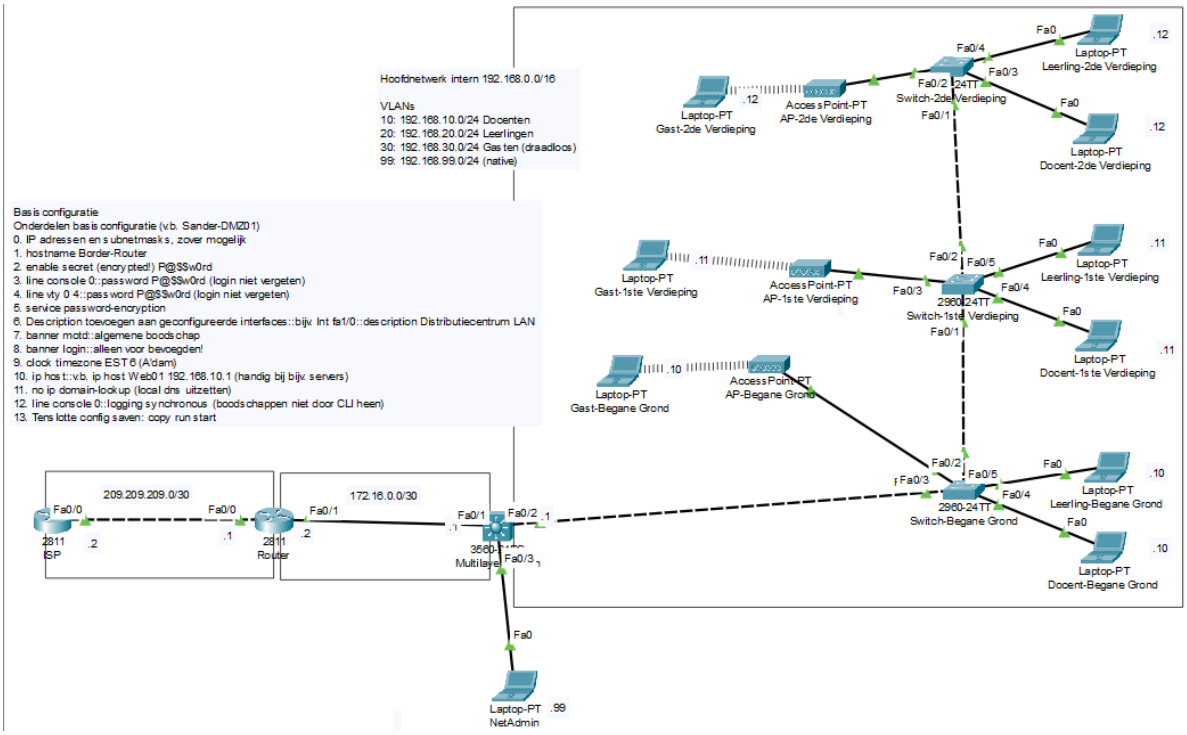
Inhoudsopgave

Fase 1 Basis netwerk

Omgeving

Dit is het omgeving die ik heb gemaakt volgens het voorbeeld op SBIS.



Veranderingen

Ik heb in fase 1 de bassisconfiguratie ingesteld en een IP-adres toegewezen aan de switch interface fast ethernet 0/1 die is verbonden met de border router. Verder heb ik een IP toegewezen aan de router.

Commando's Fase 1 Basis netwerk

Basisconfiguratie

Onderdelen basisconfiguratie (v.b. Sander-DMZ01)
0. IP adressen en subnetmasks, zover mogelijk
1. hostname Border-Router
2. enable secret (encrypted!) P@$$w0rd
3. line console 0::password P@$$w0rd (login niet vergeten)
4. line vty 0 4::password P@$$w0rd (login niet vergeten)
5. service password-encryption
6. Description toevoegen aan geconfigureerde interfaces::bijv. Int fa1/0::description Distributiecentrum LAN
7. banner motd::algemene boodschap
8. banner login::alleen voor bevoegden!
9. clock timezone EST 6 (A'dam)
10. ip host::v.b. ip host Web01 192.168.10.1 (handig bij bijv. servers)

11. no ip domain-lookup (local dns uitzetten)
12. line console 0::logging synchronous (boodschappen niet door CLI heen)
13. Tenslotte config saven: copy run start

