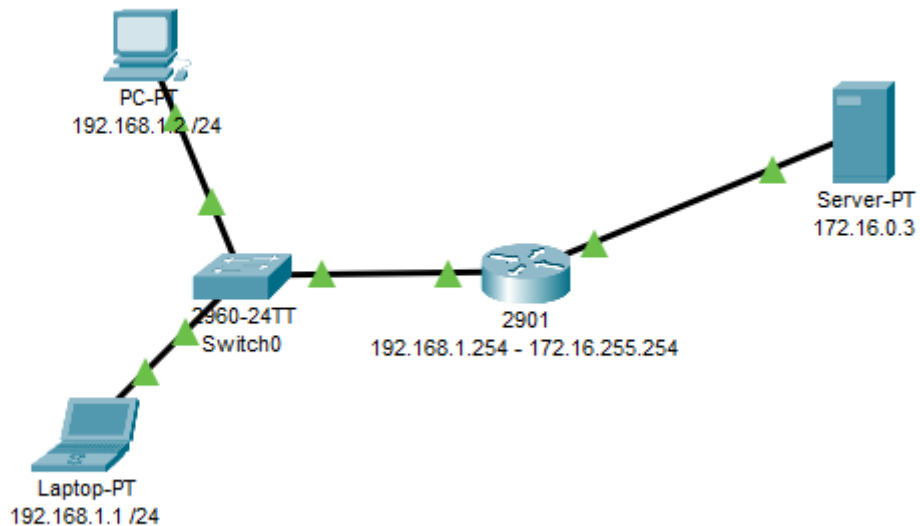


TP

La prise en main de Packet tracer

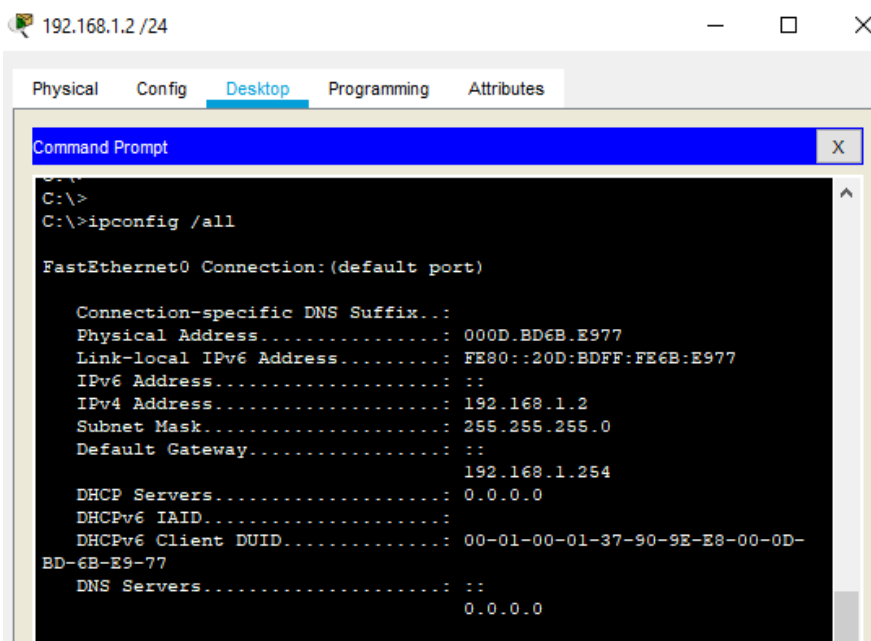
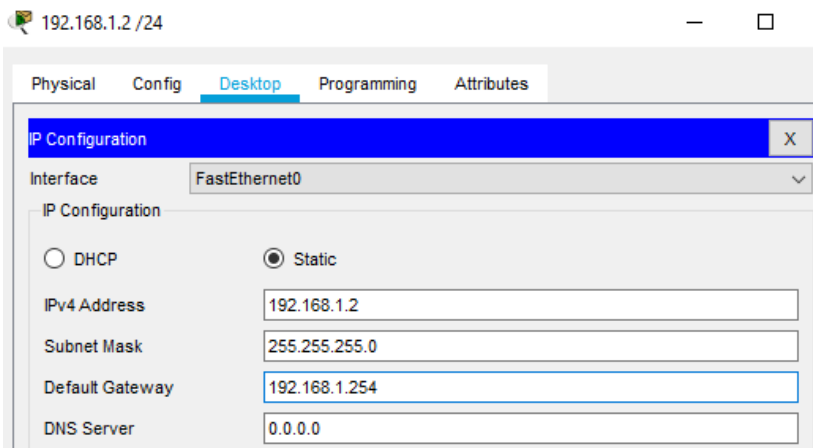
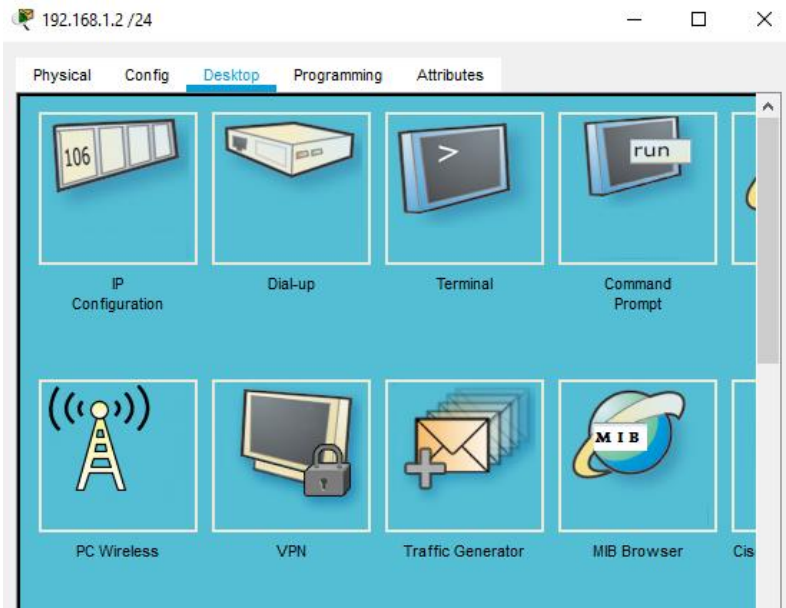
- 1) Reproduire l'architecture ci-dessous



