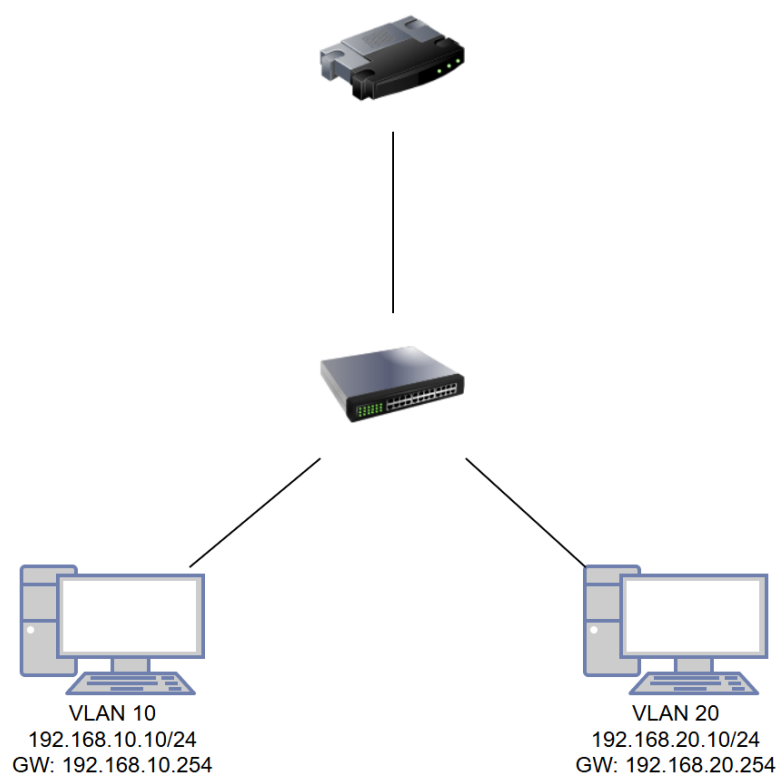


DOCUMENTATION TECHNIQUE

1. Architecture réseau



2. Plan d'adressage

Elément	VLAN	Adresse réseau	IP du PC (Hôte)	Passerelle (GW)
PC administration	10	192.168.10.0/24	192.168.10.10	192.168.10.254
PC production	20	192.168.20.0/24	192.168.20.10	192.168.20.254

3. Configuration des équipements

Pour le Switch :

Passage en mode privilège et configuration :

Enable

Configure terminal

Mise en place du lien Trunk :

Interface g0/1

Switchport mode trunk

Affectation des ports d'accès (Clients) :

Interface f0/10

Switchport mode access

Switchport access vlan 10

Interface f0/20

Switchport mode access

Switchport access vlan 20

Sauvegarde :

End

Write memory

Pour le routeur :

Passage en mode privilège et configuration :

Enable

Configure terminal

Activation de l'interface physique :

Interface g0/1

No shutdown

Création des sous-interfaces logiques :

Interface g0/1.10

Encapsulation et marquage :

Encapsulation dot1Q 10

Définition des Passerelles (Gateways) :

ip address 192.168.10.254 255.255.255.0

Création des sous-interfaces logiques :

Interface g0/1.20

Encapsulation et marquage :

Encapsulation dot1Q 20

Définition des Passerelles (Gateways) :

ip address 192.168.20.254 255.255.255.0

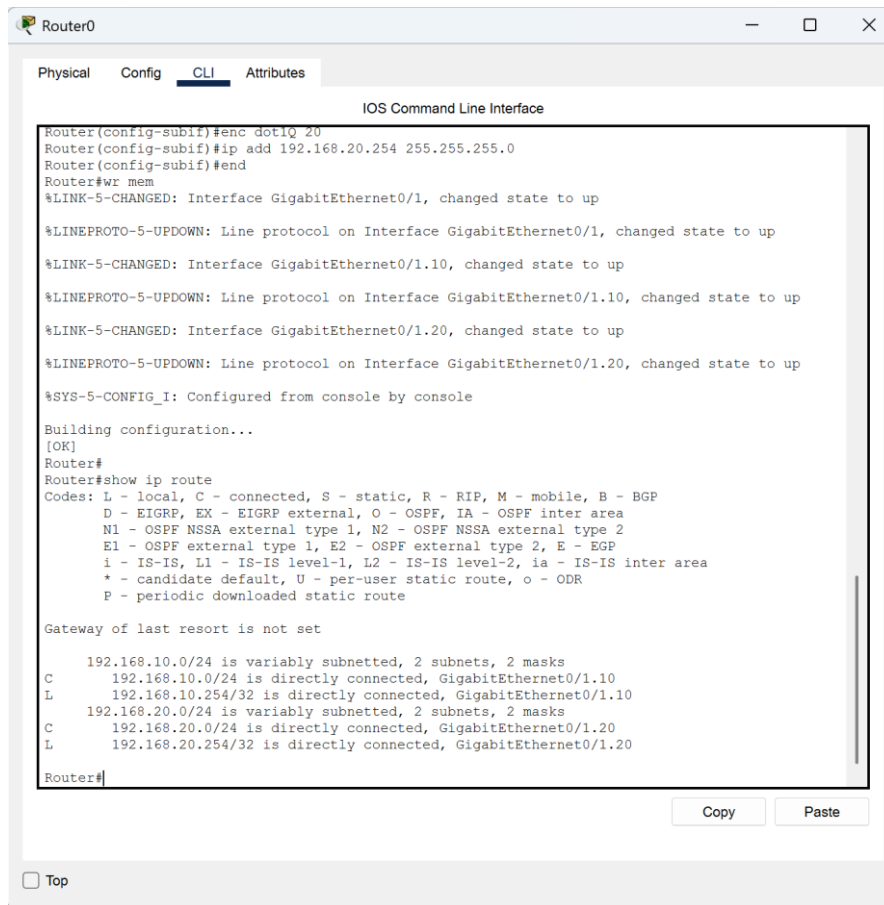
Sauvegarde :

