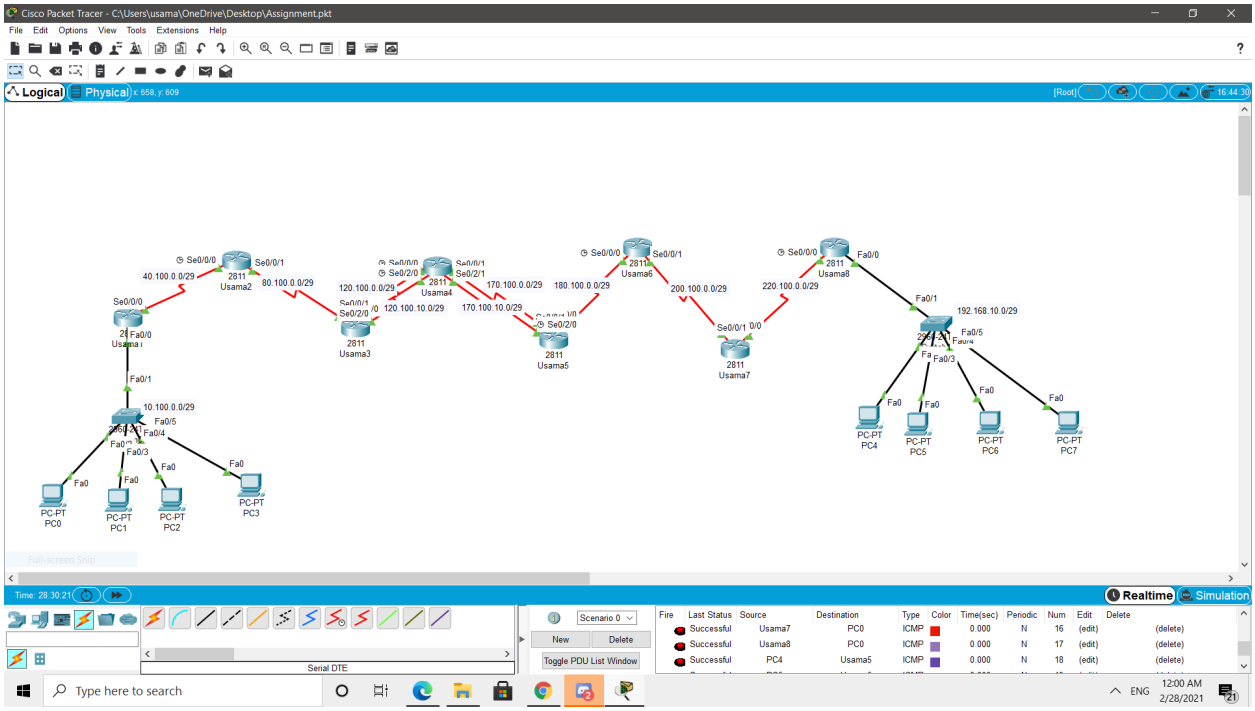
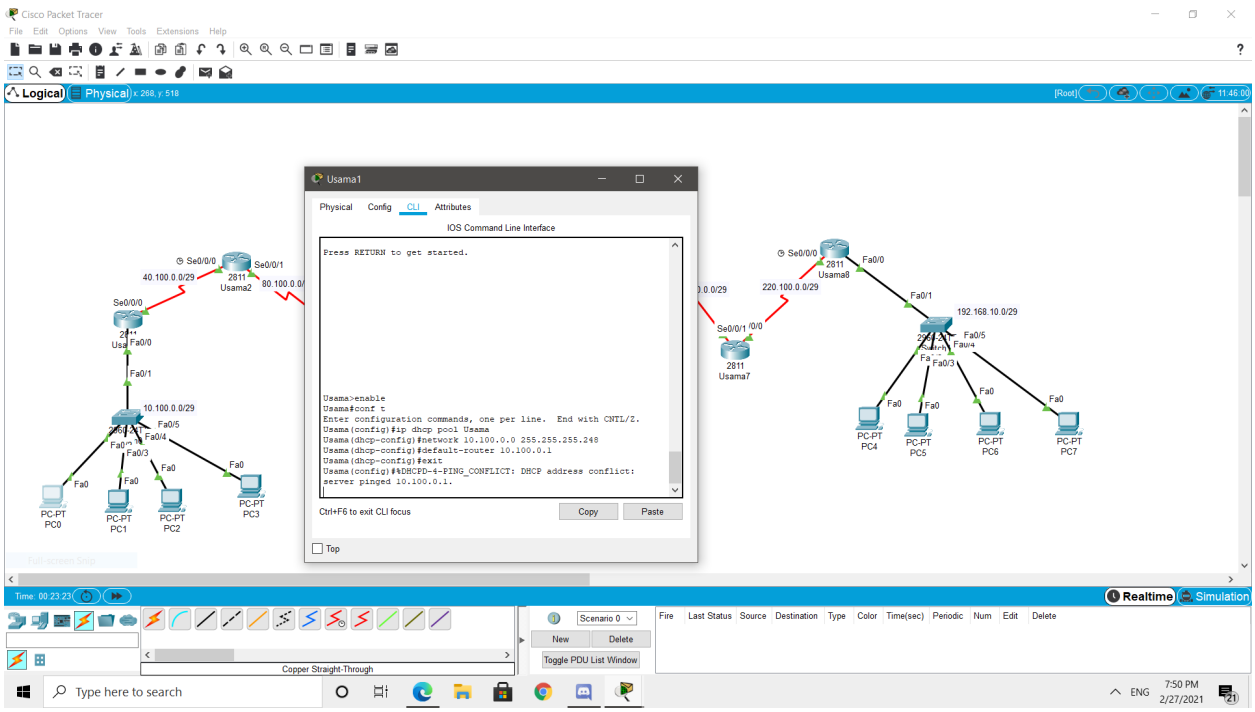
IIA LAB Assignment