IP-adressen toevoegen

```
Router>enable
Router#configure terminal
Router(config)#interface fa0/0
Router(config-if)#ip address 209.209.209.2 255.255.255.252
Router(config-if)#no shutdown
```

NoSwitchport

```
Multilayer-Switch>en
Multilayer-Switch#configure ter
Enter configuration commands, one per line.  End with CNTL/Z.
Multilayer-Switch(config)#interface fa 0/1
Multilayer-Switch(config-if)#no switchport
Multilayer-Switch(config-if)#ip address 172.16.0.1 255.255.255.252
Multilayer-Switch(config-if)#no shutdown
```

Fase 2 VLAN's, Access en Trunk

Veranderingen

Vlans aangemaakt voor de docenten, leerlingen, gasten en een native vlan voor de netadmin. De ethernet poorten tussen de netwerkapperatuur op trunk gezet in het native vlan en de ethernet poorten naar de end divices op acces gezet in het juiste vlan. Van de multilayerswitch een VTP server gemaakt dat is een server van de vlans en van de overige switches een VTP clieant gemaakt zodat die switches de vlans ontvangen.

Commando's Fase 2 VLAN's, Access en Trunk

VLAN's aanmaken

Multilayer-Switch(config-if)#vlan 10
Multilayer-Switch(config-vlan)#name Docenten
Multilayer-Switch(config-vlan)#exit
Multilayer-Switch(config)#vlan 20
Multilayer-Switch(config-vlan)#name Leerlingen
Multilayer-Switch(config-vlan)#exit
Multilayer-Switch(config)#vlan 30
Multilayer-Switch(config-vlan)#name Gasten
Multilayer-Switch(config-vlan)#exit
Multilayer-Switch(config)#vlan 99
Multilayer-Switch(config-vlan)#name Native
Multilayer-Switch(config-vlan)#exit

Interface fa 0/0 (ligt aan de interface)
switchport mode access
switchport access vlan (naam vlan)

```
Multilayer-Switch#show vlan brief

VLAN Name                              Status    Ports
---- --------------------------------- --------- -------------------------------
1    default                           active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                 Fa0/7, Fa0/8, Fa0/9, Fa0/10
                                                 Fa0/11, Fa0/12, Fa0/13, Fa0/14
                                                 Fa0/15, Fa0/16, Fa0/17, Fa0/18
                                                 Fa0/19, Fa0/20, Fa0/21, Fa0/22
                                                 Fa0/23, Fa0/24, Gig0/1, Gig0/2
10   Docenten                          active
20   Leerlingen                        active
30   Gasten                            active
99   Native                            active
1002 fddi-default                      active
1003 token-ring-default                active
1004 fddinet-default                   active
1005 trnet-default                     active
Multilayer-Switch#
```

VTP Server

```
Multilayer-Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Multilayer-Switch(config)#VTP mode server
Device mode already VTP SERVER.
Multilayer-Switch(config)#VTP domain SchoolNetwerk
Changing VTP domain name from NULL to SchoolNetwerk
Multilayer-Switch(config)#vtp password Cisco
Setting device VLAN database password to Cisco
```

VTP Client

```
Switch-Begane-Grond(config)#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch-Begane-Grond(config)#VTP mode client
Switch-Begane-Grond(config)#VTP domain SchoolNetwerk
Switch-Begane-Grond(config)#vtp password Cisco
```

Trunk-access configureren

Vlan trunk

```
Switch(config)#interface gigabitEthernet 0/2
Switch(config-if)#switchport mode trunk
Switch(config-if)#switchport trunk native vlan 99
```

Vlan access

```
Switch(config)#interface fa0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 99
```

Fase 3 Inter-VLAN routing

Veranderingen

Ip addressen toegevoegd aan de vlans en een statice route naar de router toegevoegd, al het ip verkeer wat niet in het interne netwerk zit gaat naar de router.

