

Solaplex

- [Config van 3 switches, 1 router en alle switches op 1 core switch](#)

Config van 3 switches, 1 router en alle switches op 1 core switch

Dit is de configuratie van een netwerk met 3 switches en 2 routers. De instellingen zijn als volgt:

Technische informatie

Alle apparaten in het netwerk worden gekenmerkt door een *hostname*.

Dit document geeft aan welke IP-adressen gehanteerd zijn, hoe de VLAN's zijn ingericht, welke IOS-versies op de devices staan geïnstalleerd en wat de systeemaccounts zijn. Het beheer op alle devices kan door de netwerkbeheerder worden uitgevoerd via SSH. Van de verbinding tussen de devices is geen actuele tekening beschikbaar.

A diagram of a cloud computing
Description automatically generated

IP-adressen

De volgende IP-adressen zijn aan de devices toegekend en door de netwerkbeheerder via VLAN 30 bereikbaar.

Netwerkdevice	IP-adres
	10.30.0.4/16
	10.30.0.5/16
	10.30.0.6/16
Core	10.30.0.2/16
Core_L3	10.30.0.1/16
WALL	172.16.20.2/16
Core	172.16.0.2/30
Back_01	172.16.20.5/16

Server	IP-adres
NTP/syslog	10.30.0.100/16
DHCP	10.30.0.175/16
HTTP	10.10.0.100/16 -
Controller	N.v.t.
FTP	10.30.0.50/16
DNS	10.30.0.200/16

Verdeling VLAN's

Om het uitvalrisico te beperken, zijn de VLAN's gelijkmatig over de switches verdeeld. Poort 24 is op alle access-switches vrij gelaten voor de netwerkbeheerder.

Switch	Accesspoorten	VLAN-ID	Verbonden met
SW1	1 - 5	20	Productie
	6 - 10	21	KlantenService
	11 - 15	22	HRM
	16-20	23	Marketing
	21-23	99	Ongebruikt
	24	30	IT_Beheer
SW2	1 - 5	20	Productie
	6 - 10	21	KlantenService
	11 - 15	22	HRM
	16-20	23	Marketing
	21-23	99	Ongebruikt
	24	30	IT_Beheer
SW3	1 - 5	20	Productie
	6 - 10	21	KlantenService
	11 - 15	22	HRM
	16-20	23	Marketing
	21-23	99	Productie
	24	30	IT_Beheer
Main_L3	1/0/18-24	30	IT_Beheer

Systemaccounts

De volgende systemaccounts zijn aan de devices toegekend.

Voor Telnet is geen account aangemaakt, omdat die toegang geblokkeerd dient te zijn volgens de securitypolicy's.

Service	Gebruikersnaam	Wachtwoord
Privileged mode	-	WELkom@1
Telnet	-	-
SSH	admin	WELkom@1
Console	admin	WELkom@1

IOS-versies

Op alle devices hoort de volgende versie van Cisco IOS geïnstalleerd te zijn.

Netwerkdevice	IOS-versie
SW1	12.2(25r)
SW2	12.2(25r)
SW3	12.2(25r)
SW_Core	12.1(22)
Main_I3	16.3.2
FIREWALL	12.5 (3)S5
Edge	15.5 (3)S5
SW-back_01	15.1(22)EA4

Device	IP-adres	Interface	Verbonden met		
			Device	Interface	Trunk/ Access
SW_Core	10.30.0.2	G3/1	Main_L3	G1/0/2	Trunk
FIREWALL	172.16.20.2	G0/0/1	SW_Back_01	G0/0/0	Access
Edge	172.16.0.2	G0/0/0	Main_L3	G1/0/1	Access
Sw1	10.30.0.4	G2/1	SW-Core	G0/1	Trunk
Sw2	10.30.0.5	G1/1	SW-Core	G0/1	Trunk
Sw3	10.30.0.6	G0/1	SW-Core	G0/1	Trunk
SW_back_01	172.16.20.5	FA0/1	FIREWALL	G0/0/1	Access

