

BÁO CÁO THỰC HÀNH

Môn: Quản trị mạng và hệ thống - NT132.O11.ANTT

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C1: Chia địa chỉ IP cho các mạng con

| Số host | Network | Subnet mask | Dải IP | Broadcast |
|---------|-----------------|-----------------|---------------------------|-------------|
| 126 | 10.77.05.0/25 | 255.255.255.128 | 10.77.5.1 - 10.77.5.126 | 10.77.5.127 |
| 30 | 10.77.05.128/27 | 255.255.255.224 | 10.77.5.129 - 10.77.5.158 | 10.77.5.159 |
| 14 | 10.77.5.160/28 | 255.255.255.240 | 10.77.5.161 - 10.77.5.174 | 10.77.5.175 |
| 2 | 10.77.5.176/30 | 255.255.255.252 | 10.77.5.177 - 10.77.5.178 | 10.77.5.179 |
| 2 | 10.77.5.180/30 | 255.255.255.252 | 10.77.5.181 - 10.77.5.182 | 10.77.5.183 |
| 2 | 10.77.5.184/30 | 255.255.255.252 | 10.77.5.185 - 10.77.5.186 | 10.77.5.187 |
| 2 | 10.77.5.188/30 | 255.255.255.252 | 10.77.5.189 - 10.77.5.190 | 10.77.5.191 |

| Thiết bị | Interface | Địa chỉ IP | Subnet mask | Default Gateway |
|----------|-----------|-------------|-----------------|-----------------|
| R1 | G0/0/1 | 10.77.5.1 | 255.255.255.128 | |
| | S0/1/0 | 10.77.5.177 | 255.255.255.252 | |
| | S0/1/1 | 10.77.5.181 | 255.255.255.252 | |
| R2 | S0/1/0 | 10.77.5.178 | 255.255.255.252 | |
| | S0/1/1 | 10.77.5.185 | 255.255.255.252 | |
| R3 | G0/0/0 | 10.77.5.161 | 255.255.255.240 | |
| | G0/0/1 | 10.77.5.129 | 255.255.255.224 | |
| | S0/1/0 | 10.77.5.186 | 255.255.255.252 | |
| | S0/1/1 | 10.77.5.189 | 255.255.255.252 | |
| R4 | S0/1/0 | 10.77.5.190 | 255.255.255.252 | |
| | S0/1/1 | 10.77.5.182 | 255.255.255.252 | |
| PC-A | NIC | 10.77.5.126 | 255.255.255.128 | 10.77.5.1 |
| ServerB1 | NIC | 10.77.5.174 | 255.255.255.240 | 10.77.5.161 |
| ServerB2 | NIC | 10.77.5.158 | 255.255.255.224 | 10.77.5.129 |

C2: Thực hiện cấu hình cơ bản cho các thiết bị

R1:

The screenshot shows a window titled 'R1' with a tabbed interface. The 'CLI' tab is selected, displaying the 'IOS Command Line Interface'. The terminal output shows the command 'show running-config' being executed, resulting in the following configuration:

```
R1# show running-config
Building configuration...

Current configuration : 1162 bytes
!
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname R1
!
!
!
enable password 7 0828425D0C1A091610
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
```

At the bottom right of the CLI window, there are 'Copy' and 'Paste' buttons. At the bottom left of the main window, there is a checkbox labeled 'Top'.

