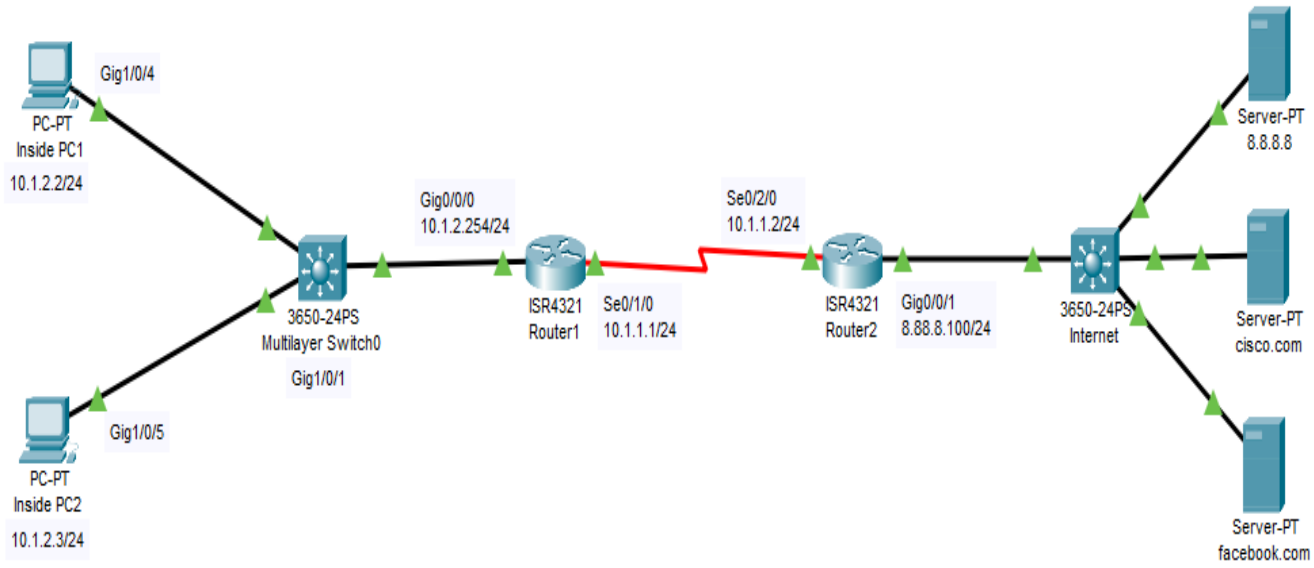
Jayathilaka H.A.D.T.T.

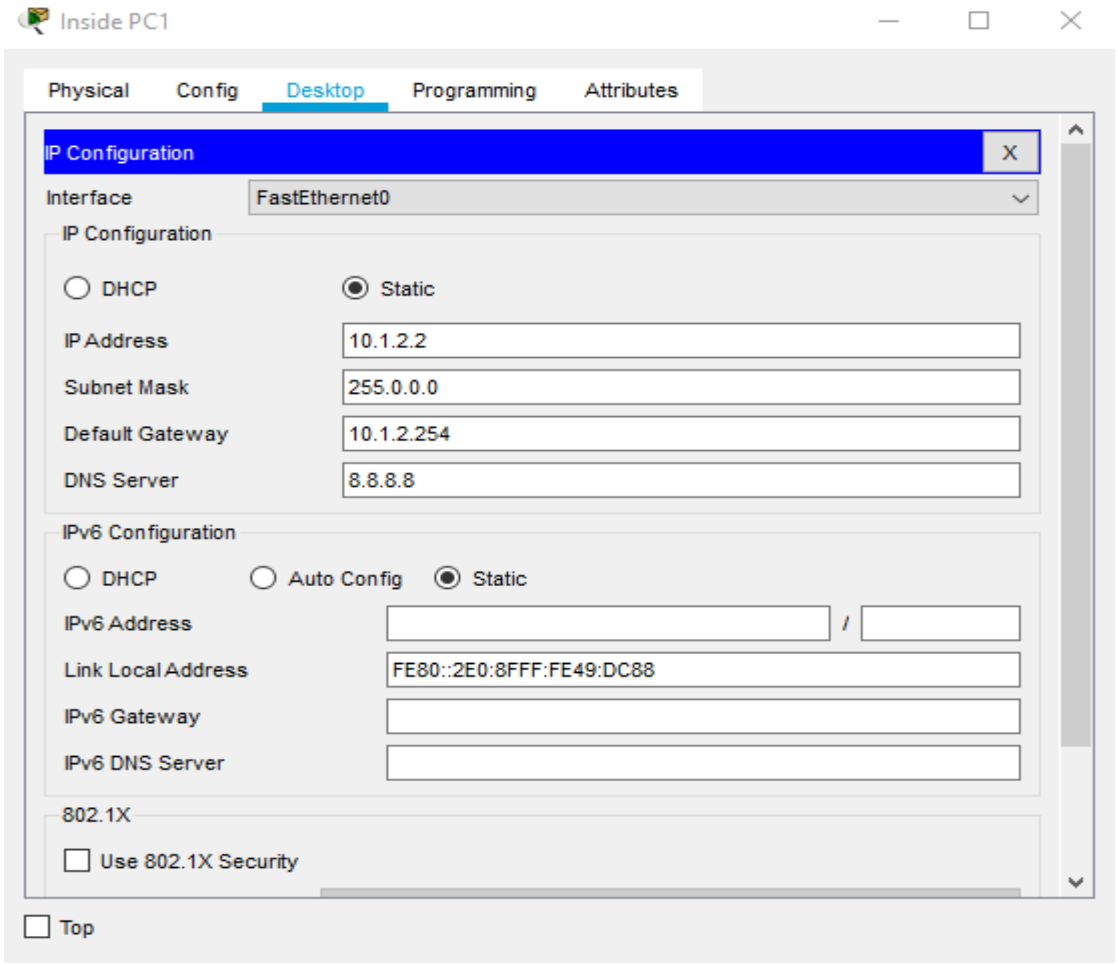
E/16/156

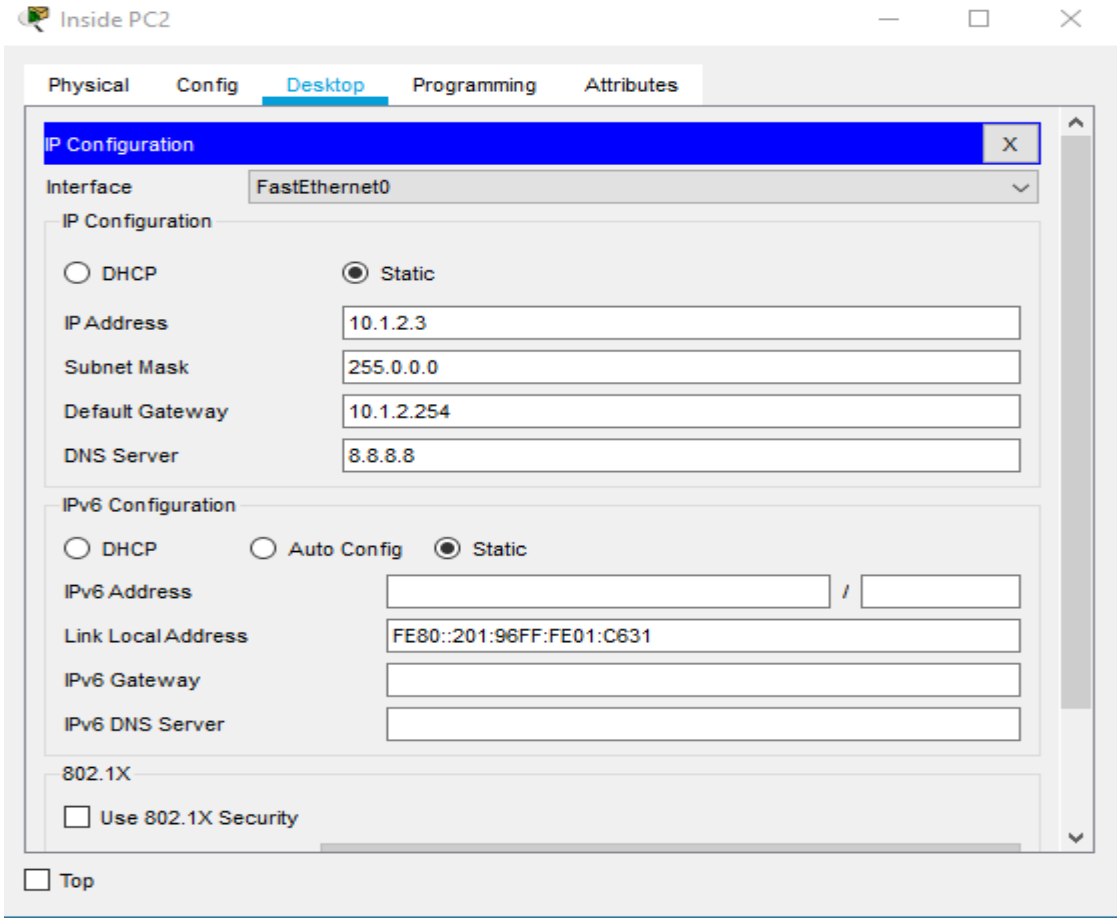
CO513 - Lab 01

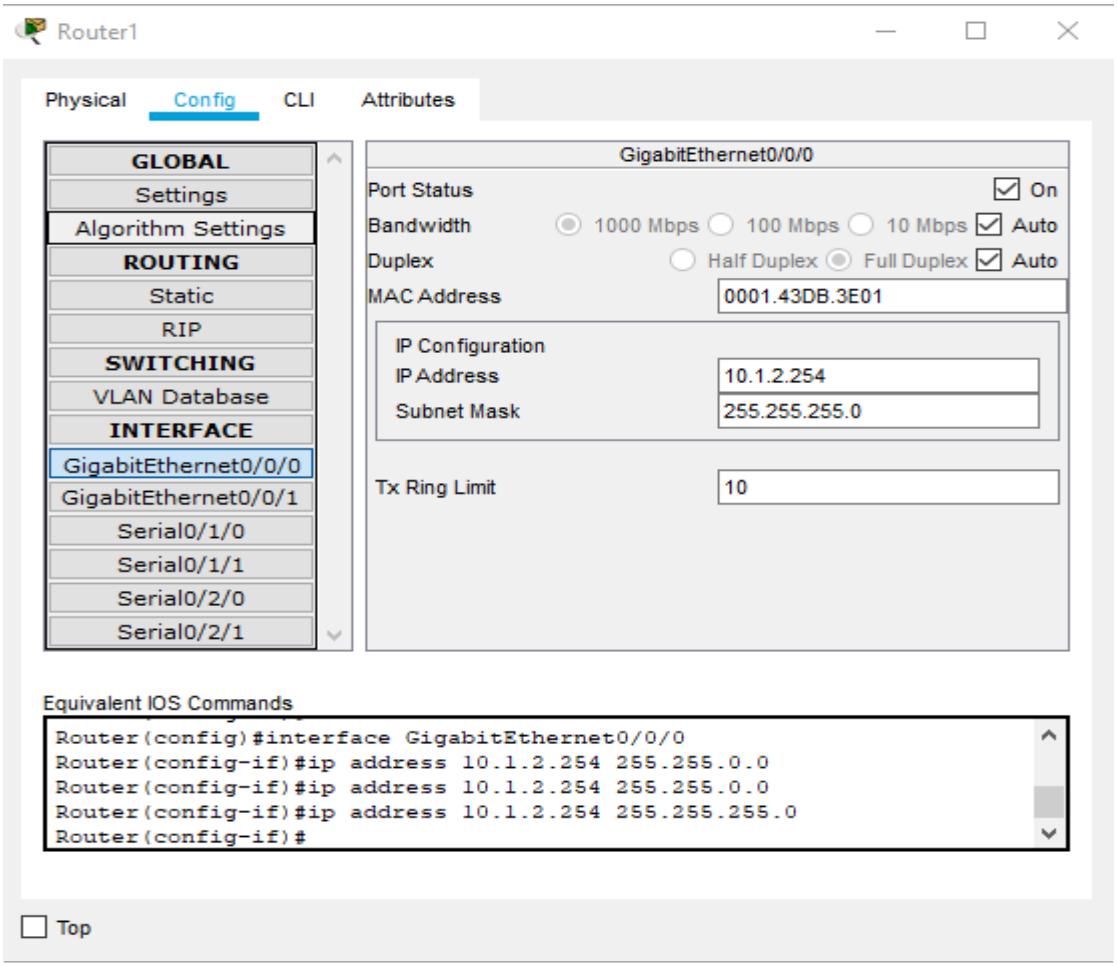
Introduction to Cisco Packet Tracer

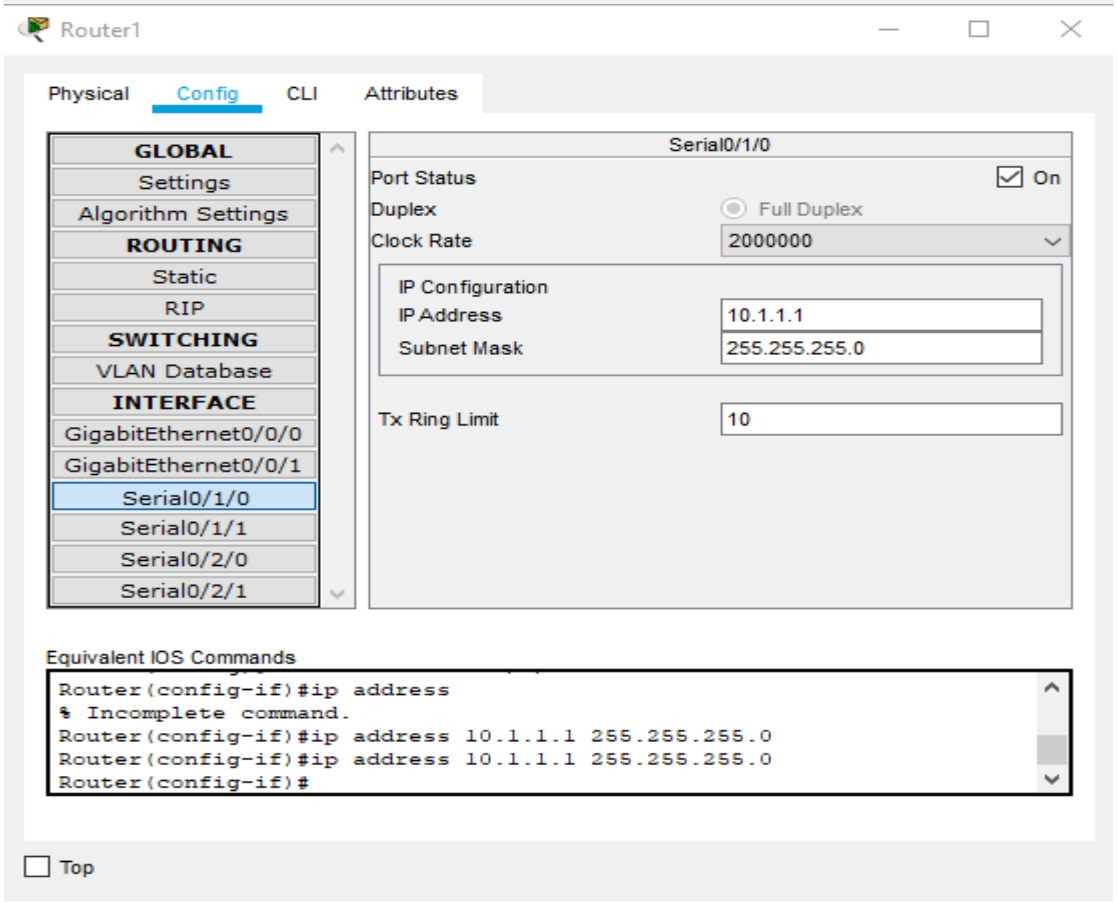
1. **Implement the following network using Cisco packet tracer. Perform any IP configuration accordingly within each of the devices. Make sure the network is up and running.**

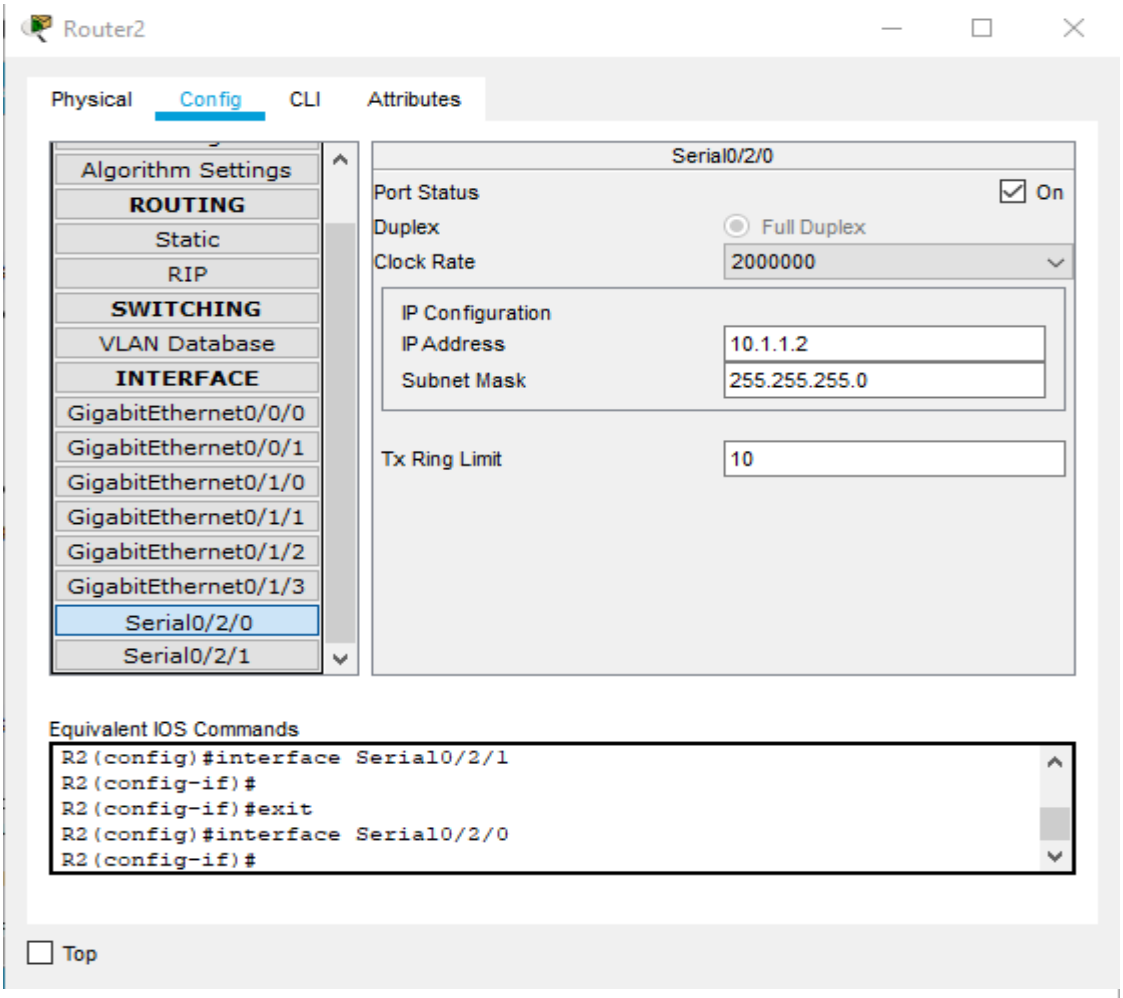


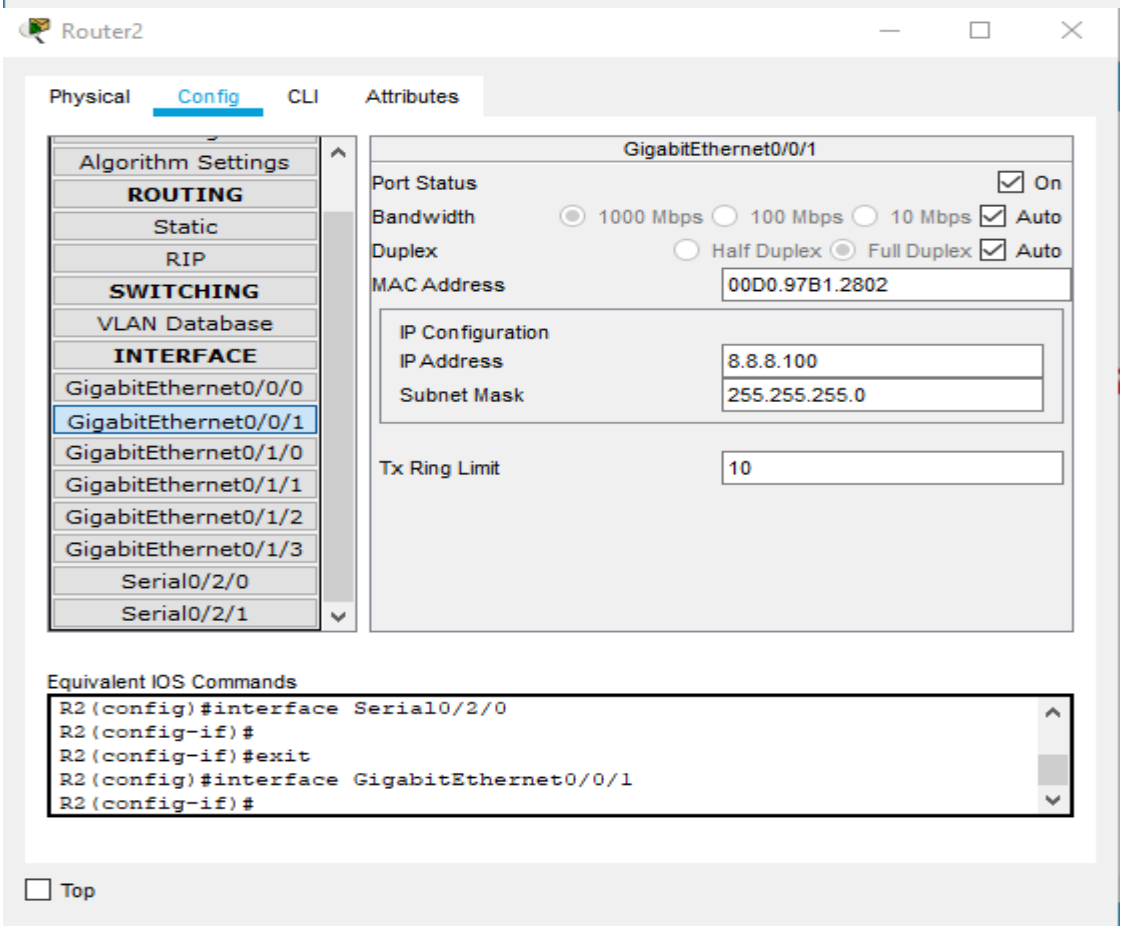

Inside PC1
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
Interface
FastEthernet0
IP Configuration
DHCP
Static
IP Address
10.1.2.2
Subnet Mask
255.0.0.0
Default Gateway
10.1.2.254
DNS Server
8.8.8.8
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::2E0:8FFF:FE49:DC88
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Top