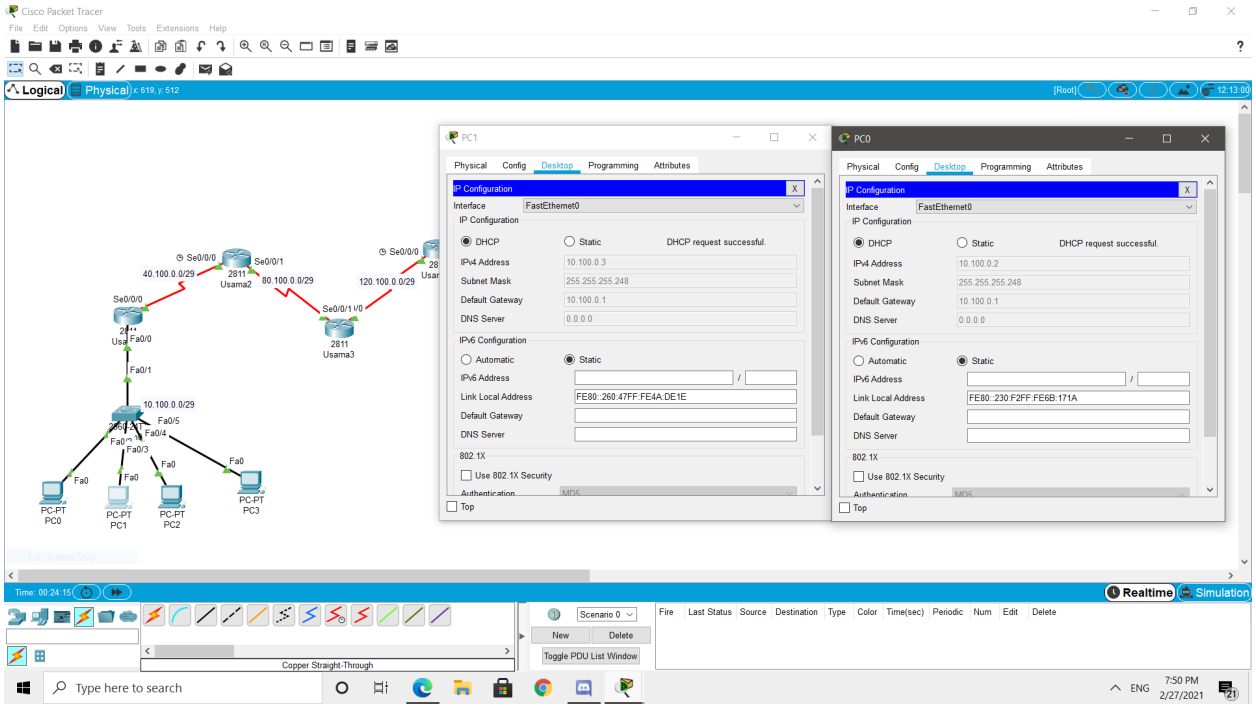
Usama Rehman
9894

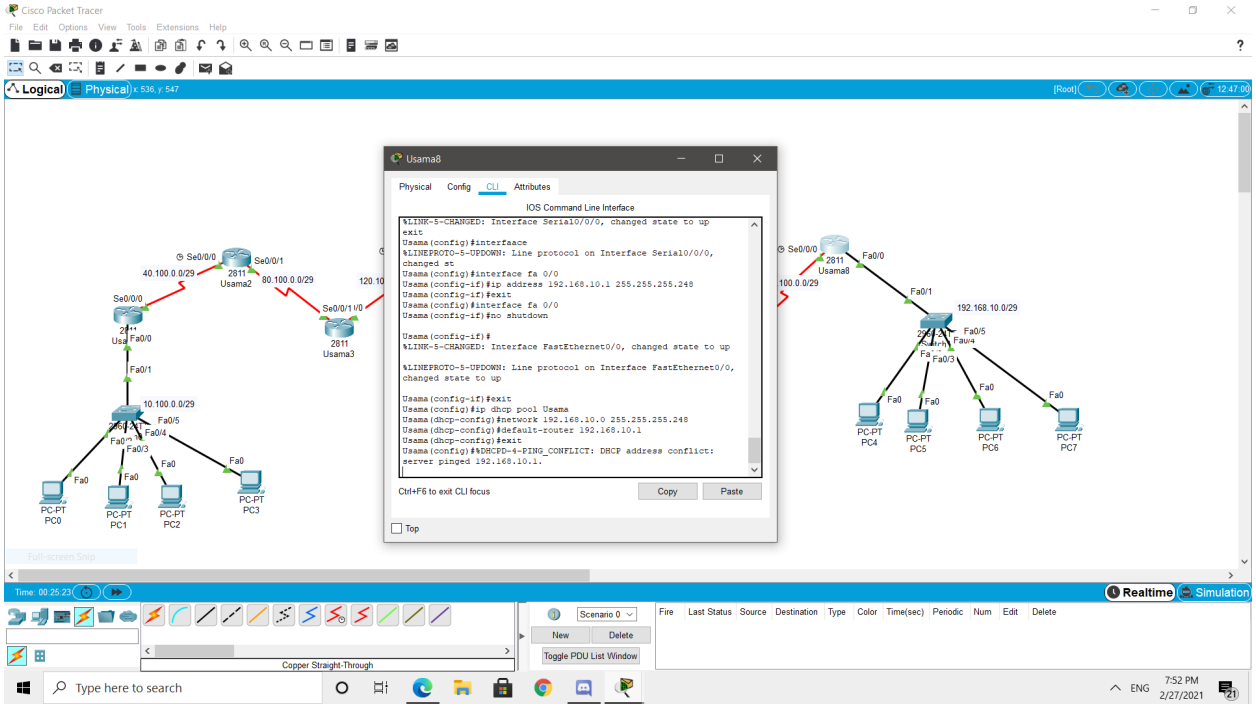
Network Diagram

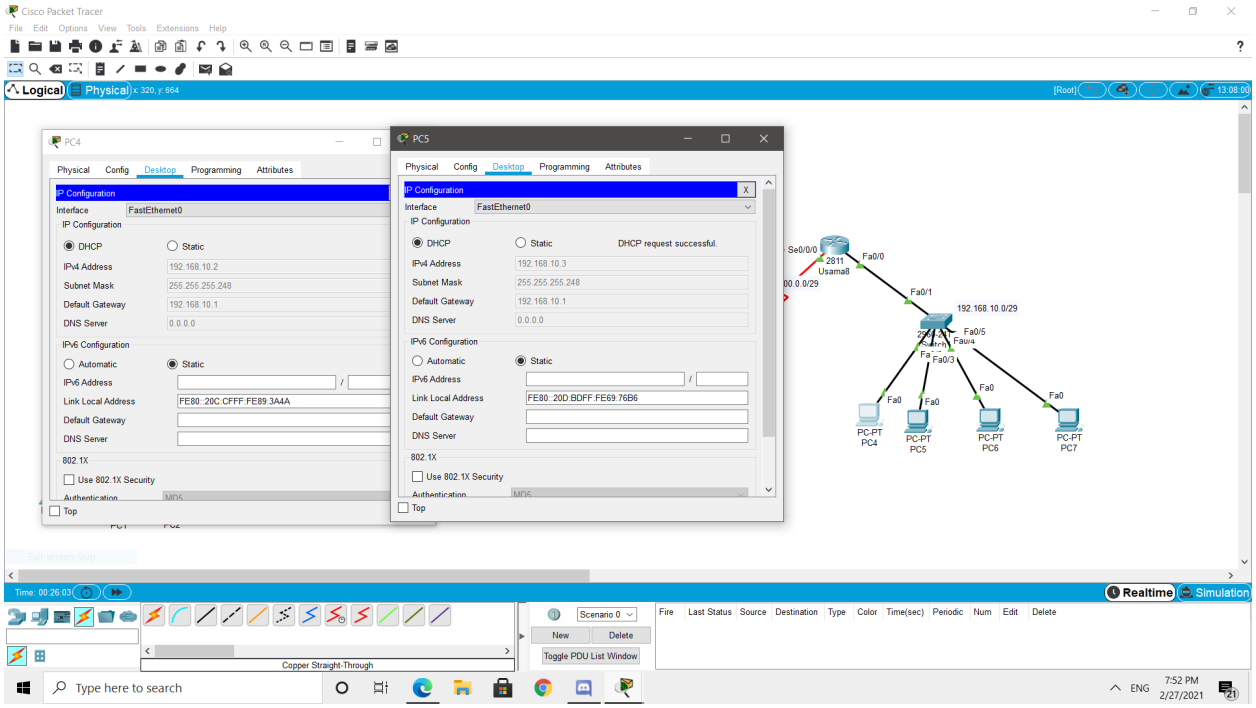


DHCP :-

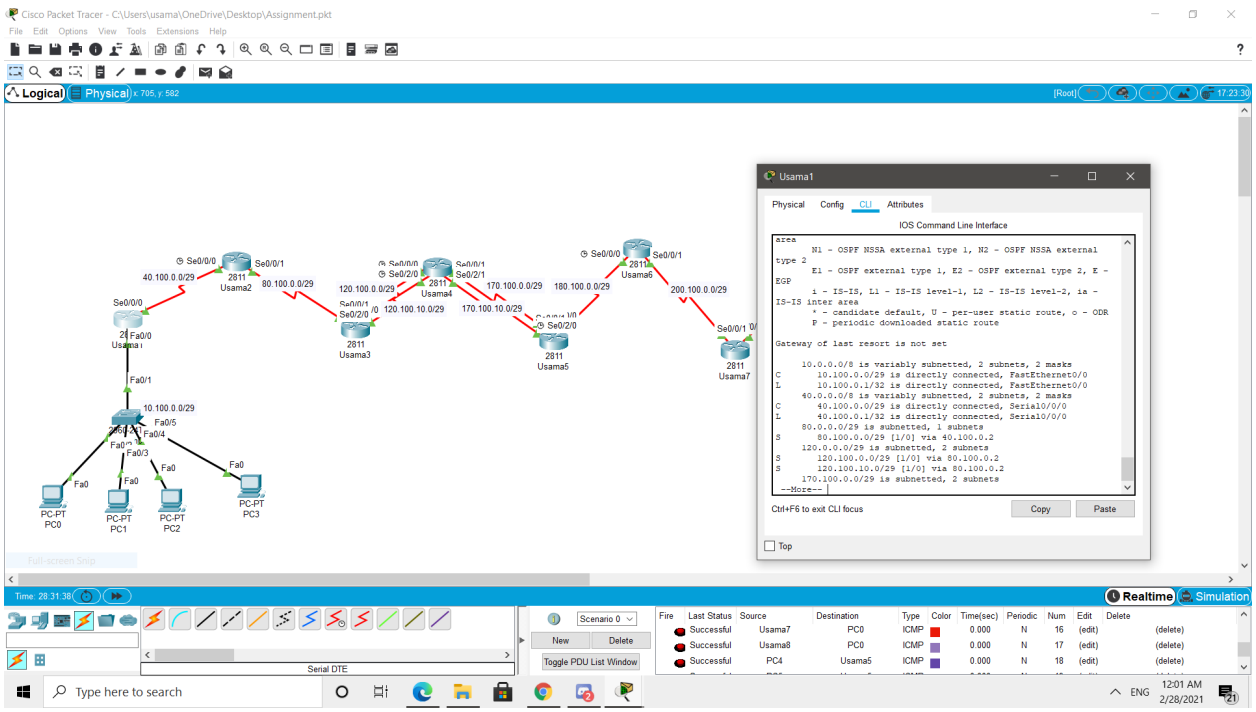


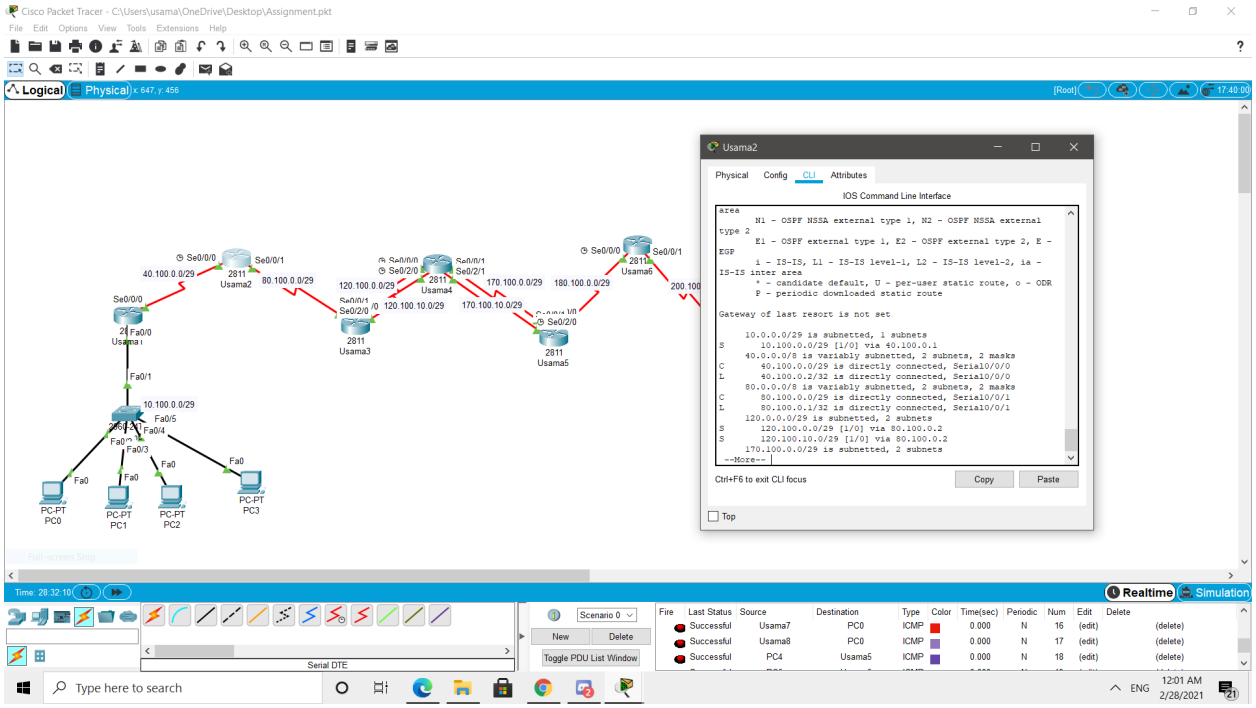

Cisco Packet Tracer
Logical
Physical
PC1
PC0
Physical Config Desktop Programming Attributes
IP Configuration
Interface FastEthernet0
DHCP
Static
DHCP request successful.
IPv4 Address 10.100.0.3
Subnet Mask 255.255.255.248
Default Gateway 10.100.0.1
DNS Server 0.0.0.0
IPv6 Configuration
Automatic
Static
IPv6 Address
Link Local Address FE80::260:47FF:FE4A:DE1E
Default Gateway
DNS Server
802.1X
Use 802.1X Security
Authentication MD5
Top
IPv4 Address 10.100.0.2
Link Local Address FE80::230:F2FF:FE6B:171A
40.100.0.0/29
80.100.0.0/29
120.100.0.0/29
10.100.0.0/29
Usama2
Usama3
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
Time: 00:24:15
Realtime
Simulation
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
Copper Straight-Through
Type here to search
ENG
7:50 PM
2/27/2021

