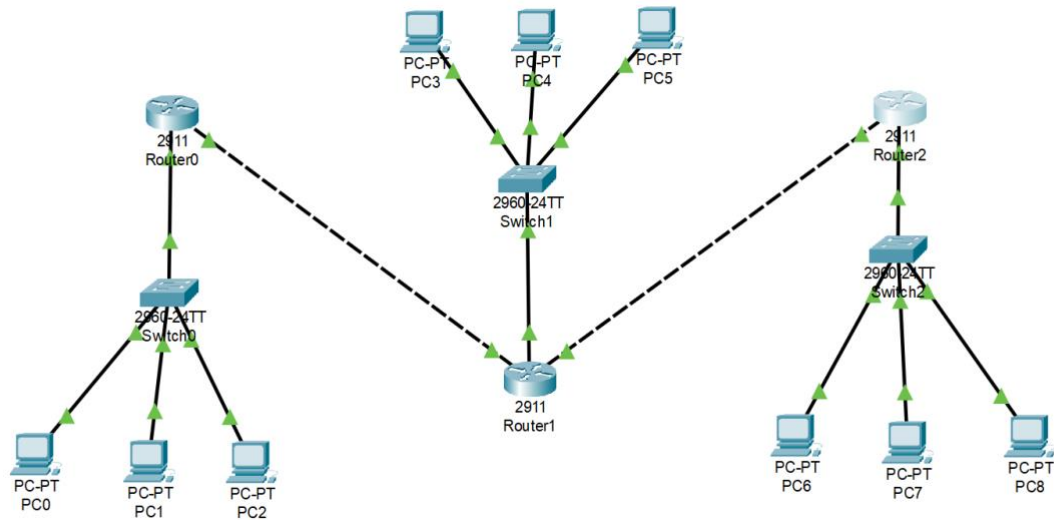


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Router 1

```
09010282327026_R1(config)#ip route 192.168.20.0 255.255.255.0 10.10.10.2
09010282327026_R1(config)#ip route 10.20.10.0 255.255.255.252 10.10.10.2
09010282327026_R1(config)#ip route 192.168.40.0 255.255.255.0 10.10.10.2
09010282327026_R1(config)#
```

```
09010282327026_R1#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
```

```
10.0.0.0/8 is variably subnetted, 3 subnets, 2 masks
C       10.10.10.0/30 is directly connected, GigabitEthernet0/1
L       10.10.10.1/32 is directly connected, GigabitEthernet0/1
S       10.20.10.0/30 [1/0] via 10.10.10.2
192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.2.0/24 is directly connected, GigabitEthernet0/0
L       192.168.2.1/32 is directly connected, GigabitEthernet0/0
S       192.168.20.0/24 [1/0] via 10.10.10.2
```

```
09010282327026_R1#
```

Router 2

```
09010282327026_R2(config)#ip route 192.168.2.0 255.255.255.0 10.10.10.1
09010282327026_R2(config)#ip route 192.168.40.0 255.255.255.0 10.20.10.2
09010282327026_R2(config)#

09010282327026_R2#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

    10.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
C       10.10.10.0/30 is directly connected, GigabitEthernet0/1
L       10.10.10.2/32 is directly connected, GigabitEthernet0/1
C       10.20.10.0/30 is directly connected, GigabitEthernet0/2
L       10.20.10.1/32 is directly connected, GigabitEthernet0/2
S       192.168.2.0/24 [1/0] via 10.10.10.1
    192.168.20.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.20.0/24 is directly connected, GigabitEthernet0/0
L       192.168.20.1/32 is directly connected, GigabitEthernet0/0
S       192.168.40.0/24 [1/0] via 10.20.10.2

09010282327026_R2#
```

Router 3

```
09010282327026_R3(config)#ip route 192.168.20.0 255.255.255.0 10.20.10.1
09010282327026_R3(config)#ip route 10.10.10.0 255.255.255.252 10.20.10.1
09010282327026_R3(config)#ip route 192.168.2.0 255.255.255.0 10.20.10.1
09010282327026_R3(config)#

09010282327026_R3#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

    10.0.0.0/8 is variably subnetted, 3 subnets, 2 masks
S       10.10.10.0/30 [1/0] via 10.20.10.1
C       10.20.10.0/30 is directly connected, GigabitEthernet0/2
L       10.20.10.2/32 is directly connected, GigabitEthernet0/2
S       192.168.2.0/24 [1/0] via 10.20.10.1
S       192.168.20.0/24 [1/0] via 10.20.10.1
    192.168.40.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.40.0/24 is directly connected, GigabitEthernet0/0
L       192.168.40.1/32 is directly connected, GigabitEthernet0/0
```

No	Sumber	Tujuan	Hasil	
			Ya	Tidak
1	PC 1	PC2	Ya	
		PC3	Ya	
		PC4	Ya	
		PC5	Ya	
		PC6	Ya	
		PC7	Ya	
		PC8	Ya	
		PC9	Ya	