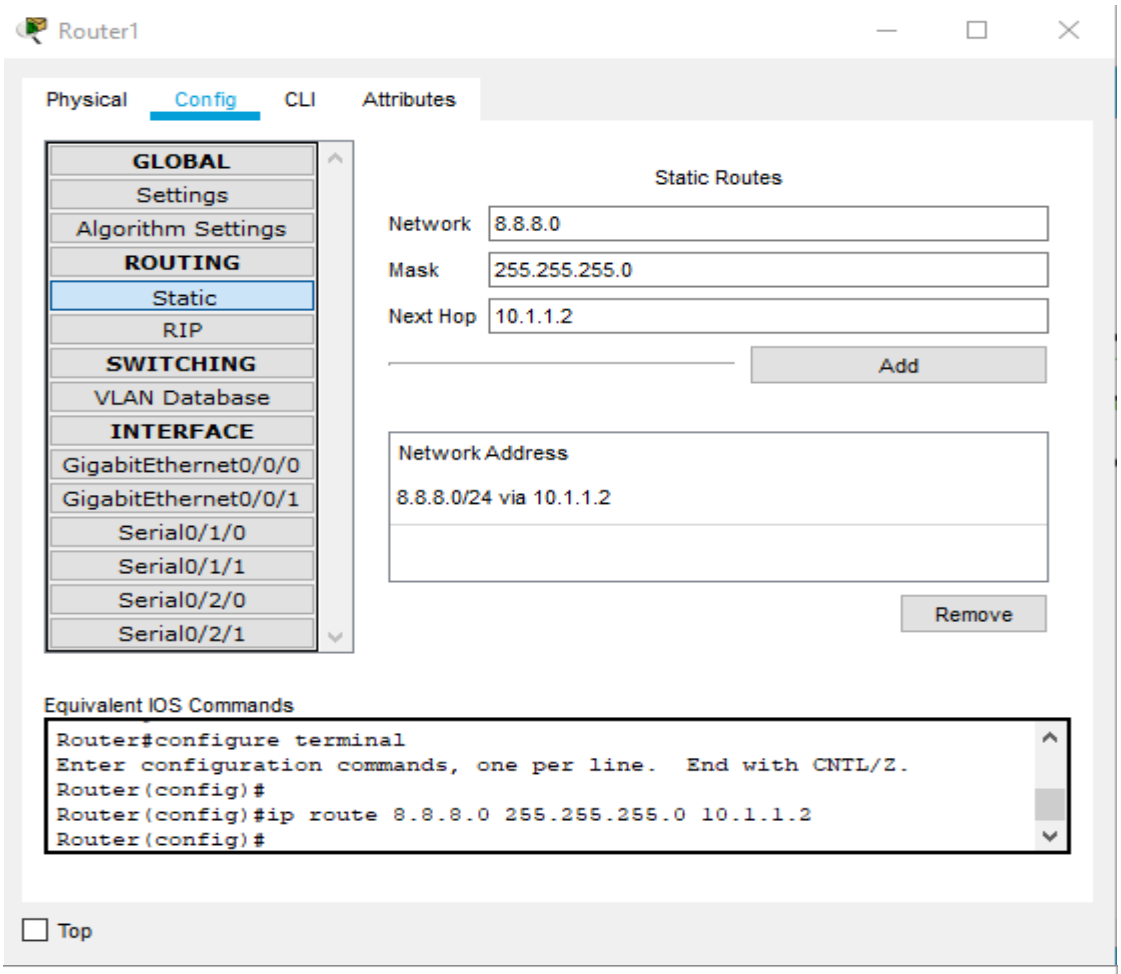

Inside PC2
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
Interface
FastEthernet0
IP Configuration
DHCP
Static
IP Address
10.1.2.3
Subnet Mask
255.0.0.0
Default Gateway
10.1.2.254
DNS Server
8.8.8.8
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::201:96FF:FE01:C631
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Top

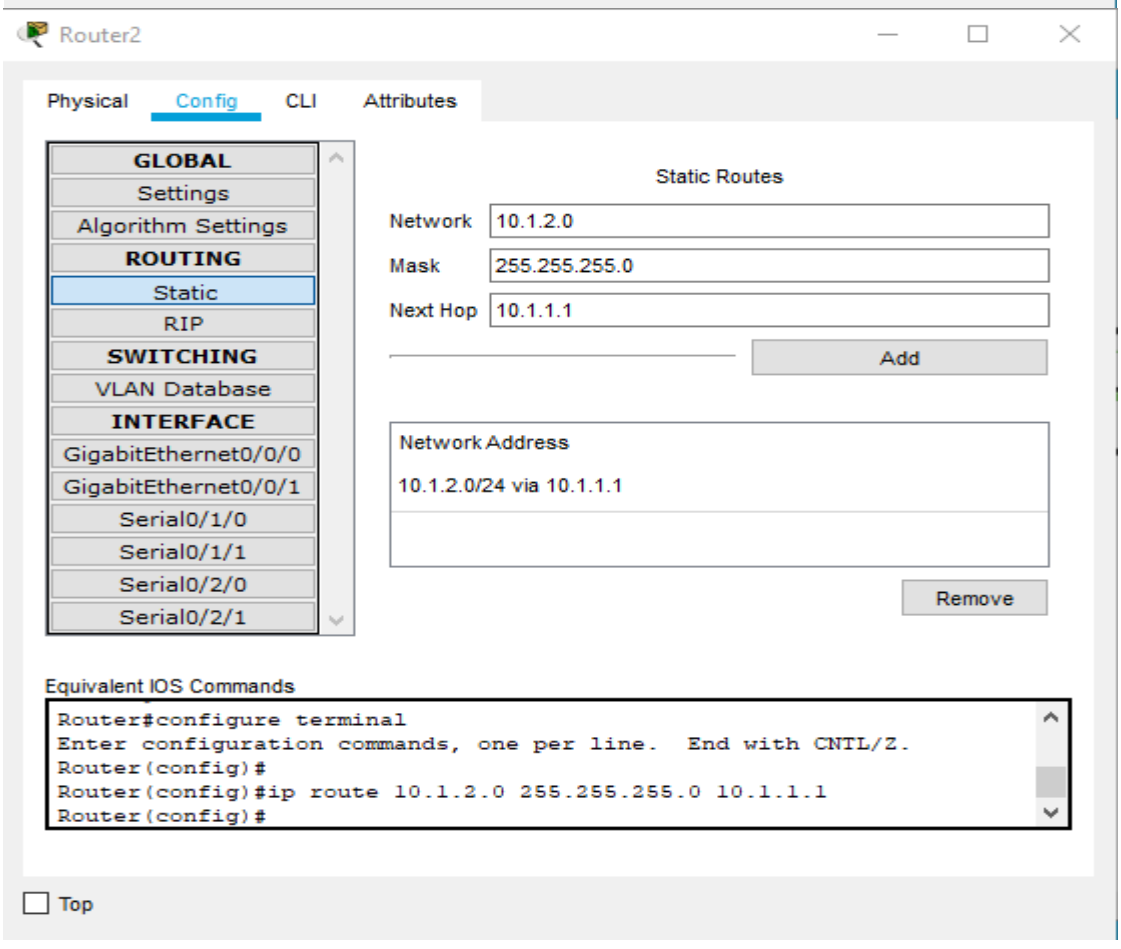

Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
Serial0/1/0
Serial0/1/1
Serial0/2/0
Serial0/2/1
GigabitEthernet0/0/0
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0001.43DB.3E01
IP Configuration
IP Address
10.1.2.254
Subnet Mask
255.255.255.0
Tx Ring Limit
10
Equivalent IOS Commands
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#ip address 10.1.2.254 255.255.0.0
Router(config-if)#ip address 10.1.2.254 255.255.0.0
Router(config-if)#ip address 10.1.2.254 255.255.255.0
Router(config-if)#
Top

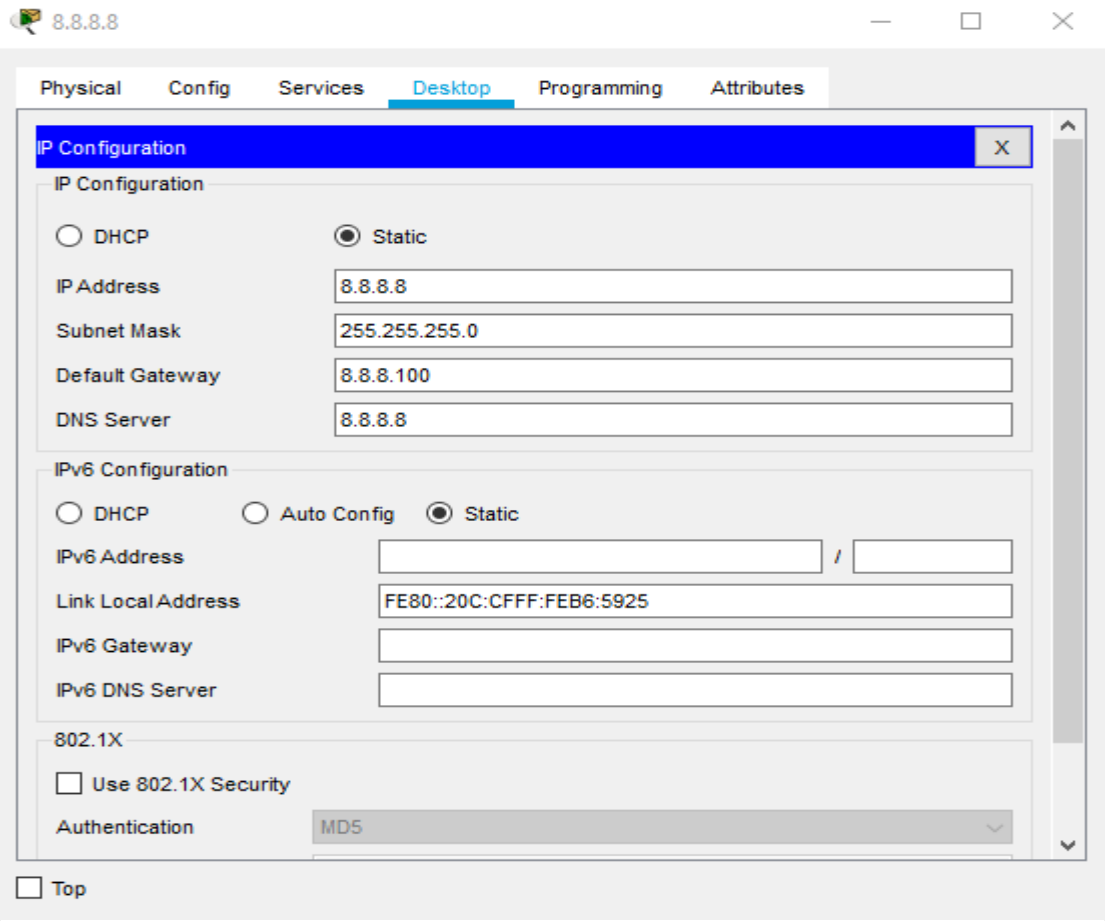

Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
Serial0/1/0
Serial0/1/1
Serial0/2/0
Serial0/2/1
Serial0/1/0
Port Status
On
Duplex
Full Duplex
Clock Rate
2000000
IP Configuration
IP Address
10.1.1.1
Subnet Mask
255.255.255.0
Tx Ring Limit
10
Equivalent IOS Commands
Router(config-if)#ip address
% Incomplete command.
Router(config-if)#ip address 10.1.1.1 255.255.255.0
Router(config-if)#ip address 10.1.1.1 255.255.255.0
Router(config-if)#
Top

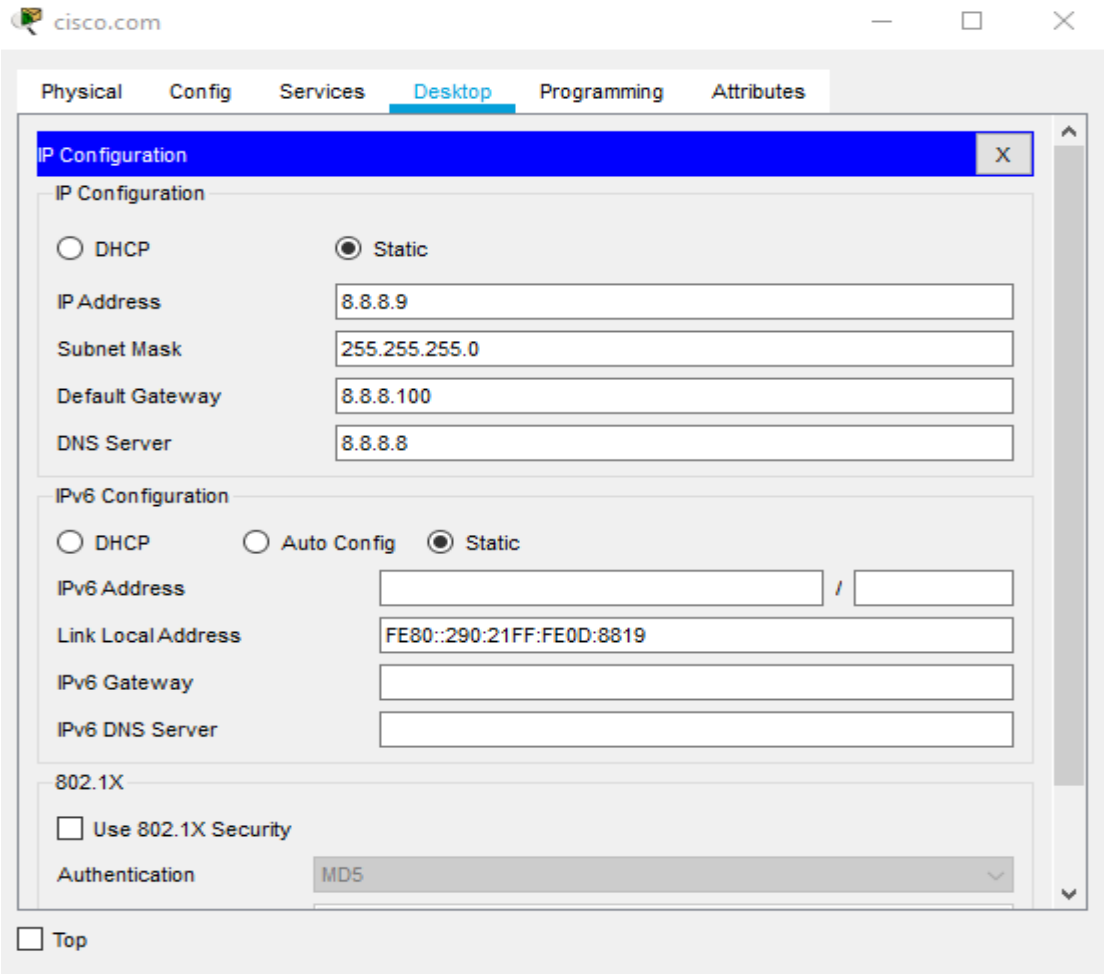

Router2
Physical
Config
CLI
Attributes
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
GigabitEthernet0/1/0
GigabitEthernet0/1/1
GigabitEthernet0/1/2
GigabitEthernet0/1/3
Serial0/2/0
Serial0/2/1
Serial0/2/0
Port Status
On
Duplex
Full Duplex
Clock Rate
2000000
IP Configuration
IP Address
10.1.1.2
Subnet Mask
255.255.255.0
Tx Ring Limit
10
Equivalent IOS Commands
R2(config)#interface Serial0/2/1
R2(config-if)#
R2(config-if)#exit
R2(config)#interface Serial0/2/0
R2(config-if)#
Top

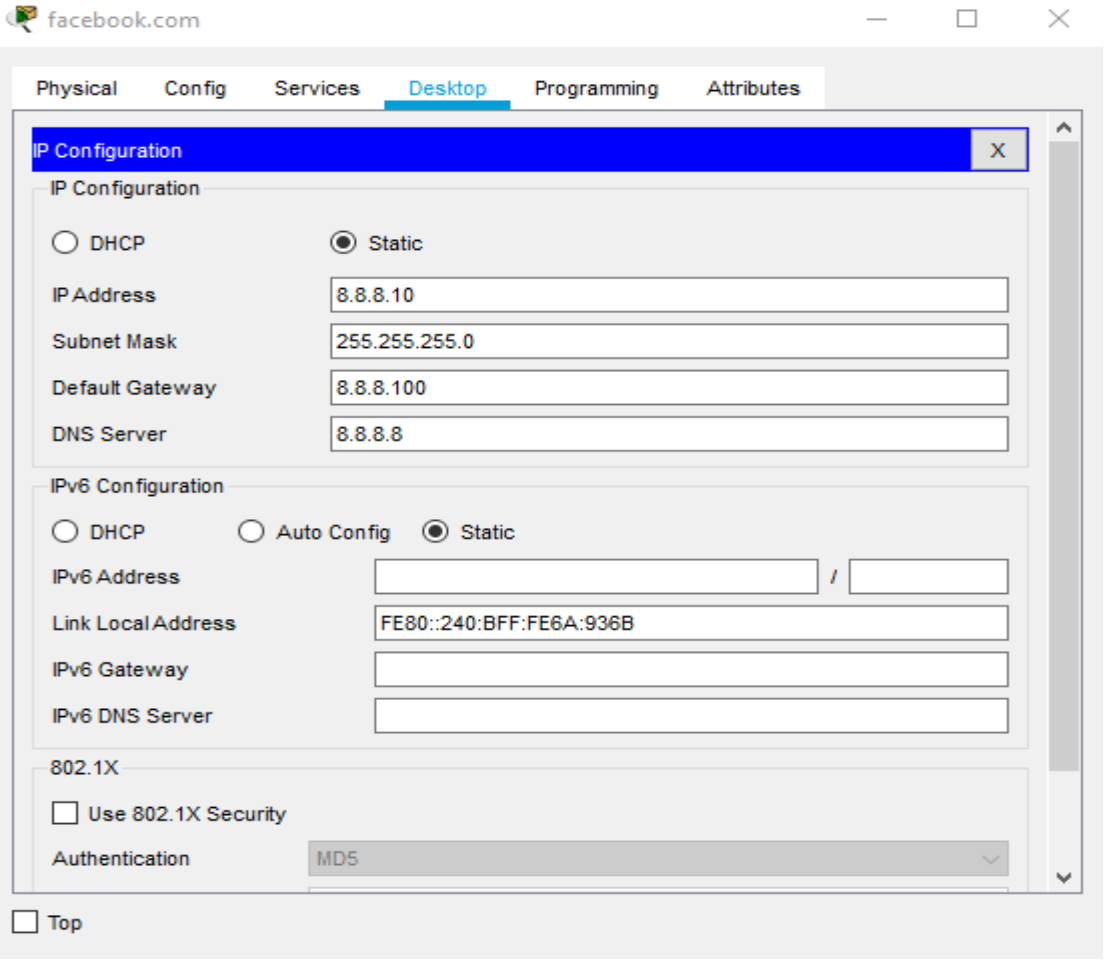

Router2
Physical
Config
CLI
Attributes
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
GigabitEthernet0/1/0
GigabitEthernet0/1/1
GigabitEthernet0/1/2
GigabitEthernet0/1/3
Serial0/2/0
Serial0/2/1
GigabitEthernet0/0/1
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
00D0.97B1.2802
IP Configuration
IP Address
8.8.8.100
Subnet Mask
255.255.255.0
Tx Ring Limit
10
Equivalent IOS Commands
R2(config)#interface Serial0/2/0
R2(config-if)#
R2(config-if)#exit
R2(config)#interface GigabitEthernet0/0/1
R2(config-if)#
Top

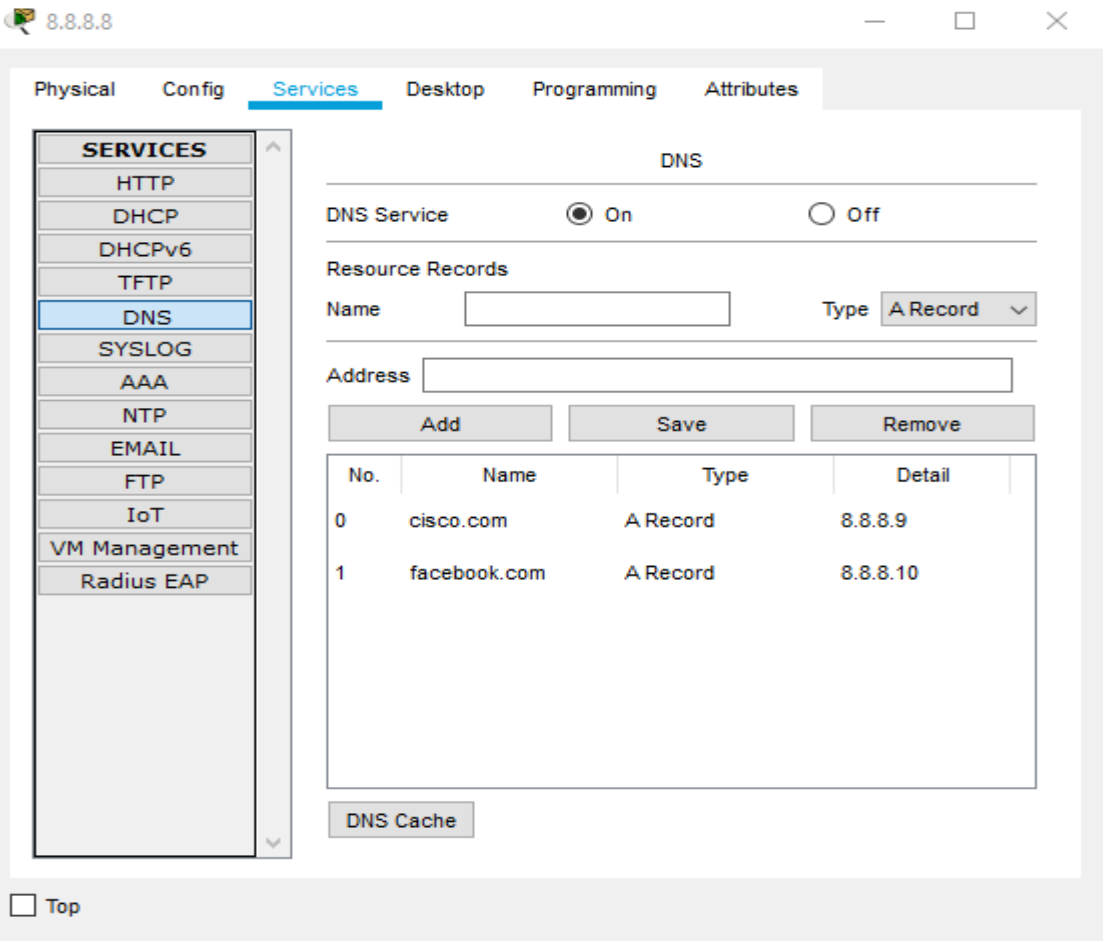

Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
Serial0/1/0
Serial0/1/1
Serial0/2/0
Serial0/2/1
Static Routes
Network 8.8.8.0
Mask 255.255.255.0
Next Hop 10.1.1.2
Add
Network Address
8.8.8.0/24 via 10.1.1.2
Remove
Equivalent IOS Commands
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#ip route 8.8.8.0 255.255.255.0 10.1.1.2
Router(config)#
Top


Router2
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0/0
GigabitEthernet0/0/1
Serial0/1/0
Serial0/1/1
Serial0/2/0
Serial0/2/1
Static Routes
Network 10.1.2.0
Mask 255.255.255.0
Next Hop 10.1.1.1
Add
Network Address
10.1.2.0/24 via 10.1.1.1
Remove
Equivalent IOS Commands
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#ip route 10.1.2.0 255.255.255.0 10.1.1.1
Router(config)#
Top

