

Date: 2/8/24

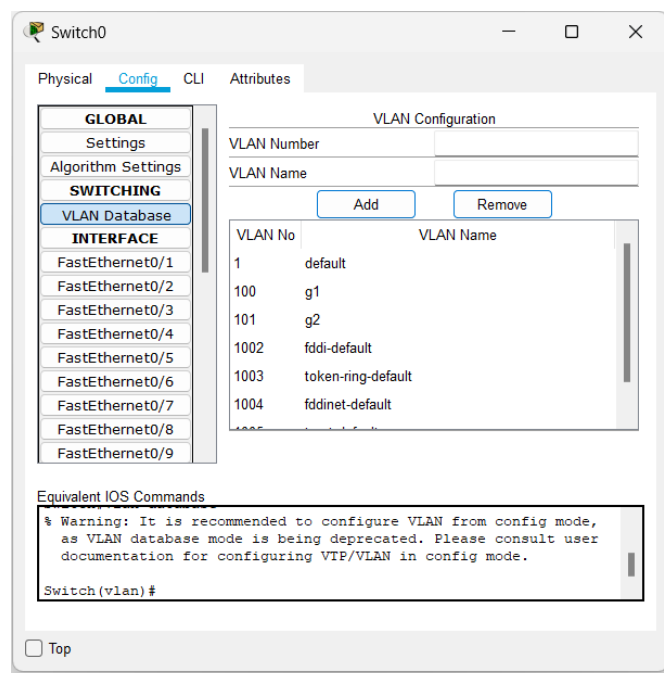
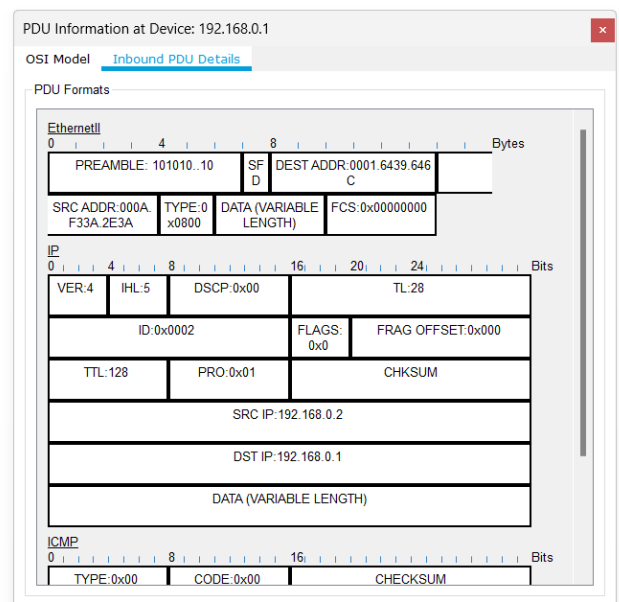
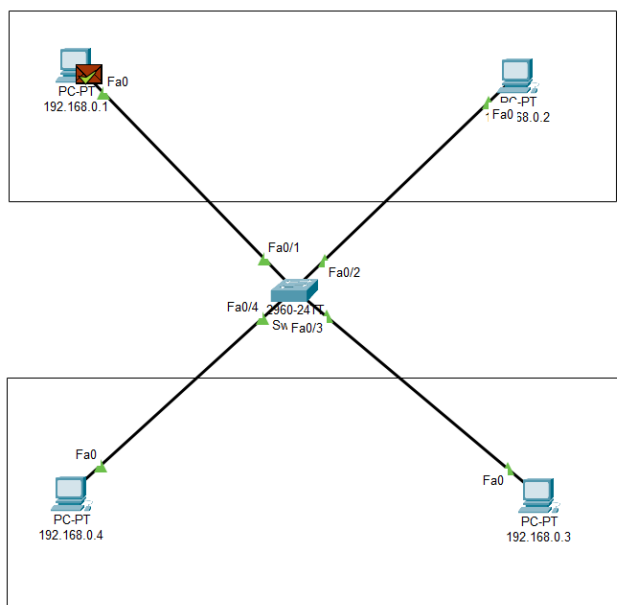
Lab Practical #05:

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.

