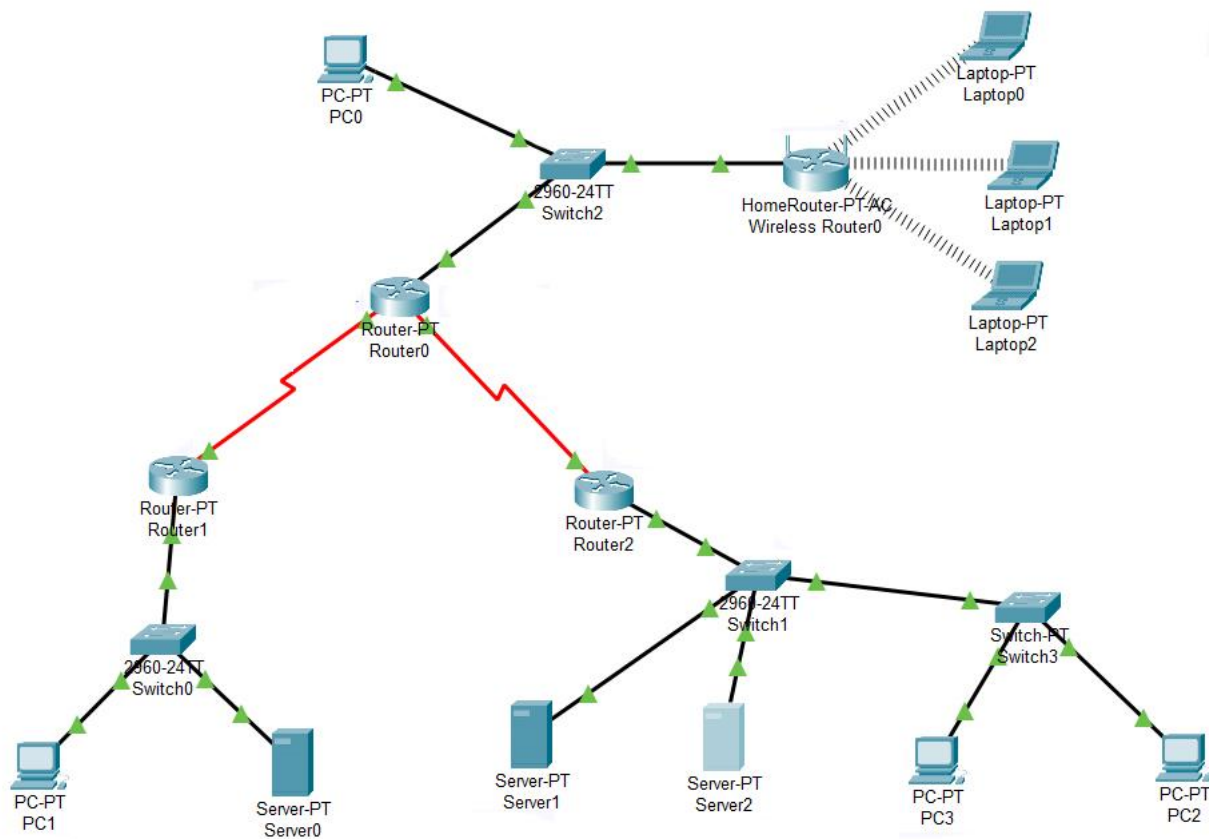




Nombre: Josué Merino

NRC: 14575

Diseño Físico



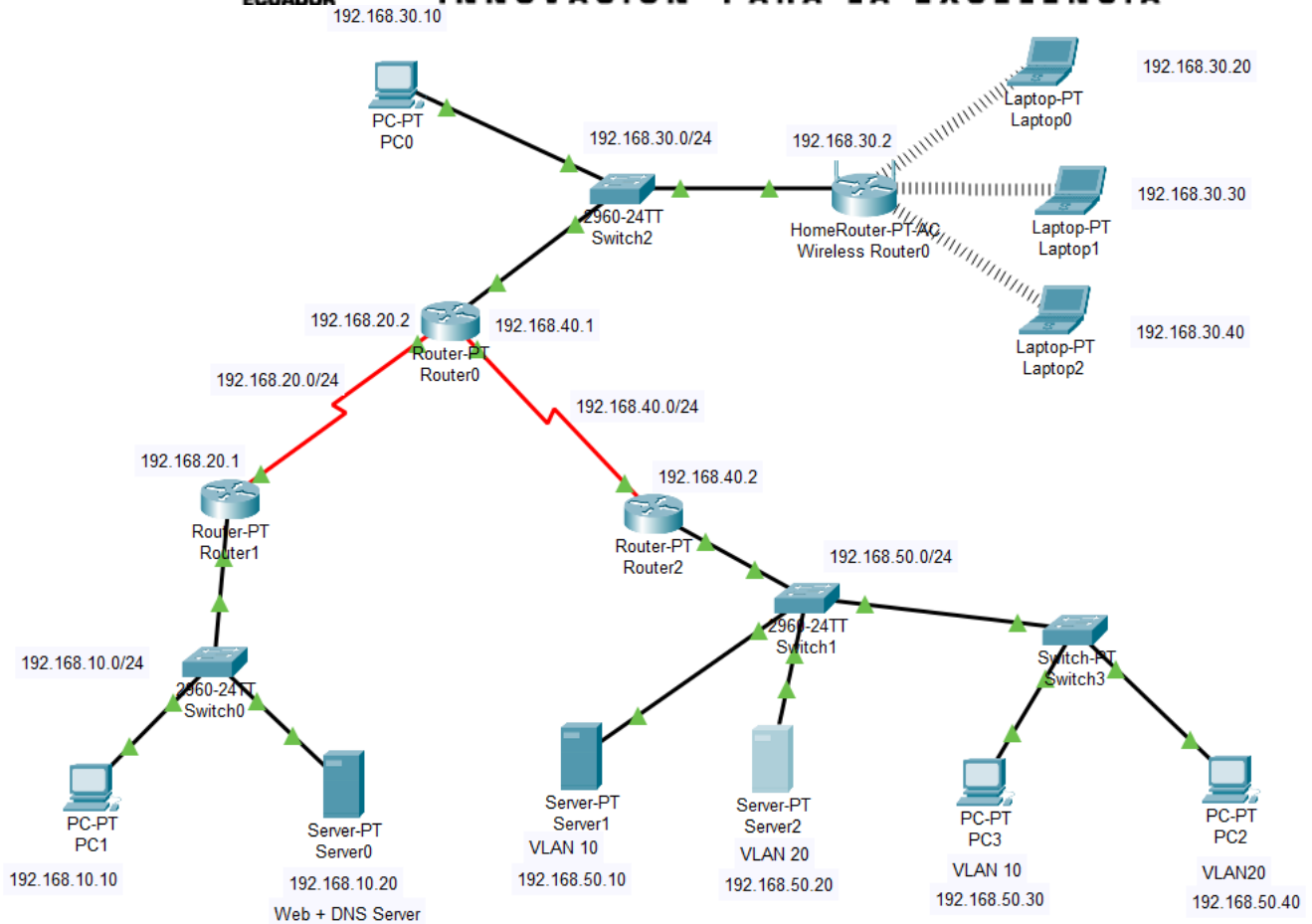
Diseño Lógico



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Configuración de OSPF



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Router1

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 00D0.FFC5.166B

IP Configuration

IPv4 Address 192.168.20.1

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Router0

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0050.0F10.90A5

IP Configuration

IPv4 Address 192.168.20.2

Subnet Mask 255.255.255.0

Tx Ring Limit 10



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Router2

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0040.0B33.49C1

IP Configuration

IPv4 Address 192.168.40.2

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Configuración de Servicios

Configuración de Server DNS:



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Server0

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS**
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

