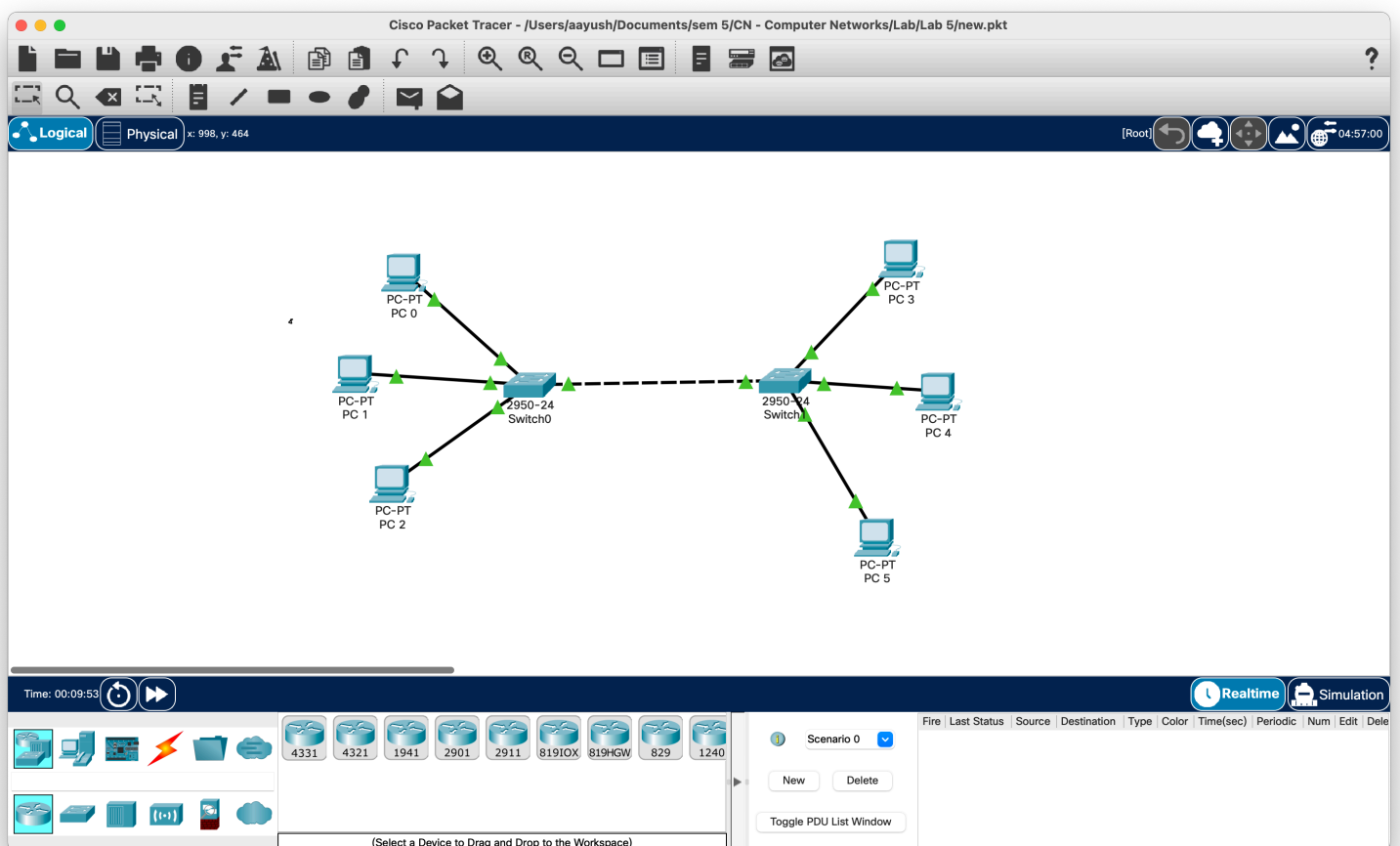Aayush Shah

19BCE245

2 October 2021

Practical 5
Virtual LAN

• **Configure virtual LAN using packet tracer.**

• **Main Figure :**

• **Configurations :**

PC 0 config

PC 1 config

PC 2 config

```
●  ●  ●                          PC 2

        Physical   Config   Desktop   Programming   Attributes

    ┌─────────────────┐  ┌──────────────────────────────────────────┐
    │     GLOBAL      │  │              FastEthernet0               │
    ├─────────────────┤  │                                          │
    │    Settings     │  │ Port Status                    ☑ On      │
    ├─────────────────┤  │ Bandwidth         ○ 100 Mbps ○ 10 Mbps ☑ Auto │
    │ Algorithm Settings │ │ Duplex         ○ Half Duplex ● Full Duplex ☑ Auto │
    ├─────────────────┤  │ MAC Address            0050.0F9D.E5CC     │
    │    INTERFACE    │  │  ┌──────────────────────────────────────┐ │
    ├─────────────────┤  │  │ IP Configuration                     │ │
    │  FastEthernet0  │  │  │  ○ DHCP                              │ │
    ├─────────────────┤  │  │  ● Static                            │ │
    │    Bluetooth    │  │  │ IPv4 Address       192.168.1.4       │ │
    └─────────────────┘  │  │ Subnet Mask        255.255.255.0     │ │
                         │  └──────────────────────────────────────┘ │
                         │  ┌──────────────────────────────────────┐ │
                         │  │ IPv6 Configuration                   │ │
                         │  │  ○ Automatic                         │ │
                         │  │  ● Static                            │ │
                         │  │ IPv6 Address  [            ] / [   ] │ │
                         │  │ Link Local Address: FE80::250:FFF:FE9D:E5CC │ │
                         │  └──────────────────────────────────────┘ │
                         │                                          │