R1

Physical

Config

CLI

Attributes

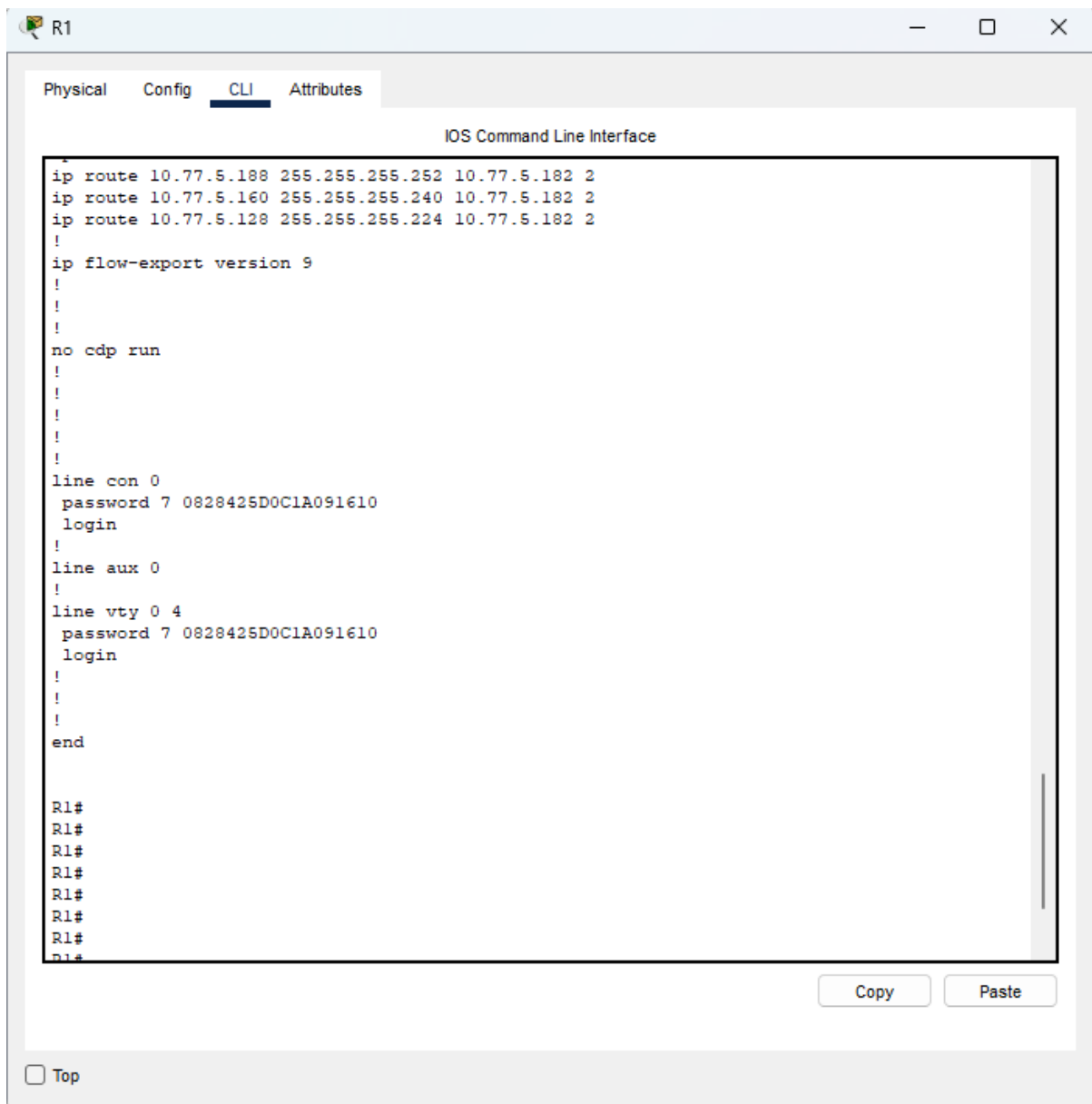
IOS Command Line Interface

```
spanning-tree mode pvst
!
!
!
!
!
!
interface GigabitEthernet0/0/0
no ip address
duplex auto
speed auto
shutdown
!
interface GigabitEthernet0/0/1
ip address 10.77.5.1 255.255.255.128
duplex auto
speed auto
!
interface Serial0/1/0
ip address 10.77.5.177 255.255.255.252
clock rate 2000000
!
interface Serial0/1/1
ip address 10.77.5.181 255.255.255.252
clock rate 2000000
!
interface Vlan1
no ip address
shutdown
!
ip classless
ip route 10.77.5.184 255.255.255.252 10.77.5.178
ip route 10.77.5.128 255.255.255.224 10.77.5.178
ip route 10.77.5.160 255.255.255.240 10.77.5.178
ip route 10.77.5.188 255.255.255.252 10.77.5.182 2
ip route 10.77.5.160 255.255.255.240 10.77.5.182 2
ip route 10.77.5.128 255.255.255.224 10.77.5.182 2
```

Copy

Paste

☐ Top



R2:

IOS Command Line Interface


```
R2#show running config
      ^
% Invalid input detected at '^' marker.

R2#show running-config
Building configuration...

Current configuration : 1014 bytes
!
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname R2
!
!
!
enable password 7 0828425D0C1A091610
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
interface GigabitEthernet0/0/0
no ip address
duplex auto
speed auto
shutdown
!
interface GigabitEthernet0/0/1
no ip address
duplex auto
speed auto
shutdown
!
interface Serial0/1/0
ip address 10.27.5.129 255.255.255.252
```

Copy

Paste

 R2

Physical

Config

CLI

Attributes

IOS Command Line Interface

```
!
interface GigabitEthernet0/0/0
  no ip address
  duplex auto
  speed auto
  shutdown
!
interface GigabitEthernet0/0/1
  no ip address
  duplex auto
  speed auto
  shutdown
!
interface Serial0/1/0
  ip address 10.77.5.178 255.255.255.252
  clock rate 2000000
  shutdown
!
interface Serial0/1/1
  ip address 10.77.5.185 255.255.255.252
  clock rate 2000000
  shutdown
!
interface Vlan1
  no ip address
  shutdown
!
ip classless
ip route 10.77.5.0 255.255.255.128 10.77.5.177
ip route 10.77.5.160 255.255.255.240 10.77.5.186
ip route 10.77.5.128 255.255.255.224 10.77.5.186
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
  password 7 082842SD0C1A091610
  login
!
line aux 0
!
line vty 0 4
  password 7 082842SD0C1A091610
  login
!
!
!
end

R2#
R2#S
```

Copy

Paste

☐ Top

R3:

R3

Physical

Config

CLI

Attributes


IOS Command Line Interface

```
R3#show running-config
Building configuration...

Current configuration : 1054 bytes
!
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname R3
!
!
!
enable password 7 0828425D0C1A091610
!
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
interface GigabitEthernet0/0/0
ip address 10.77.5.161 255.255.255.240
duplex auto
speed auto
!
interface GigabitEthernet0/0/1
ip address 10.77.5.129 255.255.255.224
duplex auto
speed auto
!
interface Serial0/1/0
ip address 10.77.5.186 255.255.255.252
clock rate 2000000
!
interface Serial0/1/1
ip address 10.77.5.189 255.255.255.252
!
interface Vlan1
```

Copy

Paste

 R3—□×

PhysicalConfigCLIAttributes

IOS Command Line Interface

```
!
!
interface GigabitEthernet0/0/0
ip address 10.77.5.161 255.255.255.240
duplex auto
speed auto
!
interface GigabitEthernet0/0/1
ip address 10.77.5.129 255.255.255.224
duplex auto
speed auto
!
interface Serial0/1/0
ip address 10.77.5.186 255.255.255.252
clock rate 2000000
!
interface Serial0/1/1
ip address 10.77.5.189 255.255.255.252
!
interface Vlan1
no ip address
shutdown
!
ip classless
ip route 10.77.5.176 255.255.255.252 10.77.5.185
ip route 10.77.5.0 255.255.255.128 10.77.5.185
ip route 10.77.5.180 255.255.255.252 10.77.5.190 2
ip route 10.77.5.0 255.255.255.128 10.77.5.190 2
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
password 7 0828425D0C1A091610
login
!
line aux 0
!
line vty 0 4
password 7 0828425D0C1A091610
login
!
!
!
end

R3#
R3#
R3#
R3#
R3#
```