Inhoud

[Dit is de configuratie van een netwerk met 3 switches en 2 routers. De instellingen zijn als volgt:](#)

[Technische informatie](#)

[IP-adressen](#)

[Verdeling VLAN's](#)

[Systeemaccounts](#)

[IOS-versies](#)

[Configuration Switch1:](#)

[Configuration Switch 2:](#)

[Configuration Switch 3:](#)

[Configuration Router:](#)

[Configuration SW-Core](#)

Configuration Switch1:

Current configuration : 6978 bytes

!

version 12.2

no service timestamps log datetime msec

no service timestamps debug datetime msec

service password-encryption

!

hostname SW1

!

ip ftp username ftp-admin

ip ftp password B@ckup-cnfg

enable secret 5 \$1\$mERr\$Zpt2pQQKuNvOILWnoLsoB/

!

!

!

ip ssh version 2

ip domain-name solarplex.nl

!

username admin privilege 1 password 7 081669620216083743

username c privilege 1 password 7 0822

!

!

ip dhcp snooping vlan 1-1000

ip dhcp snooping

!

lldp run

!

spanning-tree mode pvst

spanning-tree extend system-id

spanning-tree vlan 1-4000 priority 16384

!

interface FastEthernet0/1

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/2

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/3

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/4

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

```
interface FastEthernet0/5
switchport access vlan 20
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
spanning-tree portfast
spanning-tree bpduguard enable
```

!

```
interface FastEthernet0/6
switchport access vlan 21
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
spanning-tree bpduguard enable
```

!

```
interface FastEthernet0/7
switchport access vlan 21
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
```

spanning-tree bpduguard enable

!

interface FastEthernet0/8

switchport access vlan 21

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/9

switchport access vlan 21

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/10

switchport access vlan 21

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/11

switchport access vlan 22

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/12

switchport access vlan 22

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/13

switchport access vlan 22

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/14

switchport access vlan 22

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/15

switchport access vlan 22

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/16

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/17

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/18

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/19

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/20

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/21

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

shutdown

!

interface FastEthernet0/22

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

shutdown

!

interface FastEthernet0/23

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

shutdown

!

interface FastEthernet0/24

switchport access vlan 30

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface GigabitEthernet0/1

switchport trunk allowed vlan 20-23,30

ip dhcp snooping trust

switchport mode trunk

!

interface GigabitEthernet0/2

switchport access vlan 99

shutdown

!

interface Vlan1

no ip address

shutdown

!

interface Vlan30

ip address 10.30.0.4 255.255.0.0

!

ip default-gateway 10.30.0.1

!

no cdp run

!

banner motd ^C

###

#

!! WARNING !!

#

There is no expectation of privacy when using this system.

UNAUTHORIZED ACCESS TO THIS DEVICE IS PROHIBITED

#

You must have explicit, authorized permission to

access or configure this device. Unauthorized attempts

and actions to access or use this system may result

in civil and/or criminal penalties. All activities

performed on this device are logged and monitored.

#

###

^C

logging 10.30.0.100

!

!

!

line con 0

login local

!

line vty 0 4

login local

```
transport input ssh
```

```
line vty 5 15
```

```
login
```

```
transport input ssh
```

```
!
```

```
!
```

```
!
```

```
ntp server 10.30.0.100
```

```
!
```

```
End
```

Configuration Switch 2:

```
Current configuration : 6999 bytes
```

```
!
```

```
version 12.2
```

```
no service timestamps log datetime msec
```

```
no service timestamps debug datetime msec
```

```
service password-encryption
```

```
!
```

hostname SW2

!

ip ftp username ftp-admin

ip ftp password B@ckup-cnfg

!

!

!

ip ssh version 2

ip domain-name solarplex.nl

!

username admin privilege 1 password 7 081669620216083743

username c privilege 1 password 7 0822

!

