

Ruteo OSPF de área única

ESPECIFICACIÓN
Dirección IP de la subred: 175.3.0.0/25
Máscara de subred: 255.255.255.128
Cantidad de host utilizables por la subred: 126
Primera dirección del host: 173.3.0.1
Última dirección de host: 173.3.0.126

ESPECIFICACIÓN
Dirección IP de la subred: 129.3.0.0/25
Máscara de subred: 255.255.255.128
Cantidad de host utilizables por la subred: 126
Primera dirección del host: 129.3.0.1
Última dirección de host: 129.3.0.126

ESPECIFICACIÓN
Dirección IP de la subred: 184.3.0.0/26
Máscara de subred: 255.255.255.192
Cantidad de host utilizables por la subred: 62
Primera dirección del host: 184.3.0.1
Última dirección de host: 184.3.0.62

ESPECIFICACIÓN
Dirección IP de la subred: 117.3.0.0/25
Máscara de subred: 255.255.254.0
Cantidad de host utilizables por la subred: 510
Primera dirección del host: 117.3.0.1
Última dirección de host: 117.3.1.254

Dispositivo	Interfaz	Dirección IP	Máscara de Subred	Gateway por defecto
R1	Fa0/0	175.3.0.126	255.255.255.128	—
	Se0/0/0	1.2.3.1	255.255.255.252	—
	Se0/0/1	4.5.6.1	255.255.255.252	—
R2	Fa0/0	184.3.0.62	255.255.255.192	—
	Se0/0/0	4.5.6.2	255.255.255.252	—
	Se0/0/1	1.4.2.1	255.255.255.252	—
	Se0/1/0	1.2.4.1	255.255.255.252	—
R3	Fa0/0	129.3.0.126	255.255.255.128	—
	Se0/0/0	1.2.3.2	255.255.255.252	—
	Se0/0/1	1.4.2.2	255.255.255.252	—
	Se0/1/0	1.3.6.1	255.255.255.252	—
R4	Fa0/0	117.3.1.254	255.255.254.0	—
	Se0/0/0	1.2.4.2	255.255.255.252	—
	Se0/0/1	1.3.6.2	255.255.255.252	—
PC0	NIC	175.3.0.1	255.255.255.128	175.3.0.126
PC1	NIC	175.3.0.2	255.255.255.128	175.3.0.126
PC2	NIC	184.3.0.1	255.255.255.192	184.3.0.62
PC3	NIC	184.3.0.2	255.255.255.192	184.3.0.62
PC4	NIC	129.3.0.1	255.255.255.128	129.3.0.126
PC5	NIC	129.3.0.1	255.255.255.128	129.3.0.126
PC6	NIC	117.3.0.1	255.255.254.0	117.3.1.254
PC7	NIC	117.3.0.2	255.255.254.0	117.3.1.254

Tabla de ruteo para cada uno de los ruteadores, con el siguiente formato:

Origen	Máscara	Dirección de red	Dirección de Próximo Salto	Interfaz de salida
R1	255.255.255.252	1.2.3.0	—	Se0/0/0
		1.2.4.0	4.5.6.2	Se0/0/1
		1.3.6.0	1.2.3.2	Se0/0/0
		1.4.2.0	1.2.3.2	Se0/0/0
	255.255.255.252	4.5.6.0	—	Se0/0/1
	255.255.255.255	10.0.0.0	—	Loopback1
		11.0.0.0	—	Loopback2
	255.255.254.0	117.3.0.0	1.2.3.2	Se0/0/0
			4.5.6.2	Se0/0/1
	255.255.255.128	129.3.0.0	1.2.3.2	Se0/0/0
	255.255.255.128	175.3.0.0	—	Fa0/0
	255.255.255.192	184.3.0.0	4.5.6.2	Se0/0/1

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* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route

