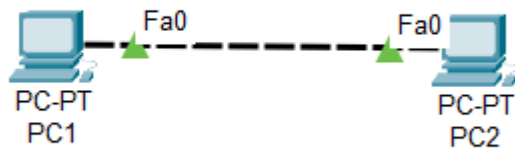


## Basic

### Topologie de la connectivité entre le Pc1 et Pc2 :



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

```
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128
Reply from 192.168.1.2: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

```
Cisco Packet Tracer PC Command Line 1.0
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

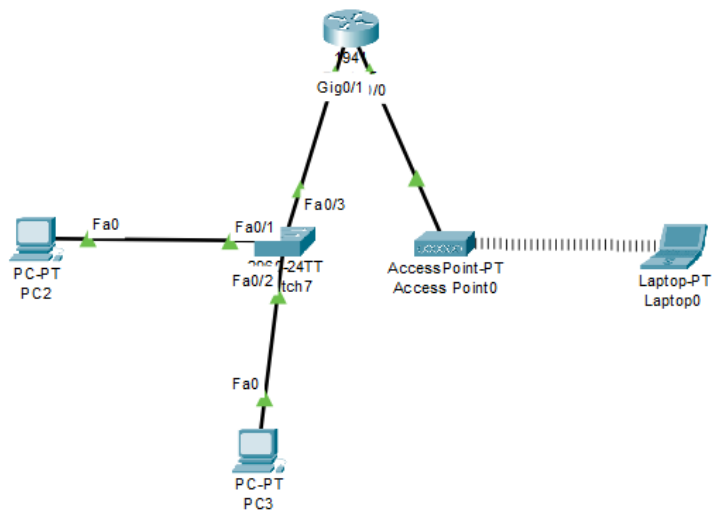
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

**Montrez-nous que vous avez compris ! Pouvez-vous me dire quelle est la différence entre Fast Ethernet 0/1 et 1/1 ?**

La principale différence réside dans la manière dont les **informations sont structurées dans la notation**. "Fast Ethernet 0/1" est **plus explicite** en indiquant le type d'interface, tandis que "1/1" est **plus concis mais suppose que vous connaissez déjà le type d'interface** (dans ce cas, Fast Ethernet) et que vous savez à quoi correspondent les numéros de module et d'interface.

## Switch

### Topologie de 2 sous réseaux dont 1 en wifi ;



```

PC0
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 172.16.1.2

Pinging 172.16.1.2 with 32 bytes of data:

Reply from 172.16.1.2: bytes=32 time=16ms TTL=127
Reply from 172.16.1.2: bytes=32 time=21ms TTL=127
Reply from 172.16.1.2: bytes=32 time=18ms TTL=127
Reply from 172.16.1.2: bytes=32 time=16ms TTL=127

Ping statistics for 172.16.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 16ms, Maximum = 21ms, Average = 17ms
C:\>
  
