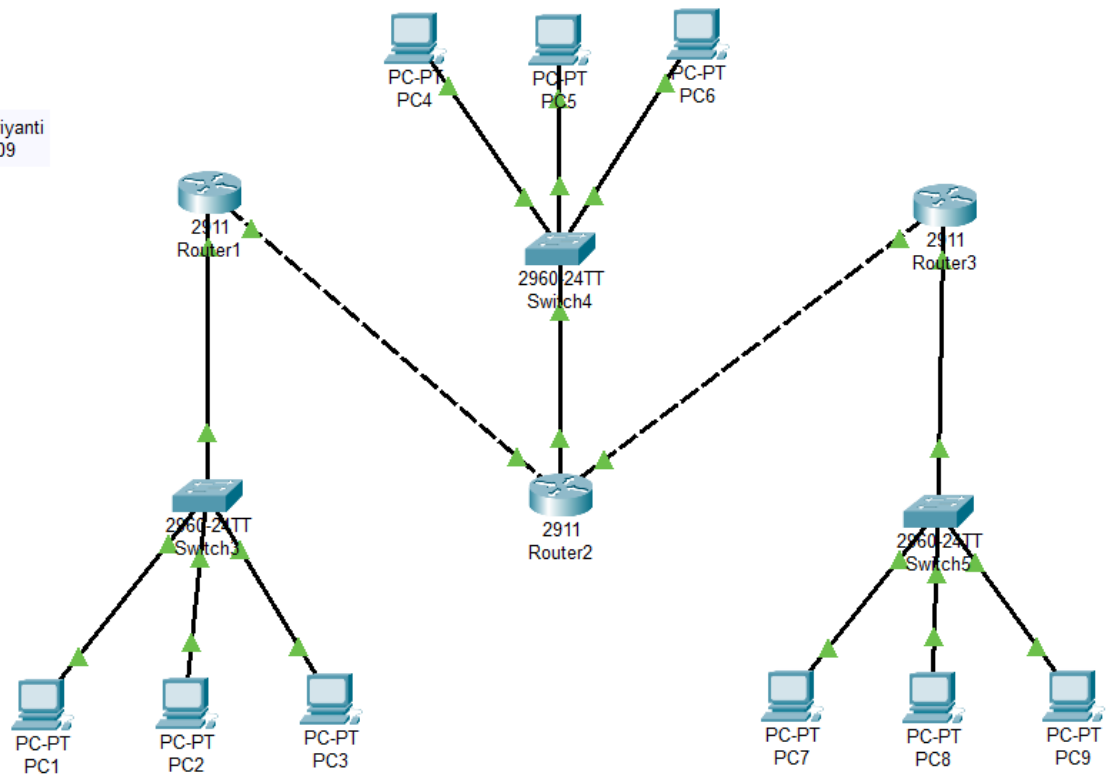NAMA   : AULIA ZAHRA EVRIYANTI
NIM   : 09010182327009
KELAS   : MI 3A
MK   : JARINGAN KOMPUTER

DYNAMIC ROUTING

R1

```
09010182327009_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, 4 subnets, 4 masks
C       10.0.0.0/8 is directly connected, GigabitEthernet0/1
L       10.10.10.1/32 is directly connected, GigabitEthernet0/1
S       10.20.10.0/24 [1/0] via 10.10.10.2
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
S    192.168.40.0/24 [1/0] via 10.10.10.2
```

R2

```
09010182327009_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
```

R3

```
09010182327009_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
```

Tes Koneksi ICMP (catat hasil yang anda dapatkan)

No	Sumber	Tujuan	Hasil	
			Ya	Tidak
1	PC1	PC2	Ya	
		PC3	Ya	
		PC4	Ya	

		Tujuan	Ya	Tidak
		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	
		PC7	Ya	
		PC8	Ya	
		PC9	Ya	

Screenshot hasil Ping pada cmd PC:
PC1 -> PC5

```
Cisco Packet Tracer PC Command Line 1.0
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=37ms TTL=128
Reply from 192.168.2.10: bytes=32 time=3ms TTL=128
Reply from 192.168.2.10: bytes=32 time=1ms TTL=128
Reply from 192.168.2.10: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 37ms, Average = 10ms

C:\>ping 192.168.20.11

Pinging 192.168.20.11 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.11: bytes=32 time=1ms TTL=126
Reply from 192.168.20.11: bytes=32 time=1ms TTL=126
Reply from 192.168.20.11: bytes=32 time=13ms TTL=126

Ping statistics for 192.168.20.11:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 13ms, Average = 5ms

C:\>
```

PC1 -> PC7

```
Cisco Packet Tracer PC Command Line 1.0
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=37ms TTL=128
Reply from 192.168.2.10: bytes=32 time=3ms TTL=128
Reply from 192.168.2.10: bytes=32 time=1ms TTL=128
Reply from 192.168.2.10: bytes=32 time=1ms TTL=128

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 37ms, Average = 10ms

C:\>ping 192.168.20.11

Pinging 192.168.20.11 with 32 bytes of data:

Request timed out.
Reply from 192.168.20.11: bytes=32 time=1ms TTL=126
Reply from 192.168.20.11: bytes=32 time=1ms TTL=126
Reply from 192.168.20.11: bytes=32 time=13ms TTL=126

Ping statistics for 192.168.20.11:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 13ms, Average = 5ms

C:\>ping 192.168.40.10

Pinging 192.168.40.10 with 32 bytes of data:

Request timed out.
Reply from 192.168.40.10: bytes=32 time<1ms TTL=125
Reply from 192.168.40.10: bytes=32 time=18ms TTL=125
Reply from 192.168.40.10: bytes=32 time<1ms TTL=125

Ping statistics for 192.168.40.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 18ms, Average = 6ms

C:\>
```