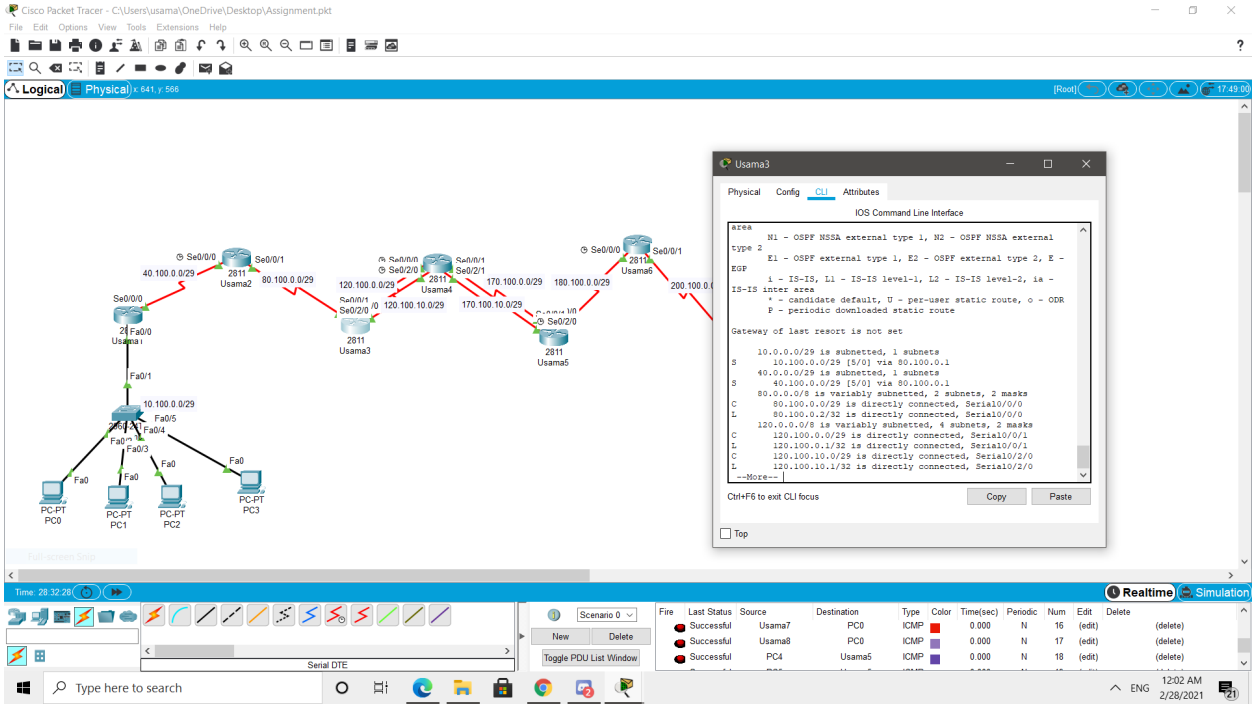

Cisco Packet Tracer
Logical
Physical
Usama8
Physical Config CLI Attributes
IOS Command Line Interface
%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up
exit
Usama(config)#interfaace
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed st
Usama(config)#interface fa 0/0
Usama(config-if)#ip address 192.168.10.1 255.255.255.248
Usama(config-if)#exit
Usama(config)#interface fa 0/0
Usama(config-if)#no shutdown
Usama(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
Usama(config-if)#exit
Usama(config)#ip dhcp pool Usama
Usama(dhcp-config)#network 192.168.10.0 255.255.255.248
Usama(dhcp-config)#default-router 192.168.10.1
Usama(dhcp-config)#exit
Usama(config)#%DHCPD-4-PING_CONFLICT: DHCP address conflict: server pinged 192.168.10.1.
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
192.168.10.0/29
PC-PT PC4
PC-PT PC5
PC-PT PC6
PC-PT PC7
Time: 00:25:23
Realtime
Simulation
Copper Straight-Through
Type here to search
ENG
7:52 PM
2/27/2021

