Cisco Commands

Werk proces 1

Command line

Router> User Mode
Router>enable
Router# privileged Mode
Router#configure terminal
Router(config)# Global Configuration Mode

Show previous commands we have entered

Router#show history

Change the history size

Router#terminal history size 50 (0-256)

Change the hostname

Router(config)#hostname HeadOffice
HeadOffice(config)#

View Configurations

HeadOffice#show running-config

Save router configuration to NVRam

HeadOffice#copy running-config startup-config

Reload the router

HeadOffice#reload Page 2

Restore back-ups

Om back-ups terug te zetten vul je de volgende commando's in:
Switch# enable
Switch# configure terminal
Switch(config) config-register 0x2102
Switch(config) exit
Switch# reload
Nu start je het device opnieuw.
Switch# show running-config
Control leer of de back up is gemaakt.

Banner MOTD message of the day

HeadOffice(config)#Banner motd # Verboden toegang #

Login banner

HeadOffice(config)#Banner login # Wel Come to the Public Router#

enable password

HeadOffice(config)#enable password CISCO

enable secret password

Router(config)#enable secret CCNA

Console password

HeadOffice(config)#line console 0
HeadOffice(config-line)#password console
HeadOffice(config-line)#login

encrypt passwords

HeadOffice(config)#service password-encryption

Stop ip domain lookup

HeadOffice(config)#no ip domain-lookup

Console logout time

HeadOffice(config)#line console 0
HeadOffice(config-line)#exec-timeout min sec Page 3

OSPF instellen

Device(config)# router ospf [ID Name]
Device(config-router)# network 192.168.129.16 0.0.0.3 area 20

OSPF authentication

R1(config)#int fa0/0
R1(config-if)#ip ospf authentication-key secret
R1(config-if)#ip ospf authentication
Router#show ip ospf interface serial 2/0

SSH

Router(config)#service password-encryption
Router(config)#ip domain-name horizoncollege.nl
hostname R1
crypto key generate rsa
How many bits in the modulus [512]: 1024
R1(config)#login block-for 180 attempts 4 within 120
R1(config-line)#transport input ssh
R1(config-line)#login local

Stop disturbing console message when typing

HeadOffice(config)#line console 0

HeadOffice(config-line)#logging synchronous

View the date and time

HeadOffice#view clock

Change the timezone

HeadOffice(config)#clock timezone utc 5 30

Change the time

HeadOffice#clock set h:m:s date month year (if now time is 8 10 am we must - 5 30 from it when enter the time)

NTP Server

Switch(config)#ntp server [IP]
Switch(config)#ntp authenticate
Switch(config)#ntp trusted-key 1
Switch(config)#ntp authenticate-key 1 md5 [Password]

show ntp associations

ntp server [IP NTP server]

Configure fastethernet interface

HeadOffice(config)#interface fastethernet 0/0
HeadOffice(config-if)#Description CONNECTION TO LAN ADMIN
HeadOffice(config-if)#ip address 192.168.1.1 255.255.255.0
HeadOffice(config-if)#no shut

Configure serial interface

HeadOffice(config)#interface serial 0/0/0
HeadOffice(config-if)#ip address 192.168.10.1 255.255.255.252
HeadOffice(config-if)#description WAN CONNECTION TO 2ND FLOOR
HeadOffice(config-if)#clock rate 64000 (DCE interface)
HeadOffice(config-if)#no shut Page 4

Back-up tftp

Switch# wr mem
Switch# copy startup-config tftp:
Address or name of remote host []? [IP Address]
Destination filename [Switch-confg]? [Name config file]

Back-up ftp

Switch# enable
Switch# config t
Switch(config)# ip ftp username [Username]
Switch(config)# ip ftp password [Password]
Switch# wr mem
Switch# copy running-config ftp:
Address or name of remote host []? [IP Address]
Destination filename [Switch-confg]? [Name config file]

DHCP Server instellen

Router(config)#ip dhcp pool [Naam DHCP Pool]
Router(dhcp-config)#network 192.168.0.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.0.1
Router(dhcp-config)#dns-server 192.168.0.1 (Hoeft niet perse)