```

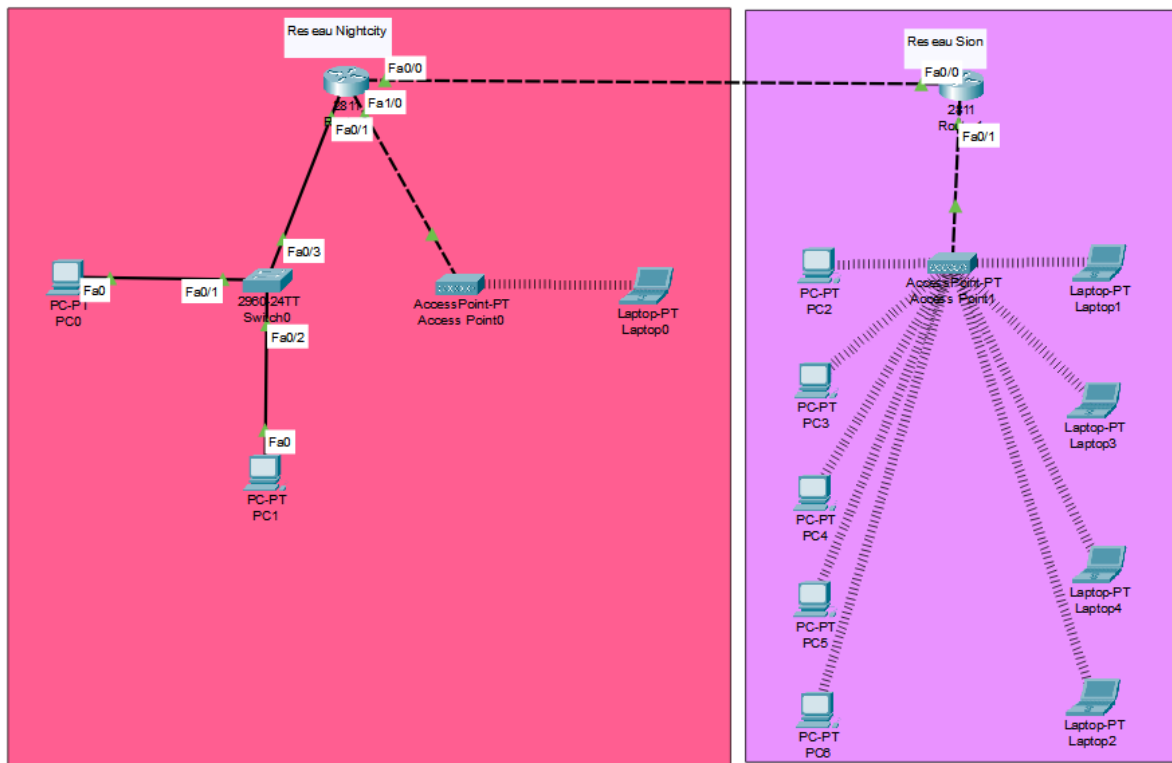
## Idoine

### Envoie de PDU simple et PDU complexe, toutes les 5 secondes ;

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC0	PC1	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC0	Laptop0	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC1	Laptop0	ICMP		0.000	N	2	(edit)	(delete)
	Failed	Laptop0	PC1	ICMP		0.000	N	2	(edit)	(delete)
	Successful	PC0	PC1	ICMP		0.000	N	3	(edit)	(delete)
	Successful	PC0	192.168.1.3	ICMP		5.000	Y	4	(edit)	(delete)

## Multi-réseau

## Topologie de 2 réseaux distincts représentant 1 ville chacun :



```
PC0
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.3

Pinging 192.168.0.3 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 192.168.0.3: bytes=32 time=14ms TTL=126
Reply from 192.168.0.3: bytes=32 time=33ms TTL=126

Ping statistics for 192.168.0.3:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 14ms, Maximum = 33ms, Average = 23ms

C:\>ping 192.168.0.3

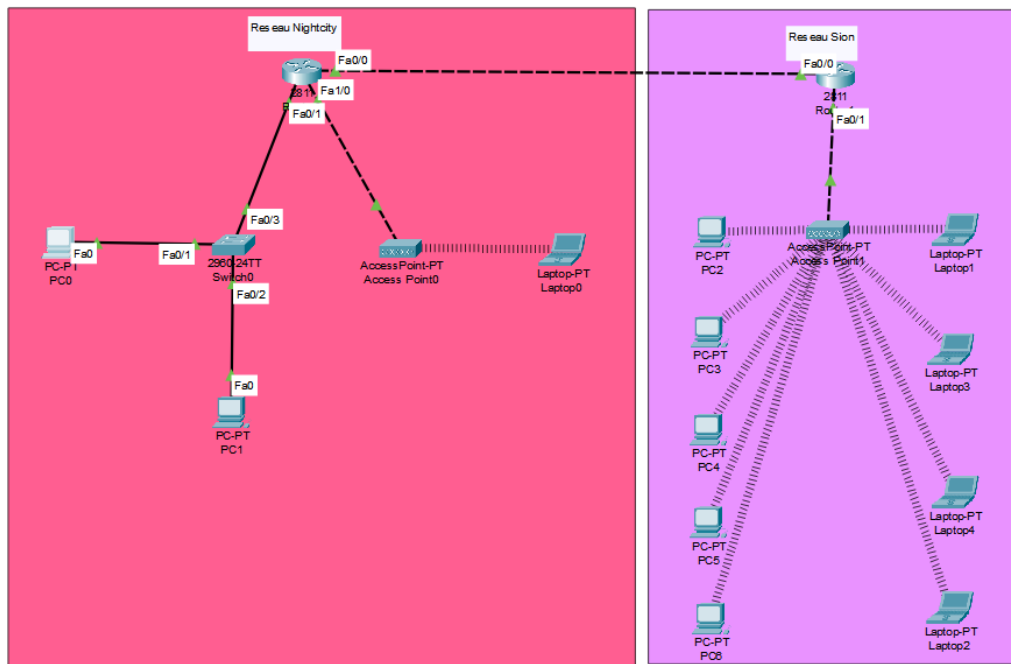
Pinging 192.168.0.3 with 32 bytes of data:

Reply from 192.168.0.3: bytes=32 time=18ms TTL=126
Reply from 192.168.0.3: bytes=32 time=35ms TTL=126
Reply from 192.168.0.3: bytes=32 time=12ms TTL=126
Reply from 192.168.0.3: bytes=32 time=7ms TTL=126

Ping statistics for 192.168.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 7ms, Maximum = 35ms, Average = 18ms
```