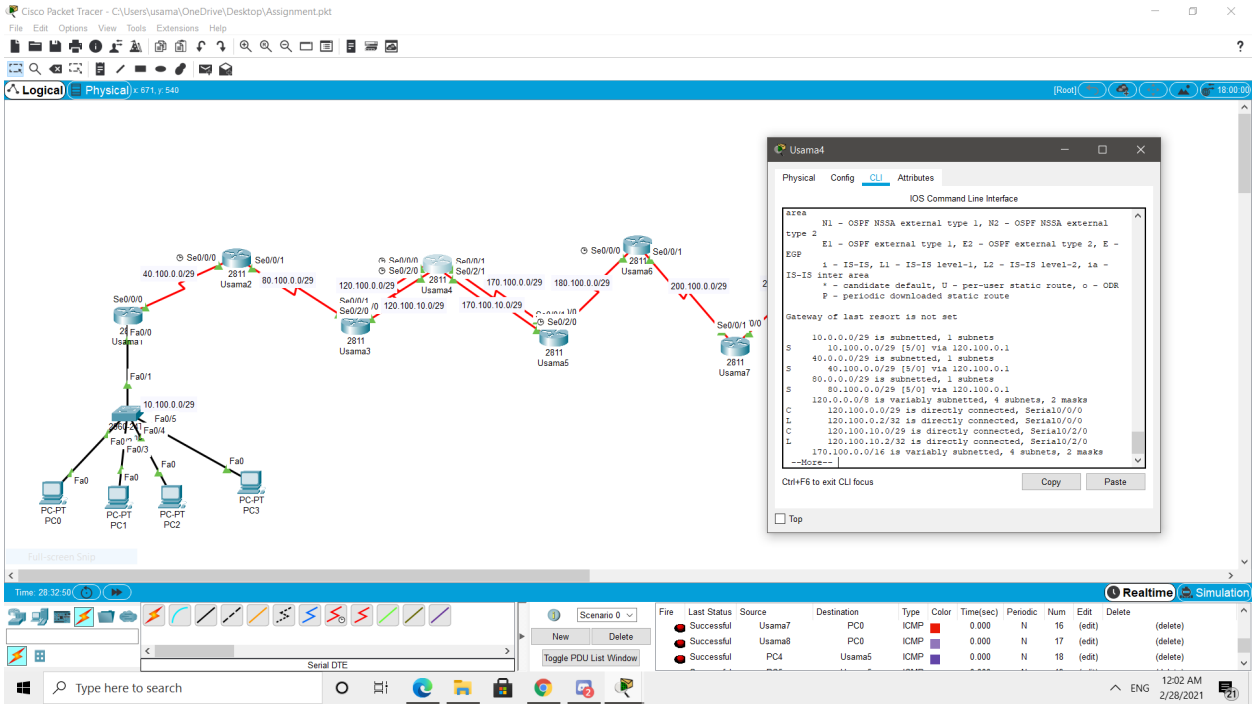


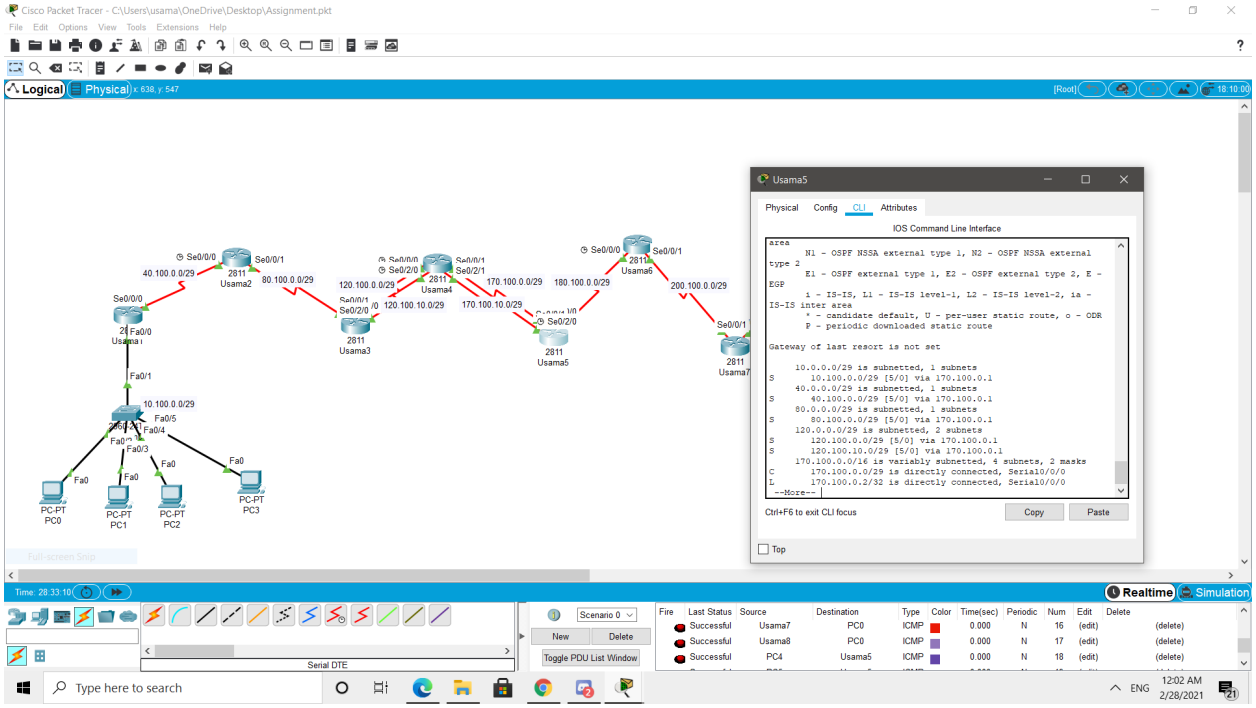
Routing Table

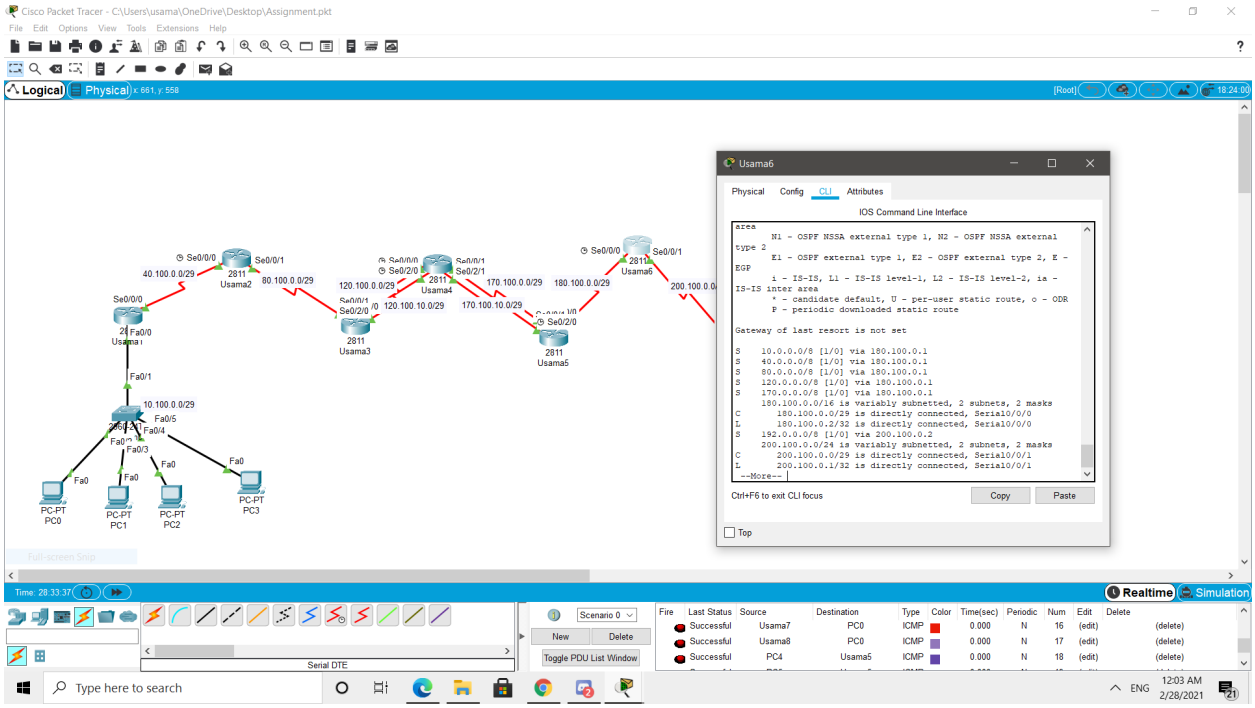


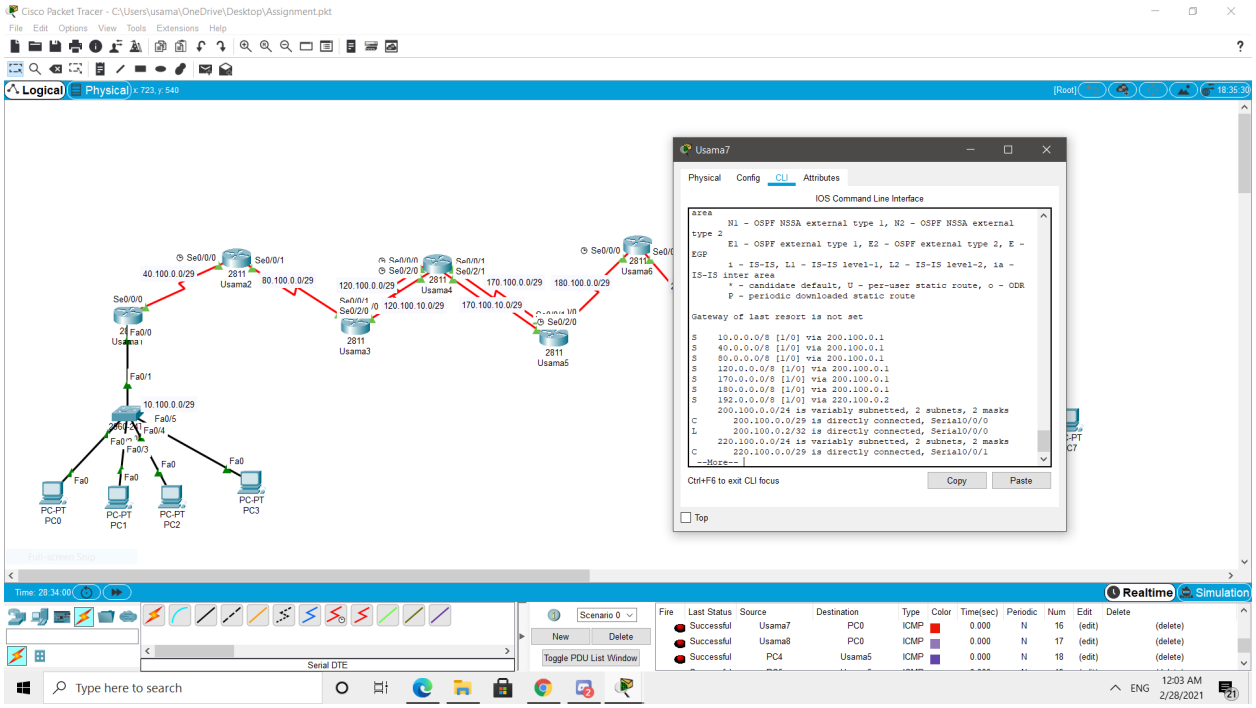

Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Logical
Physical
Usama2
Physical Config CLI Attributes
IOS Command Line Interface
area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route
Gateway of last resort is not set
10.0.0.0/29 is subnetted, 1 subnets
S 10.100.0.0/29 [1/0] via 40.100.0.1
40.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C 40.100.0.0/29 is directly connected, Serial0/0/0
L 40.100.0.2/32 is directly connected, Serial0/0/0
80.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C 80.100.0.0/29 is directly connected, Serial0/0/1
L 80.100.0.1/32 is directly connected, Serial0/0/1
120.0.0.0/29 is subnetted, 2 subnets
S 120.100.0.0/29 [1/0] via 80.100.0.2
S 120.100.10.0/29 [1/0] via 80.100.0.2
170.100.0.0/29 is subnetted, 2 subnets
--More--
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Realtime
Simulation
Type here to search
12:01 AM
2/28/2021

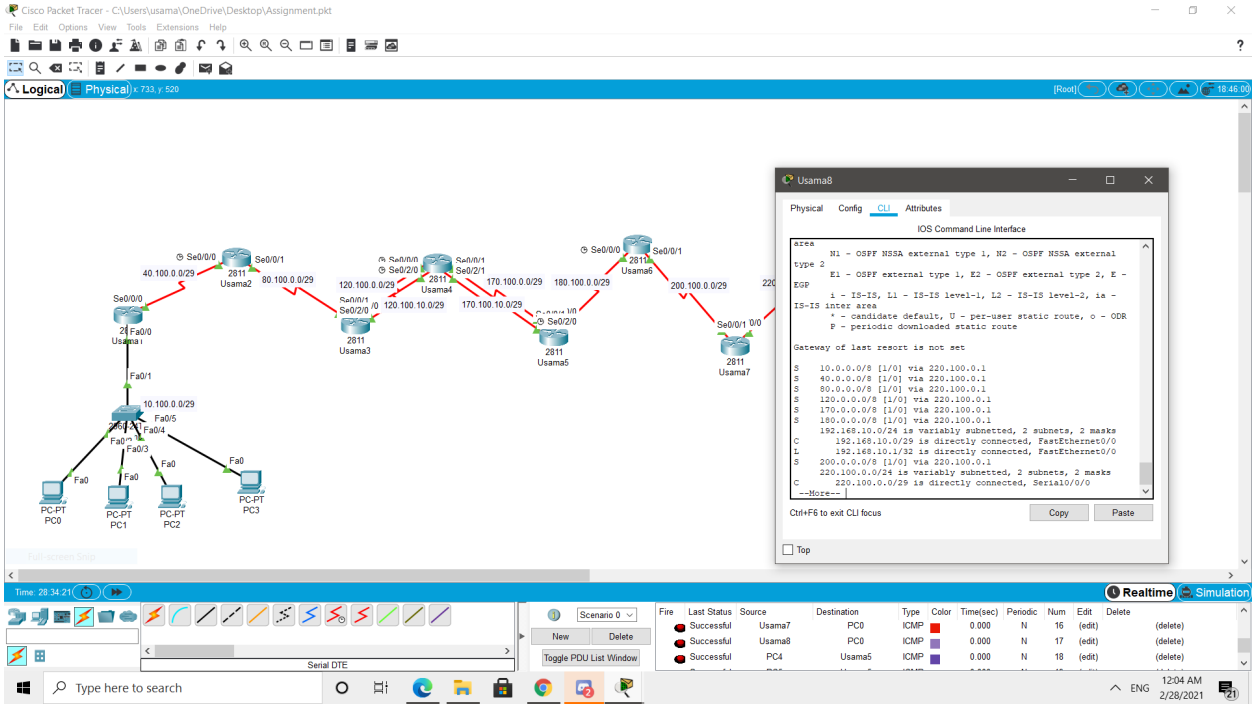

Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Logical
Physical
Usama3
Physical Config CLI Attributes
IOS Command Line Interface
area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route
Gateway of last resort is not set
10.0.0.0/29 is subnetted, 1 subnets
S 10.100.0.0/29 [5/0] via 80.100.0.1
40.0.0.0/29 is subnetted, 1 subnets
S 40.100.0.0/29 [5/0] via 80.100.0.1
80.0.0.0/8 is variably subnetted, 2 subnets, 2 masks
C 80.100.0.0/29 is directly connected, Serial0/0/1
L 80.100.0.2/32 is directly connected, Serial0/0/1
120.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
C 120.100.0.0/29 is directly connected, Serial0/0/1
L 120.100.0.1/32 is directly connected, Serial0/0/1
C 120.100.10.0/29 is directly connected, Serial0/2/0
L 120.100.10.1/32 is directly connected, Serial0/2/0
--More--
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Realtime
Simulation
Type here to search
12:02 AM
2/28/2021


Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Logical
Physical
Usama4
Physical
Config
CLI
Attributes
IOS Command Line Interface
area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route
Gateway of last resort is not set
10.0.0.0/29 is subnetted, 1 subnets
S 10.100.0.0/29 [5/0] via 120.100.0.1
40.0.0.0/29 is subnetted, 1 subnets
S 40.100.0.0/29 [5/0] via 120.100.0.1
80.0.0.0/29 is subnetted, 1 subnets
S 80.100.0.0/29 [5/0] via 120.100.0.1
120.0.0.0/8 is variably subnetted, 4 subnets, 2 masks
C 120.100.0.0/29 is directly connected, Serial0/0/0
L 120.100.0.2/32 is directly connected, Serial0/0/0
C 120.100.10.0/29 is directly connected, Serial0/2/0
L 120.100.10.2/32 is directly connected, Serial0/2/0
170.100.0.0/16 is variably subnetted, 4 subnets, 2 masks
--More--
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Usama2
Usama3
Usama4
Usama5
Usama6
Usama7
PC0
PC1
PC2
PC3
Realtime
Simulation
Serial DTE
Scenario 0
New
Delete
Toggle PDU List Window
Type here to search
ENG
12:02 AM
2/28/2021

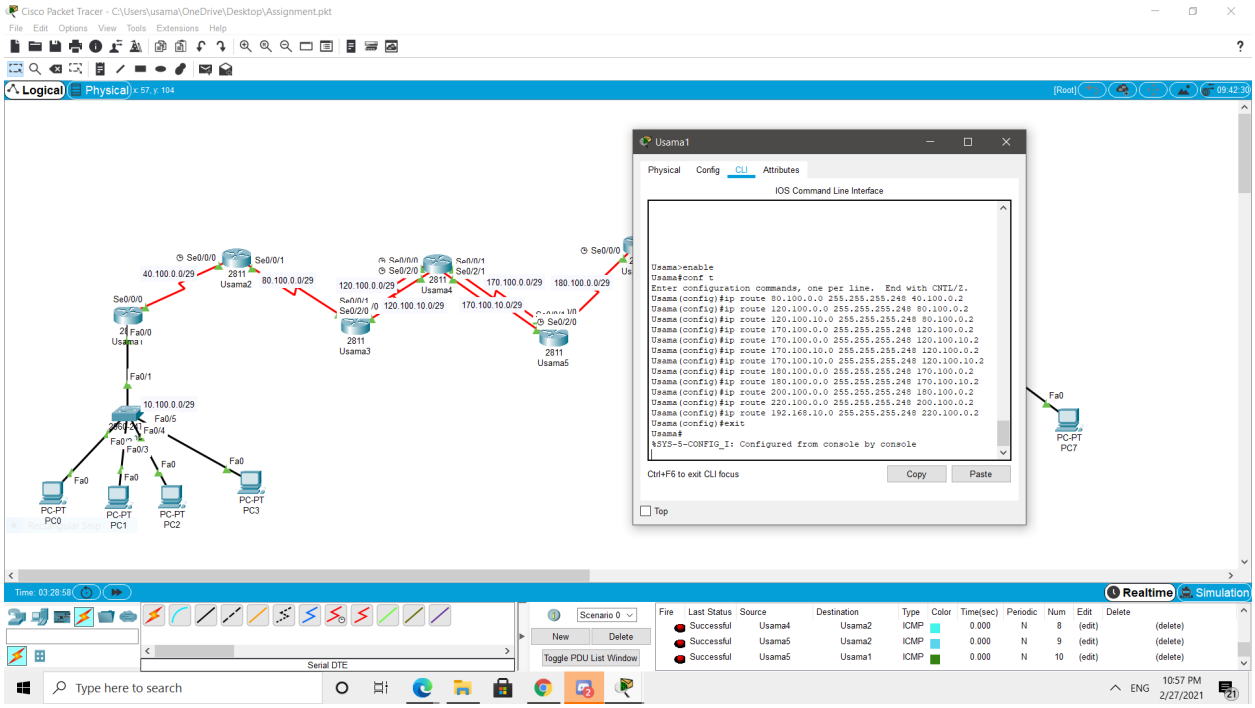

Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Logical
Physical
Usama5
Physical
Config
CLI
Attributes
IOS Command Line Interface
area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route
Gateway of last resort is not set
10.0.0.0/29 is subnetted, 1 subnets
S 10.100.0.0/29 [5/0] via 170.100.0.1
40.0.0.0/29 is subnetted, 1 subnets
S 40.100.0.0/29 [5/0] via 170.100.0.1
80.0.0.0/29 is subnetted, 1 subnets
S 80.100.0.0/29 [5/0] via 170.100.0.1
120.0.0.0/29 is subnetted, 2 subnets
S 120.100.0.0/29 [5/0] via 170.100.0.1
S 120.100.10.0/29 [5/0] via 170.100.0.1
170.100.0.0/16 is variably subnetted, 4 subnets, 2 masks
C 170.100.0.0/29 is directly connected, Serial0/0/0
L 170.100.0.2/32 is directly connected, Serial0/0/0
--More--
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Usama2
Usama3
Usama4
Usama5
Usama6
Usama7
PC0
PC1
PC2
PC3
Realtime
Simulation
Serial DTE
Scenario 0
New
Delete
Toggle PDU List Window
Type here to search
ENG
12:02 AM
2/28/2021

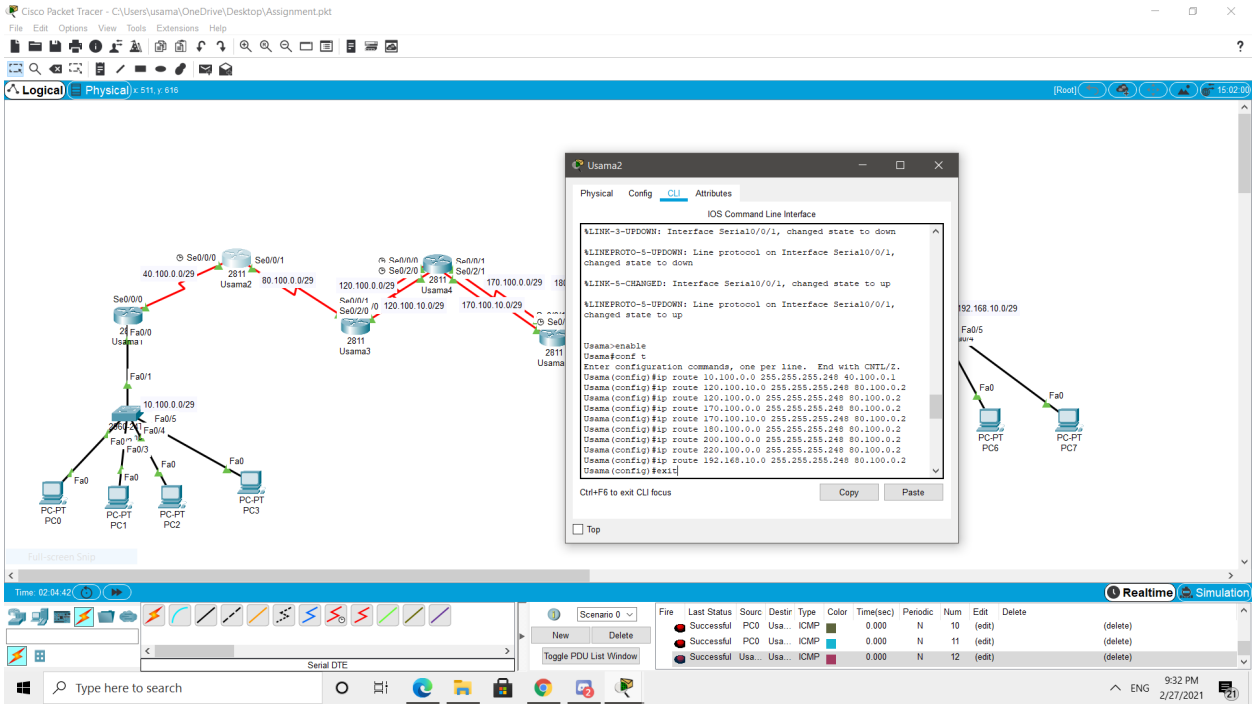

Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Logical
Physical
Usama6
Physical Config CLI Attributes
IOS Command Line Interface
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route
Gateway of last resort is not set
S 10.0.0.0/8 [1/0] via 180.100.0.1
S 40.0.0.0/8 [1/0] via 180.100.0.1
S 80.0.0.0/8 [1/0] via 180.100.0.1
S 120.0.0.0/8 [1/0] via 180.100.0.1
S 170.0.0.0/8 [1/0] via 180.100.0.1
180.100.0.0/16 is variably subnetted, 2 subnets, 2 masks
C 180.100.0.0/29 is directly connected, Serial0/0/0
L 180.100.0.2/32 is directly connected, Serial0/0/0
S 192.0.0.0/8 [1/0] via 200.100.0.2
200.100.0.0/24 is variably subnetted, 2 subnets, 2 masks
C 200.100.0.0/29 is directly connected, Serial0/0/1
L 200.100.0.1/32 is directly connected, Serial0/0/1
--More--
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Usama2
Usama1
Usama3
Usama4
Usama5
Usama6
40.100.0.0/29
80.100.0.0/29
120.100.0.0/29
120.100.10.0/29
170.100.0.0/29
170.100.10.0/29
180.100.0.0/29
200.100.0.0
10.100.0.0/29
PC0
PC1
PC2
PC3
Realtime
Simulation
Serial DTE
Scenario 0
New
Delete
Toggle PDU List Window
Fire Last Status Source Destination Type Color Time(sec) Periodic Num Edit Delete
Successful Usama7 PC0 ICMP 0.000 N 16 (edit) (delete)
Successful Usama8 PC0 ICMP 0.000 N 17 (edit) (delete)
Successful PC4 Usama5 ICMP 0.000 N 18 (edit) (delete)
Type here to search
ENG
12:03 AM
2/28/2021

