

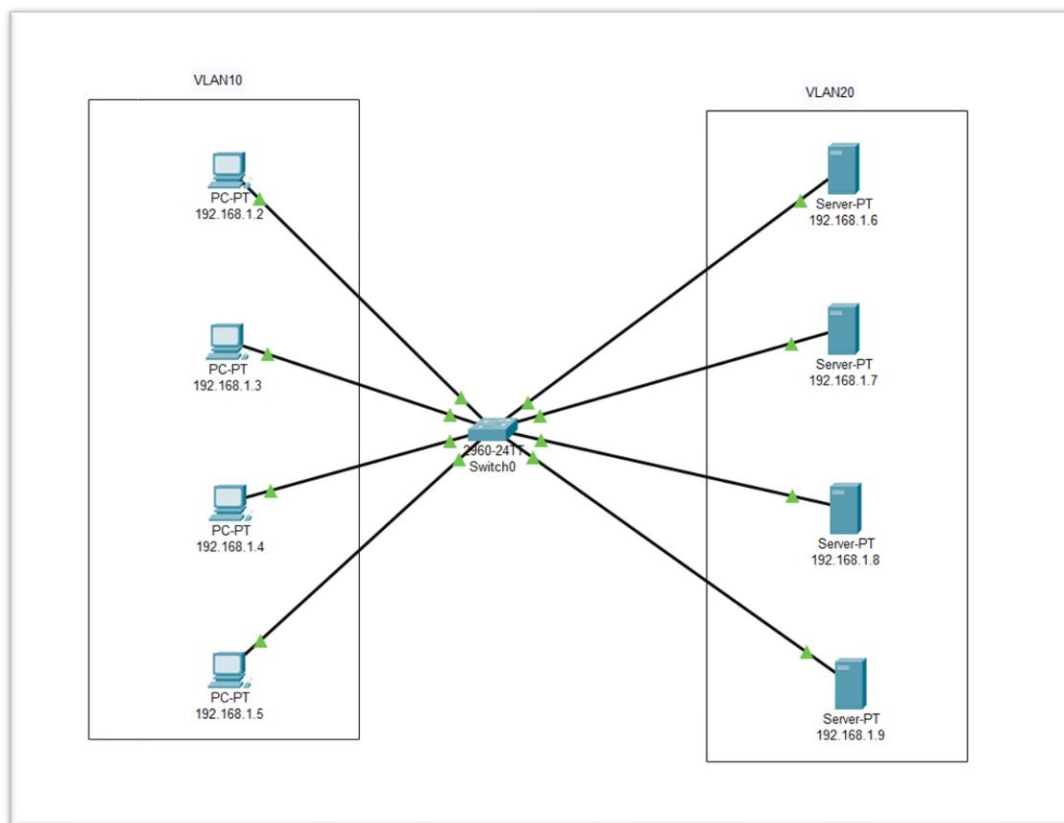
Date: 17/ 08/ 2025

Lab Practical #05:

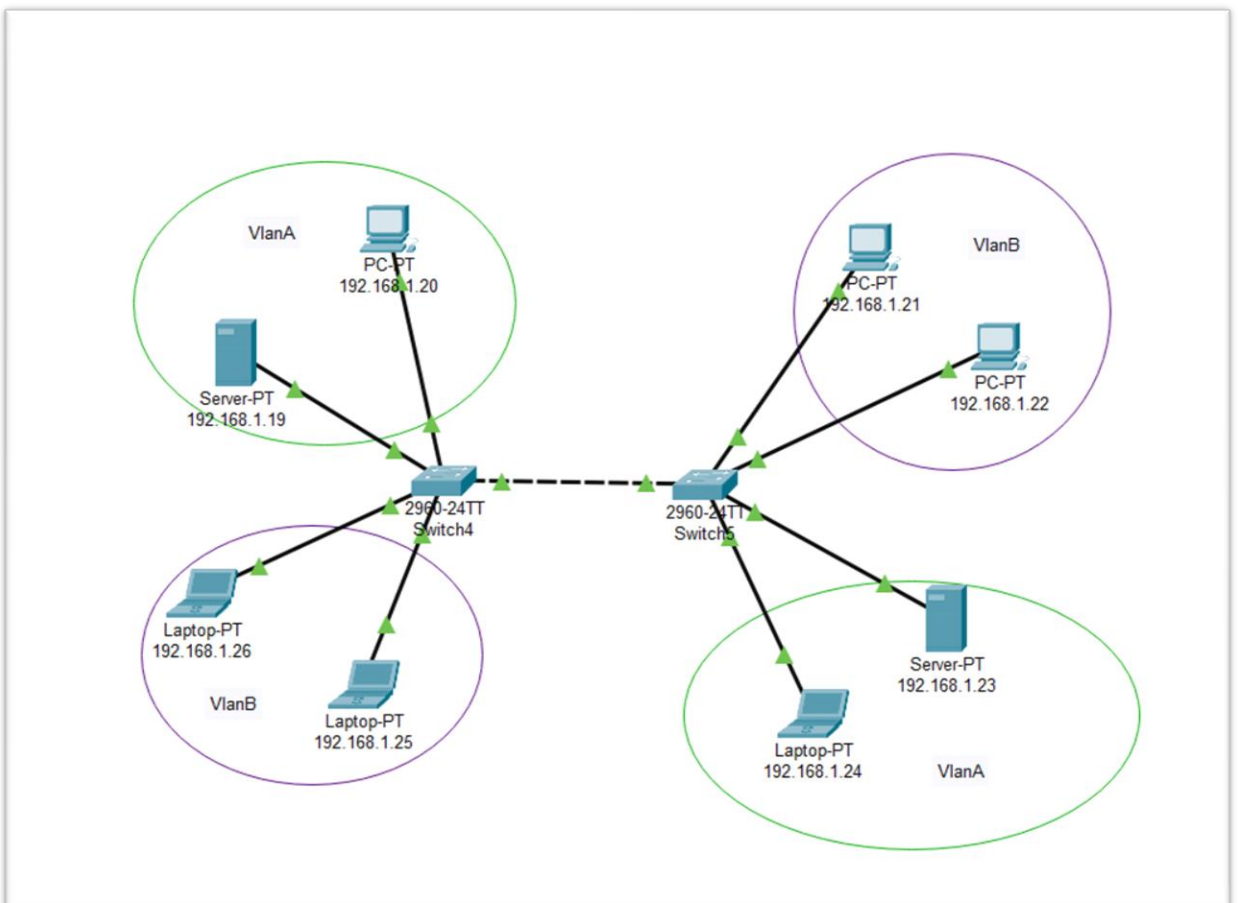
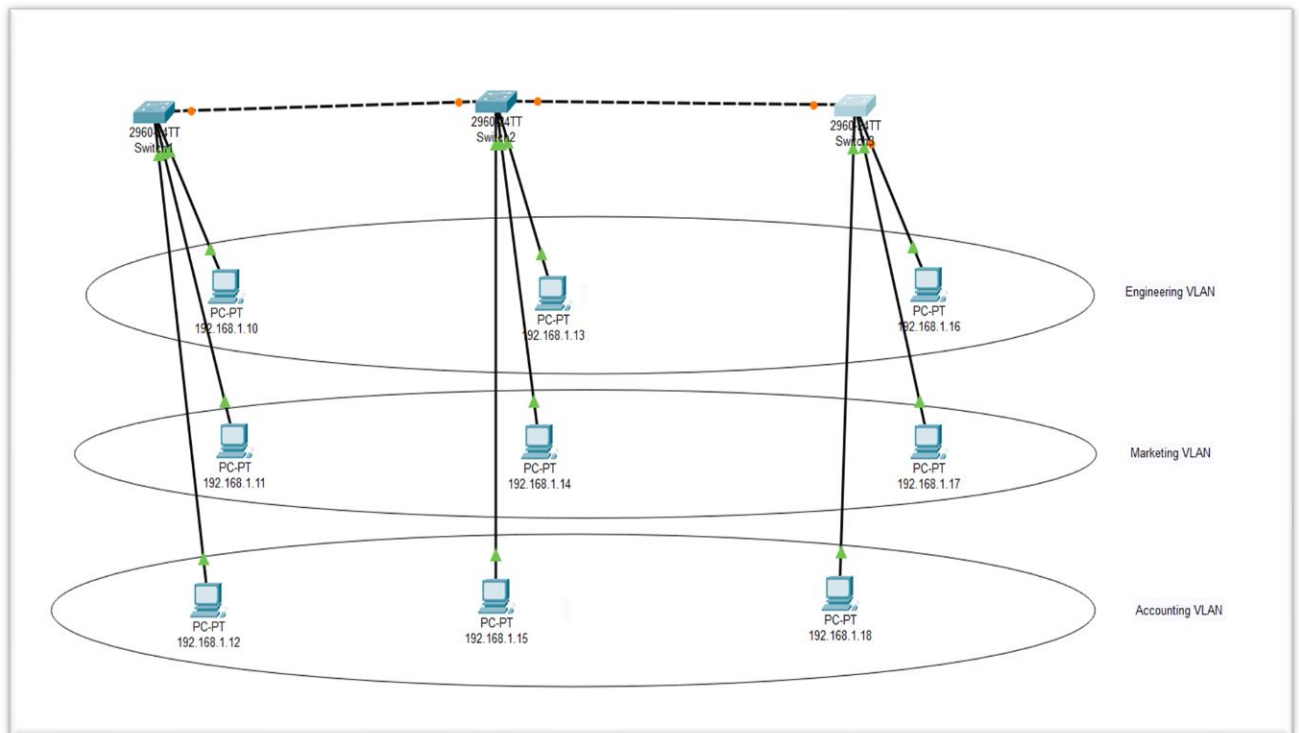
Study the concept of VLAN using packet tracer.