2	PC4	PC1	Ya	
		PC2	Ya	
		PC3	Ya	
		PC5	Ya	
		PC6	Ya	
		PC7	Ya	
		PC8	Ya	
		PC9	Ya	

3	PC7	PC1	Ya	
		PC2	Ya	
		PC3	Ya	
		PC4	Ya	
		PC5	Ya	
		PC6	Ya	
		PC8	Ya	
		PC9	Ya	

PC1 -> PC5

PC1 -> PC7

```
C:\>ping 192.168.20.3
Pinging 192.168.20.3 with 32 bytes of data:
Reply from 192.168.20.3: bytes=32 time<1ms TTL=126
Reply from 192.168.20.3: bytes=32 time<1ms TTL=126
Reply from 192.168.20.3: bytes=32 time<1ms TTL=126
Reply from 192.168.20.3: bytes=32 time<1ms TTL=126
Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping 192.168.40.3
Pinging 192.168.40.3 with 32 bytes of data:
Reply from 192.168.40.3: bytes=32 time<1ms TTL=125
Reply from 192.168.40.3: bytes=32 time<1ms TTL=125
Reply from 192.168.40.3: bytes=32 time<1ms TTL=125
Reply from 192.168.40.3: bytes=32 time<1ms TTL=125
Ping statistics for 192.168.40.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
```

PC4->PC2

PC4 ->PC8

```
C:\>ping 192.168.2.3
Pinging 192.168.2.3 with 32 bytes of data:
Reply from 192.168.2.3: bytes=32 time<1ms TTL=126
Reply from 192.168.2.3: bytes=32 time<1ms TTL=126
Reply from 192.168.2.3: bytes=32 time<1ms TTL=126
Reply from 192.168.2.3: bytes=32 time<1ms TTL=126
Ping statistics for 192.168.2.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping 192.168.40.3
Pinging 192.168.40.3 with 32 bytes of data:
Reply from 192.168.40.3: bytes=32 time<1ms TTL=126
Reply from 192.168.40.3: bytes=32 time<1ms TTL=126
Reply from 192.168.40.3: bytes=32 time<1ms TTL=126
Reply from 192.168.40.3: bytes=32 time<1ms TTL=126
Ping statistics for 192.168.40.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

PC7 ->PC3

PC7 ->PC9

```
C:\>ping 192.168.2.4

Pinging 192.168.2.4 with 32 bytes of data:

Reply from 192.168.2.4: bytes=32 time<1ms TTL=125
Reply from 192.168.2.4: bytes=32 time<1ms TTL=125
Reply from 192.168.2.4: bytes=32 time<1ms TTL=125
Reply from 192.168.2.4: bytes=32 time<1ms TTL=125

Ping statistics for 192.168.2.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.40.4

Pinging 192.168.40.4 with 32 bytes of data:

Reply from 192.168.40.4: bytes=32 time=12ms TTL=128
Reply from 192.168.40.4: bytes=32 time<1ms TTL=128
Reply from 192.168.40.4: bytes=32 time<1ms TTL=128
Reply from 192.168.40.4: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.40.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 12ms, Average = 3ms
```

Hasil Percobaan :

- Routing statis berhasil menghubungkan berbagai perangkat dalam jaringan sesuai dengan rute yang telah dikonfigurasi.
- Koneksi berhasil terjalin antara:
- PC1 ke PC2, PC3, PC4, PC5, PC6, PC7, PC8, dan PC9.
- PC4 ke PC1, PC2, PC3, PC5, PC6, PC7, PC8, dan PC9.
- PC7 ke PC1, PC2, PC3, PC4, PC5, PC6, PC8, dan PC9.
- PC1 terhubung ke PC5 dan PC7.
- PC4 terhubung ke PC2 dan PC8.
- PC7 terhubung ke PC3 dan PC9.

Analisis Percobaan :

- Static Routing adalah metode di mana tabel routing pada router dikonfigurasi secara manual oleh administrator jaringan.
- Setiap entri dalam tabel routing harus ditambahkan satu per satu, yang memungkinkan router mengetahui jalur ke jaringan tujuan tertentu.
- Konfigurasi routing statis menyebabkan perubahan signifikan pada tabel IP router.

Kesimpulan Percobaan :

- Routing static merupakan metode routing yang penting untuk dipahami.
- Meskipun memiliki keterbatasan, routing statis masih memiliki peran penting dalam beberapa skenario jaringan, terutama untuk jaringan yang kecil dan sederhana.
- Untuk jaringan yang lebih kompleks dan dinamis, routing dinamis adalah pilihan yang lebih baik.
- Penting untuk memahami konsep routing statis, menggunakan alat yang tepat, dan mengikuti langkah-langkah analisis yang sistematis untuk mengoptimalkan penggunaan routing statis.
- Konfigurasi routing statis yang salah dapat menjadi celah keamanan, sehingga perlu dilakukan dengan hati-hati dan akurat.