DNS

DNS Service ☒ On ☐ Off

Resource Records

Name Type

Address

No.	Name	Type	Detail
-----	------	------	--------

☐ Top

Configuración Server Web:



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Server0

Physical Config **Services** Desktop Programming Attributes

SERVICES

- HTTP
- DHCP
- DHCPv6
- TFTP
- DNS
- SYSLOG
- AAA
- NTP
- EMAIL
- FTP
- IoT
- VM Management
- Radius EAP

HTTP

☒ On ☐ Off

HTTPS

☒ On ☐ Off

File Manager

	File Name	Edit	Delete
1	copyrights.html	(edit)	(delete)
2	cscoptlogo177x111.jpg		(delete)
3	helloworld.html	(edit)	(delete)
4	image.html	(edit)	(delete)
5	index.html	(edit)	(delete)

New File Import

☐ Top

Configuración de WLAN

Se cambia el SSID del Router y se agrega una clave con Autenticación WPA2-PSK



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Wireless Router0

Physical Config GUI Attributes

GLOBAL

- Settings
- Algorithm Settings

INTERFACE

- Internet
- LAN**
- Wireless 2.4G
- Wireless 5G(1)
- Wireless 5G(2)
- Wireless Guest 2.4G
- Wireless Guest 5G(1)
- Wireless Guest 5G(2)