Practical Assignment #05:

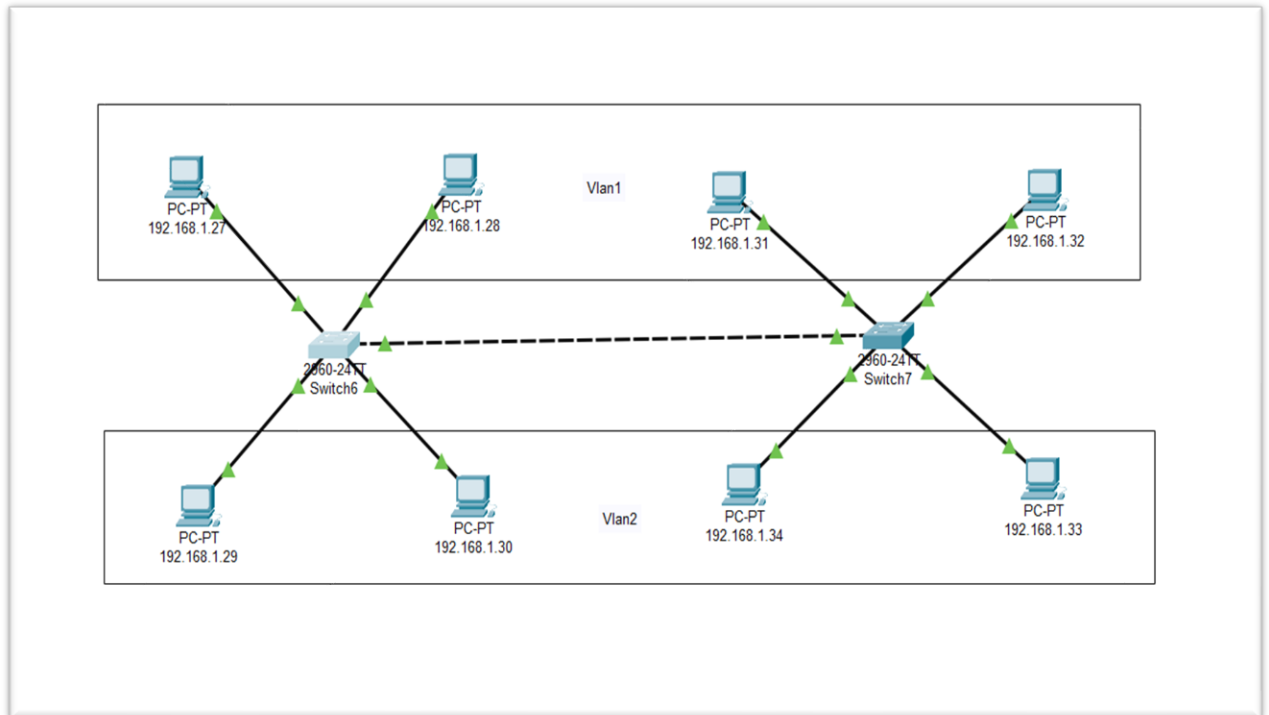
1. Implement the different network structures in VLAN and VLAN trunking. Also check connectivity between them using ping command or PDU utility.