                         └──────────────────────────────────────────┘

    ☐ Top
```
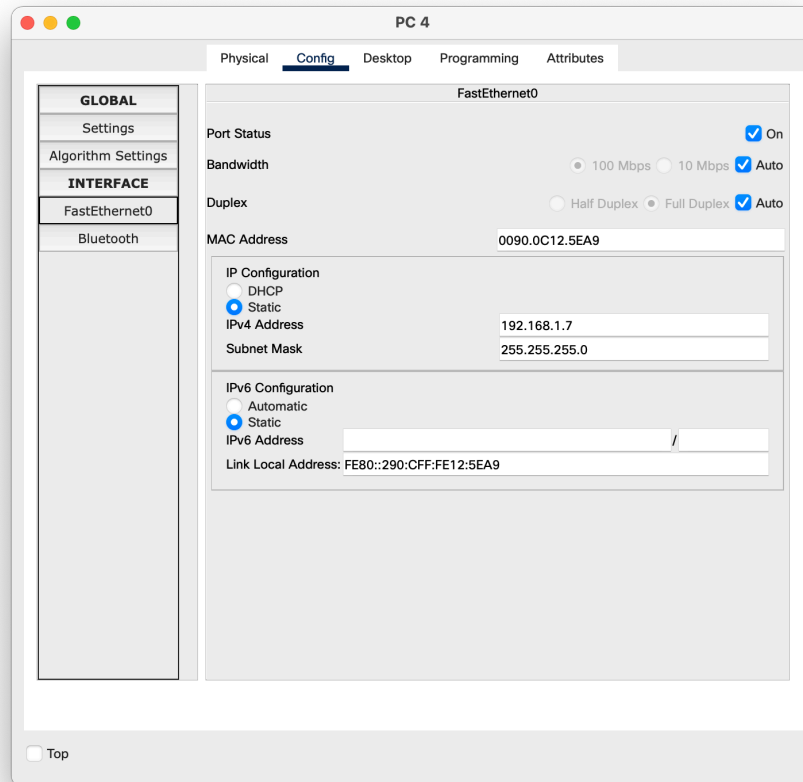
PC 3 config

```
●  ●  ●                          PC 3

        Physical   Config   Desktop   Programming   Attributes

    ┌─────────────────┐  ┌──────────────────────────────────────────┐
    │     GLOBAL      │  │              FastEthernet0               │
    ├─────────────────┤  │                                          │
    │    Settings     │  │ Port Status                    ☑ On      │
    ├─────────────────┤  │ Bandwidth         ○ 100 Mbps ○ 10 Mbps ☑ Auto │
    │ Algorithm Settings │ │ Duplex         ○ Half Duplex ● Full Duplex ☑ Auto │
    ├─────────────────┤  │ MAC Address            00E0.F905.39CA     │
    │    INTERFACE    │  │  ┌──────────────────────────────────────┐ │
    ├─────────────────┤  │  │ IP Configuration                     │ │
    │  FastEthernet0  │  │  │  ○ DHCP                              │ │
    ├─────────────────┤  │  │  ● Static                            │ │
    │    Bluetooth    │  │  │ IPv4 Address       192.168.1.6       │ │
    └─────────────────┘  │  │ Subnet Mask        255.255.255.0     │ │
                         │  └──────────────────────────────────────┘ │
                         │  ┌──────────────────────────────────────┐ │
                         │  │ IPv6 Configuration                   │ │
                         │  │  ○ Automatic                         │ │
                         │  │  ● Static                            │ │
                         │  │ IPv6 Address  [            ] / [   ] │ │
                         │  │ Link Local Address: FE80::2E0:F9FF:FE05:39CA │ │
                         │  └──────────────────────────────────────┘ │
                         │                                          │
                         └──────────────────────────────────────────┘

    ☐ Top
```
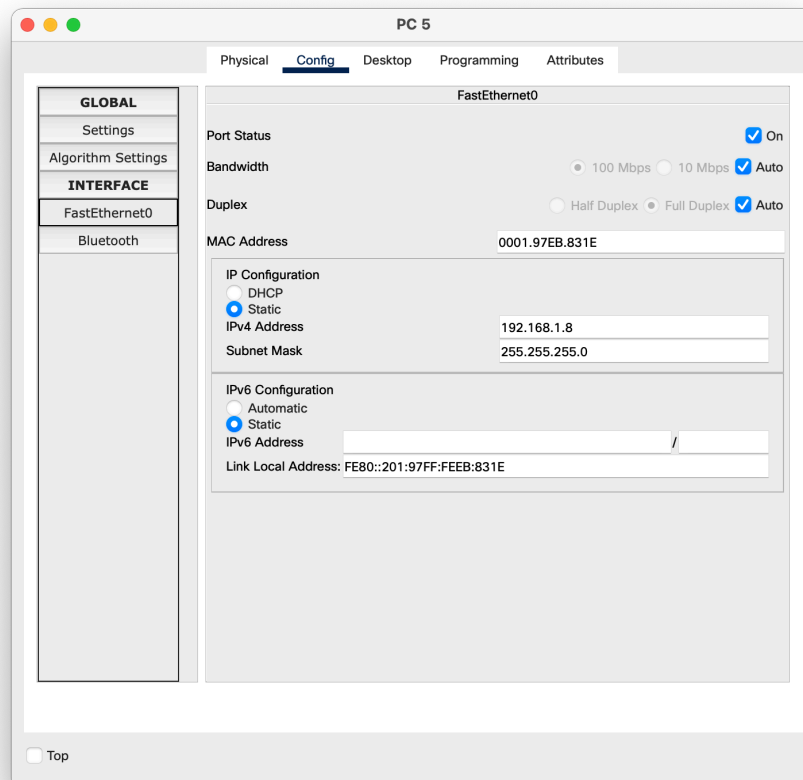
PC 4 config

