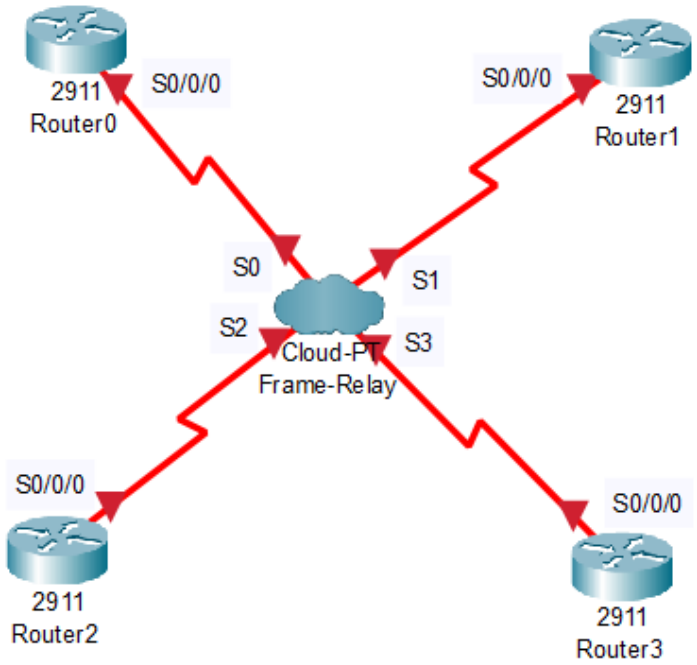
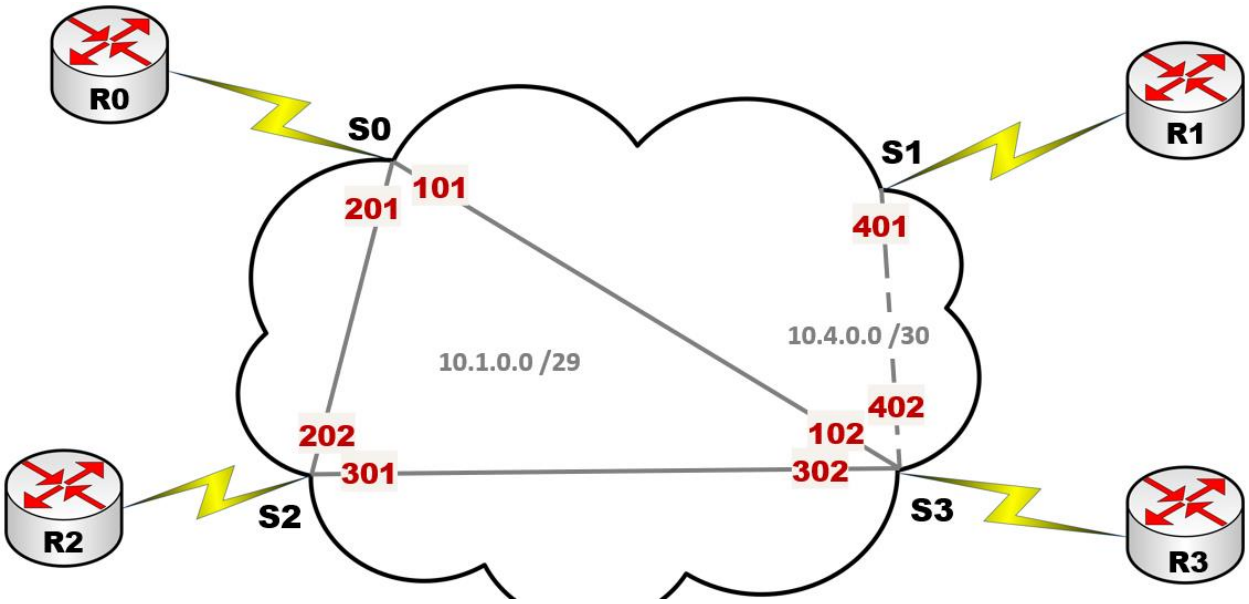
Goal. Use the provided .PKT file and configure the following:

1. Frame Relay cloud according to the logical diagram below.
2. Frame Relay protocol according to the logical diagram (the triangle between R0, R2 and R3 is a multipoint network).
3. Test connectivity.
4. RIPv2.