Copy

Paste

☐ Top

R4:

```
R4>enable
Password:
R4#show running-config
Building configuration...

Current configuration : 977 bytes
!
version 15.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname R4
!
!
!
enable password 7 0828425D0C1A091610
!
!
!
!
!
no ip cef
no ipv6 cef
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
interface GigabitEthernet0/0/0
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface GigabitEthernet0/0/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Serial0/1/0
 ip address 10.77.5.190 255.255.255.252
 clock rate 2000000
```

R4

Physical

Config

CLI

Attributes

IOS Command Line Interface

```
no ip address
duplex auto
speed auto
shutdown
!
interface GigabitEthernet0/0/1
no ip address
duplex auto
speed auto
shutdown
!
interface Serial0/1/0
ip address 10.77.5.190 255.255.255.252
clock rate 2000000
!
interface Serial0/1/1
ip address 10.77.5.182 255.255.255.252
!
interface Vlan1
no ip address
shutdown
!
ip classless
ip route 10.77.5.0 255.255.255.128 10.77.5.181 2
ip route 10.77.5.160 255.255.255.240 10.77.5.189 2
ip route 10.77.5.128 255.255.255.224 10.77.5.189 2
!
ip flow-export version 9
!
!
!
no cdp run
!
!
!
!
!
line con 0
password 7 0828425D0C1A091610
login
!
line aux 0
!
line vty 0 4
password 7 0828425D0C1A091610
login
!
!
!
end

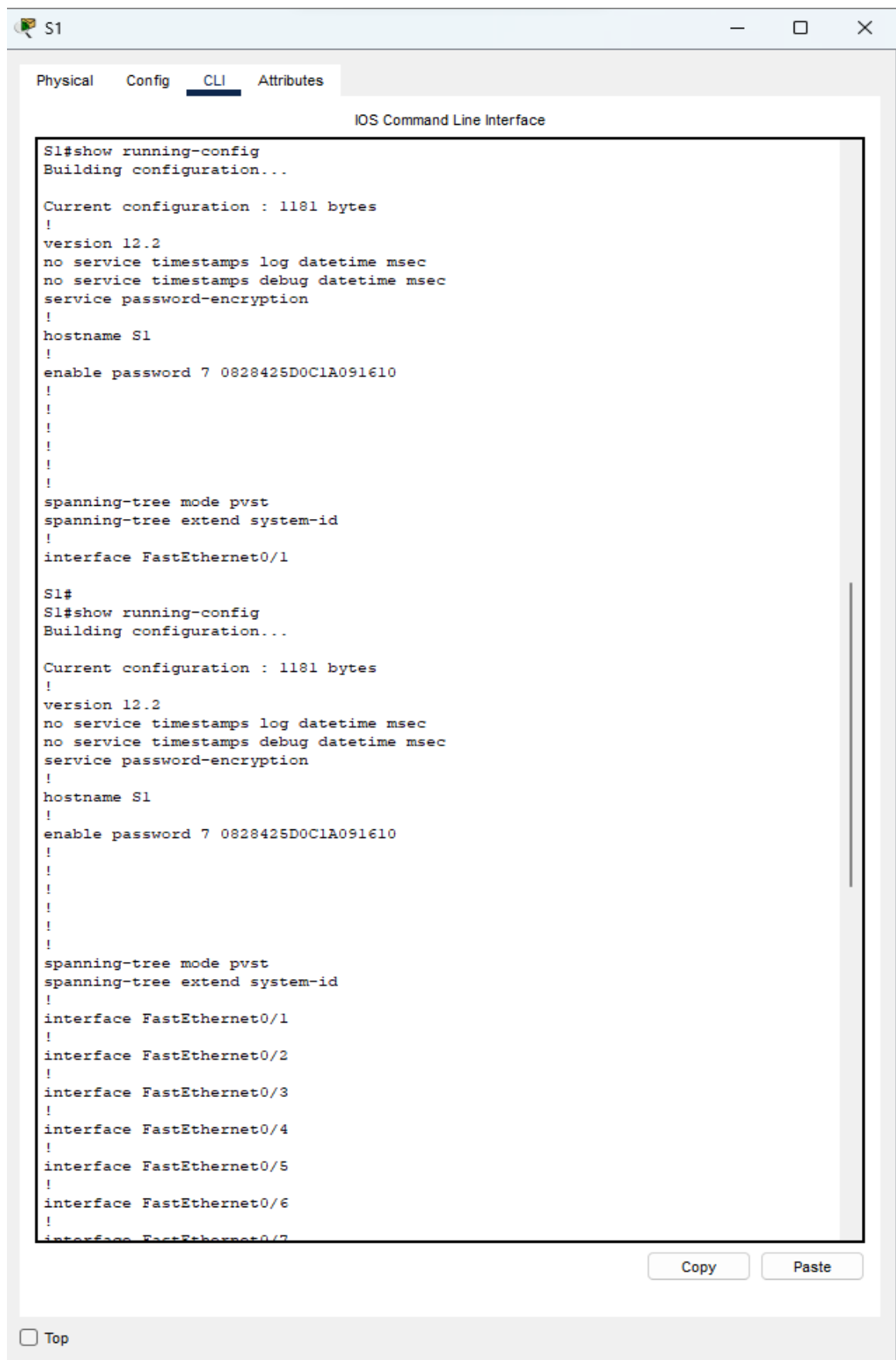
R4#
R4#
R4#
R4#
R4#
R4#
R4#
R4#D
```

