UNIVERSIDAD TECNOLÓGICA DE TULANCINGO

Nombre del trabajo:

Actividad 6.-La ruta predeterminada con Eigrp

Materia:
” interconexión de redes”

Catedrático:
Oscas lira Uribe

Alumno: anhuar fernando martinez islas
Matricula:1722110139

Grupo: TI 22

Periodo:
Enero-abril 2023

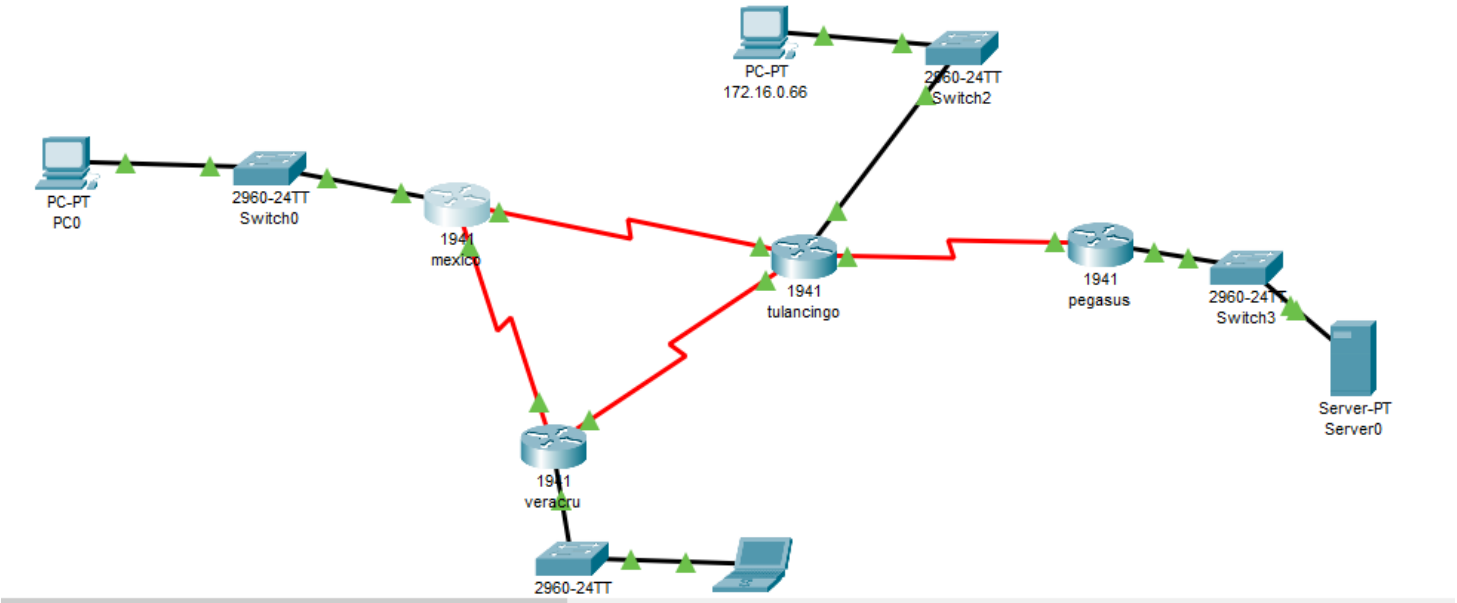
Fecha:23-febrero-2023

Introducción

La empresa “El corazón de una dama”, dedicada a la venta de abarrotes. Actualmente cuenta con 3 sucursales(Veracruz, México, Tulancingo) y por cuestiones de seguridad trabaja con un enrutamiento dinámico utilizando EIGRP con el sistema autónomo 3. El router Tulancingo es un router que se conecta con el proveedor de servicios a través de una ruta predeterminada utilizando la ip publica 200.200.200.200 /30. La compañía PEGASUS proporciona conectividad hacia internet con una ruta estática resumida.

