PROJECT REPORT

Course: Internet and Intranet Architecture
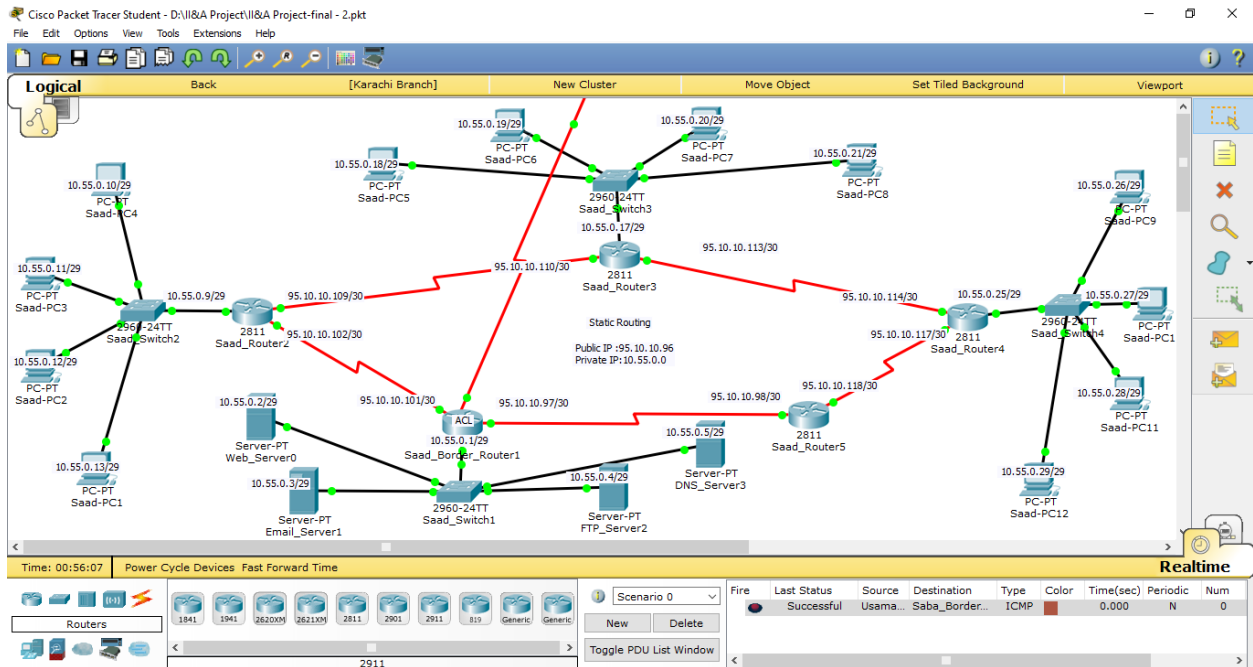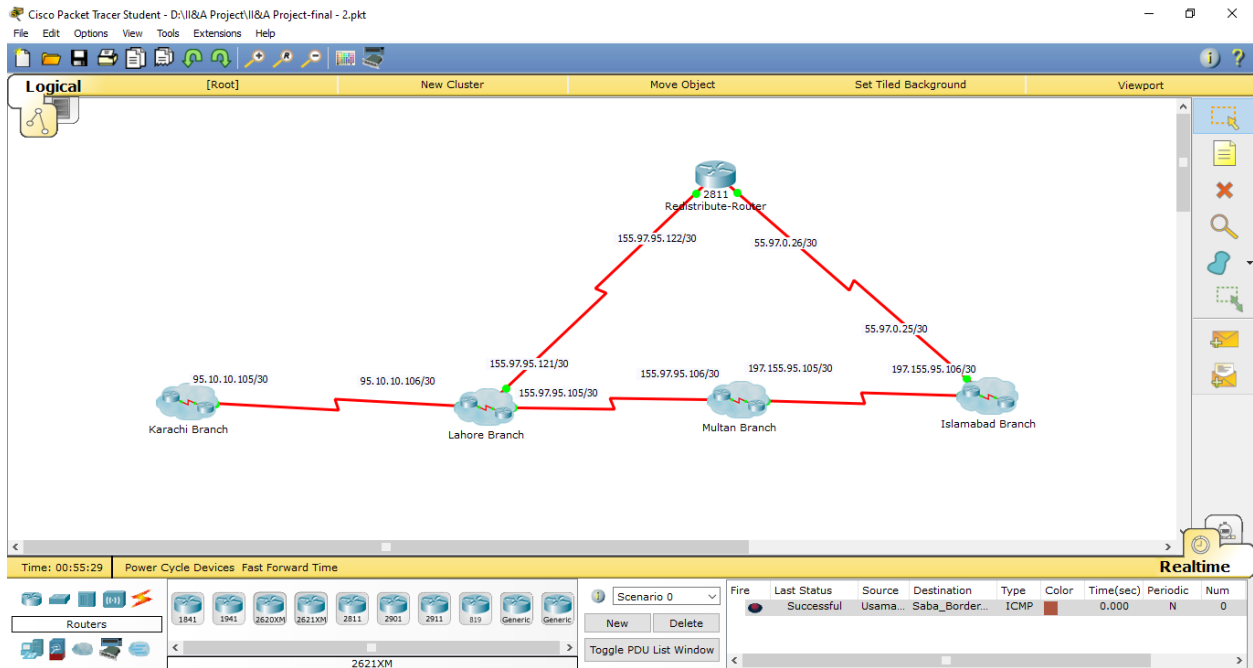
Instructor: Sir Ali Babar
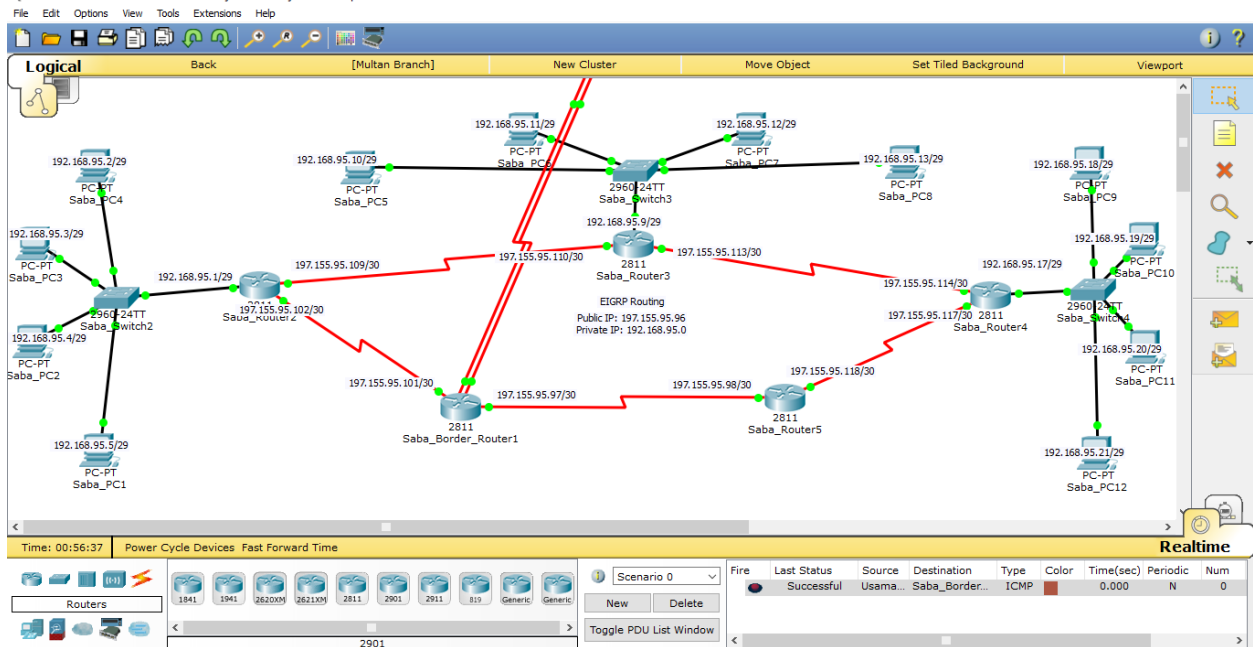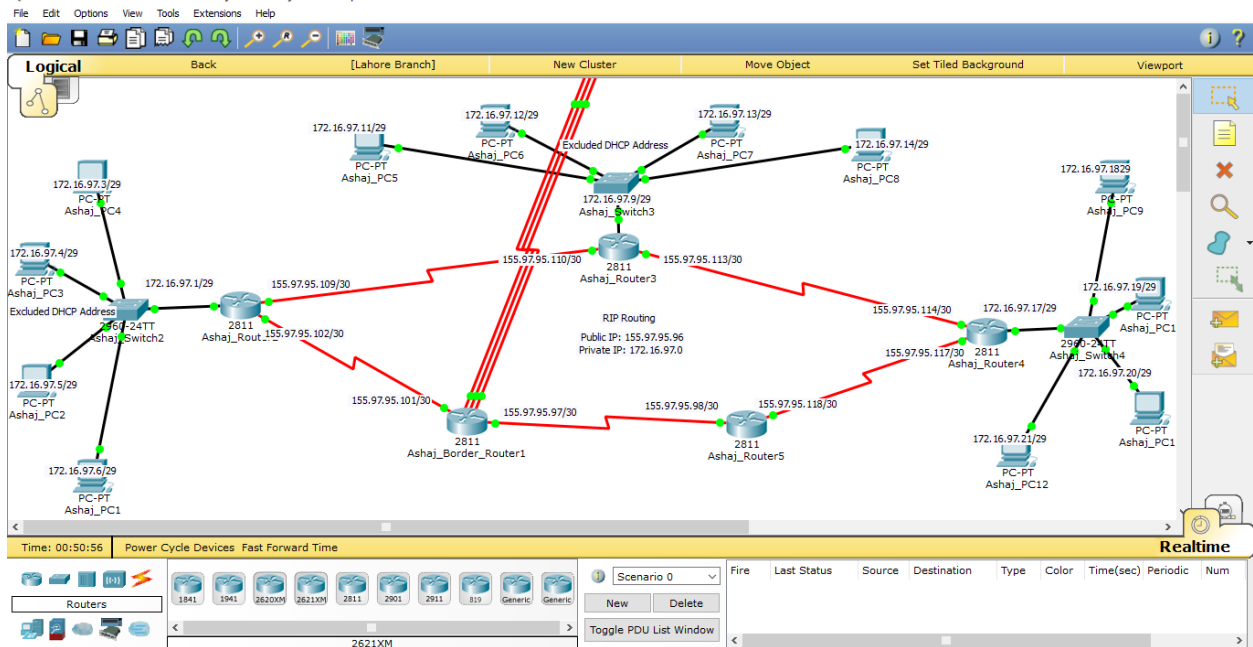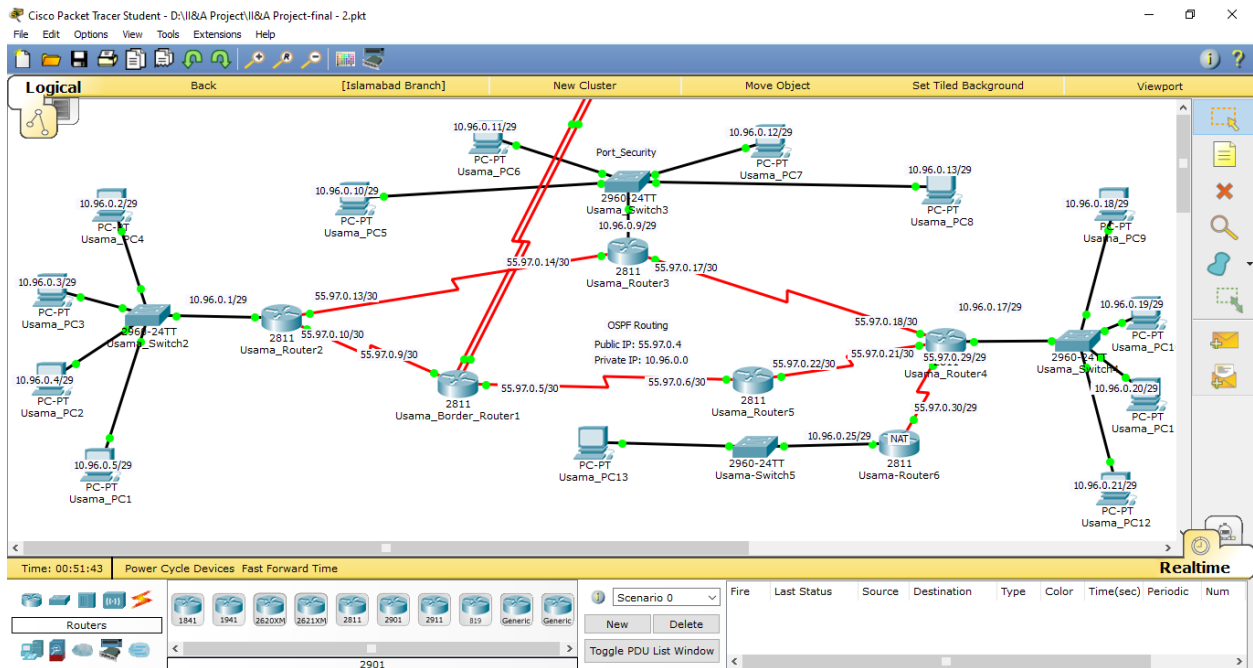
Project Title: ASSU Software Solution

GROUP MEMBERS

Name	Student id
Muhammad Saad	10155
Ashaj Bin Arshad	10097
Saba Batool	9502
Usama	9642

a) Topological Diagram:

File Edit Options Tools Extensions Help

Logical | Back | [Lahore Branch] | New Cluster | Move Object | Set Tiled Background | Viewport

172.16.97.11/29
PC-PT
Ashaj_PC5
172.16.97.12/29
PC-PT
Ashaj_PC6
Excluded DHCP Address
172.16.97.13/29
PC-PT
Ashaj_PC7
172.16.97.14/29
PC-PT
Ashaj_PC8

172.16.97.3/29
PC-PT
Ashaj_PC4

172.16.97.1829
PC-PT
Ashaj_PC9

172.16.97.9/29
Ashaj_Switch3

172.16.97.4/29
PC-PT
Ashaj_PC3
Excluded DHCP Address

172.16.97.1/29
2960-24TT
Ashaj_Switch2

2811
Ashaj_Rout

155.97.95.109/30

155.97.95.102/30

155.97.95.110/30

2811
Ashaj_Router3

155.97.95.113/30

RIP Routing
Public IP: 155.97.95.96
Private IP: 172.16.97.0

155.97.95.114/30

172.16.97.17/29
2960-2 TT
Ashaj_Switch4

172.16.97.19/29
PC-PT
Ashaj_PC1

155.97.95.117/30 2811
Ashaj_Router4

172.16.97.5/29
PC-PT
Ashaj_PC2

155.97.95.101/30

155.97.95.97/30

155.97.95.98/30

155.97.95.118/30

172.16.97.20/29
PC-PT
Ashaj_PC1

172.16.97.21/29
PC-PT
Ashaj_PC12

2811
Ashaj_Border_Router1

2811
Ashaj_Router5

172.16.97.6/29
PC-PT
Ashaj_PC1

Time: 00:50:56   Power Cycle Devices Fast Forward Time   Realtime

Routers
1841 1941 2620XM 2621XM 2811 2901 2911 819 Generic Generic
2621XM

Scenario 0
New   Delete
Toggle PDU List Window

Fire | Last Status | Source | Destination | Type | Color | Time(sec) | Periodic | Num

---

File Edit Options Tools Extensions Help

Logical | Back | [Multan Branch] | New Cluster | Move Object | Set Tiled Background | Viewport

192.168.95.11/29
PC-PT
Saba_PC6
192.168.95.12/29
PC-PT
Saba_PC7

192.168.95.2/29
PC-PT
Saba_PC4

192.168.95.10/29
PC-PT
Saba_PC5

2960-24TT
Saba_Switch3

192.168.95.13/29
PC-PT
Saba_PC8

192.168.95.18/29
PC-PT
Saba_PC9

192.168.95.3/29
PC-PT
Saba_PC3

192.168.95.9/29
2811
Saba_Router3

192.168.95.1/29
2960-24TT
Saba_Switch2

197.155.95.109/30
2811
Saba_Router2

197.155.95.102/30

197.155.95.110/30

197.155.95.113/30

EIGRP Routing
Public IP: 197.155.95.96
Private IP: 192.168.95.0

197.155.95.114/30

192.168.95.17/29
2811
Saba_Router4

192.168.95.19/29
PC-PT
Saba_PC10

197.155.95.117/30

2960-24TT
Saba_Switch4

192.168.95.4/29
PC-PT
Saba_PC2

192.168.95.20/29
PC-PT
Saba_PC11

197.155.95.101/30

197.155.95.97/30

197.155.95.98/30

197.155.95.118/30

2811
Saba_Border_Router1

2811
Saba_Router5

192.168.95.5/29
PC-PT
Saba_PC1

192.168.95.21/29
PC-PT
Saba_PC12

Time: 00:56:37   Power Cycle Devices Fast Forward Time   Realtime

Routers
1841 1941 2620XM 2621XM 2811 2901 2911 819 Generic Generic
2901

Scenario 0
New   Delete
Toggle PDU List Window

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num
	Successful	Usama...	Saba_Border...	ICMP		0.000	N	0

b) Show IP interface Brief:

IOS Command Line Interface

```
%DUAL-5-NBRCHANGE: IP-EIGRP 10: Neighbor 155.97.95.106 (Serial0/1/1) is up: new
adjacency


ashaj_router1>en
ashaj_router1#Show ip interface Brief
Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/0        unassigned      YES unset  administratively down down

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            155.97.95.101   YES manual up                    up

Serial0/0/1            155.97.95.97    YES manual up                    up

Serial0/1/0            95.10.10.106    YES manual up                    up

Serial0/1/1            155.97.95.105   YES manual up                    up

Serial0/2/0            155.97.95.121   YES manual up                    up

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
ashaj_router1#
```

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Ashaj_Router2

Physical   Config   CLI

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed state to up
%DHCPD-4-PING_CONFLICT: DHCP address conflict:  server pinged 172.16.97.1.


ashaj_router2>en
ashaj_router2#Show ip interface Brief
Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/0        172.16.97.1     YES manual up                    up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            155.97.95.109   YES manual up                    up

Serial0/0/1            155.97.95.102   YES manual up                    up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
ashaj_router2#
```

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Ashaj_Router3

Physical | Config | CLI

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
%DHCPD-4-PING_CONFLICT: DHCP address conflict:  server pinged 172.16.97.9.


ashaj_router3>en
ashaj_router3#Show ip interface Brief
Interface              IP-Address      OK? Method Status                 Protocol

FastEthernet0/0        172.16.97.9     YES manual up                     up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            155.97.95.110   YES manual up                     up

Serial0/0/1            155.97.95.113   YES manual up                     up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
ashaj_router3#
```

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Ashaj_Router4

Physical | Config | CLI

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up
%DHCPD-4-PING_CONFLICT: DHCP address conflict:  server pinged 172.16.97.17.


ashaj_router4>en
ashaj_router4#Show ip interface Brief
Interface              IP-Address      OK? Method Status               Protocol

FastEthernet0/0        172.16.97.17    YES manual up                   up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            155.97.95.117   YES manual up                   up

Serial0/0/1            155.97.95.114   YES manual up                   up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
ashaj_router4#
```

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Ashaj_Router5

Physical | Config | CLI

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed state to up


ashaj_router5>en
ashaj_router5#Show ip interface Brief
Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/0        unassigned      YES unset  administratively down down

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            155.97.95.98    YES manual up                    up

Serial0/0/1            155.97.95.118   YES manual up                    up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
ashaj_router5#
```

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IOS Command Line Interface

```
usama_router1#Show ip interface Brief
Interface              IP-Address      OK? Method Status                 Protocol

FastEthernet0/0        unassigned      YES unset  administratively down  down

FastEthernet0/1        unassigned      YES unset  administratively down  down

Serial0/0/0            55.97.0.9       YES manual up                     up

Serial0/0/1            55.97.0.5       YES manual up                     up

Serial0/1/0            197.155.95.106  YES manual up                     up

Serial0/1/1            unassigned      YES unset  administratively down  down

Serial0/2/0            55.97.0.25      YES manual up                     up

Serial0/2/1            unassigned      YES unset  administratively down  down

Serial0/3/0            unassigned      YES unset  administratively down  down

Serial0/3/1            unassigned      YES unset  administratively down  down

Vlan1                  unassigned      YES unset  administratively down  down
usama_router1#
usama_router1#
usama_router1#
```
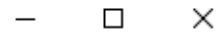
Usama_Router2   —   □   ✕

Physical | Config | CLI

IOS Command Line Interface

```
to FULL, Loading Done
%DHCPD-4-PING_CONFLICT: DHCP address conflict:  server pinged 10.96.0.1.


usama_router2>en
usama_router2#Show ip interface Brief
Interface            IP-Address      OK? Method Status              Protocol

FastEthernet0/0      10.96.0.1       YES manual up                  up

FastEthernet0/1      unassigned      YES unset  administratively down down

Serial0/0/0          55.97.0.13      YES manual up                  up

Serial0/0/1          55.97.0.10      YES manual up                  up

Serial0/1/0          unassigned      YES unset  administratively down down

Serial0/1/1          unassigned      YES unset  administratively down down

Serial0/2/0          unassigned      YES unset  administratively down down

Serial0/2/1          unassigned      YES unset  administratively down down

Serial0/3/0          unassigned      YES unset  administratively down down

Serial0/3/1          unassigned      YES unset  administratively down down

Vlan1                unassigned      YES unset  administratively down down
usama_router2#
```

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Usama_Router3   — ☐ ✕

Physical | Config | CLI

IOS Command Line Interface

```
to FULL, Loading Done
%DHCPD-4-PING_CONFLICT: DHCP address conflict:  server pinged 10.96.0.9.


usama_router3>en
usama_router3#Show ip interface Brief
Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/0        10.96.0.9       YES manual up                    up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            55.97.0.14      YES manual up                    up

Serial0/0/1            55.97.0.17      YES manual up                    up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
usama_router3#
```

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```
Usama_Router4                                    —    □    ✕

Physical   Config   CLI

               IOS Command Line Interface

to FULL, Loading Done
%DHCPD-4-PING_CONFLICT: DHCP address conflict:  server pinged 10.96.0.17.


