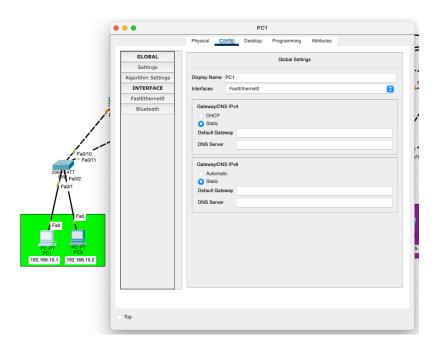
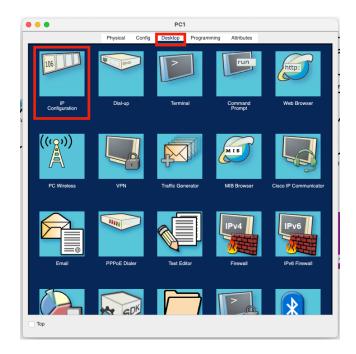
Configurar dirección IP de dispositivos finales

1. Seleccionar dispositivo y dar click



2. Mover a la pestaña "Desktop" y seleccionar opción "IP Configuration"



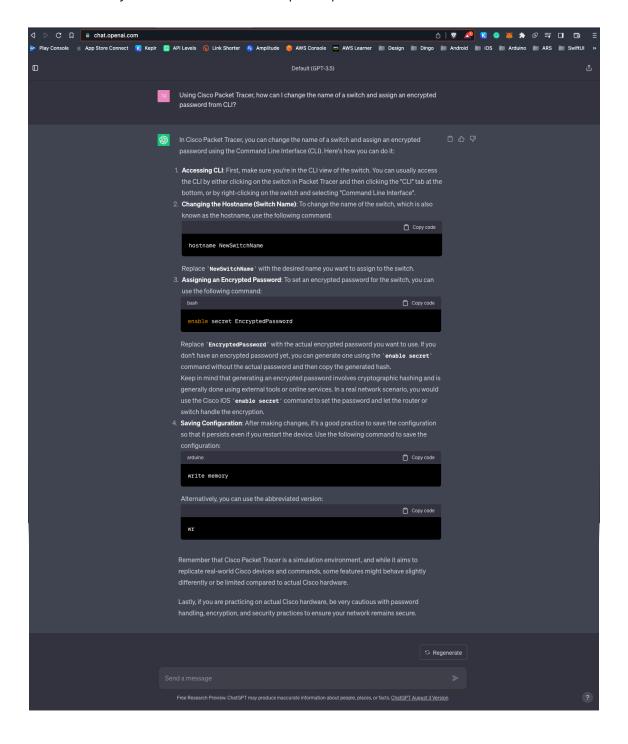
3. Ingresar dirección IP que se desea asignar y dejar máscara de subred como 255.255.255.0



Configurar Switch

Configurar nombre, dominio y contraseña (en cada switch)

Cambiar nombre y utilizar contraseña encriptada para un Switch utilizando ChatGPT



1. Nombre

Switch>enable

Switch#config t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname SW1_G41

2. Dominio

SW1_G41(config)#vtp domain practica1.usac.local

3. Contraseña

SW1_G41(config)#vtp password redes2sgrupo41

4. Guardar

SW1_G41#exit

SW1_G41#

%SYS-5-CONFIG_I: Configured from console by console

SW1 G41#wr

Building configuration...

[OK]

Crear y configurar VLAN's

1. Definir switch que tendrá modo servidor, en este caso escogemos el switch SW1_G41 y los demás se actualizaran a modo cliente

SW1_G41#configure terminal

SW1_G41(config)#vtp mode server

SW2-12_G41#configure terminal

SW2-12_G41(config)#vtp mode client

2. En el switch en modo servidor, proceder a crear VLAN's

SW1_G41#configure terminal

SW1_G41(config)#vlan 15/25/35

SW1 G41(config-vlan)#name PRIMARIA/BASICOS/DIVERSIFICADO

Configurar puertos en modo trunk (por cada switch)

SW1_G41#config t

Enter configuration commands, one per line. End with CNTL/Z.