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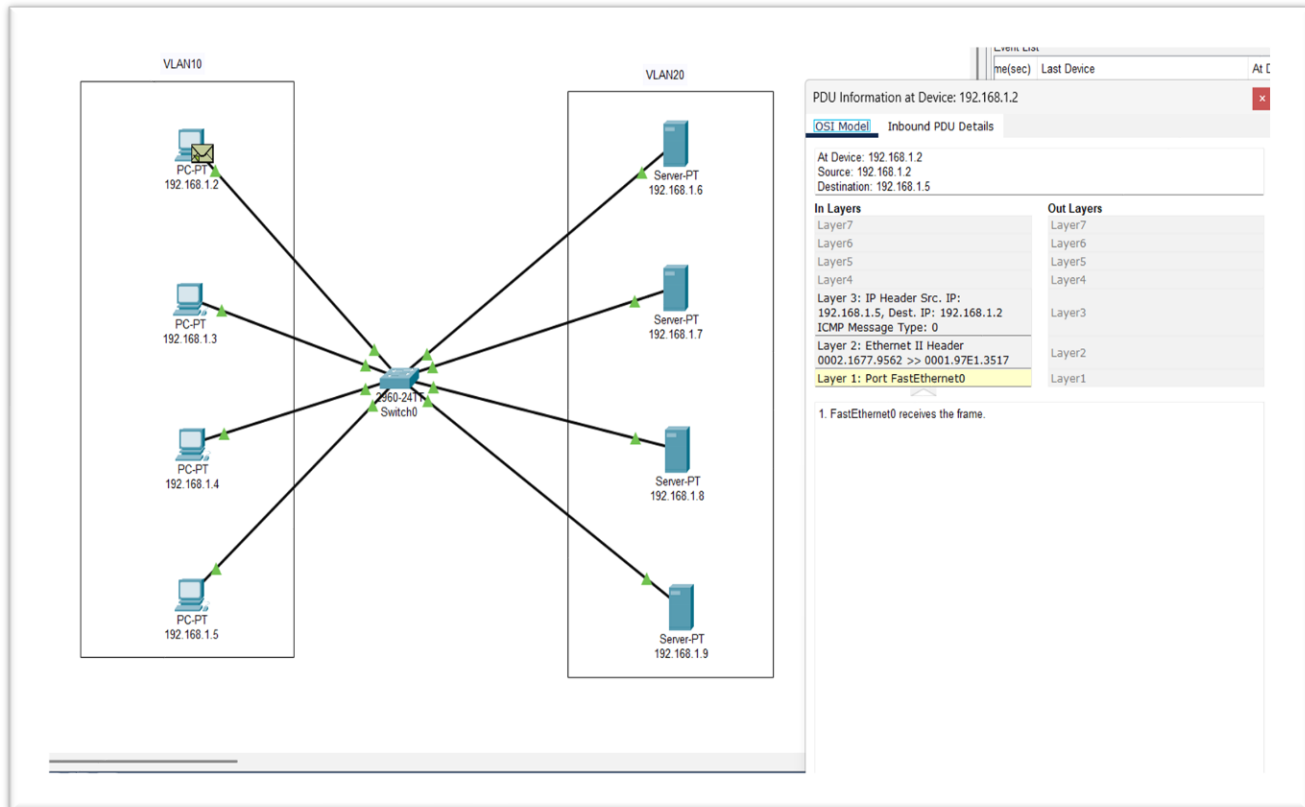
Date: 17/ 08/ 2025