usama_router4>en
usama_router4#Show ip interface Brief
Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/0        10.96.0.17      YES manual up                    up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            55.97.0.18      YES manual up                    up

Serial0/0/1            55.97.0.21      YES manual up                    up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            55.97.0.29      YES manual up                    up

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
usama_router4#

                                                    Copy        Paste
```

Usama_Router5

Physical | Config | **CLI**

IOS Command Line Interface

```
00:00:10: %OSPF-5-ADJCHG: Process 9642, Nbr 55.97.0.29 on Serial0/0/1 from LOADING
to FULL, Loading Done


usama_router5>en
usama_router5#Show ip interface Brief
Interface              IP-Address      OK? Method Status                 Protocol

FastEthernet0/0        unassigned      YES unset  administratively down down

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            55.97.0.6       YES manual up                     up

Serial0/0/1            55.97.0.22      YES manual up                     up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
usama_router5#
```

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IOS Command Line Interface

```
usama-9642-router6>en
usama-9642-router6#Show ip interface Brief
Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/0        10.96.0.25      YES manual up                    up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            55.97.0.30      YES manual up                    up

Serial0/0/1            unassigned      YES unset  administratively down down

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
usama-9642-router6#
```

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Saba_Border_Router1

Physical | **Config** | **CLI**

IOS Command Line Interface

```
00:00:10: %OSPF-5-ADJCHG: Process 9642, Nbr 197.155.95.106 on Serial0/1/1 from
LOADING to FULL, Loading Done


saba_router1>en
saba_router1#Show ip interface Brief
Interface              IP-Address      OK? Method Status                 Protocol

FastEthernet0/0        unassigned      YES unset  administratively down down

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            197.155.95.101  YES manual up                     up

Serial0/0/1            197.155.95.97   YES manual up                     up

Serial0/1/0            155.97.95.106   YES manual up                     up

Serial0/1/1            197.155.95.105  YES manual up                     up

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
saba_router1#
```

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Saba_Router2

Physical Config CLI

IOS Command Line Interface

```
adjacency
%DHCPD-4-PING_CONFLICT: DHCP address conflict:  server pinged 192.168.95.1.


saba_router2>en
saba_router2#Show ip interface Brief
Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/0        192.168.95.1    YES manual up                    up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            197.155.95.109  YES manual up                    up

Serial0/0/1            197.155.95.102  YES manual up                    up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
saba_router2#
```

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```
Saba_Router3                                              —    □    ✕

Physical   Config   CLI

                   IOS Command Line Interface

adjacency                                                            ^
%DHCPD-4-PING_CONFLICT: DHCP address conflict:  server pinged 192.168.95.9.


saba_router3>en
saba_router3#Show ip interface Brief
Interface              IP-Address       OK? Method Status              Protocol

FastEthernet0/0        192.168.95.9     YES manual up                  up

FastEthernet0/1        unassigned       YES unset  administratively down down

Serial0/0/0            197.155.95.110   YES manual up                  up

Serial0/0/1            197.155.95.113   YES manual up                  up

Serial0/1/0            unassigned       YES unset  administratively down down

Serial0/1/1            unassigned       YES unset  administratively down down

Serial0/2/0            unassigned       YES unset  administratively down down

Serial0/2/1            unassigned       YES unset  administratively down down

Serial0/3/0            unassigned       YES unset  administratively down down

Serial0/3/1            unassigned       YES unset  administratively down down

Vlan1                  unassigned       YES unset  administratively down down
saba_router3#                                                        v

                                             Copy           Paste
```

IOS Command Line Interface

```
adjacency
%DHCPD-4-PING_CONFLICT: DHCP address conflict:  server pinged 192.168.95.17.


saba_router3>en
saba_router3#Show ip interface Brief
Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/0        192.168.95.17   YES manual up                    up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            197.155.95.117  YES manual up                    up

Serial0/0/1            197.155.95.114  YES manual up                    up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
saba_router3#
```

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Saba_Router5

Physical | Config | CLI

IOS Command Line Interface

```
%DUAL-5-NBRCHANGE: IP-EIGRP 10: Neighbor 197.155.95.97 (Serial0/0/0) is up: new
adjacency


saba_router5>en
saba_router5#Show ip interface Brief
Interface              IP-Address      OK? Method Status                Protocol

FastEthernet0/0        unassigned      YES unset  administratively down down

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            197.155.95.98   YES manual up                    up

Serial0/0/1            197.155.95.118  YES manual up                    up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
saba_router5#
```

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Redistribute-Router

Physical **Config** **CLI**

IOS Command Line Interface

```
Router(config)#hostname redistribute-router
redistribute-router(config)#exit
redistribute-router#
%SYS-5-CONFIG_I: Configured from console by console

redistribute-router#Show ip interface Brief
Interface              IP-Address      OK? Method Status                 Protocol

FastEthernet0/0        unassigned      YES unset  administratively down down

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            155.97.95.122   YES manual up                     up

Serial0/0/1            55.97.0.26      YES manual up                     up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
redistribute-router#
```

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Saad_Border_Router1

Physical   Config   CLI

IOS Command Line Interface

```
saad_router1>EN
saad_router1#
saad_router1#Show ip interface Brief
Interface              IP-Address      OK? Method Status                  Protocol

FastEthernet0/0        10.55.0.1       YES manual up                      up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            95.10.10.101    YES manual up                      up

Serial0/0/1            95.10.10.97     YES manual up                      up

Serial0/1/0            95.10.10.105    YES manual up                      up

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
saad_router1#
saad_router1#
```

Copy   Paste

```
Saad_Router2                                                    —    □    ✕

Physical    Config    CLI

               IOS Command Line Interface

saad_router2>en
saad_router2#Show ip interface Brief
Interface              IP-Address      OK? Method Status              Protocol

FastEthernet0/0        10.55.0.9       YES manual up                  up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            95.10.10.109    YES manual up                  up

Serial0/0/1            95.10.10.102    YES manual up                  up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
saad_router2#

                                                     Copy          Paste
```

Saad_Router3

Physical | Config | **CLI**

IOS Command Line Interface

```
saad_router3>en
saad_router3#Show ip interface Brief
Interface            IP-Address      OK? Method Status                Protocol

FastEthernet0/0      10.55.0.17      YES manual up                    up

FastEthernet0/1      unassigned      YES unset  administratively down down

Serial0/0/0          95.10.10.110    YES manual up                    up

Serial0/0/1          95.10.10.113    YES manual up                    up

Serial0/1/0          unassigned      YES unset  administratively down down

Serial0/1/1          unassigned      YES unset  administratively down down

Serial0/2/0          unassigned      YES unset  administratively down down

Serial0/2/1          unassigned      YES unset  administratively down down

Serial0/3/0          unassigned      YES unset  administratively down down

Serial0/3/1          unassigned      YES unset  administratively down down

Vlan1                unassigned      YES unset  administratively down down
saad_router3#
```

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```
Saad_Router4                                                    —    □    ×

Physical    Config    CLI

                    IOS Command Line Interface

saad_router4>en
saad_router4#Show ip interface Brief
Interface              IP-Address      OK? Method Status              Protocol

FastEthernet0/0        10.55.0.25      YES manual up                  up

FastEthernet0/1        unassigned      YES unset  administratively down down

Serial0/0/0            95.10.10.117    YES manual up                  up

Serial0/0/1            95.10.10.114    YES manual up                  up

Serial0/1/0            unassigned      YES unset  administratively down down

Serial0/1/1            unassigned      YES unset  administratively down down

Serial0/2/0            unassigned      YES unset  administratively down down

Serial0/2/1            unassigned      YES unset  administratively down down

Serial0/3/0            unassigned      YES unset  administratively down down

Serial0/3/1            unassigned      YES unset  administratively down down

Vlan1                  unassigned      YES unset  administratively down down
saad_router4#

                                                      Copy        Paste
```

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up


saad_router5>en
saad_router5#Show ip interface Brief
Interface               IP-Address       OK? Method Status                Protocol

FastEthernet0/0         unassigned       YES unset  administratively down down

FastEthernet0/1         unassigned       YES unset  administratively down down

Serial0/0/0             95.10.10.98      YES manual up                    up

Serial0/0/1             95.10.10.118     YES manual up                    up

Serial0/1/0             unassigned       YES unset  administratively down down

Serial0/1/1             unassigned       YES unset  administratively down down

Serial0/2/0             unassigned       YES unset  administratively down down

Serial0/2/1             unassigned       YES unset  administratively down down

Serial0/3/0             unassigned       YES unset  administratively down down

Serial0/3/1             unassigned       YES unset  administratively down down

Vlan1                   unassigned       YES unset  administratively down down
saad_router5#
```

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c) Show Running Configuration:

Saad_Border_Router1

IOS Command Line Interface

```
saad_router1>en
saad_router1#show running-config
Building configuration...

Current configuration : 1487 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saad_router1
!
!
!
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
```

Copy   Paste

Physical   Config   CLI

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 10.55.0.1 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 95.10.10.101 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 95.10.10.97 255.255.255.252
!
interface Serial0/1/0
 ip address 95.10.10.105 255.255.255.252
!
interface Serial0/1/1
```

Copy   Paste

Saad_Border_Router1   —   □   ✕

Physical   Config   CLI

IOS Command Line Interface

```
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
ip classless
```

Copy   Paste

Saad_Border_Router1

Physical　　Config　　CLI

IOS Command Line Interface

```
ip classless
ip route 95.10.10.108 255.255.255.252 95.10.10.102
ip route 10.55.0.8 255.255.255.248 95.10.10.102
ip route 95.10.10.112 255.255.255.252 95.10.10.102
ip route 10.55.0.16 255.255.255.248 95.10.10.102
ip route 95.10.10.116 255.255.255.252 95.10.10.98
ip route 10.55.0.24 255.255.255.248 95.10.10.98
ip route 0.0.0.0 0.0.0.0 95.10.10.106
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```
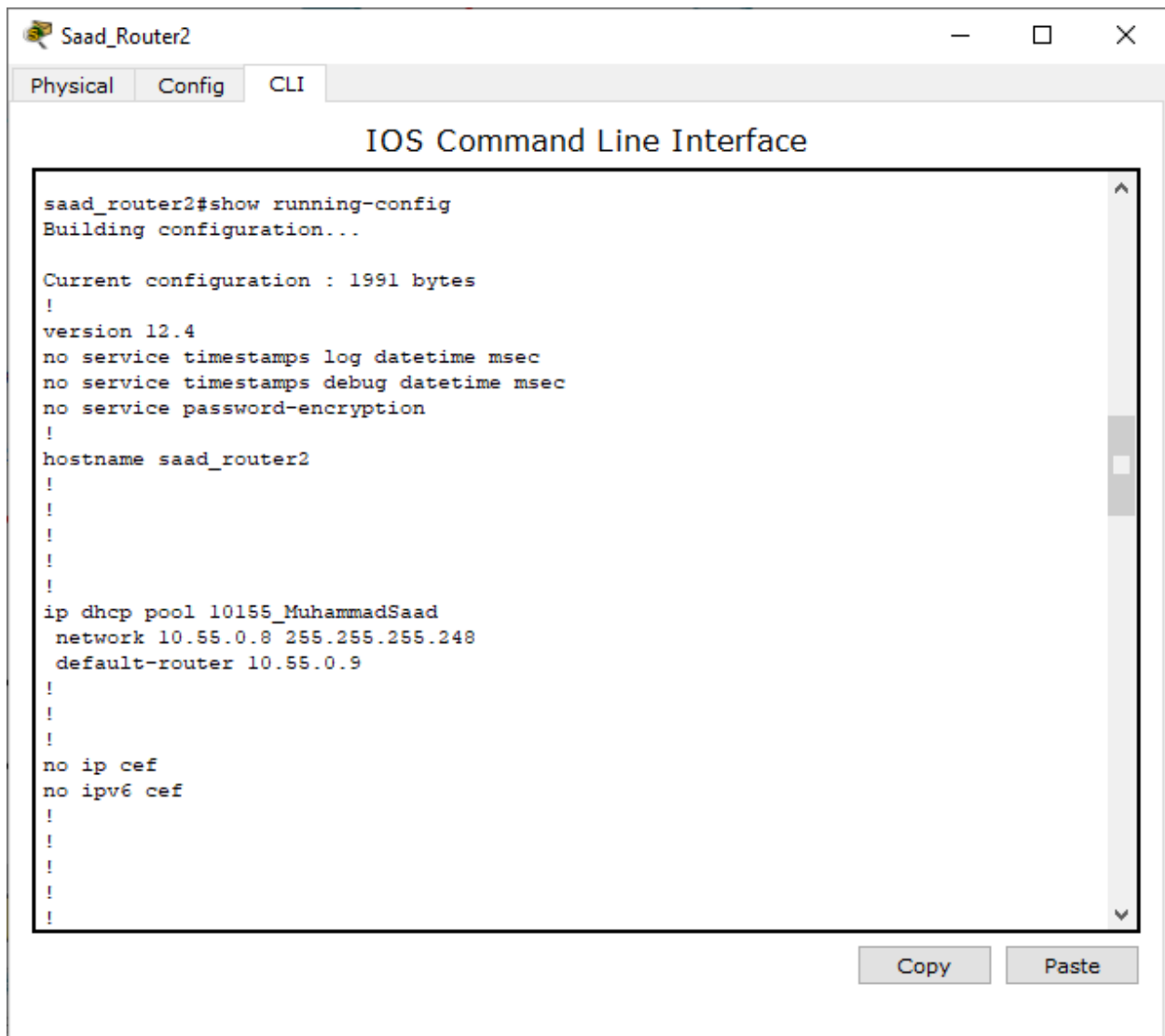
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IOS Command Line Interface

```
saad_router2#show running-config
Building configuration...

Current configuration : 1991 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saad_router2
!
!
!
!
!
ip dhcp pool 10155_MuhammadSaad
 network 10.55.0.8 255.255.255.248
 default-router 10.55.0.9
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
```
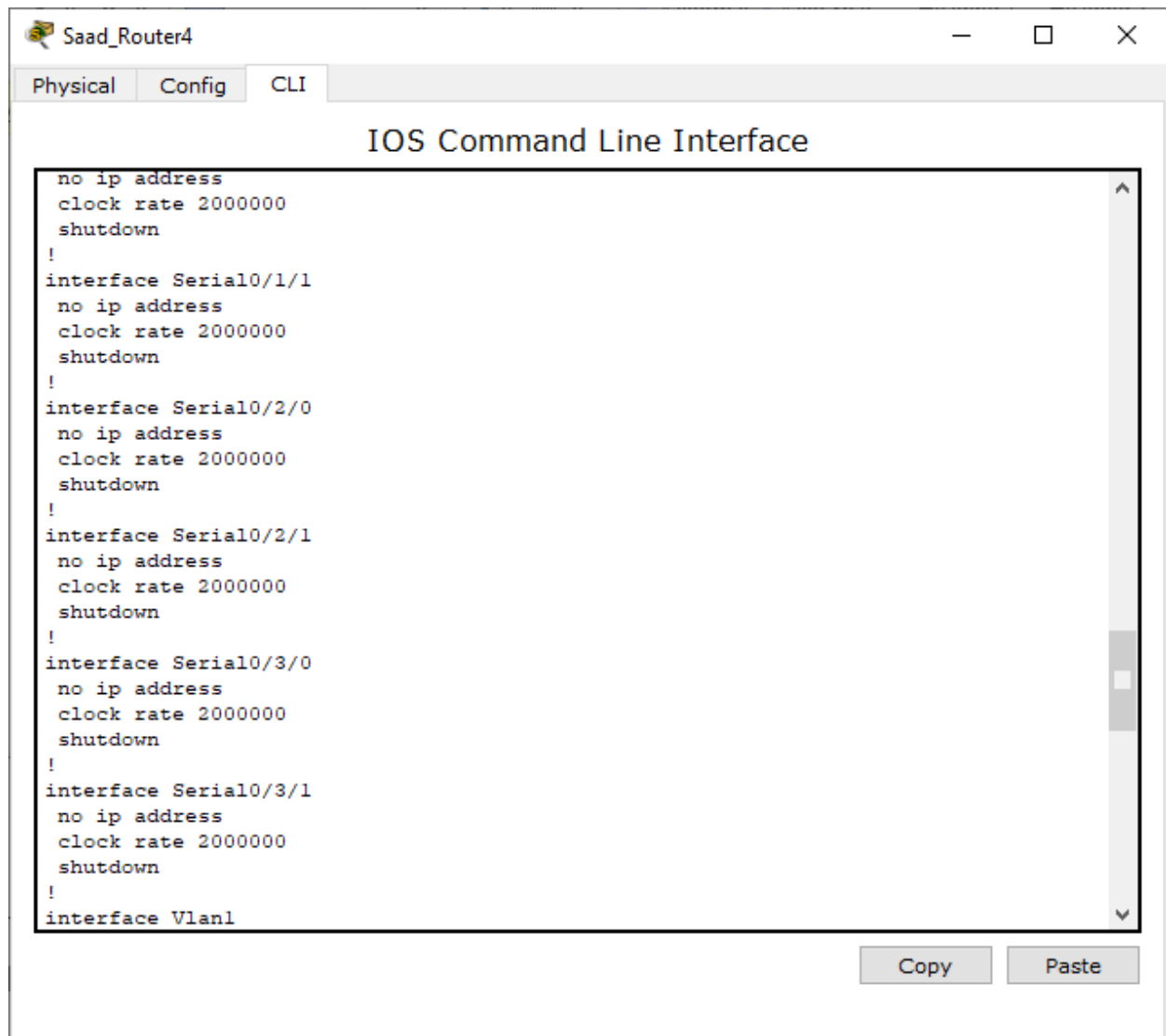
Physical   Config   CLI

IOS Command Line Interface

```
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 10.55.0.9 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 95.10.10.109 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 95.10.10.102 255.255.255.252
 ip access-group 179 out
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
```
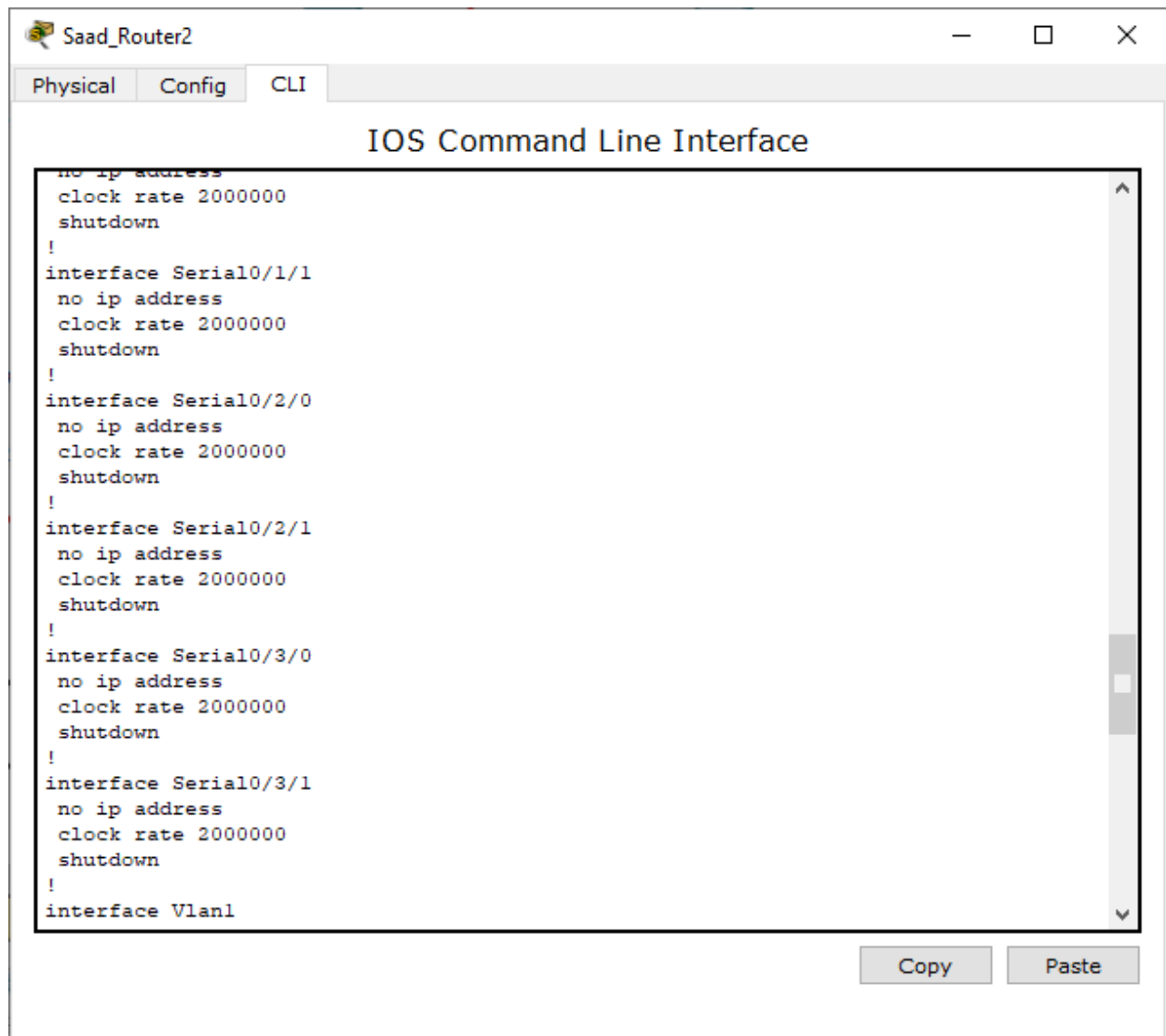
Copy   Paste

```
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
```

Copy   Paste

IOS Command Line Interface

```
interface Vlan1
 no ip address
 shutdown
!
ip classless
ip route 10.55.0.0 255.255.255.248 95.10.10.101
ip route 95.10.10.96 255.255.255.252 95.10.10.101
ip route 95.10.10.116 255.255.255.252 95.10.10.101
ip route 95.10.10.116 255.255.255.252 95.10.10.112
ip route 10.55.0.24 255.255.255.248 95.10.10.101
ip route 10.55.0.16 255.255.255.248 95.10.10.110
ip route 95.10.10.104 255.255.255.252 95.10.10.101
ip route 95.10.10.112 255.255.255.252 95.10.10.110
ip route 0.0.0.0 0.0.0.0 95.10.10.101
!
ip flow-export version 9
!
!
access-list 179 permit tcp host 10.55.0.10 host 10.55.0.3
access-list 179 permit tcp host 10.55.0.10 host 10.55.0.3 eq smtp
access-list 179 deny tcp any host 10.55.0.3 eq smtp
access-list 179 permit ip any any
access-list 179 permit tcp host 10.55.0.11 host 10.55.0.3 eq smtp
!
no cdp run
!
!
!
!
!
```

