

CCNA04 - Switch Cisco

Nº	ID	DS-232
≡	Compétence(s)	
≡	Type	Cours TP

1. Configuration de base

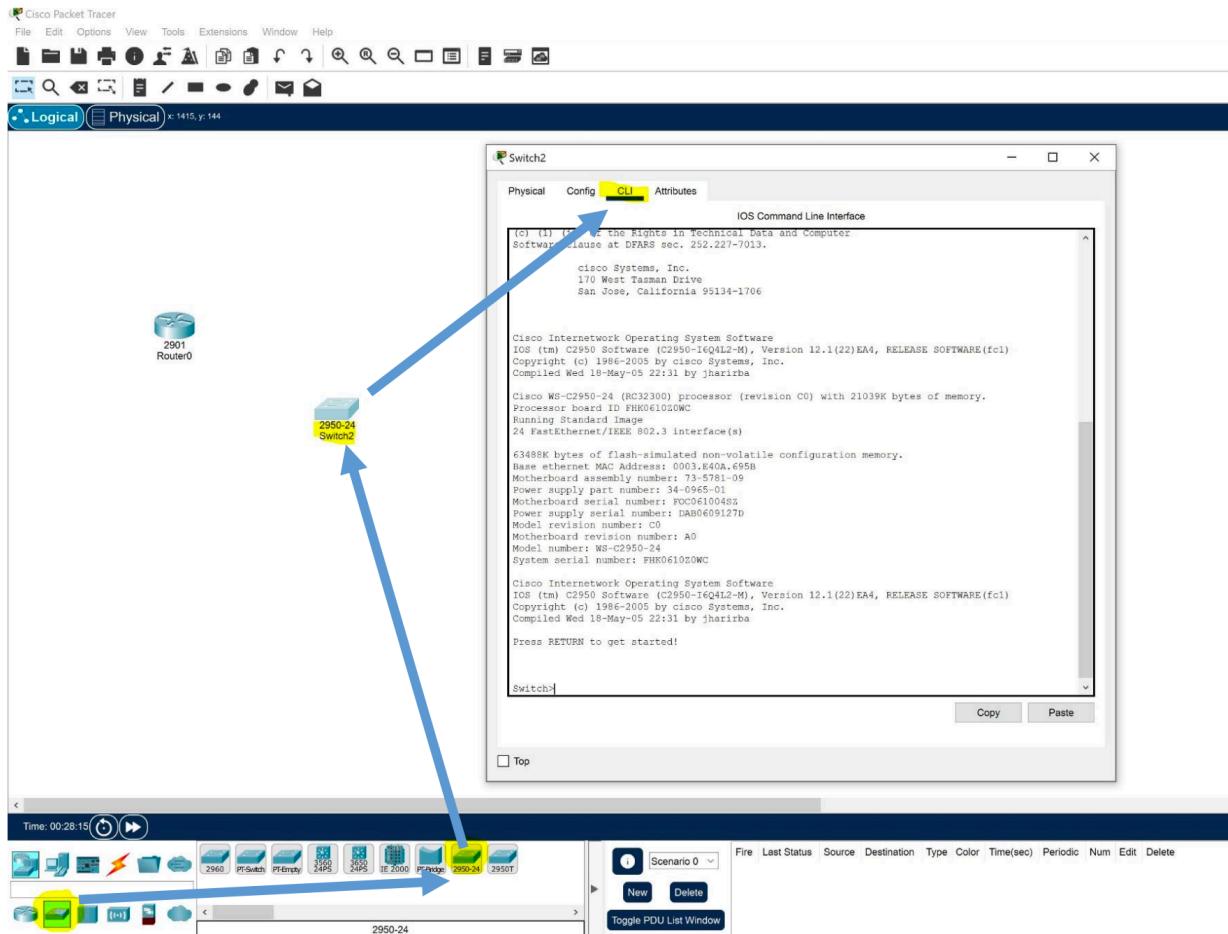
Explication simple

Un switch Cisco fonctionne de manière similaire à un routeur au niveau de la CLI, mais avec des différences importantes :

- Le switch travaille au **niveau 2 (couche liaison)** et connecte les appareils d'un même réseau local (LAN).
- Il **ne possède pas d'adresse IP de gestion par défaut**.
- Pour l'administrer, on configure une **interface VLAN**, généralement le **VLAN 1**.