❖ How to Create VLAN in packet tracer

- Open Cisco Packet Tracer on your computer.
- First Create Network Topologies.
- After Creating Topologies, Click on a switch to open its configuration window. Go to the Config tab. In the Config tab, find the VLAN Database section. Here, you can add new VLANs by entering the VLAN number and name.
- To add Add Devices to Separate VLAN, Click on a switch to open its configuration window. Go to the Config tab and select the specific port that is connected to a device. In the port configuration section, set the port mode to Access and select the VLAN number .

Date: 17/ 08/ 2025



Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/1

FastEthernet0/2

FastEthernet0/3

FastEthernet0/4

FastEthernet0/5

FastEthernet0/6

FastEthernet0/7

FastEthernet0/8

FastEthernet0/9

FastEthernet0/10

FastEthernet0/11

FastEthernet0/12

FastEthernet0/13

FastEthernet0/14

FastEthernet0/15

FastEthernet0/16

FastEthernet0/17

VLAN Configuration

VLAN Number: 20

VLAN Name: VLAN20

VLAN No	VLAN Name
1	default
10	VLAN10
20	VLAN20
1002	fddi-default
1003	token-ring-default
1004	fddinet-default
1005	trnet-default

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GLOBAL

Settings

Algorithm Settings

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/1

FastEthernet0/2

FastEthernet0/3

FastEthernet0/4

FastEthernet0/5

FastEthernet0/6

FastEthernet0/7

FastEthernet0/8

FastEthernet0/9

FastEthernet0/10

FastEthernet0/11

FastEthernet0/12

FastEthernet0/13

FastEthernet0/14

FastEthernet0/15

FastEthernet0/16

FastEthernet0/17

VLAN Configuration

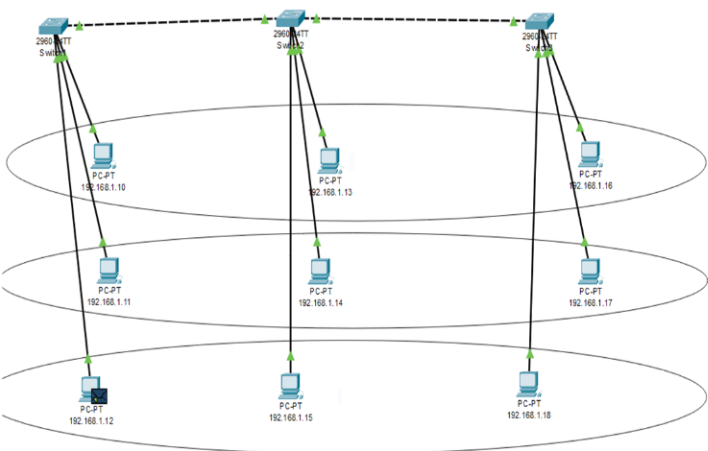
VLAN Number

VLAN Name

Add

Remove

VLAN No	VLAN Name
1	default
10	EngineeringVLAN
20	MarketingVLAN
30	AccountingVLAN
1002	fdi-default
1003	token-ring-default
1004	fdinet-default
1005	trnet-default



