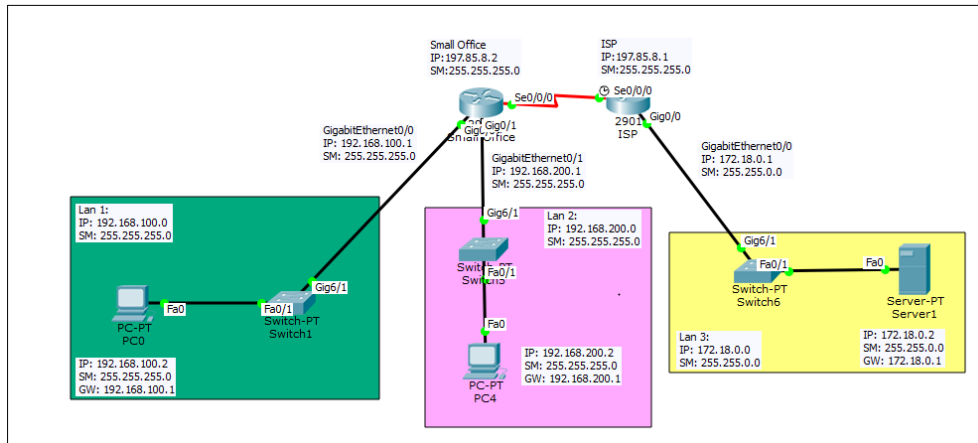


1. Testo del Problema

Verificare sui router Small Office e ISP la correttezza delle routing table

2. Dispositivi e Collegamenti



La rete è composta dai seguenti dispositivi e collegamenti:

- **3 End Device**(PC0,PC4,Server1) in cui viene settato l'IPv4, la Subnet Mask e il GateWay
- **2 Router**(SmallOffice,ISP) in cui viene settato l'IPv4 e relativa Subnet Mask per le porte GigabitEthernet e per le porte Seriali
- **3 Switch**(Switch1,Switch5,Switch6)
- **6 Cavi UTP**(copper straight-through) per il collegamento degli End Device agli Switch e degli Switch al Router
- **1 Cavo Seriale** per il collegamento dei due router

3. Configurazione dei Dispositivi

Dispositivo	Interfaccia	Indirizzo IPV4	Subnet Mask	Gateway
PC0	FastEthernet	192.168.200.2	255.255.255.0	192.168.100.1
PC4	FastEthernet	192.168.200.2	255.255.255.0	192.168.200.1
Server1	FastEthernet	172.18.0.2	255.255.0.0	172.18.0.1
SmallOffice	GigabitEthernet	192.168.100.1	255.255.255.0	-
	GigabitEthernet	192.168.200.1	255.255.255.0	-
	Serial	197.85.8.2	255.255.255.0	-
ISP	GigabitEthernet	172.18.0.1	255.255.0.0	-
	Serial	197.85.8.1	255.255.255.0	-

4. Test della Rete

Verifico che le routing table siano corrette attraverso i due modi possibili:

SmallOffice:

Routing Table for Small Office

Type	Network	Port	Next Hop IP	Metric
S	172.18.0.0/16	---	197.85.8.1	1/0
C	192.168.100.0/24	GigabitEthernet0/0	---	0/0
L	192.168.100.1/32	GigabitEthernet0/0	---	0/0
C	192.168.200.0/24	GigabitEthernet0/1	---	0/0
L	192.168.200.1/32	GigabitEthernet0/1	---	0/0
C	197.85.8.0/24	Serial0/0/0	---	0/0
L	197.85.8.2/32	Serial0/0/0	---	0/0

Small Office

Physical Config CLI

IOS Command Line Interface

SmallOffice>show ip route
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

S 172.18.0.0/16 [1/0] via 197.85.8.1
192.168.100.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.100.0/24 is directly connected, GigabitEthernet0/0
L 192.168.100.1/32 is directly connected, GigabitEthernet0/0
192.168.200.0/24 is variably subnetted, 2 subnets, 2 masks
C 192.168.200.0/24 is directly connected, GigabitEthernet0/1
L 192.168.200.1/32 is directly connected, GigabitEthernet0/1
197.85.8.0/24 is variably subnetted, 2 subnets, 2 masks
C 197.85.8.0/24 is directly connected, Serial0/0/0
L 197.85.8.2/32 is directly connected, Serial0/0/0
SmallOffice>

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ISP:

Routing Table for ISP

Type	Network	Port	Next Hop IP	Metric
C	172.18.0.0/16	GigabitEthernet0/0	---	0/0
L	172.18.0.1/32	GigabitEthernet0/0	---	0/0
S	192.168.100.0/24	---	197.85.8.2	1/0
S	192.168.200.0/24	---	197.85.8.2	1/0
C	197.85.8.0/24	Serial0/0/0	---	0/0
L	197.85.8.1/32	Serial0/0/0	---	0/0

ISP

Physical Config CLI

IOS Command Line Interface

ISP>show ip route
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

172.18.0.0/16 is variably subnetted, 2 subnets, 2 masks
C 172.18.0.0/16 is directly connected, GigabitEthernet0/0
L 172.18.0.1/32 is directly connected, GigabitEthernet0/0
S 192.168.100.0/24 [1/0] via 197.85.8.2
S 192.168.200.0/24 [1/0] via 197.85.8.2
197.85.8.0/24 is variably subnetted, 2 subnets, 2 masks
C 197.85.8.0/24 is directly connected, Serial0/0/0
L 197.85.8.1/32 is directly connected, Serial0/0/0
ISP>

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