Commando's Fase 3 Inter-VLAN routing

Inter-VLAN configureren

```
Multilayer-Switch(config)#interface vlan10
Multilayer-Switch(config-if)#ip address 192.168.10.1 255.255.255.0
Multilayer-Switch(config-if)#no shutdown
Multilayer-Switch(config-if)#exit

Multilayer-Switch(config)#interface vlan20
Multilayer-Switch(config-if)#ip address 192.168.20.1 255.255.255.0
Multilayer-Switch(config-if)#no shutdown
Multilayer-Switch(config-if)#exit

Multilayer-Switch(config)#interface vlan30
Multilayer-Switch(config-if)#ip address 192.168.30.1 255.255.255.0
Multilayer-Switch(config-if)#no shutdown
Multilayer-Switch(config-if)#exit

Multilayer-Switch(config)#interface vlan99
Multilayer-Switch(config-if)#ip address 192.168.99.1 255.255.255.0
Multilayer-Switch(config-if)#no shutdown
Multilayer-Switch(config-if)#exit

Multilayer-Switch(config)#ip route 0.0.0.0 0.0.0.0 172.16.0.2
Multilayer-Switch(config)#exit
```

```
Multilayer-Switch#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is 172.16.0.2 to network 0.0.0.0

     172.16.0.0/30 is subnetted, 1 subnets
C       172.16.0.0 is directly connected, FastEthernet0/1
C    192.168.10.0/24 is directly connected, Vlan10
C    192.168.20.0/24 is directly connected, Vlan20
C    192.168.30.0/24 is directly connected, Vlan30
C    192.168.99.0/24 is directly connected, Vlan99
S*   0.0.0.0/0 [1/0] via 172.16.0.2

Multilayer-Switch#
```

Fase 4 - ACL configuratie MLS

Veranderingen

ACL (access control list) firewall ingesteld op de multilayer switch voor ieder vlan een eigen ACL behalve voor de NetAdmin. SSH (Secure Shell) toegevoegd aan de switches dat is veiliger dan Telnet omdat SSH versleuteld is.

Commando's Fase 4 - ACL configuratie MLS

ACL configureren

```
Multilayer-Switch>en
Multilayer-Switch#configure terminal
Multilayer-Switch(config)#ip  access-list extended Docenten
Multilayer-Switch(config-ext-nacl)#2 permit tcp any any established
Multilayer-Switch(config-ext-nacl)#5 permit icmp any any echo-reply
Multilayer-Switch(config-ext-nacl)#10 deny ip 192.168.10.0 0.0.0.255 192.168.99.0 0.0.0.255
Multilayer-Switch(config-ext-nacl)#20 permit ip any any
Multilayer-Switch(config-ext-nacl)#exit
Multilayer-Switch(config)#interface vlan 10
Multilayer-Switch(config-if)#ip access-group Docenten in
Multilayer-Switch(config-if)#exit

Multilayer-Switch(config)#ip access-list extended Leerlingen
Multilayer-Switch(config-ext-nacl)#2 permit tcp any any established
Multilayer-Switch(config-ext-nacl)#5 permit icmp any any echo-reply
Multilayer-Switch(config-ext-nacl)#10 deny ip 192.168.20.0 0.0.0.255 192.168.0.0
0.0.255.255
Multilayer-Switch(config-ext-nacl)#20 permit ip any any
Multilayer-Switch(config-ext-nacl)#exit
Multilayer-Switch(config)#interface vlan 20
Multilayer-Switch(config-if)#ip access-group Leerlingen in
Multilayer-Switch(config-if)#exit

Multilayer-Switch(config)#ip access-list extended Gasten
Multilayer-Switch(config-ext-nacl)#2 permit tcp any any established
Multilayer-Switch(config-ext-nacl)#5 permit icmp any any echo-reply
Multilayer-Switch(config-ext-nacl)#10 deny ip 192.168.30.0 0.0.0.255 192.168.0.0
0.0.255.255
Multilayer-Switch(config-ext-nacl)#20 permit ip any any
Multilayer-Switch(config-ext-nacl)#exit
Multilayer-Switch(config)#interface vlan 30
Multilayer-Switch(config-if)#ip access-group Gasten in
Multilayer-Switch(config-if)#
```

SSH configureren

SSH Multilayer-Switch

```
Multilayer-Switch>en
Multilayer-Switch#configure terminal
Multilayer-Switch(config)#ip domain name admin
Multilayer-Switch(config)#ena
*Mar 1 6:10:1.596: RSA key size needs to be at least 768 bits for ssh version 2
*Mar 1 6:10:1.596: %SSH-5-ENABLED: SSH 1.5 has been enabled
Multilayer-Switch(config)#enable secret P@$$w0rd
Multilayer-Switch(config)#username admin password P@$$w0rd

Multilayer-Switch(config)#crypto key generate rsa
% You already have RSA keys defined named Multilayer-Switch.admin .
% Do you really want to replace them? [yes/no]: yes
The name for the keys will be: Multilayer-Switch.admin
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]: 768
% Generating 768 bit RSA keys, keys will be non-exportable...[OK]

*Mar 1 6:14:34.187: %SSH-5-ENABLED: SSH 1.99 has been enabled

Multilayer-Switch(config)#ip ssh version 2
Multilayer-Switch(config)#line vty 0 15
Multilayer-Switch(config-line)#transport input ssh
Multilayer-Switch(config-line)#login local
Multilayer-Switch(config-line)#
```