FLO: DISTRIBUTION BLOCK: 192.168.1.12

OSI Model Inbound PDU Details

At Device: 192.168.1.12
Source: 192.168.1.12
Destination: 192.168.1.18

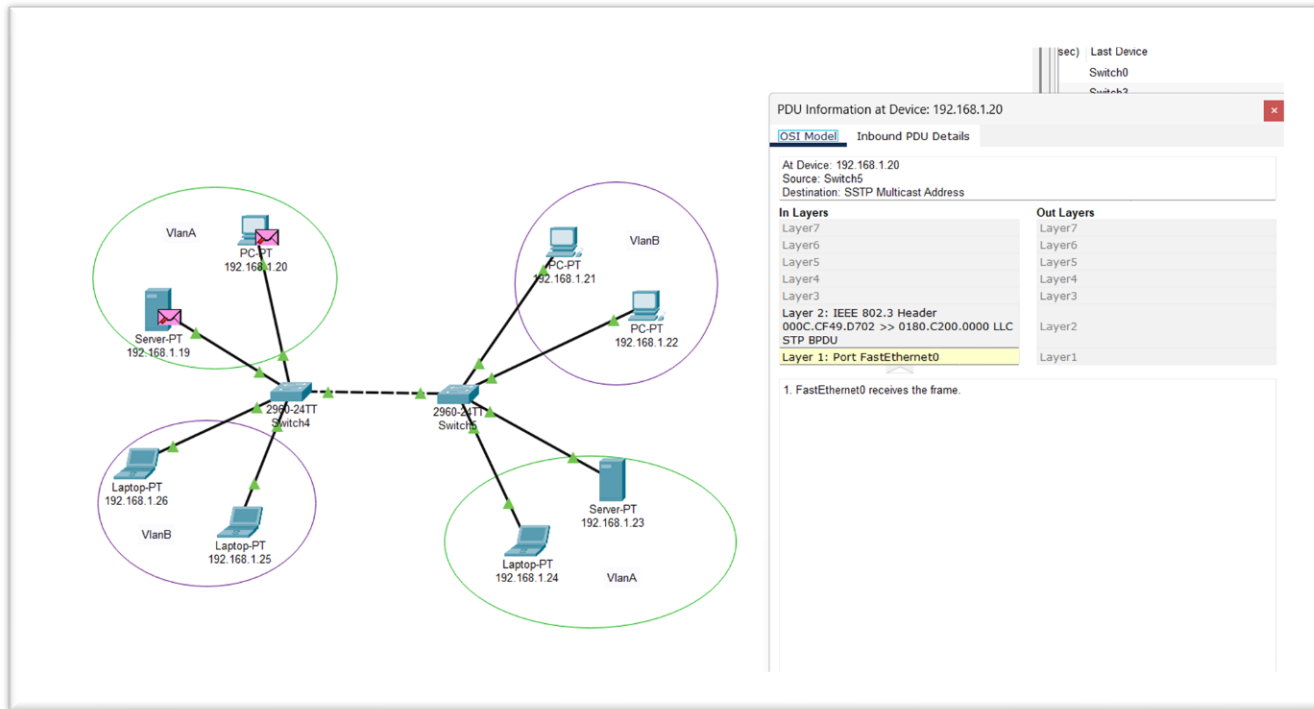
In Layers	Out Layers
Layer7	Layer7
Layer6	Layer6
Layer5	Layer5
Layer4	Layer4
Layer3	Layer3
Layer2	Layer2
Layer1	Layer1

Layer 3: IP Header Src. IP: 192.168.1.18, Dest. IP: 192.168.1.12 ICMP Message Type: 0
Layer 2: Ethernet II Header 0001.641B.1538 >> 0009.7C7E.0B57
Layer 1: Port FastEthernet0