!

ip dhcp snooping vlan 1-1000

ip dhcp snooping

!

lldp run

!

spanning-tree mode pvst

spanning-tree extend system-id

spanning-tree vlan 1-4000 priority 16384

!

interface FastEthernet0/1

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/2

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/3

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/4

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/5

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/6

switchport access vlan 21

switchport mode access

switchport nonegotiate

```
switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/7

switchport access vlan 21

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/8

switchport access vlan 21

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/9

switchport access vlan 21

switchport mode access

switchport nonegotiate
```

```
switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/10

switchport access vlan 21

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/11

switchport access vlan 22

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/12

switchport access vlan 22

switchport mode access

switchport nonegotiate
```

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/13

switchport access vlan 22

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/14

switchport access vlan 22

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/15

switchport access vlan 22

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/16

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/17

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/18

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/19

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/20

switchport access vlan 23

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/21

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

shutdown

!

interface FastEthernet0/22

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

shutdown

!

interface FastEthernet0/23

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

shutdown

!

interface FastEthernet0/24

switchport access vlan 30

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface GigabitEthernet0/1

switchport trunk allowed vlan 20-23,30

ip dhcp snooping trust

switchport mode trunk

switchport nonegotiate

!

interface GigabitEthernet0/2

ip dhcp snooping trust

switchport mode trunk

switchport nonegotiate

shutdown

!

interface Vlan1

no ip address

shutdown

!

interface Vlan30

ip address 10.30.0.5 255.255.0.0

!

ip default-gateway 10.30.0.1

!

no cdp run

!

banner motd ^C

###

#

!! WARNING !!

#

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#

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access or configure this device. Unauthorized attempts

and actions to access or use this system may result

in civil and/or criminal penalties. All activities

performed on this device are logged and monitored.

#

```
#####  
###
```

^C

```
logging 10.30.0.100
```

```
!
```

```
!
```

```
!
```

```
line con 0
```

```
login local
```

```
!
```

```
line vty 0 4
```

```
login local
```

```
transport input ssh
```

```
line vty 5 15
```

```
login
```

```
transport input ssh
```

```
!
```

```
!
```

```
!
```

```
ntp server 10.30.0.100
```

```
!
```

```
end
```

Configuration Switch 3:

Current configuration : 6929 bytes

!

version 12.2

no service timestamps log datetime msec

no service timestamps debug datetime msec

service password-encryption

!

hostname SW3

!

ip ftp username ftp-admin

ip ftp password B@ckup-cnfg

!

!

!

ip ssh version 2

ip domain-name solarplex.nl

!

username admin privilege 1 password 7 081669620216083743

username c privilege 1 password 7 0822

!

!

```
ip dhcp snooping vlan 1-1000

ip dhcp snooping

!

lldp run

!

spanning-tree mode pvst

spanning-tree extend system-id

spanning-tree vlan 1-4000 priority 16384

!

interface FastEthernet0/1

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/2

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3
```