SSH Switch 1st verdieping

```
Switch-1ste-Verdieping>en
Switch-1ste-Verdieping#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch-1ste-Verdieping(config)#interface vlan 99
Switch-1ste-Verdieping(config-if)#
%LINK-5-CHANGED: Interface Vlan99, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan99, changed state to up

Switch-1ste-Verdieping(config-if)#ipSwitch-1ste-Verdieping(config-if)#
Switch-1ste-Verdieping(config-if)#ip add 192.168.99.11 255.255.255.0
Switch-1ste-Verdieping(config-if)#no shutdown
Switch-1ste-Verdieping(config-if)#ip domain name admin
Switch-1ste-Verdieping(config)#crypto key generate rsa
The name for the keys will be: Switch-1ste-Verdieping.admin
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]: 768
% Generating 768 bit RSA keys, keys will be non-exportable...[OK]

*Mar 1 6:32:10.734: %SSH-5-ENABLED: SSH 1.99 has been enabled

Switch-1ste-Verdieping(config)#enable secret P@$$w0rd
Switch-1ste-Verdieping(config)#username admin password P@$$w0rd
Switch-1ste-Verdieping(config)#ip ssh version 2
Switch-1ste-Verdieping(config)#line vty 0 15
Switch-1ste-Verdieping(config-line)#transport input ssh
Switch-1ste-Verdieping(config-line)#login local
Switch-1ste-Verdieping(config-line)#
```

Fase 5 Configuratie router

Veranderingen

Statice routes toegepast op de border-router en de ISP Router.
Pat (Port Address Translation) geconfigureerd.
NACL (Named acces control list) toegevoegd aan de border router zodat aanvallen van het IP verkeer van buiten wordt geblokkeerd als firewall. DHCP toegevoegd aan de ISP router en de interface van de border router die is verbonden met de ISP op IP address dhcp gezet. Default gateway ingesteld op switches. SSH (Secure Shell) toegevoegd aan de border router dat is veiliger dan Telnet omdat SSH versleuteld is. Show IP nat translations test gedaan met een ping en IP nat translations commando uitgevoerd op de border router.

Commando's Fase 5 Configuratie router

IP route

```
Border-Router(config)#ip route 0.0.0.0 0.0.0.0 fa0/0
Border-Router(config-if)#ip route 192.168.0.0 255.255.0.0 172.16.0.1

ISP-Router(config)#ip route 172.16.0.0 255.255.255.252 209.209.209.1
ISP-Router(config)#ip route 192.168.0.0 255.255.0.0 209.209.209.1
```

Pat

```
Border-Router#configure terminal
Border-Router(config)#access-list 1 permit 192.168.0.0 0.0.255.255
Border-Router(config)#ip nat inside source list 1 interface fa0/0 overload
Border-Router(config)#interface fa0/1
Border-Router(config-if)#ip nat inside
Border-Router(config-if)#exit
Border-Router(config)#interface fa0/0
Border-Router(config-if)#ip nat outside
Border-Router(config-if)#
```

NACL

```
Border-Router>en
Border-Router#configure ter
Border-Router(config)#ip access-list extended ISP
Border-Router(config-ext-nacl)#2 permit tcp any any established
Border-Router(config-ext-nacl)#5 permit icmp any any echo-reply
Border-Router(config-ext-nacl)#exit
Border-Router(config)#interface fa0/0
Border-Router(config-if)#exit
Border-Router(config)#interface fa0/0
Border-Router(config-if)#ip access-group ISP in
Border-Router(config)#ip access-list extended ISP
Border-Router(config-ext-nacl)#25 permit udp any any eq 68
Border-Router(config-ext-nacl)#
```

DHCP ontvangen op border router

```
Border-Router(config)#interface fa0/0
Border-Router(config-if)#ip address dhcp
Border-Router(config-if)#no shutdown

Border-Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Border-Router(config-if)#
```

Default gateway op switch

```
Switch-Begane-Grond(config)#ip default-gateway 192.168.99.1
```