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IOS Command Line Interface

```
ip route 95.10.10.104 255.255.255.252 95.10.10.101
ip route 95.10.10.112 255.255.255.252 95.10.10.110
ip route 0.0.0.0 0.0.0.0 95.10.10.101
!
ip flow-export version 9
!
!
access-list 179 permit tcp host 10.55.0.10 host 10.55.0.3
access-list 179 permit tcp host 10.55.0.10 host 10.55.0.3 eq smtp
access-list 179 deny tcp any host 10.55.0.3 eq smtp
access-list 179 permit ip any any
access-list 179 permit tcp host 10.55.0.11 host 10.55.0.3 eq smtp
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```
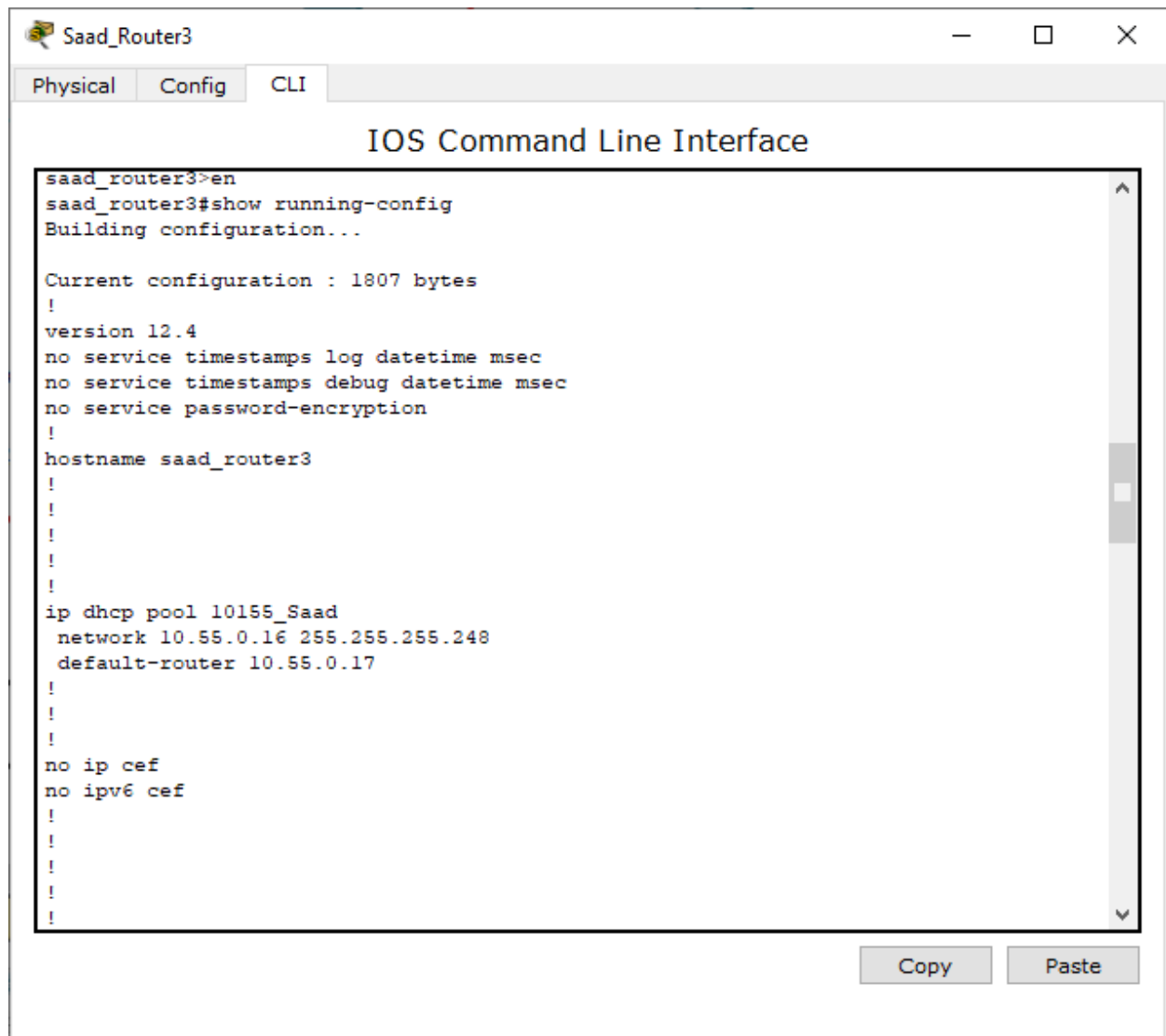
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Physical Config CLI

IOS Command Line Interface

```
saad_router3>en
saad_router3#show running-config
Building configuration...

Current configuration : 1807 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saad_router3
!
!
!
!
!
ip dhcp pool 10155_Saad
 network 10.55.0.16 255.255.255.248
 default-router 10.55.0.17
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
```

Copy   Paste

Saad_Router3

Physical | Config | CLI

IOS Command Line Interface

```
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 10.55.0.17 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 95.10.10.110 255.255.255.252
 ip access-group 199 out
!
interface Serial0/0/1
 ip address 95.10.10.113 255.255.255.252
 clock rate 2000000
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
```

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IOS Command Line Interface

```
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
```

Copy   Paste
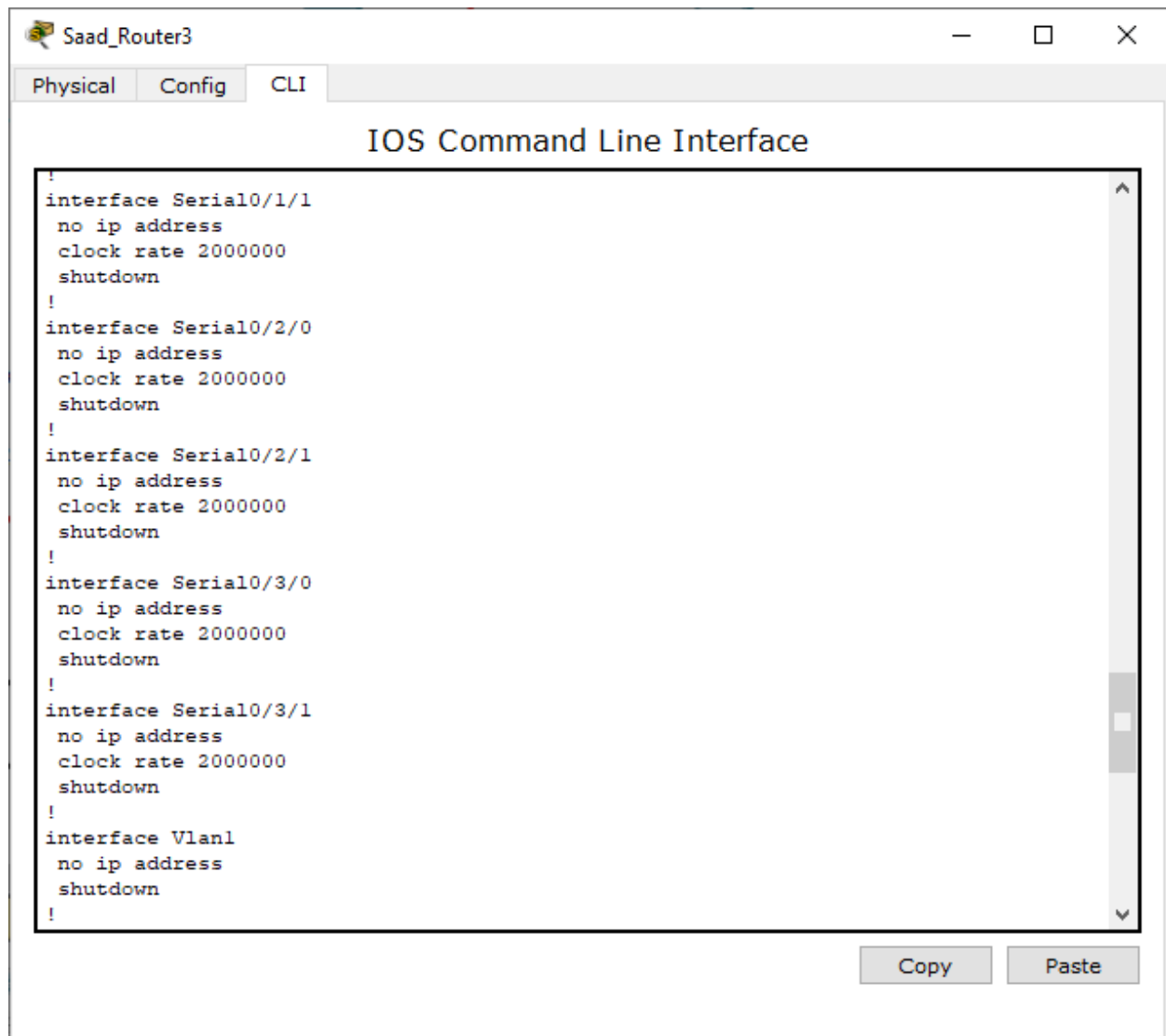
Saad_Router3

Physical Config CLI

IOS Command Line Interface

```
interface Vlan1
 no ip address
 shutdown
!
ip classless
ip route 10.55.0.0 255.255.255.248 95.10.10.109
ip route 10.55.0.8 255.255.255.248 95.10.10.109
ip route 10.55.0.24 255.255.255.248 95.10.10.114
ip route 95.10.10.100 255.255.255.252 95.10.10.109
ip route 95.10.10.96 255.255.255.252 95.10.10.109
ip route 95.10.10.104 255.255.255.252 95.10.10.109
ip route 95.10.10.116 255.255.255.252 95.10.10.114
ip route 0.0.0.0 0.0.0.0 95.10.10.109
!
ip flow-export version 9
!
!
access-list 199 permit tcp host 10.55.0.18 host 10.55.0.2 eq www
access-list 199 deny tcp any host 10.55.0.2 eq www
access-list 199 permit ip any any
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
```

Copy Paste

```
ip route 95.10.10.110 255.255.255.252 95.10.10.114
ip route 0.0.0.0 0.0.0.0 95.10.10.109
!
ip flow-export version 9
!
!
access-list 199 permit tcp host 10.55.0.18 host 10.55.0.2 eq www
access-list 199 deny tcp any host 10.55.0.2 eq www
access-list 199 permit ip any any
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end


saad_router3#
saad_router3#
```
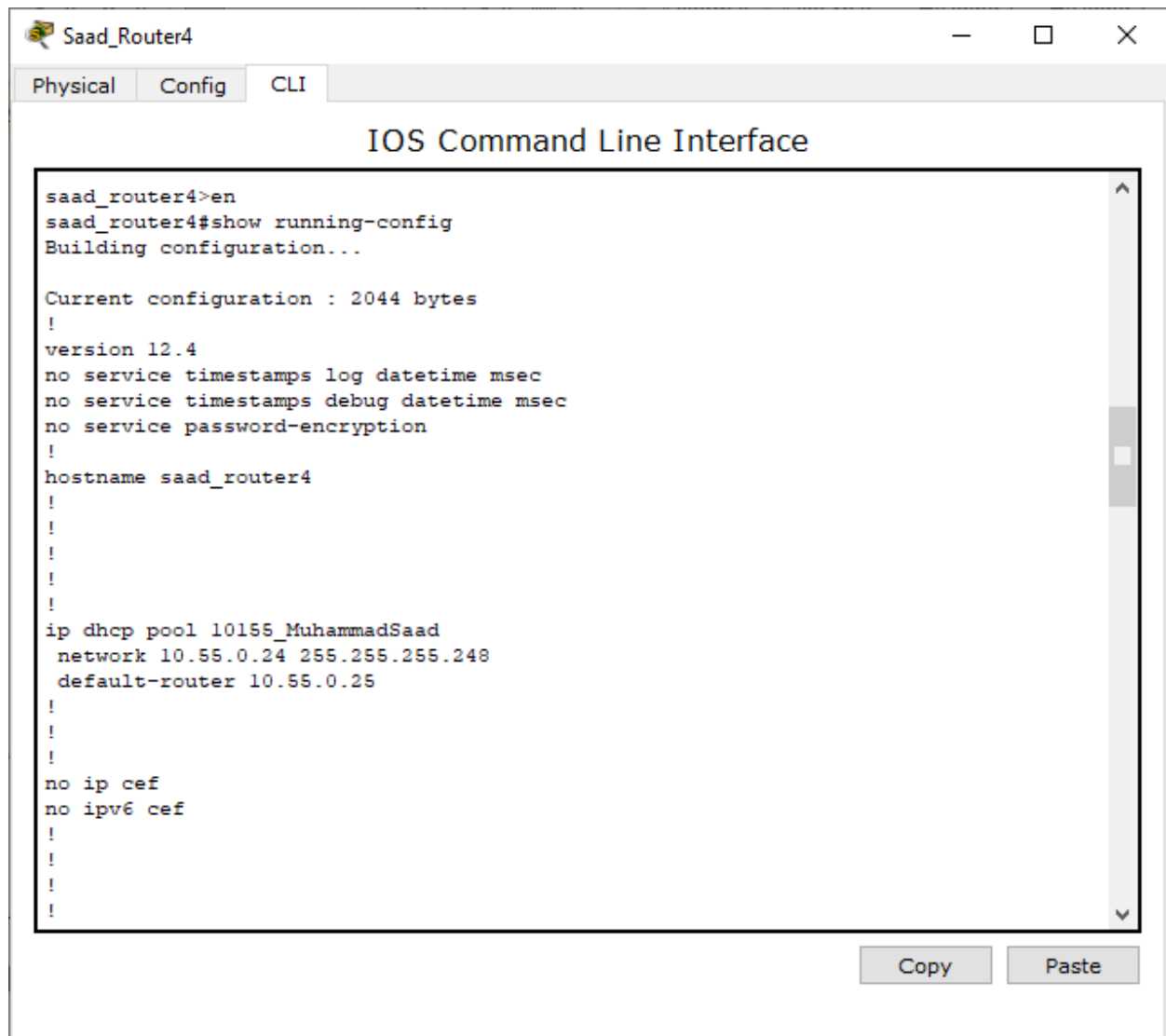
Physical Config CLI

IOS Command Line Interface

```
saad_router4>en
saad_router4#show running-config
Building configuration...

Current configuration : 2044 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saad_router4
!
!
!
!
!
ip dhcp pool 10155_MuhammadSaad
 network 10.55.0.24 255.255.255.248
 default-router 10.55.0.25
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
```

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IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 10.55.0.25 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 95.10.10.117 255.255.255.252
 ip access-group 189 out
 clock rate 2000000
!
interface Serial0/0/1
 ip address 95.10.10.114 255.255.255.252
 ip access-group 189 out
!
interface Serial0/1/0
 no ip address
```

Copy   Paste

IOS Command Line Interface

```
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
```

IOS Command Line Interface

```
interface Vlan1
 no ip address
 shutdown
!
ip classless
ip route 10.55.0.16 255.255.255.248 95.10.10.113
ip route 10.55.0.8 255.255.255.248 95.10.10.113
ip route 10.55.0.0 255.255.255.248 95.10.10.118
ip route 95.10.10.96 255.255.255.252 95.10.10.118
ip route 95.10.10.100 255.255.255.252 95.10.10.118
ip route 95.10.10.104 255.255.255.252 95.10.10.118
ip route 95.10.10.108 255.255.255.252 95.10.10.113
ip route 10.55.0.0 255.255.255.248 95.10.10.113
ip route 95.10.10.100 255.255.255.252 95.10.10.113
ip route 95.10.10.96 255.255.255.252 95.10.10.113
ip route 95.10.10.104 255.255.255.252 95.10.10.113
ip route 0.0.0.0 0.0.0.0 95.10.10.113
!
ip flow-export version 9
!
!
access-list 189 permit tcp host 10.55.0.26 host 10.55.0.4 eq ftp
access-list 189 deny tcp any host 10.55.0.4 eq ftp
access-list 189 permit ip any any
!
no cdp run
!
!
!
```

Copy   Paste

```
access-list 189 permit tcp host 10.55.0.26 host 10.55.0.4 eq ftp
access-list 189 deny tcp any host 10.55.0.4 eq ftp
access-list 189 permit ip any any
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end


saad_router4#
saad_router4#
saad_router4#
saad_router4#
saad_router4#
saad_router4#
saad_router4#
```

Saad_Router5

Physical | Config | CLI

IOS Command Line Interface

```
saad_router5>en
saad_router5#show running-config
Building configuration...

Current configuration : 1574 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saad_router5
!
!
!
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
```

Copy | Paste
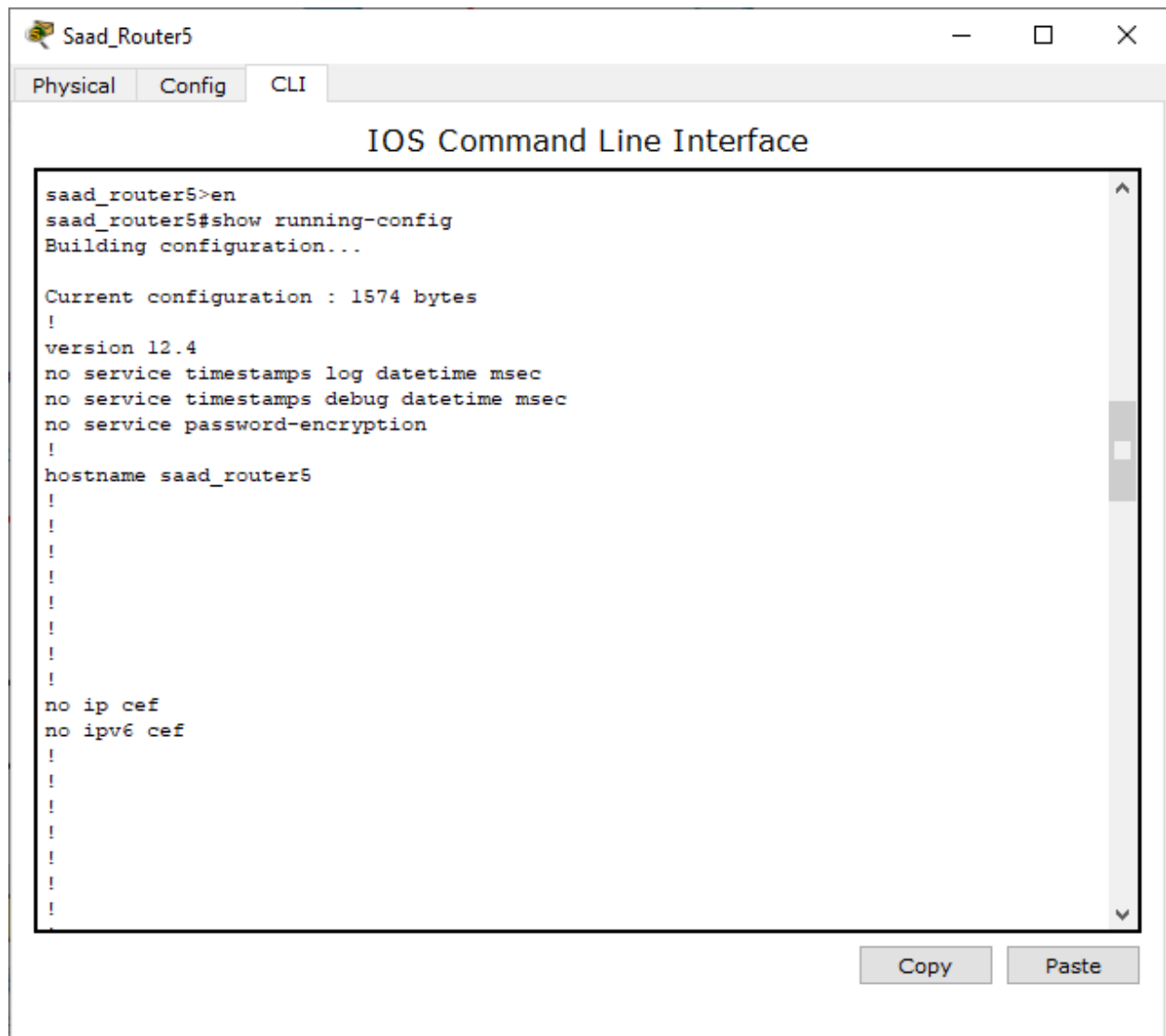
IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 95.10.10.98 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 95.10.10.118 255.255.255.252
 !
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
```

```
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
ip classless
```

IOS Command Line Interface

```
ip route 10.55.0.0 255.255.255.248 95.10.10.97
ip route 10.55.0.8 255.255.255.248 95.10.10.97
ip route 10.55.0.16 255.255.255.248 95.10.10.97
ip route 10.55.0.24 255.255.255.248 95.10.10.117
ip route 95.10.10.100 255.255.255.252 95.10.10.97
ip route 95.10.10.104 255.255.255.252 95.10.10.97
ip route 95.10.10.108 255.255.255.252 95.10.10.97
ip route 95.10.10.112 255.255.255.252 95.10.10.117
ip route 0.0.0.0 0.0.0.0 95.10.10.97
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Physical   Config   CLI

IOS Command Line Interface

```
ashaj_router1>en
ashaj_router1#show running-config
Building configuration...

Current configuration : 1414 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname ashaj_router1
!
!
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
```

Copy   Paste

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 155.97.95.101 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 155.97.95.97 255.255.255.252
!
interface Serial0/1/0
 ip address 95.10.10.106 255.255.255.252
 clock rate 2000000
!
```

Copy   Paste

IOS Command Line Interface

```
!
interface Serial0/1/1
 ip address 155.97.95.105 255.255.255.252
!
interface Serial0/2/0
 ip address 155.97.95.121 255.255.255.252
 clock rate 2000000
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router eigrp 10
 network 155.97.95.104 0.0.0.3
 auto-summary
```

Copy   Paste

IOS Command Line Interface

```
!
router eigrp 10
 network 155.97.95.104 0.0.0.3
 auto-summary
!
router rip
 version 2
 redistribute eigrp 10 metric 2
 redistribute static metric 2
 network 95.0.0.0
 network 155.97.0.0
 no auto-summary
!
ip classless
ip route 0.0.0.0 0.0.0.0 95.10.10.105
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
```

Copy   Paste

Ashaj_Router2 — □ ✕

Physical   Config   CLI

IOS Command Line Interface

```
ashaj_router2>en
ashaj_router2#show running-config
Building configuration...

