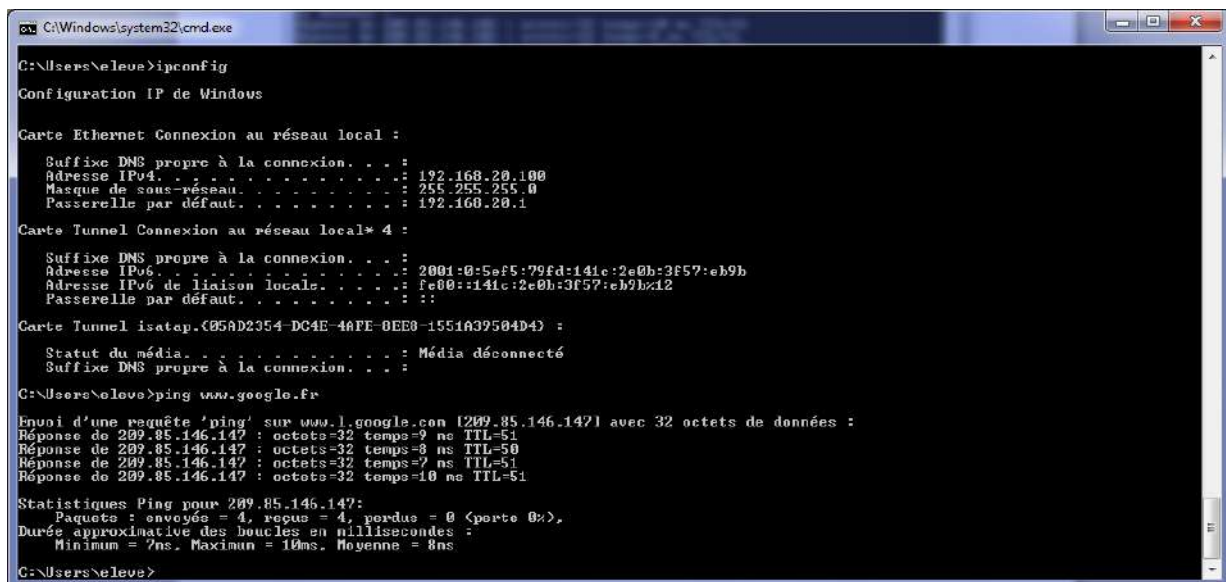
```
C:\Windows\system32\cmd.exe
C:\Users\eleve> ping www.google.fr

Envoi d'une requête 'ping' sur www.l.google.com [209.85.146.103] avec 32 octets de données :
Réponse de 209.85.146.103 : octets=32 temps=10 ms TTL=51
Réponse de 209.85.146.103 : octets=32 temps=8 ms TTL=51
Réponse de 209.85.146.103 : octets=32 temps=10 ms TTL=51
Réponse de 209.85.146.103 : octets=32 temps=10 ms TTL=51

Statistiques Ping pour 209.85.146.103:
    Paquets : envoyés = 4, reçus = 4, perdus = 0 (perte 0%),
Durée approximative des boucles en millisecondes :
    Minimum = 8ms, Maximum = 10ms, Moyenne = 9ms

C:\Users\eleve>
```

Test verification accès Internet



```
C:\Windows\system32\cmd.exe
C:\Users\eleve> ipconfig

Configuration IP de Windows

Carte Ethernet Connexion au réseau local :
    Suffixe DNS propre à la connexion. . . :
    Adresse IPv4. . . . . : 192.168.20.100
    Masque de sous-réseau. . . . . : 255.255.255.0
    Passerelle par défaut. . . . . : 192.168.20.1

Carte Tunnel Connexion au réseau local* 4 :
    Suffixe DNS propre à la connexion. . . :
    Adresse IPv6. . . . . : 2001:0:5ef5:79fd:141c:2e0b:3f57:eb9b
    Adresse IPv6 de liaison locale. . . : fe80::141c:2e0b:3f57:eb9b%12
    Passerelle par défaut. . . . . :

Carte Tunnel isatap.{05AD2354-DC4E-4AFE-0EE8-1551A39504D4} :
    Statut du média. . . . . : Média déconnecté
    Suffixe DNS propre à la connexion. . . :

C:\Users\eleve> ping www.google.fr

Envoi d'une requête 'ping' sur www.l.google.com [209.85.146.147] avec 32 octets de données :
Réponse de 209.85.146.147 : octets=32 temps=9 ms TTL=51
Réponse de 209.85.146.147 : octets=32 temps=8 ms TTL=50
Réponse de 209.85.146.147 : octets=32 temps=7 ms TTL=51
Réponse de 209.85.146.147 : octets=32 temps=10 ms TTL=51

Statistiques Ping pour 209.85.146.147:
    Paquets : envoyés = 4, reçus = 4, perdus = 0 (perte 0%),
Durée approximative des boucles en millisecondes :
    Minimum = 7ms, Maximum = 10ms, Moyenne = 8ms

C:\Users\eleve>
```

