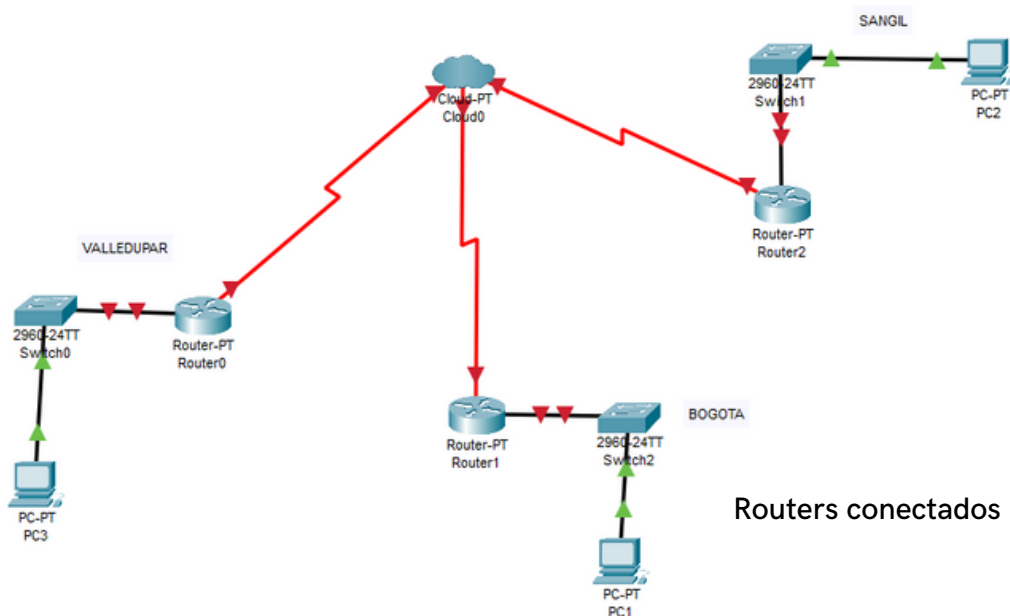# FrameRelay
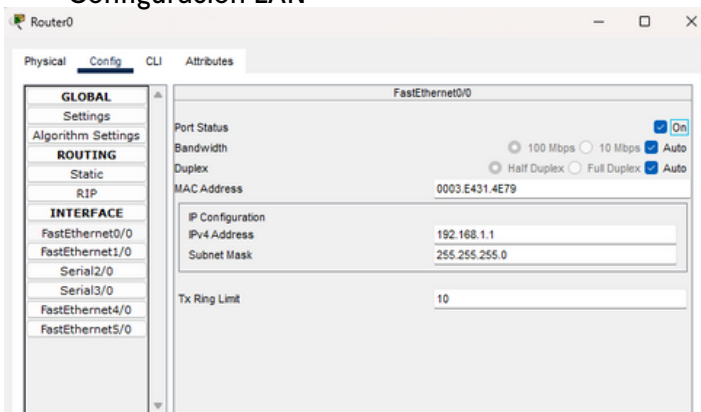
Taller para la creación de una infraestructura de frame relay con el servidor principal y las sucursales.

| | Valledupar | Bogotá | San Gil |
|---|---|---|---|
| Router | 192.168.1.1 | 192.168.4.1 | 192.168.2.1 |
| PC | 192.168.1.2 | 192.168.4.2 | 192.168.2.2 |
| WAN | 10.0.1.1 | 10.0.4.4 | 10.0.2.2 |

Cloud



Routers conectados por serial

Configuración LAN



Configuración WAN SERIAL PORT



Luis Mora Aroca y Andres Barrera Muñoz
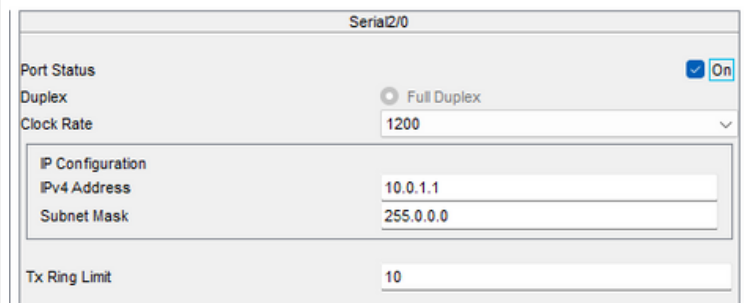
## Prueba de conexión con router