Current configuration : 1388 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname ashaj_router2
!
!
!
!
ip dhcp excluded-address 172.16.97.2
!
ip dhcp pool 10097_Ashaj
 network 172.16.97.0 255.255.255.248
 default-router 172.16.97.1
ip dhcp pool Ashaj_10097
!
!
!
no ip cef
no ipv6 cef
!
!
```

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Ashaj_Router2 — □ ✕

Physical Config CLI

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 172.16.97.1 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 155.97.95.109 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 155.97.95.102 255.255.255.252
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
```

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```
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
```

IOS Command Line Interface

```
router rip
 version 2
 network 155.97.0.0
 network 172.16.0.0
 no auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Copy | Paste

IOS Command Line Interface

```
ashaj_router3>en
ashaj_router3#show running-config
Building configuration...

Current configuration : 1389 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname ashaj_router3
!
!
!
!
ip dhcp excluded-address 172.16.97.10
!
ip dhcp pool 10097_Ashaj
 network 172.16.97.8 255.255.255.248
 default-router 172.16.97.9
ip dhcp pool Ashaj_10097
!
!
!
no ip cef
no ipv6 cef
!
!
!
```

Copy   Paste

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 172.16.97.9 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 155.97.95.110 255.255.255.252
!
interface Serial0/0/1
 ip address 155.97.95.113 255.255.255.252
 clock rate 2000000
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
!
```

Copy   Paste

```
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router rip
```

Ashaj_Router3

Physical   Config   CLI

IOS Command Line Interface

Copy   Paste

Physical | Config | CLI

IOS Command Line Interface

```
!
router rip
 version 2
 network 155.97.0.0
 network 172.16.0.0
 no auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Copy | Paste

Ashaj_Router4   — □ ✕

Physical   Config   CLI

IOS Command Line Interface

```
ashaj_router4#show running-config
Building configuration...

Current configuration : 1482 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname ashaj_router4
!
!
!
!
!
ip dhcp pool 10097_Ashaj
 network 172.16.97.16 255.255.255.248
 default-router 172.16.97.17
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
```

Copy   Paste

Physical   Config   CLI

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 172.16.97.17 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 155.97.95.117 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 155.97.95.114 255.255.255.252
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
```

Copy   Paste

```
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
```

Copy   Paste

```
!
router rip
 version 2
 network 155.97.0.0
 network 172.16.0.0
 no auto-summary
!
```
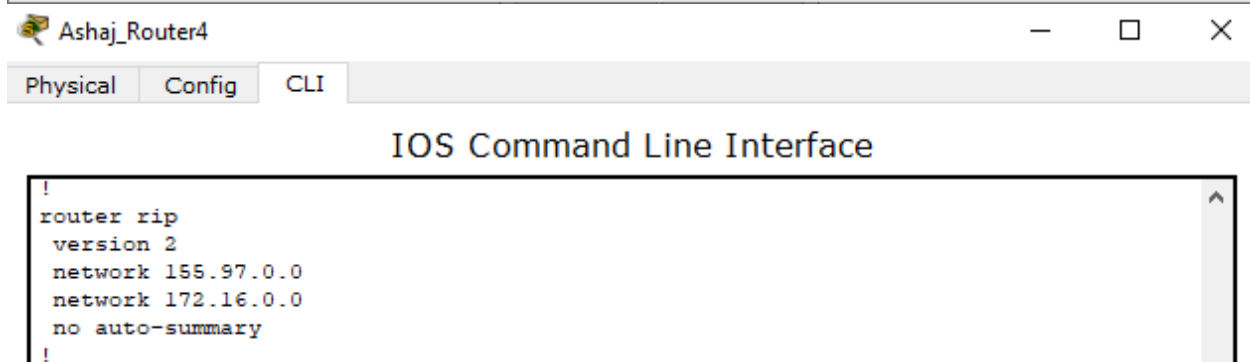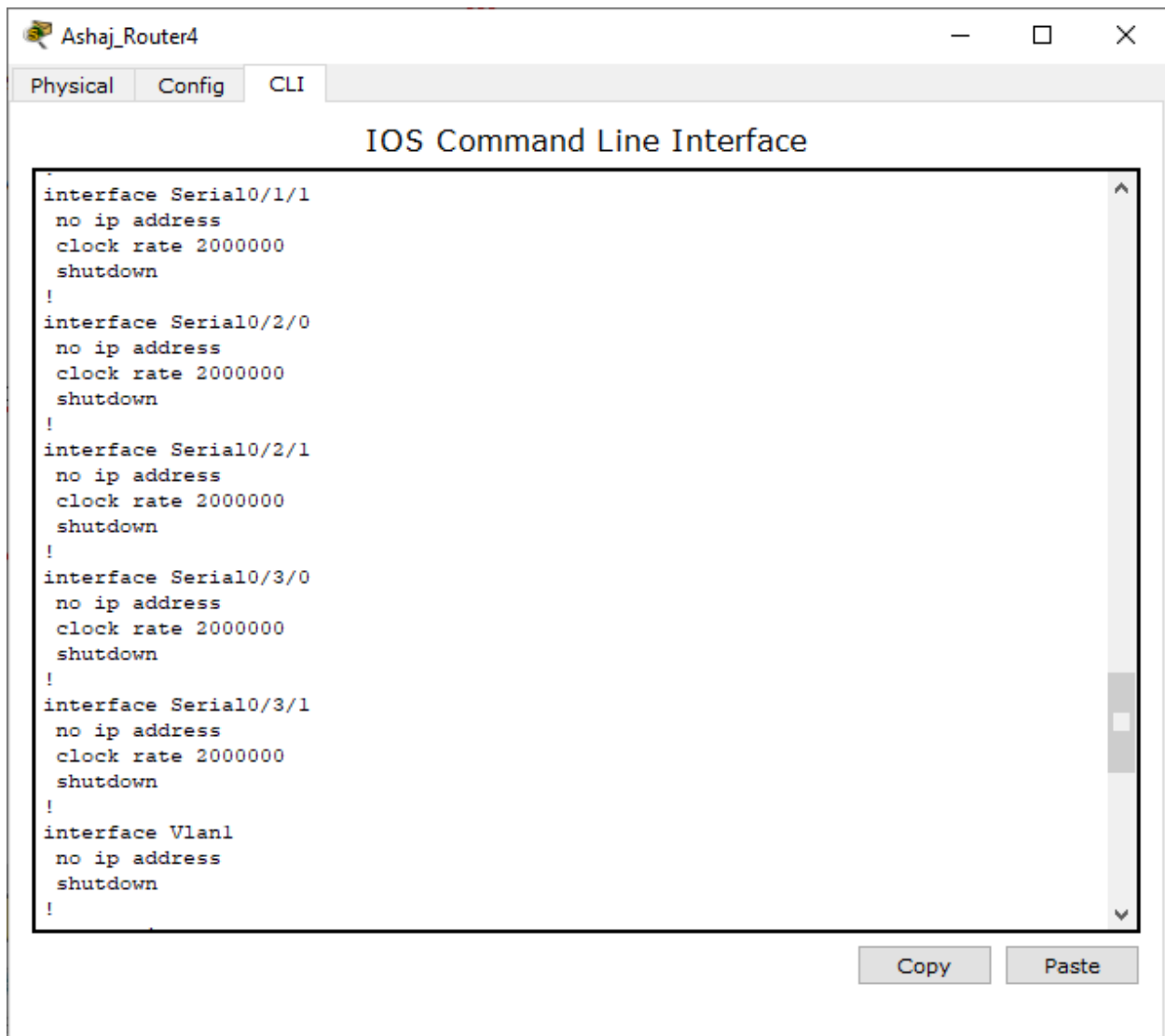
```
ip classless
!
ip flow-export version 9
!
!
access-list 25 permit 172.16.97.16 0.0.0.7
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end


ashaj_router4#
ashaj_router4#
ashaj_router4#
ashaj_router4#
ashaj_router4#
```

IOS Command Line Interface

```
ashaj_router5>en
ashaj_router5#show running-config
Building configuration...

Current configuration : 1200 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname ashaj_router5
!
!
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
```

Copy   Paste

Physical | Config | CLI

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 155.97.95.98 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 155.97.95.118 255.255.255.252
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
```

Copy | Paste

Ashaj_Router5

Physical | Config | CLI

IOS Command Line Interface

```
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
```
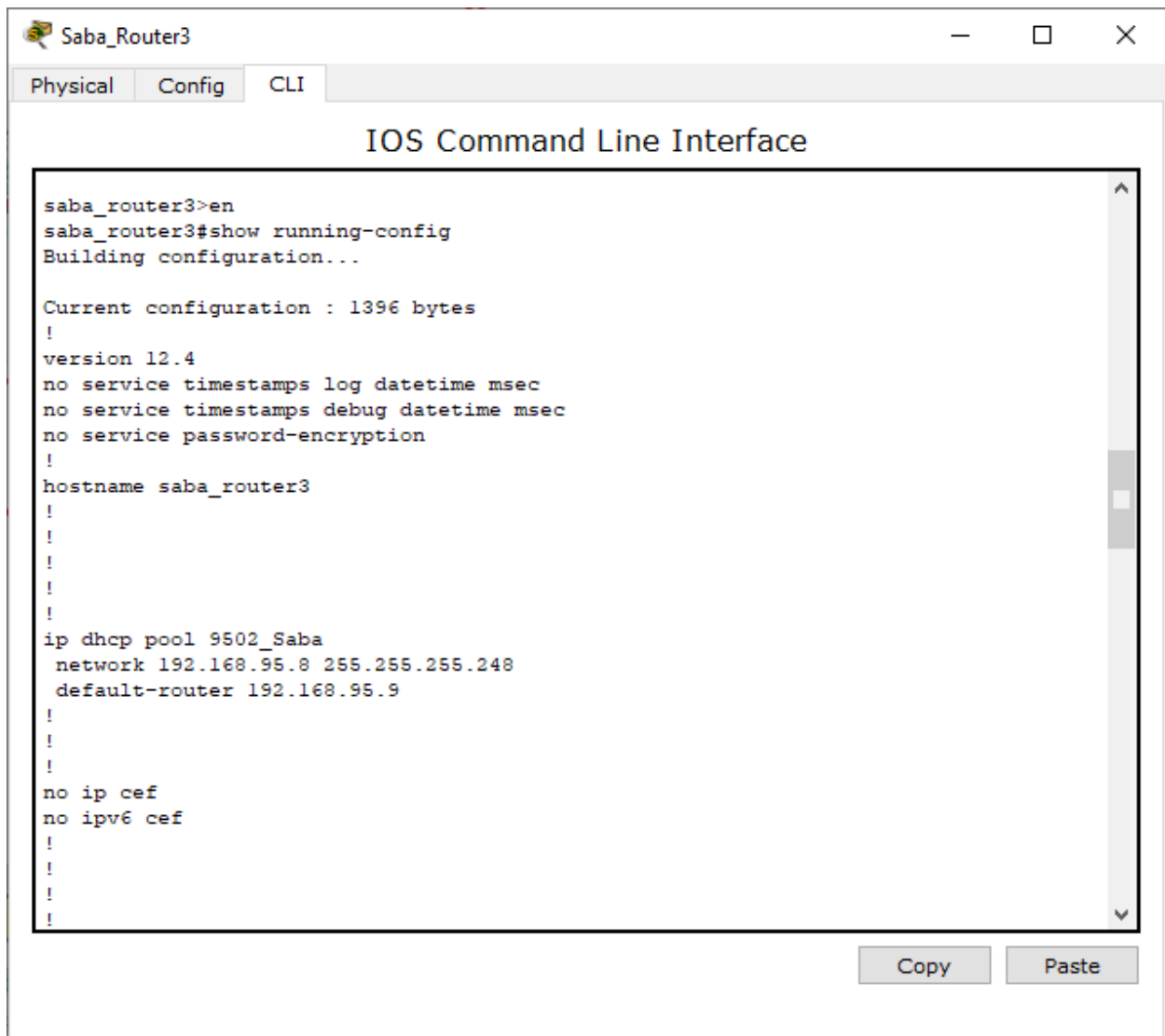
Copy | Paste

Physical   Config   CLI

IOS Command Line Interface

```
 no ip address
 shutdown
!
router rip
 version 2
 network 155.97.0.0
 no auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Copy   Paste

Physical   Config   CLI

IOS Command Line Interface

```
saba_router1>en
saba_router1#show running-config
Building configuration...

Current configuration : 1529 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saba_router1
!
!
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
```

Copy   Paste

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 197.155.95.101 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 197.155.95.97 255.255.255.252
!
interface Serial0/1/0
 ip address 155.97.95.106 255.255.255.252
 clock rate 2000000
!
```

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IOS Command Line Interface

```
interface Serial0/1/1
 ip address 197.155.95.105 255.255.255.252
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router eigrp 10
 redistribute rip metric 100 0 255 10 5
 redistribute ospf 9642 metric 100 1 255 10 5
```
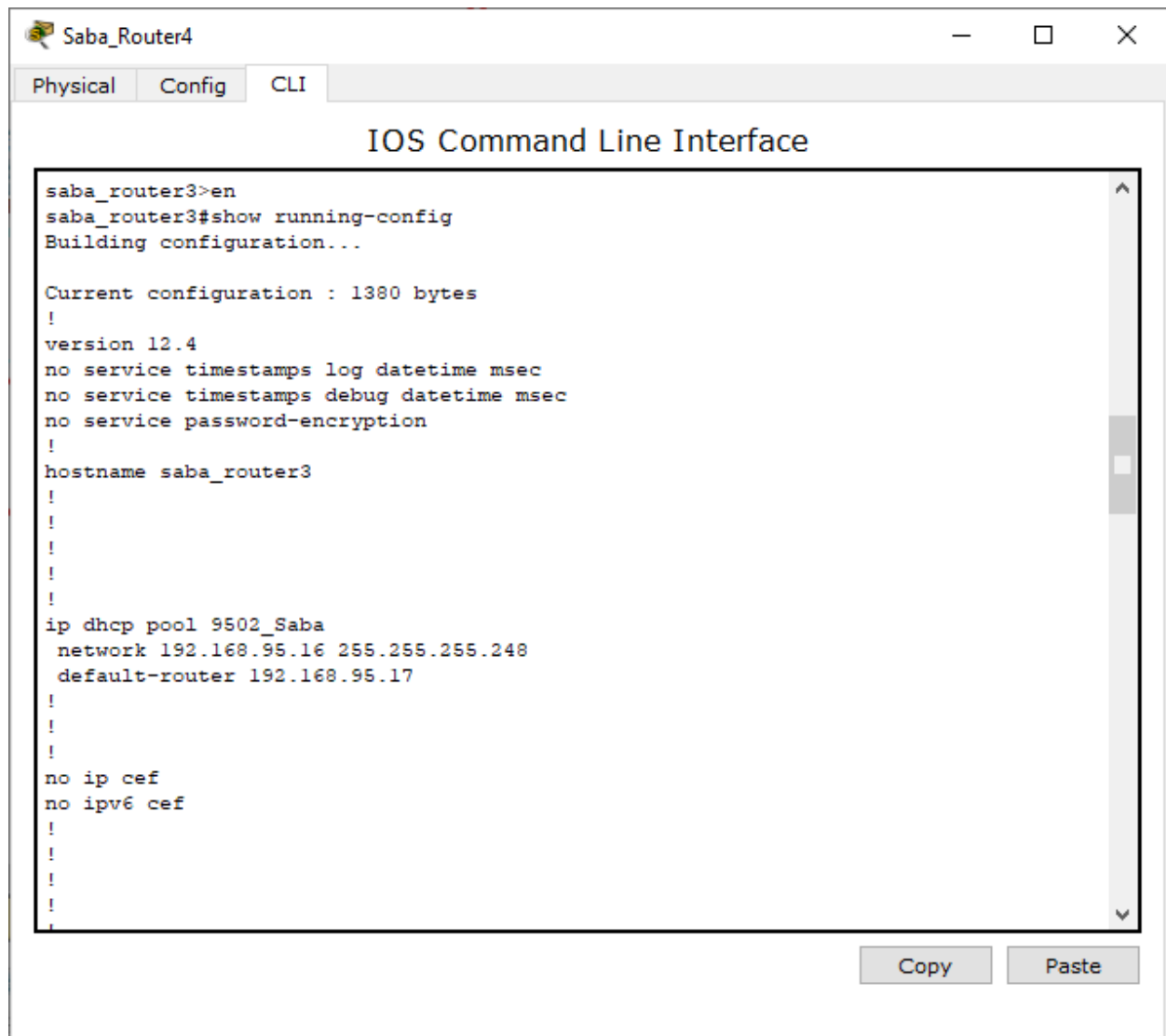
Copy   Paste

IOS Command Line Interface

```
router eigrp 10
 redistribute rip metric 100 0 255 10 5
 redistribute ospf 9642 metric 100 1 255 10 5
 network 197.155.95.100 0.0.0.3
 network 197.155.95.96 0.0.0.3
 network 197.155.95.104 0.0.0.3
 network 155.97.95.104 0.0.0.3
 no auto-summary
!
router ospf 9642
 log-adjacency-changes
 network 197.155.95.104 0.0.0.3 area 0
!
router rip
 version 2
 network 155.97.0.0
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
```

Copy   Paste

```
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end


saba_router1#
saba_router1#
saba_router1#
saba_router1#
saba_router1#
```

IOS Command Line Interface

```
saba_router2>en
saba_router2#show running-config
Building configuration...

Current configuration : 1356 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saba_router2
!
!
!
!
!
ip dhcp pool 9502_Saba
 network 192.168.95.0 255.255.255.248
 default-router 192.168.95.1
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
```

Saba_Router2

Physical | Config | CLI

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 192.168.95.1 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 197.155.95.109 255.255.255.252
!
interface Serial0/0/1
 ip address 197.155.95.102 255.255.255.252
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
!
```

Copy | Paste

Physical Config CLI

IOS Command Line Interface

```
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
```

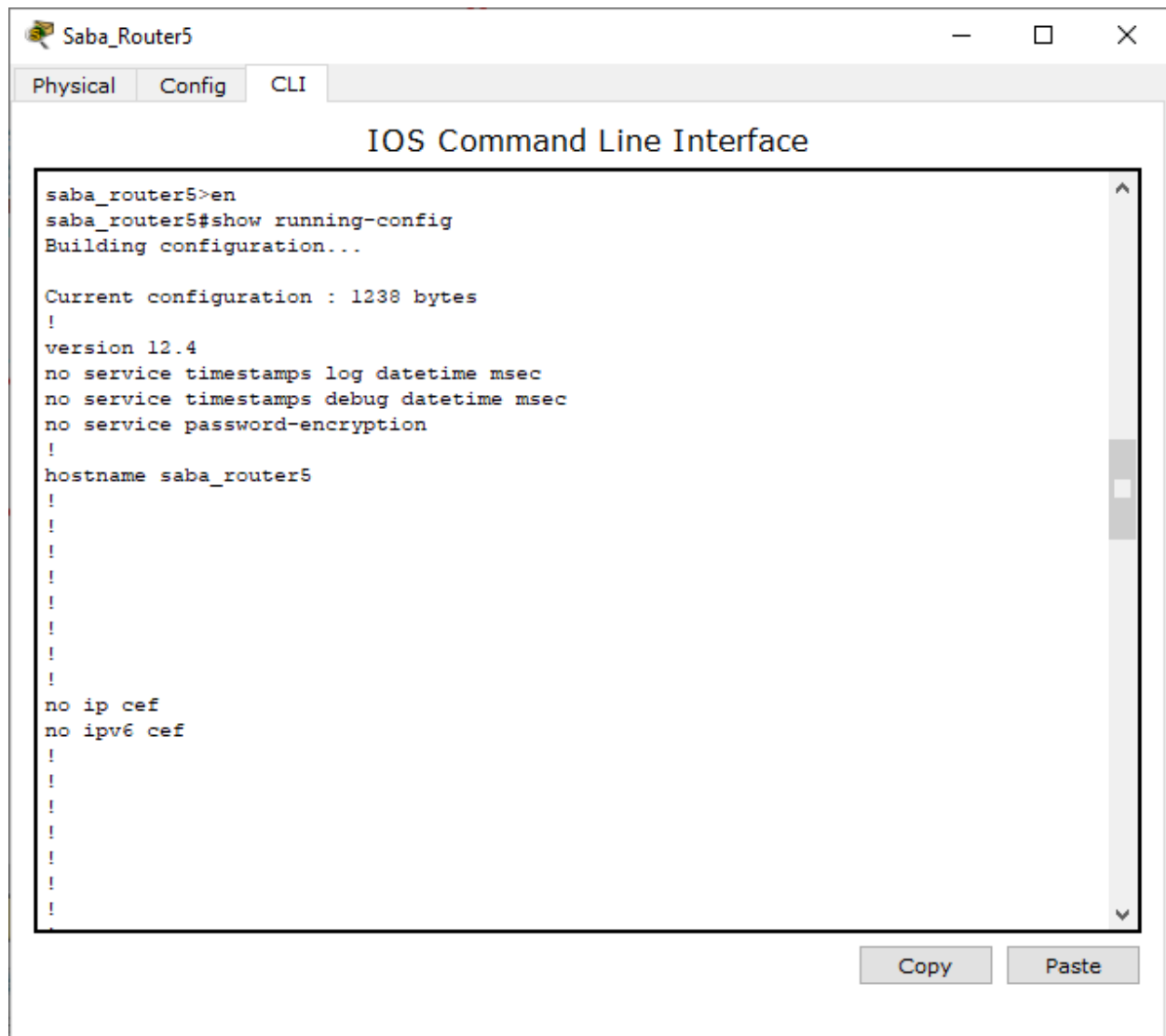Copy   Paste

Saba_Router2

Physical   Config   CLI

IOS Command Line Interface