SSH Router

```
Border-Router>en
Border-Router#configure ter
Border-Router(config)#ip domain name SchoolNetwerk
Border-Router(config)#crypto key generate rsa
The name for the keys will be: Border-Router.SchoolNetwerk
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]: 1024
% Generating 1024 bit RSA keys, keys will be non-exportable...[OK]

*Mar 1 6:2:56.626: %SSH-5-ENABLED: SSH 1.99 has been enabled
Border-Router(config)#enable secret P@$$w0rd
Border-Router(config)#username NetAdmin password Cisco
Border-Router(config)#ip ssh version 2
Border-Router(config)#line vty 0 4
Border-Router(config-line)#transport input ssh
Border-Router(config-line)#login local
Border-Router(config-line)#
```

Show IP nat translations

```
Border-Router#show ip nat Translations
Pro  Inside global     Inside local       Outside local      Outside global
icmp 209.209.209.1:10  192.168.99.99:10   209.209.209.2:10   209.209.209.2:10
icmp 209.209.209.1:11  192.168.99.99:11   209.209.209.2:11   209.209.209.2:11
icmp 209.209.209.1:12  192.168.99.99:12   209.209.209.2:12   209.209.209.2:12
icmp 209.209.209.1:9   192.168.99.99:9    209.209.209.2:9    209.209.209.2:9
```

Fase 6 - DHCP en DNS configuratie

Veranderingen

DNS/Web server geplaats in het netwerk in vlan 40 in met de interface op de switch op acces mode met IP 192.168.40.10 en pulbic IP 209.209.209.5
DHCP servers ingesteld op de vlans en met ACL firewall voor leerlingen en gasten toegestaan dat ze naar de DNS/web server mogen.

Commando's Fase 6 - DHCP en DNS configuratie

DHCP ACL vlan

```
Multilayer-Switch(config)#ip access-list extended Leerlingen
Multilayer-Switch(config-ext-nacl)#7 permit ip 192.168.20.0 0.0.0.255 host 192.168.40.10
Multilayer-Switch(config-ext-nacl)#exit
Multilayer-Switch(config)#ip access-list extended Gasten
Multilayer-Switch(config-ext-nacl)#7 permit ip 192.168.30.0 0.0.0.255 host 192.168.40.10
Multilayer-Switch(config-ext-nacl)#
```

DHCP vlans

```
Multilayer-Switch>en
Multilayer-Switch#configure terminal
Multilayer-Switch(config)#ip dhcp pool Docenten
Multilayer-Switch(dhcp-config)#network 192.168.10.0 255.255.255.0
Multilayer-Switch(dhcp-config)#domain-name Docenten
Multilayer-Switch(dhcp-config)#default-router 192.168.10.1
Multilayer-Switch(dhcp-config)#dns-server 192.168.40.10
Multilayer-Switch(dhcp-config)#exit

Multilayer-Switch(config)#ip dhcp pool Leerlingen
Multilayer-Switch(dhcp-config)#network 192.168.20.0 255.255.255.0
Multilayer-Switch(dhcp-config)#domain-name Leerlingen
Multilayer-Switch(dhcp-config)#default-router 192.168.20.1
Multilayer-Switch(dhcp-config)#dns-server 192.168.40.10
Multilayer-Switch(dhcp-config)#exit

Multilayer-Switch(config)#ip dhcp pool Gasten
Multilayer-Switch(dhcp-config)#network 192.168.30.0 255.255.255.0
Multilayer-Switch(dhcp-config)#domain-name Gasten
Multilayer-Switch(dhcp-config)#default-router 192.168.30.1
Multilayer-Switch(dhcp-config)#dns-server 192.168.40.10
Multilayer-Switch(dhcp-config)#
```

Fase 7 - Webserver in DMZ

Veranderingen

Op de ISP en de border router toegang ingesteld naar de webserver op het IP 209.209.209.5 en op de NACL firewall ingesteld dat al het web verkeer via poort 80 en 443 naar de webserver mag.