## Micro Réseau

## Topologie de 2 réseaux distincts représentant 1 ville chacun :



PC1

Physical Config **Desktop** Programming Attributes

**IP Configuration**

Interface FastEthernet0

IP Configuration

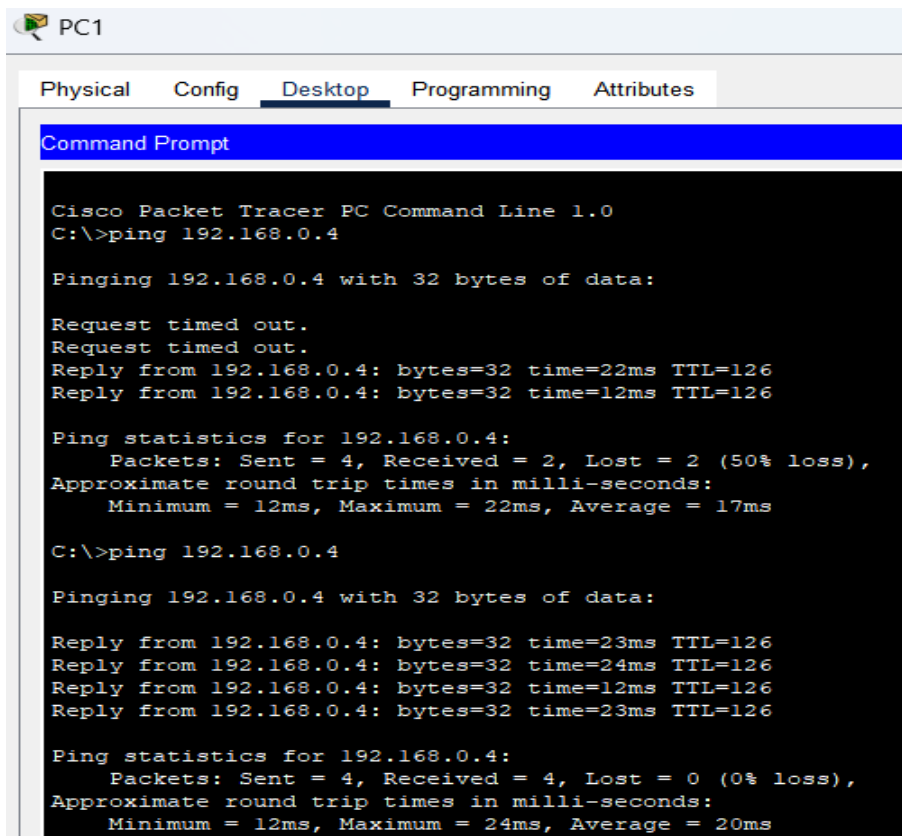
☒ DHCP ☐ Static

IPv4 Address 192.168.1.2

Subnet Mask 255.255.255.0

Default Gateway 192.168.1.1

DNS Server 8.8.8.8



The screenshot shows the 'PC1' window in Cisco Packet Tracer. The 'Desktop' tab is selected, displaying a 'Command Prompt' window. The window title is 'Cisco Packet Tracer PC Command Line 1.0'. The user has entered the command 'C:\>ping 192.168.0.4'. The output shows two ping attempts. The first attempt results in a 50% loss of packets (2 sent, 2 received). The second attempt results in a 0% loss of packets (4 sent, 4 received).

