SOMMAIRE

1. Configuration du commutateur SW1

```
Current configuration : 1143 bytes
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname SW1
!
enable secret 5 $1$mERr$hFcHryO1v5qWPxVkKIYMc/
!
!
!
no ip domain-lookup
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
 --More--
```

```
!
interface FastEthernet0/1
 switchport access vlan 10
 switchport mode access
 switchport port-security
!
interface FastEthernet0/2
 switchport access vlan 10
 switchport mode access
 switchport port-security
!
```

```
!
interface FastEthernet0/9
 switchport access vlan 10
 switchport mode access
 switchport port-security
!
interface FastEthernet0/10
 switchport access vlan 10
 switchport mode access
 switchport port-security
!
interface FastEthernet0/11
 switchport access vlan 20
 switchport mode access
 switchport port-security
!
interface FastEthernet0/12
 switchport access vlan 20
 switchport mode access
 switchport port-security
```

```
!
interface FastEthernet0/19
 switchport access vlan 20
 switchport mode access
 switchport port-security
!
interface FastEthernet0/20
 switchport access vlan 20
 switchport mode access
 switchport port-security
!
interface FastEthernet0/21
 switchport access vlan 30
 switchport mode access
 switchport port-security
!
```

```
!
interface FastEthernet0/24
 switchport access vlan 30
 switchport mode access
 switchport port-security
```

```
interface FastEthernet0/24
 switchport access vlan 30
 switchport mode access
!
interface GigabitEthernet0/1
 switchport mode trunk
!
interface GigabitEthernet0/2
 shutdown
!
interface Vlan1
 ip address 192.168.0.2 255.255.255.252
!
ip default-gateway 192.168.0.1
!
!
!
!
access-list 1 permit 192.168.1.0 0.0.0.15
line con 0
 password 7 0800564B1B0D1C47
 logging synchronous
 login
!
line vty 0 4
 access-class 1 in
 password 7 0800564B1B0D1C47
 login
 transport input telnet
line vty 5 15
 access-class 1 in
 password 7 0800564B1B0D1C47
 login
 transport input telnet
```