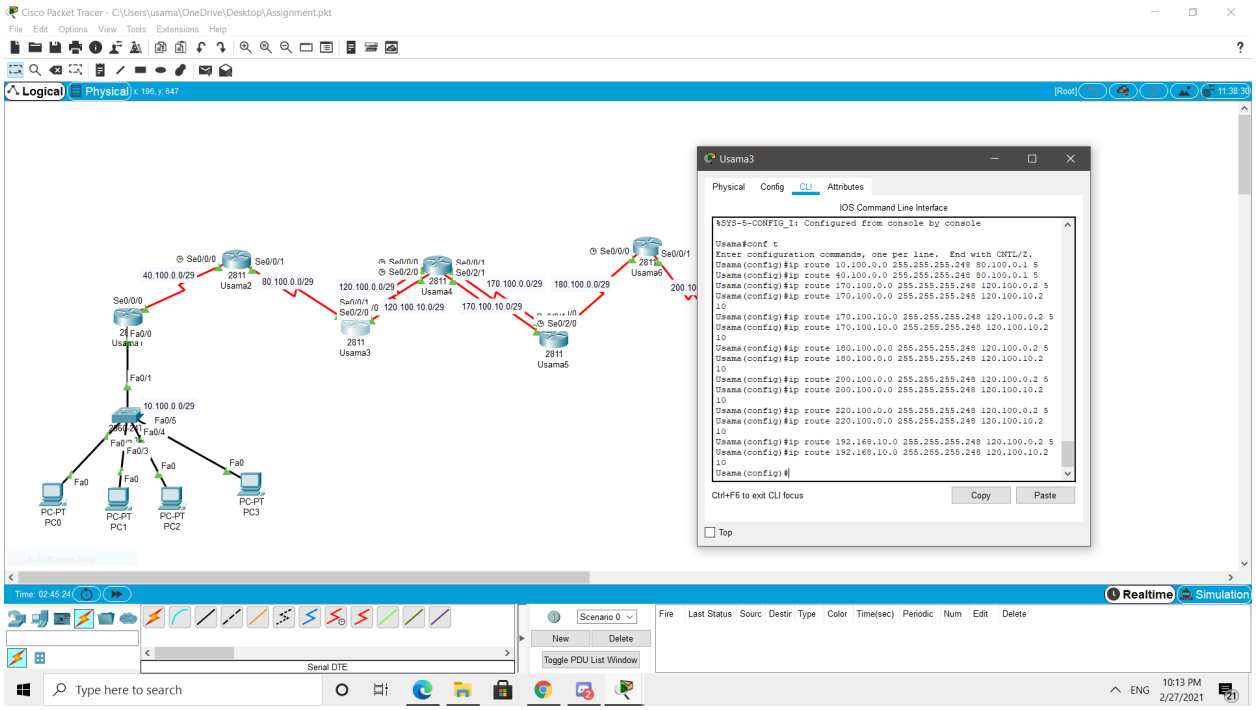


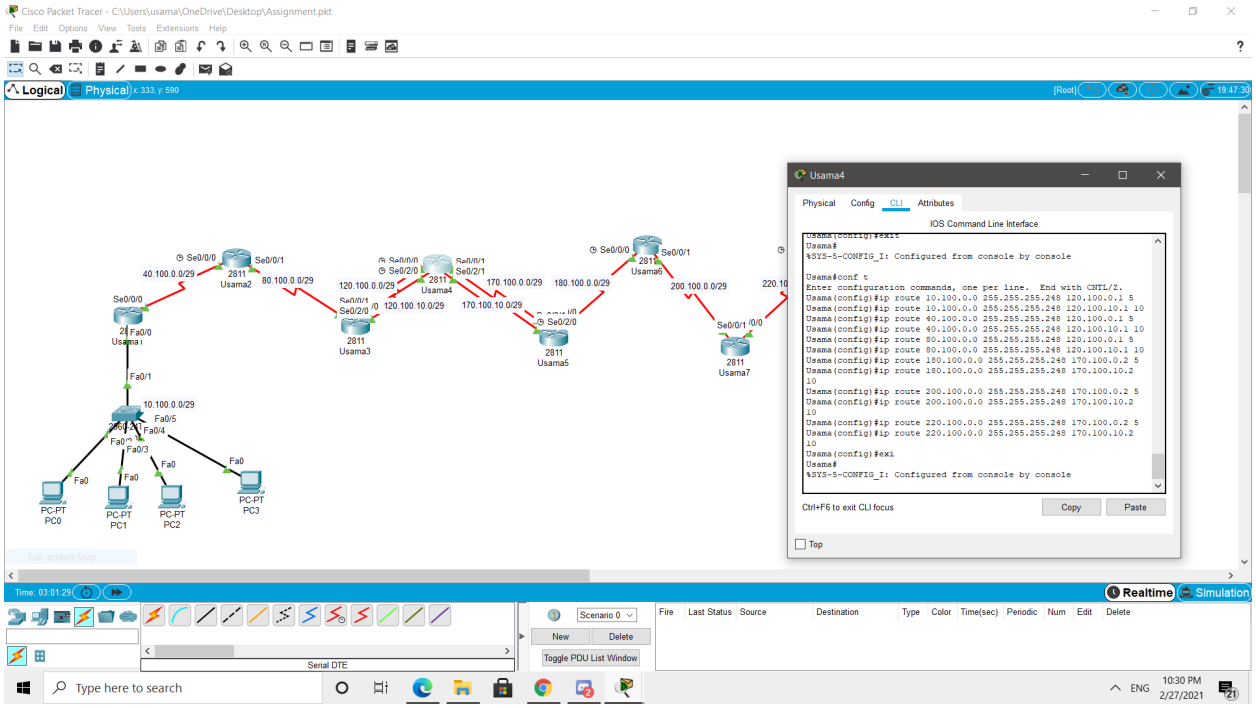


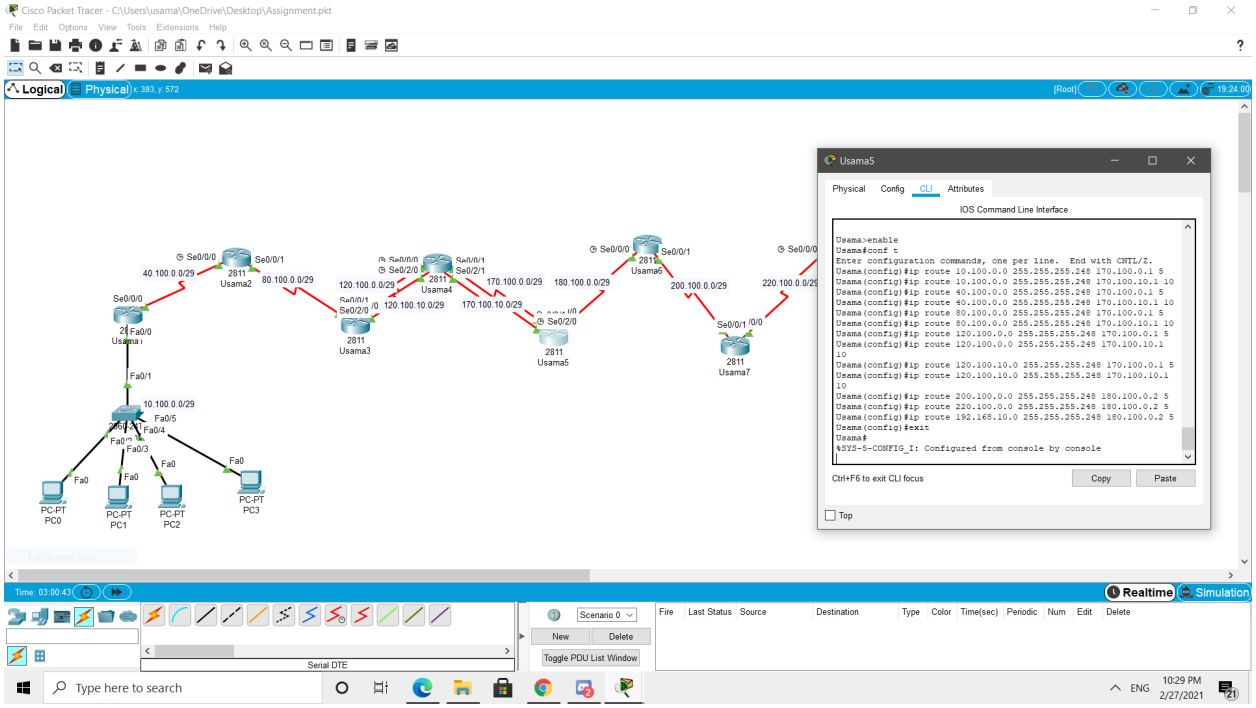
Router Configurations IP Route :-

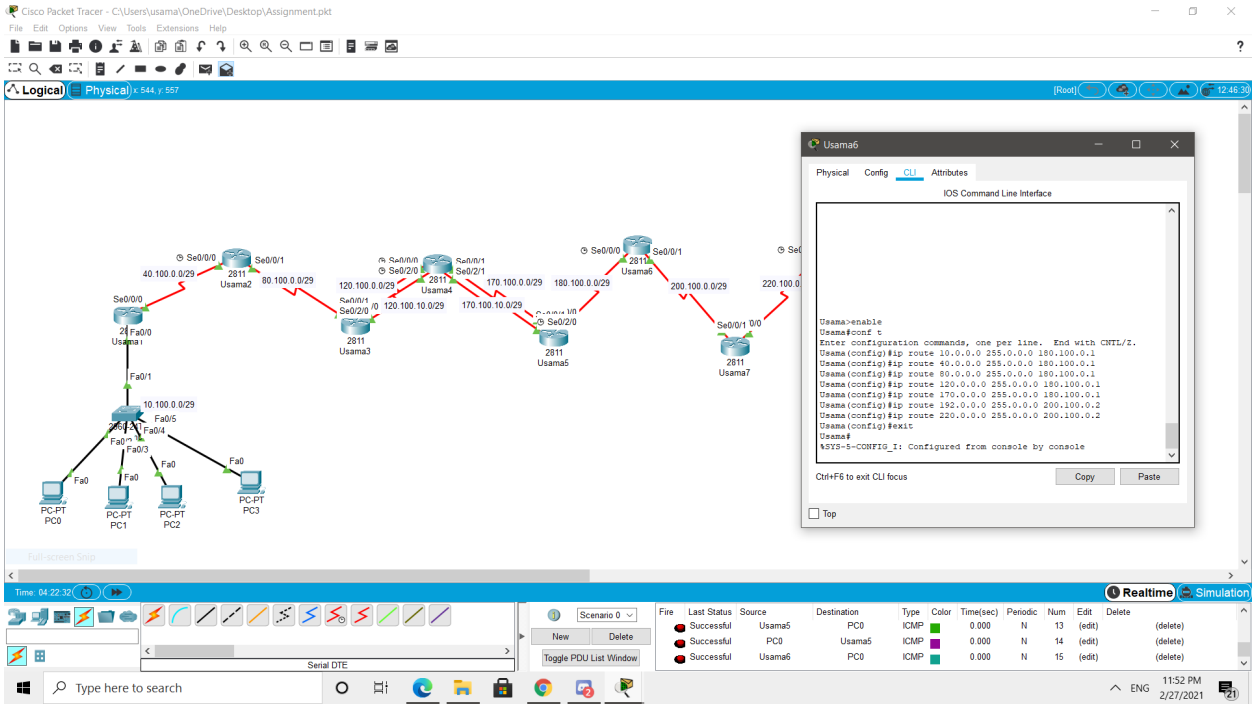

Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Logical
Physical
Usama1
Physical
Config
CLI
Attributes
IOS Command Line Interface
Usama>enable
Usama#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Usama(config)#ip route 80.100.0.0 255.255.255.248 40.100.0.2
Usama(config)#ip route 120.100.0.0 255.255.255.248 80.100.0.2
Usama(config)#ip route 120.100.10.0 255.255.255.248 80.100.0.2
Usama(config)#ip route 170.100.0.0 255.255.255.248 120.100.0.2
Usama(config)#ip route 170.100.0.0 255.255.255.248 120.100.10.2
Usama(config)#ip route 170.100.10.0 255.255.255.248 120.100.0.2
Usama(config)#ip route 170.100.10.0 255.255.255.248 120.100.10.2
Usama(config)#ip route 180.100.0.0 255.255.255.248 170.100.0.2
Usama(config)#ip route 180.100.0.0 255.255.255.248 170.100.10.2
Usama(config)#ip route 200.100.0.0 255.255.255.248 180.100.0.2
Usama(config)#ip route 220.100.0.0 255.255.255.248 200.100.0.2
Usama(config)#ip route 192.168.10.0 255.255.255.248 220.100.0.2
Usama(config)#exit
Usama#
%SYS-5-CONFIG_I: Configured from console by console
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Usama2
Usama4
Usama3
Usama5
Usama1
40.100.0.0/29
80.100.0.0/29
120.100.0.0/29
120.100.10.0/29