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/3

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/4

switchport access vlan 20

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/5

switchport access vlan 20

switchport mode access

```
switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree portfast

spanning-tree bpduguard enable

!

interface FastEthernet0/6

switchport access vlan 21

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/7

switchport access vlan 21

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/8

switchport access vlan 21
```

```
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/9
```

```
switchport access vlan 21
```

```
switchport mode access
```

```
switchport nonegotiate
```

```
switchport port-security
```

```
switchport port-security maximum 3
```

```
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/10
```

```
switchport access vlan 21
```

```
switchport mode access
```

```
switchport nonegotiate
```

```
switchport port-security
```

```
switchport port-security maximum 3
```

```
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/11
```

```
switchport access vlan 22
```

```
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/12
```

```
switchport access vlan 22
```

```
switchport mode access
```

```
switchport nonegotiate
```

```
switchport port-security
```

```
switchport port-security maximum 3
```

```
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/13
```

```
switchport access vlan 22
```

```
switchport mode access
```

```
switchport nonegotiate
```

```
switchport port-security
```

```
switchport port-security maximum 3
```

```
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/14
```

```
switchport access vlan 22
```

```
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/15
```

```
switchport access vlan 22
```

```
switchport mode access
```

```
switchport nonegotiate
```

```
switchport port-security
```

```
switchport port-security maximum 3
```

```
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/16
```

```
switchport access vlan 23
```

```
switchport mode access
```

```
switchport nonegotiate
```

```
switchport port-security
```

```
switchport port-security maximum 3
```

```
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/17
```

```
switchport access vlan 23
```

```
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
spanning-tree bpduguard enable
!
```

```
interface FastEthernet0/18
switchport access vlan 23
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
spanning-tree bpduguard enable
!
```

```
interface FastEthernet0/19
switchport access vlan 23
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
spanning-tree bpduguard enable
!
```

```
interface FastEthernet0/20
switchport access vlan 23
```

```
switchport mode access
switchport nonegotiate
switchport port-security
switchport port-security maximum 3
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/21
```

```
switchport access vlan 99
```

```
switchport mode access
```

```
switchport nonegotiate
```

```
switchport port-security
```

```
switchport port-security maximum 3
```

```
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/22
```

```
switchport access vlan 99
```

```
switchport mode access
```

```
switchport nonegotiate
```

```
switchport port-security
```

```
switchport port-security maximum 3
```

```
spanning-tree bpduguard enable
```

```
!
```

```
interface FastEthernet0/23
```

```
switchport access vlan 99
```

```
switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface FastEthernet0/24

switchport access vlan 30

switchport mode access

switchport nonegotiate

switchport port-security

switchport port-security maximum 3

spanning-tree bpduguard enable

!

interface GigabitEthernet0/1

ip dhcp snooping trust

switchport mode trunk

switchport nonegotiate

!

interface GigabitEthernet0/2

ip dhcp snooping trust

switchport mode trunk

switchport nonegotiate

shutdown
```

!

interface Vlan1

no ip address

shutdown

!

interface Vlan30

ip address 10.30.0.6 255.255.0.0

!

ip default-gateway 10.30.0.1

!

no cdp run

!

banner motd ^C

###

#

!! WARNING !!

#

There is no expectation of privacy when using this system.

UNAUTHORIZED ACCESS TO THIS DEVICE IS PROHIBITED

#

```
# You must have explicit, authorized permission to #
# access or configure this device. Unauthorized attempts #
# and actions to access or use this system may result #
# in civil and/or criminal penalties. All activities #
# performed on this device are logged and monitored. #
# #
```

```
#####
###
```

^C

```
logging 10.30.0.100
```

```
!
```

```
!
```

```
!
```

```
line con 0
```

```
login local
```

```
!
```

```
line vty 0 4
```

```
login local
```

```
transport input ssh
```

```
line vty 5 15
```

```
login
```

```
transport input ssh
```

```
!
```

```
!  
!  
ntp server 10.30.0.100  
!  
end
```

Configuration Router:

Current configuration : 7482 bytes

```
!  
version 16.3.2  
service timestamps log datetime msec  
no service timestamps debug datetime msec  
service password-encryption  
!  
hostname Main_L3  
!  
logging userinfo  
!  
enable secret 5 $1$mERr$Zpt2pQQKuNvOILWnoLsoB/  
!  
!
```

!

!

!

!

no ip cef

ip routing

!

no ipv6 cef

!

!

!

username admin password 7 081669620216083743

username c password 7 0822

!

!

lldp run

!

!

!

!

!

!

!

!

```
ip dhcp snooping vlan 1

ip dhcp snooping database flash:/dhcp-snooping.db

ip dhcp snooping

!

ip ftp username ftp-admin

ip ftp password B@ckup-cnfg

ip ssh version 2

ip domain-name solarplex.nl

!

!

spanning-tree mode pvst

spanning-tree vlan 1-4000 priority 0

!

class-map match-any Default

match protocol arp

match protocol dhcp

match protocol icmp

!

policy-map PT_CONTROLLER_QUEUING_OUT

class Default

bandwidth remaining percent 1

random-detect dscp-based

!

policy-map PT_CONTROLLER_MARKING_IN
```

```
class Default

set ip dscp default

!

!

!

!

!

interface Loopback1

no ip address

!

interface GigabitEthernet1/0/1

no switchport

ip address 172.16.0.1 255.255.255.252

duplex auto

speed auto

!

interface GigabitEthernet1/0/2

ip dhcp snooping trust

switchport trunk allowed vlan 20-23,30

switchport mode trunk

switchport nonegotiate

!

interface GigabitEthernet1/0/3

switchport access vlan 30
```