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.4

Pinging 192.168.0.4 with 32 bytes of data:

Request timed out.
Request timed out.
Reply from 192.168.0.4: bytes=32 time=22ms TTL=126
Reply from 192.168.0.4: bytes=32 time=12ms TTL=126

Ping statistics for 192.168.0.4:
    Packets: Sent = 4, Received = 2, Lost = 2 (50% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 12ms, Maximum = 22ms, Average = 17ms

C:\>ping 192.168.0.4

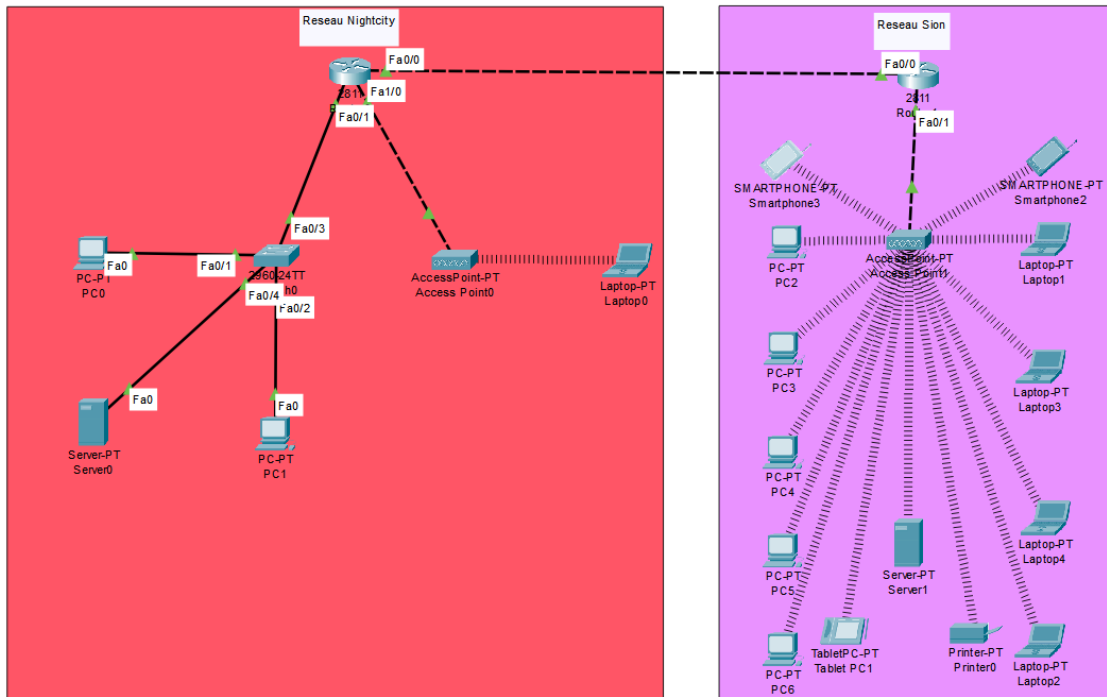
Pinging 192.168.0.4 with 32 bytes of data:

Reply from 192.168.0.4: bytes=32 time=23ms TTL=126
Reply from 192.168.0.4: bytes=32 time=24ms TTL=126
Reply from 192.168.0.4: bytes=32 time=12ms TTL=126
Reply from 192.168.0.4: bytes=32 time=23ms TTL=126

Ping statistics for 192.168.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 12ms, Maximum = 24ms, Average = 20ms
```

## À vos smarts

### Topologie de 2 réseaux distincts avec ajout de 4 périphériques :



Smartphone3

Physical Config **Desktop** Programming Attributes

Command Prompt

```

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.3

Pinging 192.168.0.3 with 32 bytes of data:

Reply from 192.168.0.3: bytes=32 time=29ms TTL=128
Reply from 192.168.0.3: bytes=32 time=30ms TTL=128
Reply from 192.168.0.3: bytes=32 time=45ms TTL=128
Reply from 192.168.0.3: bytes=32 time=29ms TTL=128