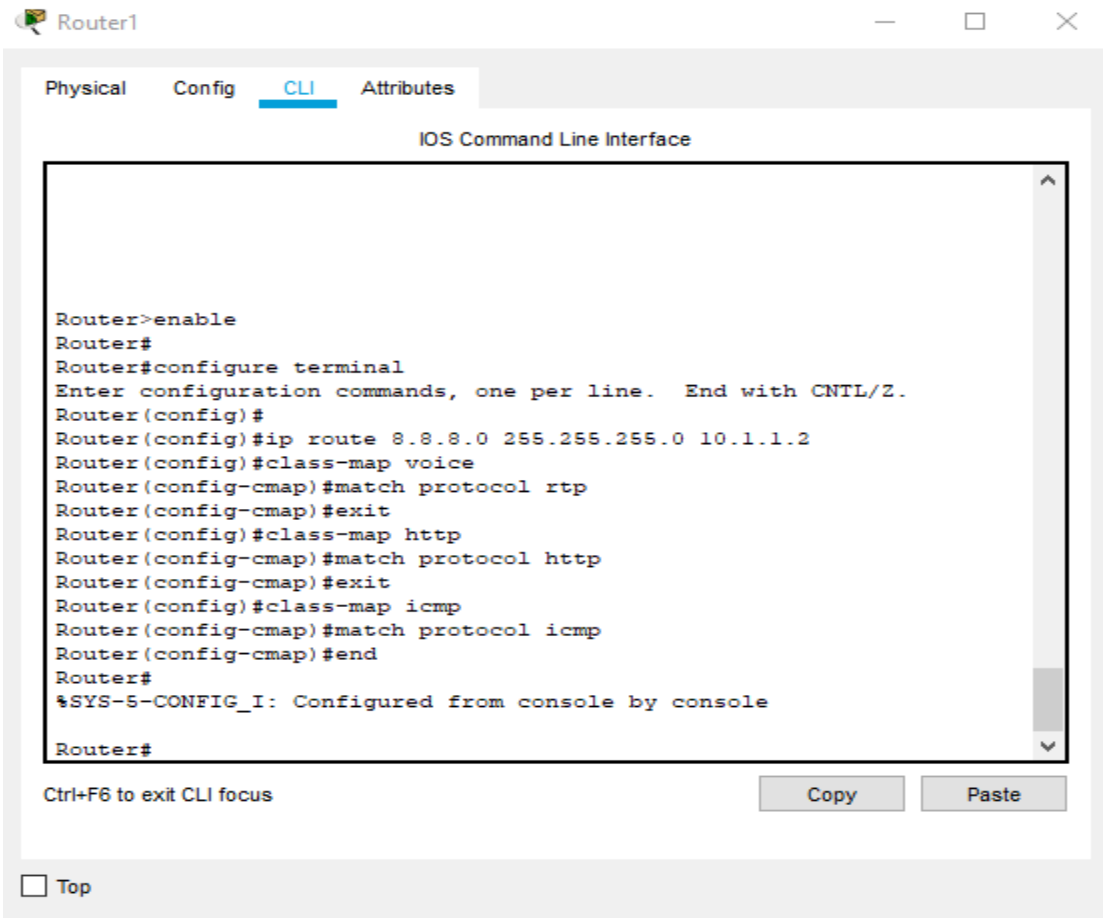

8.8.8.8
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
8.8.8.8
Subnet Mask
255.255.255.0
Default Gateway
8.8.8.100
DNS Server
8.8.8.8
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::20C:CFFF:FEB6:5925
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Top

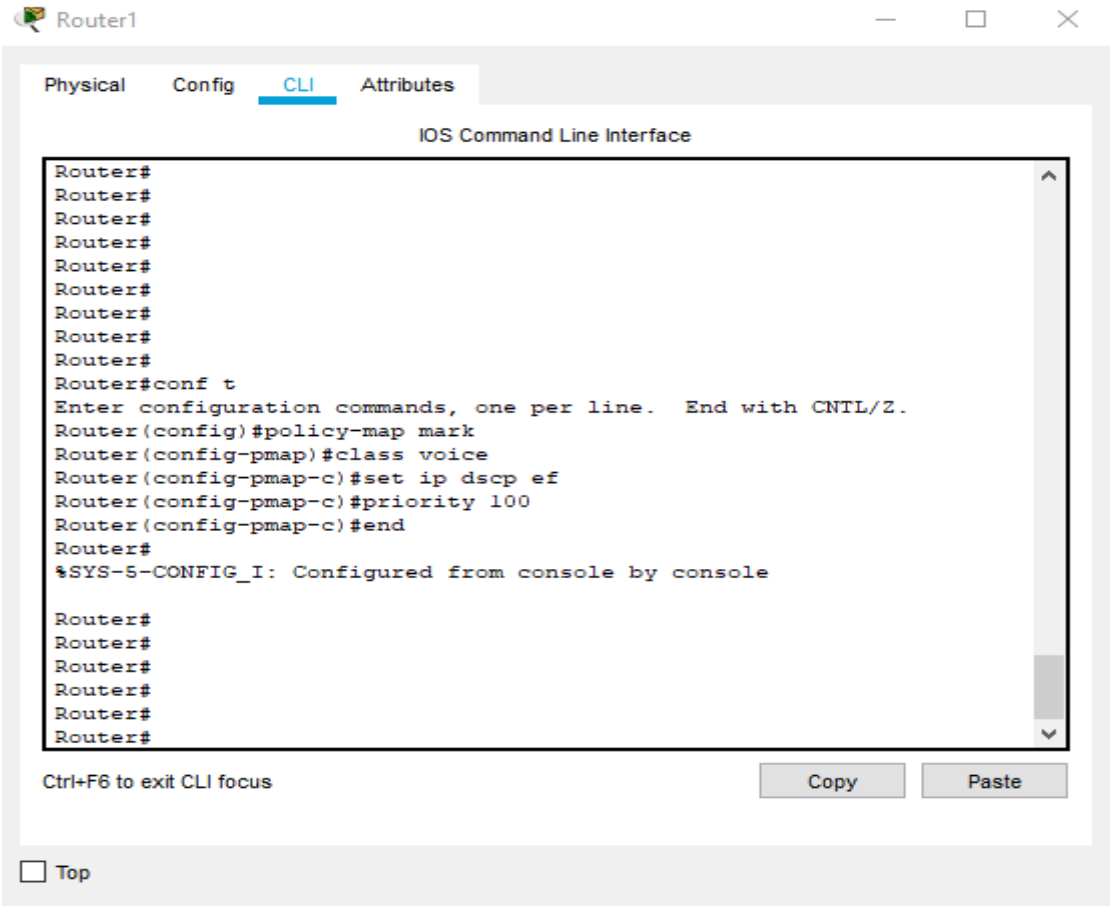

cisco.com
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
8.8.8.9
Subnet Mask
255.255.255.0
Default Gateway
8.8.8.100
DNS Server
8.8.8.8
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::290:21FF:FE0D:8819
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Top


facebook.com
Physical
Config
Services
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
8.8.8.10
Subnet Mask
255.255.255.0
Default Gateway
8.8.8.100
DNS Server
8.8.8.8
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::240:BFF:FE6A:936B
IPv6 Gateway
IPv6 DNS Server
802.1X
Use 802.1X Security
Authentication
MD5
Top


8.8.8.8
Physical
Config
Services
Desktop
Programming
Attributes
SERVICES
HTTP
DHCP
DHCPv6
TFTP
DNS
SYSLOG
AAA
NTP
EMAIL
FTP
IoT
VM Management
Radius EAP
DNS
DNS Service
On
Off
Resource Records
Name
Type
A Record
Address
Add
Save
Remove
No.
Name
Type
Detail
0
cisco.com
A Record
8.8.8.9
1
facebook.com
A Record
8.8.8.10
DNS Cache
Top

On router 1


Router1
Physical
Config
CLI
Attributes
IOS Command Line Interface
Router>enable
Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#ip route 8.8.8.0 255.255.255.0 10.1.1.2
Router(config)#class-map voice
Router(config-cmap)#match protocol rtp
Router(config-cmap)#exit
Router(config)#class-map http
Router(config-cmap)#match protocol http
Router(config-cmap)#exit
Router(config)#class-map icmp
Router(config-cmap)#match protocol icmp
Router(config-cmap)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top


Router1
Physical
Config
CLI
Attributes
IOS Command Line Interface
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#policy-map mark
Router(config-pmap)#class voice
Router(config-pmap-c)#set ip dscp ef
Router(config-pmap-c)#priority 100
Router(config-pmap-c)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#
Router#
Router#
Router#
Router#
Router#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top

Router1

Physical Config CLI Attributes

```
Router#
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#policy-map mark
Router(config-pmap)#class voice
Router(config-pmap-c)#set ip dscp ef
Router(config-pmap-c)#priority 100
Router(config-pmap-c)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#
Router#
Router#
Router#
Router#
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#policy-map mark
Router(config-pmap)#class http
Router(config-pmap-c)#set ip dscp af31
Router(config-pmap-c)#bandwidth 50
Router(config-pmap-c)#exit
Router(config-pmap)#class icmp
Router(config-pmap-c)#set ip dscp af11
Router(config-pmap-c)#bandwidth 25
Router(config-pmap-c)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Router1

Physical Config CLI Attributes

IOS Command Line Interface

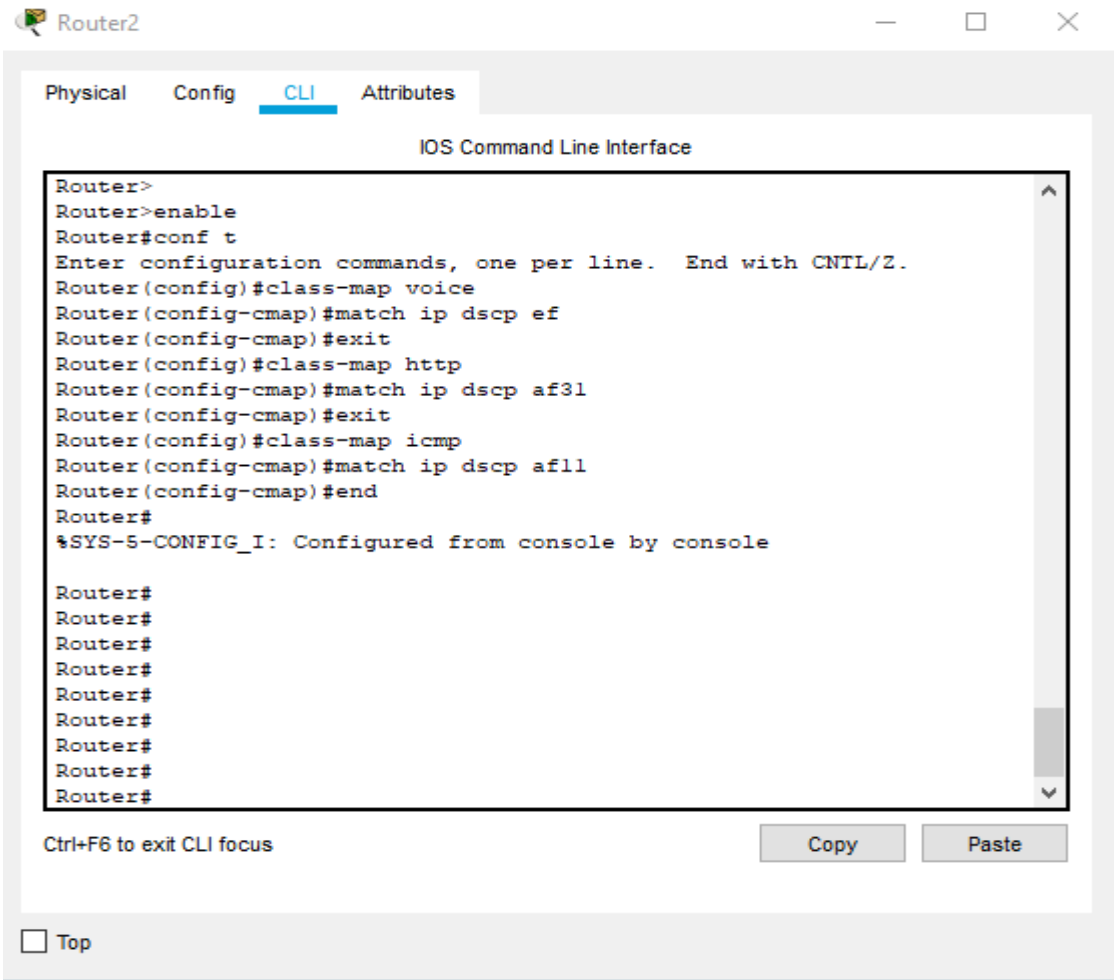
```
Router#
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int serial 0/1/0
Router(config-if)#service-policy output mark
Router(config-if)#end
Router#
```