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/4

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/5

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/6

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/7

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/8

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/9

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/10

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/11

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/12

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/13

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/14

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/15

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/16

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/17

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface GigabitEthernet1/0/18

ip dhcp snooping trust

switchport access vlan 30

!

interface GigabitEthernet1/0/19

ip dhcp snooping trust

switchport access vlan 30

!

interface GigabitEthernet1/0/20

ip dhcp snooping trust

switchport access vlan 30

!

interface GigabitEthernet1/0/21

ip dhcp snooping trust

switchport access vlan 30

!

interface GigabitEthernet1/0/22

ip dhcp snooping trust

switchport access vlan 30

!

interface GigabitEthernet1/0/23

switchport access vlan 30

!

interface GigabitEthernet1/0/24

switchport access vlan 30

!

```
interface GigabitEthernet1/1/1
switchport access vlan 99
switchport mode access
switchport nonegotiate
switchport port-security
shutdown
spanning-tree bpduguard enable
!
```

```
interface GigabitEthernet1/1/2
switchport access vlan 99
switchport mode access
switchport nonegotiate
switchport port-security
shutdown
spanning-tree bpduguard enable
!
```

```
interface GigabitEthernet1/1/3
switchport access vlan 99
switchport mode access
switchport nonegotiate
switchport port-security
shutdown
spanning-tree bpduguard enable
!
```

```
interface GigabitEthernet1/1/4

switchport access vlan 99

switchport mode access

switchport nonegotiate

switchport port-security

shutdown

spanning-tree bpduguard enable

!

interface Vlan1

no ip address

shutdown

!

interface Vlan20

mac-address 0002.4a40.2901

ip address 10.20.0.1 255.255.0.0

ip helper-address 10.30.0.175

ip access-group 120 in

!

interface Vlan21

mac-address 0002.4a40.2902

ip address 10.21.0.1 255.255.0.0

ip helper-address 10.30.0.175

ip access-group 121 in

!
```

```
interface Vlan22

mac-address 0002.4a40.2903

ip address 10.22.0.1 255.255.0.0

ip helper-address 10.30.0.175

ip access-group 122 in

!

interface Vlan23

mac-address 0002.4a40.2904

ip address 10.23.0.1 255.255.0.0

ip helper-address 10.30.0.175

ip access-group 123 in

!

interface Vlan30

mac-address 0002.4a40.2905

ip address 10.30.0.1 255.255.0.0

!

interface Vlan100

mac-address 0002.4a40.2906

ip address 100.0.0.1 255.0.0.0

!

router ospf 1

log-adjacency-changes

passive-interface default

no passive-interface GigabitEthernet1/0/1
```

```
network 10.20.0.0 0.0.255.255 area 0
network 10.21.0.0 0.0.255.255 area 0
network 10.22.0.0 0.0.255.255 area 0
network 10.23.0.0 0.0.255.255 area 0
network 10.30.0.0 0.0.255.255 area 0
network 10.10.0.0 0.0.255.255 area 0
network 172.16.0.0 0.0.0.3 area 0
```

```
!
```

```
ip classless
```

```
!
```

```
ip flow-export version 9
```

```
!
```

```
!
```

```
!
```

```
no cdp run
```

```
!
```

```
banner motd ^C
```

```
#####
###
```

```
# #
```

```
# !! WARNING !! #
```

```
# #
```

```
# There is no expectation of privacy when using this system. #
```

UNAUTHORIZED ACCESS TO THIS DEVICE IS PROHIBITED

#

You must have explicit, authorized permission to

access or configure this device. Unauthorized attempts

and actions to access or use this system may result

in civil and/or criminal penalties. All activities

performed on this device are logged and monitored.

#

###

^C

!

!

!