DESARROLLO

Implementado la siguiente topología se realizó un Subneteo para 80 host y 6 ip para WAN



Implementando una ruta predeterminada del router Tulancingo a Pegasus , el mismo router Tulancingo comparte esa ruta por medio del protocolo rip

```
Router>enabl
Router#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 200.200.200.202 to network 0.0.0.0

     172.16.0.0/16 is variably subnetted, 9 subnets, 4 masks
R       172.16.0.0/26 [120/1] via 172.16.0.121, 00:00:16, Serial0/0/1
C       172.16.0.64/28 is directly connected, GigabitEthernet0/0
L       172.16.0.65/32 is directly connected, GigabitEthernet0/0
R       172.16.0.96/28 [120/1] via 172.16.0.113, 00:00:28, Serial0/1/1
C       172.16.0.112/30 is directly connected, Serial0/1/1
L       172.16.0.114/32 is directly connected, Serial0/1/1
R       172.16.0.116/30 [120/1] via 172.16.0.121, 00:00:16, Serial0/0/1
                        [120/1] via 172.16.0.113, 00:00:28, Serial0/1/1
C       172.16.0.120/30 is directly connected, Serial0/0/1
L       172.16.0.122/32 is directly connected, Serial0/0/1
     200.200.200.0/24 is variably subnetted, 2 subnets, 2 masks
C       200.200.200.200/30 is directly connected, Serial0/1/0
L       200.200.200.201/32 is directly connected, Serial0/1/0
S*   0.0.0.0/0 [1/0] via 200.200.200.202

Router#
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname tulancingo
tulancingo(config)#
```

Tabla de enrutamiento en Veracruz

```
veracruz(config)#do 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 172.16.0.122 to network 0.0.0.0

     172.16.0.0/16 is variably subnetted, 9 subnets, 4 masks
C       172.16.0.0/26 is directly connected, GigabitEthernet0/0
L       172.16.0.1/32 is directly connected, GigabitEthernet0/0
R       172.16.0.64/28 [120/1] via 172.16.0.122, 00:00:29, Serial0/1/1
R       172.16.0.96/28 [120/1] via 172.16.0.117, 00:00:19, Serial0/1/0
R       172.16.0.112/30 [120/1] via 172.16.0.117, 00:00:19, Serial0/1/0
                        [120/1] via 172.16.0.122, 00:00:29, Serial0/1/1
C       172.16.0.116/30 is directly connected, Serial0/1/0
L       172.16.0.118/32 is directly connected, Serial0/1/0
C       172.16.0.120/30 is directly connected, Serial0/1/1
L       172.16.0.121/32 is directly connected, Serial0/1/1
R*   0.0.0.0/0 [120/1] via 172.16.0.122, 00:00:29, Serial0/1/1

veracruz(config)#
```

Tabla de enrutamiento de México

```
Router#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 172.16.0.114 to network 0.0.0.0

     172.16.0.0/16 is variably subnetted, 9 subnets, 4 masks
R       172.16.0.0/26 [120/1] via 172.16.0.118, 00:00:24, Serial0/1/0
R       172.16.0.64/28 [120/1] via 172.16.0.114, 00:00:11, Serial0/1/1
C       172.16.0.96/28 is directly connected, GigabitEthernet0/0
L       172.16.0.97/32 is directly connected, GigabitEthernet0/0
C       172.16.0.112/30 is directly connected, Serial0/1/1
L       172.16.0.113/32 is directly connected, Serial0/1/1
C       172.16.0.116/30 is directly connected, Serial0/1/0
L       172.16.0.117/32 is directly connected, Serial0/1/0
R       172.16.0.120/30 [120/1] via 172.16.0.118, 00:00:25, Serial0/1/0
                        [120/1] via 172.16.0.114, 00:00:12, Serial0/1/1
R*   0.0.0.0/0 [120/1] via 172.16.0.114, 00:00:12, Serial0/1/1

Router#
Router#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname mexico
mexico(config)#
```

Tabla de enrutamiento Pegasus

```
pegasus(config)#do show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BG
       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 int
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

S    172.16.0.0/16 [1/0] via 200.200.200.201
     200.200.200.0/24 is variably subnetted, 2 subnets, 2 masks
C       200.200.200.200/30 is directly connected, Serial0/1/0
L       200.200.200.202/32 is directly connected, Serial0/1/0
     200.200.201.0/24 is variably subnetted, 2 subnets, 2 masks
C       200.200.201.0/24 is directly connected, GigabitEthernet0/0
L       200.200.201.1/32 is directly connected, GigabitEthernet0/0

pegasus(config)#
```

Conexión con el servidor por dns

Conclusión

Fue una practica interesante donde un router les comunica a los demás que conoce ciertas rutas para encaminar paquetes y fue interesante al poder configurar tu propia página HTML