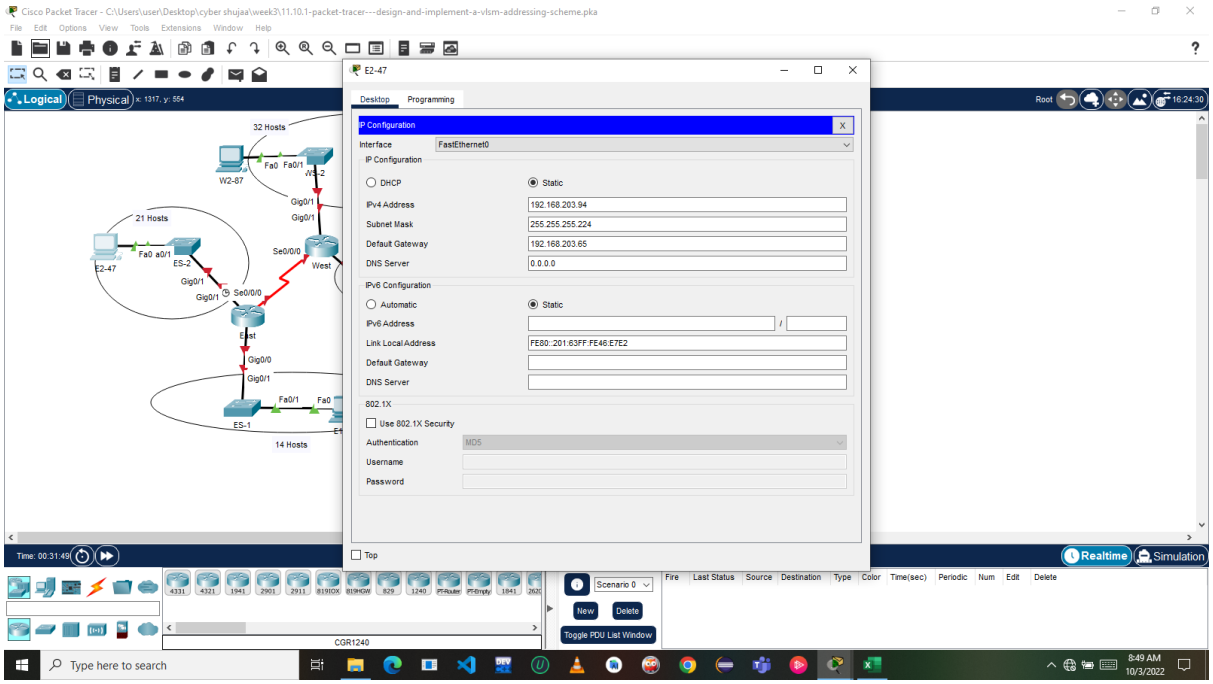
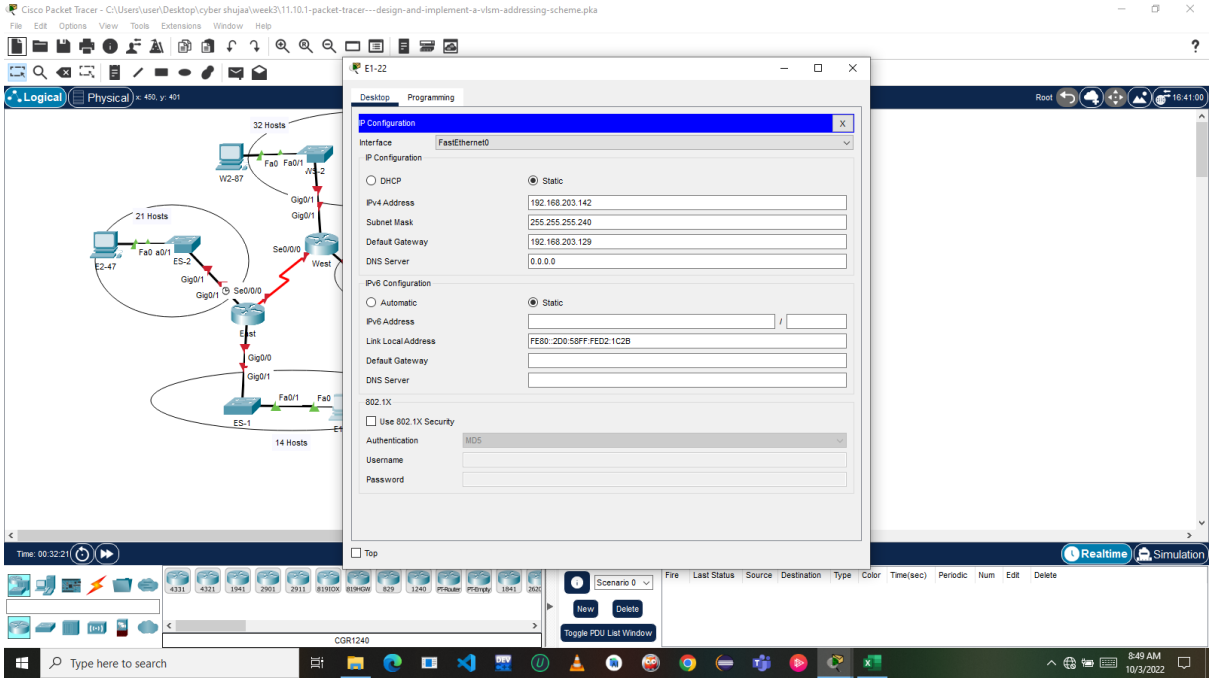
