北京师范大学

2022-2023学年春季学期“网络实验”实验报告

综合实验

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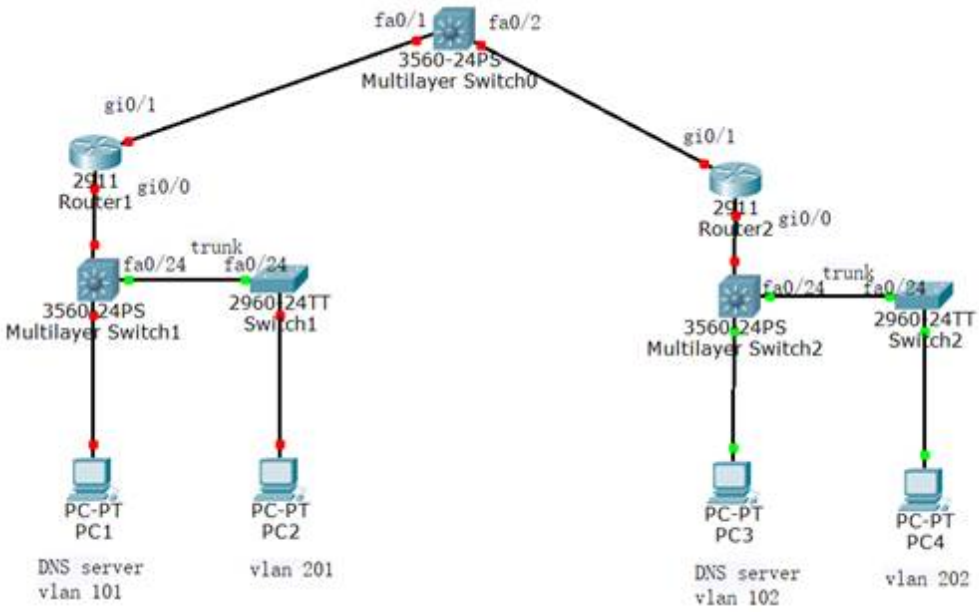
实验要求：

一．物理连接

实验分**2**个组进行，使用思科模拟软件。每个同学模拟两个组。每个组选用一台路由器、一台三层交换机和一台二层交换机。要求按下图拓扑进行连接。如下图：最上端设备为核心交换机，按老师要求配置（后面提供）



核心交换机配置：

```
Switch>

Switch>ena

Switch#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname CORE

CORE(config)#int fa 0/1

CORE(config-if)#no shut

CORE(config-if)#no switchport
```

```
CORE(config-if)#ip add 200.200.1.254 255.255.255.0

CORE(config-if)#int fa 0/2

CORE(config-if)#no shut

CORE(config-if)#no switchport

CORE(config-if)#ip add 200.200.2.254 255.255.255.0

CORE(config-if)#

CORE#(config)#ip routing

CORE#
```

注意：核心交换机必须按老师指定的配置，不能自己增加额外的配置

二． **IP**编址

每组两台交换机之间通过端口**24**进行连接，之间配置成**TRUNK**链路。每个组配置**VLAN10x**、**VLAN20x**，其中**x**为组号。例如：组号为**2**时，需要配置**VLAN102**和**202**。

VLAN10x 使用**IP**网络**192.168.10x.0/24, VLAN20x**使用**IP**网络**192.168.20x.0/24**。**VLAN10x**为服务器网段，**VLAN20x**为客户端网段。**DNS**、**WEB**和**EMAIL**（不做）使用相应网段的**101－103**三个**IP**地址。在三层交换机中启用**VLAN10x**和**VLAN20x**三层接口，其**IP**分别设为相应**IP**网络的地址**1**。

第一组路由器配置**lo0**：**1.1.1.1/32;**三层交换机配置**lo0**：**1.1.1.2/32**

第二组路由器配置**lo0**：**2.2.2.1/32;**三层交换机配置**lo0**：**2.2.2.2/32**

X组三层交换机名字为**SW1_x**，其中**x=1**或**2. X**组二层交换机名字**SW2_x**

各组路由器**gi 0/1**端口的**IP**地址使用**200.200.x.0/24**网段，分别是该网段的地址**200.200.x.10**。**200.200.x.0/24**由**x**组使用。路由器**gi0/0**对应的交换机端口划分到**VLAN10x**，**gi 0/0 IP**配置为**192.168.10x.254 /24**。**255.255.255.0**