SW1_G41(config)#interface f0/12

SW1_G41(config-if)#switchport mode trunk

SW1_G41(config-if)#switchport trunk allowed vlan 15,25,35

SW1_G41(config-if)#exit

SW1_G41(config)#do wr

Building configuration...

[OK]

Configurar puertos en modo acceso (por cada switch)

SW4_G41#config t

Enter configuration commands, one per line. End with CNTL/Z.

SW4_G41(config)#interface f0/1

SW4 G41(config-if)#switchport mode access

SW4 G41(config-if)#switchport access vlan [insertar numero de vlan]

SW4_G41(config-if)#exit

SW4 G41(config)#do wr

Building configuration...

[OK]

Configurar security ports (por cada switch)

SW4_G41#config t

SW4_G41(config)#interface f0/1

SW4_G41(config-if)#switchport port-security // activar

SW4_G41(config-if)#switchport port-security mac-address [insertar mac address]

SW4 G41(config-if)#exit

SW4_G41(config)#do wr

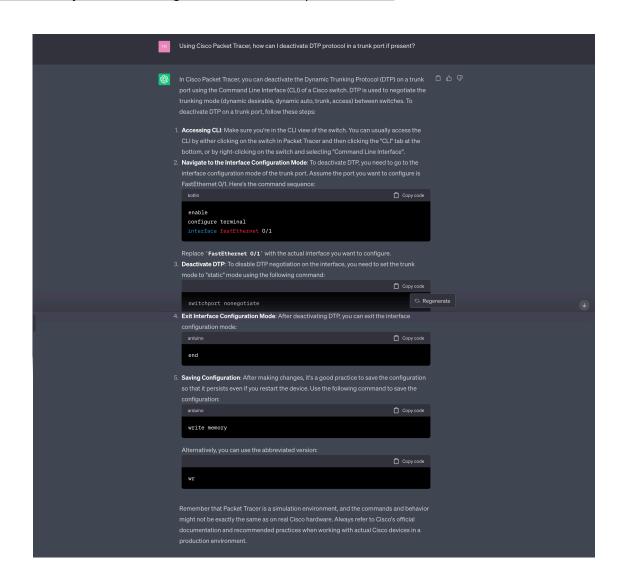
Building configuration...

[OK]

Lista de MAC address en el proyecto:

00E0.B0E2.571B 0090.2B85.83BA 00E0.8FC1.37D4 0040.0B60.6EC7 0050.0F13.23AE 00E0.B037.4903 0001.C920.0E18 00E0.F9E9.E6CD 0090.2BBB.2B72 0006.2AB8.D6C5

Desactivar Dynamic Trunking Protocol (DTP) en puertos trunk



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SW4_G41#config t

SW4_G41(config)#interface f0/1

SW4_G41(config-if)#switchport nonegotiate

SW4_G41(config-if)#exit

SW4_G41(config)#do wr

Building configuration...

[OK]

Determinar puerto root, designated o non designated

SW1_G41#show spanning-tree vlan 35

```
VLAN0035
 Spanning tree enabled protocol ieee
            Priority
 Root ID
                        32803
            Address
                        0000.0CE7.2219
            Cost 38
Port 2 (FastEthernet0/2)
            Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
 Bridge ID Priority 32803 (priority 32768 sys-id-ext 35)
                       0001.643A.8B27
            Address
            Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
            Aging Time 20
Interface
                Role Sts Cost
                                  Prio.Nbr Type
Fa0/1
                Altn BLK 19
                                  128.1
                                           P2p
Fa0/2
                                           P2p
                Root FWD 19
                                  128.2
Fa0/3
                Altn BLK 19
                                  128.3
                                           P2p
Fa0/10
                Altn BLK 19
                                  128.10
                                           P2p
Fa0/11
                Altn BLK 19
                                  128.11
                                           P2p
```