Logical diagram:

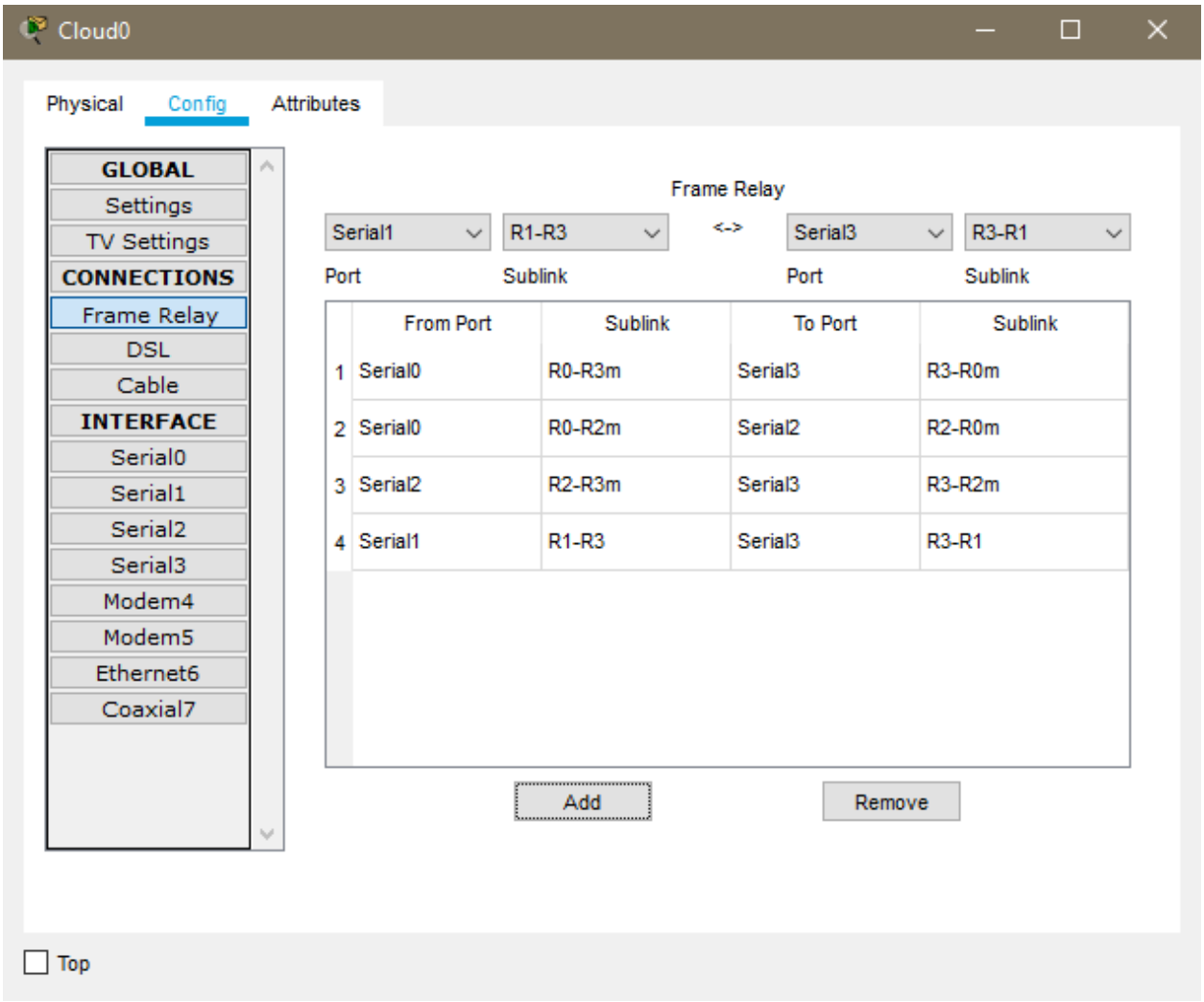


1. Frame Relay cloud configuration

1. Click on the cloud
2. Go to the “Config” tab
3. Find the “INTERFACES” section, and in each Serial interface, add the following:

- Serial0: DLCI 101, Name R0-R3m
- Serial0: DLCI 201, Name R0-R2m
- Serial1: DLCI 401, Name R1-R3
- Serial2: DLCI 202, Name R2-R0m
- Serial2: DLCI 301, Name R2-R3m
- Serial3: DLCI 102, Name R3-R2m
- Serial3: DLCI 302, Name R3-R2m
- Serial3: DLCI 402, Name R3-R1

4. Find the “Frame Relay” option under “CONNECTIONS” and add the following:



You should have as many connections here as there are in the Frame Relay cloud, in the logical diagram.

2. Frame Relay protocol configuration

Serial interface + Frame Relay protocol configuration:

```
R0(config)#interface Serial 0/0/0
R0(config-if)#encapsulation frame-relay
R0(config-if)#no shutdown
R0(config-if)#exit

R1(config)#interface Serial 0/0/0
```

```
R1(config-if)#encapsulation frame-relay
R1(config-if)#no shutdown
R1(config-if)#exit

R2(config)#interface Serial 0/0/0
R2(config-if)#encapsulation frame-relay
R2(config-if)#no shutdown
R2(config-if)#exit

R3(config)#interface Serial 0/0/0
R3(config-if)#encapsulation frame-relay
R3(config-if)#no shutdown
R3(config-if)#exit
```

Sub-interface configuration, Multipoint:

```
R0(config)#interface Serial 0/0/0.100 multipoint
R0(config-subif)#frame-relay interface-dlci 101
R0(config-subif)#frame-relay interface-dlci 201
R0(config-subif)#ip address 10.1.0.1 255.255.255.248
R0(config-subif)#exit

R2(config)#interface Serial 0/0/0.100 multipoint
R2(config-subif)#frame-relay interface-dlci 202
R2(config-subif)#frame-relay interface-dlci 301
R2(config-subif)#ip address 10.1.0.2 255.255.255.248
R2(config-subif)#exit

R3(config)#interface Serial 0/0/0.100 multipoint
R3(config-subif)#frame-relay interface-dlci 302
R3(config-subif)#frame-relay interface-dlci 102
R3(config-subif)#ip address 10.1.0.3 255.255.255.248
R3(config-subif)#exit
```

Sub-interface configuration, PTP link between R1 and R3:

```
R1(config)#interface Serial 0/0/0.401 point-to-point
R1(config-subif)#frame-relay interface-dlci 401
R1(config-subif)#ip address 10.4.0.1 255.255.255.252
R1(config-subif)#exit

R3(config)#interface Serial 0/0/0.402 point-to-point
R3(config-subif)#frame-relay interface-dlci 402
R3(config-subif)#ip address 10.4.0.2 255.255.255.252
R3(config-subif)#exit
```

4. Connectivity test

Try to ping between the routers which have direct, point-to-point or multipoint connections. Those should work.

Try to ping between routers that don’t have a link connecting them. Those shouldn’t work.

4. RIPv2

```
R0(config)#router rip
R0(config-router)#version 2
R0(config-router)#no auto-summary
R0(config-router)#network 10.1.0.0
R0(config-router)#exit


R1(config)#router rip
R1(config-router)#version 2
R1(config-router)#no auto-summary
R1(config-router)#network 10.4.0.0
R1(config-router)#exit


R2(config)#router rip
R2(config-router)#version 2
R2(config-router)#no auto-summary
R2(config-router)#network 10.1.0.0
R2(config-router)#exit


R3(config)#router rip
R3(config-router)#version 2
R3(config-router)#no auto-summary
R3(config-router)#network 10.1.0.0
R3(config-router)#network 10.4.0.0
R3(config-router)#exit
```