

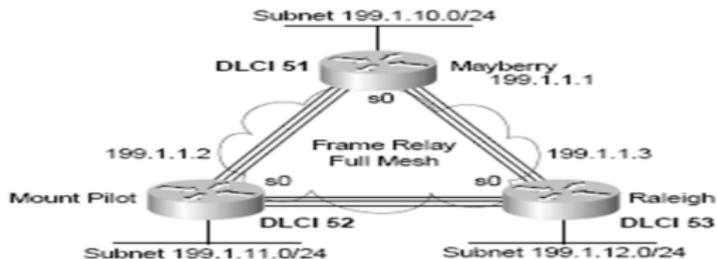
Redes de Datos II

Protocolo IP – Interconexión de Redes

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LINTI-UNLP

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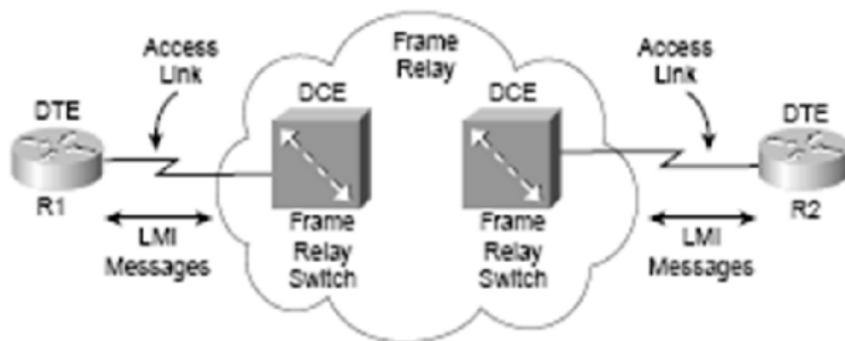
- 1 Escenarios
- 2 Configuración Internetworking

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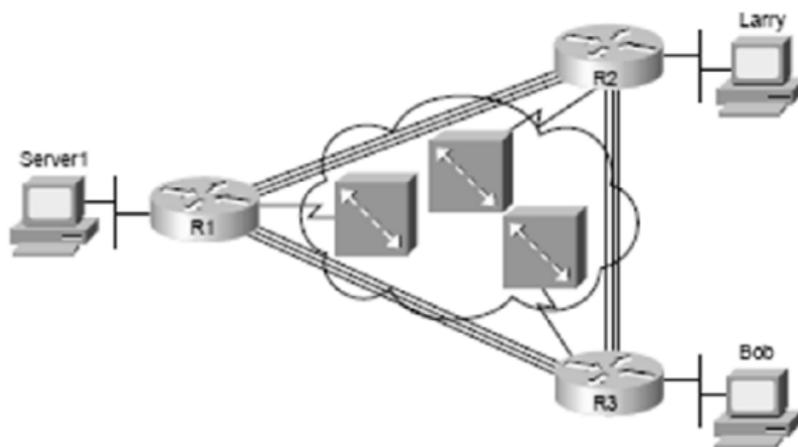
Estamos en:

- 1 Escenarios
- 2 Configuración Internetworking

Escenario – 1



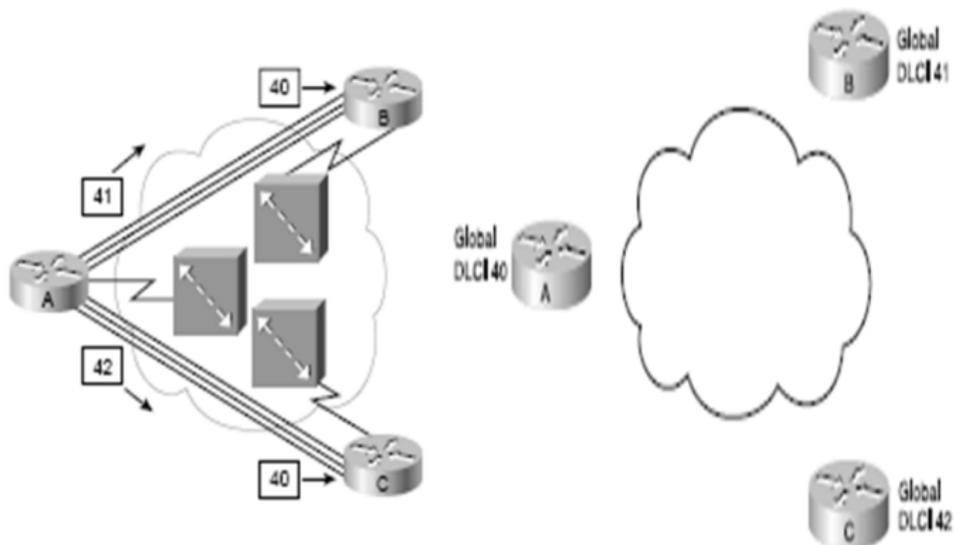
Escenario – 2



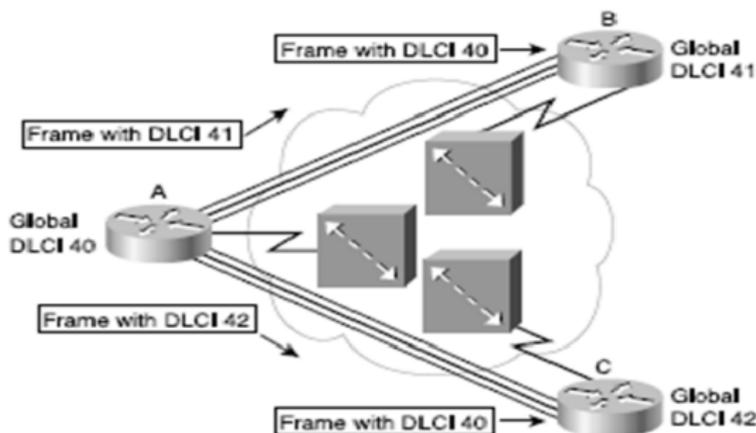
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DLCIs Globales

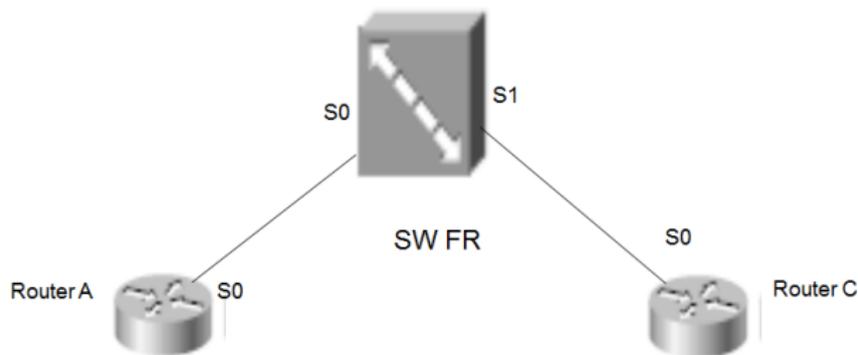


DLCIs Globales ...



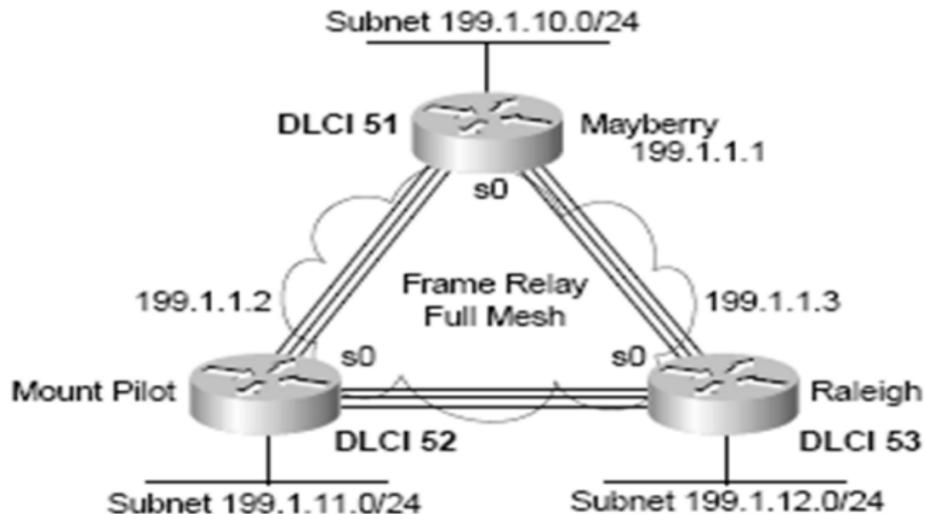
- El emisor toma el campo DLCI como dirección de destino, utilizando el DLCI “global”
- El receptor considera el campo de DLCI como la dirección origen dado que contiene el DLCI “global” del emisor