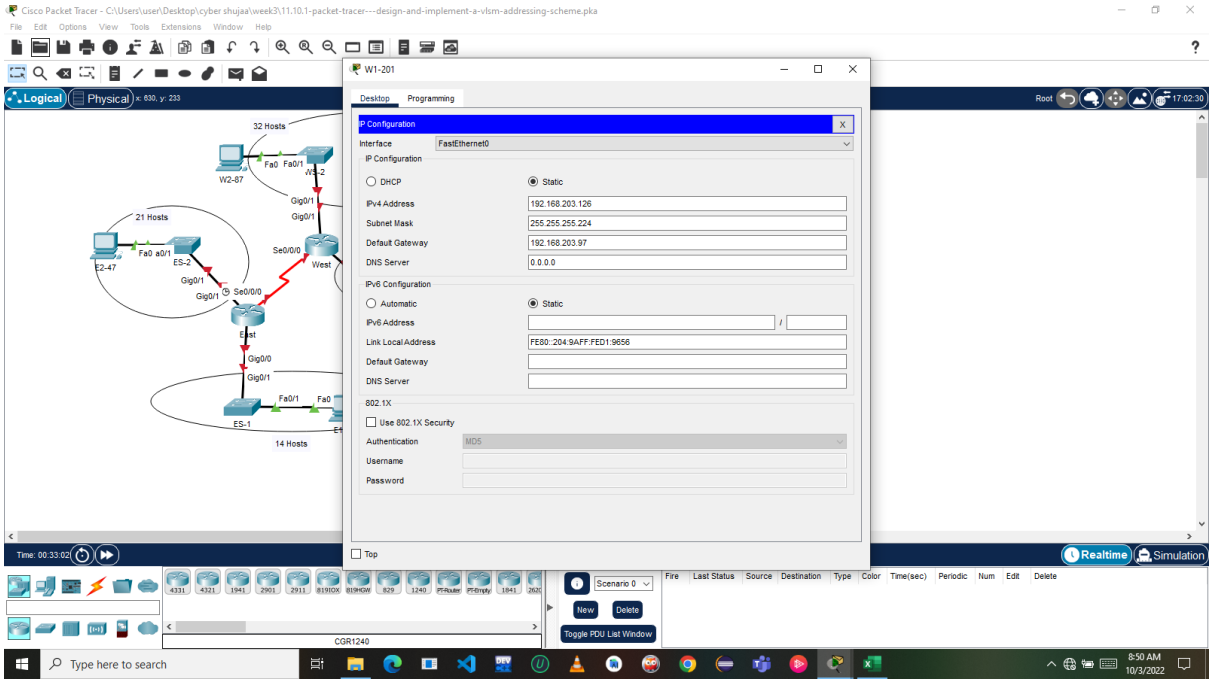
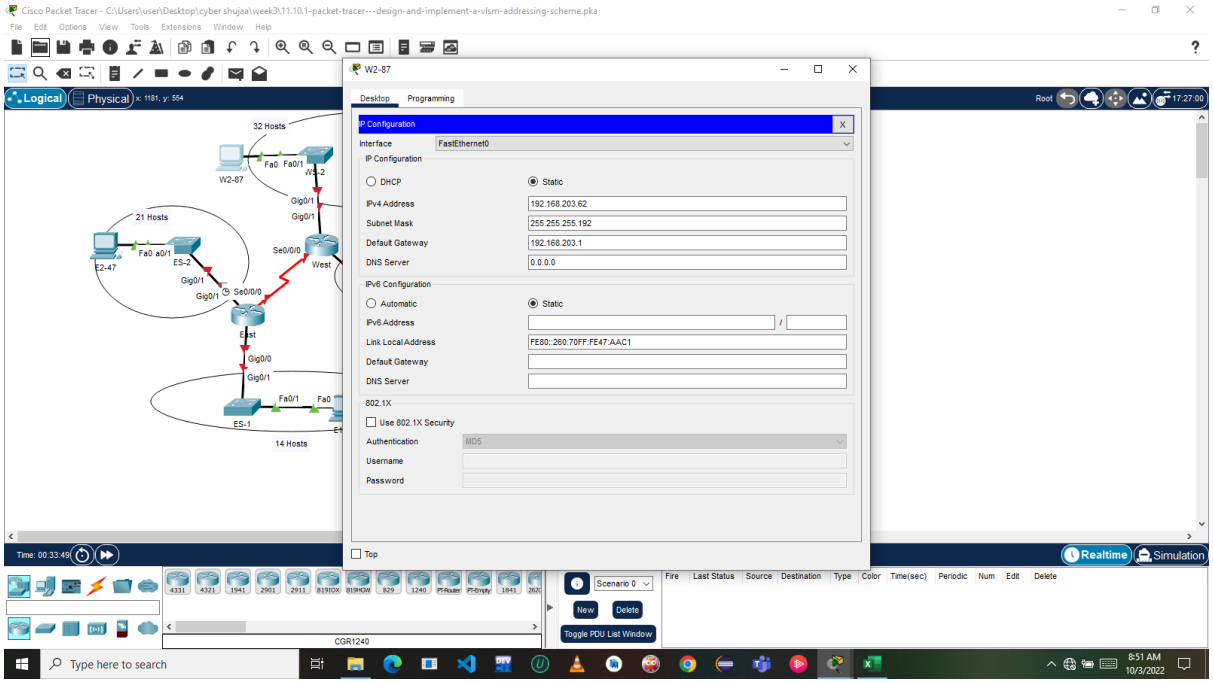
Packet Tracer - Design and Implement a VLSM Addressing Scheme