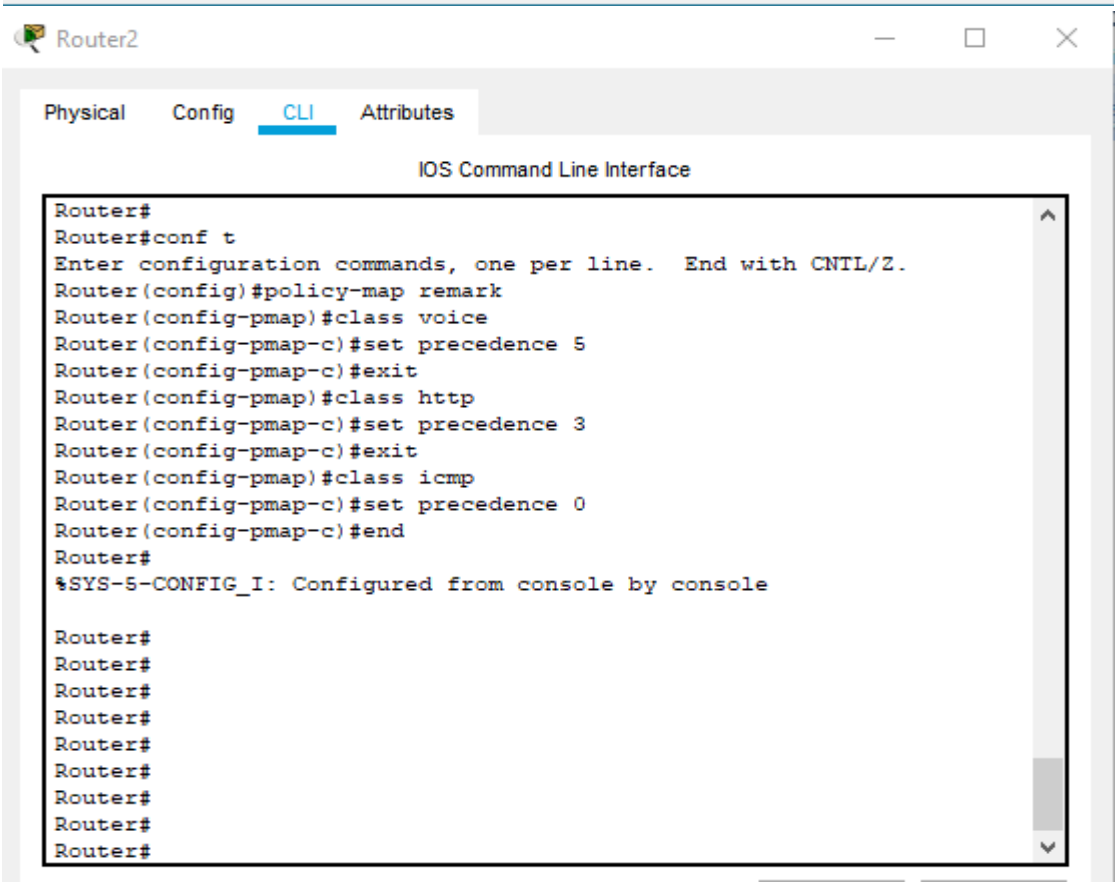
Router1

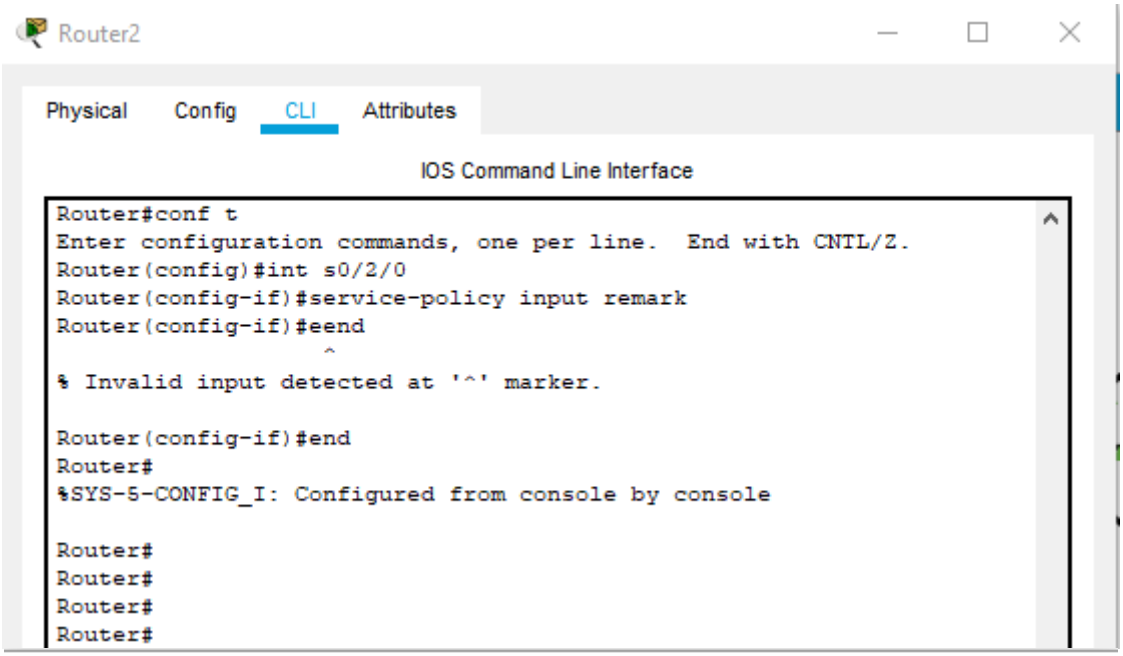
Physical Config CLI Attributes

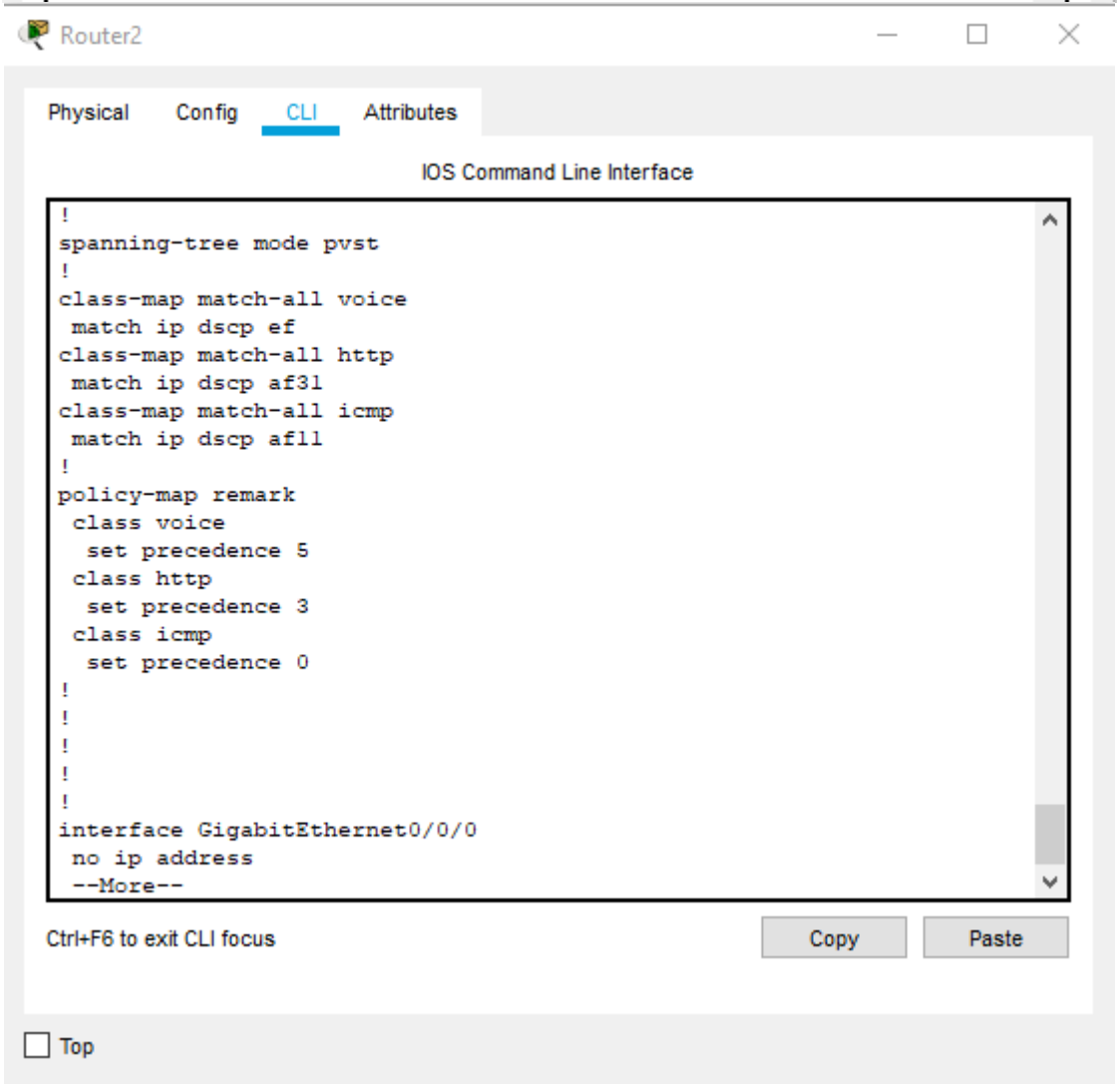
```
!
!
spanning-tree mode pvst
!
class-map match-all voice
 match protocol rtp
class-map match-all http
 match protocol http
class-map match-all icmp
 match protocol icmp
!
policy-map mark
 class voice
  priority 100
  set ip dscp ef
 class http
  bandwidth 50
  set ip dscp af31
 class icmp
  bandwidth 25
  set ip dscp af11
!
```

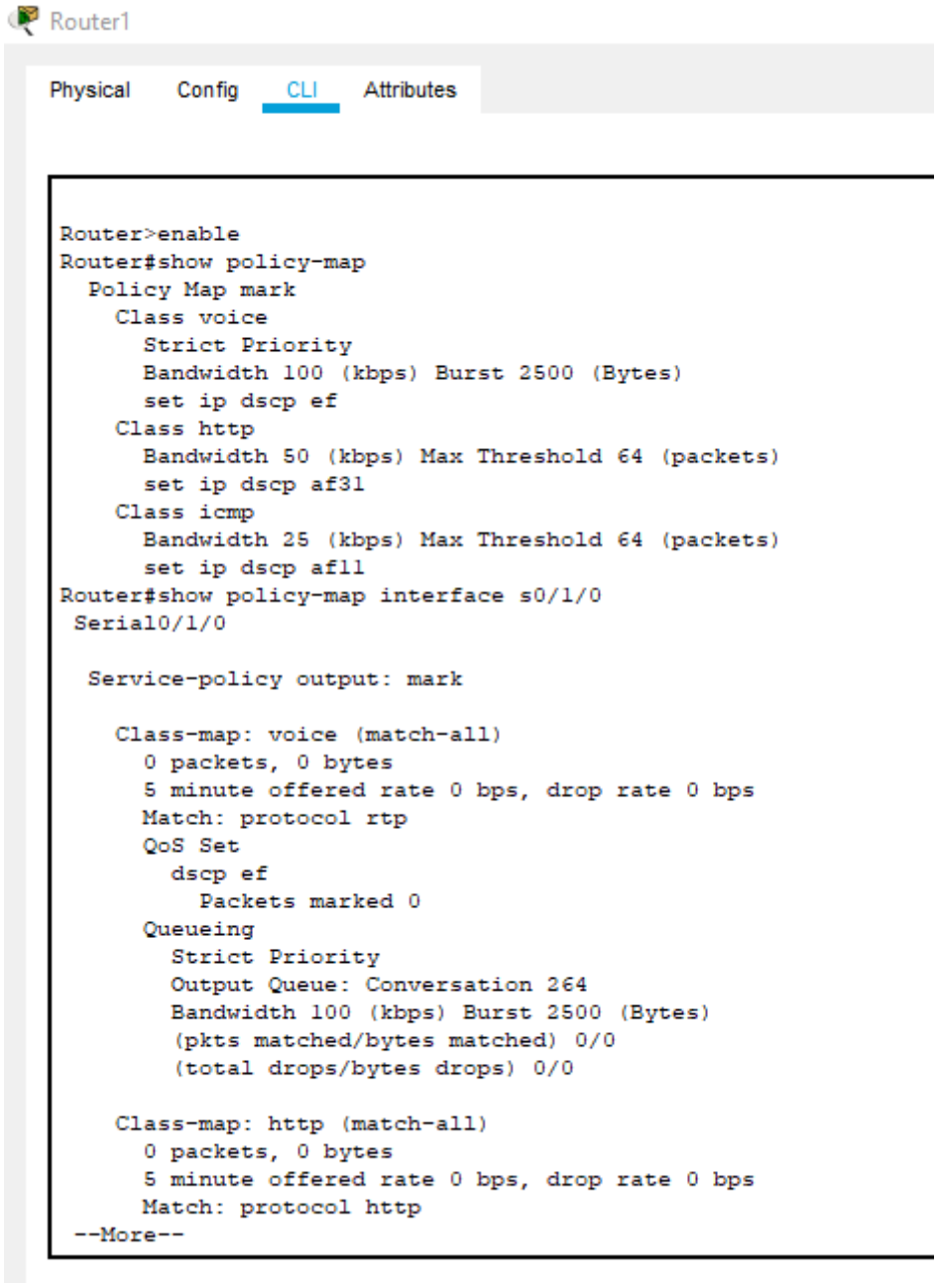
On router 2


Router2
Physical
Config
CLI
Attributes
IOS Command Line Interface
Router>
Router>enable
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#class-map voice
Router(config-cmap)#match ip dscp ef
Router(config-cmap)#exit
Router(config)#class-map http
Router(config-cmap)#match ip dscp af31
Router(config-cmap)#exit
Router(config)#class-map icmp
Router(config-cmap)#match ip dscp af11
Router(config-cmap)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top


Router2
Physical
Config
CLI
Attributes
IOS Command Line Interface
Router#
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#policy-map remark
Router(config-pmap)#class voice
Router(config-pmap-c)#set precedence 5
Router(config-pmap-c)#exit
Router(config-pmap)#class http
Router(config-pmap-c)#set precedence 3
Router(config-pmap-c)#exit
Router(config-pmap)#class icmp
Router(config-pmap-c)#set precedence 0
Router(config-pmap-c)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#
Router#


Router2
Physical
Config
CLI
Attributes
IOS Command Line Interface
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int s0/2/0
Router(config-if)#service-policy input remark
Router(config-if)#eend
^
% Invalid input detected at '^' marker.
Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#
Router#
Router#
Router#


Router2
Physical
Config
CLI
Attributes
IOS Command Line Interface
!
spanning-tree mode pvst
!
class-map match-all voice
 match ip dscp ef
class-map match-all http
 match ip dscp af31
class-map match-all icmp
 match ip dscp af11
!
policy-map remark
 class voice
  set precedence 5
 class http
  set precedence 3
 class icmp
  set precedence 0
!
!
!
!
!
interface GigabitEthernet0/0/0
 no ip address
 --More--
Ctrl+F6 to exit CLI focus
Copy
Paste
Top

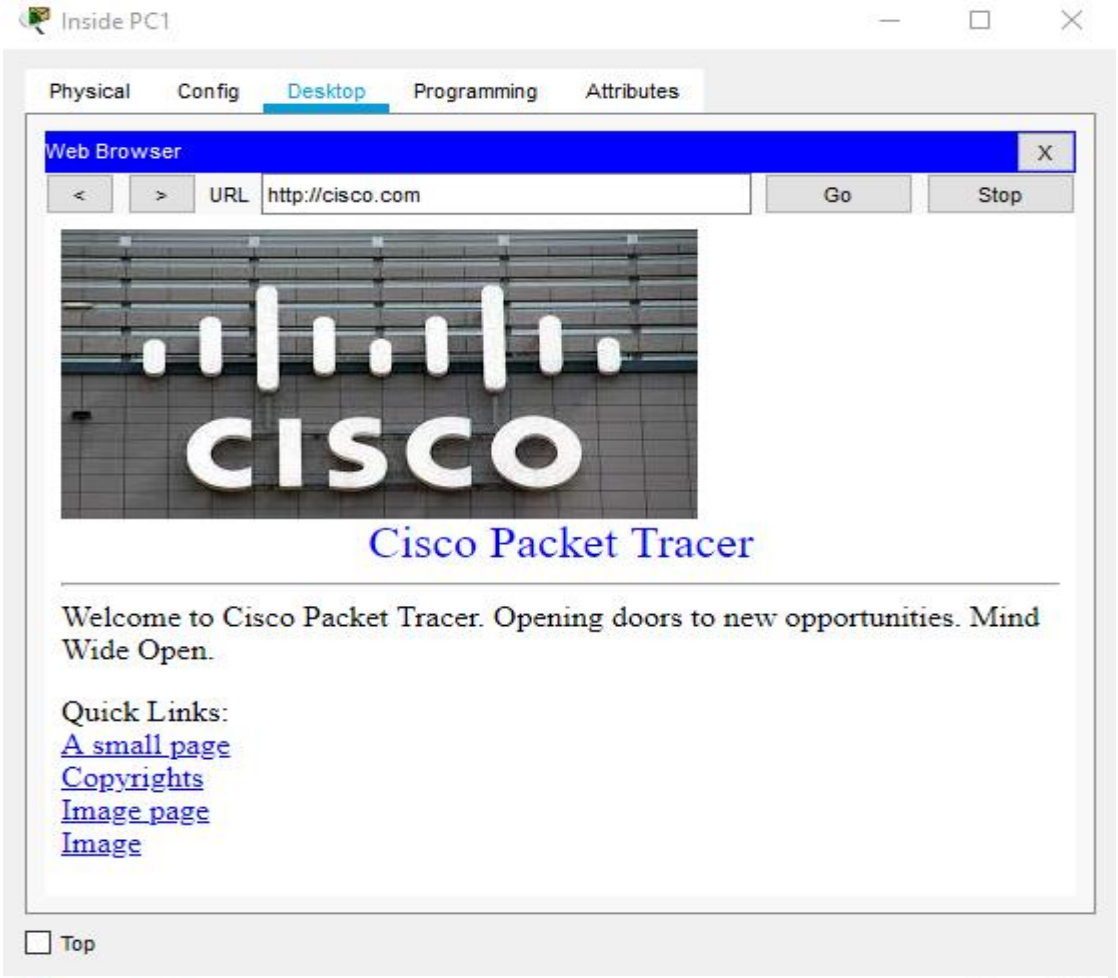

Router1
Physical
Config
CLI
Attributes
Router>enable
Router#show policy-map
Policy Map mark
Class voice
Strict Priority
Bandwidth 100 (kbps) Burst 2500 (Bytes)
set ip dscp ef
Class http
Bandwidth 50 (kbps) Max Threshold 64 (packets)
set ip dscp af31
Class icmp
Bandwidth 25 (kbps) Max Threshold 64 (packets)
set ip dscp af11
Router#show policy-map interface s0/1/0
Serial0/1/0
Service-policy output: mark
Class-map: voice (match-all)
0 packets, 0 bytes
5 minute offered rate 0 bps, drop rate 0 bps
Match: protocol rtp
QoS Set
dscp ef
Packets marked 0
Queueing
Strict Priority
Output Queue: Conversation 264
Bandwidth 100 (kbps) Burst 2500 (Bytes)
(pkts matched/bytes matched) 0/0
(total drops/bytes drops) 0/0
Class-map: http (match-all)
0 packets, 0 bytes
5 minute offered rate 0 bps, drop rate 0 bps
Match: protocol http
--More--

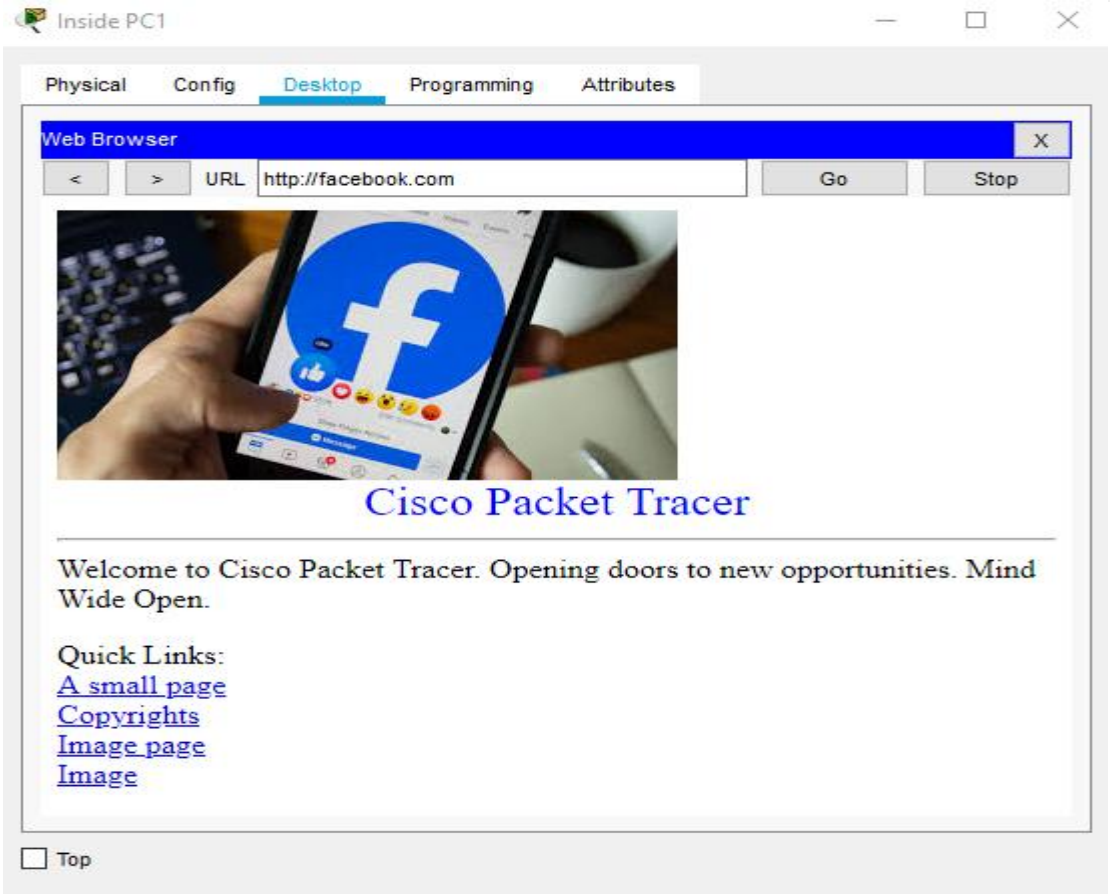
Router2

Physical Config CLI Attributes