	PC 4	
Physical	Config Desktop Programming Attributes	

FastEthernet0

Port Status   ☑ On

Bandwidth   ● 100 Mbps ○ 10 Mbps ☑ Auto

Duplex   ○ Half Duplex ● Full Duplex ☑ Auto

MAC Address   0090.0C12.5EA9

IP Configuration
○ DHCP
● Static
IPv4 Address   192.168.1.7
Subnet Mask   255.255.255.0

IPv6 Configuration
○ Automatic
● Static
IPv6 Address   /

Link Local Address: FE80::290:CFF:FE12:5EA9

GLOBAL — Settings — Algorithm Settings — INTERFACE — FastEthernet0 — Bluetooth

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PC 5 config

	PC 5	
Physical	Config Desktop Programming Attributes	

FastEthernet0

Port Status   ☑ On

Bandwidth   ● 100 Mbps ○ 10 Mbps ☑ Auto

Duplex   ○ Half Duplex ● Full Duplex ☑ Auto

MAC Address   0001.97EB.831E

IP Configuration
○ DHCP
● Static
IPv4 Address   192.168.1.8
Subnet Mask   255.255.255.0

IPv6 Configuration
○ Automatic
● Static
IPv6 Address   /

Link Local Address: FE80::201:97FF:FEEB:831E

GLOBAL — Settings — Algorithm Settings — INTERFACE — FastEthernet0 — Bluetooth

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Switch CLI

```
●  ●  ●                          Switch0

              Physical    Config    CLI    Attributes

                          IOS Command Line Interface

  Version ID                    : V02
  CLEI Code Number              : COM3L00BRA
  Hardware Board Revision Number : 0x01

  Switch Ports Model            SW Version          SW Image
  ------ ----- -----            ----------          ----------
  *    1 26    WS-C2960-24TT-L   15.0(2)SE4          C2960-LANBASEK9-M

  Cisco IOS Software, C2960 Software (C2960-LANBASEK9-M), Version 15.0(2)SE4, RELEASE SOFTWARE (fc1)
  Technical Support: http://www.cisco.com/techsupport
  Copyright (c) 1986-2013 by Cisco Systems, Inc.
  Compiled Wed 26-Jun-13 02:49 by mnguyen


  Press RETURN to get started!

  %LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

  %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

  %LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up

  %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up

  %LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up

  %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up

  %LINK-5-CHANGED: Interface FastEthernet0/4, changed state to up

  %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state to up


  Switch>en
  Switch#configure terminal
  Enter configuration commands, one per line.  End with CNTL/Z.
  Switch(config)#
  %LINK-3-UPDOWN: Interface FastEthernet0/1, changed state to down

  %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down

  %LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

  %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

  Command+F6 to exit CLI focus                              Copy      Paste

  □ Top
```