三． **IP NAT**与**DHCP**

所有客户**PC**机的**IP**地址在离开本组的出口路由器时，转换成路由器**gi0/1**接口**IP**地址。各组服务器提供的服务应满足本组及其他组的**PC**机能够访问。当从外网访问**200.200.x.101**时，就访问了**x**组的**DNS**服务器；当从外网访问**200.200.x.102**时，就访问了**x**组的**WEB**服务器；

在每组的三层交换机上配置**DHCP**服务器，使得**vlan20x**的计算机可以自动获得**ip**地址（包括网关等）

四． 路由

每组的路由器配置到核心交换机的默认路由

每组组内配置**ospf**选路

默认路由通过**ospf**通告到**ospf**域中

Ospf配置中要求指定路由器**ID**为**loopback**的**ip** 地址。

出口路由器到外部网络的下一跳**IP**地址为：**200.200.x.254**。

五． 网络联通性测试

首先保证各组内客户机与服务器相互间具有**IP**连通性，并均可**PING**通出口路由器内外口**IP**地址。然后检查与其他组连通性。

六． **Windows 2012 Server**配置**DNS**服务器**(**不需要配置**)**

DNS服务器运行在**Windows 2012 Server**环境，负责本组的三个服务器的域名解析。为了方便各组记忆，具体的域名规划如下：

第**1**组： **(DNS**服务器 **----- 192.168.101.101)**

Web服务器**----web.beijing.china.com-----192.168.101.102**

Mail服务器**---- beijing.china.com----------192.168.101.103**

第**2**组： **(DNS**服务器 **----- 192.168.102.101)**

Web服务器**----web.shanghai.china.com-----192.168.102.102**

Mail服务器**---- shanghai.china.com------192.168.102.103**

提交：

1. 每个设备**show run**（**10**分）
2. 路由器三层交换机**show ip route**（**10**分）
3. **PC** 之间**ping** 通的测试（**10**分）

