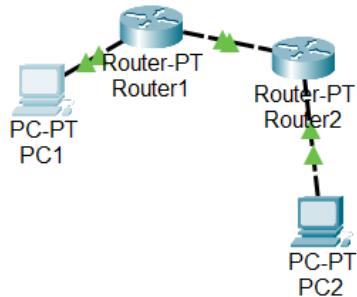


Travaux Pratique : Config routeur avec ip statique CISCO

architecture globale :



Dans cette architecture, il y a 2 réseaux,
192.168.1.0 et 192.168.2.0 relié au routeurs (r1 et r2)

Notre objectif, c'est de relier ces 2 réseaux
de sorte à pouvoir « ping » depuis l'autre réseau, en faisant des
routes statiques depuis les routeurs.

config PC1 (1^{er} réseau) :

PC1

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 0.0.0.0

IPv6 Configuration

☐ Automatic ☒ Static

IPv6 Address /

Link Local Address FE80::2D0:97FF:FEA1:30EB

Default Gateway

DNS Server

802.1X

☐ Use 802.1X Security

Authentication MD5

Username

Password

config routeur 1:

Router1

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet0/0

Port Status ☒ On

Bandwidth

Duplex ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0030.A3C1.D26A

IP Configuration

IPv4 Address 192.168.1.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

config PC2

The screenshot shows the 'PC2' configuration window with the 'Desktop' tab selected. The 'IP Configuration' section is active, showing settings for the 'FastEthernet0' interface. The 'Static' radio button is selected for both IPv4 and IPv6 configurations.

IP Configuration	
Interface	FastEthernet0
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IPv4 Address	192.168.2.2
Subnet Mask	255.255.255.0
Default Gateway	192.168.2.1
DNS Server	0.0.0.0
IPv6 Configuration	
<input type="radio"/> Automatic	<input checked="" type="radio"/> Static
IPv6 Address	
Link Local Address	FE80::250:FFF:FE18:1800
Default Gateway	
DNS Server	
802.1X	
<input type="checkbox"/> Use 802.1X Security	
Authentication	MD5
Username	
Password	

config routeur 2

The screenshot shows the 'Router2' configuration window with the 'Config' tab selected. The 'FastEthernet0/0' interface is selected in the left sidebar. The main panel shows the configuration for this interface, including port status, bandwidth, duplex, MAC address, and IP configuration.

FastEthernet0/0	
Port Status	<input checked="" type="checkbox"/> On
Bandwidth	<input checked="" type="radio"/> 100 Mbps <input type="radio"/> 10 Mbps <input checked="" type="checkbox"/> Auto
Duplex	<input type="radio"/> Half Duplex <input checked="" type="radio"/> Full Duplex <input checked="" type="checkbox"/> Auto
MAC Address	0001.C919.57A2
IP Configuration	
IPv4 Address	192.168.2.1
Subnet Mask	255.255.255.0
Tx Ring Limit	10

Nous voilà avec 2 réseaux, maintenant connectons les, de sorte à pouvoir communiquer d'un réseau à un autre. Créons donc un inter-réseau puis lions les 2 réseaux via un « ip route ».

inter-réseau R1

Router1

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings

ROUTING

- Static
- RIP

INTERFACE

- FastEthernet0/0
- FastEthernet1/0**
- Serial2/0
- Serial3/0
- FastEthernet4/0
- FastEthernet5/0

FastEthernet1/0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0060.3EB8.3972

IP Configuration

IPv4 Address 10.0.0.1

Subnet Mask 255.255.255.252

Tx Ring Limit 10

inter-réseau R2

Router2

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings

ROUTING

- Static
- RIP

INTERFACE

- FastEthernet0/0
- FastEthernet1/0**
- Serial2/0
- Serial3/0
- FastEthernet4/0
- FastEthernet5/0

FastEthernet1/0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0060.3E64.712E

IP Configuration

IPv4 Address 10.0.0.2

Subnet Mask 255.255.255.252

Tx Ring Limit 10

Voilà donc un inter-réseau (« un réseau de routeur »)

avec comme adresse :

10.0.0.0 + un masque de sous-réseau de 255.255.255.252, (/30 car ce n'est qu'un réseau de routeurs et donc pas besoin de beaucoup d'adresses).

Ip route R1

The screenshot shows the 'Router1' configuration window with the 'Config' tab selected. On the left, a sidebar lists categories: GLOBAL (Settings, Algorithm Settings), ROUTING (Static, RIP), and INTERFACE (FastEthernet0/0, FastEthernet1/0, Serial2/0, Serial3/0, FastEthernet4/0, FastEthernet5/0). The 'Static Routes' section is active. It contains fields for 'Network', 'Mask', and 'Next Hop', followed by an 'Add' button. Below these fields, a table shows the configured route: '192.168.2.0/24 via 10.0.0.2'.

R2

The screenshot shows the 'Router2' configuration window with the 'Config' tab selected. The sidebar is identical to Router1. The 'Static Routes' section is active. It contains fields for 'Network', 'Mask', and 'Next Hop', followed by an 'Add' button. Below these fields, a table shows the configured route: '192.168.1.0/24 via 10.0.0.1'.

On a donc fait ip route

avec pour R1 :

Network : 192.168.2.0

Mask : 255.255.255

Next Hop : 10.0.0.2

pour R2 :

192.168.1.0

255.255.255.0

10.0.0.1

```
C:\>ping 192.168.2.2

Pinging 192.168.2.2 with 32 bytes of data:

Reply from 192.168.2.2: bytes=32 time<1ms TTL=126
Reply from 192.168.2.2: bytes=32 time<1ms TTL=126
Reply from 192.168.2.2: bytes=32 time<1ms TTL=126
Reply from 192.168.2.2: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.2.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>|
```

voilà donc
le ping qui
montre que
ces réseaux
sont
interconnectés
grâce aux
manips
faites!!!!