| Fire | Last Status | Source | Destination | Type | Color | Time(sec) | Periodic | Num | Edit | Delete |
|------|-------------|--------|-------------|------|-------|-----------|----------|-----|------|--------|
| ● | Successful | PC2 SANGIL | Router2 | ICMP | 🟩 | 0.000 | N | 0 | (edit) | (delete) |
| ● | Successful | PC1 BOGOTA | Router1 | ICMP | 🟥 | 0.000 | N | 1 | (edit) | (delete) |
| ● | Successful | PC3 VALLEDUPAR | Router0 | ICMP | 🟩 | 0.000 | N | 2 | (edit) | (delete) |

## DLCI SE/0 VALLEDUPAR

| DLCI | | Name | |
|------|--|------|--|
| | Add | | Remove |

| DLCI | Name |
|------|------|
| 102 | VUP-BOG |
| 103 | VUP-SGL |

## DLCI SE/1 SAN GIL

| DLCI | Name |
|------|------|
| 201 | SGL-BOG |
| 200 | SGL-VUP |

## DLCI SE/02 BOGOTA

| DLCI | Name |
|------|------|
| 1002 | BOG-SGL |
| 100 | BOG-VUP |

## FRAME RELAY

### Frame Relay

| Serial2 ∨ | BOG-VUP ∨ | <-> | Serial0 ∨ | VUP-BOG ∨ |
|-----------|-----------|-----|-----------|-----------|
| Port | Sublink | | Port | Sublink |

| | From Port | Sublink | To Port | Sublink |
|---|-----------|---------|---------|---------|
| 1 | Serial0 | VUP-BOG | Serial2 | BOG-VUP |
| 2 | Serial0 | VUP-SGL | Serial1 | SGL-VUP |
| 3 | Serial1 | SGL-BOG | Serial2 | BOG-SGL |

Luis Mora Aroca y Andres Barrera Muñoz

## ROUTING Y ENCAPSULAMIENTO ROUTER VALLEDUPAR

| | |
|---|---|
| Network | 192.168.4.0 |
| Mask | 255.255.255.0 |
| Next Hop | 10.0.4.4 |

| | Add |
|---|---|

**Network Address**

192.168.2.0/24 via 10.0.2.2

192.168.4.0/24 via 10.0.4.4

```
Router(config)#interface Serial2/0
Router(config-if)#encapsulation frame-relay
Router(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
```

## ROUTING Y ENCAPSULAMIENTO ROUTER SANGIL

### Static Routes

| | |
|---|---|
| Network | 192.168.4.0 |
| Mask | 255.255.255.0 |
| Next Hop | 10.0.4.4 |

| | Add |
|---|---|

**Network Address**

192.168.1.0/24 via 10.0.1.1

192.168.4.0/24 via 10.0.4.4

```
Router(config)#interface Serial2/0
Router(config-if)#encapsulation frame-relay
Router(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
```

## ROUTING Y ENCAPSULAMIENTO ROUTER BOGOTA

### Static Routes

| | |
|---|---|
| Network | 192.168.1.0 |
| Mask | 255.255.255.0 |
| Next Hop | 10.0.1.1 |

| | Add |
|---|---|

**Network Address**

192.168.2.0/24 via 10.0.2.2

192.168.1.0/24 via 10.0.1.1

```
Router(config)#interface Serial2/0
Router(config-if)#encapsulation frame-relay
Router(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
```