在**PC2**上，**ping 192.168.101.101**；**ping 192.168.101.102**；

Ping 200.200.2.254

在**PC4**上，**ping 192.168.101.101**；**ping 192.168.101.102**

Ping 200.200.1.254

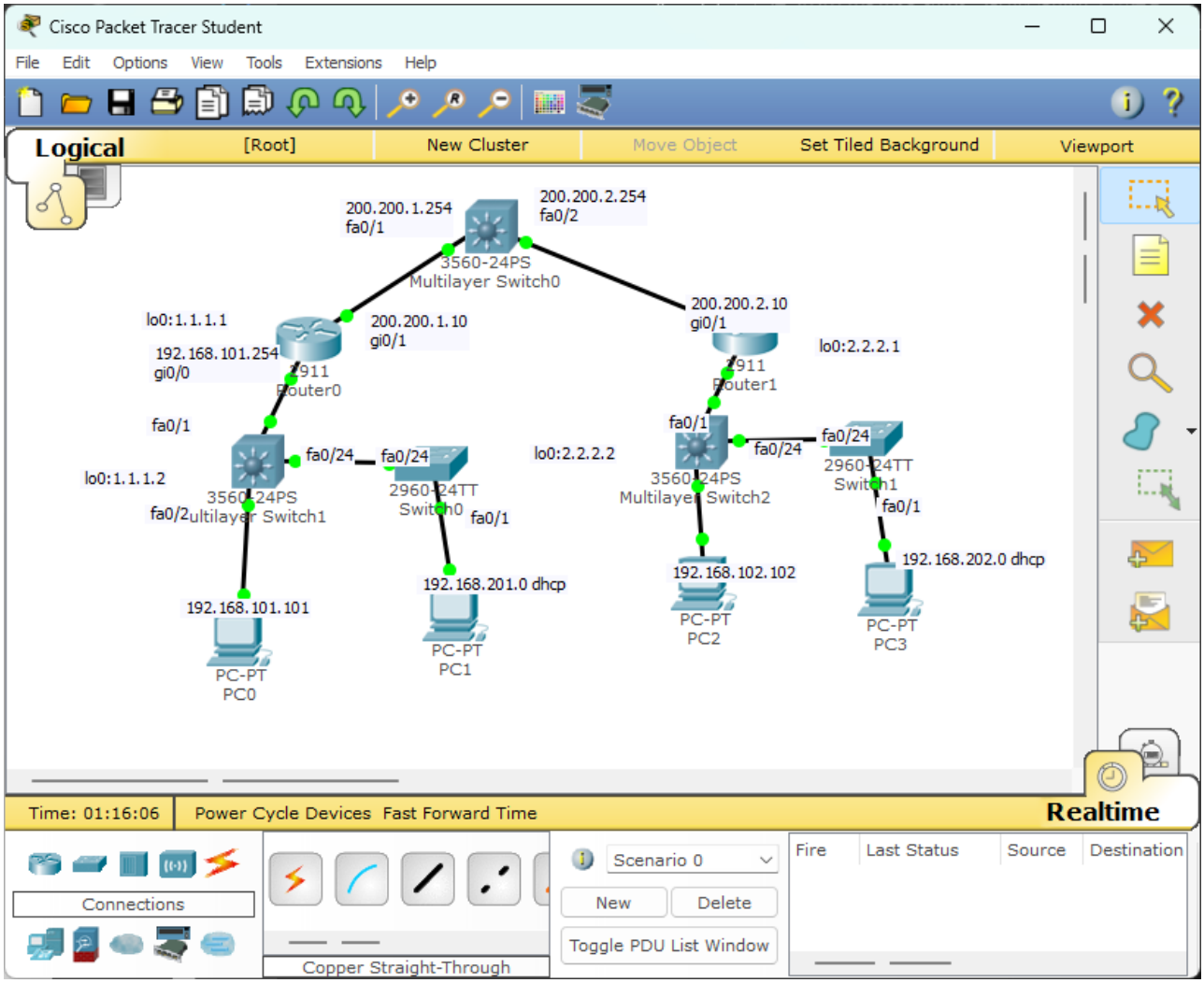
4. 文件名：学号_姓名_综合实验（**word**或**PDF**文档）

☒ 基础性实验 ☐ 综合性实验 ☐ 设计性实验

实验报告正文

实验过程

1 网络拓扑



2 sh run

2.1 核心交换机

```
CORE>ena
CORE#sh run
Building configuration...

Current configuration : 1296 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname CORE
!
!
!
!
!
!
!
ip routing
!
!
```

```
!
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
!
interface FastEthernet0/1
 no switchport
 ip address 200.200.1.254 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet0/2
 no switchport
 ip address 200.200.2.254 255.255.255.0
 duplex auto
 speed auto
!
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
!
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
!
ip classless
!
ip flow-export version 9
!
!
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

2.2 路由器1

```
Router>ena
Router#sh run
Building configuration...

Current configuration : 1292 bytes
!
```

```
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
!
!
license udi pid CISCO2911/K9 sn FTX15241CPO
!
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
!
interface Loopback0
 ip address 1.1.1.1 255.255.255.255
!
interface GigabitEthernet0/0
 ip address 192.168.101.254 255.255.255.0
 ip nat inside
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 200.200.1.10 255.255.255.0
 ip nat outside
 duplex auto
 speed auto
!
interface GigabitEthernet0/2
 no ip address
```

```
 duplex auto
 speed auto
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 1
 router-id 1.1.1.1
 log-adjacency-changes
 redistribute static subnets
 network 1.1.1.1 0.0.0.0 area 0
 network 200.200.1.0 0.0.0.255 area 0
 network 192.168.101.0 0.0.0.255 area 0
 default-information originate
!
ip nat inside source list 1 interface GigabitEthernet0/1 overload
ip nat inside source static 192.168.101.101 200.200.1.101
ip classless
ip route 0.0.0.0 0.0.0.0 200.200.1.254
!
ip flow-export version 9
!
!
access-list 1 permit 192.168.101.0 0.0.0.255
access-list 1 permit 192.168.201.0 0.0.0.255
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

