

## 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.

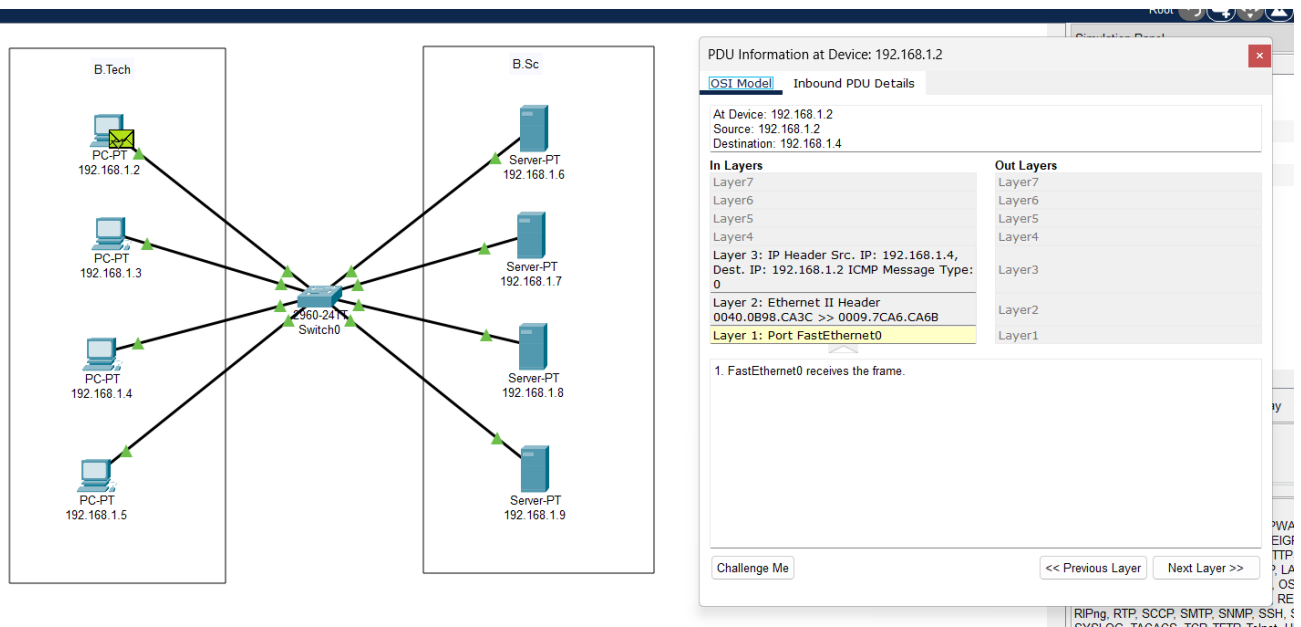


Figure 1 same VLAN data transfer

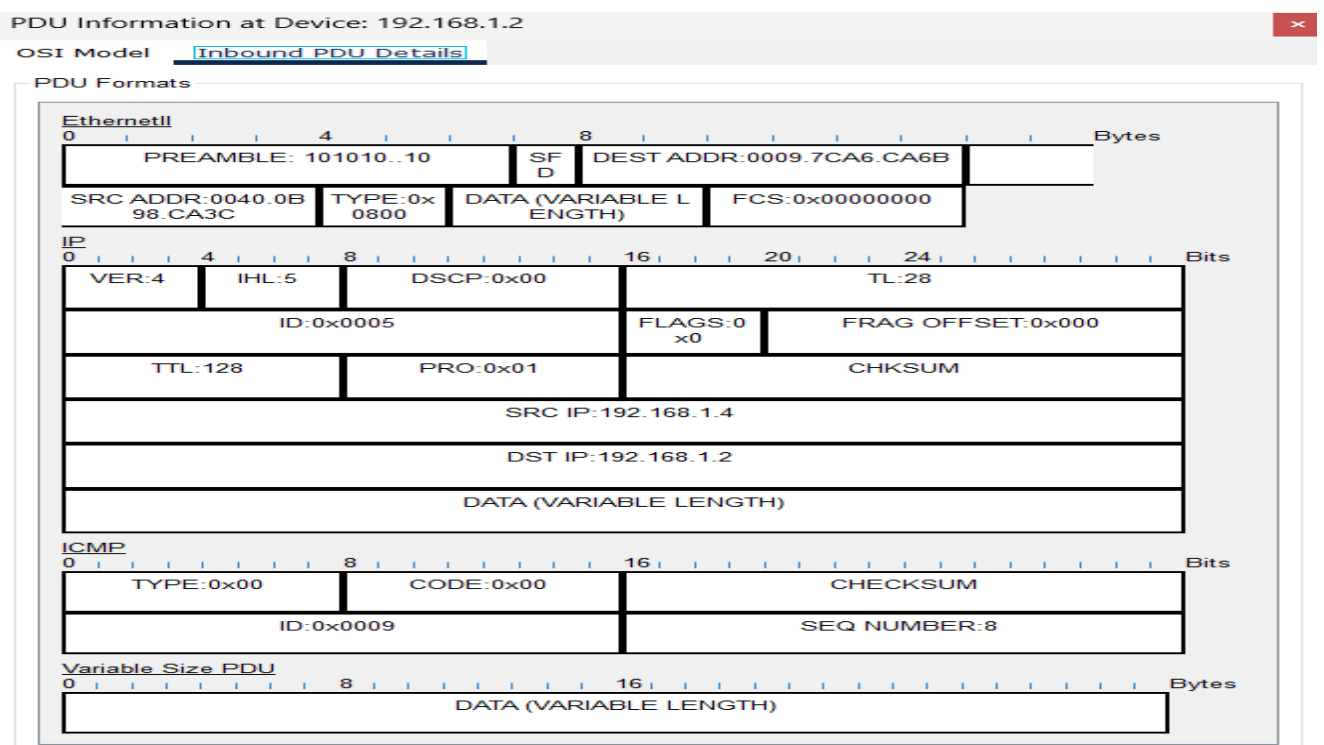


Figure 2 Same VLAN PDU

Date:     /     /

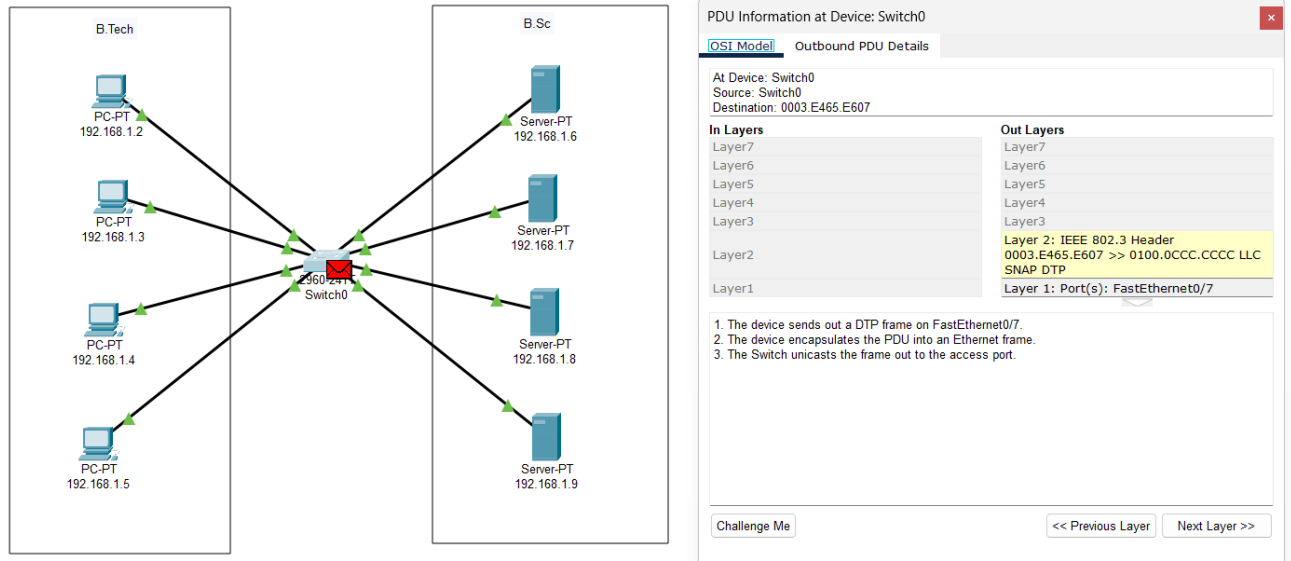


Figure 3 Different VLAN data transfer

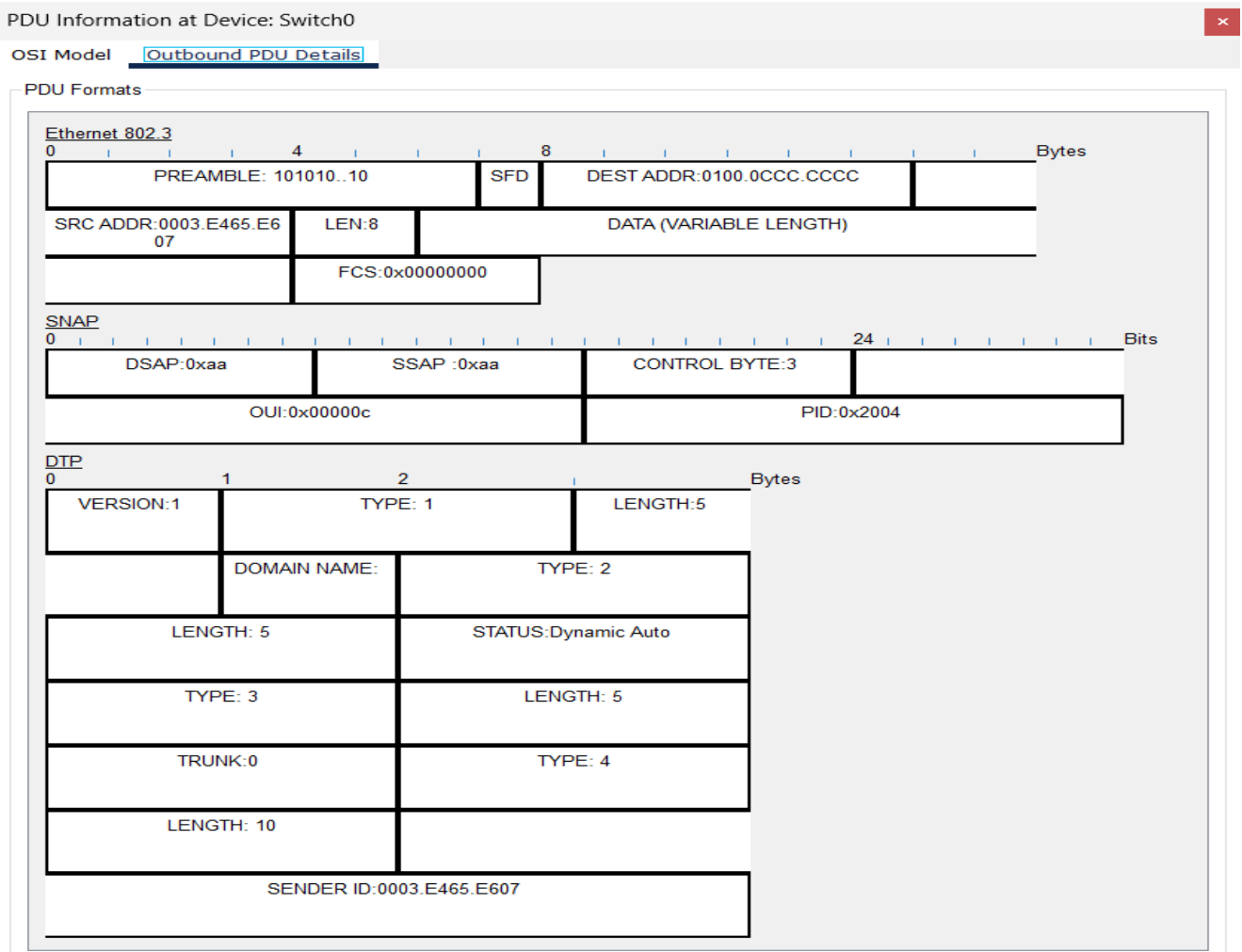


Figure 4 Different VLAN PDU

Date: / /

Switch0

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

Add

Remove

VLAN No	VLAN Name
1	default
10	B.Tech
20	B.Sc.
1002	fddi-default
1003	token-ring-default
1004	fddinet-default
1005	trnet-default

Equivalent IOS Commands

```
Switch(config-if)#
Switch(config-if)#switchport access vlan 20
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/8
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 20
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#
Switch(config)#
```

☐ Top

Figure 5 Switch Configuration

Date:     /     /

Switch0

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

FastEthernet0/1

Port Status

Bandwidth

Duplex

Access

VLAN

Tx Ring Limit

100 Mbps

10 Mbps

Half Duplex

Full Duplex

10

On

Auto

Auto

Equivalent IOS Commands

Switch(config-if)#  
Switch(config-if)#exit  
Switch(config)#interface FastEthernet0/8  
Switch(config-if)#  
Switch(config-if)#  
Switch(config-if)#switchport access vlan 20  
Switch(config-if)#  
Switch(config-if)#exit  
Switch(config)#  
Switch(config)#  
Switch(config)#interface FastEthernet0/1  
Switch(config-if)#

Top

Figure 6 Port Configuration