```
Router#
Router#show policy-map
  Policy Map remark
    Class voice
      set precedence 5
    Class http
      set precedence 3
    Class icmp
      set precedence 0
Router#show policy-map interface s0/2/0
 Serial0/2/0

  Service-policy input: remark

    Class-map: voice (match-all)
      0 packets, 0 bytes
      5 minute offered rate 0 bps, drop rate 0 bps
      Match: ip dscp ef (46)
      QoS Set
        precedence 5
          Packets marked 0

    Class-map: http (match-all)
      0 packets, 0 bytes
      5 minute offered rate 0 bps, drop rate 0 bps
      Match: ip dscp af31 (26)
      QoS Set
        precedence 3
          Packets marked 0

    Class-map: icmp (match-all)
      0 packets, 0 bytes
      5 minute offered rate 0 bps, drop rate 0 bps
      Match: ip dscp af11 (10)
      QoS Set
        precedence 0
          Packets marked 0

 --More--
```

a. Open browser on PC1 and PC2 and browse to cisco.com and facebook.com - Verify matches in policy.





Inside PC2

Physical Config Desktop Programming Attributes

Web Browser

< > URL http://cisco.com Go Stop

Cisco Packet Tracer

Welcome to Cisco Packet Tracer. Opening doors to new opportunities. Mind Wide Open.

Quick Links:
A small page
Copyrights
Image page
Image

Top

Inside PC2

Physical Config Desktop Programming Attributes

Web Browser

< > URL http://facebook.com Go Stop

Cisco Packet Tracer

Welcome to Cisco Packet Tracer. Opening doors to new opportunities. Mind Wide Open.

Quick Links:
A small page
Copyrights
Image page
Image

Top

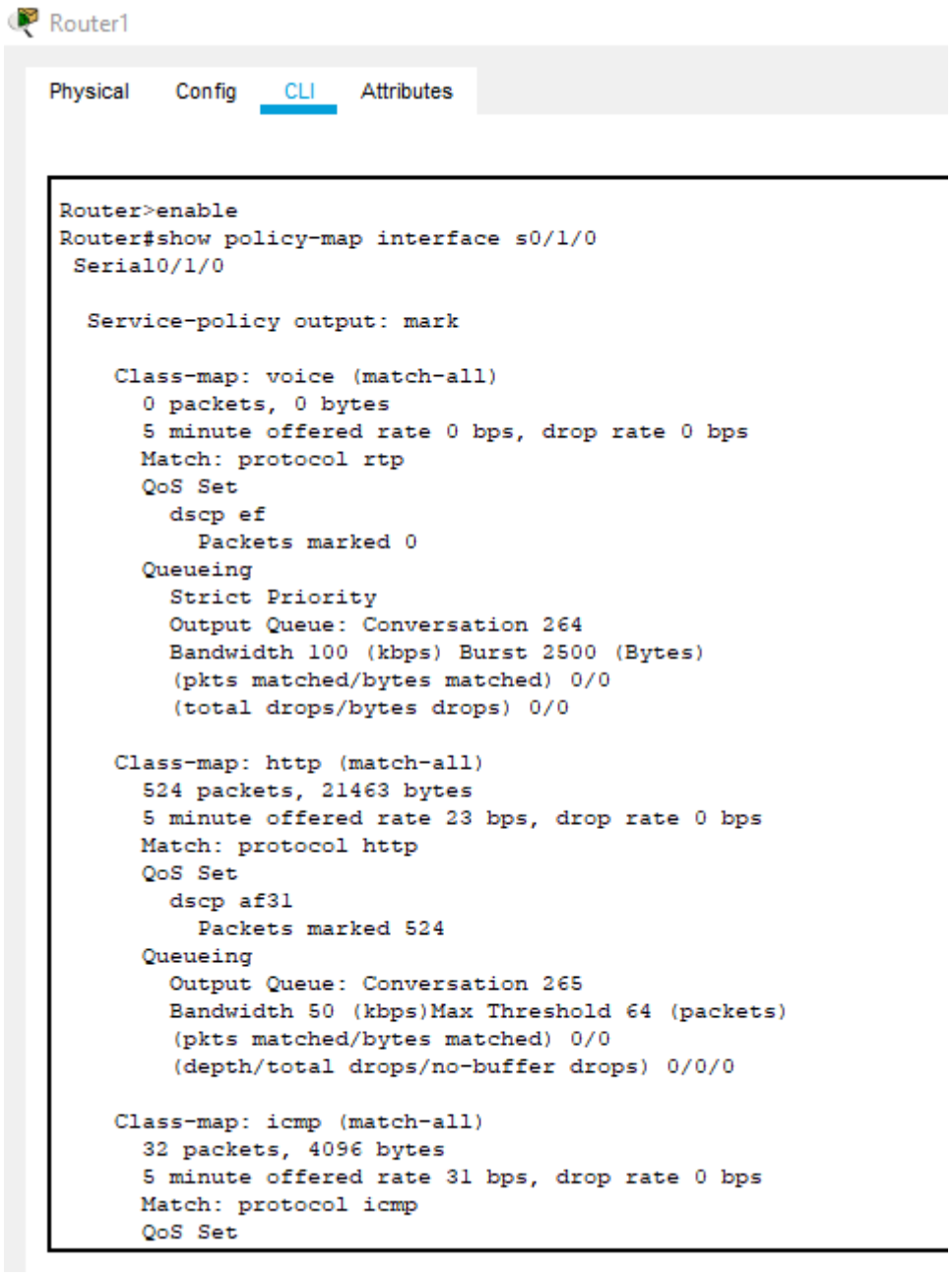


Figure1: Before connecting cisco.com

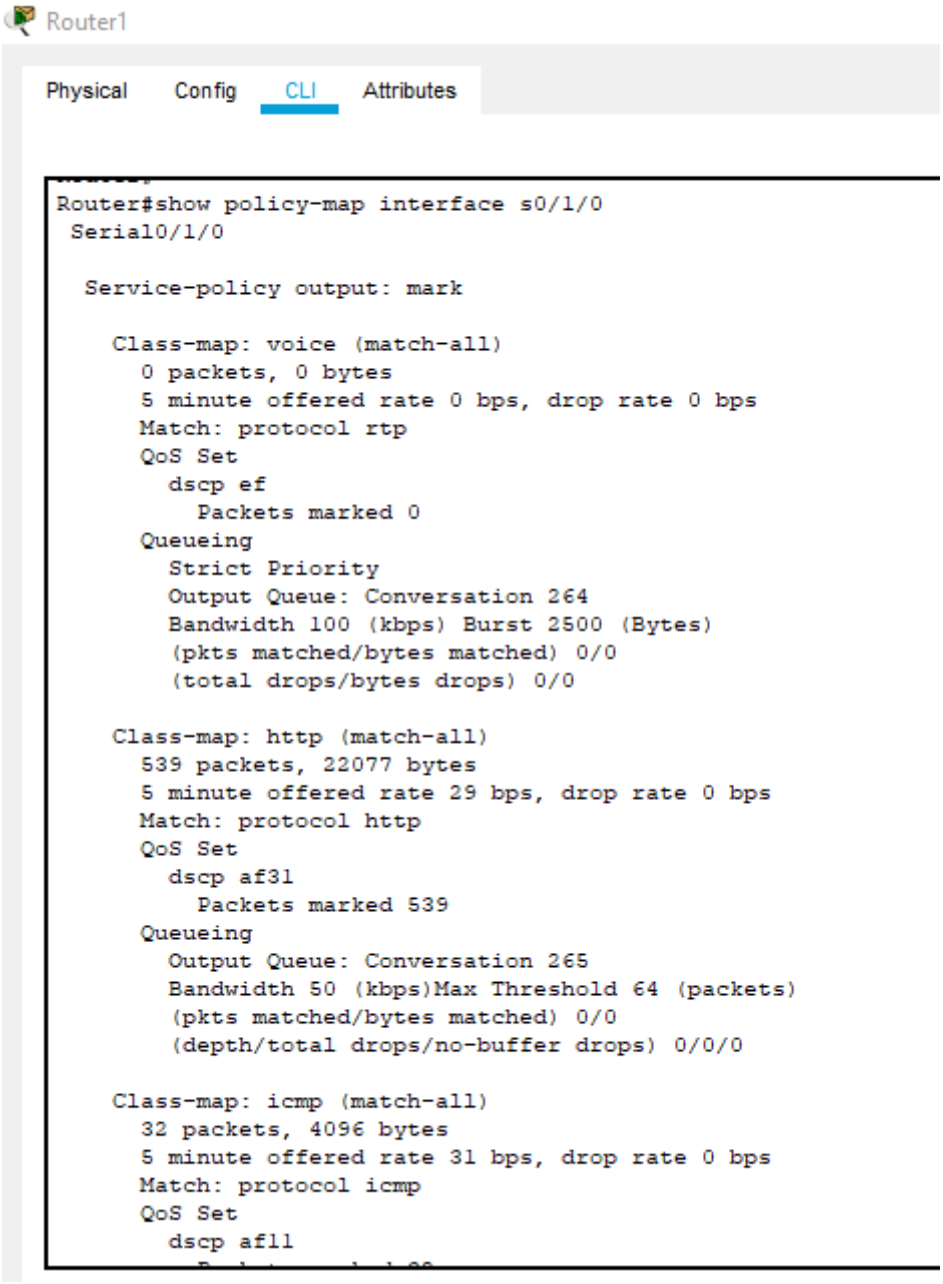
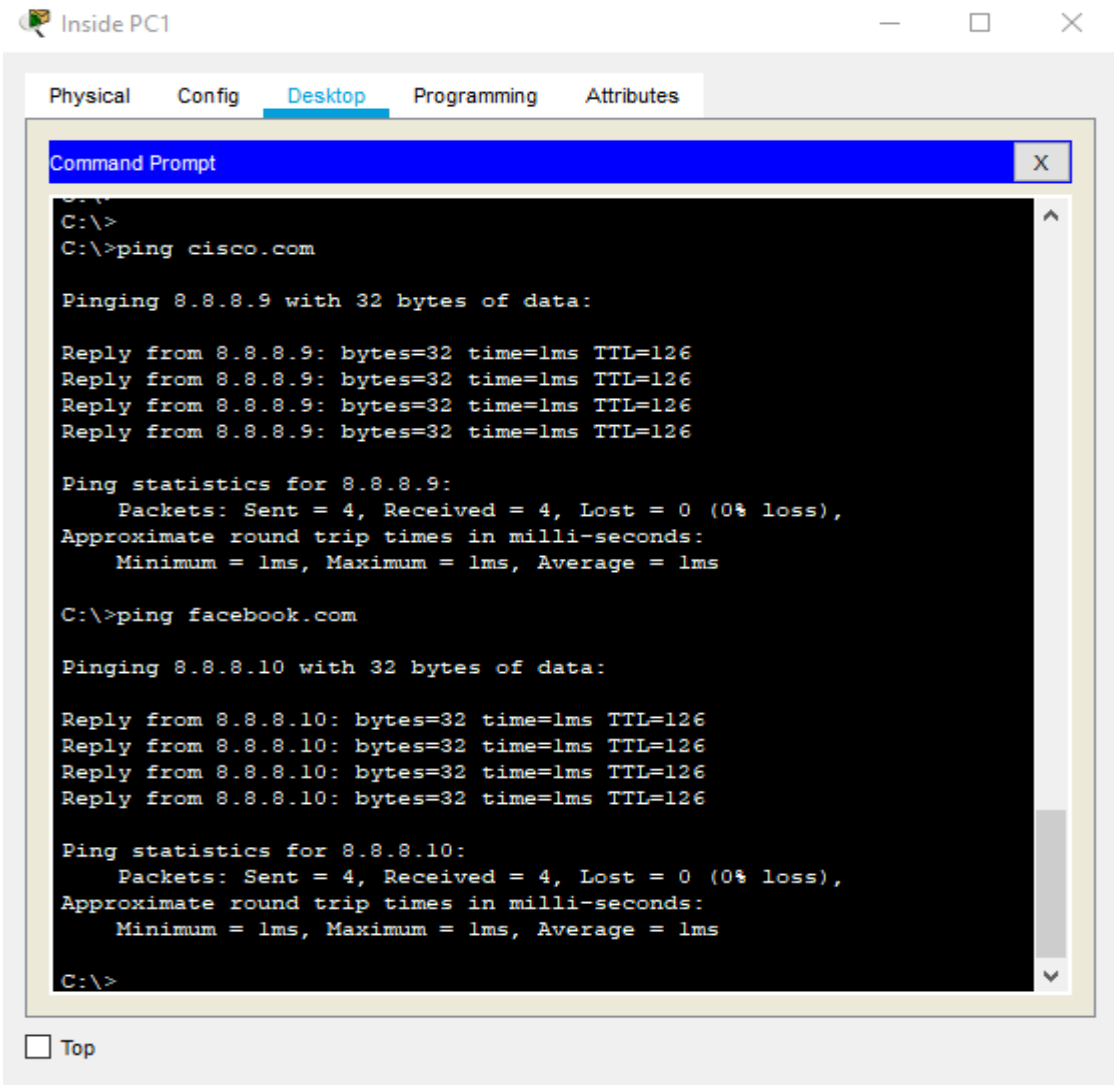
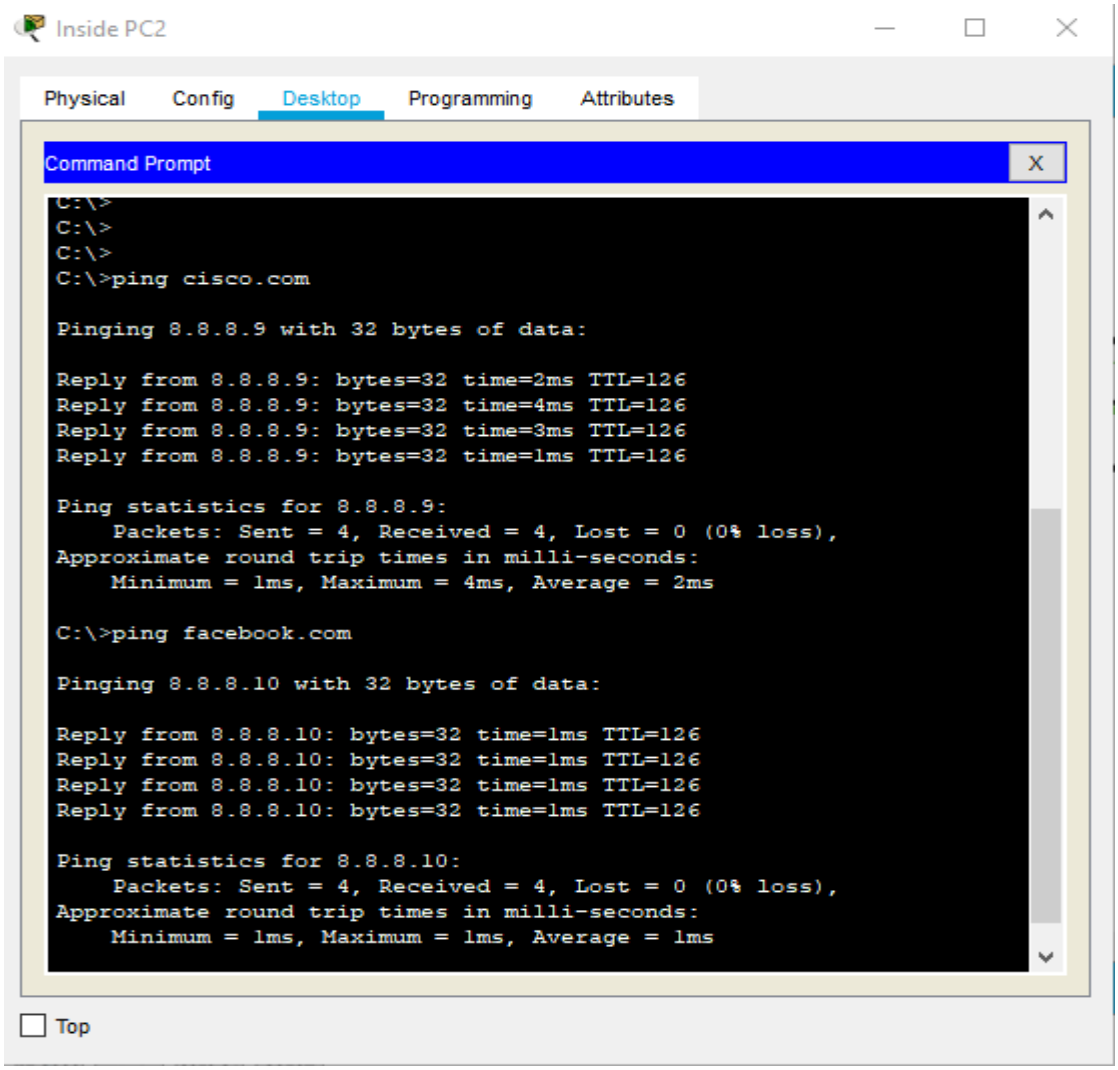


Figure2: After connecting cisco.com

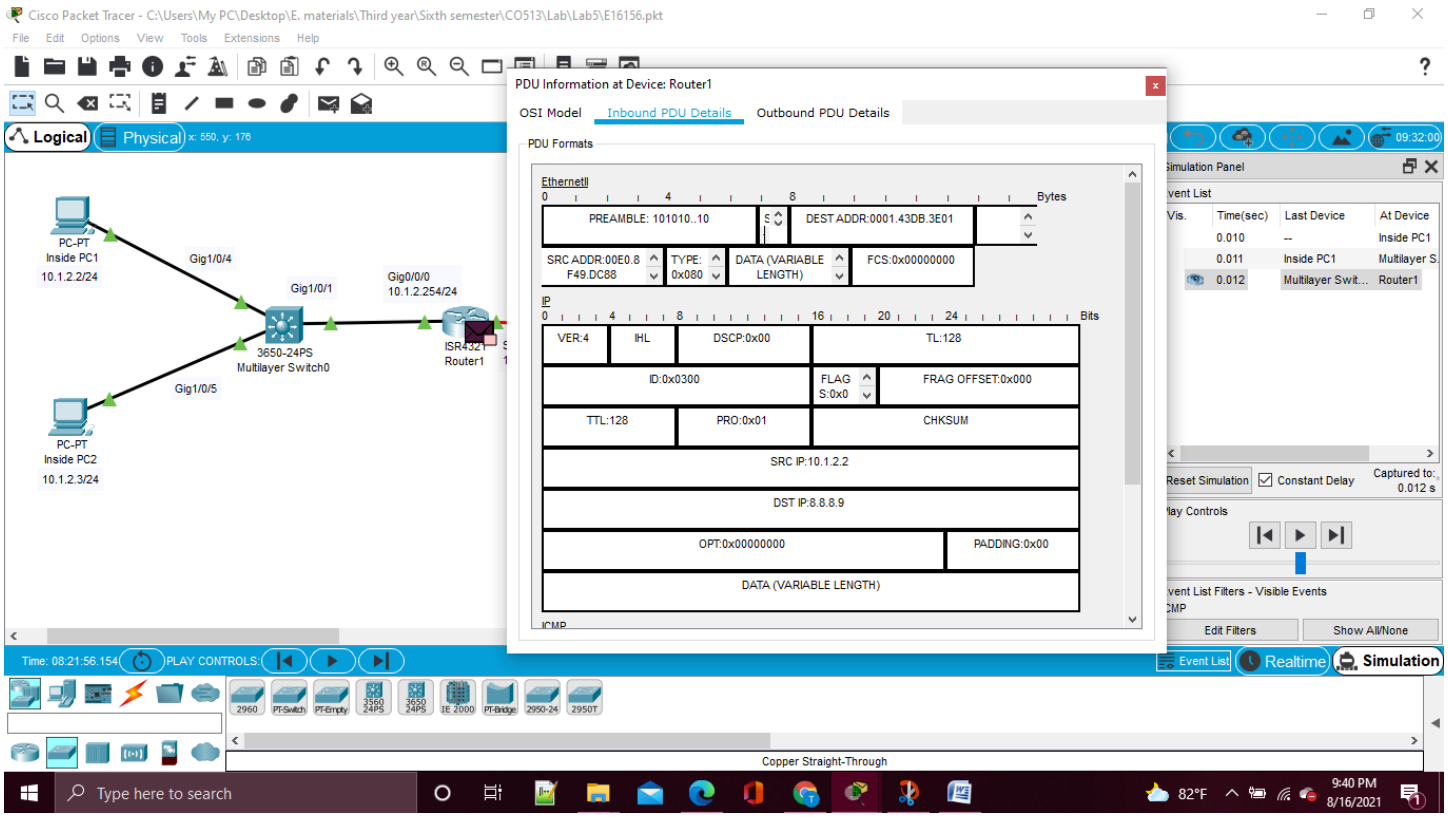
If we consider above two figures, we can see http policy matches have increased.

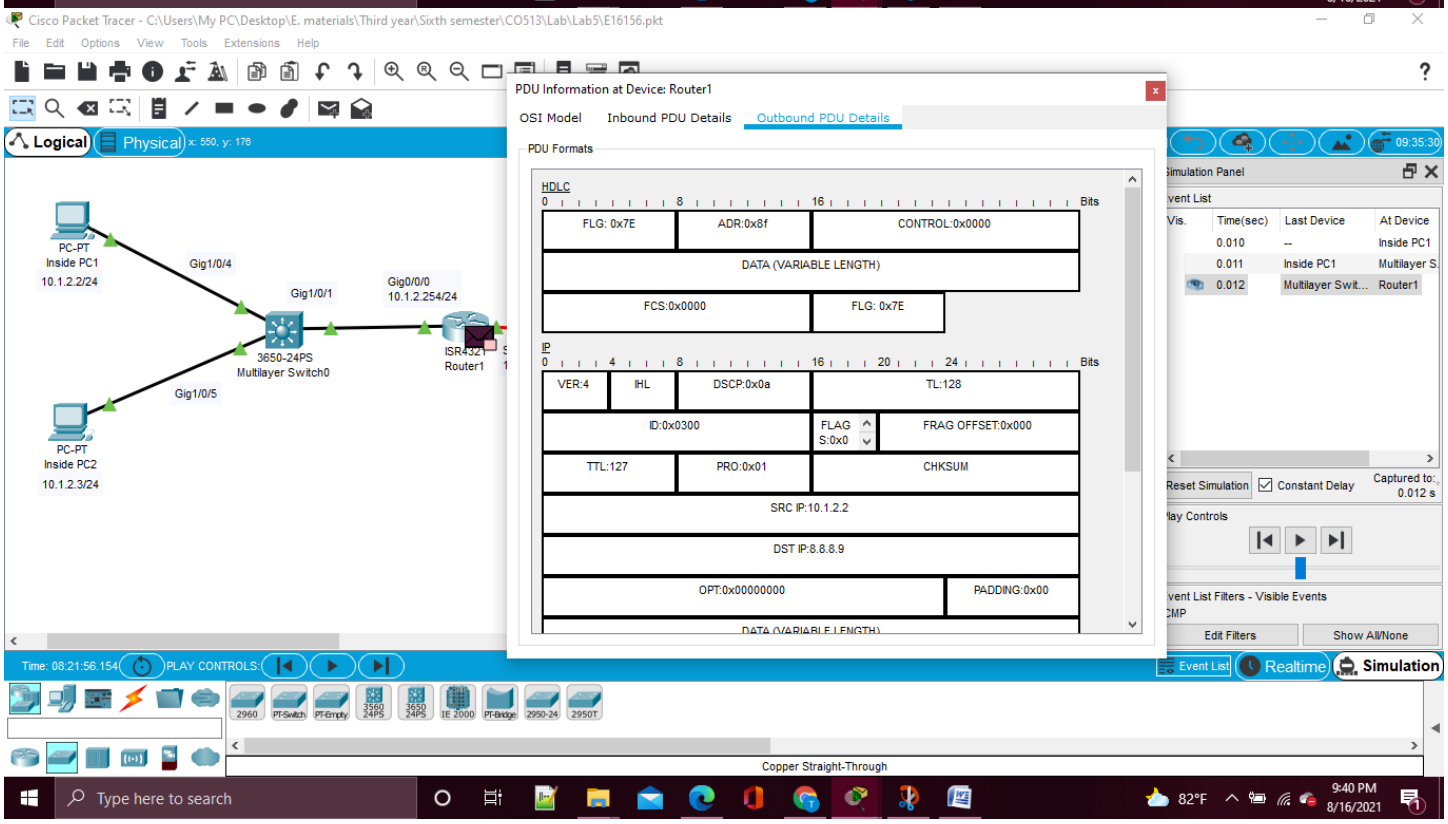
b. Ping cisco.com from PC1 and PC2 - Verify matches in policy.

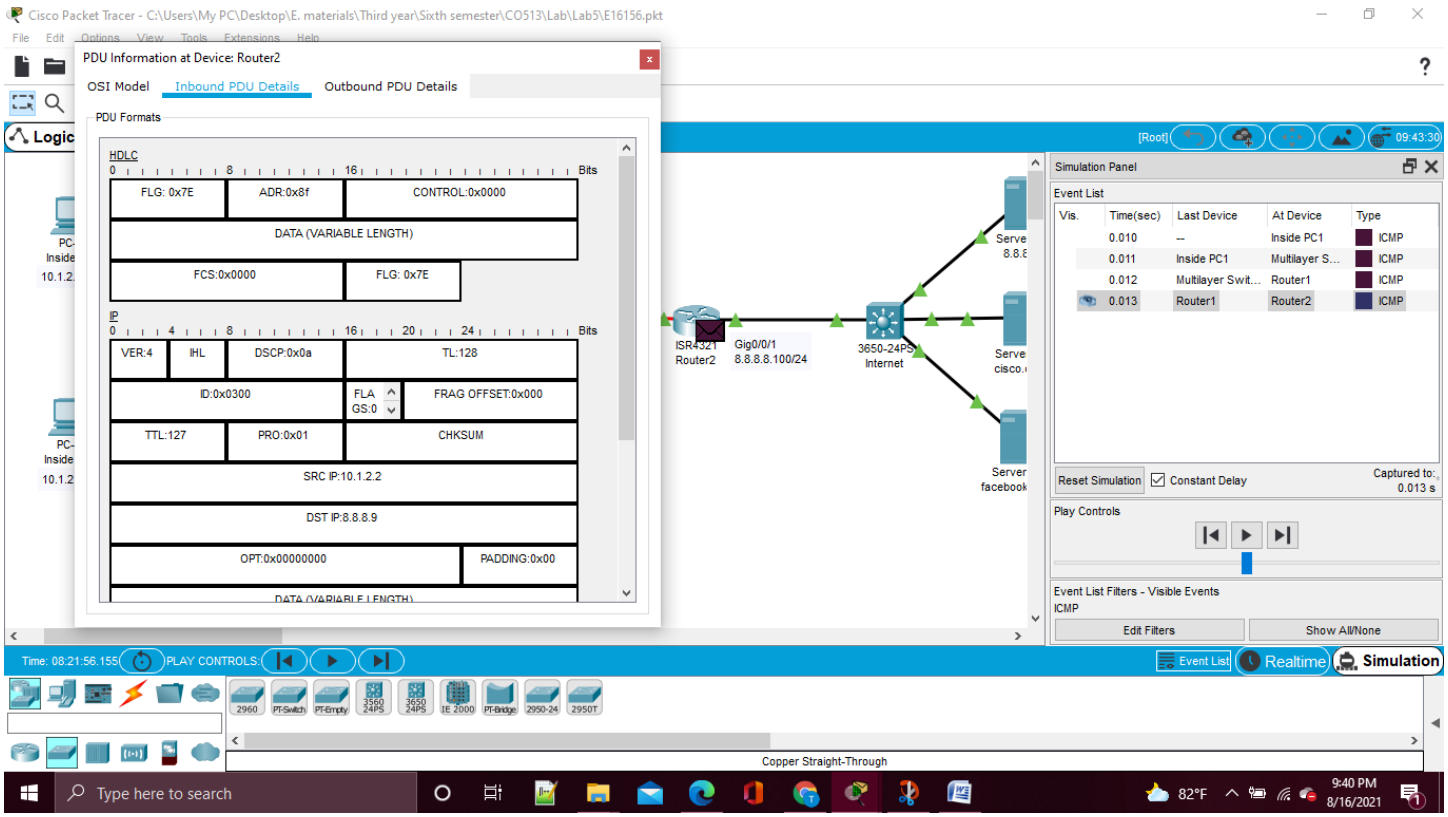


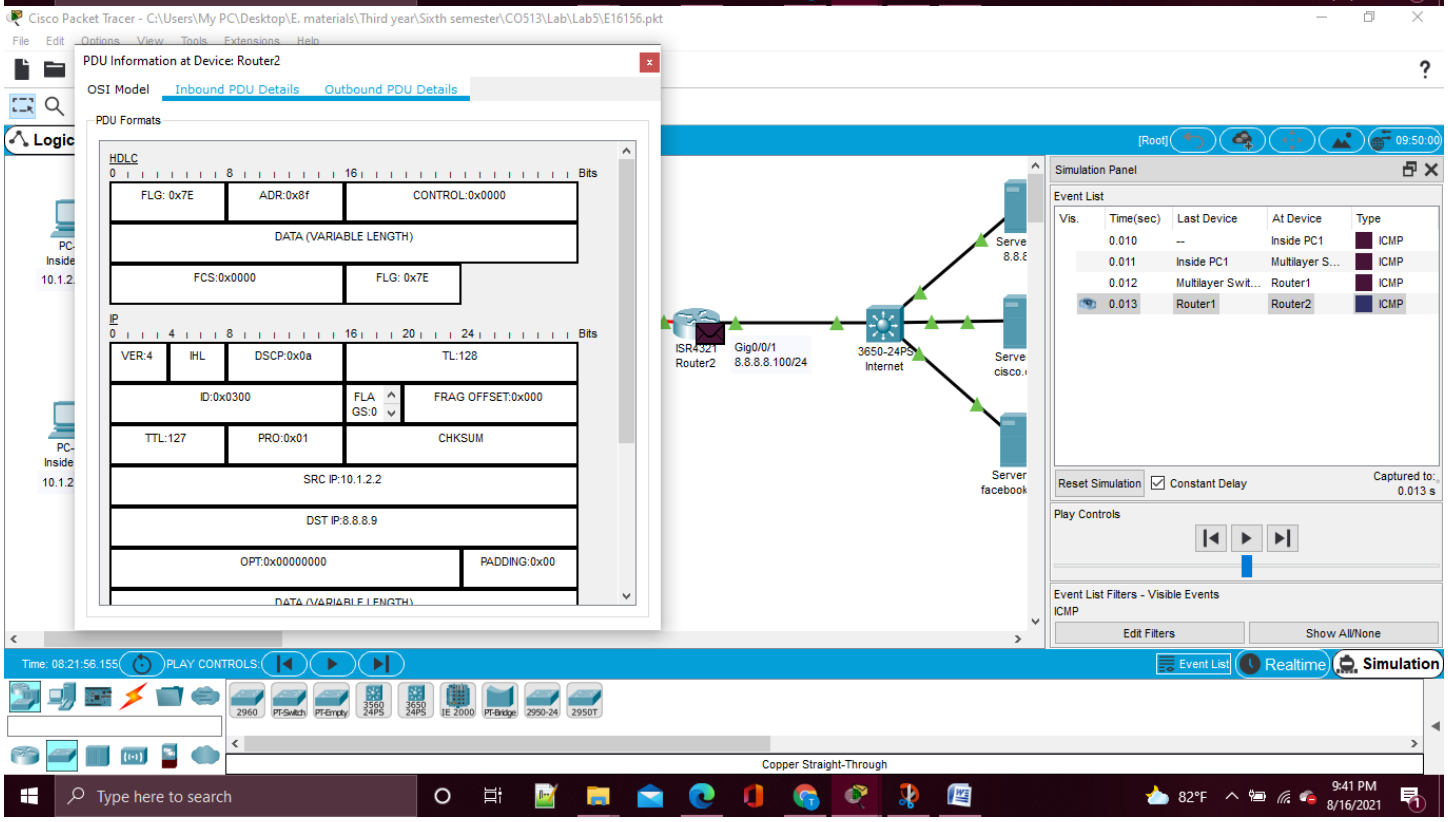


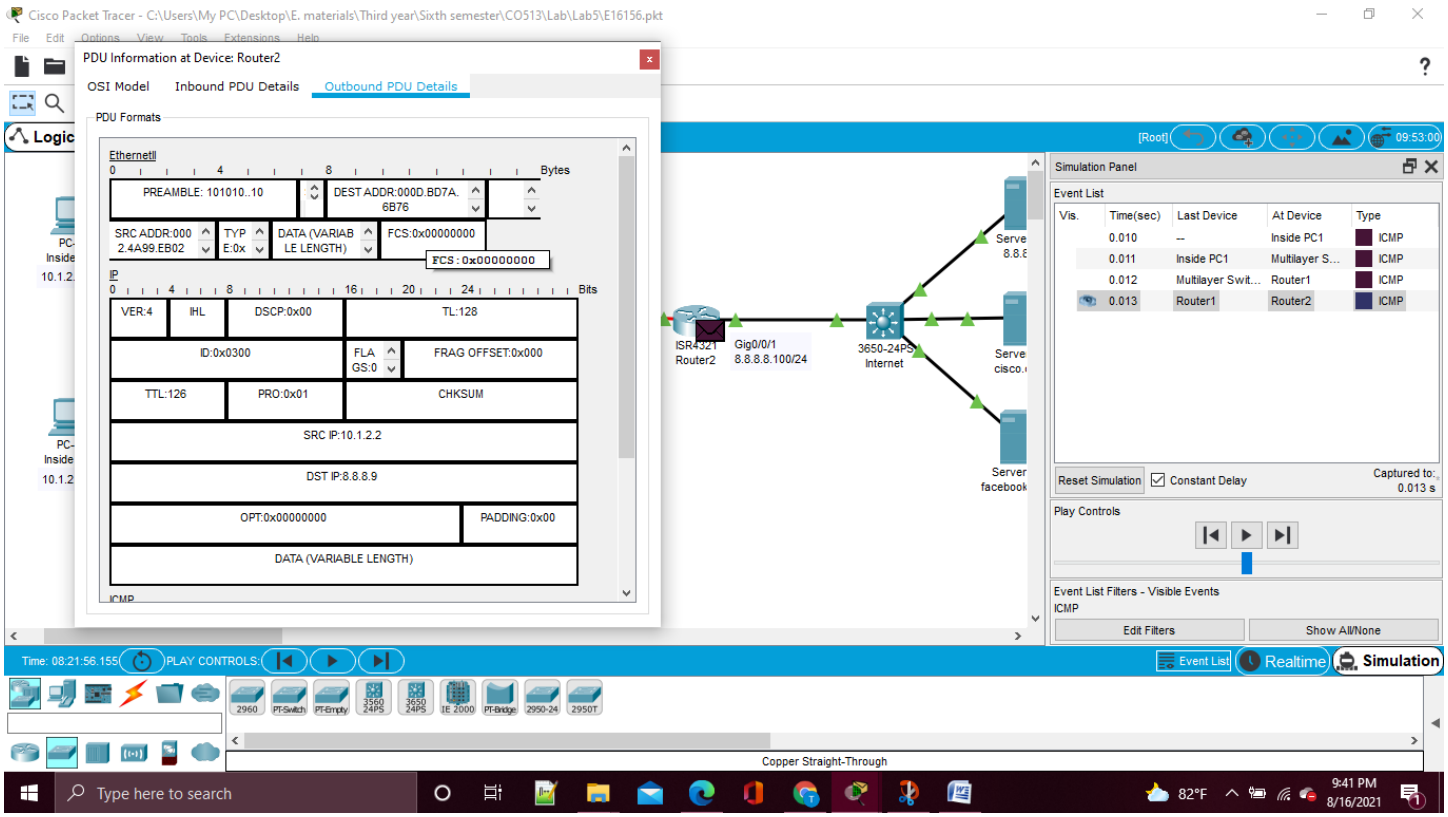
c. **Use simulation mode to view DSCP and IP Precedence Packet markings**.

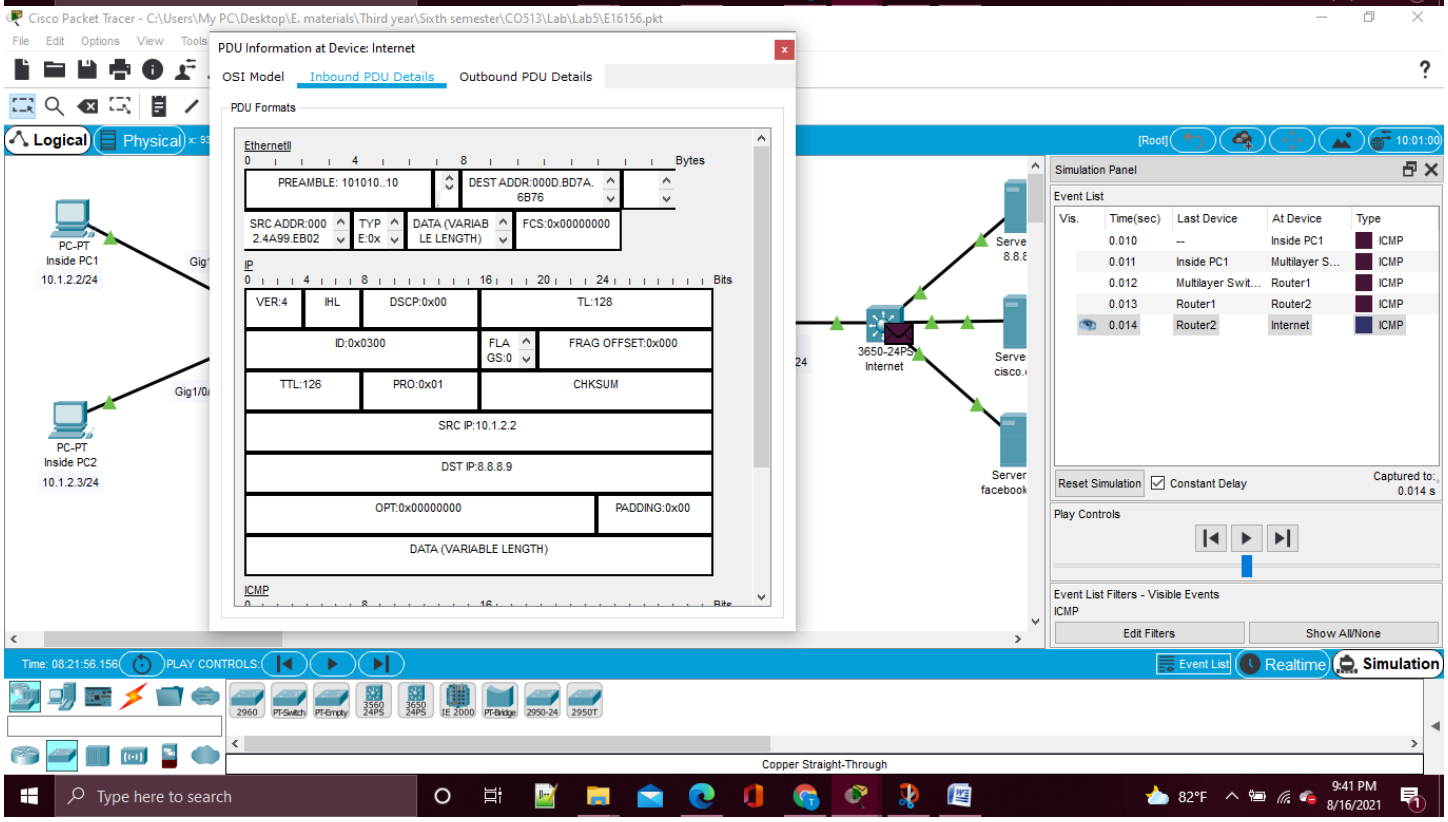

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PDU Information at Device: Router1
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
Ethernetll
PREAMBLE: 101010..10
DEST ADDR:0001.43DB.3E01
SRC ADDR:00E0.8F49.DC88
TYPE: 0x080
DATA (VARIABLE LENGTH)
FCS:0x00000000
IP
VER:4
IHL
DSCP:0x00
TL:128
ID:0x0300
FLAG S:0x0
FRAG OFFSET:0x000
TTL:128
PRO:0x01
CHKSUM
SRC IP:10.1.2.2
DST IP:8.8.8.9
OPT:0x00000000
PADDING:0x00
DATA (VARIABLE LENGTH)
PC-PT Inside PC1 10.1.2.2/24
Gig1/0/4
Gig1/0/1
Gig0/0/0 10.1.2.254/24
3650-24PS Multilayer Switch0
ISR4321 Router1
Gig1/0/5
PC-PT Inside PC2 10.1.2.3/24
Logical
Physical
Copper Straight-Through
Type here to search
82°F
9:40 PM
8/16/2021

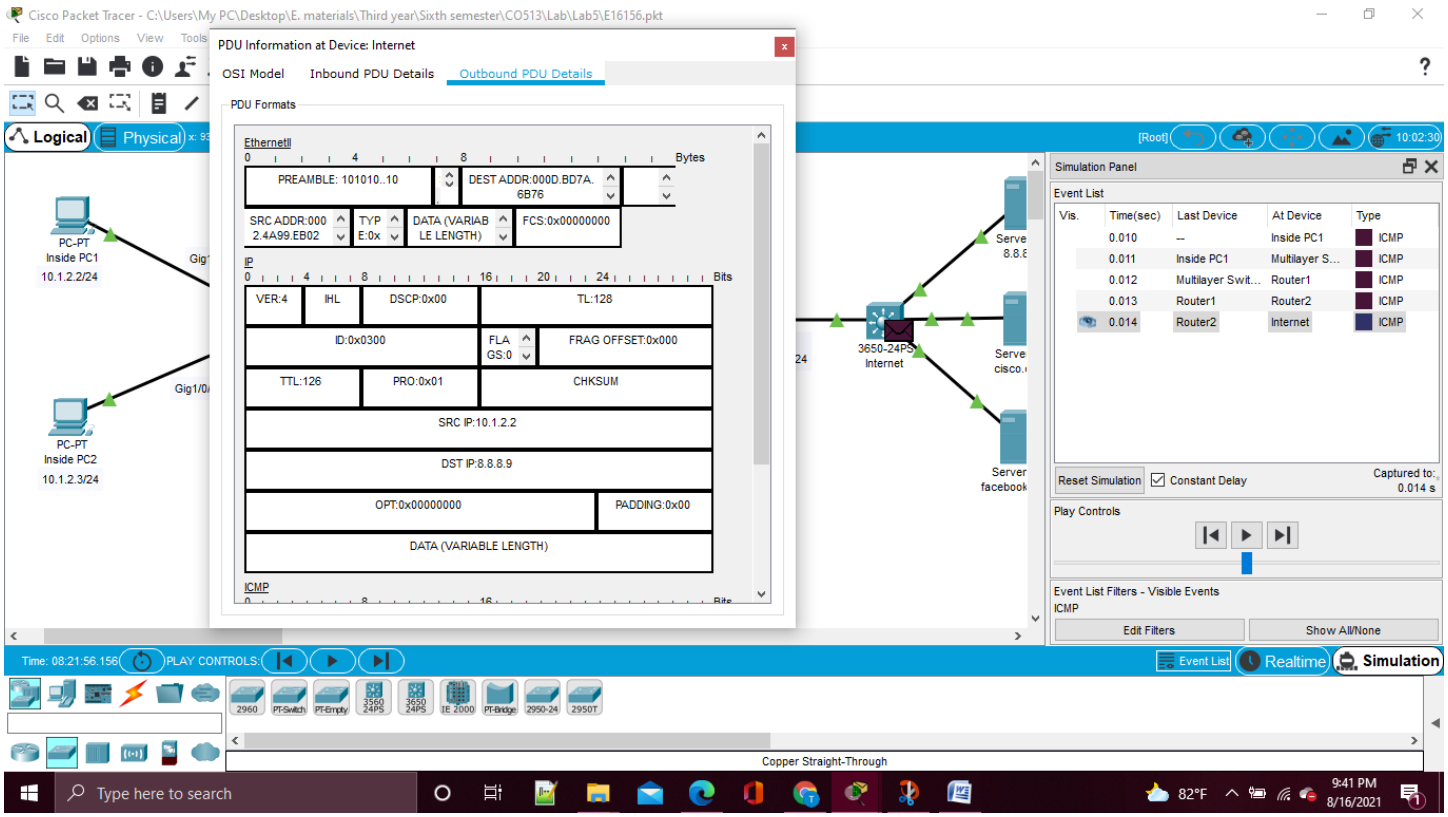

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PDU Information at Device: Router1
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
HDLC
FLG: 0x7E
ADR:0x8f
CONTROL:0x0000
DATA (VARIABLE LENGTH)
FCS:0x0000
FLG: 0x7E
IP
VER:4
IHL
DSCP:0x0a
TL:128
ID:0x0300
FLAG S:0x0
FRAG OFFSET:0x000
TTL:127
PRO:0x01
CHKSUM
SRC IP:10.1.2.2
DST IP:8.8.8.9
OPT:0x00000000
PADDING:0x00
PC-PT Inside PC1 10.1.2.2/24
Gig1/0/4
Gig1/0/1
Gig0/0/0 10.1.2.254/24
3650-24PS Multilayer Switch0
ISR4321 Router1
Gig1/0/5
PC-PT Inside PC2 10.1.2.3/24
Logical
Physical
Copper Straight-Through
Type here to search
82°F
9:40 PM
8/16/2021

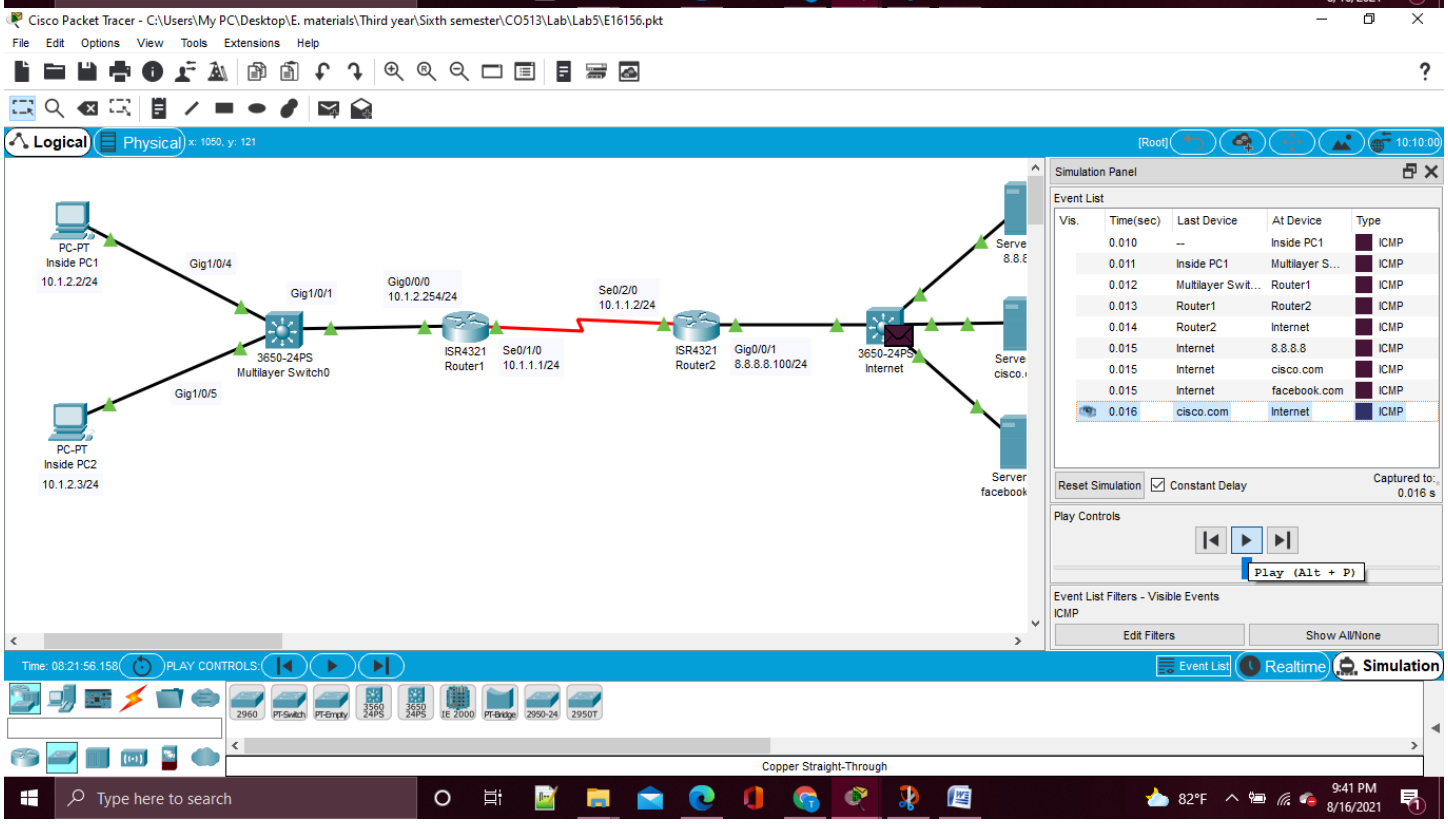

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PDU Information at Device: Router2
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
HDLC
0 8 16 Bits
FLG: 0x7E
ADR:0x8f
CONTROL:0x0000
DATA (VARIABLE LENGTH)
FCS:0x0000
FLG: 0x7E
IP
0 4 8 16 20 24 Bits
VER:4
IHL
DSCP:0x0a
TL:128
ID:0x0300
FLA GS:0
FRAG OFFSET:0x000
TTL:127
PRO:0x01
CHKSUM
SRC IP:10.1.2.2
DST IP:8.8.8.9
OPT:0x00000000
PADDING:0x00
DATA (VARIABLE LENGTH)
ISR4321 Router2
Gig0/0/1 8.8.8.8.100/24
3650-24PS Internet
Server facebook
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.010 -- Inside PC1 ICMP
0.011 Inside PC1 Multilayer S... ICMP
0.012 Multilayer Swit... Router1 ICMP
0.013 Router1 Router2 ICMP
Reset Simulation
Constant Delay
Captured to: 0.013 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
Time: 08:21:56.155
PLAY CONTROLS:
Event List
Realtime
Simulation
Copper Straight-Through
Type here to search
82°F
9:40 PM
8/16/2021

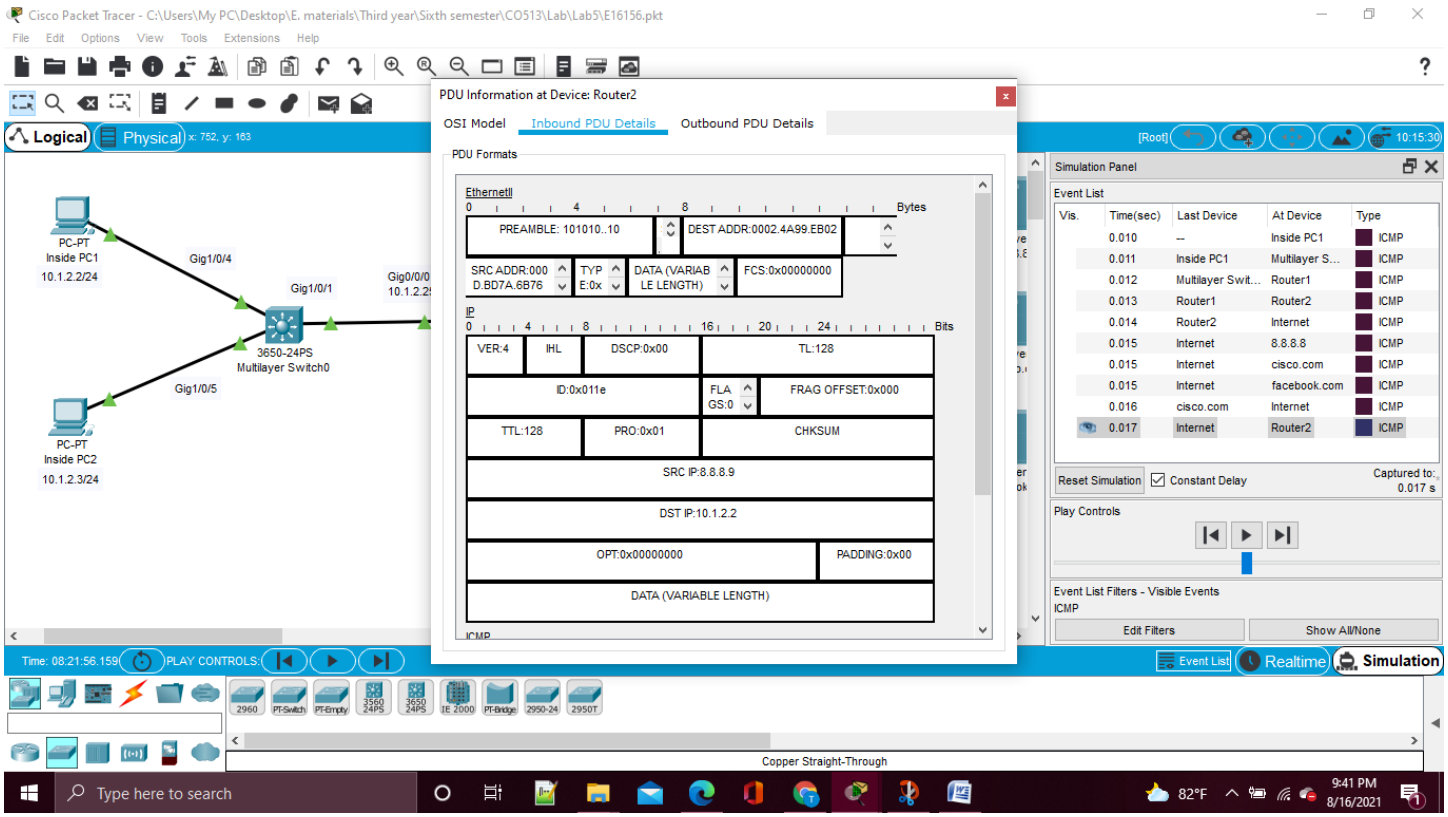