Configuraciones



<pre>SW FR S0 102 → S1 201</pre>	<pre>Router A #int S0 If#int s0.102 point-to-point If#ip add 172.16.10.1/24 If#frame-relay interface-dlci 102</pre>	<pre>Router C #int S0 If#int s0.201 point-to-point If#ip add 172.16.10.2/24 If#frame-relay interface-dlci 201</pre>
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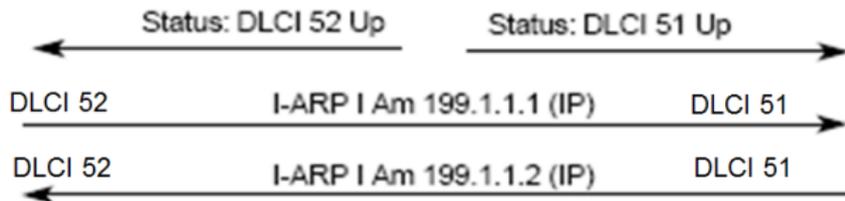
Mapeo



Mapeo Estático

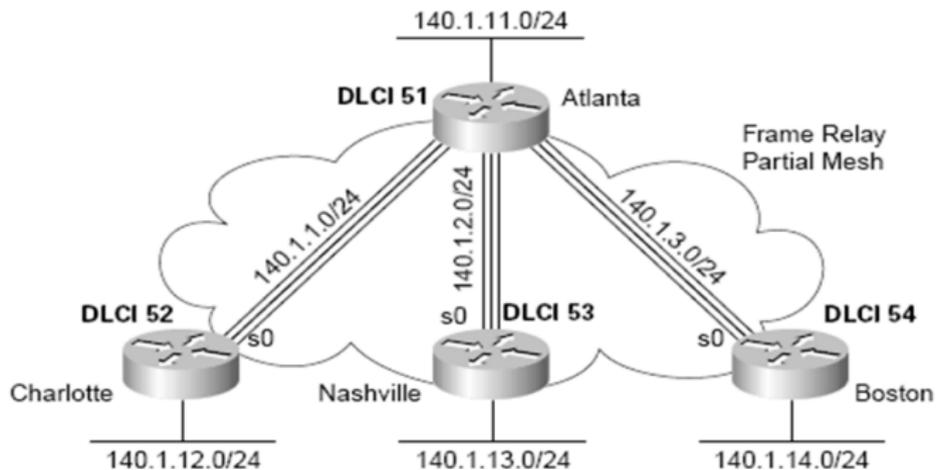
```
Mayberry
interface serial 0
no frame-relay inverse-arp
frame-relay map ip 199.1.1.2 52 broadcast
frame-relay map ip 199.1.1.3 53 broadcast
-----
Mount Pilot
interface serial 0
no frame-relay inverse-arp
frame-relay map ip 199.1.1.1 51 broadcast
frame-relay map ip 199.1.1.3 53 broadcast
-----
Raleigh
interface serial 0
no frame-relay inverse-arp
frame-relay map ip 199.1.1.1 51 broadcast
frame-relay map ip 199.1.1.2 52 broadcast
```

Mapeo Dinámico: iARP



Sending Router	DLCI When the Frame Is Sent	Receiving Router	DLCI When the Frame Is Received	Information in the Inverse ARP Message
Mayberry	52	Mount Pilot	51	I am 199.1.1.1.
Mayberry	53	Raleigh	51	I am 199.1.1.1.
Mount Pilot	51	Mayberry	52	I am 199.1.1.2.
Mount Pilot	53	Raleigh	52	I am 199.1.1.2.
Raleigh	51	Mayberry	53	I am 199.1.1.3.
Raleigh	52	Mount Pilot	53	I am 199.1.1.3.

Subinterfaces



Subinterfaces - Configuraciones – 1

```
Atlanta(config)#interface serial 0
Atlanta(config-if)#encapsulation frame-relay

Atlanta(config-if)#interface serial 0.1 point-to-point
Atlanta(config-subif)#ip address 140.1.1.1 255.255.255.0
Atlanta(config-subif)#frame-relay interface-dlci 52

Atlanta(config-fr-dlci)#interface serial 0.2 point-to-point
Atlanta(config-subif)#ip address 140.1.2.1 255.255.255.0
Atlanta(config-subif)#frame-relay interface-dlci 53

Atlanta(config-fr-dlci)#interface serial 0.3 point-to-point
Atlanta(config-subif)#ip address 140.1.3.1 255.255.255.0
Atlanta(config-subif)#frame-relay interface-dlci 54

Atlanta(config-fr-dlci)#interface ethernet 0
Atlanta(config-if)#ip address 140.1.11.1 255.255.255.0
```

