

### **SSH CTP :**

```
(config)#username admin secret cisco
(config)#crypto key generate rsa
(config)#ip ssh version 2
(config)#line vty 0 15
(config-line)#login local
(config-line)#transport input ssh
(config-line)#exec-timeout 5 20
```

**show flash delete vlan.dat multiple-fs reload no**

**username admin privilege 15 password progtr00**

**show vlan brief**

**no switchport access vlan**

**si pb voir le tp config vlan and traking**

### **Routeur:**

Building configuration...

Current configuration : 3314 bytes

!

! Last configuration change at 13:55:19 UTC Mon Jan 9 2023

!

version 15.8

service timestamps debug datetime msec

service timestamps log datetime msec

no service password-encryption

!

hostname Router

!

boot-start-marker

boot-end-marker

!

!

!

no aaa new-model

!

!

!

!

!

!

!

!

ip dhcp excluded-address 192.27.1.1 192.27.1.20

ip dhcp excluded-address 192.27.2.1 192.27.2.20

ip dhcp excluded-address 192.27.3.1 192.27.3.20

ip dhcp excluded-address 192.27.4.1 192.27.4.20

!

ip dhcp pool vlan10

network 192.27.1.0 255.255.255.0

default-router 192.27.1.1

dns-server 10.0.0.1

```
!  
ip dhcp pool vlan20  
network 192.27.2.0 255.255.255.0  
default-router 192.27.2.1  
dns-server 10.0.0.1  
!  
ip dhcp pool vlan30  
network 192.27.3.0 255.255.255.0  
default-router 192.27.3.1  
dns-server 10.0.0.1  
!  
ip dhcp pool vlan40  
network 192.27.4.0 255.255.255.0  
default-router 192.27.4.1  
dns-server 10.0.0.1  
!  
!  
!  
ip cef  
no ipv6 cef  
multilink bundle-name authenticated  
!  
!  
!  
license udi pid C927-4P sn FGL2348L2EW  
!  
!  
!  
redundancy  
!  
!  
controller VDSL 0  
!  
!  
!  
!  
!  
interface ATM0  
no ip address  
shutdown  
no atm ilmi-keepalive  
!  
interface Ethernet0  
no ip address  
shutdown  
!  
interface GigabitEthernet0  
switchport mode trunk  
no ip address  
!  
interface GigabitEthernet1  
no ip address  
!  
interface GigabitEthernet2  
no ip address
```

```
!  
interface GigabitEthernet3  
no ip address  
!  
interface GigabitEthernet4  
ip address 10.2.1.1 255.240.0.0  
ip nat outside  
ip virtual-reassembly in  
duplex auto  
speed auto  
!  
interface Vlan1  
no ip address  
!  
interface Vlan10  
ip address 192.27.1.1 255.255.255.0  
ip access-group 10 out  
ip nat inside  
ip virtual-reassembly in  
!  
interface Vlan20  
ip address 192.27.2.1 255.255.255.0  
ip access-group 20 out  
ip nat inside  
ip virtual-reassembly in  
!  
interface Vlan30  
ip address 192.27.3.1 255.255.255.0  
ip access-group 30 out  
ip nat inside  
ip virtual-reassembly in  
!  
interface Vlan40  
ip address 192.27.4.1 255.255.255.0  
ip access-group 40 out  
ip nat inside  
ip virtual-reassembly in  
!  
ip forward-protocol nd  
no ip http server  
no ip http secure-server  
!  
!  
ip nat inside source list 1 interface GigabitEthernet4 overload  
ip nat inside source list 2 interface GigabitEthernet4 overload  
ip nat inside source list 3 interface GigabitEthernet4 overload  
ip nat inside source list 4 interface GigabitEthernet4 overload  
ip nat inside source static tcp 192.27.1.10 80 10.2.1.1 80 extendable  
ip nat inside source static tcp 192.27.1.22 80 10.2.2.1 80 extendable  
ip route 0.0.0.0 0.0.0.0 10.0.0.1  
!  
!  
!  
tftp-server flash:/firmware/vadsl_module_img.bin  
access-list 1 permit 192.27.1.0 0.0.0.255
```

```
access-list 2 permit 192.27.2.0 0.0.0.255
access-list 3 permit 192.27.3.0 0.0.0.255
access-list 4 permit 192.27.4.0 0.0.0.255
access-list 10 permit any
access-list 20 deny 192.27.4.0 0.0.0.255
access-list 20 deny 192.27.3.0 0.0.0.255
access-list 20 permit any
access-list 30 deny 192.27.4.0 0.0.0.255
access-list 30 deny 192.27.2.0 0.0.0.255
access-list 30 permit any
access-list 40 deny 192.27.2.0 0.0.0.255
access-list 40 deny 192.27.3.0 0.0.0.255
access-list 40 permit any
!
control-plane
!
!
line con 0
line 4
no activation-character
transport preferred none
transport input all
transport output all
stopbits 1
line vty 0 4
login
transport input none
!
scheduler allocate 20000 1000
!
end
```