170.100.0.0/29
170.100.10.0/29
180.100.0.0/29
10.100.0.0/29
PC0
PC1
PC2
PC3
PC7
Realtime
Simulation
Serial DTE
Scenario 0
New
Delete
Toggle PDU List Window
Type here to search
10:57 PM
2/27/2021

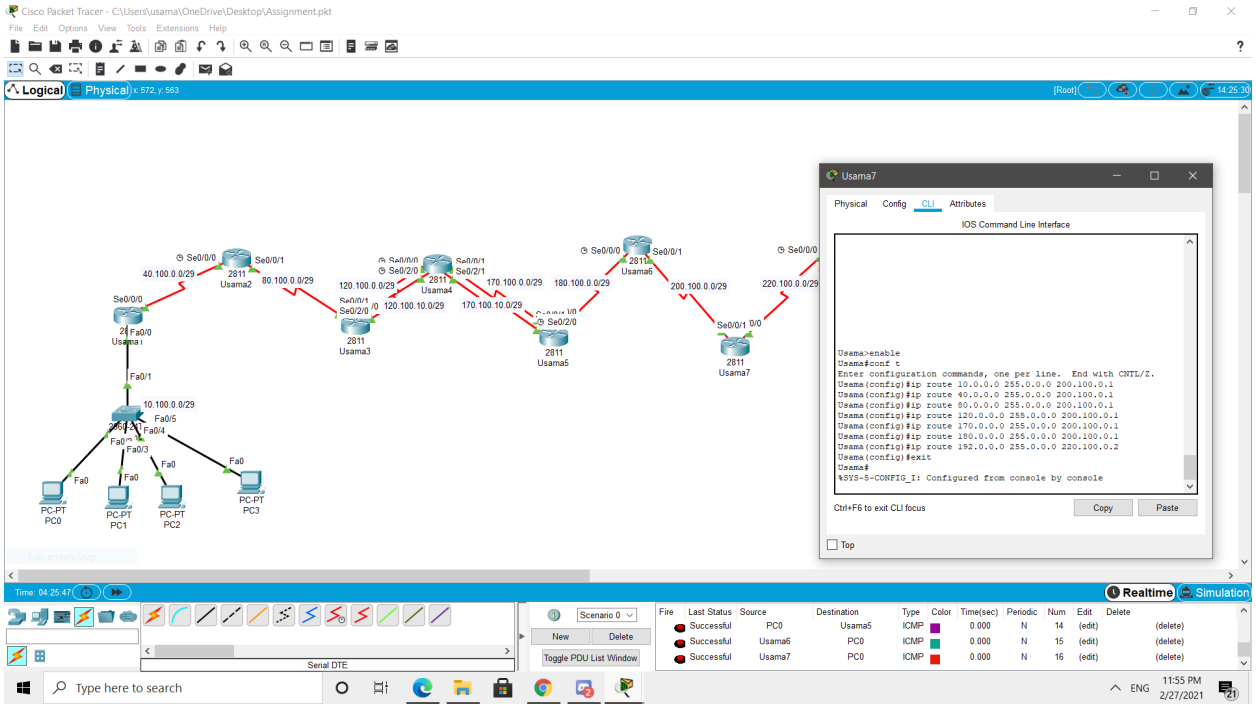

Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Usama2
Physical Config CLI Attributes
IOS Command Line Interface
%LINK-3-UPDOWN: Interface Serial0/0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed state to down
%LINK-5-CHANGED: Interface Serial0/0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed state to up
Usama>enable
Usama#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Usama(config)#ip route 10.100.0.0 255.255.255.248 40.100.0.1
Usama(config)#ip route 120.100.10.0 255.255.255.248 80.100.0.2
Usama(config)#ip route 120.100.0.0 255.255.255.248 80.100.0.2
Usama(config)#ip route 170.100.0.0 255.255.255.248 80.100.0.2
Usama(config)#ip route 170.100.10.0 255.255.255.248 80.100.0.2
Usama(config)#ip route 180.100.0.0 255.255.255.248 80.100.0.2
Usama(config)#ip route 200.100.0.0 255.255.255.248 80.100.0.2
Usama(config)#ip route 220.100.0.0 255.255.255.248 80.100.0.2
Usama(config)#ip route 192.168.10.0 255.255.255.248 80.100.0.2
Usama(config)#exit
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Logical
Physical
Realtime
Simulation
Serial DTE
Scenario 0
New
Delete
Toggle PDU List Window
Type here to search
ENG
9:32 PM
2/27/2021