En résumé :

- On ne configure pas une interface physique pour attribuer une IP au switch.
- On configure l'interface VLAN d'administration (souvent VLAN 1).



2. Commandes de base

Voici la séquence classique pour configurer un switch Cisco.

```
Switch> enable
```

Passer en mode privilégié.

```
Switch# configure terminal
```

Entrer en mode de configuration globale.

```
Switch(config)# hostname Switch1
```

Renommer le switch.

```
Switch1(config)# interface vlan 1
```

Accéder à l'interface VLAN d'administration.

```
Switch1(config-if)# ip address 192.168.1.2 255.255.255.0
```

Attribuer une adresse IP au switch.

```
Switch1(config-if)# no shutdown
```

Activer l'interface VLAN.

```
Switch1(config-if)# exit
```

```
Switch1(config)# ip default-gateway 192.168.1.1
```

Définir la passerelle du switch.

```
Switch1(config)# exit
```

```
Switch1# show ip interface brief
```

Vérifier que l'interface VLAN est activée et possède bien une IP.

Switch2

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Running Standard Image
24 FastEthernet/IEEE 802.3 interface(s)

63488K bytes of flash-simulated non-volatile configuration memory.
Base ethernet MAC Address: 0003.E40A.695B
Motherboard assembly number: 73-5781-09
Power supply part number: 34-0965-01
Motherboard serial number: FOC061004SZ
Power supply serial number: DAB0609127D
Model revision number: C0
Motherboard revision number: A0
Model number: WS-C2950-24
System serial number: FHK0610ZOWC

Cisco Internetwork Operating System Software
IOS (tm) C2950 Software (C2950-I6Q4L2-M), Version 12.1(22)EA4, RELEASE SOFTWARE(fcl)
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Compiled Wed 18-May-05 22:31 by jharirba

Press RETURN to get started!

Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname Switch1
Switch1(config)#interface vlan 1
Switch1(config-if)#ip address 192.168.1.2 255.255.255.0
Switch1(config-if)#no shutdown

Switch1(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

Switch1(config-if)#exit
Switch1(config)#ip default-gateway 192.168.1.1
Switch1(config)#exit
Switch1#
%SYS-5-CONFIG_I: Configured from console by console
```

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```

Switch1(config-if)#ip address 192.168.1.2 255.255.255.0
Switch1(config-if)#no shutdown

Switch1(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

Switch1(config-if)#exit
Switch1(config)#ip default-gateway 192.168.1.1
Switch1(config)#exit
Switch1#
%SYS-5-CONFIG_I: Configured from console by console

Switch1#show ip interface brief
Interface          IP-Address      OK? Method Status       Protocol
FastEthernet0/1    unassigned     YES manual down        down
FastEthernet0/2    unassigned     YES manual down        down
FastEthernet0/3    unassigned     YES manual down        down
FastEthernet0/4    unassigned     YES manual down        down
FastEthernet0/5    unassigned     YES manual down        down
FastEthernet0/6    unassigned     YES manual down        down
FastEthernet0/7    unassigned     YES manual down        down
FastEthernet0/8    unassigned     YES manual down        down
FastEthernet0/9    unassigned     YES manual down        down
FastEthernet0/10   unassigned     YES manual down        down
FastEthernet0/11   unassigned     YES manual down        down
FastEthernet0/12   unassigned     YES manual down        down
FastEthernet0/13   unassigned     YES manual down        down
FastEthernet0/14   unassigned     YES manual down        down
FastEthernet0/15   unassigned     YES manual down        down
FastEthernet0/16   unassigned     YES manual down        down
FastEthernet0/17   unassigned     YES manual down        down
FastEthernet0/18   unassigned     YES manual down        down
FastEthernet0/19   unassigned     YES manual down        down
FastEthernet0/20   unassigned     YES manual down        down
FastEthernet0/21   unassigned     YES manual down        down
FastEthernet0/22   unassigned     YES manual down        down
FastEthernet0/23   unassigned     YES manual down        down
FastEthernet0/24   unassigned     YES manual down        down
Vlan1             192.168.1.2  YES manual up         down
Switch1#

```

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3. Exercice de compréhension

Situation

Un nouveau switch vient d'être branché dans l'entreprise.