Configuring the PCS with Ip address, subnet mask and the default gateway

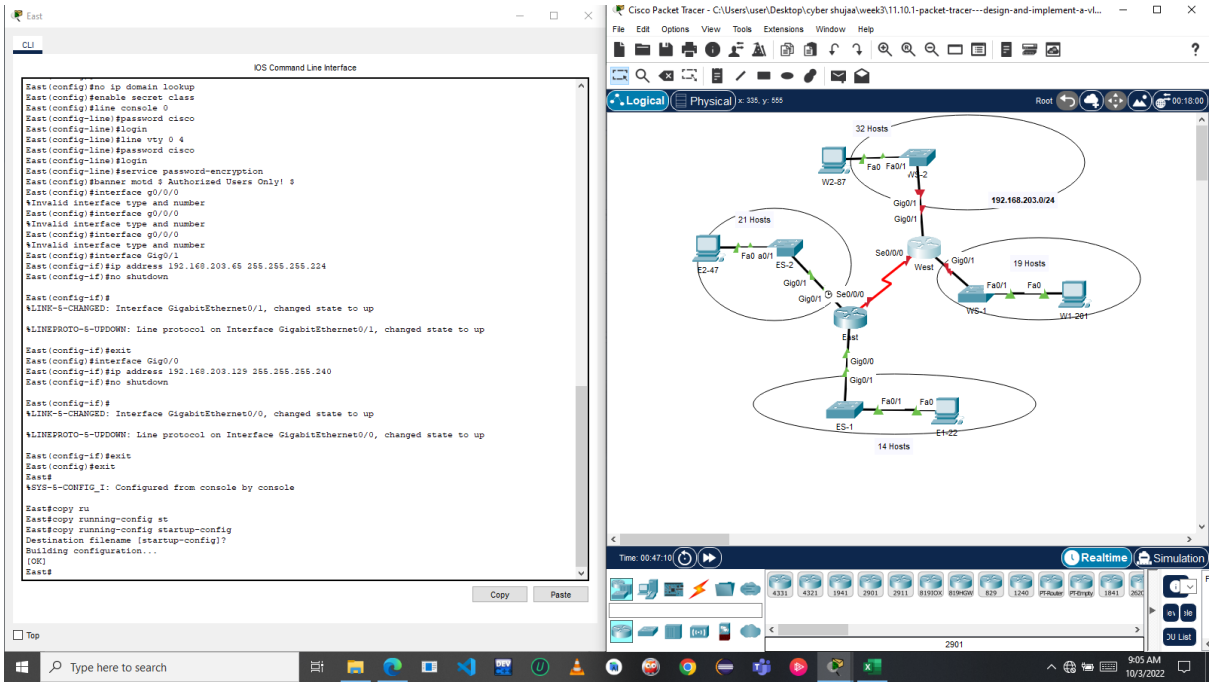


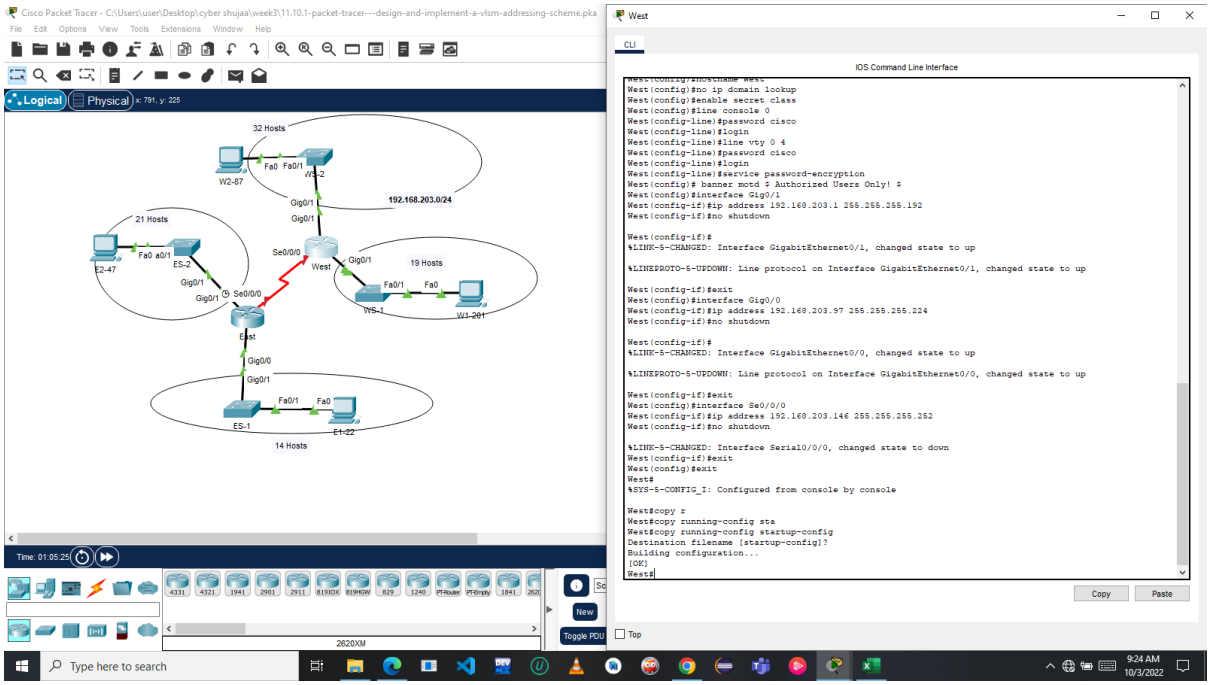



Cisco Packet Tracer - C:\Users\user\Desktop\cyber shujaa\week3\11.10.1-packet-tracer---design-and-implement-a-vlsm-addressing-scheme.pka
W1-201
Desktop
Programming
IP Configuration
Interface
FastEthernet0
DHCP
Static
IPv4 Address
192.168.203.126
Subnet Mask
255.255.255.224
Default Gateway
192.168.203.97
DNS Server
0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::204:9AFF:FED1:9656
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
32 Hosts
21 Hosts
14 Hosts
W2-87
ES-2
ES-1
West
East
Logical
Physical
Realtime
Simulation
Type here to search
8:50 AM
10/3/2022