**Luis Mora Aroca y Andres Barrera Muñoz**

# Pruebas
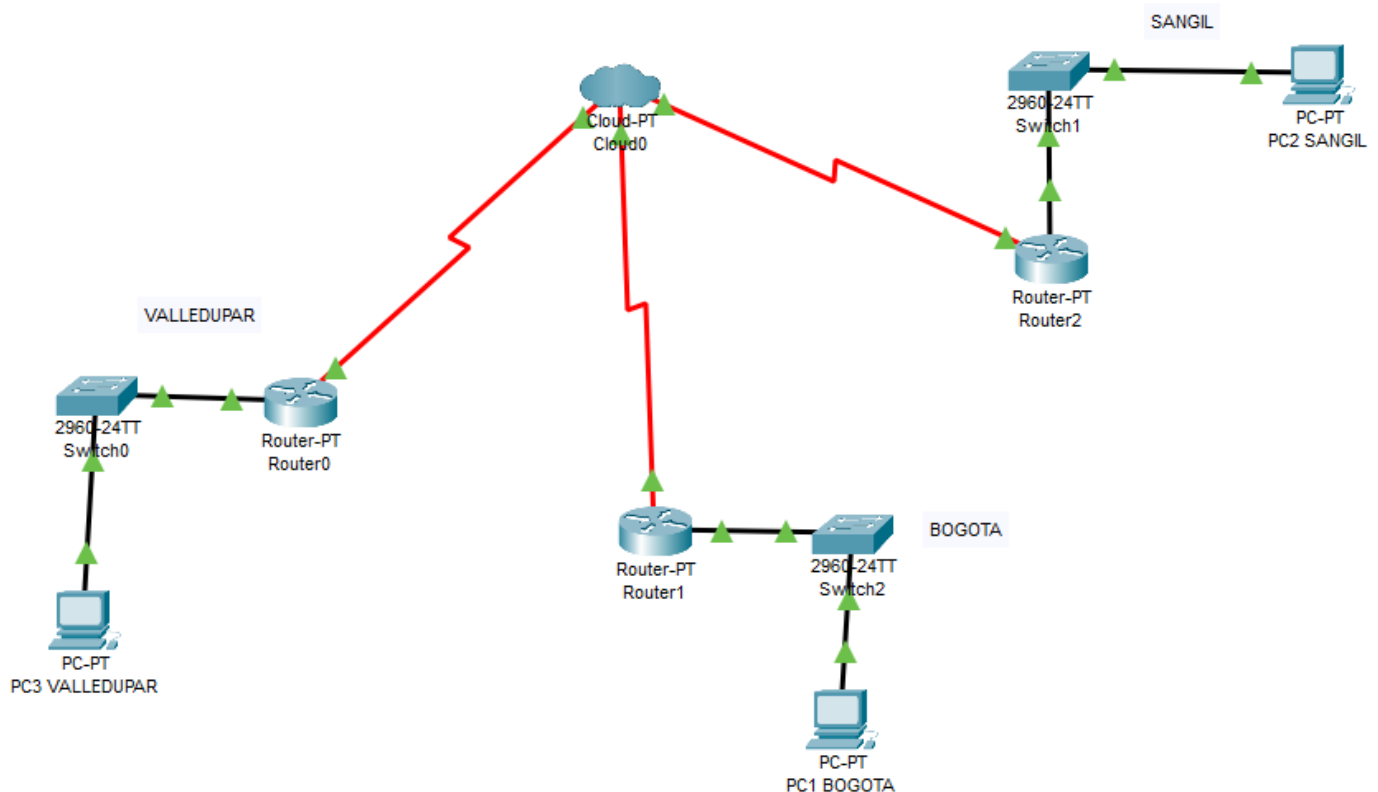


|        | Valledupar   | Bogotá       | San Gil      |
|--------|--------------|--------------|--------------|
| Router | 192.168.1.1  | 192.168.4.1  | 192.168.2.1  |
| PC     | 192.168.1.2  | 192.168.4.2  | 192.168.2.2  |
| WAN    | 10.0.1.1     | 10.0.4.4     | 10.0.2.2     |

| Fire | Last Status | Source | Destination |
|------|-------------|--------|-------------|
| ● | Successful | PC3 VALLEDUPAR | PC1 BOGOTA |
| ● | Successful | PC1 BOGOTA | PC2 SANGIL |
| ● | Successful | PC2 SANGIL | PC1 BOGOTA |
| ● | Successful | PC3 VALLEDUPAR | PC2 SANGIL |



**Archivo en Google Drive**

https://drive.google.com/file/d/1VVj5CkGSYACm1xDslhaDeIglqZ3aEY-P/view?usp=sharing

Luis Mora Aroca y Andres Barrera Muñoz