Gateway of last resort is not set

1.0.0.0/30 is subnetted, 4 subnets
C    1.2.3.0 is directly connected, Serial0/0/0
O    1.2.4.0 [110/128] via 4.5.6.2, 00:45:14, Serial0/0/1
O    1.3.6.0 [110/128] via 1.2.3.2, 00:45:28, Serial0/0/0
O    1.4.2.0 [110/128] via 1.2.3.2, 00:47:23, Serial0/0/0
      [110/128] via 4.5.6.2, 00:47:23, Serial0/0/1
4.0.0.0/30 is subnetted, 1 subnets
C    4.5.6.0 is directly connected, Serial0/0/1
10.0.0.0/32 is subnetted, 1 subnets
C    10.0.0.1 is directly connected, Loopback1
11.0.0.0/32 is subnetted, 1 subnets
C    11.0.0.1 is directly connected, Loopback2
117.0.0.0/23 is subnetted, 1 subnets
O    117.3.0.0 [110/129] via 1.2.3.2, 00:42:04, Serial0/0/0
      [110/129] via 4.5.6.2, 00:42:04, Serial0/0/1
129.3.0.0/25 is subnetted, 1 subnets
O    129.3.0.0 [110/65] via 1.2.3.2, 01:01:04, Serial0/0/0
175.3.0.0/25 is subnetted, 1 subnets
C    175.3.0.0 is directly connected, FastEthernet0/0
184.3.0.0/26 is subnetted, 1 subnets
O    184.3.0.0 [110/65] via 4.5.6.2, 00:53:17, Serial0/0/1

R1#

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Origen	Máscara	Dirección de red	Dirección de Próximo Salto	Interfaz de salida
R2	255.255.255.252	1.2.3.0	4.5.6.1	Se0/0/0
			1.4.2.2	Se0/0/1
		1.2.4.0	—	Se0/1/0
		1.3.6.0	1.4.2.2	Se0/0/1
			1.2.4.2	Se0/1/0
	255.255.255.255	1.4.2.0	—	Se0/0/1
		4.5.6.0	—	Se0/0/0
		11.0.0.2	—	Loopback1
		12.0.0.1	—	Loopback2
		13.0.0.0	—	Loopback3
		255.255.254.0	1.2.4.2	Se0/1/0
		255.255.255.128	1.4.2.2	Se0/0/1
		255.255.255.128	4.5.6.1	Se0/0/0
		255.255.255.192	—	Fa0/0

Gateway of last resort is not set

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1.0.0.0/30 is subnetted, 4 subnets
O   1.2.3.0 [110/128] via 4.5.6.1, 01:26:53, Serial0/0/0
    [110/128] via 1.4.2.2, 01:26:53, Serial0/0/1
C   1.2.4.0 is directly connected, Serial0/1/0
O   1.3.6.0 [110/128] via 1.4.2.2, 01:21:34, Serial0/0/1
    [110/128] via 1.2.4.2, 01:21:34, Serial0/1/0
C   1.4.2.0 is directly connected, Serial0/0/1
4.0.0.0/30 is subnetted, 1 subnets
C   4.5.6.0 is directly connected, Serial0/0/0
11.0.0.0/32 is subnetted, 1 subnets
C   11.0.0.2 is directly connected, Loopback1
12.0.0.0/32 is subnetted, 1 subnets
C   12.0.0.1 is directly connected, Loopback2
13.0.0.0/30 is subnetted, 1 subnets
C   13.0.0.0 is directly connected, Loopback3
117.0.0.0/23 is subnetted, 1 subnets
O   117.3.0.0 [110/65] via 1.2.4.2, 01:21:34, Serial0/1/0
129.3.0.0/25 is subnetted, 1 subnets
O   129.3.0.0 [110/65] via 1.4.2.2, 01:26:53, Serial0/0/1
175.3.0.0/25 is subnetted, 1 subnets
O   175.3.0.0 [110/65] via 4.5.6.1, 01:32:47, Serial0/0/0
184.3.0.0/26 is subnetted, 1 subnets
C   184.3.0.0 is directly connected, FastEthernet0/0

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R2#

Origen	Máscara	Dirección de red	Dirección de Próximo Salto	Interfaz de salida
R3	255.255.255.252	1.2.3.0	—	Se0/0/0
		1.2.4.0	1.4.2.1	Se0/0/1
			1.3.6.2	Se0/1/0
		1.3.6.0	—	Se0/1/0
	255.255.255.252	4.5.6.0	—	Se0/0/1
			1.2.3.1	Se0/0/0
	255.255.255.255	10.0.0.2	1.4.2.1	Se0/0/1
			—	Loopback1
			—	Loopback2
			—	Loopback3
			1.3.6.2	Se0/1/0
			—	Fa0/0
			1.2.3.1	Se0/0/0
			1.4.2.1	Se0/0/1