```
router eigrp 10
 network 197.155.95.100 0.0.0.3
 network 197.155.95.108 0.0.0.3
 network 192.168.95.0 0.0.0.7
 no auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

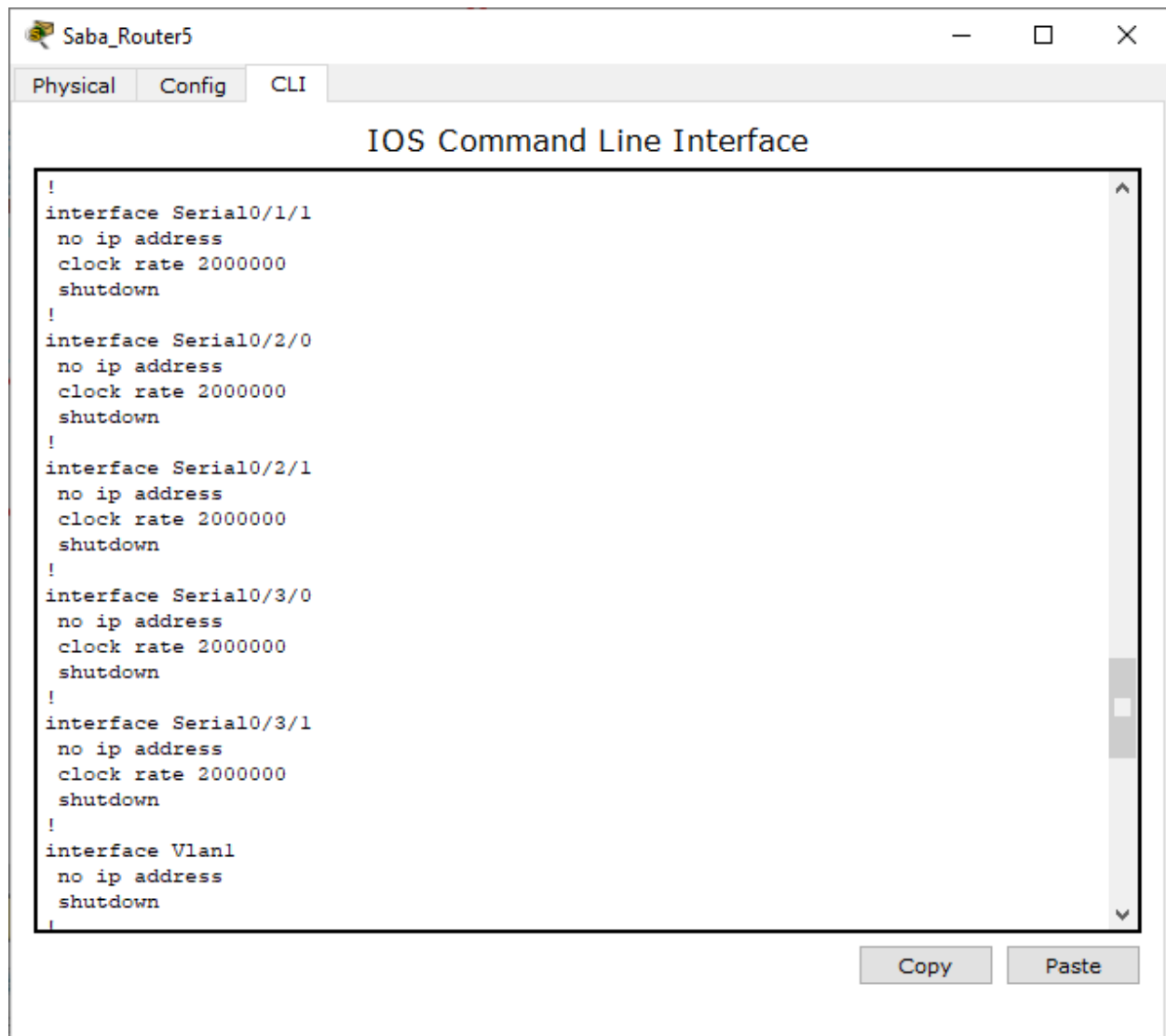Copy   Paste

Saba_Router3

Physical | Config | CLI

IOS Command Line Interface

```
saba_router3>en
saba_router3#show running-config
Building configuration...

Current configuration : 1396 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saba_router3
!
!
!
!
!
ip dhcp pool 9502_Saba
 network 192.168.95.8 255.255.255.248
 default-router 192.168.95.9
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
```

Copy   Paste

Physical | Config | CLI

IOS Command Line Interface

```
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 192.168.95.9 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 197.155.95.110 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 197.155.95.113 255.255.255.252
 clock rate 2000000
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
```

Copy | Paste

```
 shutdown
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
```

```
!
router eigrp 10
 network 197.155.95.108 0.0.0.3
 network 197.155.95.112 0.0.0.3
 network 192.168.95.8 0.0.0.7
 no auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Copy   Paste

IOS Command Line Interface

```
saba_router3>en
saba_router3#show running-config
Building configuration...

Current configuration : 1380 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saba_router3
!
!
!
!
!
ip dhcp pool 9502_Saba
 network 192.168.95.16 255.255.255.248
 default-router 192.168.95.17
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
```

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 192.168.95.17 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 197.155.95.117 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 197.155.95.114 255.255.255.252
 !
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
```

Copy   Paste

Physical   Config   CLI

IOS Command Line Interface

```
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router eigrp 10
```

Copy   Paste

```
router eigrp 10
 network 197.155.95.112 0.0.0.3
 network 197.155.95.116 0.0.0.3
 network 192.168.95.16 0.0.0.7
 no auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Copy   Paste

IOS Command Line Interface

```
saba_router5>en
saba_router5#show running-config
Building configuration...

Current configuration : 1238 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname saba_router5
!
!
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
```

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 197.155.95.98 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 197.155.95.118 255.255.255.252
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
```

Copy   Paste

Physical | Config | CLI

IOS Command Line Interface

```
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
```
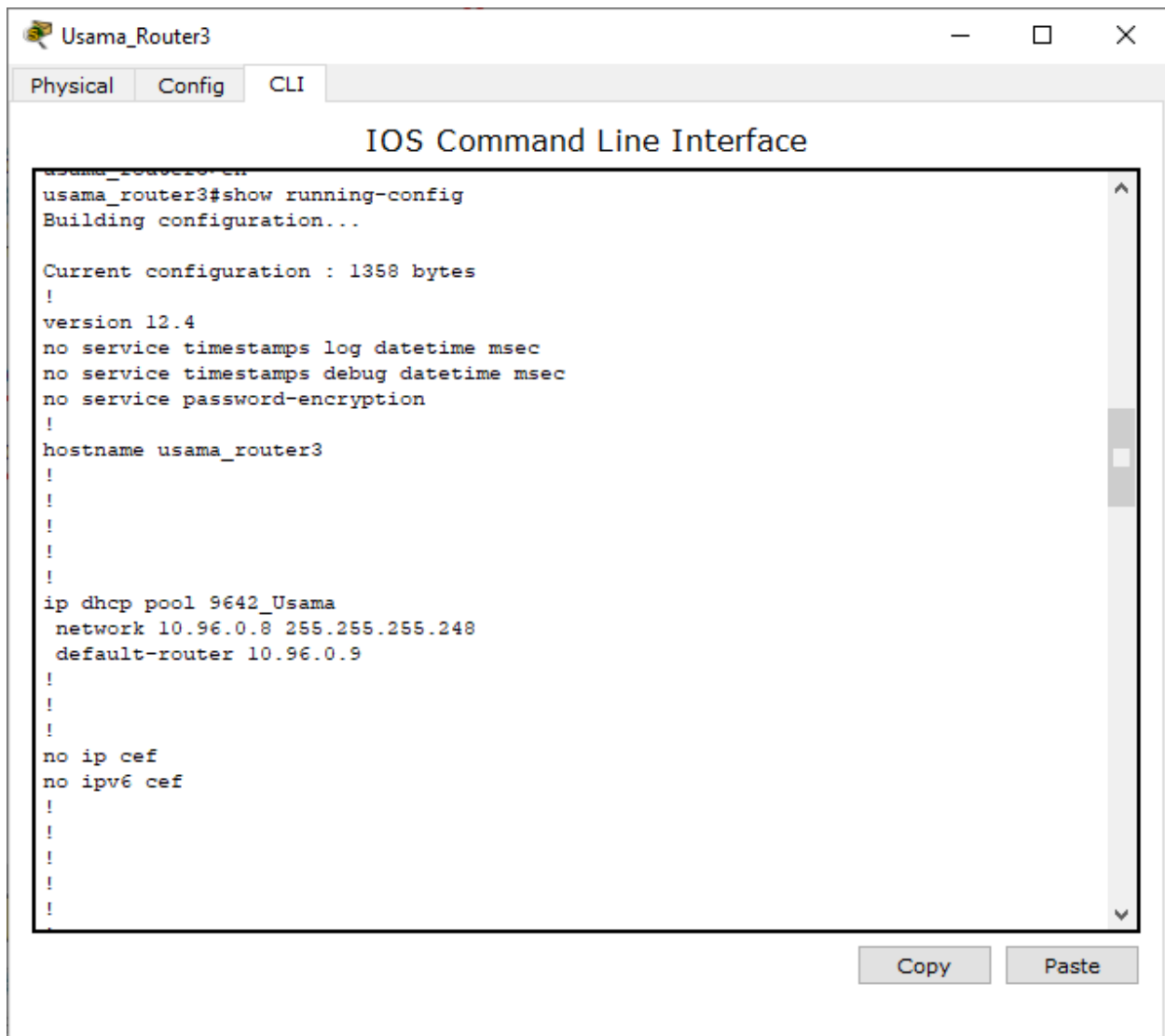
Copy | Paste

Physical   Config   CLI

IOS Command Line Interface

```
router eigrp 10
 network 197.155.95.116 0.0.0.3
 network 197.155.95.96 0.0.0.3
 no auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end

saba_router5#
```

Copy   Paste

Physical   Config   CLI

IOS Command Line Interface

```
usama_router1>EN
usama_router1#show running-config
Building configuration...

Current configuration : 1348 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname usama_router1
!
!
!
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
```

Copy   Paste

IOS Command Line Interface

```
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 55.97.0.9 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 55.97.0.5 255.255.255.252
!
interface Serial0/1/0
 ip address 197.155.95.106 255.255.255.252
 clock rate 2000000
```

Copy   Paste

IOS Command Line Interface

```
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 ip address 55.97.0.25 255.255.255.252
 clock rate 2000000
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 9642
```
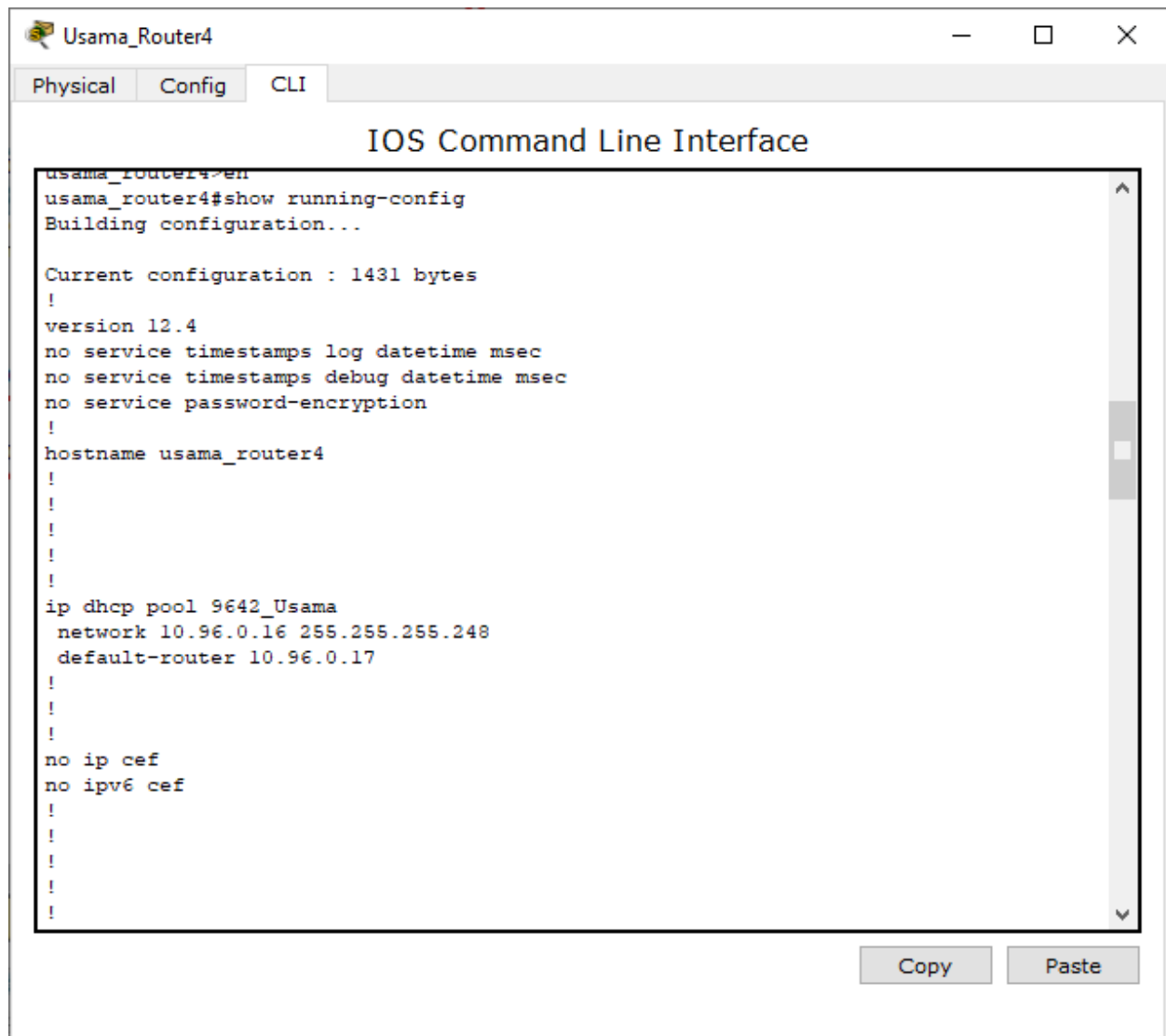
Copy   Paste

IOS Command Line Interface

```
router ospf 9642
 log-adjacency-changes
 network 55.97.0.8 0.0.0.3 area 0
 network 55.97.0.4 0.0.0.3 area 0
 network 197.155.95.104 0.0.0.3 area 0
 network 55.97.0.24 0.0.0.3 area 0
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Copy   Paste

IOS Command Line Interface

```
usama_router2>en
usama_router2#show running-config
Building configuration...

Current configuration : 1377 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname usama_router2
!
!
!
!
!
ip dhcp pool 9642_Usama
 network 10.96.0.0 255.255.255.248
 default-router 10.96.0.1
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
```

Copy   Paste

Physical   Config   CLI

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 10.96.0.1 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 55.97.0.13 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 55.97.0.10 255.255.255.252
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
!
```

Copy   Paste

Physical | Config | CLI

IOS Command Line Interface

```
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
```

Copy | Paste

IOS Command Line Interface

```
router ospf 9642
 log-adjacency-changes
 network 55.97.0.12 0.0.0.3 area 0
 network 55.97.0.8 0.0.0.3 area 0
 network 10.96.0.0 0.0.0.7 area 0
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Copy   Paste

Physical   Config   CLI

IOS Command Line Interface

```
usama_router3#show running-config
Building configuration...

Current configuration : 1358 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname usama_router3
!
!
!
!
!
ip dhcp pool 9642_Usama
 network 10.96.0.8 255.255.255.248
 default-router 10.96.0.9
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
```

Copy   Paste

IOS Command Line Interface

```
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 10.96.0.9 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 55.97.0.14 255.255.255.252
!
interface Serial0/0/1
 ip address 55.97.0.17 255.255.255.252
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
```

Copy   Paste

Usama_Router3

Physical | Config | CLI

IOS Command Line Interface

```
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 8642
```

Copy | Paste

IOS Command Line Interface

```
router ospf 9642
 log-adjacency-changes
 network 55.97.0.16 0.0.0.3 area 0
 network 55.97.0.12 0.0.0.3 area 0
 network 10.96.0.8 0.0.0.7 area 0
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Copy   Paste

```
usama_router4>en
usama_router4#show running-config
Building configuration...

Current configuration : 1431 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname usama_router4
!
!
!
!
!
ip dhcp pool 9642_Usama
 network 10.96.0.16 255.255.255.248
 default-router 10.96.0.17
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
```

Copy   Paste

Usama_Router4

Physical | Config | CLI

IOS Command Line Interface

```
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 10.96.0.17 255.255.255.248
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 55.97.0.18 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 55.97.0.21 255.255.255.252
 clock rate 2000000
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
```

Copy | Paste

IOS Command Line Interface

```
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 ip address 55.97.0.29 255.255.255.248
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 9642
```

Copy   Paste

```
Usama_Router4                                      —    □    ×

  Physical   Config   CLI

                    IOS Command Line Interface

router ospf 9642
 log-adjacency-changes
 network 55.97.0.20 0.0.0.3 area 0
 network 55.97.0.16 0.0.0.3 area 0
 network 10.96.0.16 0.0.0.7 area 0
 network 55.97.0.24 0.0.0.7 area 0
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end

                                      Copy        Paste
```

Physical   Config   CLI

IOS Command Line Interface

```
usama_router5>en
usama_router5#show running-config
Building configuration...

Current configuration : 1244 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname usama_router5
!
!
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
```

Copy   Paste

IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 55.97.0.6 255.255.255.252
 clock rate 2000000
!
interface Serial0/0/1
 ip address 55.97.0.22 255.255.255.252
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
```

Copy   Paste

```
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 9642
```

Usama_Router5 — □ ×

Physical | Config | CLI

IOS Command Line Interface

```
router ospf 9642
 log-adjacency-changes
 network 55.97.0.20 0.0.0.3 area 0
 network 55.97.0.4 0.0.0.3 area 0
!
ip classless
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end

usama_router5#
```

Copy | Paste

IOS Command Line Interface

```
usama-9642-router6#show running-config
Building configuration...

Current configuration : 1516 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname usama-9642-router6
!
!
!
!
!
ip dhcp pool usama
 network 10.96.0.24 255.255.255.248
 default-router 10.96.0.25
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
```

Physical   Config   CLI

IOS Command Line Interface

```
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 ip address 10.96.0.25 255.255.255.248
 ip nat inside
 duplex auto
 speed auto
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 55.97.0.30 255.255.255.248
 ip nat outside
 clock rate 2000000
!
interface Serial0/0/1
 no ip address
 clock rate 2000000
 shutdown
!
```

Copy   Paste

IOS Command Line Interface

```
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
```

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Usama-Router6 — □ ×

Physical   Config   CLI

IOS Command Line Interface

```
interface Vlan1
 no ip address
 shutdown
!
router ospf 9642
 log-adjacency-changes
 network 55.97.0.24 0.0.0.7 area 0
 network 10.96.0.24 0.0.0.7 area 0
!
ip nat pool usama 55.97.0.28 55.97.0.30 netmask 255.255.255.248
ip nat inside source list 55 pool usama
ip classless
!
ip flow-export version 9
!
!
access-list 55 permit 10.96.0.24 0.0.0.7
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
```

Copy   Paste

IOS Command Line Interface

```
!
router ospf 9642
 log-adjacency-changes
 network 55.97.0.24 0.0.0.7 area 0
 network 10.96.0.24 0.0.0.7 area 0
!
ip nat pool usama 55.97.0.28 55.97.0.30 netmask 255.255.255.248
ip nat inside source list 55 pool usama
ip classless
!
ip flow-export version 9
!
!
access-list 55 permit 10.96.0.24 0.0.0.7
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

Copy   Paste

Redistribute-Router

Physical | Config | CLI

IOS Command Line Interface

```
redistribute-router>en
redistribute-router#show running-config
Building configuration...

Current configuration : 1319 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname redistribute-router
!
!
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
```

Copy | Paste

IOS Command Line Interface

```
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface FastEthernet0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/0/0
 ip address 155.97.95.122 255.255.255.252
!
interface Serial0/0/1
 ip address 55.97.0.26 255.255.255.252
!
interface Serial0/1/0
 no ip address
 clock rate 2000000
 shutdown
```

Copy   Paste

```
 shutdown
!
interface Serial0/1/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/2/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/0
 no ip address
 clock rate 2000000
 shutdown
!
interface Serial0/3/1
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
```

Copy   Paste

IOS Command Line Interface

```
 no ip address
 clock rate 2000000
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 9642
 log-adjacency-changes
 redistribute rip metric 50 subnets
 network 55.97.0.24 0.0.0.3 area 0
!
router rip
 version 2
 redistribute ospf 9642 metric 2
 network 155.97.0.0
 no auto-summary
!
ip classless
!
ip flow-export version 9
!
!
!
!
!
!
!
line con 0
```