- VLAN-1

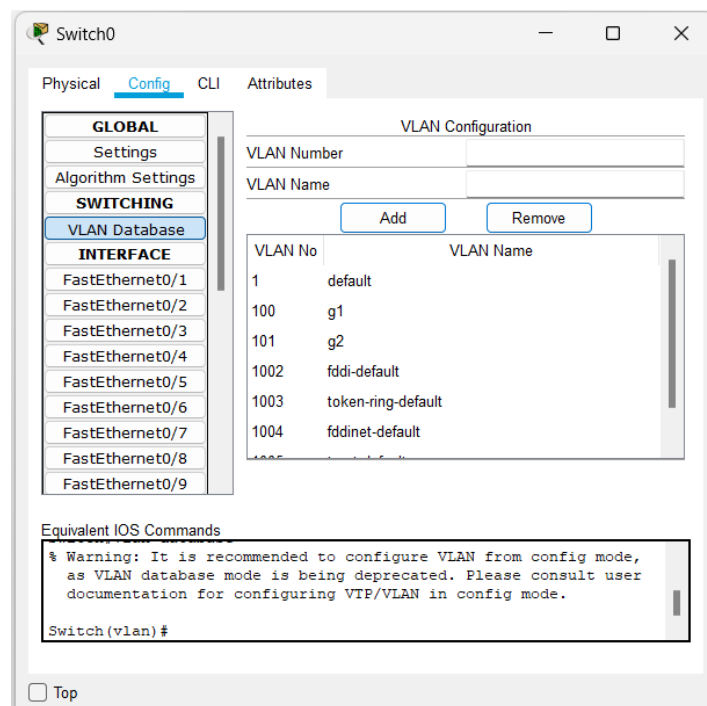
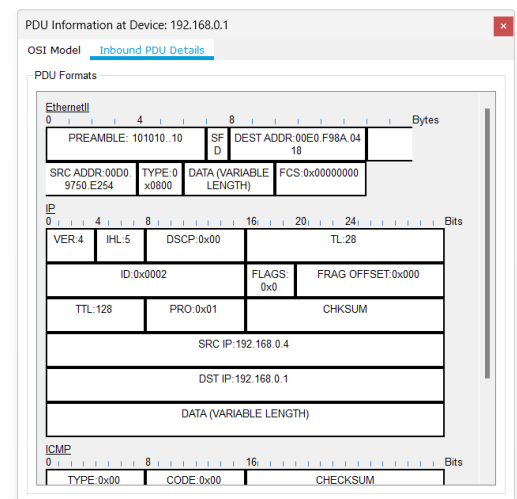
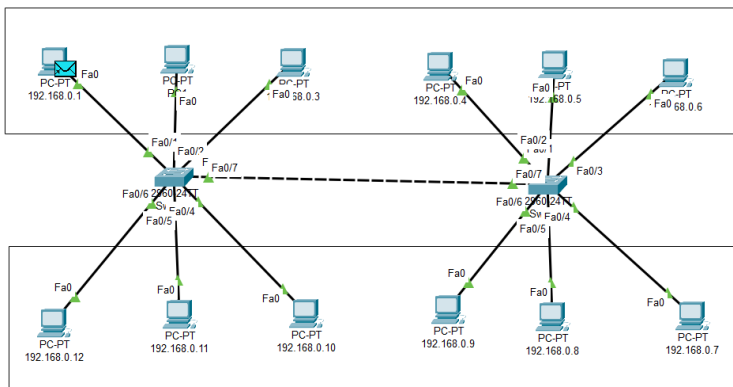


Date: 2/8/24

• Steps for create VLAN:-

- 1) Configure a Switch and go to 'VLAN Database' → then create a database g1 and g2.
- 2) Configure 4 PC with labeled with IP address. And connect all four with Switch.
- 3) Open Switch Dialog and configure PC-1 and PC-2 in g1 database with access state and configure PC-1 and PC-2 in g2 database with access state.
- 4) So as per above image we create a to VLAN g1 and g2.
- 5) The packet are transfer one PC to another PC with an g1 VLAN like as The packet are transfer one PC to another PC with an g2 VLAN.