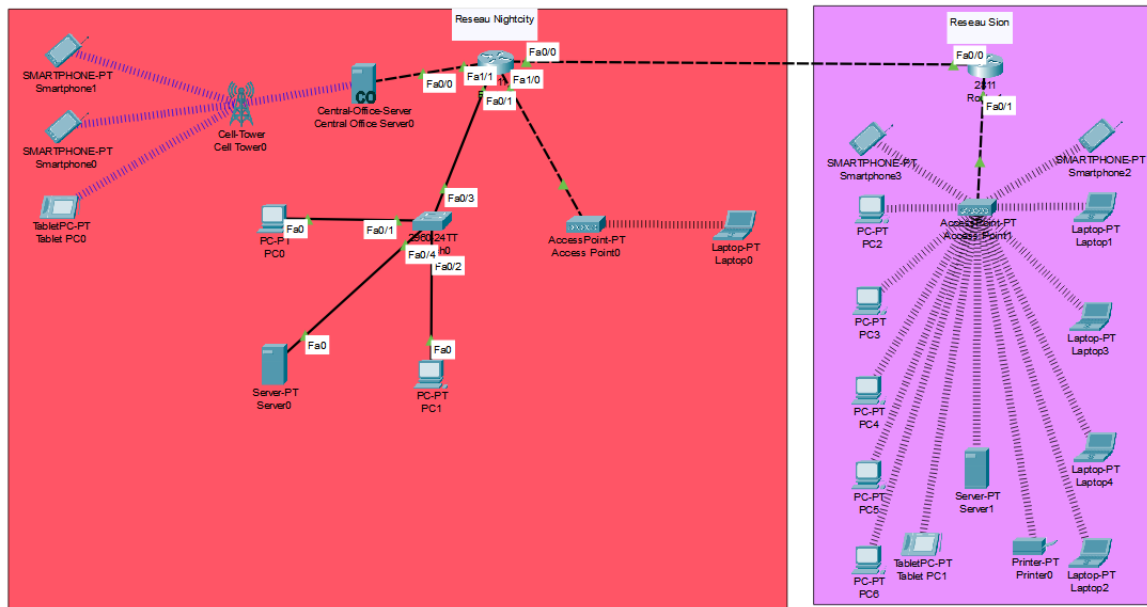
Ping statistics for 192.168.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 29ms, Maximum = 45ms, Average = 33ms