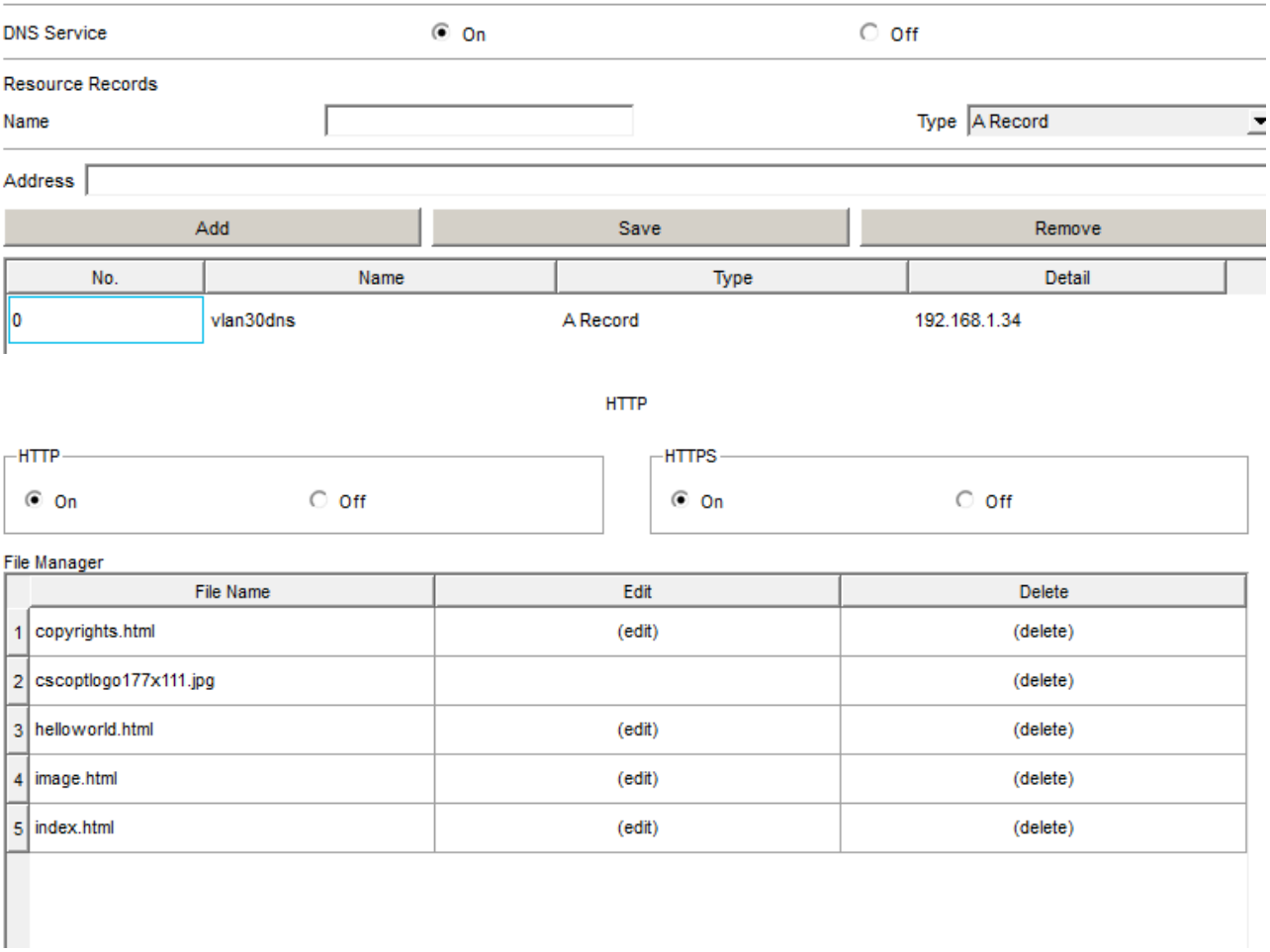
2. Configuration du routeur R1

```
Current configuration : 2020 bytes
!
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname r1
!
!
!
enable secret 5 $1$mERr$hFcHryO1v5qWPxVkKIYMc/
!
!
ip dhcp excluded-address 192.168.1.1
ip dhcp excluded-address 192.168.1.17
ip dhcp excluded-address 192.168.1.33
!
ip dhcp pool vlan10
 network 192.168.1.0 255.255.255.240
 default-router 192.168.1.1
 dns-server 192.168.1.34
ip dhcp pool vlan20
 network 192.168.1.16 255.255.255.240
 default-router 192.168.1.17
 dns-server 192.168.1.34
ip dhcp pool vlan30
 network 192.168.1.32 255.255.255.248
 default-router 192.168.1.33
 dns-server 192.168.1.34
!
!
!
ip cef
no ip domain-lookup
!
!
spanning-tree mode pvst
!
!
!
!
!
!
interface GigabitEthernet0/0
 ip address 192.168.0.1 255.255.255.252
 duplex auto
 speed auto
!
interface GigabitEthernet0/0.10
 encapsulation dot1Q 10
 ip address 192.168.1.1 255.255.255.240
!
interface GigabitEthernet0/0.20
 encapsulation dot1Q 20
 ip address 192.168.1.17 255.255.255.240
!
interface GigabitEthernet0/0.30
 encapsulation dot1Q 30
 ip address 192.168.1.33 255.255.255.248
 ip access-group server-access&retour out
!
interface GigabitEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
```

```
access-list 1 permit 192.168.1.0 0.0.0.15
ip access-list extended server-access&retour
 permit tcp 192.168.1.16 0.0.0.15 host 192.168.1.34 eq www
 permit icmp 192.168.1.0 0.0.0.31 host 192.168.1.34 echo
 permit tcp 192.168.1.0 0.0.0.31 host 192.168.1.34 eq domain
 permit udp 192.168.1.0 0.0.0.31 host 192.168.1.34 eq domain
 permit tcp any host 192.168.1.34 established
 permit icmp any host 192.168.1.34 echo-reply
!
!
!
!
!
line con 0
 password 7 0800564B1B0D1C47
 logging synchronous
 login
!
line aux 0
!
line vty 0 4
 access-class 1 in
 password 7 0800564B1B0D1C47
 login
 transport input telnet
!
!
```