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PDU Information at Device: Router2
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
HDLC
0 8 16 Bits
FLG: 0x7E
ADR:0x8f
CONTROL:0x0000
DATA (VARIABLE LENGTH)
FCS:0x0000
FLG: 0x7E
IP
0 4 8 16 20 24 Bits
VER:4
IHL
DSCP:0x0a
TL:128
ID:0x0300
FLA GS:0
FRAG OFFSET:0x000
TTL:127
PRO:0x01
CHKSUM
SRC IP:10.1.2.2
DST IP:8.8.8.9
OPT:0x00000000
PADDING:0x00
DATA (VARIABLE LENGTH)
ISR4321 Router2
Gig0/0/1 8.8.8.8.100/24
3650-24PS Internet
Server facebook
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.010 -- Inside PC1 ICMP
0.011 Inside PC1 Multilayer S... ICMP
0.012 Multilayer Swit... Router1 ICMP
0.013 Router1 Router2 ICMP
Reset Simulation
Constant Delay
Captured to: 0.013 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
Time: 08:21:56.155
PLAY CONTROLS:
Event List
Realtime
Simulation
Copper Straight-Through
Type here to search
82°F
9:41 PM
8/16/2021

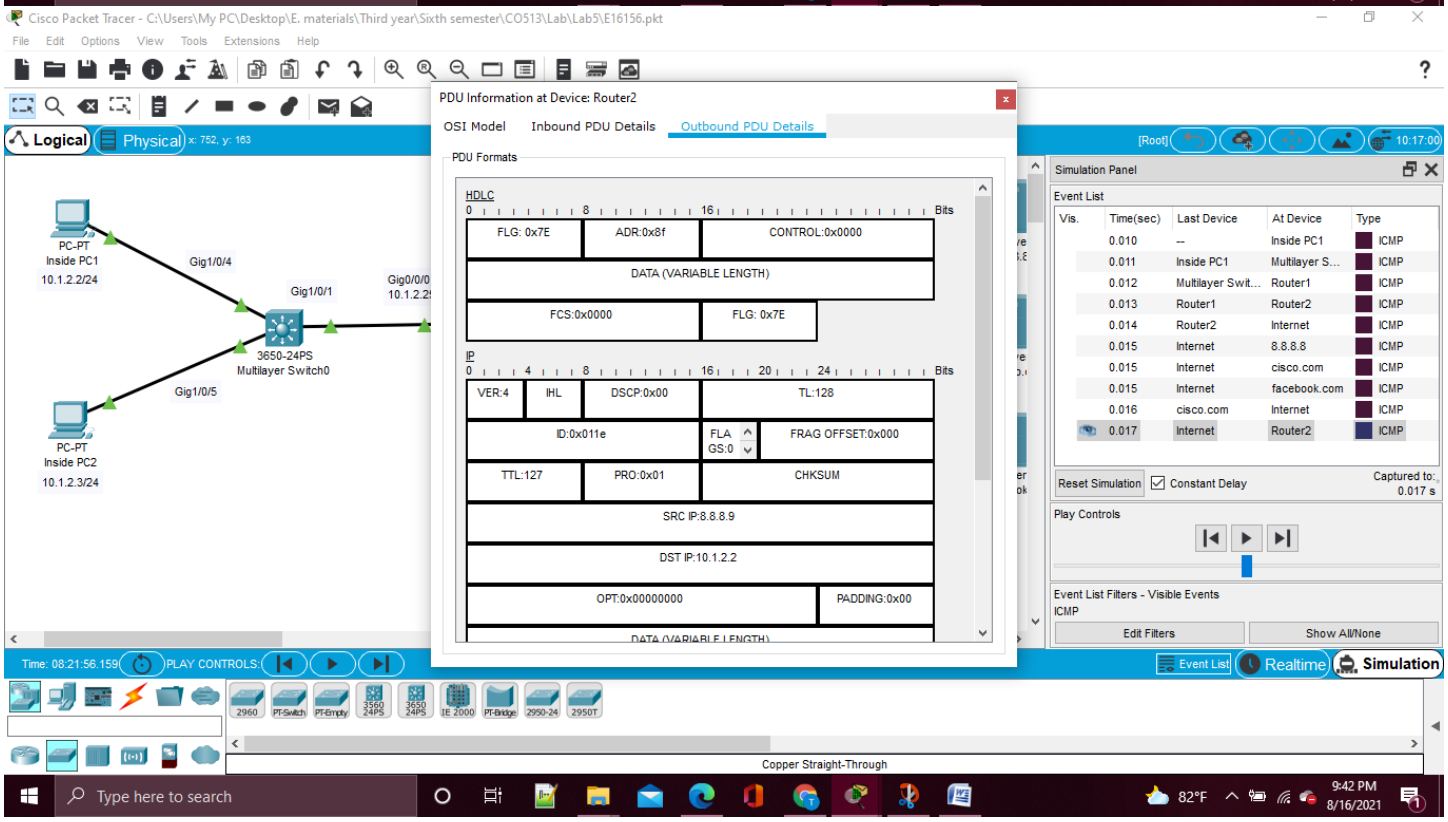

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PDU Information at Device: Router2
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
Ethernetll
Bytes
PREAMBLE: 101010..10
DEST ADDR:000D.BD7A.6B76
SRC ADDR:000 2.4A99.EB02
TYP E:0x
DATA (VARIAB LE LENGTH)
FCS:0x00000000
FCS : 0x00000000
IP
Bits
VER:4
IHL
DSCP:0x00
TL:128
ID:0x0300
FLA GS:0
FRAG OFFSET:0x000
TTL:126
PRO:0x01
CHKSUM
SRC IP:10.1.2.2
DST IP:8.8.8.9
OPT:0x00000000
PADDING:0x00
DATA (VARIABLE LENGTH)
ICMP
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.010 -- Inside PC1 ICMP
0.011 Inside PC1 Multilayer S... ICMP
0.012 Multilayer Swit... Router1 ICMP
0.013 Router1 Router2 ICMP
Reset Simulation
Constant Delay
Captured to: 0.013 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
ISR4321 Router2
Gig0/0/1 8.8.8.8.100/24
3650-24PS Internet
Server facebook
Copper Straight-Through
Time: 08:21:56.155
PLAY CONTROLS:
Event List
Realtime
Simulation
Type here to search
82°F
9:41 PM 8/16/2021

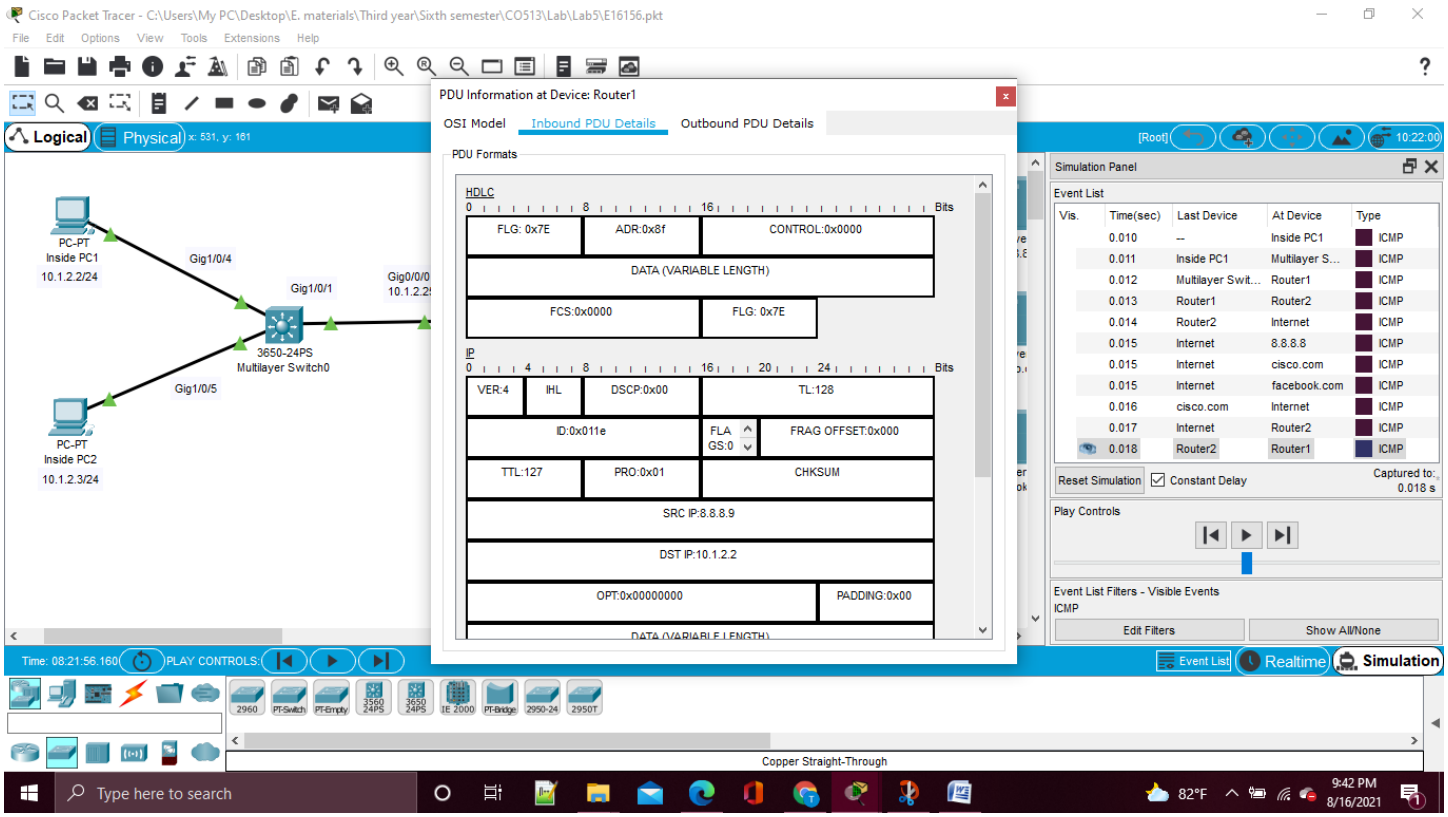

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PDU Information at Device: Internet
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
Ethernetll
Bytes
PREAMBLE: 101010..10
DEST ADDR:000D.BD7A.6B76
SRC ADDR:000 2.4A99.EB02
TYP E:0x
DATA (VARIAB LE LENGTH)
FCS:0x00000000
IP
Bits
VER:4
IHL
DSCP:0x00
TL:128
ID:0x0300
FLA GS:0
FRAG OFFSET:0x000
TTL:126
PRO:0x01
CHKSUM
SRC IP:10.1.2.2
DST IP:8.8.8.9
OPT:0x00000000
PADDING:0x00
DATA (VARIABLE LENGTH)
ICMP
Logical
Physical
PC-PT Inside PC1 10.1.2.2/24
PC-PT Inside PC2 10.1.2.3/24
Simulation Panel
Event List
Vis.
Time(sec)
Last Device
At Device
Type
0.010 -- Inside PC1 ICMP
0.011 Inside PC1 Multilayer S... ICMP
0.012 Multilayer Swit... Router1 ICMP
0.013 Router1 Router2 ICMP
0.014 Router2 Internet ICMP
Reset Simulation
Constant Delay
Captured to: 0.014 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
3650-24PS Internet
Server facebook
Copper Straight-Through
Time: 08:21:56.156
PLAY CONTROLS:
Event List
Realtime
Simulation
Type here to search
82°F
9:41 PM 8/16/2021

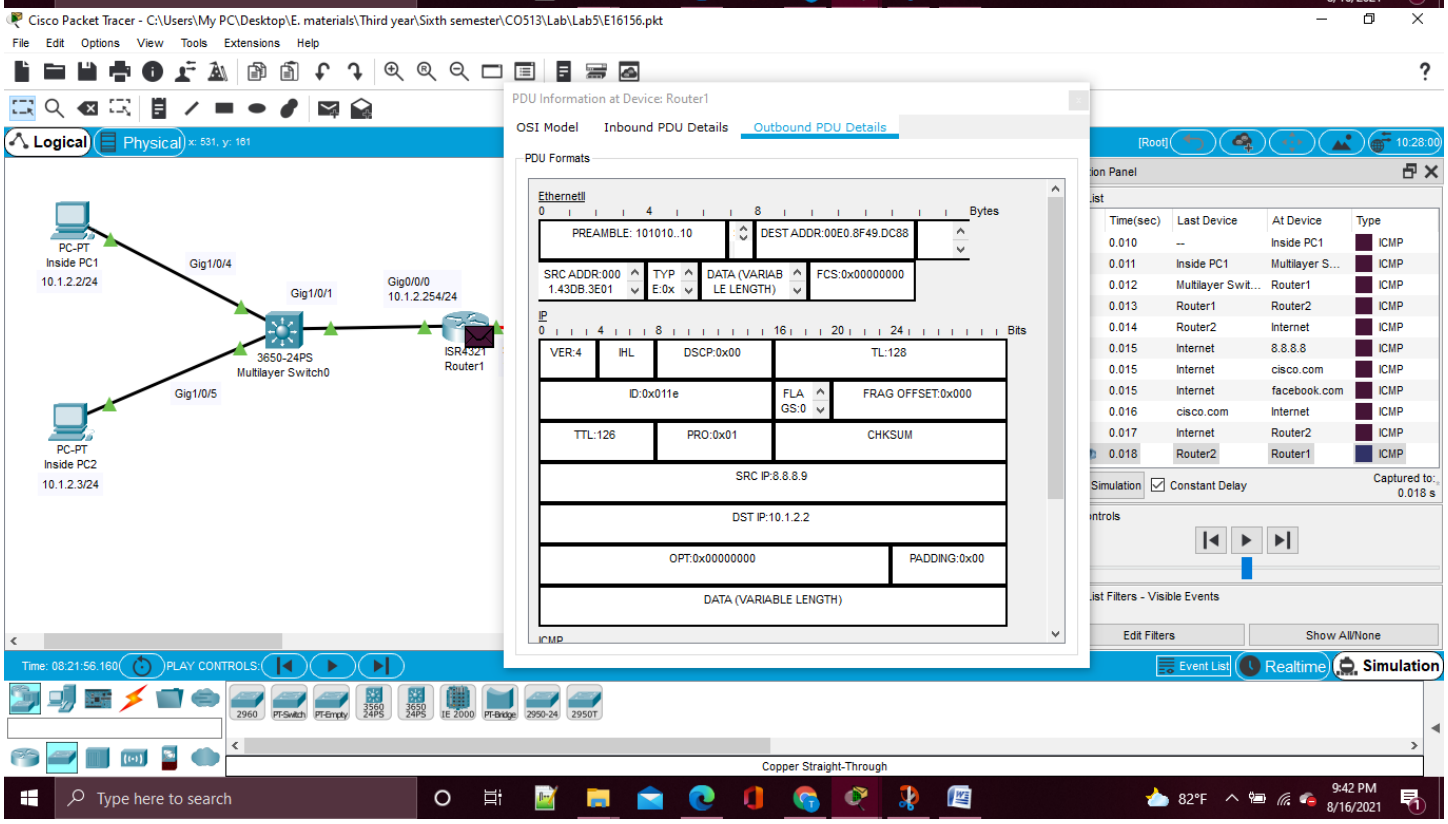

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PDU Information at Device: Internet
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
Ethernetll
PREAMBLE: 101010..10
DEST ADDR:000D.BD7A.6B76
SRC ADDR:000 2.4A99.EB02
TYP E:0x
DATA (VARIABLE LENGTH)
FCS:0x00000000
IP
VER:4
IHL
DSCP:0x00
TL:128
ID:0x0300
FLAGS:0
FRAG OFFSET:0x000
TTL:126
PRO:0x01
CHKSUM
SRC IP:10.1.2.2
DST IP:8.8.8.9
OPT:0x00000000
PADDING:0x00
DATA (VARIABLE LENGTH)
ICMP
PC-PT Inside PC1 10.1.2.2/24
PC-PT Inside PC2 10.1.2.3/24
3650-24PS Internet
Server facebook
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.010 -- Inside PC1 ICMP
0.011 Inside PC1 Multilayer S... ICMP
0.012 Multilayer Swit... Router1 ICMP
0.013 Router1 Router2 ICMP
0.014 Router2 Internet ICMP
Reset Simulation
Constant Delay
Captured to: 0.014 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
Time: 08:21:56.156
PLAY CONTROLS:
Realtime
Simulation
Copper Straight-Through
Type here to search
82°F
9:41 PM
8/16/2021

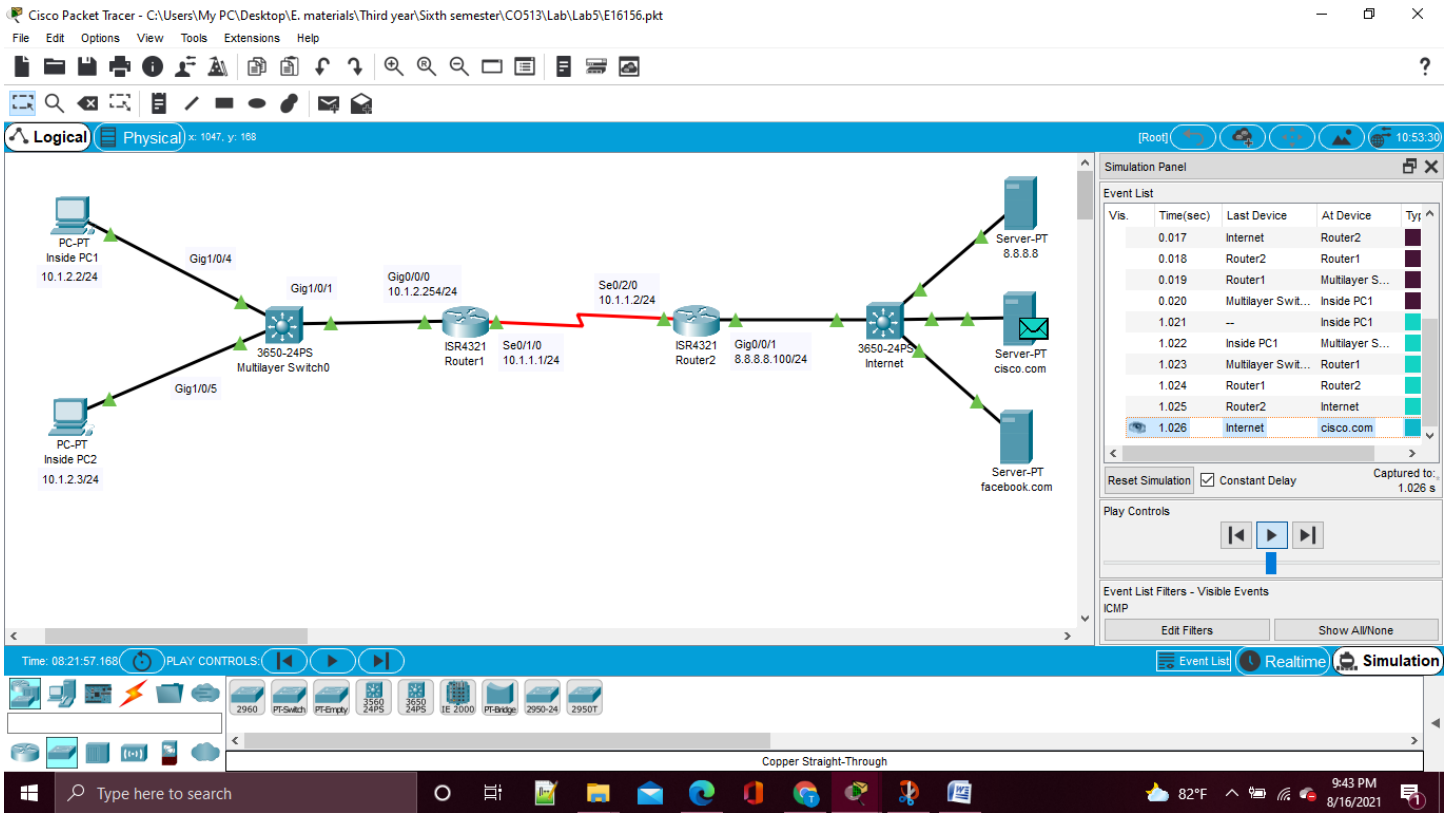

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PC-PT Inside PC1 10.1.2.2/24
PC-PT Inside PC2 10.1.2.3/24
Gig1/0/4
Gig1/0/5
Gig1/0/1
Gig0/0/0 10.1.2.254/24
3650-24PS Multilayer Switch0
ISR4321 Router1
Se0/1/0 10.1.1.1/24
Se0/2/0 10.1.1.2/24
ISR4321 Router2
Gig0/0/1 8.8.8.8.100/24
3650-24PS Internet
Server facebook
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
0.010 -- Inside PC1 ICMP
0.011 Inside PC1 Multilayer S... ICMP
0.012 Multilayer Swit... Router1 ICMP
0.013 Router1 Router2 ICMP