Subinterfaces - Configuraciones – 2

Charlotte

```
interface serial0
encapsulation frame-relay
|
interface serial 0.1 point-to-point
ip address 140.1.1.2 255.255.255.0
frame-relay interface-dlci 51
|
interface ethernet 0
ip address 140.1.12.2 255.255.255.0
```

Subinterfaces - Configuraciones – 3

Nashville

```
interface serial0
encapsulation frame-relay
!
interface serial 0.2 point-to-point
ip address 140.1.2.3 255.255.255.0
frame-relay interface-dlci 51
!
interface ethernet 0
ip address 140.1.13.3 255.255.255.0
```

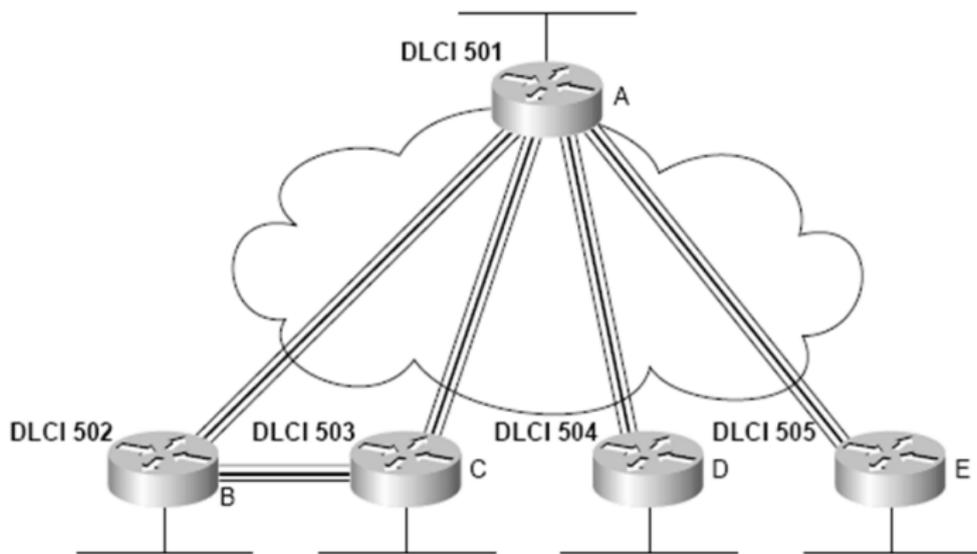
Subinterfaces - Configuraciones – 4

Boston

```
interface serial0
encapsulation frame-relay
!
interface serial 0.2 point-to-point
ip address 140.1.2.3 255.255.255.0
frame-relay interface-dlci 51
!
interface ethernet 0
ip address 140.1.13.3 255.255.255.0
```

Configuración Mixta

Charlotte



Configuración Mixta ...

Charlotte

```
hostname RouterA
!
interface serial0
encapsulation frame-relay
!
interface serial 0.1 multipoint
ip address 140.1.1.1 255.255.255.0
frame-relay interface-dlci 502
frame-relay interface-dlci 503
!
interface serial 0.2 point-to-point
ip address 140.1.2.1 255.255.255.0
frame-relay interface-dlci 504
!
interface serial 0.3 point-to-point
ip address 140.1.3.1 255.255.255.0
frame-relay interface-dlci 505
!
interface ethernet 0
ip address 140.1.11.1 255.255.255.0
```

Configuración Mixta ...

Charlotte

```
hostname RouterB
!
interface serial0
encapsulation frame-relay
!
interface serial 0.1 multipoint
ip address 140.1.1.2 255.255.255.0
frame-relay interface-dlci 501
frame-relay interface-dlci 503
!
interface ethernet 0
ip address 140.1.12.2 255.255.255.0
```

```
hostname RouterC
!
interface serial0
encapsulation frame-relay
!
interface serial 0.1 multipoint
ip address 140.1.1.3 255.255.255.0
frame-relay interface-dlci 501
frame-relay interface-dlci 502
!
interface ethernet 0
ip address 140.1.13.3 255.255.255.0
```

Configuración Mixta ...

Charlotte

```
hostname RouterD
!
interface serial0
encapsulation frame-relay
!
interface serial 0.1 point-to-point
ip address 140.1.2.4 255.255.255.0
frame-relay interface-dlci 501
!
interface ethernet 0
ip address 140.1.14.4 255.255.255.0
```

```
hostname RouterE
!
interface serial0
encapsulation frame-relay
!
interface serial 0.1 point-to-point
ip address 140.1.3.5 255.255.255.0
frame-relay interface-dlci 501
!
interface ethernet 0
ip address 140.1.16.5 255.255.255.0
```