Copy

Paste

☐ Top

S1:



The screenshot shows a window titled 'S1' with a tabbed interface. The 'CLI' tab is selected, displaying the 'IOS Command Line Interface'. The terminal shows the command 'S1#show running-config' and its output, which is the current configuration of the switch. The configuration includes version 12.2, service timestamps, password encryption, hostname S1, enable password, spanning-tree mode pvst, and several FastEthernet interfaces (0/1 through 0/7). The output is repeated twice in the terminal. At the bottom of the window, there is a 'Top' button and a 'Copy/Paste' section with 'Copy' and 'Paste' buttons.

```
S1#show running-config
Building configuration...

Current configuration : 1181 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname S1
!
enable password 7 0828425D0C1A091610
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1

S1#
S1#show running-config
Building configuration...

Current configuration : 1181 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname S1
!
enable password 7 0828425D0C1A091610
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
!
interface FastEthernet0/2
!
interface FastEthernet0/3
!
interface FastEthernet0/4
!
interface FastEthernet0/5
!
interface FastEthernet0/6
!
interface FastEthernet0/7
```

☐ Top

Copy Paste

IOS Command Line Interface

```
interface FastEthernet0/10
!
interface FastEthernet0/11
!
interface FastEthernet0/12
!
interface FastEthernet0/13
!
interface FastEthernet0/14
!
interface FastEthernet0/15
!
interface FastEthernet0/16
!
interface FastEthernet0/17
!
interface FastEthernet0/18
!
interface FastEthernet0/19
!
interface FastEthernet0/20
!
interface FastEthernet0/21
!
interface FastEthernet0/22
!
interface FastEthernet0/23
!
interface FastEthernet0/24
!
interface GigabitEthernet0/1
!
interface GigabitEthernet0/2
!
interface Vlan1
  no ip address
  shutdown
!
!
!
!
line con 0
  password 7 0828425D0C1A091610
  login
!
line vty 0 4
  password 7 0828425D0C1A091610
  login
line vty 5 15
  login
!
!
!
!
end

S1#
S1#
```

Copy

Paste

S31:



The screenshot shows a web-based interface for a switch named S31. The 'CLI' tab is selected, displaying the IOS Command Line Interface. The user has entered the command 'show running-config', and the output shows the current configuration of the switch. The configuration includes the version 12.2, service timestamps, password encryption, hostname S31, enable password, spanning-tree mode pvst, and 18 FastEthernet interfaces (0/1 to 0/17). The interface is titled 'S31' and has tabs for 'Physical', 'Config', 'CLI', and 'Attributes'. The 'CLI' tab is active, showing the 'IOS Command Line Interface'. The output of the 'show running-config' command is displayed in a text area, with a 'Copy' button and a 'Paste' button at the bottom right. A 'Top' link is located at the bottom left of the interface.

```
S31>enable
Password:
S31#show running-config
Building configuration...

Current configuration : 1182 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname S31
!
enable password 7 0828425D0C1A091610
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
!
interface FastEthernet0/2
!
interface FastEthernet0/3
!
interface FastEthernet0/4
!
interface FastEthernet0/5
!
interface FastEthernet0/6
!
interface FastEthernet0/7
!
interface FastEthernet0/8
!
interface FastEthernet0/9
!
interface FastEthernet0/10
!
interface FastEthernet0/11
!
interface FastEthernet0/12
!
interface FastEthernet0/13
!
interface FastEthernet0/14
!
interface FastEthernet0/15
!
interface FastEthernet0/16
!
interface FastEthernet0/17
!
```

☐ Top

IOS Command Line Interface


```
interface FastEthernet0/10
!
interface FastEthernet0/11
!
interface FastEthernet0/12
!
interface FastEthernet0/13
!
interface FastEthernet0/14
!
interface FastEthernet0/15
!
interface FastEthernet0/16
!
interface FastEthernet0/17
!
interface FastEthernet0/18
!
interface FastEthernet0/19
!
interface FastEthernet0/20
!
interface FastEthernet0/21
!
interface FastEthernet0/22
!
interface FastEthernet0/23
!
interface FastEthernet0/24
!
interface GigabitEthernet0/1
!
interface GigabitEthernet0/2
!
interface Vlan1
  no ip address
  shutdown
!
!
!
!
line con 0
  password 7 0828425D0C1A091610
  login
!
line vty 0 4
  password 7 0828425D0C1A091610
  login
line vty 5 15
  login
!
!
!
!
end

S31#
S31#
```

Copy

Paste

S32:

 S32

Physical

Config

CLI

Attributes

IOS Command Line Interface

```
* Invalid input detected at '^' marker.

S32#show running-config
Building configuration...

Current configuration : 1182 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname S32
!
enable password 7 0828425D0C1A091610
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1

S32#show running-config
Building configuration...

Current configuration : 1182 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname S32
!
enable password 7 0828425D0C1A091610
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
interface FastEthernet0/1
!
interface FastEthernet0/2
!
interface FastEthernet0/3
!
interface FastEthernet0/4
!
interface FastEthernet0/5
!
interface FastEthernet0/6
!
```