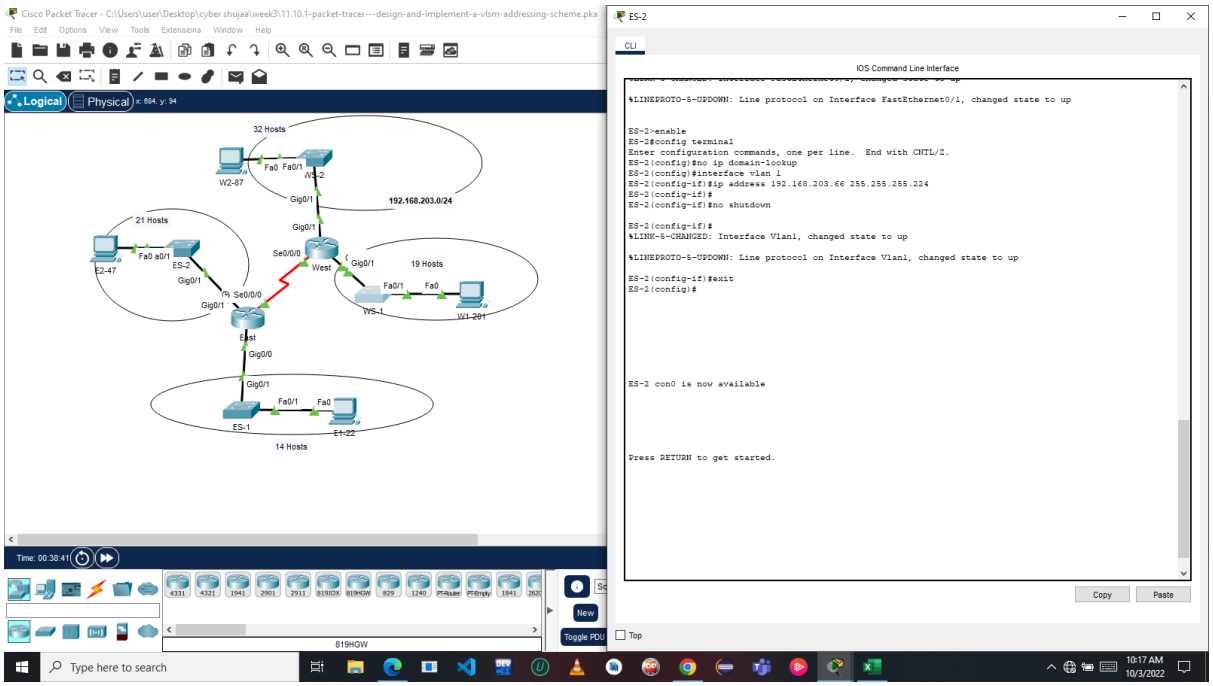

Cisco Packet Tracer - C:\Users\user\Desktop\cyber shujaa\week3\11.10.1-packet-tracer---design-and-implement-a-vlsm-addressing-scheme.pka
W2-87
Desktop
Programming
IP Configuration
Interface
FastEthernet0
DHCP
Static
IPv4 Address
192.168.203.62
Subnet Mask
255.255.255.192
Default Gateway
192.168.203.1
DNS Server
0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address
FE80::260:70FF:FE47:AAC1
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Username
Password
Top
32 Hosts
21 Hosts
14 Hosts
W2-87
ES-2
ES-1
West
East
Logical
Physical
Realtime
Simulation
Type here to search
8:51 AM
10/3/2022