1. FastEthernet0 receives the frame.

Challenge Me << Previous Layer Next Layer >>

Date: 17/ 08/ 2025



Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

SWITCHING

VLAN Database

INTERFACE

FastEthernet0/1

FastEthernet0/2

FastEthernet0/3

FastEthernet0/4

FastEthernet0/5

FastEthernet0/6

FastEthernet0/7

FastEthernet0/8

FastEthernet0/9

FastEthernet0/10

FastEthernet0/11

FastEthernet0/12

FastEthernet0/13

FastEthernet0/14

FastEthernet0/15

FastEthernet0/16

FastEthernet0/17

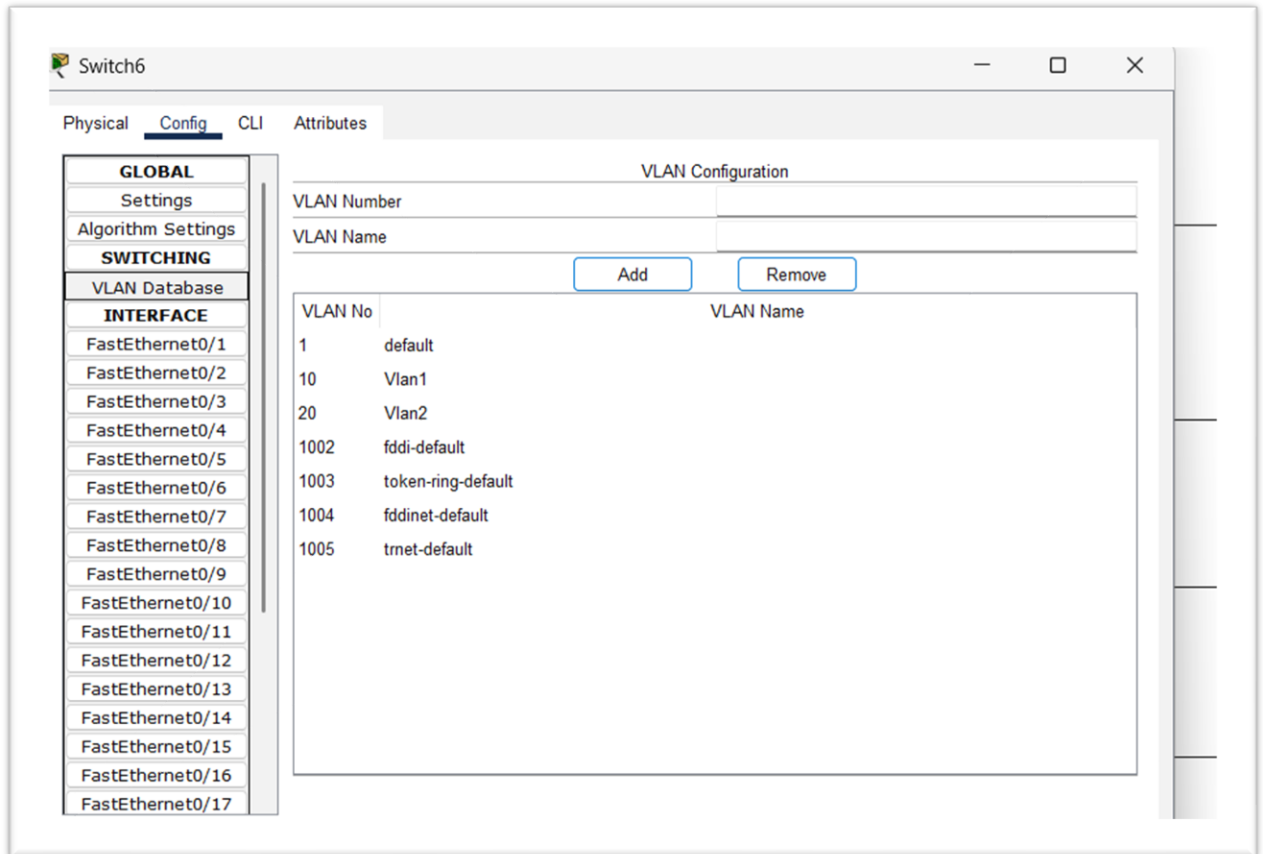
VLAN Configuration

VLAN Number: 20

VLAN Name: VlanB

Add Remove

VLAN No	VLAN Name
1	default
10	VlanA
20	VlanB
1002	fddi-default
1003	token-ring-default
1004	fddinet-default
1005	trnet-default