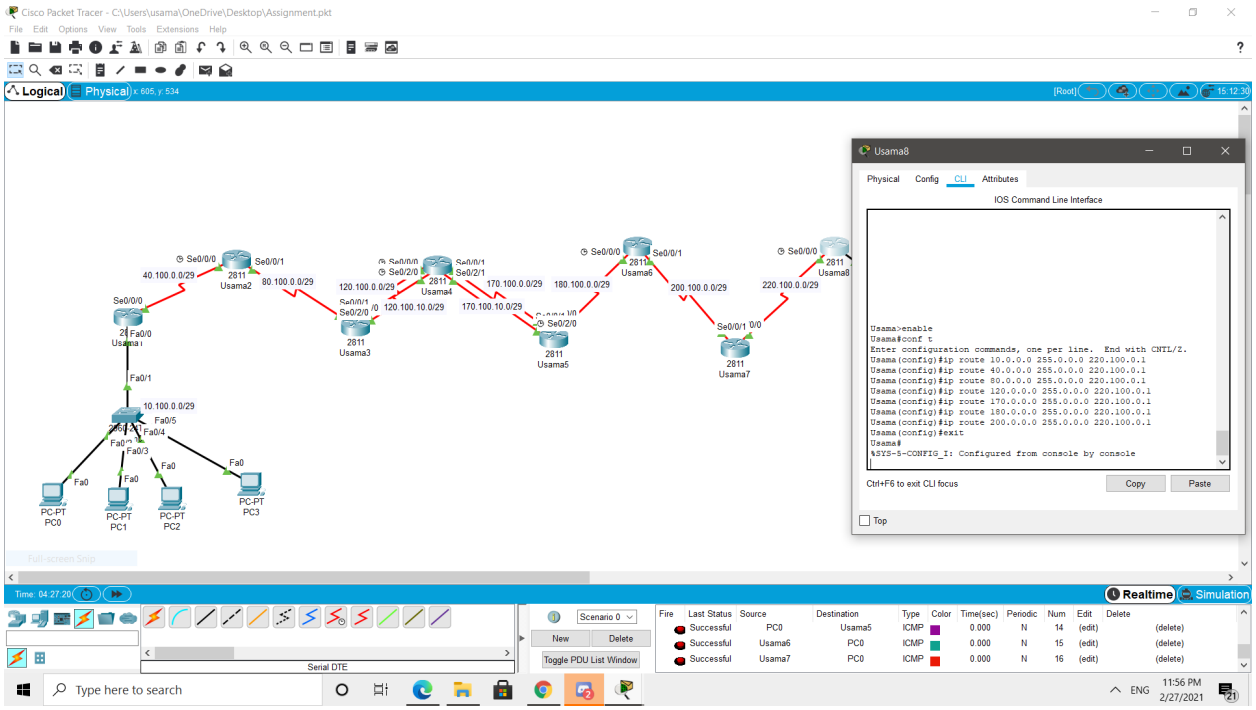

Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Usama3
Physical Config CLI Attributes
IOS Command Line Interface
%SYS-5-CONFIG_I: Configured from console by console
Usama#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Usama(config)#ip route 10.100.0.0 255.255.255.248 80.100.0.1 5
Usama(config)#ip route 40.100.0.0 255.255.255.248 80.100.0.1 5
Usama(config)#ip route 170.100.0.0 255.255.255.248 120.100.0.2 5
Usama(config)#ip route 170.100.0.0 255.255.255.248 120.100.10.2 10
Usama(config)#ip route 170.100.10.0 255.255.255.248 120.100.0.2 5
Usama(config)#ip route 170.100.10.0 255.255.255.248 120.100.10.2 10
Usama(config)#ip route 180.100.0.0 255.255.255.248 120.100.0.2 5
Usama(config)#ip route 180.100.0.0 255.255.255.248 120.100.10.2 10
Usama(config)#ip route 200.100.0.0 255.255.255.248 120.100.0.2 5
Usama(config)#ip route 200.100.0.0 255.255.255.248 120.100.10.2 10
Usama(config)#ip route 220.100.0.0 255.255.255.248 120.100.0.2 5
Usama(config)#ip route 220.100.0.0 255.255.255.248 120.100.10.2 10
Usama(config)#ip route 192.168.10.0 255.255.255.248 120.100.0.2 5
Usama(config)#ip route 192.168.10.0 255.255.255.248 120.100.10.2 10
Usama(config)#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Logical
Physical
Realtime
Simulation
Serial DTE
Scenario 0
New
Delete
Toggle PDU List Window
Type here to search
ENG
10:13 PM
2/27/2021


Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Usama4
IOS Command Line Interface
Usama#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Usama(config)#ip route 10.100.0.0 255.255.255.248 120.100.0.1 5
Usama(config)#ip route 10.100.0.0 255.255.255.248 120.100.10.1 10
Usama(config)#ip route 40.100.0.0 255.255.255.248 120.100.0.1 5
Usama(config)#ip route 40.100.0.0 255.255.255.248 120.100.10.1 10
Usama(config)#ip route 80.100.0.0 255.255.255.248 120.100.0.1 5
Usama(config)#ip route 80.100.0.0 255.255.255.248 120.100.10.1 10
Usama(config)#ip route 180.100.0.0 255.255.255.248 170.100.0.2 5
Usama(config)#ip route 180.100.0.0 255.255.255.248 170.100.10.2 10
Usama(config)#ip route 200.100.0.0 255.255.255.248 170.100.0.2 5
Usama(config)#ip route 200.100.0.0 255.255.255.248 170.100.10.2 10
Usama(config)#ip route 220.100.0.0 255.255.255.248 170.100.0.2 5
Usama(config)#ip route 220.100.0.0 255.255.255.248 170.100.10.2 10
Usama(config)#exi
Usama#
%SYS-5-CONFIG_I: Configured from console by console
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
40.100.0.0/29
80.100.0.0/29
120.100.0.0/29
120.100.10.0/29
170.100.0.0/29
170.100.10.0/29
180.100.0.0/29
200.100.0.0/29
10.100.0.0/29
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
Realtime
Simulation
Type here to search
10:30 PM
2/27/2021


Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Usama5
IOS Command Line Interface
Usama>enable
Usama#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Usama(config)#ip route 10.100.0.0 255.255.255.248 170.100.0.1 5
Usama(config)#ip route 10.100.0.0 255.255.255.248 170.100.10.1 10
Usama(config)#ip route 40.100.0.0 255.255.255.248 170.100.0.1 5
Usama(config)#ip route 40.100.0.0 255.255.255.248 170.100.10.1 10
Usama(config)#ip route 80.100.0.0 255.255.255.248 170.100.0.1 5
Usama(config)#ip route 80.100.0.0 255.255.255.248 170.100.10.1 10
Usama(config)#ip route 120.100.0.0 255.255.255.248 170.100.0.1 5
Usama(config)#ip route 120.100.0.0 255.255.255.248 170.100.10.1 10
Usama(config)#ip route 120.100.10.0 255.255.255.248 170.100.0.1 5
Usama(config)#ip route 120.100.10.0 255.255.255.248 170.100.10.1 10
Usama(config)#ip route 200.100.0.0 255.255.255.248 180.100.0.2 5
Usama(config)#ip route 220.100.0.0 255.255.255.248 180.100.0.2 5
Usama(config)#ip route 192.168.10.0 255.255.255.248 180.100.0.2 5
Usama(config)#exit
Usama#
%SYS-5-CONFIG_I: Configured from console by console
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
40.100.0.0/29
80.100.0.0/29
120.100.0.0/29
120.100.10.0/29
170.100.0.0/29
170.100.10.0/29
180.100.0.0/29
200.100.0.0/29
10.100.0.0/29
PC-PT PC0
PC-PT PC1
PC-PT PC2
PC-PT PC3
Realtime
Simulation
Type here to search
10:29 PM
2/27/2021


Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Logical
Physical
Usama6
Physical
Config
CLI
Attributes
IOS Command Line Interface
Usama>enable
Usama#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Usama(config)#ip route 10.0.0.0 255.0.0.0 180.100.0.1
Usama(config)#ip route 40.0.0.0 255.0.0.0 180.100.0.1
Usama(config)#ip route 80.0.0.0 255.0.0.0 180.100.0.1
Usama(config)#ip route 120.0.0.0 255.0.0.0 180.100.0.1
Usama(config)#ip route 170.0.0.0 255.0.0.0 180.100.0.1
Usama(config)#ip route 192.0.0.0 255.0.0.0 200.100.0.2
Usama(config)#ip route 220.0.0.0 255.0.0.0 200.100.0.2
Usama(config)#exit
Usama#
%SYS-5-CONFIG_I: Configured from console by console
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
40.100.0.0/29
80.100.0.0/29
120.100.0.0/29
120.100.10.0/29
170.100.0.0/29
170.100.10.0/29
180.100.0.0/29
200.100.0.0/29
10.100.0.0/29
Usama2
Usama3
Usama4
Usama5
Usama6
Usama7
PC0
PC1
PC2
PC3
Realtime
Simulation
Serial DTE
Scenario 0
New
Delete
Toggle PDU List Window
Type here to search
11:52 PM
2/27/2021


Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Logical
Physical
Usama7
Physical
Config
CLI
Attributes
IOS Command Line Interface
Usama>enable
Usama#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Usama(config)#ip route 10.0.0.0 255.0.0.0 200.100.0.1
Usama(config)#ip route 40.0.0.0 255.0.0.0 200.100.0.1
Usama(config)#ip route 80.0.0.0 255.0.0.0 200.100.0.1
Usama(config)#ip route 120.0.0.0 255.0.0.0 200.100.0.1
Usama(config)#ip route 170.0.0.0 255.0.0.0 200.100.0.1
Usama(config)#ip route 180.0.0.0 255.0.0.0 200.100.0.1
Usama(config)#ip route 192.0.0.0 255.0.0.0 220.100.0.2
Usama(config)#exit
Usama#
%SYS-5-CONFIG_I: Configured from console by console
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Realtime
Simulation
Serial DTE
Type here to search
11:55 PM
2/27/2021


Cisco Packet Tracer - C:\Users\usama\OneDrive\Desktop\Assignment.pkt
Logical
Physical
Usama8
Physical
Config
CLI
Attributes
IOS Command Line Interface
Usama>enable
Usama#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Usama(config)#ip route 10.0.0.0 255.0.0.0 220.100.0.1
Usama(config)#ip route 40.0.0.0 255.0.0.0 220.100.0.1
Usama(config)#ip route 80.0.0.0 255.0.0.0 220.100.0.1
Usama(config)#ip route 120.0.0.0 255.0.0.0 220.100.0.1
Usama(config)#ip route 170.0.0.0 255.0.0.0 220.100.0.1
Usama(config)#ip route 180.0.0.0 255.0.0.0 220.100.0.1
Usama(config)#ip route 200.0.0.0 255.0.0.0 220.100.0.1
Usama(config)#exit
Usama#
%SYS-5-CONFIG_I: Configured from console by console
Ctrl+F6 to exit CLI focus
Copy
Paste
Top
Realtime
Simulation
Serial DTE
Type here to search
11:56 PM
2/27/2021