Wireless 2.4G Settings

SSID: JOSUE-RED

2.4 GHz Channel: 6 - 2.437GHz

Coverage Range (meters): 250,00

Authentication:

- ☐ Disabled
- ☐ WPA-PSK
- ☒ WPA2-PSK
- ☐ WPA
- ☐ WPA2

WEP Key: [Empty]

PSK Pass Phrase: PruebaRedes2024

RADIUS Server Settings:

IP Address: [Empty]

Shared Secret: [Empty]

Encryption Type: AES

Se conecta cada Laptop a la red agregando la contraseña previamente configurada



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Laptop0

Physical Config **Desktop** Programming Attributes

WPA2-Personal Needed for Connection

This wireless network has WPA2-Personal enabled. To connect to this network, enter the required passphrase in the appropriate field below. Then click the **Connect** button.

Security WPA2-Personal Please select the wireless security method used by your existing wireless network.

Pre-shared Key PruebaRedes2024 Please enter a Pre-shared Key that is 8 to 63 characters in length.

Cancel **Connect**

Wireless-N Notebook Adapter Wireless Network Monitor v1.0 Model No. WPC300N

Laptop1

Physical Config **Desktop** Programming Attributes

WPA2-Personal Needed for Connection

This wireless network has WPA2-Personal enabled. To connect to this network, enter the required passphrase in the appropriate field below. Then click the **Connect** button.

Security WPA2-Personal Please select the wireless security method used by your existing wireless network.

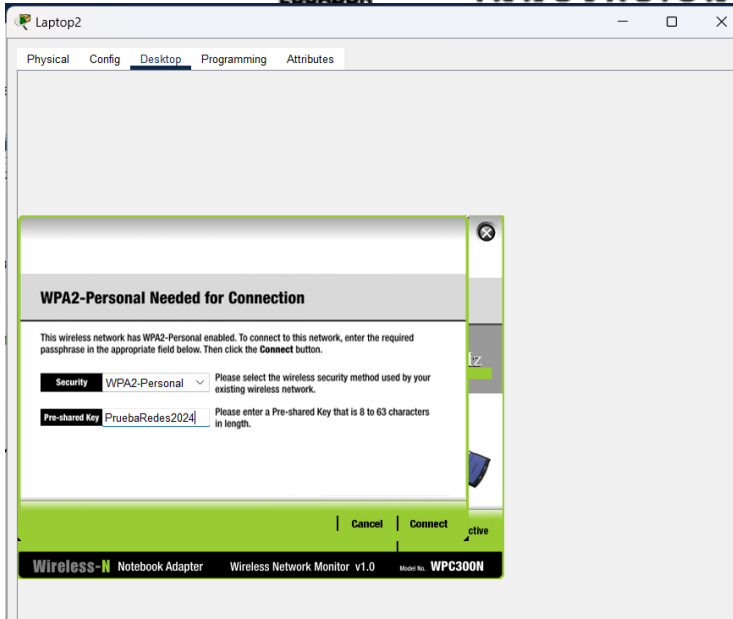
Pre-shared Key PruebaRedes2024 Please enter a Pre-shared Key that is 8 to 63 characters in length.

Cancel **Connect**

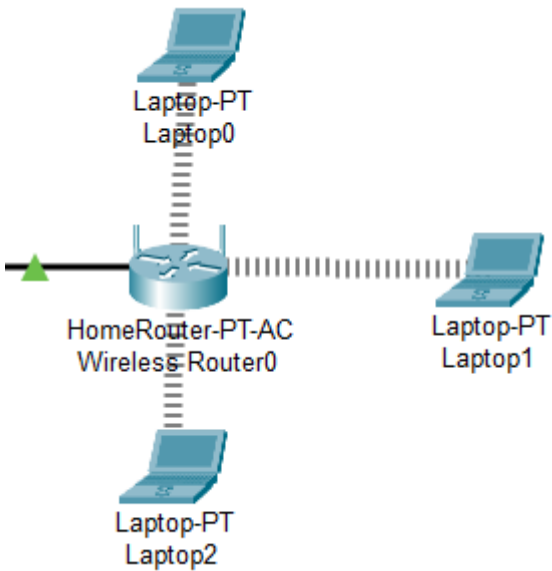
Wireless-N Notebook Adapter Wireless Network Monitor v1.0 Model No. WPC300N



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Se evidencia la conectividad que existe:



Configuración de VLANS



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Switch1



Physical Config CLI Attributes

IOS Command Line Interface

Switch con0 is now available

Press RETURN to get started.