Switch6

Physical **Config** CLI Attributes

GLOBAL

- Settings
- Algorithm Settings

SWITCHING

- VLAN Database**

INTERFACE

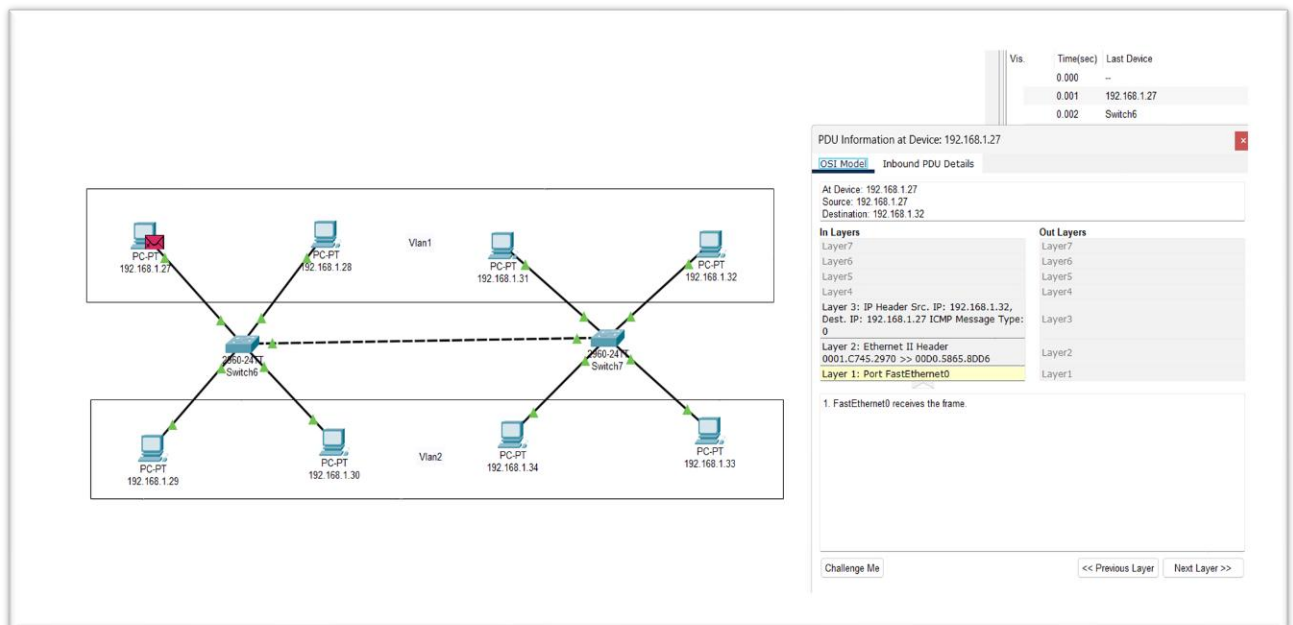
- FastEthernet0/1
- FastEthernet0/2
- FastEthernet0/3
- FastEthernet0/4
- FastEthernet0/5
- FastEthernet0/6
- FastEthernet0/7
- FastEthernet0/8
- FastEthernet0/9
- FastEthernet0/10
- FastEthernet0/11
- FastEthernet0/12
- FastEthernet0/13
- FastEthernet0/14
- FastEthernet0/15
- FastEthernet0/16
- FastEthernet0/17

VLAN Configuration

VLAN Number:

VLAN Name:

VLAN No	VLAN Name
1	default
10	Vlan1
20	Vlan2
1002	fdi-default
1003	token-ring-default
1004	fddinet-default
1005	trnet-default



PDU Information at Device: 192.168.1.27

Vis. Time(sec) Last Device

0.000	--
0.001	192.168.1.27
0.002	Switch6

OSI Model Inbound PDU Details

At Device: 192.168.1.27
Source: 192.168.1.27
Destination: 192.168.1.32

In Layers

- Layer7
- Layer6
- Layer5
- Layer4

Layer 3: IP Header Src. IP: 192.168.1.32, Dest. IP: 192.168.1.27 ICMP Message Type: 0

Layer 2: Ethernet II Header 0001.C745.2970 >> 00D0.5865.8DD6

Layer 1: Port FastEthernet0

1. FastEthernet0 receives the frame.