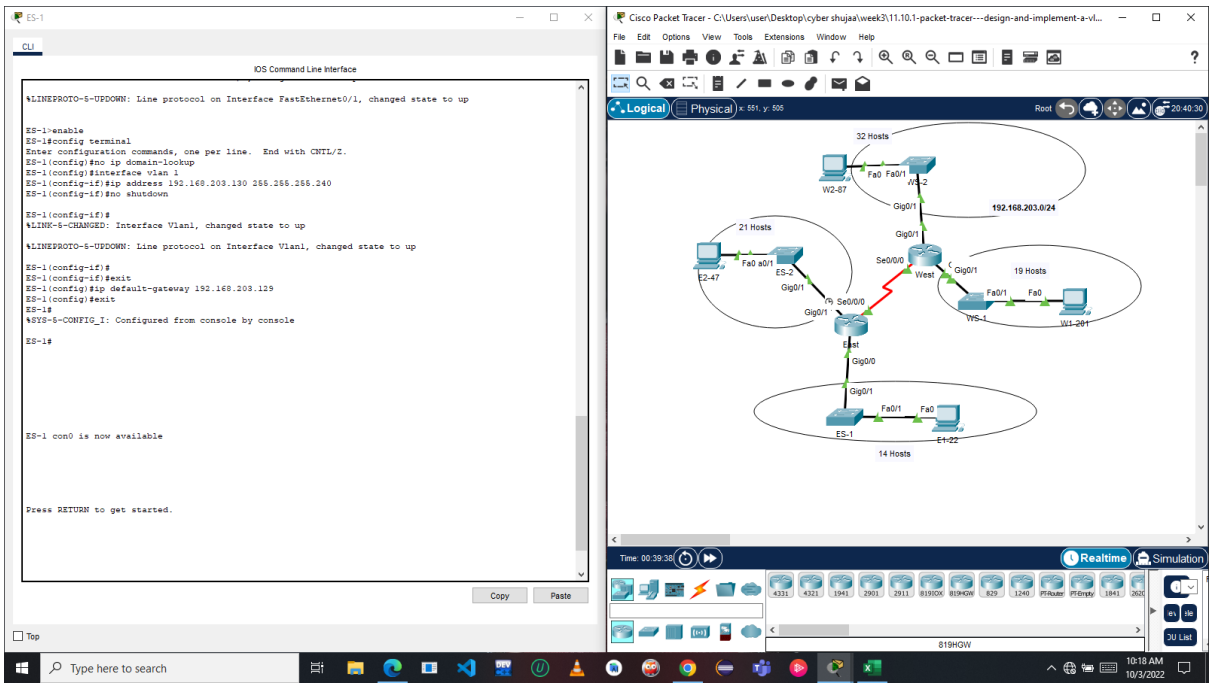
Configuring the two routers

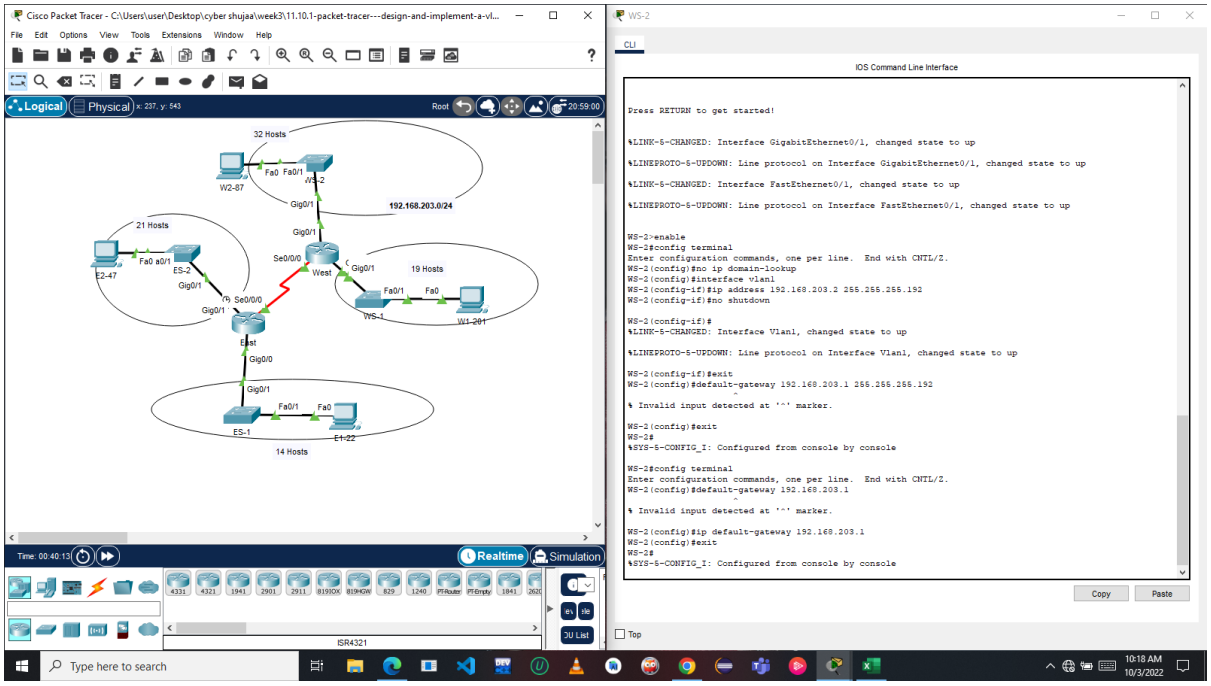


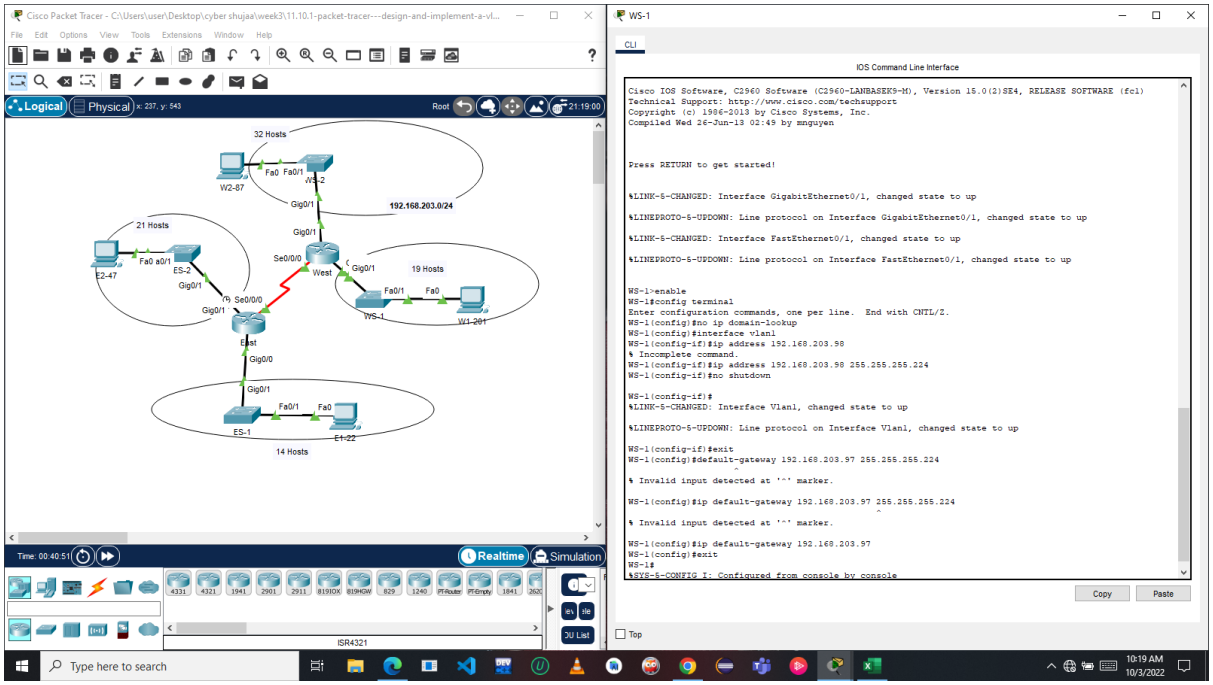


Configuring the 4 switches

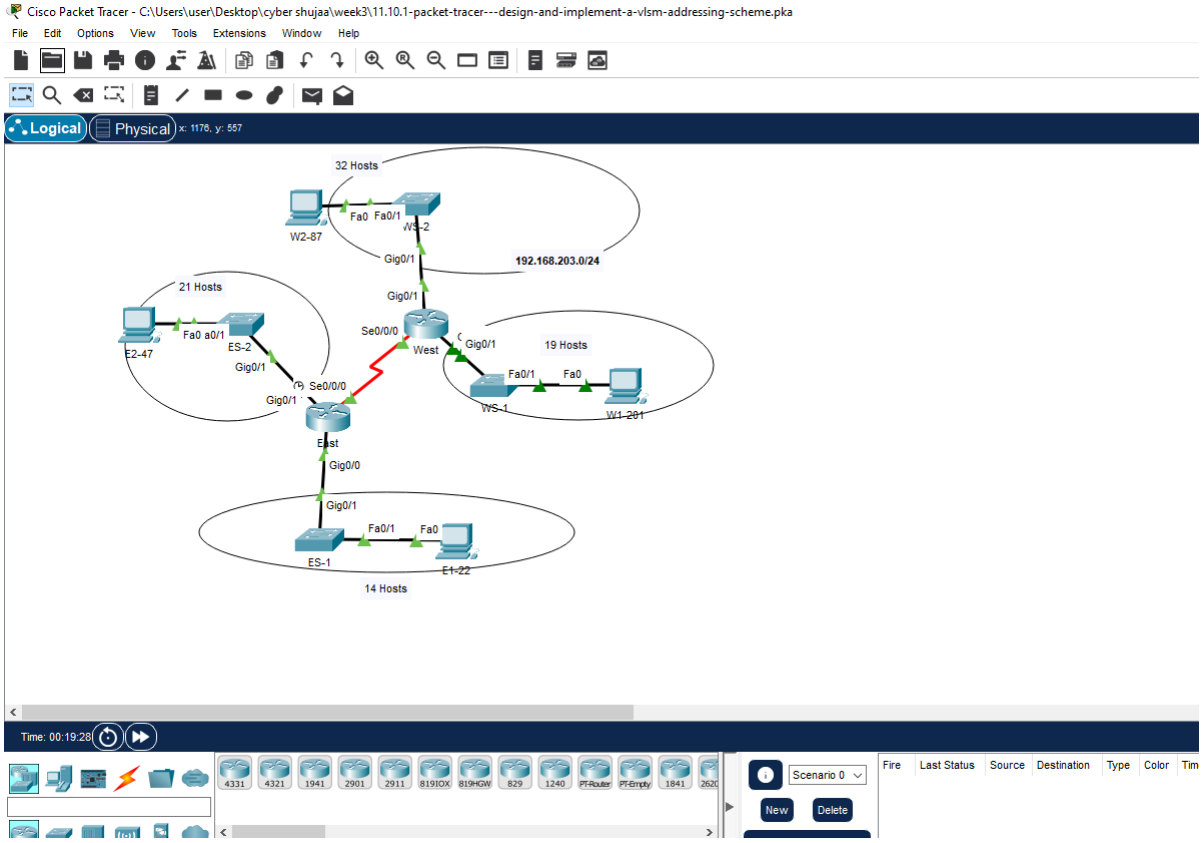





Cisco Packet Tracer - C:\Users\user\Desktop\cyber shujaa\week3\11.10.1-packet-tracer---design-and-implement-a-vl...
File Edit Options View Tools Extensions Window Help
Logical Physical
Root
32 Hosts
W2-87
Fa0 Fa0/1
WS-2
Gig0/1
192.168.203.0/24
21 Hosts
E2-47
Fa0 a0/1
ES-2
Gig0/1
Se0/0/0
West
Gig0/1
19 Hosts
Fa0/1
Fa0
WS-1
W1-201
Se0/0/0
Gig0/1
East
Gig0/0
Gig0/1
Fa0/1
Fa0
ES-1
E1-22
14 Hosts
Time: 00:40:13
Realtime
Simulation
ISR4321
Type here to search
10:18 AM
10/3/2022
WS-2
CLI
IOS Command Line Interface
Press RETURN to get started!
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
WS-2>enable
WS-2#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
WS-2(config)#no ip domain-lookup
WS-2(config)#interface vlan1
WS-2(config-if)#ip address 192.168.203.2 255.255.255.192