!

logging 10.30.0.100

line con 0

login local

!

line aux 0

!

```
line vty 0 4
login local
transport input ssh
!
!
!
ntp server 10.30.0.100
ntp update-calendar
!
End
```

Configuration SW-Core

Current configuration : 3403 bytes

```
!
version 12.1
service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
```

```
hostname SW_Core

!

ip ftp username ftp-admin

ip ftp password B@ckup-cnfg

enable secret 5 $1$mERr$Zpt2pQQKuNvOILWnoLsoB/

!

!

!

ip ssh version 2

ip domain-name solarplex.nl

!

username admin privilege 1 password 7 081669620216083743

username c privilege 1 password 7 0822

!

!

ip dhcp snooping

!

lldp run

!

spanning-tree mode pvst

spanning-tree extend system-id

spanning-tree vlan 1-4000 priority 4096

!

interface GigabitEthernet0/1
```

```
switchport trunk allowed vlan 20-23,30
```

```
ip dhcp snooping trust
```

```
switchport mode trunk
```

```
switchport nonegotiate
```

```
!
```

```
interface GigabitEthernet1/1
```

```
switchport trunk allowed vlan 20-23,30
```

```
ip dhcp snooping trust
```

```
switchport mode trunk
```

```
switchport nonegotiate
```

```
!
```

```
interface GigabitEthernet2/1
```

```
switchport trunk allowed vlan 20-23,30
```

```
ip dhcp snooping trust
```

```
switchport mode trunk
```

```
switchport nonegotiate
```

```
!
```

```
interface GigabitEthernet3/1
```

```
switchport trunk allowed vlan 20-23,30
```

```
ip dhcp snooping trust
```

```
switchport mode trunk
```

```
switchport nonegotiate
```

```
!
```

```
interface GigabitEthernet4/1
```

```
switchport access vlan 99  
switchport mode access  
switchport nonegotiate  
spanning-tree bpduguard enable  
shutdown
```

```
!
```

```
interface GigabitEthernet5/1
```

```
switchport access vlan 99  
switchport mode access  
switchport port-security  
spanning-tree bpduguard enable  
shutdown
```

```
!
```

```
interface GigabitEthernet6/1
```

```
switchport access vlan 99  
switchport mode access  
switchport nonegotiate  
switchport port-security  
spanning-tree bpduguard enable
```

```
!
```

```
interface GigabitEthernet7/1
```

```
switchport access vlan 99  
switchport mode access  
switchport nonegotiate
```

```
switchport port-security
spanning-tree bpduguard enable
shutdown
!
interface GigabitEthernet8/1
switchport access vlan 99
switchport mode access
switchport nonegotiate
switchport port-security
spanning-tree bpduguard enable
shutdown
!
interface GigabitEthernet9/1
switchport access vlan 99
switchport mode access
switchport nonegotiate
switchport port-security
spanning-tree bpduguard enable
shutdown
!
interface Vlan1
no ip address
shutdown
!
```

```
interface Vlan30

ip address 10.30.0.2 255.255.0.0

!

ip default-gateway 10.30.0.1

!

no cdp run

!

banner motd ^C
```

```
#####
###
```

```
# #
```

```
# !! WARNING !! #
```

```
# #
```

```
# There is no expectation of privacy when using this system. #
```

```
# ----- #
```

```
# UNAUTHORIZED ACCESS TO THIS DEVICE IS PROHIBITED #
```

```
# ----- #
```

```
# #
```

```
# You must have explicit, authorized permission to #
```

```
# access or configure this device. Unauthorized attempts #
```

```
# and actions to access or use this system may result #
```

```
# in civil and/or criminal penalties. All activities #
```

```
# performed on this device are logged and monitored. #
```

#

###

^C

logging 10.30.0.100

!

!

!

line con 0

login local

!

line vty 0 4

login local

transport input ssh

line vty 5 15

login

!

!

!

ntp server 192.168.0.125

!

End

Als je bij de sw core meer fastethernet poorten nodig hebt, dan kan je een pt switch pakken en die uitbreiden bij modules (cfe in de spots slepen als het stroom eraf is bij physical)