• VLAN-2

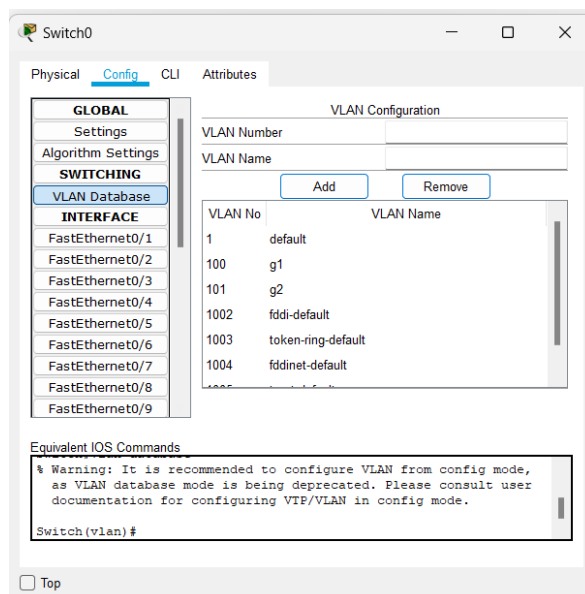
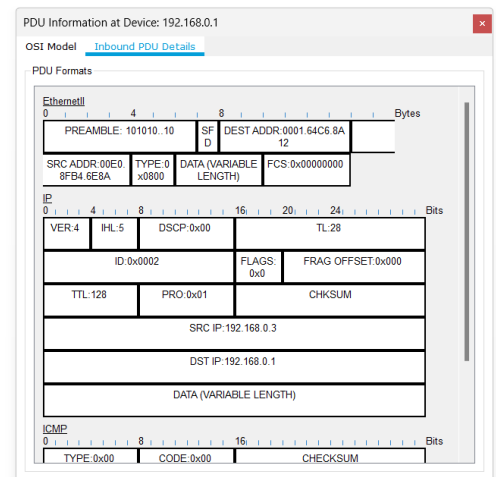
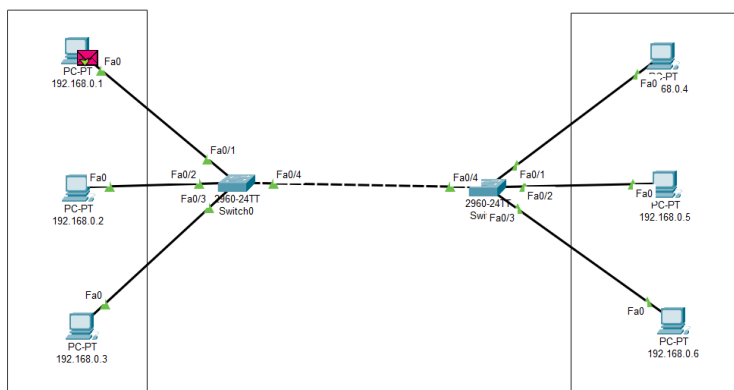


Date: 2/8/24

• **Steps for create VLAN:-**

- 1) Configure a Switch1 and go to 'VLAN Database' → then create a database g1 and g2.
- 2) Configure a Switch2 and go to 'VLAN Database' → then create a database g1 and g2.
- 3) Configure 12 PC with labeled with IP address. And connect all First 6 PC with Switch1 and remaining 6 PC with Switch2.
- 4) Open Switch Dialog and configure PC-1, PC-2, PC-3, PC-4, PC-5 and PC-6 in g1 database with access state and configure PC-1, PC-2, PC-3, PC-4, PC-5 and PC-6 in g2 database with access state.
- 5) So as per above image we create a to VLAN g1 and g2.
- 6) Switch to switch configure database with trunk state.
- 7) The packet are transfer one PC to another PC with an g1 VLAN like as The packet are transfer one PC to another PC with an g2 VLAN.