Show run du Routeur

```
Router#show run
Building configuration...

Current configuration : 863 bytes
!
version 12.2
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname Router
!
!
ip subnet-zero
!
!
!
!
!
!
interface Ethernet0/0
 ip address dhcp
 ip nat outside
 half-duplex
!
interface Serial0/0
 no ip address
 shutdown
!
interface Ethernet0/1
 no ip address
 half-duplex
!
interface Ethernet0/1.10
 ip nat inside
!
interface Ethernet0/1.20
 encapsulation dot1Q 2
 ip address 192.168.20.1 255.255.255.0
 ip nat inside
!
interface Ethernet0/1.30
 encapsulation dot1Q 3
 ip address 192.168.30.1 255.255.255.0
 ip nat inside
!
interface Serial0/1
 no ip address
--More--
```

```
03:19:15: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/0, changed
s shutdownp
!
ip nat inside source list 10 interface Ethernet0/0 overload
ip classless
ip route 0.0.0.0 0.0.0.0 192.168.8.1
no ip http server
ip pim bidir-enable
!
access-list 10 permit 192.168.0.0 0.0.255.255
!
line con 0
line aux 0
line vty 0 4
!
end

Router#sh run
Building configuration...

Current configuration : 863 bytes
!
version 12.2
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname Router
!
!
ip subnet-zero
!
!
!
!
!
!
interface Ethernet0/0
 ip address dhcp
 ip nat outside
 half-duplex
!
interface Serial0/0
 no ip address
 shutdown
!
interface Ethernet0/1
 no ip address
 half-duplex
!
```

```
interface Ethernet0/1.10
 ip nat inside
 !
interface Ethernet0/1.20
 encapsulation dot1Q 2
 ip address 192.168.20.1 255.255.255.0
 ip nat inside
 !
interface Ethernet0/1.30
 encapsulation dot1Q 3
 ip address 192.168.30.1 255.255.255.0
 ip nat inside
 !
interface Serial0/1
 no ip address
 shutdown
 !
ip nat inside source list 10 interface Ethernet0/0 overload
ip classless
ip route 0.0.0.0 0.0.0.0 192.168.8.1
no ip http server
ip pim bidir-enable
 !
access-list 10 permit 192.168.0.0 0.0.255.255
 !
line con 0
line aux 0
line vty 0 4
 !
end
```

Show run du Switch

```
Switch#sh run
Building configuration...

Current configuration : 1702 bytes
!
version 12.1
no service pad
service timestamps debug uptime
service timestamps log uptime
no service password-encryption
!
hostname Switch
!
!
ip subnet-zero
!
spanning-tree extend system-id
!
!
interface FastEthernet0/1
 switchport mode trunk
 no ip address
!
interface FastEthernet0/2
 no ip address
!
interface FastEthernet0/3
 no ip address
!
interface FastEthernet0/4
 no ip address
!
interface FastEthernet0/5
 no ip address
!
interface FastEthernet0/6
 no ip address
!
interface FastEthernet0/7
 no ip address
!
interface FastEthernet0/8
 no ip address
!
interface FastEthernet0/9
 no ip address
!
interface FastEthernet0/10
 no ip address
```

```
!  
interface FastEthernet0/11  
  switchport access vlan 2  
  switchport mode access  
  no ip address  
!  
interface FastEthernet0/12  
  switchport access vlan 3  
  switchport mode access  
  no ip address  
!  
interface FastEthernet0/13  
  no ip address  
!  
interface FastEthernet0/14  
  no ip address  
!  
interface FastEthernet0/15  
  no ip address  
!  
interface FastEthernet0/16  
  no ip address  
!  
interface FastEthernet0/17  
  no ip address  
!  
interface FastEthernet0/18  
  no ip address  
!  
interface FastEthernet0/19  
  no ip address  
!  
interface FastEthernet0/20  
  no ip address  
!  
interface FastEthernet0/21  
  no ip address  
!  
interface FastEthernet0/22  
  no ip address  
!  
interface FastEthernet0/23  
  no ip address  
!  
interface FastEthernet0/24  
  switchport mode trunk  
  no ip address  
!  
interface Vlan1  
  no ip address
```

```
no ip route-cache
shutdown
!
interface Vlan2
ip address 192.168.20.1 255.255.255.0
no ip route-cache
shutdown
!
interface Vlan3
ip address 192.168.30.1 255.255.255.0
no ip route-cache
shutdown
!
ip http server
!
!
line con 0
line vty 0 4
login
line vty 5 15
login
!
end
```

Etape 8

Sauvegarde des configuration router, switch et PA en utilisant le serveur TFTP servi

Etape 9

Après reset configurer l'aironet en mode authentication WAP, SSID votre nom .

Etape 10