WS-2(config-if)#no shutdown
WS-2(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
WS-2(config-if)#exit
WS-2(config)#default-gateway 192.168.203.1 255.255.255.192
% Invalid input detected at '^' marker.
WS-2(config)#exit
WS-2#
%SYS-5-CONFIG_I: Configured from console by console
WS-2#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
WS-2(config)#default-gateway 192.168.203.1
% Invalid input detected at '^' marker.
WS-2(config)#ip default-gateway 192.168.203.1
WS-2(config)#exit
WS-2#
%SYS-5-CONFIG_I: Configured from console by console
Copy
Paste
Top


Cisco Packet Tracer - C:\Users\user\Desktop\cyber shujaa\week3\11.10.1-packet-tracer---design-and-implement-a-vl...
File Edit Options View Tools Extensions Window Help
Logical Physical
Root
32 Hosts
W2-87
Fa0 Fa0/1
WS-2
Gig0/1
192.168.203.0/24
21 Hosts
E2-47
Fa0 a0/1
ES-2
Gig0/1
Se0/0/0
West
Gig0/1
19 Hosts
Fa0/1
Fa0
WS-1
W1-201
Se0/0/0
Gig0/1
East
Gig0/0
Gig0/1
Fa0/1
Fa0
ES-1
E1-22
14 Hosts
Time: 00:40:51
Realtime
Simulation
ISR4321
Type here to search
10:19 AM
10/3/2022
WS-1
CLI
IOS Command Line Interface
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 GigabitEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
WS-1>enable
WS-1#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
WS-1(config)#no ip domain-lookup
WS-1(config)#interface vlan1
WS-1(config-if)#ip address 192.168.203.98
% Incomplete command.
WS-1(config-if)#ip address 192.168.203.98 255.255.255.224
WS-1(config-if)#no shutdown
WS-1(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
WS-1(config-if)#exit
WS-1(config)#default-gateway 192.168.203.97 255.255.255.224
% Invalid input detected at '^' marker.
WS-1(config)#ip default-gateway 192.168.203.97 255.255.255.224
% Invalid input detected at '^' marker.
WS-1(config)#ip default-gateway 192.168.203.97
WS-1(config)#exit
WS-1#
%SYS-5-CONFIG_I: Configured from console by console
Copy
Paste
Top

The Pcs from different subnets can now communicate with each other



When pc E2-47 can communicate with pc W1-201 succesfully