Ip adressen excluden

Router(config)#ip dhcp excluded-address 192.168.10.0 192.168.10.9

View interface details

HeadOffice#show controllers serial 0/0/0

Show physcial configurations

HeadOffice#show version

Static route

HeadOffice(config)#ip route 192.168.2.0 255.255.255.0 192.168.10.1

(destination network) (subnetmask) (next hop address)

or

HeadOffice(config)#ip route 192.168.2.0 255.255.255.0 serial 0/0/0

(destination network) (subnetmask) (exit interface)

VTY Lines Password

UpaaeRouter1(config)# line vty 0 15

paaeRouter1(line-config)# password hans

UpaaeRouter1(line-config)#login

Port security

Switch(config)#int fa0/1

Switch(config-if)#switchport mode access

Switch(config-if)#switchport port-security

Switch(config-if)#switchport port-security mac-address sticky

Vlan Ip address geven

Switch(config)#interface vlan (Vlan nummer)

Switch(config-if)#ip address (ip) (submask)

Vlan aanmaken

Switch> Enable

Switch# Vlan datebase

Switch# Vlan (nummer) name (naam die je wilt geven)

Maak een switch primary vlan

Switch> Enable

Switch# Config Terminal

Switch(config) spanning-tree vlan (nummer) root primary

VTP Instellen

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Switch> enable
Switch# config terminal
Switch(config) interface vlan (Vlan name)
Switch(vlan)#vtp domain (Domain Name) (kan je in theorie zelf kiezen)
Switch(vlan)#vtp password (password)
Switch(vlan)#vtp {client | server | transparent}
```

Vlans koppelen aan interface

Switch> enable

Switch# config terminal

Switch(config) interface (Name)

Switch(config-if)switchmode access vlan (nummer)

Trunkpoort aanmaken

Switch> enable

Switch# config terminal

Switch(config) interface (Name)

Switch(config-if)switchmode mode trunk

optioneel commando, niet altijd beschikbaar op switchesswitch

Switch(config-if)**switchport trunk encapsulation dot1q**

Als je vlans wilt toevoegen aan trunk poort gebruik dit

switch(config-if)switchport trunk allowed vlan xx,xx

om te testen of je trunkpoort werkt gebruik:

Switch#show interfaces trunk

ACL instellen

Doe dit echt als laatste stap anders gaat misschien je netwerk naar de klote!!!

R1#config terminal

R1(config)#ip access-list extended (lijst naam)

R1(config-ext-nacl)#deny (tcp of udp) 192.168.20.0 0.0.0.255 host 192.168.10.100 eq (poortnummer)

R1(config-ext-nacl)#permit ip any any

ACL koppelen aan interface

Switch(config) interface (naam interface)

Switch (config-if) ip access-group (acl naam) in

DHCP pools per vlan

Maak zoveel pools aan als je nodig hebt in dat geval maak er twee aan

Zorg voor trunk poorten en voeg de vlans die je wilt gebruiken aan router toe

Switch> enable

Switch# config terminal

Switch(config-subif) interface (Name) (nummer.1)

Switch(config-subif) ip address (IP) (Mask)

Switch(config-subif) encapsulation dot1q (vlan nummer)

Switch(config-subif) No shutdown

Switch(config-subif) end

Switch(config-subif) interface (Name) (nummer.2)

Switch(config-subif) ip address (IP) (Mask)

Switch(config-subif) encapsulation dot1q (vlan nummer)

No shutdown

Om CDP en LLDP inteschakelen

Router(config)cdp run

Router(config)lldp run

Werk Proces 2

Command prompt

Ping om connectie te checken

Ping (IP)

Tracert (IP)

Telnet/ssh om verbinding te maken met router

telnet (default gateway)

ssh -l (username) (ip)

Om verbonden apparaten te ontdekken

Arp -a

Command Line

Om info over interfaces te vinden

Router>show interface

Om routes te bekijken (let op 'via' voor connecties met andere routers)

Router>show ip route

Om verbonden apparaten te ontdekken

Router>show arp

Werkt een beetje hetzelfde al arp

Router>Show cdp neighbors detail

Router>Show lldp

Om te checken of de start-up config opgeslagen is

Router>Show flash