0.014 Router2 Internet ICMP
0.015 Internet 8.8.8.8 ICMP
0.015 Internet cisco.com ICMP
0.015 Internet facebook.com ICMP
0.016 cisco.com Internet ICMP
Reset Simulation
Constant Delay
Captured to: 0.016 s
Play Controls
Play (Alt + P)
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
Time: 08:21:56.158
PLAY CONTROLS:
Realtime
Simulation
Copper Straight-Through
Type here to search
82°F
9:41 PM
8/16/2021

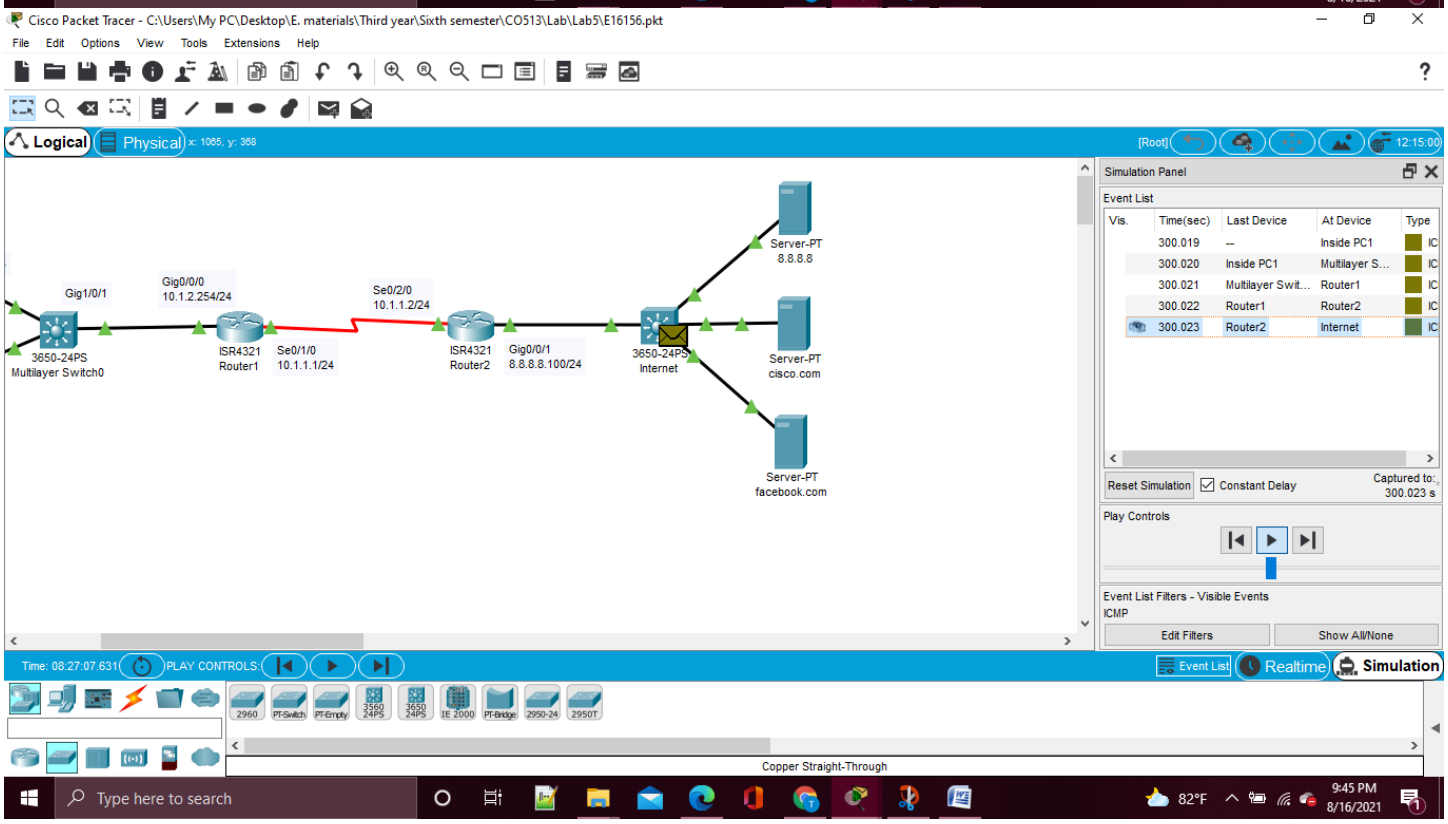

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PDU Information at Device: Router2
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
EthernetII
PREAMBLE: 101010..10
DEST ADDR:0002.4A99.EB02
SRC ADDR:000D.BD7A.6B76
TYP E:0x
DATA (VARIABLE LENGTH)
FCS:0x00000000
IP
VER:4
IHL
DSCP:0x00
TL:128
ID:0x011e
FLA GS:0
FRAG OFFSET:0x000
TTL:128
PRO:0x01
CHKSUM
SRC IP:8.8.8.9
DST IP:10.1.2.2
OPT:0x00000000
PADDING:0x00
DATA (VARIABLE LENGTH)
PC-PT Inside PC1 10.1.2.2/24
PC-PT Inside PC2 10.1.2.3/24
3650-24PS Multilayer Switch0
Gig1/0/4
Gig1/0/1
Gig1/0/5
Simulation Panel
Event List
Reset Simulation
Constant Delay
Play Controls
Event List Filters - Visible Events
Edit Filters
Show All/None
Copper Straight-Through
Type here to search
9:41 PM
8/16/2021

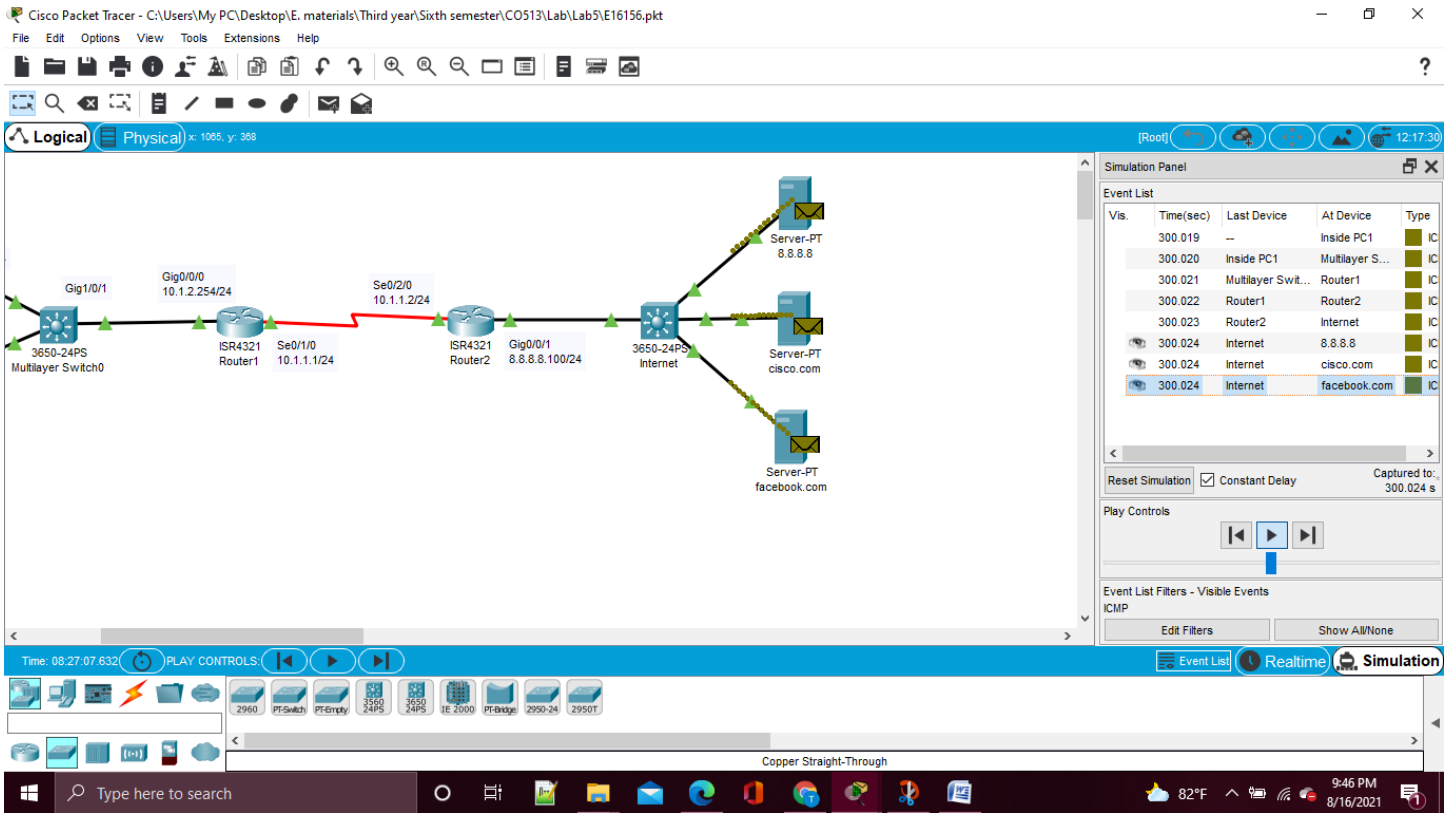

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
PDU Information at Device: Router2
OSI Model
Inbound PDU Details
Outbound PDU Details
PDU Formats
HDLC
FLG: 0x7E
ADR:0x8f
CONTROL:0x0000
DATA (VARIABLE LENGTH)
FCS:0x0000
FLG: 0x7E
IP
VER:4
IHL
DSCP:0x00
TL:128
ID:0x011e
FLA GS:0
FRAG OFFSET:0x000
TTL:127
PRO:0x01
CHKSUM
SRC IP:8.8.8.9
DST IP:10.1.2.2
OPT:0x00000000
PADDING:0x00
PC-PT Inside PC1 10.1.2.2/24
PC-PT Inside PC2 10.1.2.3/24
3650-24PS Multilayer Switch0
Gig1/0/4
Gig1/0/1
Gig1/0/5
Simulation Panel
Event List
Reset Simulation
Constant Delay
Play Controls
Event List Filters - Visible Events
Edit Filters
Show All/None
Copper Straight-Through
Type here to search
9:42 PM
8/16/2021

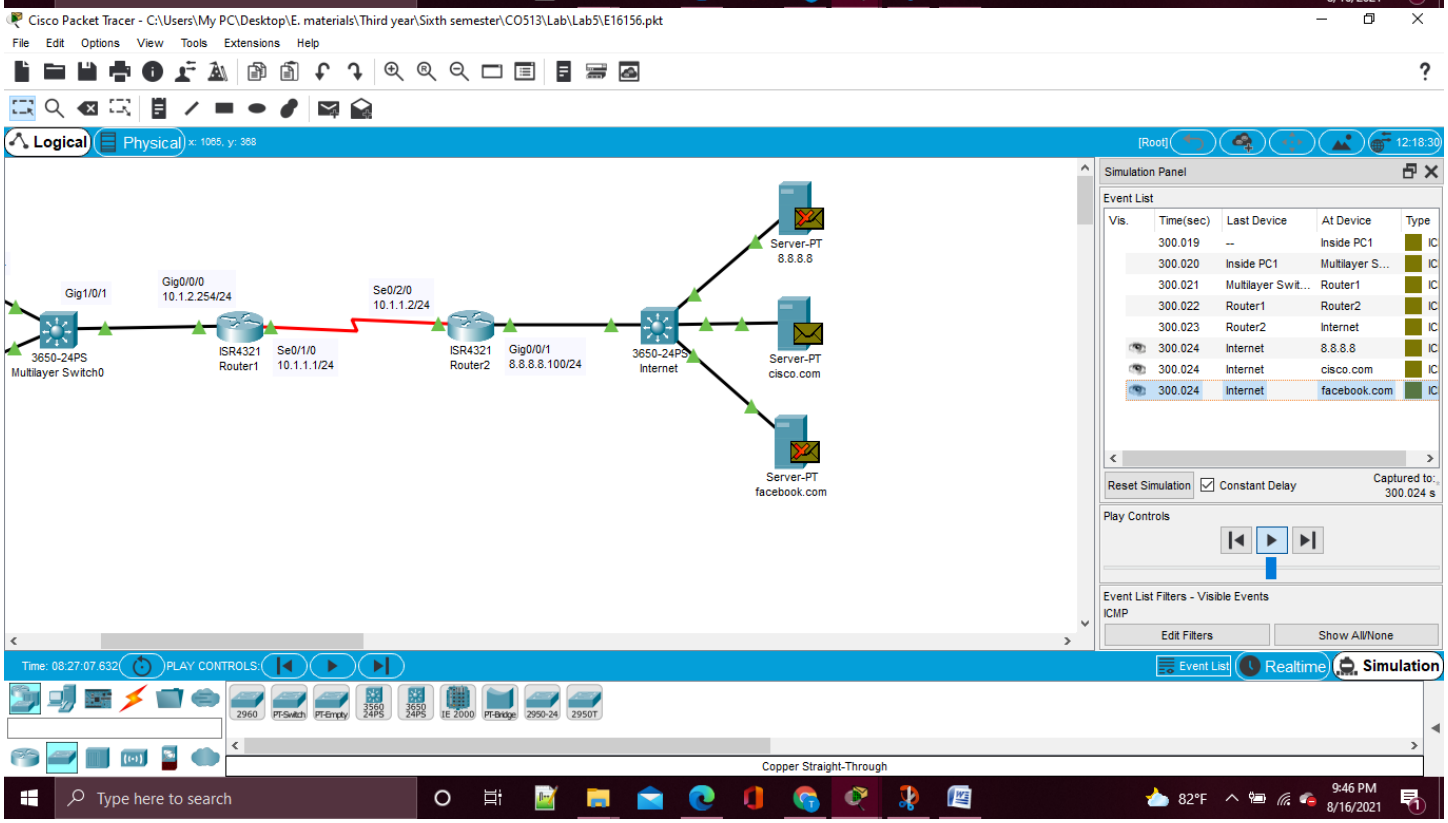

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
File Edit Options View Tools Extensions Help
Logical Physical
PDU Information at Device: Router1
OSI Model Inbound PDU Details Outbound PDU Details
PDU Formats
HDLC
FLG: 0x7E ADR:0x8f CONTROL:0x0000
DATA (VARIABLE LENGTH)
FCS:0x0000 FLG: 0x7E
IP
VER:4 IHL DSCP:0x00 TL:128
ID:0x011e FLA GS:0 FRAG OFFSET:0x000
TTL:127 PRO:0x01 CHKSUM
SRC IP:8.8.8.9
DST IP:10.1.2.2
OPT:0x00000000 PADDING:0x00
PC-PT Inside PC1 10.1.2.2/24
PC-PT Inside PC2 10.1.2.3/24
3650-24PS Multilayer Switch0
Gig1/0/4
Gig1/0/1
Gig1/0/5
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
Reset Simulation Constant Delay
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters Show All/None
Time: 08:21:56.160 PLAY CONTROLS:
Event List Realtime Simulation
Copper Straight-Through
Type here to search
82°F
9:42 PM 8/16/2021

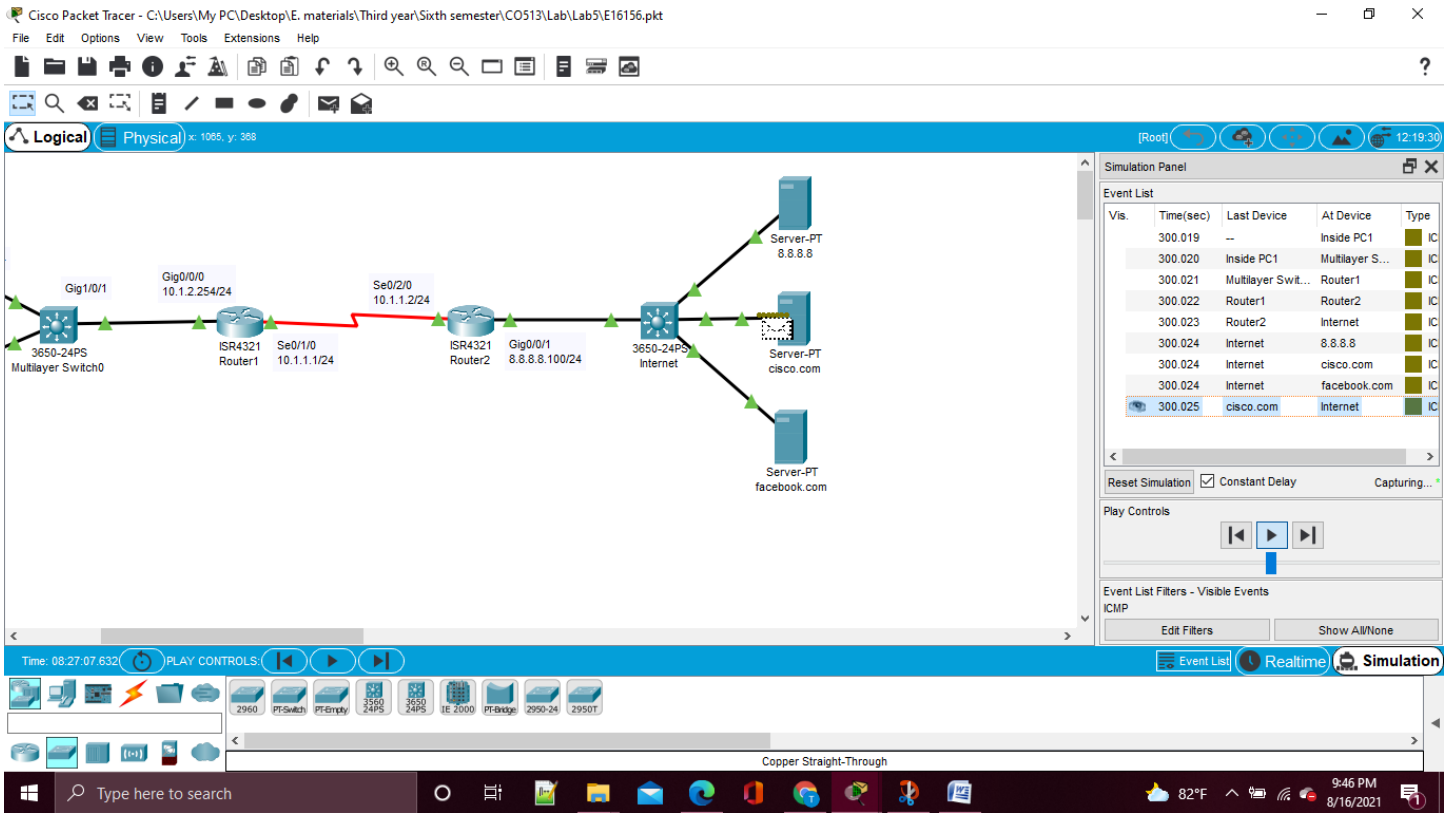

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
File Edit Options View Tools Extensions Help
Logical Physical
PDU Information at Device: Router1
OSI Model Inbound PDU Details Outbound PDU Details
PDU Formats
EthernetII
PREAMBLE: 101010..10 DEST ADDR:00E0.8F49.DC88
SRC ADDR:000 1.43DB.3E01 TYP E:0x DATA (VARIAB LE LENGTH) FCS:0x00000000
IP
VER:4 IHL DSCP:0x00 TL:128
ID:0x011e FLA GS:0 FRAG OFFSET:0x000
TTL:126 PRO:0x01 CHKSUM
SRC IP:8.8.8.9
DST IP:10.1.2.2
OPT:0x00000000 PADDING:0x00
DATA (VARIABLE LENGTH)
PC-PT Inside PC1 10.1.2.2/24
PC-PT Inside PC2 10.1.2.3/24
3650-24PS Multilayer Switch0
ISR4321 Router1
Gig0/0/0 10.1.2.254/24
Gig1/0/4
Gig1/0/1
Gig1/0/5
Time: 08:21:56.160 PLAY CONTROLS:
Event List Realtime Simulation
Copper Straight-Through
Type here to search
82°F
9:42 PM 8/16/2021

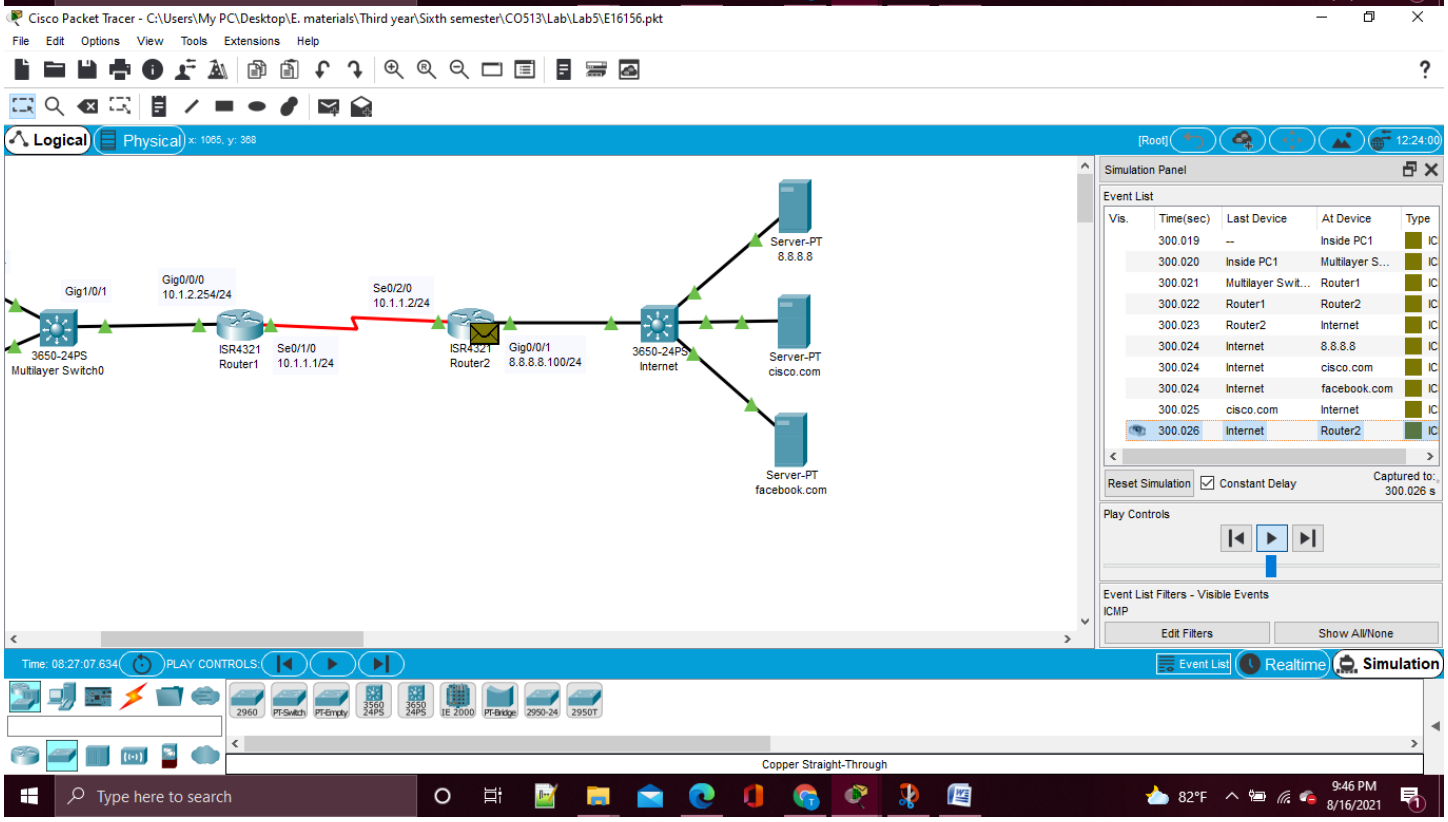

Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
File Edit Options View Tools Extensions Help
Logical Physical
PC-PT Inside PC1 10.1.2.2/24
PC-PT Inside PC2 10.1.2.3/24
Gig1/0/4
Gig1/0/5
Gig1/0/1
3650-24PS Multilayer Switch0
Gig0/0/0 10.1.2.254/24
ISR4321 Router1
Se0/1/0 10.1.1.1/24
Se0/2/0 10.1.1.2/24
ISR4321 Router2
Gig0/0/1 8.8.8.8.100/24
3650-24PS Internet
Server-PT 8.8.8.8
Server-PT cisco.com
Server-PT facebook.com
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device
0.017 Internet Router2
0.018 Router2 Router1
0.019 Router1 Multilayer S...
0.020 Multilayer Swit... Inside PC1
1.021 -- Inside PC1
1.022 Inside PC1 Multilayer S...
1.023 Multilayer Swit... Router1
1.024 Router1 Router2
1.025 Router2 Internet
1.026 Internet cisco.com
Reset Simulation Constant Delay
Captured to: 1.026 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters Show All/None