C:\>

```

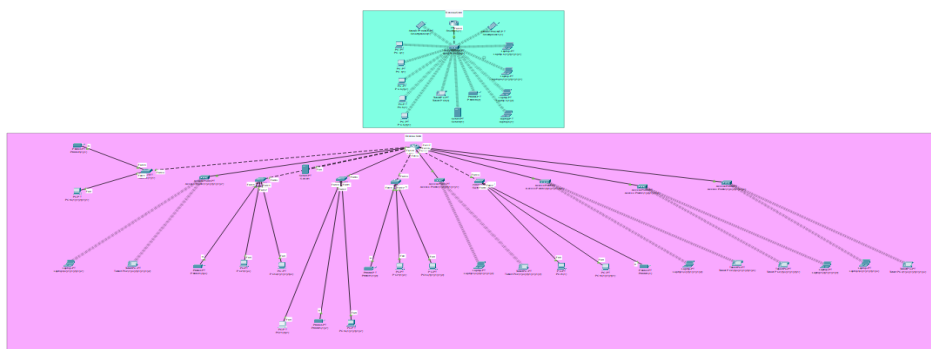
## Réseau mobile

### Topologie de 2 réseaux distincts avec ajout de la Cell Tower et ses 3 périphériques :

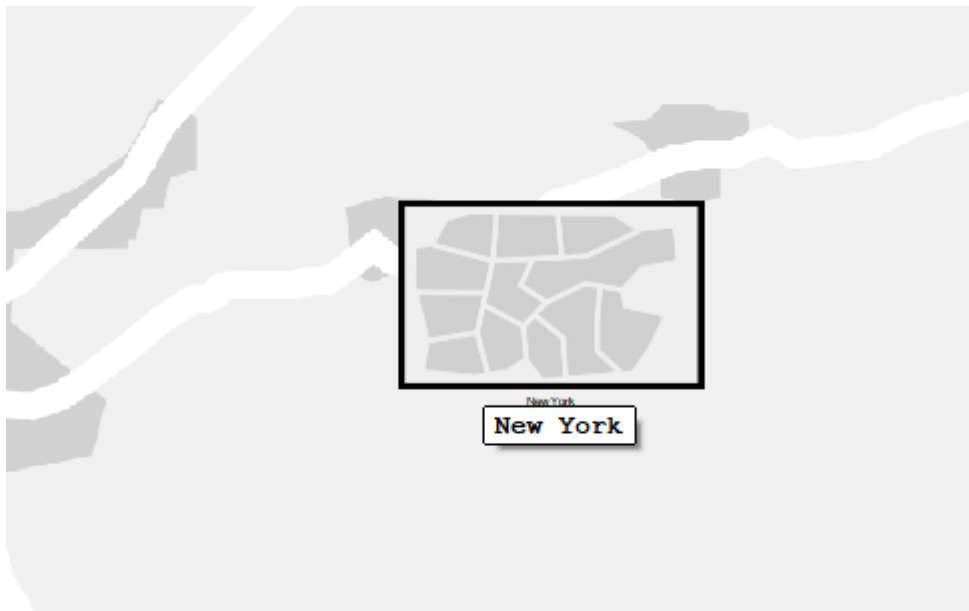


## Architecture Physique

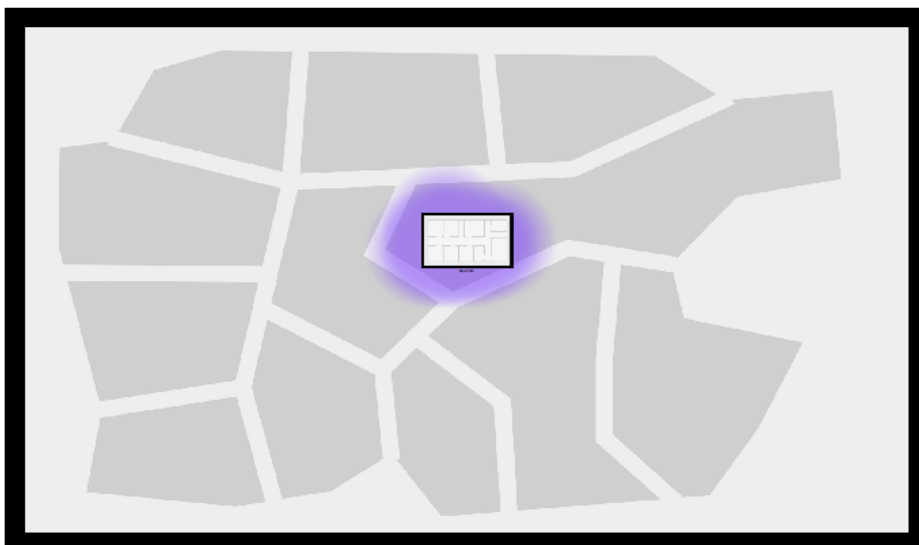
### Topologie de l'interface Logique et Physique de