Commando's Fase 7 - Webserver in DMZ

ISP static route

ISP-Router(config)#ip route 209.209.209.5 255.255.255.255 fa0/0
%Default route without gateway, if not a point-to-point interface, may impact performance

Border-Router static route

Border-Router(config)#ip nat inside source static 192.168.40.10 209.209.209.5
Border-Router(config)#

NACL ISP op border router (firewall)

Border-Router#configure terminal
Border-Router(config)#ip access-list extended ISP
Border-Router(config-ext-nacl)#5 permit tcp any host 209.209.209.5 eq 80
Border-Router(config-ext-nacl)#6 permit tcp any host 209.209.209.5 eq 443

Fase 8 - Back-up

Veranderingen

Een back-up server geplaatst in vlan 99 in met de interface op de switch op acces mode met het IP 192.168.99.5 en back-ups gemaakt van alle routers en switches in het interne netwerk.

Commando's Fase 8 - LLDP

```
Border-Router#configure terminal
Border-Router(config)#no cdp run
Border-Router(config)#lldp run
Border-Router(config)#interface fa0/0
Border-Router(config-if)#no lldp transmit
Border-Router(config-if)#no cdp enable
```

```
Multilayer-Switch#show lldp neighbors
Capability codes:
    (R) Router, (B) Bridge, (T) Telephone, (C) DOCSIS Cable Device
    (W) WLAN Access Point, (P) Repeater, (S) Station, (O) Other
Device ID           Local Intf     Hold-time  Capability      Port ID
Border-Router       Fa0/1          120        R               Fa0/1
Switch-Begane-Grond Fa0/2          120        B               Fa0/1
Switch-1ste-VerdiepingGig0/1       120        B               Gig0/1
Switch-2de-VerdiepingGig0/2        120        B               Gig0/1
```

Commando's Fase 8 - spanning-tree

```
Multilayer-Switch(config)#spanning-tree vlan 1 root primary
Multilayer-Switch(config)#spanning-tree vlan 10 root primary
Multilayer-Switch(config)#spanning-tree vlan 20 root primary
Multilayer-Switch(config)#spanning-tree vlan 30 root primary
Multilayer-Switch(config)#spanning-tree vlan 40 root primary
Multilayer-Switch(config)#spanning-tree vlan 99 root primary
Multilayer-Switch(config)#
```

Commando's Fase 8 - Back-up

Fa05 switchport access voor back-up server

```
Multilayer-Switch>en
Multilayer-Switch#configure ter
Multilayer-Switch(config)#interface fa0/5
Multilayer-Switch(config-if)#switchport mode access
Multilayer-Switch(config-if)#switchport access vlan 99
Multilayer-Switch(config-if)#
```

Back-up

```
Multilayer-Switch#copy running-config tftp:
Address or name of remote host []? 192.168.99.5
Destination filename [Multilayer-Switch-confg]?

Writing running-config....!!
[OK - 3648 bytes]

3648 bytes copied in 3.044 secs (1198 bytes/sec)

C:\>ssh -l admin 192.168.99.1

Password:

Vergeet de config niet op te slaan

Multilayer-Switch>en
Password:
Multilayer-Switch#copy running-config tftp:
Address or name of remote host []? 192.168.99.5
Destination filename [Multilayer-Switch-confg]?

Writing running-config...!!
[OK - 3648 bytes]

3648 bytes copied in 0 secs

Multilayer-Switch#exit

[Connection to 192.168.99.1 closed by foreign host]

C:\>ssh -l admin 192.168.99.10

Password:
```

Vergeet de config niet op te slaan

Switch-Begane-Grond>en
Password:
Switch-Begane-Grond#copy running-config tftp:
Address or name of remote host []? 192.168.99.5
Destination filename [Switch-Begane-Grond-confg]?

Writing running-config....!!
[OK - 1977 bytes]

1977 bytes copied in 3.005 secs (657 bytes/sec)
Switch-Begane-Grond#

C:\>ssh -l admin 192.168.99.11

Password:

Vergeet de config niet opteslaan

Switch-1ste-Verdieping>en
Password:
Switch-1ste-Verdieping#copy running-config tftp:
Address or name of remote host []? 192.168.99.5
Destination filename [Switch-1ste-Verdieping-confg]?

