

TP 7

Etape 1 : consultation de la configuration

```
!  
ip classless  
ip route 192.168.2.0 255.255.255.0 172.16.2.2  
ip route 192.168.1.0 255.255.255.0 172.16.2.2  
ip route 172.16.1.0 255.255.255.0 172.16.2.2  
!
```

R1#sh ip route

```
Codes: C - connected, S - static, I - IGRP, 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

```
172.16.0.0/24 is subnetted, 3 subnets  
S 172.16.1.0 [1/0] via 172.16.2.2  
C 172.16.2.0 is directly connected, Serial0/0/0  
C 172.16.3.0 is directly connected, FastEthernet0/0  
S 192.168.1.0/24 [1/0] via 172.16.2.2  
S 192.168.2.0/24 [1/0] via 172.16.2.2
```

Etape 2 : vérification de la connectivité

ping pc 1

```
Ping statistics for 192.168.2.3:  
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),  
C:\>ping 192.168.2.10  
Pinging 192.168.2.10 with 32 bytes of data:  
Request timed out.  
Reply from 192.168.2.10: bytes=32 time=9ms TTL=125  
Reply from 192.168.2.10: bytes=32 time=11ms TTL=125  
Reply from 192.168.2.10: bytes=32 time=12ms TTL=125  
Ping statistics for 192.168.2.10:  
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),  
Approximate round trip times in milli-seconds:  
Minimum = 9ms, Maximum = 12ms, Average = 10ms  
C:\>ping 172.16.1.10  
Pinging 172.16.1.10 with 32 bytes of data:  
Request timed out.  
Reply from 172.16.1.10: bytes=32 time=7ms TTL=126  
Reply from 172.16.1.10: bytes=32 time=7ms TTL=126  
Reply from 172.16.1.10: bytes=32 time=9ms TTL=126  
Ping statistics for 172.16.1.10:  
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),  
Approximate round trip times in milli-seconds:  
Minimum = 7ms, Maximum = 9ms, Average = 7ms
```

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ping pc 2

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 172.16.3.10

Pinging 172.16.3.10 with 32 bytes of data:

Reply from 172.16.3.10: bytes=32 time=12ms TTL=126
Reply from 172.16.3.10: bytes=32 time=7ms TTL=126
Reply from 172.16.3.10: bytes=32 time=8ms TTL=126
Reply from 172.16.3.10: bytes=32 time=4ms TTL=126

Ping statistics for 172.16.3.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 4ms, Maximum = 12ms, Average = 7ms

C:\>ping 192.168.2.10

Pinging 192.168.2.10 with 32 bytes of data:

Reply from 192.168.2.10: bytes=32 time=5ms TTL=126
Reply from 192.168.2.10: bytes=32 time=2ms TTL=126
Reply from 192.168.2.10: bytes=32 time=5ms TTL=126
Reply from 192.168.2.10: bytes=32 time=4ms TTL=126

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 5ms, Average = 4ms
```

ping pc 3

```
C:\>ping 172.16.1.10

Pinging 172.16.1.10 with 32 bytes of data:

Reply from 172.16.1.10: bytes=32 time=9ms TTL=126
Reply from 172.16.1.10: bytes=32 time=5ms TTL=126
Reply from 172.16.1.10: bytes=32 time=8ms TTL=126
Reply from 172.16.1.10: bytes=32 time=7ms TTL=126

Ping statistics for 172.16.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 5ms, Maximum = 9ms, Average = 7ms

C:\>ping 172.16.3.10

Pinging 172.16.3.10 with 32 bytes of data:

Reply from 172.16.3.10: bytes=32 time=15ms TTL=125
Reply from 172.16.3.10: bytes=32 time=11ms TTL=125
Reply from 172.16.3.10: bytes=32 time=11ms TTL=125
Reply from 172.16.3.10: bytes=32 time=10ms TTL=125

Ping statistics for 172.16.3.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 10ms, Maximum = 15ms, Average = 11ms
```

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2. Résumé des routes statiques (routeur R3).

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 172.16.1.10

Pinging 172.16.1.10 with 32 bytes of data:

Request timed out.
Reply from 172.16.1.10: bytes=32 time=6ms TTL=126
Reply from 172.16.1.10: bytes=32 time=7ms TTL=126
Reply from 172.16.1.10: bytes=32 time=6ms TTL=126

Ping statistics for 172.16.1.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 6ms, Maximum = 7ms, Average = 6ms

C:\>ping 172.16.3.10

Pinging 172.16.3.10 with 32 bytes of data:

Request timed out.
Reply from 172.16.3.10: bytes=32 time=10ms TTL=125
Reply from 172.16.3.10: bytes=32 time=9ms TTL=125
Reply from 172.16.3.10: bytes=32 time=8ms TTL=125

Ping statistics for 172.16.3.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 8ms, Maximum = 10ms, Average = 9ms
```

3. Configuration d'un réseau d'extrémité (routeur R1).

```
C:\>ping 172.16.1.10

Pinging 172.16.1.10 with 32 bytes of data:

Reply from 172.16.1.10: bytes=32 time=9ms TTL=126
Reply from 172.16.1.10: bytes=32 time=5ms TTL=126
Reply from 172.16.1.10: bytes=32 time=6ms TTL=126
Reply from 172.16.1.10: bytes=32 time=6ms TTL=126

Ping statistics for 172.16.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 5ms, Maximum = 9ms, Average = 6ms

C:\>ping 192.168.2.10

Pinging 192.168.2.10 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.10: bytes=32 time=11ms TTL=125
Reply from 192.168.2.10: bytes=32 time=7ms TTL=125
Reply from 192.168.2.10: bytes=32 time=8ms TTL=125

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 7ms, Maximum = 11ms, Average = 8ms
```