Copy   Paste
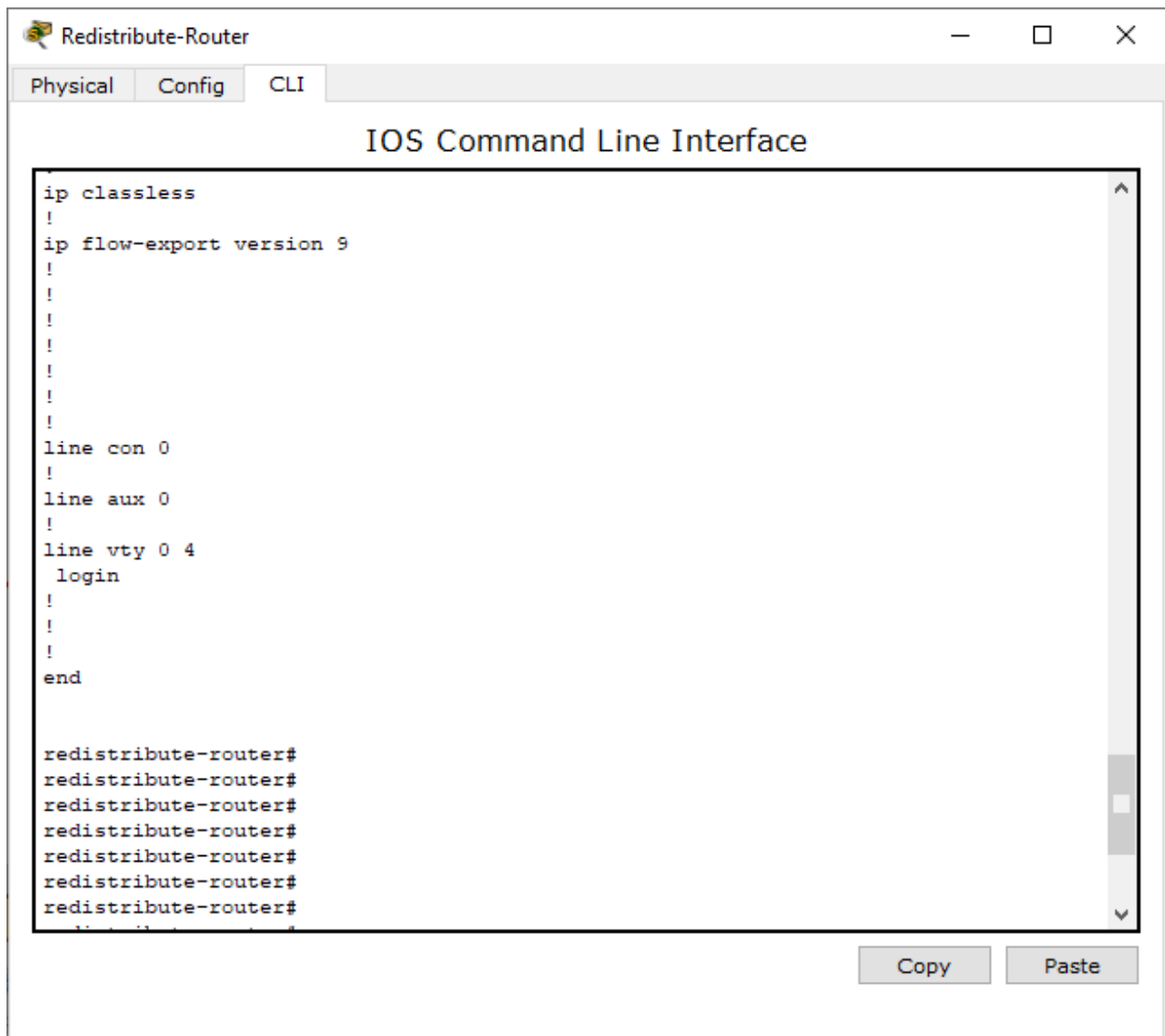
d) Show IP Route:

Saad_Border_Router1 — IOS Command Line Interface

```
press RETURN to get started.

saad_router1>en
saad_router1#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter 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 95.10.10.106 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
C       10.55.0.0 is directly connected, FastEthernet0/0
S       10.55.0.8 [1/0] via 95.10.10.102
S       10.55.0.16 [1/0] via 95.10.10.102
S       10.55.0.24 [1/0] via 95.10.10.98
     95.0.0.0/30 is subnetted, 6 subnets
C       95.10.10.96 is directly connected, Serial0/0/1
C       95.10.10.100 is directly connected, Serial0/0/0
C       95.10.10.104 is directly connected, Serial0/1/0
S       95.10.10.108 [1/0] via 95.10.10.102
S       95.10.10.112 [1/0] via 95.10.10.102
S       95.10.10.116 [1/0] via 95.10.10.98
S*   0.0.0.0/0 [1/0] via 95.10.10.106
saad_router1#
saad_router1#
saad_router1#
```

Saad_Router2 — IOS Command Line Interface

```
press RETURN to get started.

saad_router2>en
saad_router2#Show IP Route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter 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 95.10.10.101 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
S       10.55.0.0 [1/0] via 95.10.10.101
C       10.55.0.8 is directly connected, FastEthernet0/0
S       10.55.0.16 [1/0] via 95.10.10.110
S       10.55.0.24 [1/0] via 95.10.10.101
     95.0.0.0/30 is subnetted, 6 subnets
S       95.10.10.96 [1/0] via 95.10.10.101
C       95.10.10.100 is directly connected, Serial0/0/1
S       95.10.10.104 [1/0] via 95.10.10.101
C       95.10.10.108 is directly connected, Serial0/0/0
S       95.10.10.112 [1/0] via 95.10.10.110
S       95.10.10.116 [1/0] via 95.10.10.101
                    [1/0] via 95.10.10.112
S*   0.0.0.0/0 [1/0] via 95.10.10.101
saad_router2#
saad_router2#
```

Physical | Config | CLI

IOS Command Line Interface

```
Press RETURN to get started.



saad_router3>en
saad_router3#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter 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 95.10.10.109 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
S       10.55.0.0 [1/0] via 95.10.10.109
S       10.55.0.8 [1/0] via 95.10.10.109
C       10.55.0.16 is directly connected, FastEthernet0/0
S       10.55.0.24 [1/0] via 95.10.10.114
     95.0.0.0/30 is subnetted, 6 subnets
S       95.10.10.96 [1/0] via 95.10.10.109
S       95.10.10.100 [1/0] via 95.10.10.109
S       95.10.10.104 [1/0] via 95.10.10.109
C       95.10.10.108 is directly connected, Serial0/0/0
C       95.10.10.112 is directly connected, Serial0/0/1
S       95.10.10.116 [1/0] via 95.10.10.114
S*   0.0.0.0/0 [1/0] via 95.10.10.109
saad_router3#
saad_router3#
```

Copy | Paste

Physical | Config | CLI

IOS Command Line Interface

```
saad_router4>en
saad_router4#Show IP Route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter 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 95.10.10.113 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
S       10.55.0.0 [1/0] via 95.10.10.113
                  [1/0] via 95.10.10.118
S       10.55.0.8 [1/0] via 95.10.10.113
S       10.55.0.16 [1/0] via 95.10.10.113
C       10.55.0.24 is directly connected, FastEthernet0/0
     95.0.0.0/30 is subnetted, 6 subnets
S       95.10.10.96 [1/0] via 95.10.10.113
                  [1/0] via 95.10.10.118
S       95.10.10.100 [1/0] via 95.10.10.113
                  [1/0] via 95.10.10.118
S       95.10.10.104 [1/0] via 95.10.10.113
                  [1/0] via 95.10.10.118
S       95.10.10.108 [1/0] via 95.10.10.113
C       95.10.10.112 is directly connected, Serial0/0/1
C       95.10.10.116 is directly connected, Serial0/0/0
S*   0.0.0.0/0 [1/0] via 95.10.10.113
saad_router4#
saad_router4#
saad_router4#
saad_router4#
saad_router4#
```

Copy | Paste

Saad_Router5 — □ ✕

Physical | Config | CLI

IOS Command Line Interface

```
Press RETURN to get started.




saad_router5>en
saad_router5#Show IP Route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter 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 95.10.10.97 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
S       10.55.0.0 [1/0] via 95.10.10.97
S       10.55.0.8 [1/0] via 95.10.10.97
S       10.55.0.16 [1/0] via 95.10.10.97
S       10.55.0.24 [1/0] via 95.10.10.117
     95.0.0.0/30 is subnetted, 6 subnets
C       95.10.10.96 is directly connected, Serial0/0/0
S       95.10.10.100 [1/0] via 95.10.10.97
S       95.10.10.104 [1/0] via 95.10.10.97
S       95.10.10.108 [1/0] via 95.10.10.97
S       95.10.10.112 [1/0] via 95.10.10.117
C       95.10.10.116 is directly connected, Serial0/0/1
S*   0.0.0.0/0 [1/0] via 95.10.10.97
saad_router5#
saad_router5#
```

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Ashaj_Border_Router1 — □ ✕

Physical | Config | CLI

IOS Command Line Interface

```
Gateway of last resort is 95.10.10.105 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
R       10.96.0.0 [120/2] via 155.97.95.122, 00:00:03, Serial0/2/0
R       10.96.0.8 [120/2] via 155.97.95.122, 00:00:03, Serial0/2/0
R       10.96.0.16 [120/2] via 155.97.95.122, 00:00:03, Serial0/2/0
R       10.96.0.24 [120/2] via 155.97.95.122, 00:00:03, Serial0/2/0
     55.0.0.0/30 is subnetted, 6 subnets
R       55.97.0.4 [120/16] via 155.97.95.122, 00:00:03, Serial0/2/0
R       55.97.0.8 [120/16] via 155.97.95.122, 00:00:03, Serial0/2/0
R       55.97.0.12 [120/2] via 155.97.95.122, 00:00:03, Serial0/2/0
R       55.97.0.16 [120/2] via 155.97.95.122, 00:00:03, Serial0/2/0
R       55.97.0.20 [120/2] via 155.97.95.122, 00:00:03, Serial0/2/0
R       55.97.0.24 [120/2] via 155.97.95.122, 00:00:03, Serial0/2/0
     95.0.0.0/30 is subnetted, 1 subnets
C       95.10.10.104 is directly connected, Serial0/1/0
     155.97.0.0/30 is subnetted, 7 subnets
C       155.97.95.96 is directly connected, Serial0/0/1
C       155.97.95.100 is directly connected, Serial0/0/0
C       155.97.95.104 is directly connected, Serial0/1/1
R       155.97.95.108 [120/1] via 155.97.95.102, 00:00:04, Serial0/0/0
R       155.97.95.112 [120/2] via 155.97.95.102, 00:00:04, Serial0/0/0
                      [120/2] via 155.97.95.98, 00:00:01, Serial0/0/1
R       155.97.95.116 [120/1] via 155.97.95.98, 00:00:01, Serial0/0/1
C       155.97.95.120 is directly connected, Serial0/2/0
     172.16.0.0/29 is subnetted, 3 subnets
R       172.16.97.0 [120/1] via 155.97.95.102, 00:00:04, Serial0/0/0
R       172.16.97.8 [120/2] via 155.97.95.102, 00:00:04, Serial0/0/0
        10.96.0.24 [44483040/929103902] via 55.97.0.29,
                    [120/2] via 155.97.95.98, 00:00:01, Serial0/0/1
     192.168.95.0/29 is subnetted, 3 subnets
D       192.168.95.0 [90/2684416] via 155.97.95.106, 00:56:53, Serial0/1/1
D       192.168.95.8 [90/3196416] via 155.97.95.106, 00:56:52, Serial0/1/1
D       192.168.95.16 [90/3196416] via 155.97.95.106, 00:56:53, Serial0/1/1
     197.155.95.0/30 is subnetted, 6 subnets
D       197.155.95.96 [90/2681856] via 155.97.95.106, 00:56:53, Serial0/1/1
D       197.155.95.100 [90/2681856] via 155.97.95.106, 00:56:53, Serial0/1/1
D       197.155.95.104 [90/2681856] via 155.97.95.106, 00:56:53, Serial0/1/1
D       197.155.95.108 [90/3193856] via 155.97.95.106, 00:56:53, Serial0/1/1
D       197.155.95.112 [90/3705856] via 155.97.95.106, 00:56:53, Serial0/1/1
D       197.155.95.116 [90/3193856] via 155.97.95.106, 00:56:53, Serial0/1/1
S*   0.0.0.0/0 [1/0] via 95.10.10.105
```

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IOS Command Line Interface

```
Gateway of last resort is 155.97.95.101 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
R       10.96.0.0 [120/3] via 155.97.95.101, 00:00:26, Serial0/0/1
R       10.96.0.8 [120/3] via 155.97.95.101, 00:00:26, Serial0/0/1
R       10.96.0.16 [120/3] via 155.97.95.101, 00:00:26, Serial0/0/1
R       10.96.0.24 [120/3] via 155.97.95.101, 00:00:26, Serial0/0/1
     55.0.0.0/30 is subnetted, 6 subnets
R       55.97.0.4 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       55.97.0.8 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       55.97.0.12 [120/3] via 155.97.95.101, 00:00:26, Serial0/0/1
R       55.97.0.16 [120/3] via 155.97.95.101, 00:00:26, Serial0/0/1
R       55.97.0.20 [120/3] via 155.97.95.101, 00:00:26, Serial0/0/1
R       55.97.0.24 [120/3] via 155.97.95.101, 00:00:26, Serial0/0/1
     95.0.0.0/30 is subnetted, 1 subnets
R       95.10.10.104 [120/1] via 155.97.95.101, 00:00:26, Serial0/0/1
     155.97.0.0/30 is subnetted, 7 subnets
R       155.97.95.96 [120/1] via 155.97.95.101, 00:00:26, Serial0/0/1
C       155.97.95.100 is directly connected, Serial0/0/1
R       155.97.95.104 [120/1] via 155.97.95.101, 00:00:26, Serial0/0/1
C       155.97.95.108 is directly connected, Serial0/0/0
R       155.97.95.112 [120/1] via 155.97.95.110, 00:00:28, Serial0/0/0
R       155.97.95.116 [120/2] via 155.97.95.110, 00:00:28, Serial0/0/0
                     [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       155.97.95.120 [120/1] via 155.97.95.101, 00:00:26, Serial0/0/1
     172.16.0.0/29 is subnetted, 3 subnets
C       172.16.97.0 is directly connected, FastEthernet0/0
R       172.16.97.8 [120/1] via 155.97.95.110, 00:00:28, Serial0/0/0
R       172.16.97.16 [120/2] via 155.97.95.110, 00:00:28, Serial0/0/0
     192.168.95.0/29 is subnetted, 3 subnets
R       192.168.95.0 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       192.168.95.8 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       192.168.95.16 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
     197.155.95.0/30 is subnetted, 6 subnets
R       197.155.95.96 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       197.155.95.100 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       197.155.95.104 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       197.155.95.108 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       197.155.95.112 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R       197.155.95.116 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
R*   0.0.0.0/0 [120/2] via 155.97.95.101, 00:00:26, Serial0/0/1
```

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IOS Command Line Interface

```
Gateway of last resort is 155.97.95.109 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
R       10.96.0.0 [120/4] via 155.97.95.109, 00:00:22, Serial0/0/0
R       10.96.0.8 [120/4] via 155.97.95.109, 00:00:22, Serial0/0/0
R       10.96.0.16 [120/4] via 155.97.95.109, 00:00:22, Serial0/0/0
R       10.96.0.24 [120/4] via 155.97.95.109, 00:00:22, Serial0/0/0
     55.0.0.0/30 is subnetted, 6 subnets
R       55.97.0.4 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R       55.97.0.8 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R       55.97.0.12 [120/4] via 155.97.95.109, 00:00:22, Serial0/0/0
R       55.97.0.16 [120/4] via 155.97.95.109, 00:00:22, Serial0/0/0
R       55.97.0.20 [120/4] via 155.97.95.109, 00:00:22, Serial0/0/0
R       55.97.0.24 [120/4] via 155.97.95.109, 00:00:22, Serial0/0/0
     95.0.0.0/30 is subnetted, 1 subnets
R       95.10.10.104 [120/2] via 155.97.95.109, 00:00:22, Serial0/0/0
     155.97.0.0/30 is subnetted, 7 subnets
R       155.97.95.96 [120/2] via 155.97.95.114, 00:00:23, Serial0/0/1
                     [120/2] via 155.97.95.109, 00:00:22, Serial0/0/0
R       155.97.95.100 [120/1] via 155.97.95.109, 00:00:22, Serial0/0/0
R       155.97.95.104 [120/2] via 155.97.95.109, 00:00:22, Serial0/0/0
C       155.97.95.108 is directly connected, Serial0/0/0
C       155.97.95.112 is directly connected, Serial0/0/1
R       155.97.95.116 [120/1] via 155.97.95.114, 00:00:23, Serial0/0/1
R       155.97.95.120 [120/2] via 155.97.95.109, 00:00:22, Serial0/0/0
     172.16.0.0/29 is subnetted, 3 subnets
R       172.16.97.0 [120/1] via 155.97.95.109, 00:00:22, Serial0/0/0
C       172.16.97.8 is directly connected, FastEthernet0/0
R       172.16.97.16 [120/1] via 155.97.95.114, 00:00:23, Serial0/0/1
     192.168.95.0/29 is subnetted, 3 subnets
R       192.168.95.0 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R       192.168.95.8 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R       192.168.95.16 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
     197.155.95.0/30 is subnetted, 6 subnets
R       197.155.95.96 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R       197.155.95.100 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R       197.155.95.104 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R       197.155.95.108 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R       197.155.95.112 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R       197.155.95.116 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
R*   0.0.0.0/0 [120/3] via 155.97.95.109, 00:00:22, Serial0/0/0
ashaj_router3#
```

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Ashaj_Router4 — IOS Command Line Interface

```
Gateway of last resort is 155.97.95.118 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
R       10.96.0.0 [120/4] via 155.97.95.118, 00:00:05, Serial0/0/0
R       10.96.0.8 [120/4] via 155.97.95.118, 00:00:05, Serial0/0/0
R       10.96.0.16 [120/4] via 155.97.95.118, 00:00:05, Serial0/0/0
R       10.96.0.24 [120/4] via 155.97.95.118, 00:00:05, Serial0/0/0
     55.0.0.0/30 is subnetted, 6 subnets
R       55.97.0.4 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R       55.97.0.8 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R       55.97.0.12 [120/4] via 155.97.95.118, 00:00:05, Serial0/0/0
R       55.97.0.16 [120/4] via 155.97.95.118, 00:00:05, Serial0/0/0
R       55.97.0.20 [120/4] via 155.97.95.118, 00:00:05, Serial0/0/0
R       55.97.0.24 [120/4] via 155.97.95.118, 00:00:05, Serial0/0/0
     95.0.0.0/30 is subnetted, 1 subnets
R       95.10.10.104 [120/2] via 155.97.95.118, 00:00:05, Serial0/0/0
     155.97.0.0/30 is subnetted, 7 subnets
R       155.97.95.96 [120/1] via 155.97.95.118, 00:00:05, Serial0/0/0
R       155.97.95.100 [120/2] via 155.97.95.113, 00:00:27, Serial0/0/1
                      [120/2] via 155.97.95.118, 00:00:05, Serial0/0/0
R       155.97.95.104 [120/2] via 155.97.95.118, 00:00:05, Serial0/0/0
R       155.97.95.108 [120/1] via 155.97.95.113, 00:00:27, Serial0/0/1
C       155.97.95.112 is directly connected, Serial0/0/1
C       155.97.95.116 is directly connected, Serial0/0/0
R       155.97.95.120 [120/2] via 155.97.95.118, 00:00:05, Serial0/0/0
     172.16.0.0/29 is subnetted, 3 subnets
R       172.16.97.0 [120/2] via 155.97.95.113, 00:00:27, Serial0/0/1
R       172.16.97.8 [120/1] via 155.97.95.113, 00:00:27, Serial0/0/1
C       172.16.97.16 is directly connected, FastEthernet0/0
     192.168.95.0/29 is subnetted, 3 subnets
R       192.168.95.0 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R       192.168.95.8 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R       192.168.95.16 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
     197.155.95.0/30 is subnetted, 6 subnets
R       197.155.95.96 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R       197.155.95.100 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R       197.155.95.104 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R       197.155.95.108 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R       197.155.95.112 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R       197.155.95.116 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
R*   0.0.0.0/0 [120/3] via 155.97.95.118, 00:00:05, Serial0/0/0
```

Ashaj_Router5 — IOS Command Line Interface

```
Gateway of last resort is 155.97.95.97 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
R       10.96.0.0 [120/3] via 155.97.95.97, 00:00:12, Serial0/0/0
R       10.96.0.8 [120/3] via 155.97.95.97, 00:00:12, Serial0/0/0
R       10.96.0.16 [120/3] via 155.97.95.97, 00:00:12, Serial0/0/0
R       10.96.0.24 [120/3] via 155.97.95.97, 00:00:12, Serial0/0/0
     55.0.0.0/30 is subnetted, 6 subnets
R       55.97.0.4 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       55.97.0.8 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       55.97.0.12 [120/3] via 155.97.95.97, 00:00:12, Serial0/0/0
R       55.97.0.16 [120/3] via 155.97.95.97, 00:00:12, Serial0/0/0
R       55.97.0.20 [120/3] via 155.97.95.97, 00:00:12, Serial0/0/0
R       55.97.0.24 [120/3] via 155.97.95.97, 00:00:12, Serial0/0/0
     95.0.0.0/30 is subnetted, 1 subnets
R       95.10.10.104 [120/1] via 155.97.95.97, 00:00:12, Serial0/0/0
     155.97.0.0/30 is subnetted, 7 subnets
C       155.97.95.96 is directly connected, Serial0/0/0
R       155.97.95.100 [120/1] via 155.97.95.97, 00:00:12, Serial0/0/0
R       155.97.95.104 [120/1] via 155.97.95.97, 00:00:12, Serial0/0/0
R       155.97.95.108 [120/2] via 155.97.95.117, 00:00:17, Serial0/0/1
                      [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       155.97.95.112 [120/1] via 155.97.95.117, 00:00:17, Serial0/0/1
C       155.97.95.116 is directly connected, Serial0/0/1
R       155.97.95.120 [120/1] via 155.97.95.97, 00:00:12, Serial0/0/0
     172.16.0.0/29 is subnetted, 3 subnets
R       172.16.97.0 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       172.16.97.8 [120/2] via 155.97.95.117, 00:00:17, Serial0/0/1
R       172.16.97.16 [120/1] via 155.97.95.117, 00:00:17, Serial0/0/1
     192.168.95.0/29 is subnetted, 3 subnets
R       192.168.95.0 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       192.168.95.8 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       192.168.95.16 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
     197.155.95.0/30 is subnetted, 6 subnets
R       197.155.95.96 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       197.155.95.100 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       197.155.95.104 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       197.155.95.108 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       197.155.95.112 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R       197.155.95.116 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
R*   0.0.0.0/0 [120/2] via 155.97.95.97, 00:00:12, Serial0/0/0
```