2.3 三层交换机1

```
Switch>ena
Switch#sh run
Building configuration...

Current configuration : 1809 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
```

```
no service password-encryption
!
hostname Switch
!
!
!
!
!
ip dhcp pool NET1
 network 192.168.201.0 255.255.255.0
 default-router 192.168.201.1
 dns-server 8.8.8.8
!
!
ip routing
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
spanning-tree vlan 1-500 priority 24576
!
!
!
!
!
!
interface Loopback0
 ip address 1.1.1.2 255.255.255.255
!
interface FastEthernet0/1
 switchport access vlan 101
!
interface FastEthernet0/2
 switchport access vlan 101
!
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
!
interface FastEthernet0/18
!
interface FastEthernet0/19
!
interface FastEthernet0/20
!
interface FastEthernet0/21
!
interface FastEthernet0/22
!
interface FastEthernet0/23
!
interface FastEthernet0/24
 switchport trunk encapsulation dot1q
 switchport mode trunk
!
interface GigabitEthernet0/1
!
interface GigabitEthernet0/2
!
interface Vlan1
 no ip address
 shutdown
!
interface Vlan101
 ip address 192.168.101.1 255.255.255.0
!
interface Vlan201
 ip address 192.168.201.1 255.255.255.0
!
router ospf 1
 router-id 1.1.1.2
 log-adjacency-changes
 redistribute static subnets
 network 1.1.1.2 0.0.0.0 area 0
 network 192.168.101.0 0.0.0.255 area 0
```

```
 network 192.168.201.0 0.0.0.255 area 0
 default-information originate
!
ip classless
!
ip flow-export version 9
!
!
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

2.4 交换机1

```
SW1>ena
SW1#sh run
Building configuration...

Current configuration : 1131 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname SW1
!
!
!
!
!
spanning-tree mode pvst
spanning-tree vlan 1-500 priority 28672
!
interface FastEthernet0/1
 switchport access vlan 201
!
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
!
interface FastEthernet0/18
!
interface FastEthernet0/19
!
interface FastEthernet0/20
!
interface FastEthernet0/21
!
interface FastEthernet0/22
!
interface FastEthernet0/23
!
interface FastEthernet0/24
 switchport mode trunk
!
interface GigabitEthernet0/1
!
interface GigabitEthernet0/2
!
interface Vlan1
 no ip address
 shutdown
!
!
!
!
line con 0
!
line vty 0 4
```

```
 login
line vty 5 15
 login
!
!
end
```

2.5 路由器2

```
Router>ena
Router#sh run
Building configuration...

Current configuration : 1351 bytes
!
version 15.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
!
!
license udi pid CISCO2911/K9 sn FTX15249G53
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
!
```

```
interface Loopback0
 ip address 2.2.2.1 255.255.255.255
!
interface GigabitEthernet0/0
 ip address 192.168.102.254 255.255.255.0
 ip nat inside
 duplex auto
 speed auto
!
interface GigabitEthernet0/1
 ip address 200.200.2.10 255.255.255.0
 ip nat outside
 duplex auto
 speed auto
!
interface GigabitEthernet0/2
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 1
 router-id 2.2.2.1
 log-adjacency-changes
 redistribute static subnets
 network 2.2.2.1 0.0.0.0 area 0
 network 200.200.2.0 0.0.0.255 area 0
 network 192.168.102.0 0.0.0.255 area 0
 default-information originate
!
ip nat inside source list 1 interface GigabitEthernet0/1 overload
ip nat inside source static 192.168.102.102 200.200.2.102
ip classless
ip route 0.0.0.0 0.0.0.0 200.200.2.254
!
ip flow-export version 9
!
!
access-list 1 permit 192.168.102.0 0.0.0.255
access-list 1 permit 192.168.202.0 0.0.0.255
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
```

```
!
!
end
```

2.6 三层交换机2

```
Switch>ena
Switch#sh run
Building configuration...