### **Config du switch :**

Building configuration...

Current configuration : 2798 bytes

!

! Last configuration change at 02:03:53 UTC Mon Mar 1 1993

!

version 15.0

no service pad

no service timestamps debug uptime

no service timestamps log uptime

no service password-encryption

!

hostname SW

!

boot-start-marker

boot-end-marker

!

```
!  
no aaa new-model  
system mtu routing 1500  
!  
!  
!  
!  
!  
!  
!  
!  
!  
spanning-tree mode pvst  
spanning-tree extend system-id  
!  
vlan internal allocation policy ascending  
!  
!  
!  
!  
!  
interface FastEthernet0/1  
  switchport access vlan 10  
  switchport mode access  
!  
interface FastEthernet0/2  
  switchport access vlan 10  
  switchport mode access  
!  
interface FastEthernet0/3  
  switchport access vlan 10  
  switchport mode access  
!  
interface FastEthernet0/4  
  switchport access vlan 10  
  switchport mode access  
!  
interface FastEthernet0/5  
  switchport access vlan 10  
  switchport mode access  
!  
interface FastEthernet0/6  
  switchport access vlan 10  
  switchport mode access  
!  
interface FastEthernet0/7
```

```
switchport access vlan 20
switchport mode access
!
interface FastEthernet0/8
switchport access vlan 20
switchport mode access
!
interface FastEthernet0/9
switchport access vlan 20
switchport mode access
!
interface FastEthernet0/10
switchport access vlan 20
switchport mode access
!
interface FastEthernet0/11
switchport access vlan 20
switchport mode access
!
interface FastEthernet0/12
switchport access vlan 20
switchport mode access
!
interface FastEthernet0/13
switchport access vlan 30
switchport mode access
!
interface FastEthernet0/14
switchport access vlan 30
switchport mode access
!
interface FastEthernet0/15
switchport access vlan 30
switchport mode access
!
interface FastEthernet0/16
switchport access vlan 30
switchport mode access
!
interface FastEthernet0/17
switchport access vlan 30
switchport mode access
!
interface FastEthernet0/18
switchport access vlan 30
switchport mode access
!
interface FastEthernet0/19
```

```
switchport access vlan 40
switchport mode access
!
interface FastEthernet0/20
switchport access vlan 40
switchport mode access
!
interface FastEthernet0/21
switchport access vlan 40
switchport mode access
!
interface FastEthernet0/22
switchport access vlan 40
switchport mode access
!
interface FastEthernet0/23
switchport access vlan 40
switchport mode access
!
interface FastEthernet0/24
switchport access vlan 40
switchport mode access
!
interface GigabitEthernet0/1
switchport trunk allowed vlan 10-40
switchport mode trunk
!
interface GigabitEthernet0/2
!
interface Vlan1
no ip address
shutdown
!
interface Vlan10
ip address 192.27.1.2 255.255.255.0
!
interface Vlan20
ip address 192.27.2.2 255.255.255.0
!
interface Vlan30
ip address 192.27.3.2 255.255.255.0
!
interface Vlan40
ip address 192.27.4.2 255.255.255.0
!
ip http server
ip http secure-server
!
```

end

Capture de trame :

Pour l'obtenir j'ai branché le câble qui relie le routeur au switch à mon pc permettant ainsi de faire une capture de trame et donc d'obtenir cela

Apply a display filter ... (Ctrl-/) Allez au paquet précédent Expression...