- 2) Configurer les adresses IP

	PC1	PC2	Routeur	Serveur
Interface	192.168.1.1	192.168.1.2	192.168.1.254 172.16.255.254	172.16.0.3
Masque	255.255.255.0	255.255.255.0	255.255.255.0 255.255.0.0	255.255.0.0
Passerelle	192.168.1.254	192.168.1.254		172.16.255.254
Mac Adresse				

- 3) Tester la connectivité par le protocole ICMP (ping)
- 4) Relever les adresses IP et MAC lors d'un ping entre PC1 et PC2 d'une part, d'autre part entre PC1 et serveur.
- 5) Rédiger dans un fichier Word, une conclusion sur le rôle de l'adresse IP, de l'adresse MAC, du protocole ARP, du cache ARP.



Configurer les IP d'un routeur

192.168.1.254 - 172.16.255.254

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- SWITCHING**
- VLAN Database
- INTERFACE**
- GigabitEthernet0/0
- GigabitEthernet0/1

Global Settings

Display Name: 192.168.1.254 - 172.16.255.254

Hostname: Router

NVRAM: Erase Save

Startup Config: Load... Export...

Running Config: Export... Merge...

192.168.1.254 - 172.16.255.254

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- SWITCHING**
- VLAN Database
- INTERFACE**
- GigabitEthernet0/0
- GigabitEthernet0/1

GigabitEthernet0/0

Port Status: ☒ On

Bandwidth: ☐ 1000 Mbps ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex: ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address: 0006.2A9A.2601

IP Configuration

IPv4 Address: 192.168.1.254

Subnet Mask: 255.255.255.0

Tx Ring Limit: 10

Equivalent IOS Commands

```
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0
Router(config-if)#ip address 192.168.1.254 255.255.255.0
Router(config-if)#
```

192.168.1.254 - 172.16.255.254

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings
- ROUTING**
- Static
- RIP
- SWITCHING**
- VLAN Database
- INTERFACE**
- GigabitEthernet0/0
- GigabitEthernet0/1

GigabitEthernet0/1

Port Status: ☒ On

Bandwidth: ☐ 1000 Mbps ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex: ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address: 0006.2A9A.2602

IP Configuration

IPv4 Address: 172.16.255.254

Subnet Mask: 255.255.0.0

Tx Ring Limit: 10

Equivalent IOS Commands

```
Router(config-if)#ip address 192.168.1.254 255.255.255.0
Router(config-if)#ip address 192.168.1.254 255.255.255.0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface GigabitEthernet0/1
Router(config-if)#ip address 172.16.255.254 255.255.0.0
Router(config-if)#
```

192.168.1.2 /24

Physical Config Desktop Programming Attributes

Command Prompt

```
Reply from 192.168.1.1: bytes=32 time=2ms TTL=128
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 1, Lost = 3 (75% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 2ms, Average = 2ms

C:\>PING 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time<1ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>arp -a

Internet Address      Physical Address      Type
192.168.1.1           0006.2a7a.1ecd       dynamic
192.168.1.254         0006.2a9a.2601       dynamic

C:\>
```

Les commandes Cisco

Enable (pour passer en statut administrateur)

Show mac-address-table (cache MAC adresse sur un commutateur)

Arp -a (cache arp sur un ordinateur)

Show ip arp (sur un routeur)

Ping 192.168.1.254 (ICMP)

Inconfig /all (afficher paramétrage IP)