Physical | Config | CLI

IOS Command Line Interface

```
Gateway of last resort is 155.97.95.105 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
O       10.96.0.0 [110/129] via 197.155.95.106, 01:01:30, Serial0/1/1
O       10.96.0.8 [110/193] via 197.155.95.106, 01:01:30, Serial0/1/1
O       10.96.0.16 [110/193] via 197.155.95.106, 01:01:30, Serial0/1/1
O       10.96.0.24 [110/257] via 197.155.95.106, 01:01:30, Serial0/1/1
     55.0.0.0/30 is subnetted, 6 subnets
O       55.97.0.4 [110/128] via 197.155.95.106, 01:01:40, Serial0/1/1
O       55.97.0.8 [110/128] via 197.155.95.106, 01:01:40, Serial0/1/1
O       55.97.0.12 [110/192] via 197.155.95.106, 01:01:30, Serial0/1/1
O       55.97.0.16 [110/256] via 197.155.95.106, 01:01:30, Serial0/1/1
O       55.97.0.20 [110/192] via 197.155.95.106, 01:01:30, Serial0/1/1
O       55.97.0.24 [110/128] via 197.155.95.106, 01:01:40, Serial0/1/1
     95.0.0.0/30 is subnetted, 1 subnets
O E2    95.10.10.104 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
     155.97.0.0/30 is subnetted, 7 subnets
O E2    155.97.95.96 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
O E2    155.97.95.100 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
C       155.97.95.104 is directly connected, Serial0/1/0
O E2    155.97.95.108 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
O E2    155.97.95.112 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
O E2    155.97.95.116 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
O E2    155.97.95.120 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
     172.16.0.0/29 is subnetted, 3 subnets
O E2    172.16.97.0 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
O E2    172.16.97.8 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
O E2    172.16.97.16 [110/50] via 197.155.95.106, 01:01:30, Serial0/1/1
     192.168.95.0/29 is subnetted, 3 subnets
D       192.168.95.0 [90/2172416] via 197.155.95.102, 01:01:55, Serial0/0/0
D       192.168.95.8 [90/2684416] via 197.155.95.102, 01:01:51, Serial0/0/0
D       192.168.95.16 [90/2684416] via 197.155.95.98, 01:01:52, Serial0/0/1
     197.155.95.0/30 is subnetted, 6 subnets
C       197.155.95.96 is directly connected, Serial0/0/1
C       197.155.95.100 is directly connected, Serial0/0/0
C       197.155.95.104 is directly connected, Serial0/1/1
D       197.155.95.108 [90/2681856] via 197.155.95.102, 01:01:55, Serial0/0/0
D       197.155.95.112 [90/3193856] via 197.155.95.98, 01:01:52, Serial0/0/1
                       [90/3193856] via 197.155.95.102, 01:01:51, Serial0/0/0
D       197.155.95.116 [90/2681856] via 197.155.95.98, 01:01:53, Serial0/0/1
R*   0.0.0.0/0 [120/2] via 155.97.95.105, 00:00:19, Serial0/1/0
```

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Physical | Config | CLI

IOS Command Line Interface

```
Gateway of last resort is 197.155.95.101 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
D EX    10.96.0.0 [170/2611225256] via 197.155.95.101, 01:00:38, Serial0/0/1
D EX    10.96.0.8 [170/2611225256] via 197.155.95.101, 01:00:38, Serial0/0/1
D EX    10.96.0.16 [170/2611225256] via 197.155.95.101, 01:00:38, Serial0/0/1
D EX    10.96.0.24 [170/2611225256] via 197.155.95.101, 01:00:38, Serial0/0/1
     55.0.0.0/30 is subnetted, 6 subnets
D EX    55.97.0.4 [170/2611225256] via 197.155.95.101, 01:00:48, Serial0/0/1
D EX    55.97.0.8 [170/2611225256] via 197.155.95.101, 01:00:48, Serial0/0/1
D EX    55.97.0.12 [170/2611225256] via 197.155.95.101, 01:00:38, Serial0/0/1
D EX    55.97.0.16 [170/2611225256] via 197.155.95.101, 01:00:38, Serial0/0/1
D EX    55.97.0.20 [170/2611225256] via 197.155.95.101, 01:00:38, Serial0/0/1
D EX    55.97.0.24 [170/2611225256] via 197.155.95.101, 01:00:48, Serial0/0/1
     95.0.0.0/30 is subnetted, 1 subnets
D EX    95.10.10.104 [170/2611225256] via 197.155.95.101, 01:00:38, Serial0/0/1
     155.97.0.0/30 is subnetted, 7 subnets
D EX    155.97.95.96 [170/2611225256] via 197.155.95.101, 01:00:38, Serial0/0/1
D EX    155.97.95.100 [170/2611225256] via 197.155.95.101, 01:00:37, Serial0/0/1
D       155.97.95.104 [90/2681856] via 197.155.95.101, 01:01:00, Serial0/0/1
D EX    155.97.95.108 [170/2611225256] via 197.155.95.101, 01:00:37, Serial0/0/1
D EX    155.97.95.112 [170/2611225256] via 197.155.95.101, 01:00:37, Serial0/0/1
D EX    155.97.95.116 [170/2611225256] via 197.155.95.101, 01:00:37, Serial0/0/1
D EX    155.97.95.120 [170/2611225256] via 197.155.95.101, 01:00:37, Serial0/0/1
     172.16.0.0/29 is subnetted, 3 subnets
D EX    172.16.97.0 [170/2611225256] via 197.155.95.101, 01:00:37, Serial0/0/1
D EX    172.16.97.8 [170/2611225256] via 197.155.95.101, 01:00:37, Serial0/0/1
D EX    172.16.97.16 [170/2611225256] via 197.155.95.101, 01:00:37, Serial0/0/1
     192.168.95.0/29 is subnetted, 3 subnets
C       192.168.95.0 is directly connected, FastEthernet0/0
D       192.168.95.8 [90/2172416] via 197.155.95.110, 01:00:59, Serial0/0/0
D       192.168.95.16 [90/2684416] via 197.155.95.110, 01:00:59, Serial0/0/0
     197.155.95.0/30 is subnetted, 6 subnets
D       197.155.95.96 [90/2681856] via 197.155.95.101, 01:01:01, Serial0/0/1
C       197.155.95.100 is directly connected, Serial0/0/1
D       197.155.95.104 [90/2681856] via 197.155.95.101, 01:01:03, Serial0/0/1
C       197.155.95.108 is directly connected, Serial0/0/0
D       197.155.95.112 [90/2681856] via 197.155.95.110, 01:00:59, Serial0/0/0
D       197.155.95.116 [90/3193856] via 197.155.95.101, 01:01:01, Serial0/0/1
                       [90/3193856] via 197.155.95.110, 01:00:59, Serial0/0/0
D*EX 0.0.0.0/0 [170/2611212000] via 197.155.95.101, 01:01:00, Serial0/0/1
```

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IOS Command Line Interface

```
Gateway of last resort is 197.155.95.109 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
D EX    10.96.0.0 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    10.96.0.8 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    10.96.0.16 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    10.96.0.24 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
     55.0.0.0/30 is subnetted, 6 subnets
D EX    55.97.0.4 [170/26624256] via 197.155.95.109, 01:02:20, Serial0/0/0
D EX    55.97.0.8 [170/26624256] via 197.155.95.109, 01:02:20, Serial0/0/0
D EX    55.97.0.12 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    55.97.0.16 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    55.97.0.20 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    55.97.0.24 [170/26624256] via 197.155.95.109, 01:02:20, Serial0/0/0
     95.0.0.0/30 is subnetted, 1 subnets
D EX    95.10.10.104 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
     155.97.0.0/30 is subnetted, 7 subnets
D EX    155.97.95.96 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    155.97.95.100 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D       155.97.95.104 [90/3193856] via 197.155.95.109, 01:02:32, Serial0/0/0
D EX    155.97.95.108 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    155.97.95.112 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    155.97.95.116 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    155.97.95.120 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
     172.16.0.0/29 is subnetted, 3 subnets
D EX    172.16.97.0 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    172.16.97.8 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
D EX    172.16.97.16 [170/26624256] via 197.155.95.109, 01:02:10, Serial0/0/0
     192.168.95.0/29 is subnetted, 3 subnets
D       192.168.95.0 [90/2172416] via 197.155.95.109, 01:02:32, Serial0/0/0
C       192.168.95.8 is directly connected, FastEthernet0/0
D       192.168.95.16 [90/2172416] via 197.155.95.114, 01:02:34, Serial0/0/1
     197.155.95.0/30 is subnetted, 6 subnets
D       197.155.95.96 [90/3193856] via 197.155.95.114, 01:02:33, Serial0/0/1
                      [90/3193856] via 197.155.95.109, 01:02:32, Serial0/0/0
D       197.155.95.100 [90/2681856] via 197.155.95.109, 01:02:32, Serial0/0/0
D       197.155.95.104 [90/3193856] via 197.155.95.109, 01:02:32, Serial0/0/0
C       197.155.95.108 is directly connected, Serial0/0/0
C       197.155.95.112 is directly connected, Serial0/0/1
D       197.155.95.116 [90/2681856] via 197.155.95.114, 01:02:33, Serial0/0/1
D*EX 0.0.0.0/0 [170/26624000] via 197.155.95.109, 01:02:32, Serial0/0/0
```

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IOS Command Line Interface

```
Gateway of last resort is 197.155.95.118 to network 0.0.0.0

     10.0.0.0/29 is subnetted, 4 subnets
D EX    10.96.0.0 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    10.96.0.8 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    10.96.0.16 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    10.96.0.24 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
     55.0.0.0/30 is subnetted, 6 subnets
D EX    55.97.0.4 [170/26624256] via 197.155.95.118, 01:07:41, Serial0/0/0
D EX    55.97.0.8 [170/26624256] via 197.155.95.118, 01:07:40, Serial0/0/0
D EX    55.97.0.12 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    55.97.0.16 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    55.97.0.20 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    55.97.0.24 [170/26624256] via 197.155.95.118, 01:07:41, Serial0/0/0
     95.0.0.0/30 is subnetted, 1 subnets
D EX    95.10.10.104 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
     155.97.0.0/30 is subnetted, 7 subnets
D EX    155.97.95.96 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    155.97.95.100 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D       155.97.95.104 [90/3193856] via 197.155.95.118, 01:07:53, Serial0/0/0
D EX    155.97.95.108 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    155.97.95.112 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    155.97.95.116 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    155.97.95.120 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
     172.16.0.0/29 is subnetted, 3 subnets
D EX    172.16.97.0 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    172.16.97.8 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
D EX    172.16.97.16 [170/26624256] via 197.155.95.118, 01:07:31, Serial0/0/0
     192.168.95.0/29 is subnetted, 3 subnets
D       192.168.95.0 [90/2604416] via 197.155.95.113, 01:07:53, Serial0/0/1
D       192.168.95.8 [90/2172416] via 197.155.95.113, 01:07:55, Serial0/0/1
C       192.168.95.16 is directly connected, FastEthernet0/0
     197.155.95.0/30 is subnetted, 6 subnets
D       197.155.95.96 [90/2681856] via 197.155.95.118, 01:07:54, Serial0/0/0
D       197.155.95.100 [90/3193856] via 197.155.95.118, 01:07:54, Serial0/0/0
                       [90/3193856] via 197.155.95.113, 01:07:53, Serial0/0/1
D       197.155.95.104 [90/3193856] via 197.155.95.118, 01:07:54, Serial0/0/0
D       197.155.95.108 [90/2681856] via 197.155.95.113, 01:07:53, Serial0/0/1
C       197.155.95.112 is directly connected, Serial0/0/1
C       197.155.95.116 is directly connected, Serial0/0/0
D*EX 0.0.0.0/0 [170/26624000] via 197.155.95.118, 01:07:53, Serial0/0/0
```

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IOS Command Line Interface

Gateway of last resort is 197.155.95.97 to network 0.0.0.0

```
     10.0.0.0/29 is subnetted, 4 subnets
D EX    10.96.0.0 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    10.96.0.8 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    10.96.0.16 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    10.96.0.24 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
     55.0.0.0/30 is subnetted, 6 subnets
D EX    55.97.0.4 [170/2611225€] via 197.155.95.97, 01:08:12, Serial0/0/0
D EX    55.97.0.8 [170/2611225€] via 197.155.95.97, 01:08:12, Serial0/0/0
D EX    55.97.0.12 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    55.97.0.16 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    55.97.0.20 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    55.97.0.24 [170/2611225€] via 197.155.95.97, 01:08:12, Serial0/0/0
     95.0.0.0/30 is subnetted, 1 subnets
D EX    95.10.10.104 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
     155.97.0.0/30 is subnetted, 7 subnets
D EX    155.97.95.9€ [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    155.97.95.100 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D       155.97.95.104 [90/268185€] via 197.155.95.97, 01:08:24, Serial0/0/0
D EX    155.97.95.108 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    155.97.95.112 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    155.97.95.116 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    155.97.95.120 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
     172.16.0.0/29 is subnetted, 3 subnets
D EX    172.16.97.0 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    172.16.97.8 [170/2611225€] via 197.155.95.97, 01:08:02, Serial0/0/0
D EX    172.16.97.1€ [170/2611225€] via 197.155.95.97, 01:08:12, Serial0/0/0
     192.168.95.0/29 is subnetted, 3 subnets
D       192.168.95.0 [90/2684416] via 197.155.95.97, 01:08:26, Serial0/0/0
D       192.168.95.8 [90/2684416] via 197.155.95.117, 01:08:25, Serial0/0/1
D       192.168.95.16 [90/2172416] via 197.155.95.117, 01:08:25, Serial0/0/1
     197.155.95.0/30 is subnetted, 6 subnets
C       197.155.95.9€ is directly connected, Serial0/0/0
D       197.155.95.100 [90/268185€] via 197.155.95.97, 01:08:26, Serial0/0/0
D       197.155.95.104 [90/268185€] via 197.155.95.97, 01:08:26, Serial0/0/0
D       197.155.95.108 [90/3193856] via 197.155.95.97, 01:08:26, Serial0/0/0
                      [90/3193856] via 197.155.95.117, 01:08:24, Serial0/0/1
D       197.155.95.112 [90/268185€] via 197.155.95.117, 01:08:25, Serial0/0/1
C       197.155.95.11€ is directly connected, Serial0/0/1
D*EX 0.0.0.0/0 [170/2611200] via 197.155.95.97, 01:08:24, Serial0/0/0
```

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IOS Command Line Interface

Gateway of last resort is not set

```
     10.0.0.0/29 is subnetted, 4 subnets
O       10.96.0.0 [110/65] via 55.97.0.10, 01:08:42, Serial0/0/0
O       10.96.0.8 [110/129] via 55.97.0.10, 01:08:42, Serial0/0/0
O       10.96.0.1€ [110/129] via 55.97.0.6, 01:08:42, Serial0/0/1
O       10.96.0.24 [110/193] via 55.97.0.6, 01:08:42, Serial0/0/1
     55.0.0.0/30 is subnetted, 6 subnets
C       55.97.0.4 is directly connected, Serial0/0/1
C       55.97.0.8 is directly connected, Serial0/0/0
O       55.97.0.12 [110/128] via 55.97.0.10, 01:08:42, Serial0/0/0
O       55.97.0.1€ [110/192] via 55.97.0.6, 01:08:42, Serial0/0/1
                   [110/192] via 55.97.0.10, 01:08:42, Serial0/0/0
O       55.97.0.20 [110/128] via 55.97.0.6, 01:08:42, Serial0/0/1
C       55.97.0.24 is directly connected, Serial0/2/0
     95.0.0.0/30 is subnetted, 1 subnets
O E2    95.10.10.104 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
     155.97.0.0/30 is subnetted, 7 subnets
O E2    155.97.95.9€ [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    155.97.95.100 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    155.97.95.104 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    155.97.95.108 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    155.97.95.112 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    155.97.95.116 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    155.97.95.120 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
     172.16.0.0/29 is subnetted, 3 subnets
O E2    172.16.97.0 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    172.16.97.8 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    172.16.97.1€ [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
     192.168.95.0/29 is subnetted, 3 subnets
O E2    192.168.95.0 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    192.168.95.8 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    192.168.95.1€ [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
     197.155.95.0/30 is subnetted, 6 subnets
O E2    197.155.95.9€ [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    197.155.95.100 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
C       197.155.95.104 is directly connected, Serial0/1/0
O E2    197.155.95.108 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    197.155.95.112 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
O E2    197.155.95.116 [110/50] via 55.97.0.2€, 01:08:42, Serial0/2/0
usama_router1#
```

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Physical | Config | CLI

IOS Command Line Interface

```
        P - periodic downloaded static route

Gateway of last resort is not set

     10.0.0.0/29 is subnetted, 4 subnets
C       10.96.0.0 is directly connected, FastEthernet0/0
O       10.96.0.8 [110/65] via 55.97.0.14, 01:09:20, Serial0/0/0
O       10.96.0.16 [110/129] via 55.97.0.14, 01:09:20, Serial0/0/0
O       10.96.0.24 [110/193] via 55.97.0.14, 01:09:20, Serial0/0/0
     55.0.0.0/30 is subnetted, 6 subnets
O       55.97.0.4 [110/128] via 55.97.0.9, 01:09:20, Serial0/0/1
C       55.97.0.8 is directly connected, Serial0/0/1
C       55.97.0.12 is directly connected, Serial0/0/0
O       55.97.0.16 [110/128] via 55.97.0.14, 01:09:20, Serial0/0/0
O       55.97.0.20 [110/192] via 55.97.0.14, 01:09:20, Serial0/0/0
                   [110/192] via 55.97.0.9, 01:09:20, Serial0/0/1
O       55.97.0.24 [110/128] via 55.97.0.9, 01:09:20, Serial0/0/1
     95.0.0.0/30 is subnetted, 1 subnets
O E2    95.10.10.104 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
     155.97.0.0/30 is subnetted, 7 subnets
O E2    155.97.95.96 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    155.97.95.100 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    155.97.95.104 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    155.97.95.108 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    155.97.95.112 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    155.97.95.116 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    155.97.95.120 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
     172.16.0.0/29 is subnetted, 3 subnets
O E2    172.16.97.0 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    172.16.97.8 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    172.16.97.16 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
     192.168.95.0/29 is subnetted, 3 subnets
O E2    192.168.95.0 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    192.168.95.8 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    192.168.95.16 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
     197.155.95.0/30 is subnetted, 6 subnets
O E2    197.155.95.96 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    197.155.95.100 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O       197.155.95.104 [110/128] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    197.155.95.108 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    197.155.95.112 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
O E2    197.155.95.116 [110/50] via 55.97.0.9, 01:09:20, Serial0/0/1
```

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Physical | Config | CLI

IOS Command Line Interface

```
Gateway of last resort is not set

     10.0.0.0/29 is subnetted, 4 subnets
O       10.96.0.0 [110/65] via 55.97.0.13, 01:09:50, Serial0/0/0
C       10.96.0.8 is directly connected, FastEthernet0/0
O       10.96.0.16 [110/65] via 55.97.0.18, 01:09:50, Serial0/0/1
O       10.96.0.24 [110/129] via 55.97.0.18, 01:09:50, Serial0/0/1
     55.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
O       55.97.0.4/30 [110/192] via 55.97.0.18, 01:09:50, Serial0/0/1
                     [110/192] via 55.97.0.13, 01:09:50, Serial0/0/0
O       55.97.0.8/30 [110/128] via 55.97.0.13, 01:09:50, Serial0/0/0
C       55.97.0.12/30 is directly connected, Serial0/0/0
C       55.97.0.16/30 is directly connected, Serial0/0/1
O       55.97.0.20/30 [110/128] via 55.97.0.18, 01:09:50, Serial0/0/1
O       55.97.0.24/29 [110/128] via 55.97.0.18, 01:09:50, Serial0/0/1
     95.0.0.0/30 is subnetted, 1 subnets
O E2    95.10.10.104 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
     155.97.0.0/30 is subnetted, 7 subnets
O E2    155.97.95.96 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    155.97.95.100 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    155.97.95.104 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    155.97.95.108 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    155.97.95.112 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    155.97.95.116 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    155.97.95.120 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
     172.16.0.0/29 is subnetted, 3 subnets
O E2    172.16.97.0 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    172.16.97.8 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    172.16.97.16 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
     192.168.95.0/29 is subnetted, 3 subnets
O E2    192.168.95.0 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    192.168.95.8 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    192.168.95.16 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
     197.155.95.0/30 is subnetted, 6 subnets
O E2    197.155.95.96 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    197.155.95.100 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O       197.155.95.104 [110/192] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    197.155.95.108 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    197.155.95.112 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
O E2    197.155.95.116 [110/50] via 55.97.0.13, 01:09:50, Serial0/0/0
usama_router3#
```

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Usama_Router4 — CLI — IOS Command Line Interface

```
Gateway of last resort is not set

     10.0.0.0/29 is subnetted, 4 subnets
O       10.96.0.0 [110/129] via 55.97.0.17, 01:10:14, Serial0/0/0
O       10.96.0.8 [110/65] via 55.97.0.17, 01:10:14, Serial0/0/0
C       10.96.0.16 is directly connected, FastEthernet0/0
O       10.96.0.24 [110/65] via 55.97.0.30, 01:10:14, Serial0/2/0
     55.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
O       55.97.0.4/30 [110/128] via 55.97.0.22, 01:10:14, Serial0/0/1
O       55.97.0.8/30 [110/192] via 55.97.0.17, 01:10:14, Serial0/0/0
                     [110/192] via 55.97.0.22, 01:10:14, Serial0/0/1
O       55.97.0.12/30 [110/128] via 55.97.0.17, 01:10:14, Serial0/0/0
C       55.97.0.16/30 is directly connected, Serial0/0/0
C       55.97.0.20/30 is directly connected, Serial0/0/1
C       55.97.0.24/29 is directly connected, Serial0/2/0
     95.0.0.0/30 is subnetted, 1 subnets
O E2    95.10.10.104 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
     155.97.0.0/30 is subnetted, 7 subnets
O E2    155.97.95.96 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    155.97.95.100 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    155.97.95.104 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    155.97.95.108 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    155.97.95.112 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    155.97.95.116 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    155.97.95.120 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
     172.16.0.0/29 is subnetted, 3 subnets
O E2    172.16.97.0 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    172.16.97.8 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    172.16.97.16 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
     192.168.95.0/29 is subnetted, 3 subnets
O E2    192.168.95.0 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    192.168.95.8 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    192.168.95.16 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
     197.155.95.0/30 is subnetted, 6 subnets
O E2    197.155.95.96 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    197.155.95.100 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O       197.155.95.104 [110/192] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    197.155.95.108 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    197.155.95.112 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
O E2    197.155.95.116 [110/50] via 55.97.0.22, 01:10:14, Serial0/0/1
usama_router4#
```