PC4 -> PC2

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.20.10

Pinging 192.168.20.10 with 32 bytes of data:

Reply from 192.168.20.10: bytes=32 time=68ms TTL=128
Reply from 192.168.20.10: bytes=32 time=14ms TTL=128
Reply from 192.168.20.10: bytes=32 time=22ms TTL=128
Reply from 192.168.20.10: bytes=32 time=43ms TTL=128

Ping statistics for 192.168.20.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 14ms, Maximum = 68ms, Average = 36ms

C:\>ping 192.168.2.11

Pinging 192.168.2.11 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.11: bytes=32 time=11ms TTL=126
Reply from 192.168.2.11: bytes=32 time=11ms TTL=126
Reply from 192.168.2.11: bytes=32 time=13ms TTL=126

Ping statistics for 192.168.2.11:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 11ms, Maximum = 13ms, Average = 11ms

C:\>
```

PC4 -> PC8

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.20.10

Pinging 192.168.20.10 with 32 bytes of data:

Reply from 192.168.20.10: bytes=32 time=68ms TTL=128
Reply from 192.168.20.10: bytes=32 time=14ms TTL=128
Reply from 192.168.20.10: bytes=32 time=22ms TTL=128
Reply from 192.168.20.10: bytes=32 time=43ms TTL=128

Ping statistics for 192.168.20.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 14ms, Maximum = 68ms, Average = 36ms

C:\>ping 192.168.2.11

Pinging 192.168.2.11 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.11: bytes=32 time=11ms TTL=126
Reply from 192.168.2.11: bytes=32 time=11ms TTL=126
Reply from 192.168.2.11: bytes=32 time=13ms TTL=126

Ping statistics for 192.168.2.11:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 11ms, Maximum = 13ms, Average = 11ms

C:\>ping 192.168.40.11

Pinging 192.168.40.11 with 32 bytes of data:

Request timed out.
Reply from 192.168.40.11: bytes=32 time=4ms TTL=126
Reply from 192.168.40.11: bytes=32 time<1ms TTL=126
Reply from 192.168.40.11: bytes=32 time=12ms TTL=126

Ping statistics for 192.168.40.11:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 12ms, Average = 5ms

C:\>
```

PC7 -> PC3

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.40.10

Pinging 192.168.40.10 with 32 bytes of data:

Reply from 192.168.40.10: bytes=32 time=37ms TTL=128
Reply from 192.168.40.10: bytes=32 time=1ms TTL=128
Reply from 192.168.40.10: bytes=32 time=1ms TTL=128
Reply from 192.168.40.10: bytes=32 time=21ms TTL=128

Ping statistics for 192.168.40.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 37ms, Average = 15ms

C:\>ping 192.168.2.12

Pinging 192.168.2.12 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.12: bytes=32 time=11ms TTL=125
Reply from 192.168.2.12: bytes=32 time=12ms TTL=125
Reply from 192.168.2.12: bytes=32 time=11ms TTL=125

Ping statistics for 192.168.2.12:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 11ms, Maximum = 12ms, Average = 11ms

C:\>
```

PC7 -> PC9

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.40.10

Pinging 192.168.40.10 with 32 bytes of data:

Reply from 192.168.40.10: bytes=32 time=37ms TTL=128
Reply from 192.168.40.10: bytes=32 time=1ms TTL=128
Reply from 192.168.40.10: bytes=32 time=1ms TTL=128
Reply from 192.168.40.10: bytes=32 time=21ms TTL=128

Ping statistics for 192.168.40.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 37ms, Average = 15ms

C:\>ping 192.168.2.12

Pinging 192.168.2.12 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.12: bytes=32 time=11ms TTL=125
Reply from 192.168.2.12: bytes=32 time=12ms TTL=125
Reply from 192.168.2.12: bytes=32 time=11ms TTL=125

Ping statistics for 192.168.2.12:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 11ms, Maximum = 12ms, Average = 11ms

C:\>ping 192.168.40.12

Pinging 192.168.40.12 with 32 bytes of data:

Reply from 192.168.40.12: bytes=32 time<1ms TTL=128
Reply from 192.168.40.12: bytes=32 time=7ms TTL=128
Reply from 192.168.40.12: bytes=32 time<1ms TTL=128
Reply from 192.168.40.12: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.40.12:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 7ms, Average = 1ms

C:\>
```

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
●	Successful	PC1	PC5	ICMP		0.000	N	0	(edit)	
●	Successful	PC1	PC7	ICMP		0.000	N	1	(edit)	
●	Successful	PC4	PC2	ICMP		0.000	N	2	(edit)	

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
●	Successful	PC4	PC8	ICMP		0.000	N	3	(edit)	
●	Successful	PC7	PC3	ICMP		0.000	N	4	(edit)	
●	Successful	PC7	PC9	ICMP		0.000	N	5	(edit)	

1. Analisis yang saya peroleh menunjukkan bahwa konfigurasi dan pengaturan dynamic routing berfungsi dengan baik, terbukti dari semua koneksi ICMP yang berhasil, menunjukkan bahwa seluruh perangkat dapat saling terhubung melalui jaringan yang diatur secara dinamis.

2. Kesimpulan yang saya tarik adalah bahwa konfigurasi dynamic routing yang diterapkan memungkinkan seluruh perangkat dalam jaringan terhubung dengan lancar, yang mengindikasikan bahwa jaringan telah dikonfigurasi secara tepat.