No.	Time	Source	Destination	Protocol	Length	Info
7	1.262341220	Cisco f4:3f:19	PVST+	STP	68	Conf. Root = 32768/49/50:06:04:f4:3f:00 Cost = 0 Port = 0x8019
8	1.820284209	PcsCompu_d1:76:4b	Broadcast	ARP	64	Who has 192.27.3.1? Tell 192.27.3.21
9	2.050481203	PcsCompu_53:d0:01	Broadcast	ARP	64	Who has 192.27.1.1? Tell 192.27.1.10
10	2.822942212	Cisco f4:3f:19	PVST+	STP	68	Conf. Root = 32768/10/50:06:04:f4:3f:00 Cost = 0 Port = 0x8019
11	2.822585958	Cisco f4:3f:19	PVST+	STP	68	Conf. Root = 32768/20/50:06:04:f4:3f:00 Cost = 0 Port = 0x8019
12	2.822916680	Cisco f4:3f:19	PVST+	STP	68	Conf. Root = 32768/30/50:06:04:f4:3f:00 Cost = 0 Port = 0x8019
13	2.844222788	PcsCompu_d1:76:4b	Broadcast	ARP	64	Who has 192.27.3.1? Tell 192.27.3.21
14	3.266929718	Cisco f4:3f:19	PVST+	STP	68	Conf. Root = 32768/49/50:06:04:f4:3f:00 Cost = 0 Port = 0x8019
15	3.868253816	PcsCompu_d1:76:4b	Broadcast	ARP	64	Who has 192.27.3.1? Tell 192.27.3.21
10	4.767183890	192.31.25.156	Broadcast	SSDP	217	M-SEARCH * HTTP/1.1
11	5.827430519	Cisco f4:3f:19	PVST+	STP	68	Conf. Root = 32768/10/50:06:04:f4:3f:00 Cost = 0 Port = 0x8019
10	8.977740567	Cisco f4:3f:19	DVST+	STP	68	Conf. Root = 32768/20/50:06:04:f4:3f:00 Cost = 0 Port = 0x8019

.....1..... = IG bit: Group address (multicast/broadcast)  
 Source: PcsCompu\_d1:76:4b (08:00:27:d1:76:4b)  
 Address: PcsCompu\_d1:76:4b (08:00:27:d1:76:4b)  
 ....0..... = IG bit: Globally unique address (factory default)  
 ....0..... = IG bit: Individual address (unicast)  
 Type: 802.1Q Virtual LAN (0x8100)  
 802.1Q Virtual LAN, PRI: 0, DEI: 0, ID: 30  
 000..... = Priority: Best Effort (default) (0)  
 ...0..... = DEI: Ineligible  
 ....0000 0001 1110 = ID: 30  
 Type: ARP (0x806)  
 Padding: 00000000000000000000000000000000  
 Trailer: 00000000

```

0000 ff ff ff ff ff ff 08 00 27 d1 76 4b 01 00 00 1e .....-.vK...
0010 08 06 00 01 08 00 06 04 00 01 08 00 27 d1 76 4b .....vK
0020 c0 1b 03 15 00 00 00 00 00 00 c0 1b 03 01 00 00 .....
0030 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....

```

The image shows a Wireshark packet capture window titled "Wireshark · Paquet 1 · enp0s3". The packet list on the left shows a single packet of type "ARP" with source "PcsCompu\_53:d0:01" and destination "PcsCompu\_53:d0:01". The packet details pane on the right shows the following structure:

- Source: PcsCompu\_53:d0:01 (08:00:27:53:d0:01)
  - Address: PcsCompu\_53:d0:01 (08:00:27:53:d0:01)
    - Type: 802.1Q Virtual LAN (0x8100)
- 802.1Q Virtual LAN, PRI: 0, DEI: 0, ID: 10
  - Type: ARP (0x0806)
  - Padding: 00000000000000000000000000000000
  - Trailer: 00000000
- Address Resolution Protocol (request)

The packet bytes pane at the bottom shows the hex dump of the packet data:

```

0000  ff ff ff ff ff ff 08 00 27 53 d0 01 81 00 00 0a  ....S....
0010  08 06 00 01 08 00 06 04 00 01 08 00 27 53 d0 01  ....S....
0020  c0 1b 01 0a 00 00 00 00 00 00 c0 1b 01 01 00 00  ....
0030  00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00  ....

```