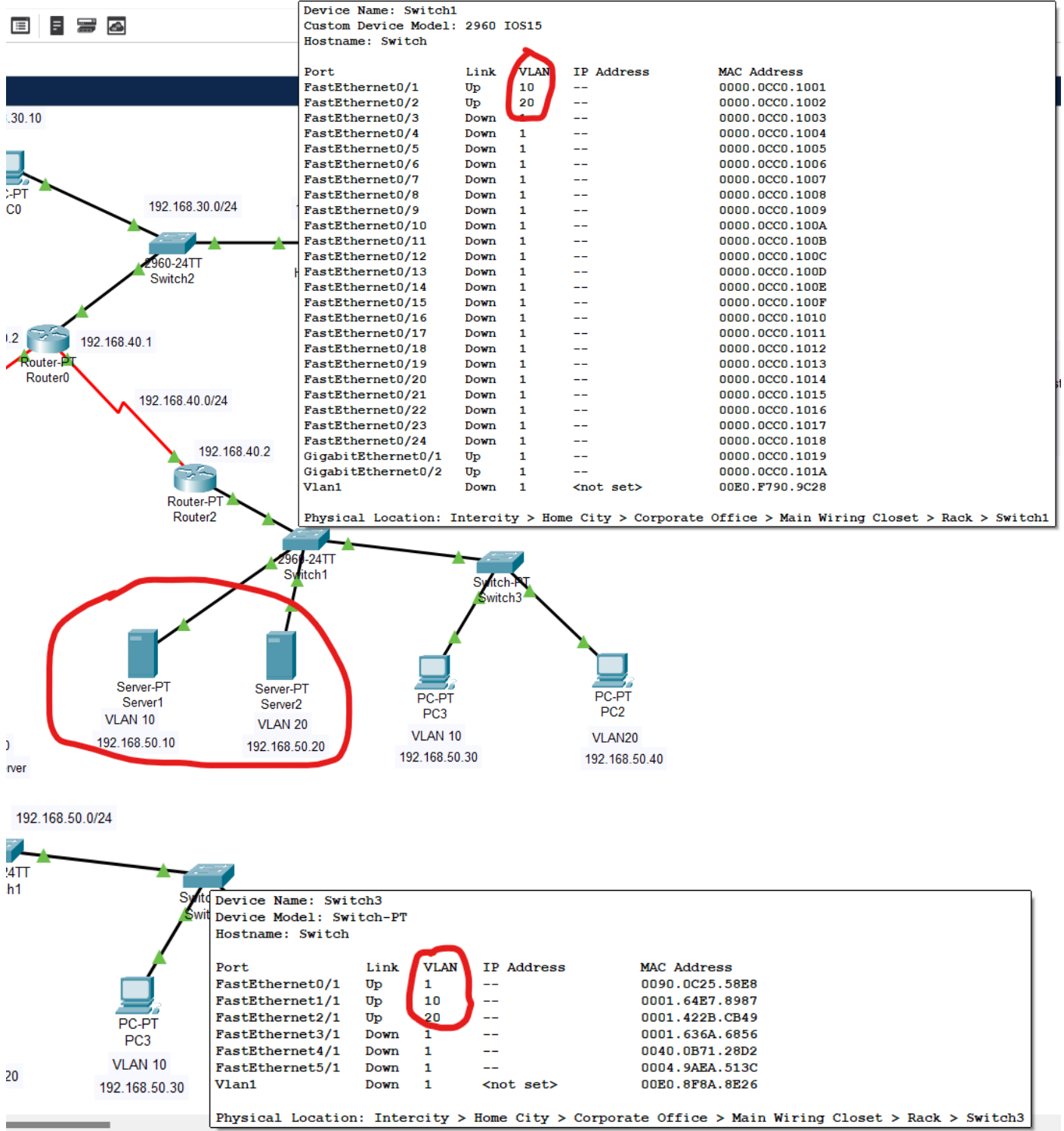
```
Switch>enable
Switch#
Switch#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#
Switch(config)#vlan 10
Switch(config-vlan)#name VLAN10
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name VLAN20
Switch(config-vlan)#exit
Switch(config)#interface fastEthernet 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
```



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Conectividad Extremo a Extremo



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Laptop2

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>
ping 192.168.30.10

Pinging 192.168.30.10 with 32 bytes of data:

Reply from 192.168.30.10: bytes=32 time=33ms TTL=128
Reply from 192.168.30.10: bytes=32 time=17ms TTL=128
Reply from 192.168.30.10: bytes=32 time=17ms TTL=128
Reply from 192.168.30.10: bytes=32 time=17ms TTL=128

Ping statistics for 192.168.30.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 17ms, Maximum = 33ms, Average = 21ms

C:\>
```