Copy

Paste

☐ Top

IOS Command Line Interface

```
!
interface FastEthernet0/10
!
interface FastEthernet0/11
!
interface FastEthernet0/12
!
interface FastEthernet0/13
!
interface FastEthernet0/14
!
interface FastEthernet0/15
!
interface FastEthernet0/16
!
interface FastEthernet0/17
!
interface FastEthernet0/18
!
interface FastEthernet0/19
!
interface FastEthernet0/20
!
interface FastEthernet0/21
!
interface FastEthernet0/22
!
interface FastEthernet0/23
!
interface FastEthernet0/24
!
interface GigabitEthernet0/1
!
interface GigabitEthernet0/2
!
interface Vlan1
  no ip address
  shutdown
!
!
!
!
line con 0
  password 7 0828425D0C1A091610
  login
!
line vty 0 4
  password 7 0828425D0C1A091610
  login
line vty 5 15
  login
!
!
!
end
```

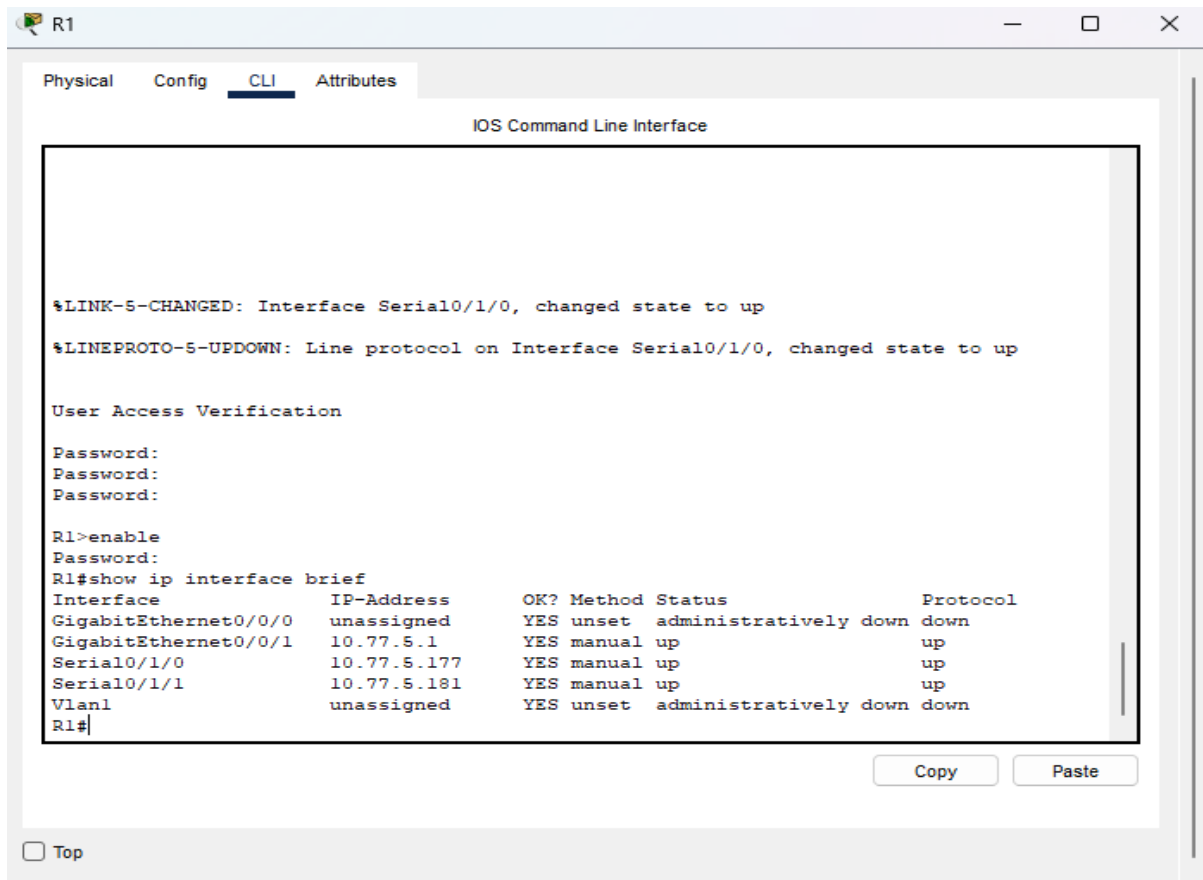
S32#

Copy

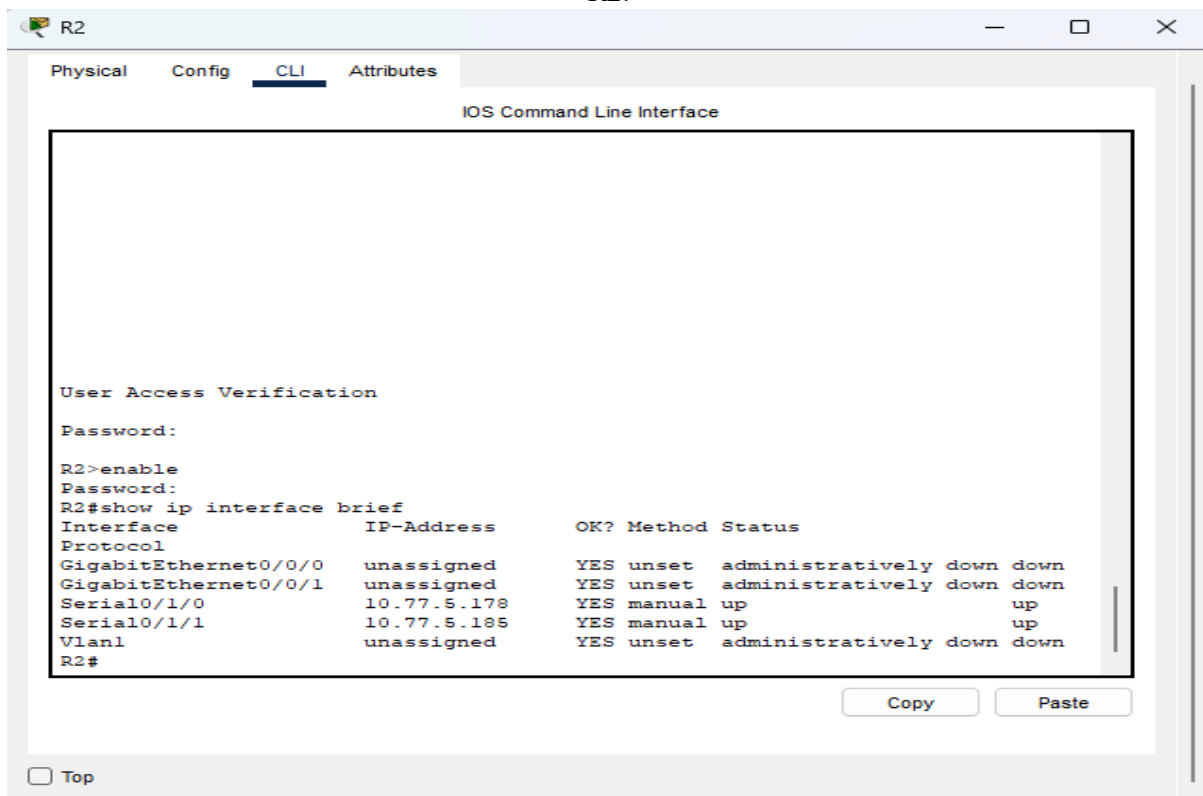
Paste

C3: Cấu hình Interface cho các thiết bị

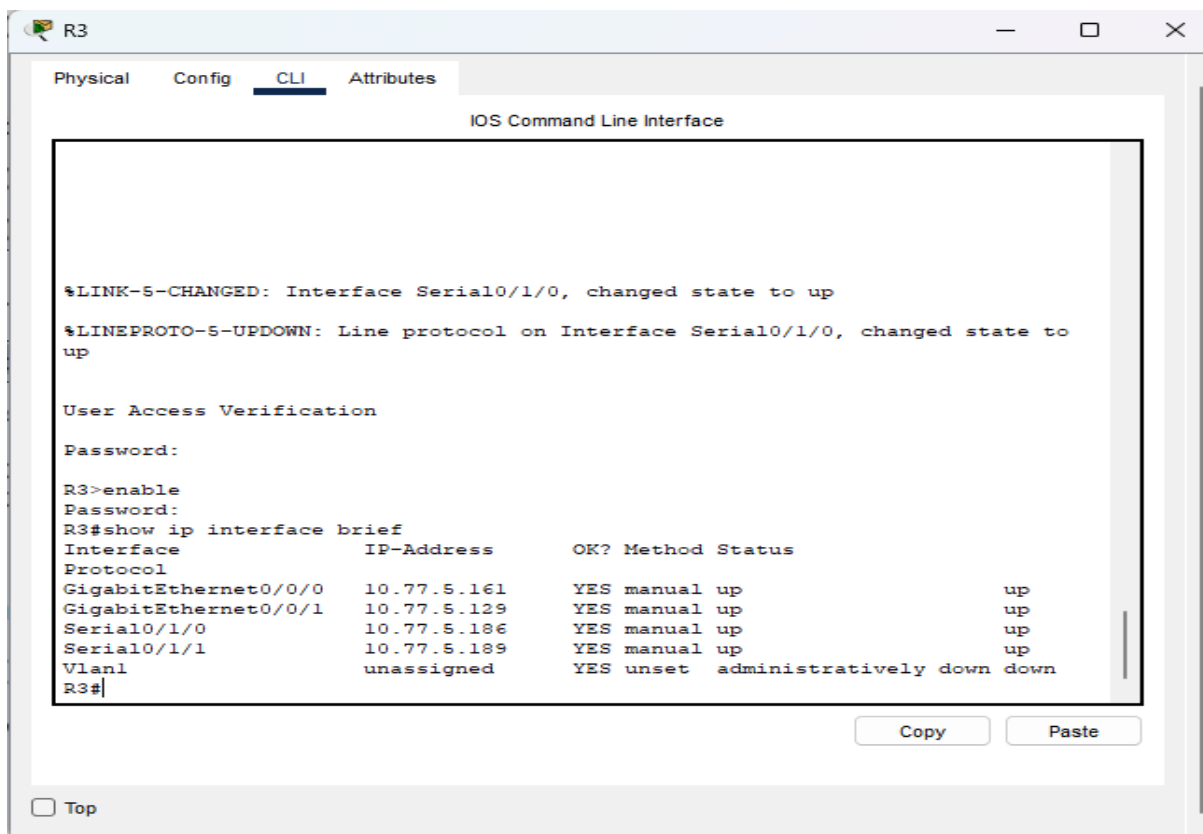
R1:



R2:



R3:



The screenshot shows the CLI window for router R3. The 'CLI' tab is selected. The interface displays the following text:

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

User Access Verification

Password:
R3>enable
Password:
R3#show ip interface brief
```

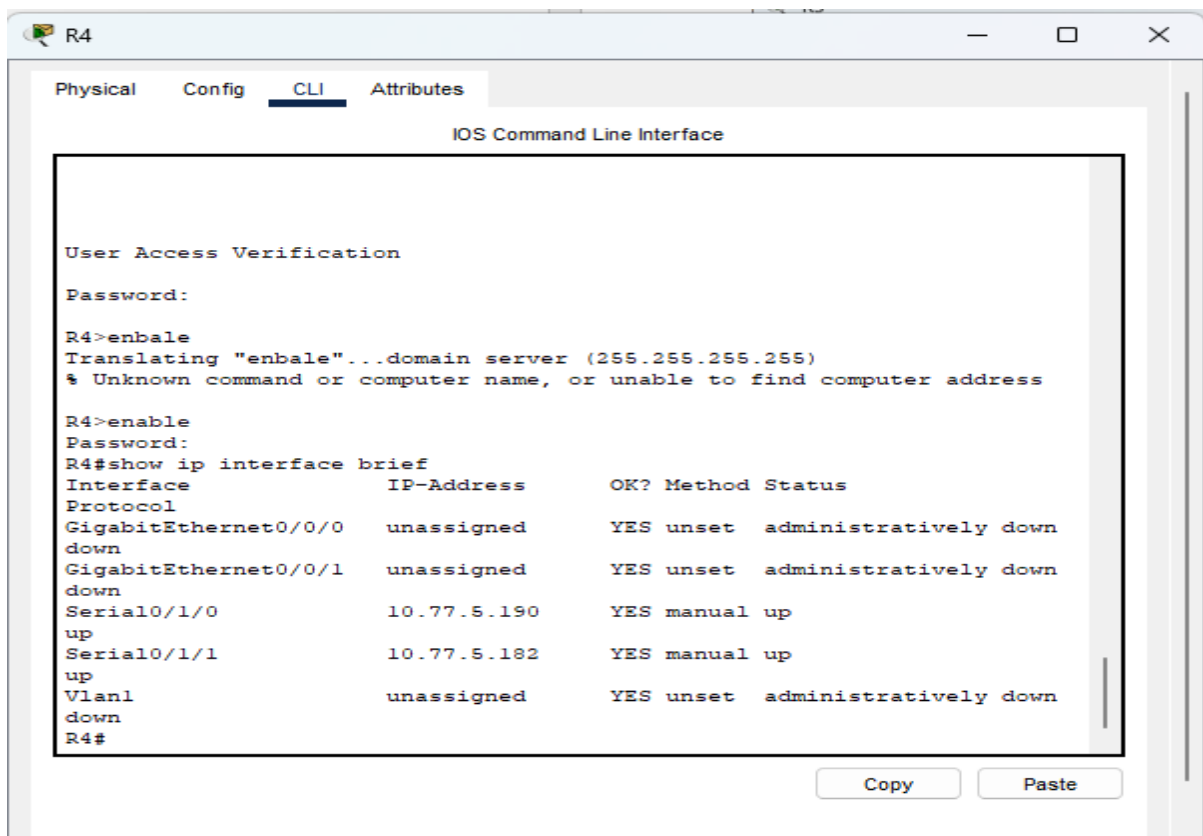
| Interface | IP-Address | OK? | Method | Status |
|----------------------|-------------|-----|--------|-----------------------|
| GigabitEthernet0/0/0 | 10.77.5.161 | YES | manual | up |
| GigabitEthernet0/0/1 | 10.77.5.129 | YES | manual | up |
| Serial0/1/0 | 10.77.5.186 | YES | manual | up |
| Serial0/1/1 | 10.77.5.189 | YES | manual | up |
| Vlan1 | unassigned | YES | unset | administratively down |

R3#

Buttons: Copy, Paste

Top

R4:



The screenshot shows the CLI window for router R4. The 'CLI' tab is selected. The interface displays the following text:

```
User Access Verification

Password:
R4>enbale
Translating "enbale"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer address

R4>enable
Password:
R4#show ip interface brief
```

| Interface | IP-Address | OK? | Method | Status |
|----------------------|-------------|-----|--------|-----------------------|
| GigabitEthernet0/0/0 | unassigned | YES | unset | administratively down |
| GigabitEthernet0/0/1 | unassigned | YES | unset | administratively down |
| Serial0/1/0 | 10.77.5.190 | YES | manual | up |
| Serial0/1/1 | 10.77.5.182 | YES | manual | up |
| Vlan1 | unassigned | YES | unset | administratively down |

R4#

Buttons: Copy, Paste

C4: Cấu hình định tuyến tĩnh

R1:

```
R1#show ip route
Codes: L - local, C - connected, S - static, 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 not set

    10.0.0.0/8 is variably subnetted, 10 subnets, 5 masks
C       10.77.5.0/25 is directly connected, GigabitEthernet0/0/1
L       10.77.5.1/32 is directly connected, GigabitEthernet0/0/1
S       10.77.5.128/27 [1/0] via 10.77.5.178
S       10.77.5.160/28 [1/0] via 10.77.5.178
C       10.77.5.176/30 is directly connected, Serial0/1/0
L       10.77.5.177/32 is directly connected, Serial0/1/0
C       10.77.5.180/30 is directly connected, Serial0/1/1
L       10.77.5.181/32 is directly connected, Serial0/1/1
S       10.77.5.184/30 [1/0] via 10.77.5.178
S       10.77.5.188/30 [2/0] via 10.77.5.182

R1#
```

R2:

```
R2#show ip route
Codes: L - local, C - connected, S - static, 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 not set

    10.0.0.0/8 is variably subnetted, 7 subnets, 5 masks
S       10.77.5.0/25 [1/0] via 10.77.5.177
S       10.77.5.128/27 [1/0] via 10.77.5.186
S       10.77.5.160/28 [1/0] via 10.77.5.186
C       10.77.5.176/30 is directly connected, Serial0/1/0
L       10.77.5.178/32 is directly connected, Serial0/1/0
C       10.77.5.184/30 is directly connected, Serial0/1/1
L       10.77.5.185/32 is directly connected, Serial0/1/1