Time: 08:21:57.168 PLAY CONTROLS:
Event List Realtime Simulation
Copper Straight-Through
Type here to search
82°F
9:43 PM 8/16/2021


Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
File Edit Options View Tools Extensions Help
Logical Physical
Gig1/0/1
3650-24PS Multilayer Switch0
Gig0/0/0 10.1.2.254/24
ISR4321 Router1
Se0/1/0 10.1.1.1/24
Se0/2/0 10.1.1.2/24
ISR4321 Router2
Gig0/0/1 8.8.8.8.100/24
3650-24PS Internet
Server-PT 8.8.8.8
Server-PT cisco.com
Server-PT facebook.com
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
300.019 -- Inside PC1
300.020 Inside PC1 Multilayer S...
300.021 Multilayer Swit... Router1
300.022 Router1 Router2
300.023 Router2 Internet
Reset Simulation Constant Delay
Captured to: 300.023 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters Show All/None
Time: 08:27:07.631 PLAY CONTROLS:
Event List Realtime Simulation
Copper Straight-Through
Type here to search
82°F
9:45 PM 8/16/2021


Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
File Edit Options View Tools Extensions Help
Logical
Physical
Gig1/0/1
Gig0/0/0
10.1.2.254/24
Se0/2/0
10.1.1.2/24
3650-24PS
Multilayer Switch0
ISR4321
Router1
Se0/1/0
10.1.1.1/24
ISR4321
Router2
Gig0/0/1
8.8.8.8.100/24
3650-24PS
Internet
Server-PT
8.8.8.8
Server-PT
cisco.com
Server-PT
facebook.com
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
300.019 -- Inside PC1
300.020 Inside PC1 Multilayer S...
300.021 Multilayer Swit... Router1
300.022 Router1 Router2
300.023 Router2 Internet
300.024 Internet 8.8.8.8
300.024 Internet cisco.com
300.024 Internet facebook.com
Reset Simulation
Constant Delay
Captured to:
300.024 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
Time: 08:27:07.632
PLAY CONTROLS:
Event List
Realtime
Simulation
Copper Straight-Through
Type here to search
82°F
9:46 PM
8/16/2021


Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
File Edit Options View Tools Extensions Help
Logical
Physical
Gig1/0/1
Gig0/0/0
10.1.2.254/24
Se0/2/0
10.1.1.2/24
3650-24PS
Multilayer Switch0
ISR4321
Router1
Se0/1/0
10.1.1.1/24
ISR4321
Router2
Gig0/0/1
8.8.8.8.100/24
3650-24PS
Internet
Server-PT
8.8.8.8
Server-PT
cisco.com
Server-PT
facebook.com
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
300.019 -- Inside PC1
300.020 Inside PC1 Multilayer S...
300.021 Multilayer Swit... Router1
300.022 Router1 Router2
300.023 Router2 Internet
300.024 Internet 8.8.8.8
300.024 Internet cisco.com
300.024 Internet facebook.com
Reset Simulation
Constant Delay
Captured to:
300.024 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
Time: 08:27:07.632
PLAY CONTROLS:
Event List
Realtime
Simulation
Copper Straight-Through
Type here to search
82°F
9:46 PM
8/16/2021


Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
File Edit Options View Tools Extensions Help
Logical Physical
Gig1/0/1
Gig0/0/0
10.1.2.254/24
Se0/2/0
10.1.1.2/24
3650-24PS
Multilayer Switch0
ISR4321
Router1
Se0/1/0
10.1.1.1/24
ISR4321
Router2
Gig0/0/1
8.8.8.8.100/24
3650-24PS
Internet
Server-PT
8.8.8.8
Server-PT
cisco.com
Server-PT
facebook.com
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
300.019 -- Inside PC1
300.020 Inside PC1 Multilayer S...
300.021 Multilayer Swit... Router1
300.022 Router1 Router2
300.023 Router2 Internet
300.024 Internet 8.8.8.8
300.024 Internet cisco.com
300.024 Internet facebook.com
300.025 cisco.com Internet
Reset Simulation
Constant Delay
Capturing...
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
Time: 08:27:07.632
PLAY CONTROLS:
Event List
Realtime
Simulation
Copper Straight-Through
Type here to search
82°F
9:46 PM
8/16/2021


Cisco Packet Tracer - C:\Users\My PC\Desktop\E. materials\Third year\Sixth semester\CO513\Lab\Lab5\E16156.pkt
File Edit Options View Tools Extensions Help
Logical Physical
Gig1/0/1
Gig0/0/0
10.1.2.254/24
Se0/2/0
10.1.1.2/24
3650-24PS
Multilayer Switch0
ISR4321
Router1
Se0/1/0
10.1.1.1/24
ISR4321
Router2
Gig0/0/1
8.8.8.8.100/24
3650-24PS
Internet
Server-PT
8.8.8.8
Server-PT
cisco.com
Server-PT
facebook.com
Simulation Panel
Event List
Vis. Time(sec) Last Device At Device Type
300.019 -- Inside PC1
300.020 Inside PC1 Multilayer S...
300.021 Multilayer Swit... Router1
300.022 Router1 Router2
300.023 Router2 Internet
300.024 Internet 8.8.8.8
300.024 Internet cisco.com
300.024 Internet facebook.com
300.025 cisco.com Internet
300.026 Internet Router2
Reset Simulation
Constant Delay
Captured to: 300.026 s
Play Controls
Event List Filters - Visible Events
ICMP
Edit Filters
Show All/None
Time: 08:27:07.634
PLAY CONTROLS:
Event List
Realtime
Simulation
Copper Straight-Through
Type here to search
82°F
9:46 PM
8/16/2021