Writing running-config....!!
[OK - 1995 bytes]

1995 bytes copied in 3.003 secs (664 bytes/sec)
Switch-1ste-Verdieping#

C:\>ssh -l admin 192.168.99.12

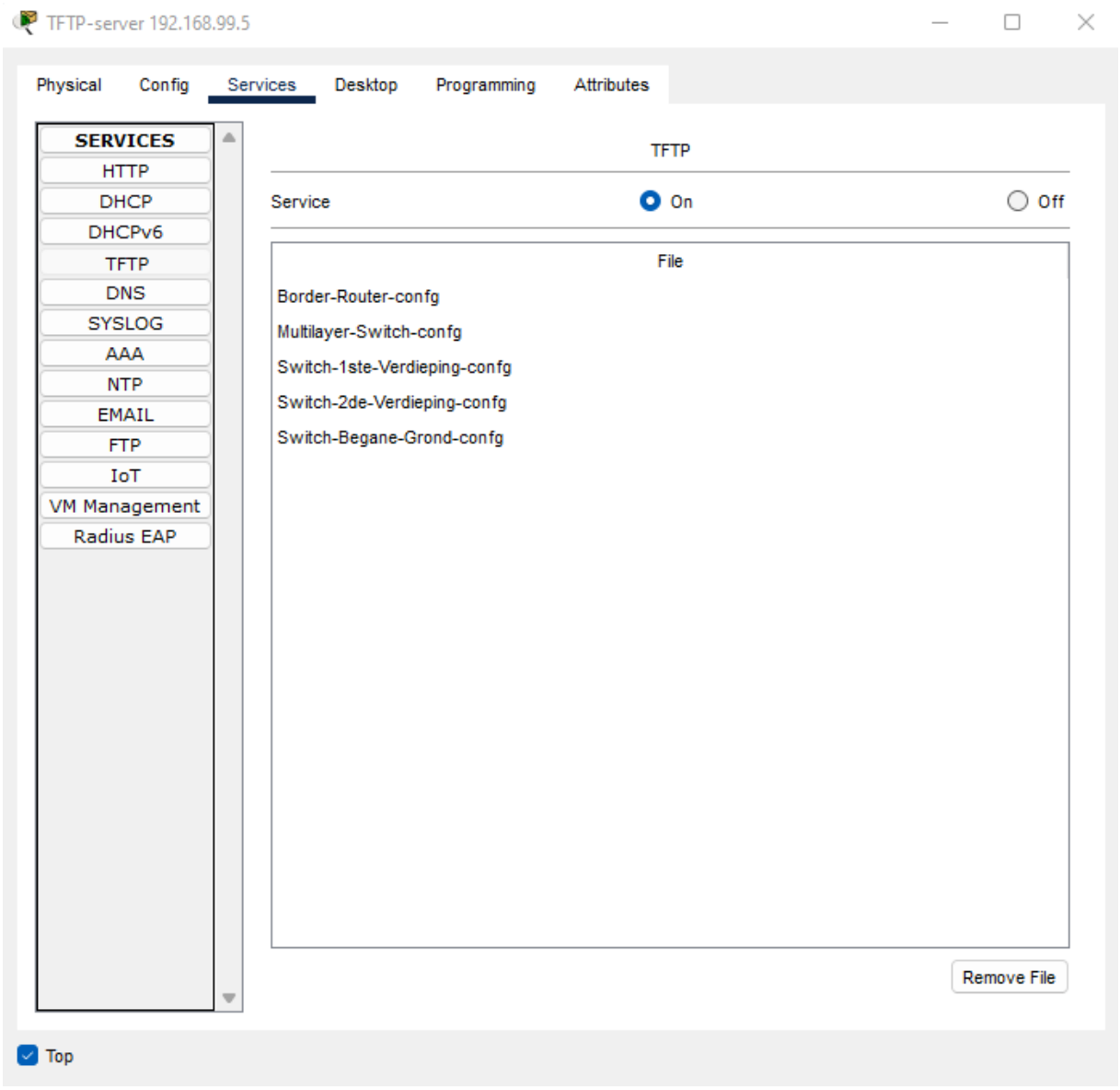
Password:

