# Cha2

**Console verbinding**:

Console cable: S1 console --> PC1 RS 232

PC: desktop --> terminal

Modes:

* **Privil EXEC**:

enable, disable

* **Global config**:

configure terminal, exit

* **line config**:

Switch(config)# line console 0, exit

* **interface config:**

Switch(config)# interface FastEthernet 0/1

Switch(config-if)#

**back to enabled**:

ctrl + Z

or

Switch(config-line)# end

Switch#

**clock**:

S1# show clock

S1# clock set 15:00:00 31 Jan 2017

**hostname**

enable, config term

Switch(config)# hostname oi

oi(config)# no hostname

Switch(config)#

**Version:**

S1# Show version

**Passwords**:

* **User EXEC** mode:

S1(config)# line console 0

S1(config-line)# password topkek

S1(config-line)# login

* **Priviliged EXEC** mode:

S1(config)# enable secret topkek

* **Virtual terminal**, for SSH+telnet (**VTY**)

S1(config)# line vty 0 15

S1(config-line)# password topkek

S1(config-line)# login

* **Password encryption:**

S1(config)# service password-encryption

* **Password security**:
  + **Passwoord Lengte:**
    - r1(config)# security passwords min-length 10
  + **Block na fout antwoord**
    - r1(config)# login block-for 120 attempts 3 within 60 //60 sec
  + **Timeout**:
    - r1(config)#line vty 0 4
    - r1(config-line)# exect-timeout 10 //10 min

**MOTD:**

S1(config)# banner motd #only authorized personnel are allowed to acces the device#

**Running config / startup config**:

* **Save running config** **file**:

S1# copy running-config startup-config

* **Undo running config**:

S1# reload

* **Remove startup-config**

S1# erase startup-config

**Interfaces:**

* **Enable SVI** (switch virt int, remote):

S1(config)# interface vlan 1

S1(config-if)# ip address 192.168.0.1 255.255.255.0

S1(config-if)# no shutdown

* **Show interfaces:**

S1# show ip interface brief

**Bestand verwijderen**

S1# delete file.txt

# Cha5

**ARP table / MAC addr table:**

* R1# show ip arp
* S1> show mac-address-table
* S1# clear mac address-table dynamic
* **cmd**:
  + arp
  + arp -a (alles tonen)
  + arp -d (alles verwijderen)

# Cha6

**cmd**:

* routing table on host:
  + route print or netstat -r

**Routing table router**:

- show ip route

**Configure router interface**:

R1(config)# **interface** gigabitethernet 0/0

R1(config-if)# **IP** **address** 192.168.10.1 255.255.255.0

R1(config-if)# **description** Link to LAN-10

R1(config-if)# **no** **shutdown**

**Verify router interface config**:

* Show IP interface:
  + R1# show IP interface brief
  + R# ping \*gigbitethernet ip\* (esc to abord)
* show interfaces
* show interface serial 0/0/0
* show IP route

**Config default gateway**:

S1#(config)# ip default-gateway 192.168.10.1

# Cha7

**enable ipv6 routing**

R1(config)# ipv6 unicast-routing

**assign ipv6 address:**

R1(config-if)# ipv6 address \*ipv-address/prefix-lenght\*

**assign ipv6 link-local address**:

- R1(config-if)# ipv6 address fe8\_::1 link-local

**ipv6 route**

- show ipv6 route

**ipv6 interfaces**

- show ipv6 interface brief

**show ip addresses + port numbers (numerical form):**

netstat -n

**CMD**:

* ipv6 ip tonen:

ipv6config /all

# cha10

**ftp commands**:

* ftp xxx (verbinden)
* dir
* ls (alles zien)
* get (downloaden in user map)
* put (plaatsen, moet rechten hebben)
* quit (stoppen, verbinding verbreken)

**Packet tracer multi user**:

- boven aan extensions: listen voor gegevens

- links onder multiuser toevoegen, beide kanten

- srv = inc, client = outgoing

- copper straight-trough naar switchen

packet tracer: display name veranderen

in config --> display name

# cha11

**Enable SSH**:

- R1(config)# ip domain-name span.com

R1(config)# crypto key generate rsa general-keys modulus 1024 //generate one-way secret keys

R1(config)# username Bob secret cisco //verify or create local database entry - Admin: username admin privilege 15 secret myPass

R1(config)# line vty 0 4

R1(config-line)# login local

R1(config-line)# transport input ssh

exit

**SSH log in as admin**

- S1 ssh -1 admin 192.168.1.1

**IPconfig**:

- ipconfig /all

- ipconfig /displaydns

**show cdp neighbors**:

- show cdp neighbors

- show cdp neighbors detail

**debug**:

- R1# debug ip icmp

- no debug ip icmp

- undebug ip icmp

- undebug all (disable all debug commands at once)

**disable dns lookup**:

- R1(config)# no ip domain-lookup