Gateway of last resort is not set

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1.0.0.0/30 is subnetted, 4 subnets
C    1.2.3.0 is directly connected, Serial0/0/0
O    1.2.4.0 [110/128] via 1.4.2.1, 02:03:48, Serial0/0/1
      [110/128] via 1.3.6.2, 02:03:48, Serial0/1/0
C    1.3.6.0 is directly connected, Serial0/1/0
C    1.4.2.0 is directly connected, Serial0/0/1
4.0.0.0/30 is subnetted, 1 subnets
O    4.5.6.0 [110/128] via 1.2.3.1, 02:09:07, Serial0/0/0
      [110/128] via 1.4.2.1, 02:09:07, Serial0/0/1
10.0.0.0/32 is subnetted, 1 subnets
C    10.0.0.2 is directly connected, Loopback1
12.0.0.0/32 is subnetted, 1 subnets
C    12.0.0.2 is directly connected, Loopback2
14.0.0.0/32 is subnetted, 1 subnets
C    14.0.0.1 is directly connected, Loopback3
117.0.0.0/23 is subnetted, 1 subnets
O    117.3.0.0 [110/65] via 1.3.6.2, 02:05:02, Serial0/1/0
129.3.0.0/25 is subnetted, 1 subnets
C    129.3.0.0 is directly connected, FastEthernet0/0
175.3.0.0/25 is subnetted, 1 subnets
O    175.3.0.0 [110/65] via 1.2.3.1, 02:22:48, Serial0/0/0
184.3.0.0/26 is subnetted, 1 subnets
O    184.3.0.0 [110/65] via 1.4.2.1, 02:09:07, Serial0/0/1

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R3#

Origen	Máscara	Dirección de red	Dirección de Próximo Salto	Interfaz de salida
R4	255.255.255.252	1.2.3.0	1.3.6.1	Se0/0/1
		1.2.4.0	—	Se0/0/0
		1.3.6.0	—	Se0/0/1
		1.4.2.0	1.3.6.1	Se0/0/1
	255.255.255.252	4.5.6.0	1.2.4.1	Se0/0/0
	255.255.255.255	13.0.0.2	—	Loopback1
	255.255.255.255	14.0.0.2	—	Loopback2
	255.255.254.0	117.3.0.0	—	Fa0/0
	255.255.255.128	129.3.0.0	1.3.6.1	Se0/0/1
	255.255.255.128	175.3.0.0	1.3.6.1	Se0/0/1
	255.255.255.192	184.3.0.0	1.2.4.1	Se0/0/0
			1.2.4.1	Se0/0/0

```

* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route

Gateway of last resort is not set

1.0.0.0/30 is subnetted, 4 subnets
O    1.2.3.0 [110/128] via 1.3.6.1, 02:11:07, Serial0/0/1
C    1.2.4.0 is directly connected, Serial0/0/0
C    1.3.6.0 is directly connected, Serial0/0/1
O    1.4.2.0 [110/128] via 1.3.6.1, 02:09:55, Serial0/0/1
      [110/128] via 1.2.4.1, 02:09:55, Serial0/0/0
4.0.0.0/30 is subnetted, 1 subnets
O    4.5.6.0 [110/128] via 1.2.4.1, 02:09:55, Serial0/0/0
13.0.0.0/32 is subnetted, 1 subnets
C    13.0.0.2 is directly connected, Loopback1
14.0.0.0/32 is subnetted, 1 subnets
C    14.0.0.2 is directly connected, Loopback2
117.0.0.0/23 is subnetted, 1 subnets
C    117.3.0.0 is directly connected, FastEthernet0/0
129.3.0.0/25 is subnetted, 1 subnets
O    129.3.0.0 [110/65] via 1.3.6.1, 02:11:07, Serial0/0/1
175.3.0.0/25 is subnetted, 1 subnets
O    175.3.0.0 [110/129] via 1.3.6.1, 02:09:55, Serial0/0/1
      [110/129] via 1.2.4.1, 02:09:55, Serial0/0/0
184.3.0.0/26 is subnetted, 1 subnets
O    184.3.0.0 [110/65] via 1.2.4.1, 02:09:55, Serial0/0/0

R4#

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