R2#
```

R3:

```
R3#show ip route
Codes: L - local, C - connected, S - static, 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 not set

    10.0.0.0/8 is variably subnetted, 11 subnets, 5 masks
S       10.77.5.0/25 [1/0] via 10.77.5.185
C       10.77.5.128/27 is directly connected, GigabitEthernet0/0/1
L       10.77.5.129/32 is directly connected, GigabitEthernet0/0/1
C       10.77.5.160/28 is directly connected, GigabitEthernet0/0/0
L       10.77.5.161/32 is directly connected, GigabitEthernet0/0/0
S       10.77.5.176/30 [1/0] via 10.77.5.185
S       10.77.5.180/30 [2/0] via 10.77.5.190
C       10.77.5.184/30 is directly connected, Serial0/1/0
L       10.77.5.186/32 is directly connected, Serial0/1/0
C       10.77.5.188/30 is directly connected, Serial0/1/1
L       10.77.5.189/32 is directly connected, Serial0/1/1
--More--
```

R4:

```
R4#show ip route
Codes: L - local, C - connected, S - static, 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 not set

    10.0.0.0/8 is variably subnetted, 7 subnets, 5 masks
S       10.77.5.0/25 [2/0] via 10.77.5.181
S       10.77.5.128/27 [2/0] via 10.77.5.189
S       10.77.5.160/28 [2/0] via 10.77.5.189
C       10.77.5.180/30 is directly connected, Serial0/1/1
L       10.77.5.182/32 is directly connected, Serial0/1/1
C       10.77.5.188/30 is directly connected, Serial0/1/0
L       10.77.5.190/32 is directly connected, Serial0/1/0

R4#
```

Kiểm tra kết nối:

Đường chính:

-Từ PC đến ServerB1:

```

C:\>ping 10.77.5.174

Pinging 10.77.5.174 with 32 bytes of data:

Reply from 10.77.5.174: bytes=32 time=12ms TTL=125
Reply from 10.77.5.174: bytes=32 time=4ms TTL=125
Reply from 10.77.5.174: bytes=32 time=9ms TTL=125
Reply from 10.77.5.174: bytes=32 time=8ms TTL=125

Ping statistics for 10.77.5.174:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 4ms, Maximum = 12ms, Average = 8ms

C:\>tracert 10.77.5.174

Tracing route to 10.77.5.174 over a maximum of 30 hops:

  0  0 ms    0 ms    0 ms    10.77.5.1
  1  1 ms    3 ms    3 ms    10.77.5.178
  2  4 ms    4 ms    2 ms    10.77.5.186
  3  3 ms    4 ms    6 ms    10.77.5.174

```

-Từ PC đến ServerB2:

```

C:\>ping 10.77.5.158

Pinging 10.77.5.158 with 32 bytes of data:

Reply from 10.77.5.158: bytes=32 time=49ms TTL=125
Reply from 10.77.5.158: bytes=32 time=55ms TTL=125
Reply from 10.77.5.158: bytes=32 time=57ms TTL=125
Reply from 10.77.5.158: bytes=32 time=6ms TTL=125

Ping statistics for 10.77.5.158:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 6ms, Maximum = 57ms, Average = 41ms

C:\>tracert 10.77.5.158

Tracing route to 10.77.5.158 over a maximum of 30 hops:

  0  0 ms    0 ms    0 ms    10.77.5.1
  1  2 ms    1 ms    3 ms    10.77.5.178
  2  2 ms    5 ms    1 ms    10.77.5.186
  3  3 ms    2 ms    0 ms    10.77.5.158

Trace complete.

```

Đường dự phòng:

-Từ PC đến ServerB1:

```

C:\>ping 10.77.5.174

Pinging 10.77.5.174 with 32 bytes of data:

Reply from 10.77.5.174: bytes=32 time=8ms TTL=125
Reply from 10.77.5.174: bytes=32 time=9ms TTL=125
Reply from 10.77.5.174: bytes=32 time=13ms TTL=125
Reply from 10.77.5.174: bytes=32 time=11ms TTL=125

Ping statistics for 10.77.5.174:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 8ms, Maximum = 13ms, Average = 10ms

C:\>tracert 10.77.5.174

Tracing route to 10.77.5.174 over a maximum of 30 hops:

  0  0 ms    0 ms    0 ms    10.77.5.1
  1  2 ms    1 ms    2 ms    10.77.5.182
  2  2 ms    5 ms    4 ms    10.77.5.189
  3  0 ms    1 ms    2 ms    10.77.5.174

Trace complete.

```

-Từ PC đến ServerB2:

```

C:\>ping 10.77.5.158

Pinging 10.77.5.158 with 32 bytes of data:

Reply from 10.77.5.158: bytes=32 time=11ms TTL=125
Reply from 10.77.5.158: bytes=32 time=9ms TTL=125
Reply from 10.77.5.158: bytes=32 time=7ms TTL=125
Reply from 10.77.5.158: bytes=32 time=12ms TTL=125

Ping statistics for 10.77.5.158:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 7ms, Maximum = 12ms, Average = 9ms

C:\>tracert 10.77.5.158

Tracing route to 10.77.5.158 over a maximum of 30 hops:

  0  1 ms    0 ms    0 ms    10.77.5.1
  1  2 ms    0 ms    4 ms    10.77.5.182
  2  4 ms    4 ms    3 ms    10.77.5.189
  3  1 ms    2 ms    0 ms    10.77.5.158

Trace complete.

```