3. Travail à faire

Mettre en place le réseau et configurer les différents équipements. Le serveur présent dans le VLAN 30 héberge les services Web et DNS (onglet **Services**).
Serveur Vlan30 qui heberge le WEB et le DNS :



pour voir le reste configuration de Switch1 et router1 aller au point 1 et 2 du compte rendu

```
SW1#sh vlan br

VLAN Name                              Status    Ports
---- --------------------------------- --------- -------------------------------
1    default                           active    Gig0/2
10   VLAN0010                          active    Fa0/1, Fa0/2, Fa0/3, Fa0/4
                                                 Fa0/5, Fa0/6, Fa0/7, Fa0/8
                                                 Fa0/9, Fa0/10
20   VLAN0020                          active    Fa0/11, Fa0/12, Fa0/13, Fa0/1
                                                 Fa0/15, Fa0/16, Fa0/17, Fa0/1
                                                 Fa0/19, Fa0/20
30   VLAN0030                          active    Fa0/21, Fa0/22, Fa0/23, Fa0/2
1002 fddi-default                      active
1003 token-ring-default                active
1004 fddinet-default                   active
1005 trnet-default                     active
SW1#
```

```
r1#sh access-lists
Standard IP access list 1
    10 permit 192.168.1.0 0.0.0.15
Extended IP access list server-accessfretour
    10 permit tcp 1
    20 permit icmp
    30 permit tcp 1
    40 permit udp 1
    50 permit tcp a
    60 permit icmp

r1#
```

```
r1#sh ip int br
Interface              IP-Address      OK? Method Status                Protocol
GigabitEthernet0/0     192.168.0.1     YES manual up                    up
GigabitEthernet0/0.10  192.168.1.1     YES manual up                    up
GigabitEthernet0/0.20  192.168.1.17    YES manual up                    up
GigabitEthernet0/0.30  192.168.1.33    YES manual up                    up
GigabitEthernet0/1     unassigned      YES unset  administratively down down
Vlan1                  unassigned      YES unset  administratively down down
r1#sh ip dhcp pool
```

1. Vérifier que seuls les hôtes du VLAN 10 peuvent manager le switch ainsi que le routeur via telnet

```
C:\>telnet 192.168.0.2
Trying 192.168.0.2 ...Open


User Access Verification

Password:
SW1>
```

```
C:\>telnet 192.168.0.1
Trying 192.168.0.1 ...Open


User Access Verification

Password:
r1>
```

vlan 20 na pas acces

```
Cisco Packet Tracer PC Command Line 1.0
C:\>telnet 192.168.0.1
Trying 192.168.0.1 ...
% Connection timed out; remote host not responding
C:\>telnet 192.168.0.2
Trying 192.168.0.2 ...
% Connection timed out; remote host not responding
C:\>
```

2. Vérifier que les machines des VLAN 10 et 20 peuvent « pinguer » le serveur du VLAN 30.

vlan10

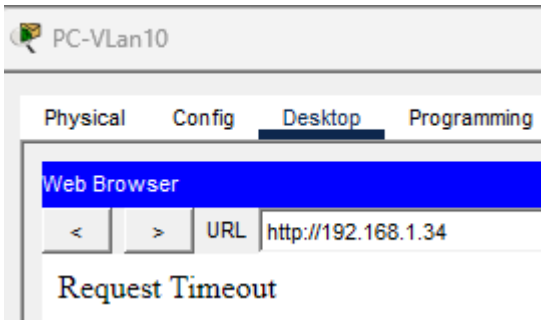
```
C:\>ping 192.168.1.34

Pinging 192.168.1.34 with 32 bytes of data:

Request timed out.
Reply from 192.168.1.34: bytes=32 time<1ms TTL=127
Reply from 192.168.1.34: bytes=32 time<1ms TTL=127
Reply from 192.168.1.34: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.1.34:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Vlan20

```
C:\>ping 192.168.1.34

Pinging 192.168.1.34 with 32 bytes of data:

Reply from 192.168.1.34: bytes=32 time<1ms TTL=127
Reply from 192.168.1.34: bytes=32 time<1ms TTL=127
Reply from 192.168.1.34: bytes=32 time<1ms TTL=127
Reply from 192.168.1.34: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.1.34:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss)
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

3.

4. Vérifier que seuls les hôtes du VLAN 20 peuvent accéder à l'application Web de ce serveur.



Les pc du vlan 20 peuvent se connecte au web mais ceux du vlan 10