L'objectif est de :

- Donner le nom **Switch_Formation** au switch
- Lui attribuer l'IP **10.10.10.2/24**
- Indiquer la passerelle par défaut **10.10.10.1**

Correction

```
Switch> enable
Switch# configure terminal
Switch(config)# hostname Switch_Formation
Switch_Formation(config)# interface vlan 1
Switch_Formation(config-if)# ip address 10.10.10.2 255.255.255.0
Switch_Formation(config-if)# no shutdown
Switch_Formation(config-if)# exit
Switch_Formation(config)# ip default-gateway 10.10.10.1
Switch_Formation(config)# exit
Switch_Formation# show ip interface brief
```

Switch3

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Running Standard Image
24 FastEthernet/IEEE 802.3 interface(s)

63488K bytes of flash-simulated non-volatile configuration memory.
Base ethernet MAC Address: 00E0.A316.610C
Motherboard assembly number: 73-5781-09
Power supply part number: 34-0965-01
Motherboard serial number: FOC061004SZ
Power supply serial number: DAB0609127D
Model revision number: C0
Motherboard revision number: A0
Model number: WS-C2950-24
System serial number: FHK0610ZOWC

Cisco Internetwork Operating System Software
IOS (tm) C2950 Software (C2950-I6Q4L2-M), Version 12.1(22)EA4, RELEASE SOFTWARE(fc1)
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Compiled Wed 18-May-05 22:31 by jharirba

Press RETURN to get started!

Switch>enable
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname Switch_Formation
Switch_Formation(config)#interface vlan 1
Switch_Formation(config-if)#ip address 10.10.10.2 255.255.255.0
Switch_Formation(config-if)#no shutdown

Switch_Formation(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

Switch_Formation(config-if)#exit
Switch_Formation(config)#ip default-gateway 10.10.10.1
Switch_Formation(config)#exit
Switch_Formation#
%SYS-5-CONFIG_I: Configured from console by console
```

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Switch3

Physical Config **CLI** Attributes

IOS Command Line Interface

```

SwitchFormation(config-if)#ip address 10.10.10.2 255.255.255.0
SwitchFormation(config-if)#no shutdown

SwitchFormation(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

SwitchFormation(config-if)#exit
SwitchFormation(config)#ip default-gateway 10.10.10.1
SwitchFormation(config)#exit
SwitchFormation#
%SYS-5-CONFIG_I: Configured from console by console

SwitchFormation#show ip interface brief
Interface          IP-Address      OK? Method Status      Protocol
FastEthernet0/1    unassigned      YES manual down    down
FastEthernet0/2    unassigned      YES manual down    down
FastEthernet0/3    unassigned      YES manual down    down
FastEthernet0/4    unassigned      YES manual down    down
FastEthernet0/5    unassigned      YES manual down    down
FastEthernet0/6    unassigned      YES manual down    down
FastEthernet0/7    unassigned      YES manual down    down
FastEthernet0/8    unassigned      YES manual down    down
FastEthernet0/9    unassigned      YES manual down    down
FastEthernet0/10   unassigned      YES manual down    down
FastEthernet0/11   unassigned      YES manual down    down
FastEthernet0/12   unassigned      YES manual down    down
FastEthernet0/13   unassigned      YES manual down    down
FastEthernet0/14   unassigned      YES manual down    down
FastEthernet0/15   unassigned      YES manual down    down
FastEthernet0/16   unassigned      YES manual down    down
FastEthernet0/17   unassigned      YES manual down    down
FastEthernet0/18   unassigned      YES manual down    down
FastEthernet0/19   unassigned      YES manual down    down
FastEthernet0/20   unassigned      YES manual down    down
FastEthernet0/21   unassigned      YES manual down    down
FastEthernet0/22   unassigned      YES manual down    down
FastEthernet0/23   unassigned      YES manual down    down
FastEthernet0/24   unassigned      YES manual down    down
Vlan1             10.10.10.2    YES manual up      down

SwitchFormation#

```

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