Usama_Router5 — CLI — IOS Command Line Interface

```
Gateway of last resort is not set

     10.0.0.0/29 is subnetted, 4 subnets
O       10.96.0.0 [110/129] via 55.97.0.5, 01:11:21, Serial0/0/0
O       10.96.0.8 [110/129] via 55.97.0.21, 01:11:21, Serial0/0/1
O       10.96.0.16 [110/65] via 55.97.0.21, 01:11:21, Serial0/0/1
O       10.96.0.24 [110/129] via 55.97.0.21, 01:11:11, Serial0/0/1
     55.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
C       55.97.0.4/30 is directly connected, Serial0/0/0
O       55.97.0.8/30 [110/128] via 55.97.0.5, 01:11:21, Serial0/0/0
O       55.97.0.12/30 [110/192] via 55.97.0.21, 01:11:21, Serial0/0/1
                      [110/192] via 55.97.0.5, 01:11:21, Serial0/0/0
O       55.97.0.16/30 [110/128] via 55.97.0.21, 01:11:21, Serial0/0/1
C       55.97.0.20/30 is directly connected, Serial0/0/1
O       55.97.0.24/29 [110/128] via 55.97.0.21, 01:11:21, Serial0/0/1
                      [110/128] via 55.97.0.5, 01:11:21, Serial0/0/0
     95.0.0.0/30 is subnetted, 1 subnets
O E2    95.10.10.104 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
     155.97.0.0/30 is subnetted, 7 subnets
O E2    155.97.95.96 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    155.97.95.100 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    155.97.95.104 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    155.97.95.108 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    155.97.95.112 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    155.97.95.116 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    155.97.95.120 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
     172.16.0.0/29 is subnetted, 3 subnets
O E2    172.16.97.0 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    172.16.97.8 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    172.16.97.16 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
     192.168.95.0/29 is subnetted, 3 subnets
O E2    192.168.95.0 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    192.168.95.8 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    192.168.95.16 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
     197.155.95.0/30 is subnetted, 6 subnets
O E2    197.155.95.96 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    197.155.95.100 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O       197.155.95.104 [110/128] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    197.155.95.108 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    197.155.95.112 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
O E2    197.155.95.116 [110/50] via 55.97.0.5, 01:11:21, Serial0/0/0
usama_router5#
```

IOS Command Line Interface

```
        P - periodic downloaded static route

Gateway of last resort is not set

      10.0.0.0/29 is subnetted, 4 subnets
O        10.96.0.0 [110/193] via 55.97.0.29, 01:11:53, Serial0/0/0
O        10.96.0.8 [110/129] via 55.97.0.29, 01:11:53, Serial0/0/0
O        10.96.0.16 [110/65] via 55.97.0.29, 01:11:53, Serial0/0/0
C        10.96.0.24 is directly connected, FastEthernet0/0
      55.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
O        55.97.0.4/30 [110/192] via 55.97.0.29, 01:11:53, Serial0/0/0
O        55.97.0.8/30 [110/256] via 55.97.0.29, 01:11:53, Serial0/0/0
O        55.97.0.12/30 [110/192] via 55.97.0.29, 01:11:53, Serial0/0/0
O        55.97.0.16/30 [110/128] via 55.97.0.29, 01:11:53, Serial0/0/0
O        55.97.0.20/30 [110/128] via 55.97.0.29, 01:11:53, Serial0/0/0
C        55.97.0.24/29 is directly connected, Serial0/0/0
      95.0.0.0/30 is subnetted, 1 subnets
O E2     95.10.10.104 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
      155.97.0.0/30 is subnetted, 7 subnets
O E2     155.97.95.96 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     155.97.95.100 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     155.97.95.104 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     155.97.95.108 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     155.97.95.112 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     155.97.95.116 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     155.97.95.120 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
      172.16.0.0/29 is subnetted, 3 subnets
O E2     172.16.97.0 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     172.16.97.8 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     172.16.97.16 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
      192.168.95.0/29 is subnetted, 3 subnets
O E2     192.168.95.0 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     192.168.95.8 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     192.168.95.16 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
      197.155.95.0/30 is subnetted, 6 subnets
O E2     197.155.95.96 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     197.155.95.100 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O        197.155.95.104 [110/256] via 55.97.0.29, 01:11:43, Serial0/0/0
O E2     197.155.95.108 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     197.155.95.112 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
O E2     197.155.95.116 [110/50] via 55.97.0.29, 01:11:53, Serial0/0/0
usama-9642-router6#
```

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IOS Command Line Interface

```
Gateway of last resort is 155.97.95.121 to network 0.0.0.0

      10.0.0.0/29 is subnetted, 4 subnets
O        10.96.0.0 [110/129] via 55.97.0.25, 01:14:02, Serial0/0/1
O        10.96.0.8 [110/193] via 55.97.0.25, 01:14:02, Serial0/0/1
O        10.96.0.16 [110/193] via 55.97.0.25, 01:14:02, Serial0/0/1
O        10.96.0.24 [110/257] via 55.97.0.25, 01:14:02, Serial0/0/1
      55.0.0.0/30 is subnetted, 6 subnets
O        55.97.0.4 [110/128] via 55.97.0.25, 01:14:02, Serial0/0/1
O        55.97.0.8 [110/128] via 55.97.0.25, 01:14:02, Serial0/0/1
O        55.97.0.12 [110/192] via 55.97.0.25, 01:14:02, Serial0/0/1
O        55.97.0.16 [110/256] via 55.97.0.25, 01:14:02, Serial0/0/1
O        55.97.0.20 [110/192] via 55.97.0.25, 01:14:02, Serial0/0/1
C        55.97.0.24 is directly connected, Serial0/0/1
      95.0.0.0/30 is subnetted, 1 subnets
R        95.10.10.104 [120/1] via 155.97.95.121, 00:00:09, Serial0/0/0
      155.97.0.0/30 is subnetted, 7 subnets
R        155.97.95.96 [120/1] via 155.97.95.121, 00:00:09, Serial0/0/0
R        155.97.95.100 [120/1] via 155.97.95.121, 00:00:09, Serial0/0/0
R        155.97.95.104 [120/1] via 155.97.95.121, 00:00:09, Serial0/0/0
R        155.97.95.108 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
R        155.97.95.112 [120/3] via 155.97.95.121, 00:00:09, Serial0/0/0
R        155.97.95.116 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
C        155.97.95.120 is directly connected, Serial0/0/0
      172.16.0.0/29 is subnetted, 3 subnets
R        172.16.97.0 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
R        172.16.97.8 [120/3] via 155.97.95.121, 00:00:09, Serial0/0/0
R        172.16.97.16 [120/3] via 155.97.95.121, 00:00:09, Serial0/0/0
      192.168.95.0/29 is subnetted, 3 subnets
R        192.168.95.0 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
R        192.168.95.8 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
R        192.168.95.16 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
      197.155.95.0/30 is subnetted, 6 subnets
R        197.155.95.96 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
R        197.155.95.100 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
O        197.155.95.104 [110/128] via 55.97.0.25, 01:14:02, Serial0/0/1
R        197.155.95.108 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
R        197.155.95.112 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
R        197.155.95.116 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
R*   0.0.0.0/0 [120/2] via 155.97.95.121, 00:00:09, Serial0/0/0
redistribute-router>
redistribute-router>
```
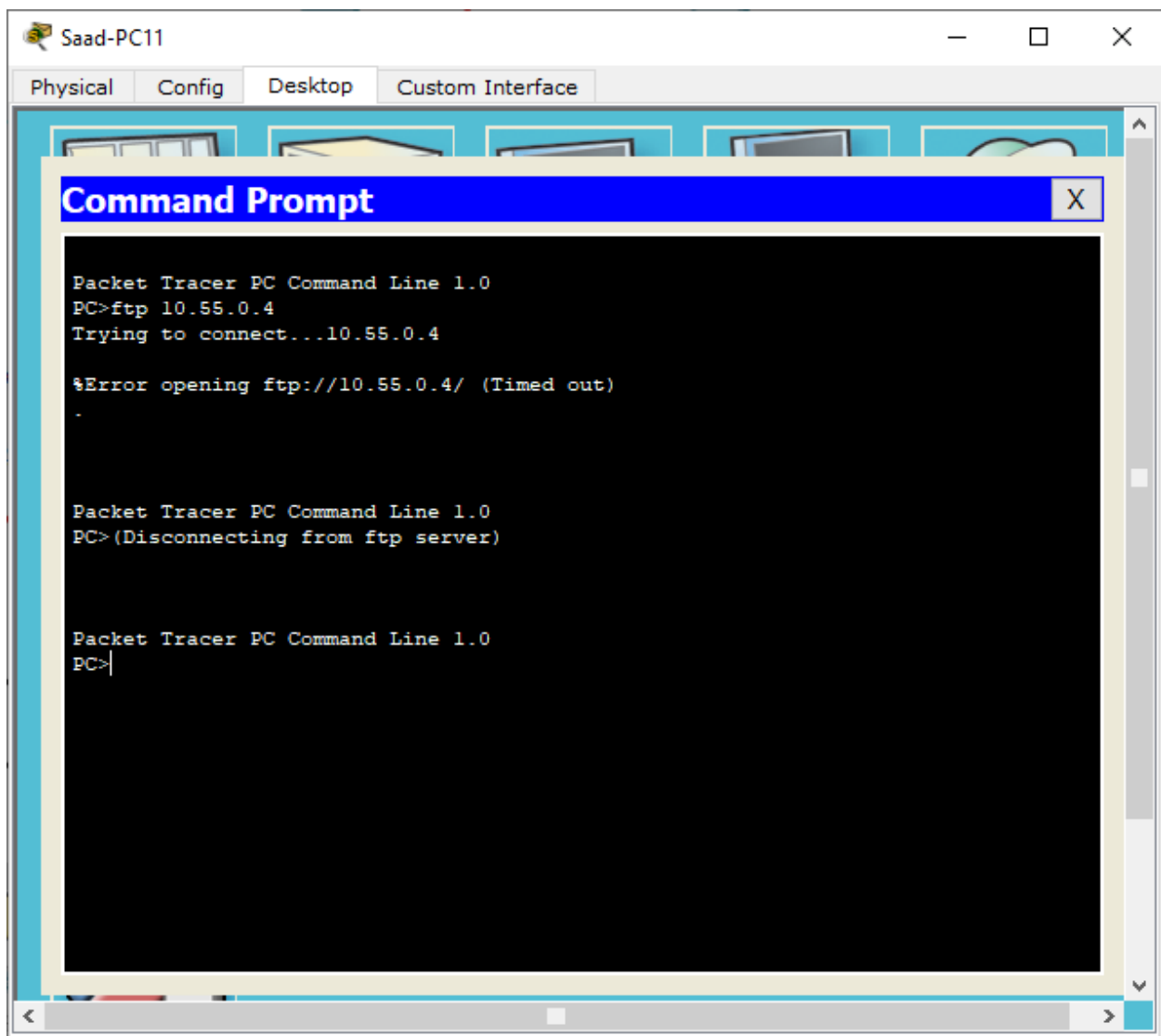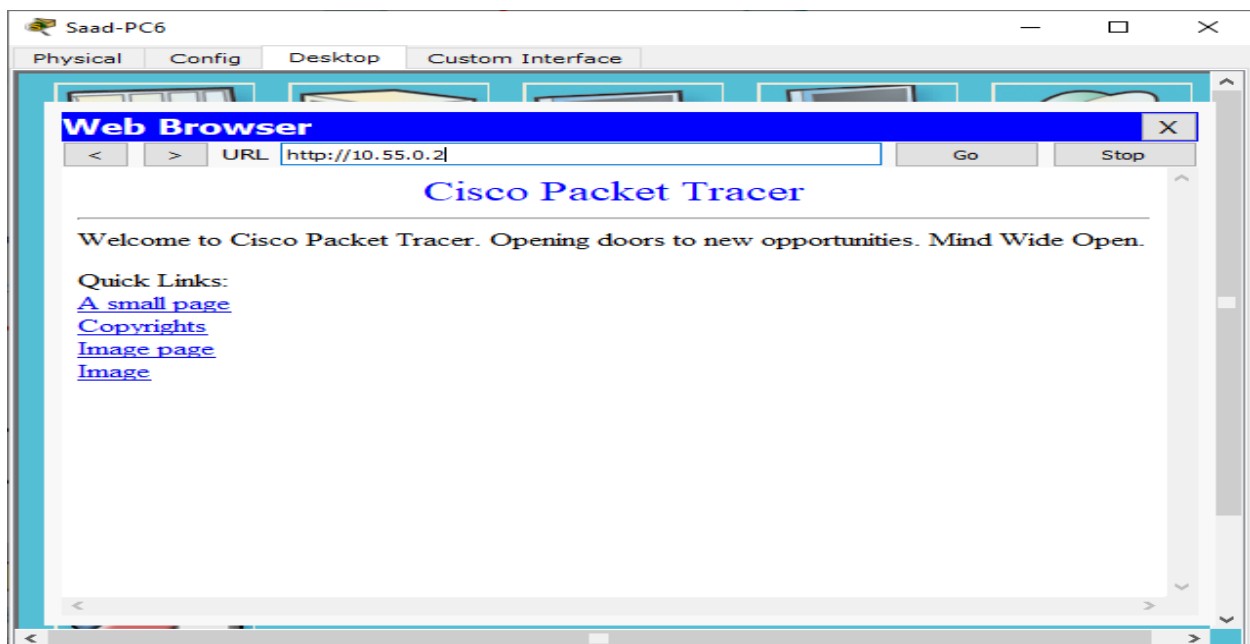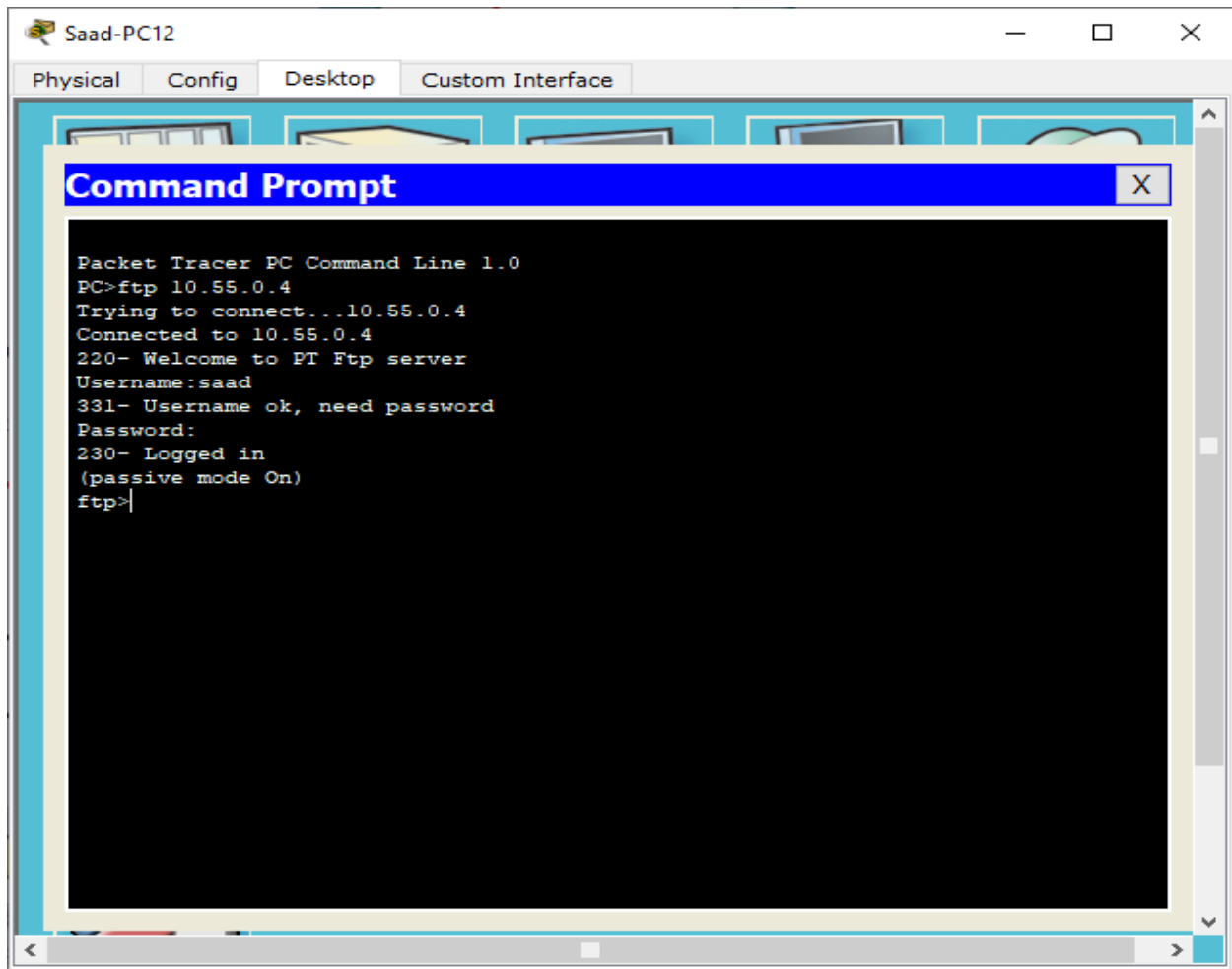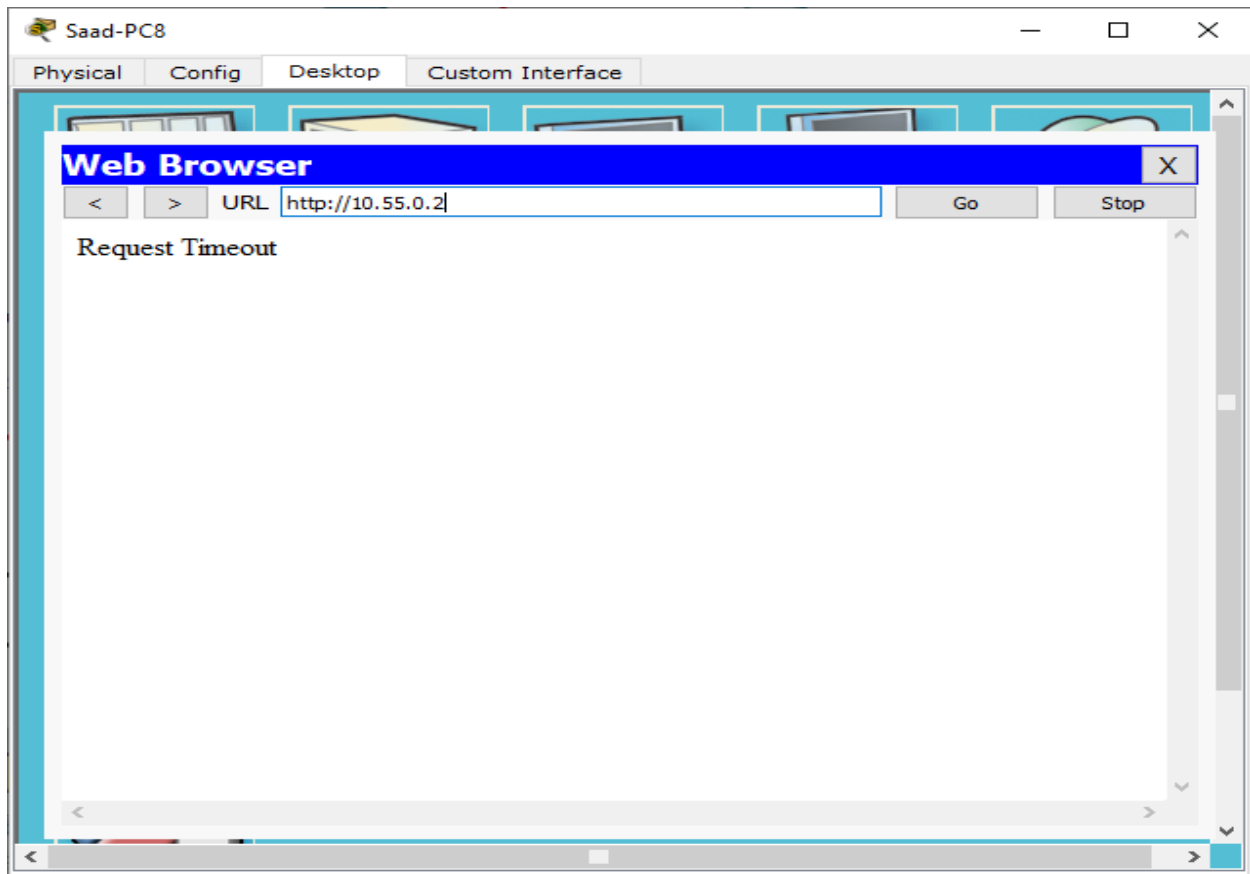
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e) Ping result for some examples

1) ACL

Saad-PC11 — □ X

Physical Config Desktop Custom Interface

Command Prompt X

```
Packet Tracer PC Command Line 1.0
PC>ftp 10.55.0.4
Trying to connect...10.55.0.4

%Error opening ftp://10.55.0.4/ (Timed out)



Packet Tracer PC Command Line 1.0
PC>(Disconnecting from ftp server)


Packet Tracer PC Command Line 1.0
PC>
```

Saad-PC12

Physical | Config | Desktop | Custom Interface

Command Prompt

```
Packet Tracer PC Command Line 1.0
PC>ftp 10.55.0.4
Trying to connect...10.55.0.4
Connected to 10.55.0.4
220- Welcome to PT Ftp server
Username:saad
331- Username ok, need password
Password:
230- Logged in
(passive mode On)
ftp>
```

Saad-PC6

Physical | Config | Desktop | Custom Interface

Web Browser

< | > | URL http://10.55.0.2 | 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

2) NAT

3) Port security

Usama_Switch3

Physical | Config | CLI

IOS Command Line Interface

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

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

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


Switch>EN
Switch#SHOW PORT-SEC
Secure Port MaxSecureAddr CurrentAddr SecurityViolation Security Action
              (Count)        (Count)        (Count)
-------------------------------------------------------------------
      Fa0/1        1             1               0          Shutdown
      Fa0/2        1             1               0          Shutdown
      Fa0/3        1             1               0          Shutdown
      Fa0/4        1             1               0          Shutdown
      Fa0/5        1             1               0          Shutdown
-------------------------------------------------------------------
Switch#
Switch#
Switch#
Switch#
Switch#
Switch#
Switch#
Switch#
Switch#
```

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