• **VLAN-3**

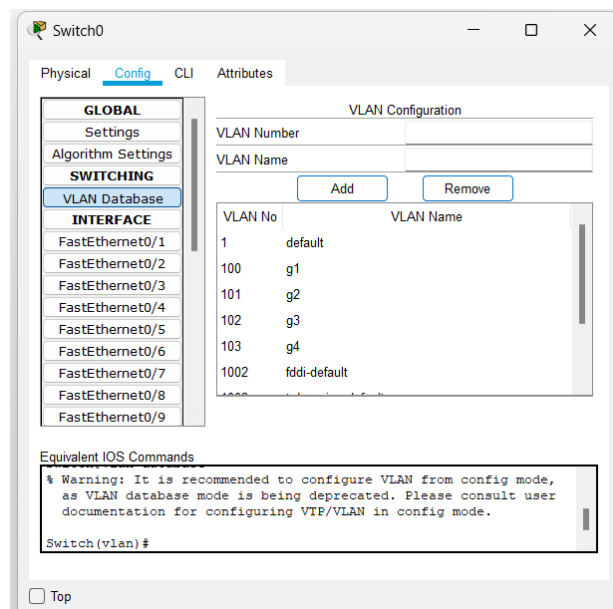
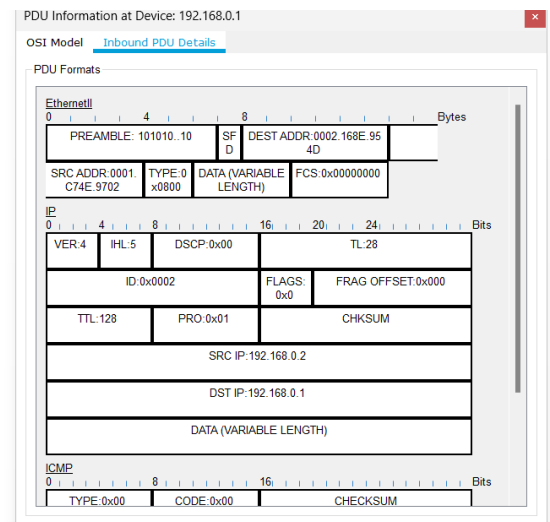
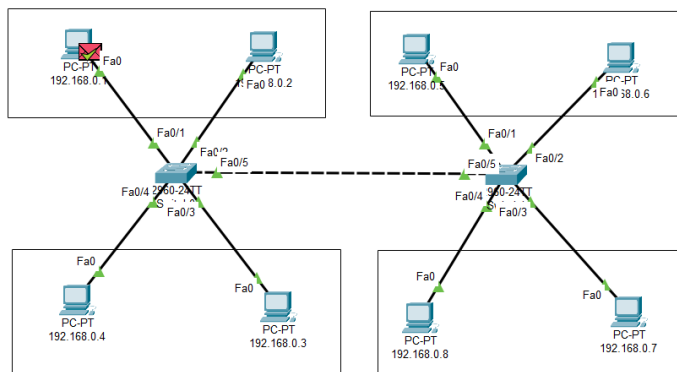


Date: 2/8/24

• Steps for create VLAN:-

- 1) Configure a Switch1 and go to 'VLAN Database' → then create a database g1.
- 2) Configure a Switch2 and go to 'VLAN Database' → then create a database g2.
- 3) Configure 3 PC with labeled with IP address. And connect all three with Switch1.
- 4) Configure 3 PC with labeled with IP address. And connect all three with Switch2.
- 5) Open Switch Dialog and configure PC-1, PC-2 and PC-3 in g1 database with access state and configure PC-1, PC-2 and PC-3 in g2 database with access state.
- 6) So as per above image we create a to VLAN g1 and g2.
- 7) Switch to switch configure database with trunk state.
- 8) The packet are transfer one PC to another PC with an g1 VLAN like as The packet are transfer one PC to another PC with an g2 VLAN.

• VLAN-4





Date: 2/8/24

- **Steps for create VLAN:-**

- 1) Configure a Switch1 and go to 'VLAN Database' → then create a database g1 and g2.
- 2) Configure a Switch2 and go to 'VLAN Database' → then create a database g3 and g4.
- 3) Configure 2 PC with labeled with IP address. And connect all two with Switch1.
- 4) Configure 2 PC with labeled with IP address. And connect all two with Switch2.
- 5) Open Switch Dialog and configure PC-1 and PC-2 in g1 database, PC-3 and PC-4 in g2 database with access state and configure PC-1 and PC-2 in g3 database, PC-3 and PC-4 in g4 database with access state.
- 6) So as per above image we create a to VLAN g1, g2, g3 and g4.
- 7) Switch to switch configure database with trunk state.
- 8) The packet are transfer one PC to another PC with an g1 VLAN like as The packet are transfer one PC to another PC with an g2,g3,g4 VLAN.