l'ancien réseau Sion et du nouveau :



## Intercity

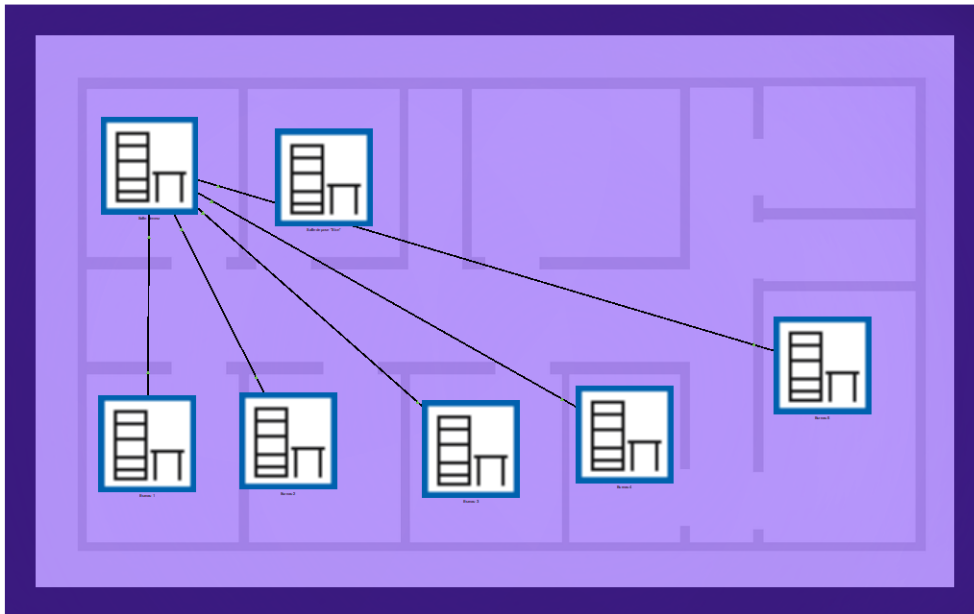


## City

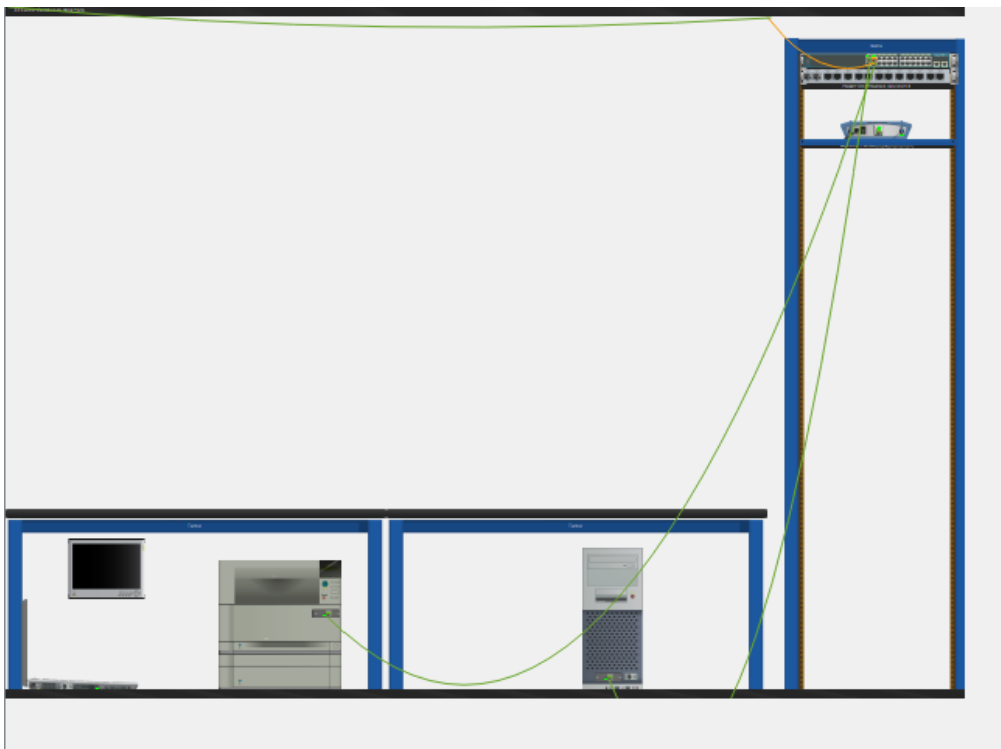




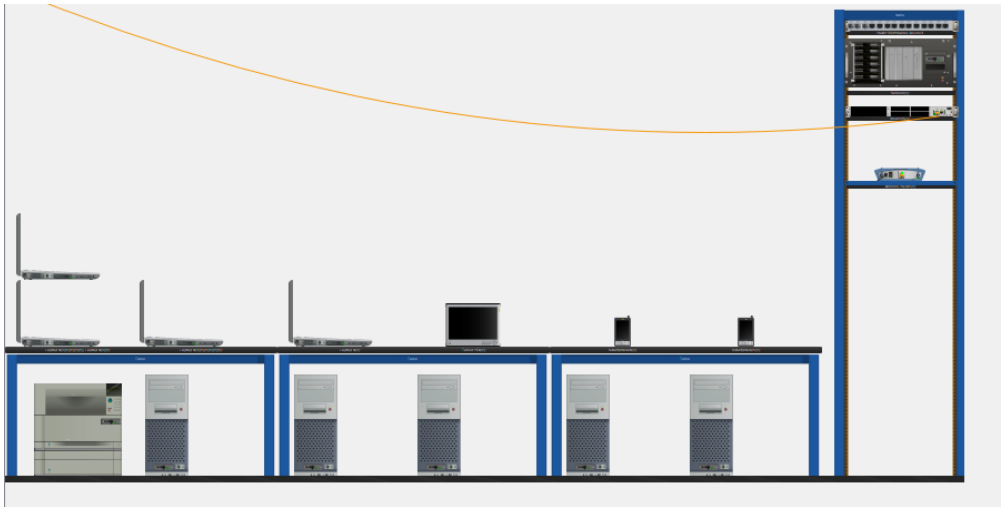
### Les différentes salles et bureau



### Nouveau Réseau Sion (Bureau 1)



### Ancien Réseau Sion (Salle de pose)



## *Salle Serveur*