End

Write memory

4. Validation et Tests de connectivité

Vérification de la table de routage



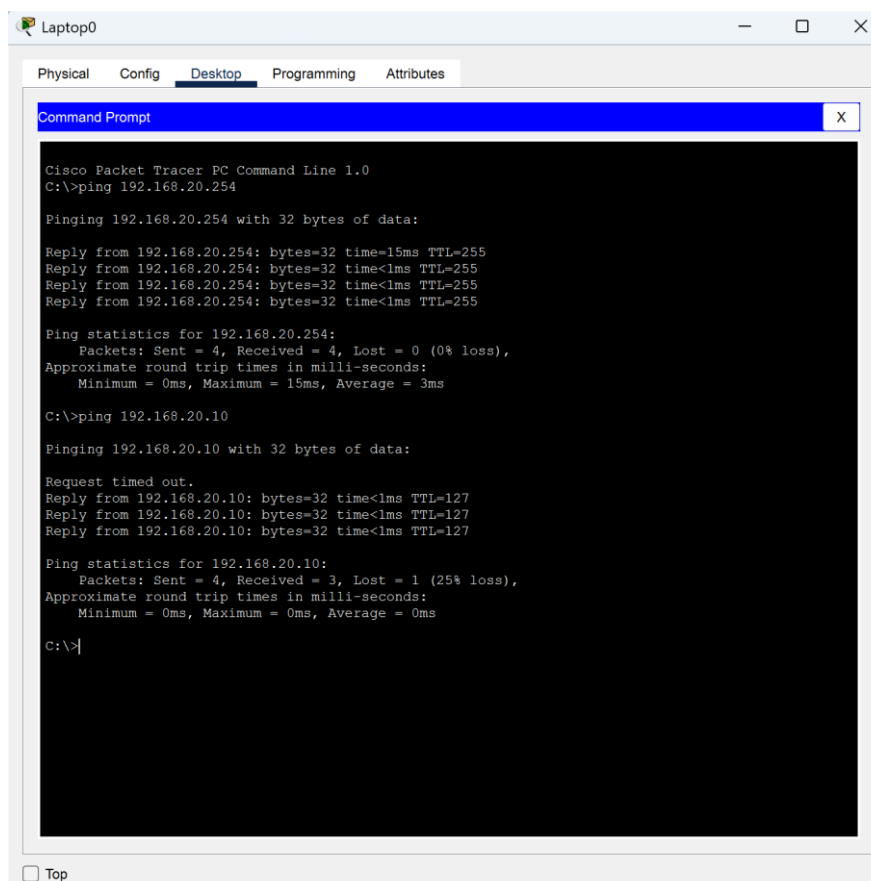
The screenshot shows the CLI of Router0. The user has entered the following commands: `Router(config-subif)#enc dot1Q 20`, `Router(config-subif)#ip add 192.168.20.254 255.255.255.0`, `Router(config-subif)#end`, `Router#wr mem`, and `Router#show ip route`. The output shows the configuration of interface GigabitEthernet0/1 with subinterfaces 0/1.10 and 0/1.20, each with a different VLAN ID and IP address. The routing table shows the following entries:

```
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       I - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, Ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

192.168.10.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.10.0/24 is directly connected, GigabitEthernet0/1.10
L       192.168.10.254/32 is directly connected, GigabitEthernet0/1.10
C       192.168.20.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.20.0/24 is directly connected, GigabitEthernet0/1.20
L       192.168.20.254/32 is directly connected, GigabitEthernet0/1.20
```

Validation finale par tests de connectivité (Ping)



The screenshot shows the Command Prompt of Laptop0. The user has entered the following commands: `C:\>ping 192.168.20.254` and `C:\>ping 192.168.20.10`. The output shows the results of the ping tests:

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.20.254

Pinging 192.168.20.254 with 32 bytes of data:

Reply from 192.168.20.254: bytes=32 time=15ms TTL=255
Reply from 192.168.20.254: bytes=32 time<1ms TTL=255
Reply from 192.168.20.254: bytes=32 time<1ms TTL=255
Reply from 192.168.20.254: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.20.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 15ms, Average = 3ms

C:\>ping 192.168.20.10

Pinging 192.168.20.10 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.10: bytes=32 time<1ms TTL=127
Reply from 192.168.20.10: bytes=32 time<1ms TTL=127
Reply from 192.168.20.10: bytes=32 time<1ms TTL=127

Ping statistics for 192.168.20.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```