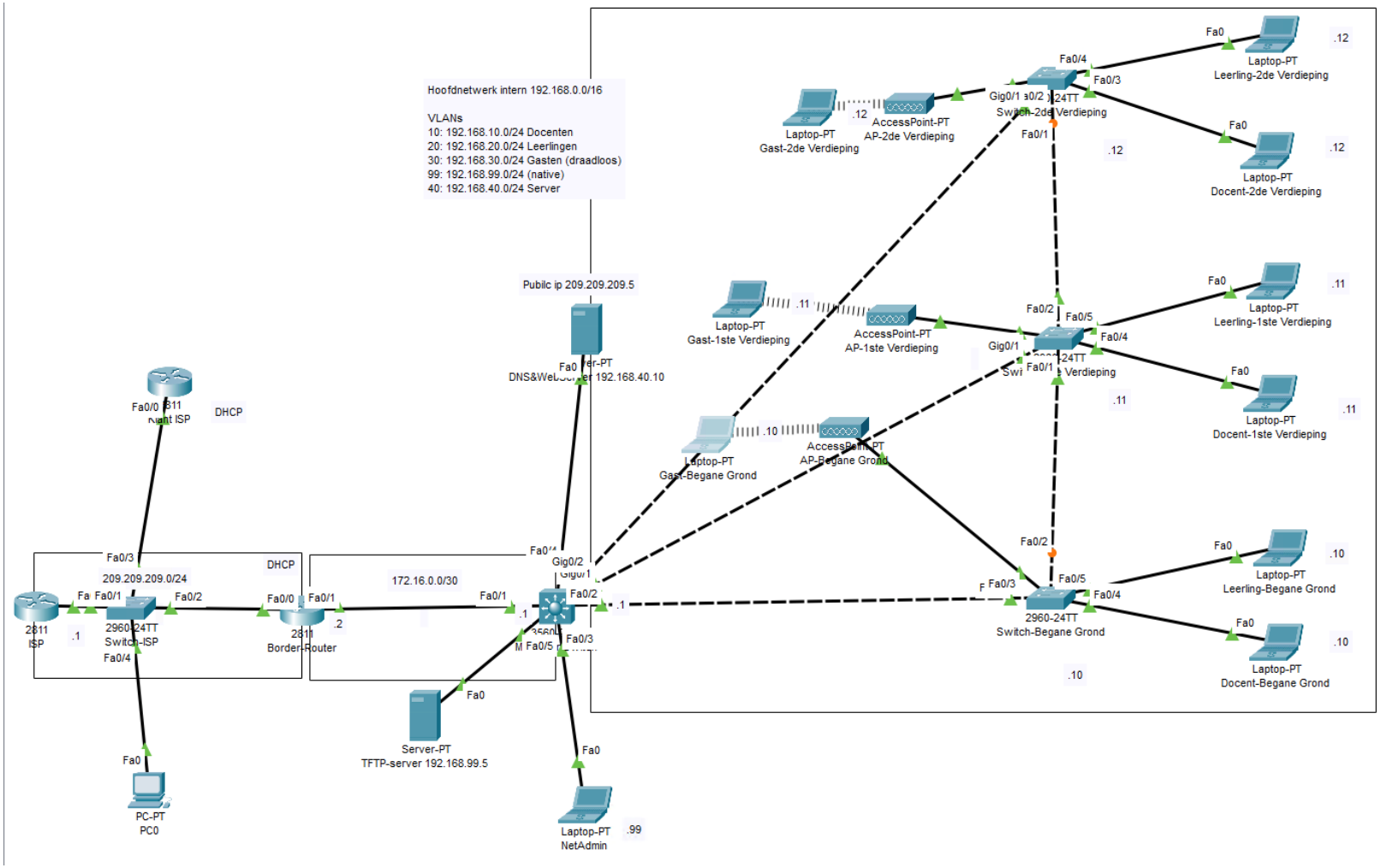
Vergeet de config niet op te slaan

Switch-2de-Verdieping>en
Password:
Switch-2de-Verdieping#copy running-config tftp:
Address or name of remote host []? 192.168.99.5
Destination filename [Switch-2de-Verdieping-confg]?

Writing running-config....!!
[OK - 1905 bytes]

1905 bytes copied in 3.002 secs (634 bytes/sec)
Switch-2de-Verdieping#





Basisconfiguratie
Onderdelen basisconfiguratie (v.b. Sander-DMZ01)
0. IP adressen en subnetmasks, zover mogelijk
1. hostname Border-Router
2. enable secret (encrypted!) P@$$w0rd
3. line console 0::password P@$$w0rd (login niet vergeten)
4. line vty 0 4::password P@$$w0rd (login niet vergeten)
5. service password-encryption
6. Description toevoegen aan geconfigureerde interfaces::bijv. Int fa1/0::description Distributiecentrum LAN
7. banner motd::algemene boodschap
8. banner login::alleen voor bevoegden!
9. clock timezone EST 6 (A'dam)
10. ip host::v.b. ip host Web01 192.168.10.1 (handig bij bijv. servers)
11. no ip domain-lookup (local dns uitzetten)
12. line console 0::logging synchronous (boodschappen niet door CLI heen)
13. Tenslotte config saven: copy run start