Current configuration : 1749 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Switch
!
!
!
!
!
ip dhcp pool NET2
 network 192.168.202.0 255.255.255.0
 default-router 192.168.202.1
!
!
ip routing
!
!
!
!
!
!
!
!
!
!
!
!
!
!
!
spanning-tree mode pvst
!
!
!
!
!
!
interface Loopback0
 ip address 2.2.2.2 255.255.255.255
!
interface FastEthernet0/1
```

```
 switchport access vlan 102
!
interface FastEthernet0/2
 switchport access vlan 102
!
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
!
interface FastEthernet0/18
!
interface FastEthernet0/19
!
interface FastEthernet0/20
!
interface FastEthernet0/21
!
interface FastEthernet0/22
!
interface FastEthernet0/23
!
interface FastEthernet0/24
 switchport trunk encapsulation dot1q
 switchport mode trunk
!
interface GigabitEthernet0/1
!
interface GigabitEthernet0/2
!
interface Vlan1
```

```
 no ip address
 shutdown
!
interface Vlan102
 ip address 192.168.102.1 255.255.255.0
!
interface Vlan202
 ip address 192.168.202.1 255.255.255.0
!
router ospf 1
 router-id 2.2.2.2
 log-adjacency-changes
 redistribute static subnets
 network 192.168.102.0 0.0.0.255 area 0
 network 2.2.2.2 0.0.0.0 area 0
 network 192.168.202.0 0.0.0.255 area 0
 default-information originate
!
ip classless
!
ip flow-export version 9
!
!
!
!
!
!
!
line con 0
!
line aux 0
!
line vty 0 4
 login
!
!
!
end
```

2.7 交换机2

```
Switch>ena
Switch#sh run
Building configuration...

Current configuration : 1094 bytes
!
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Switch
!
```

```
!
!
!
!
spanning-tree mode pvst
!
interface FastEthernet0/1
 switchport access vlan 202
!
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
!
interface FastEthernet0/18
!
interface FastEthernet0/19
!
interface FastEthernet0/20
!
interface FastEthernet0/21
!
interface FastEthernet0/22
!
interface FastEthernet0/23
!
interface FastEthernet0/24
 switchport mode trunk
!
```

```
interface GigabitEthernet0/1
!
interface GigabitEthernet0/2
!
interface Vlan1
 no ip address
 shutdown
!
!
!
!
line con 0
!
line vty 0 4
 login
line vty 5 15
 login
!
!
end
```

3 sh ip route

3.1 核心交换机

```
CORE#sh ip rout
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 not set

C    200.200.1.0/24 is directly connected, FastEthernet0/1
C    200.200.2.0/24 is directly connected, FastEthernet0/2
CORE#
```

3.2 三层交换机1

```
Switch#sh ip rout
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 192.168.101.254 to network 0.0.0.0
```

```
     1.0.0.0/32 is subnetted, 2 subnets
O       1.1.1.1 [110/2] via 192.168.101.254, 01:04:08, Vlan101
C       1.1.1.2 is directly connected, Loopback0
C    192.168.101.0/24 is directly connected, Vlan101
C    192.168.201.0/24 is directly connected, Vlan201
O    200.200.1.0/24 [110/2] via 192.168.101.254, 01:04:08, Vlan101
O*E2 0.0.0.0/0 [110/1] via 192.168.101.254, 01:04:08, Vlan101
Switch#
```

3.3 三层交换机2

```
Switch#sh ip rout
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 192.168.102.254 to network 0.0.0.0

     2.0.0.0/32 is subnetted, 2 subnets
O       2.2.2.1 [110/2] via 192.168.102.254, 00:56:35, Vlan102
C       2.2.2.2 is directly connected, Loopback0
C    192.168.102.0/24 is directly connected, Vlan102
C    192.168.202.0/24 is directly connected, Vlan202
O    200.200.2.0/24 [110/2] via 192.168.102.254, 00:56:35, Vlan102
O*E2 0.0.0.0/0 [110/1] via 192.168.102.254, 00:56:35, Vlan102
Switch#
```

3.4 路由器1

```
Router#sh ip rout
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 200.200.1.254 to network 0.0.0.0

     1.0.0.0/32 is subnetted, 2 subnets
C       1.1.1.1/32 is directly connected, Loopback0
O       1.1.1.2/32 [110/2] via 192.168.101.1, 01:04:40, GigabitEthernet0/0
     192.168.101.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.101.0/24 is directly connected, GigabitEthernet0/0
L       192.168.101.254/32 is directly connected, GigabitEthernet0/0
O    192.168.201.0/24 [110/2] via 192.168.101.1, 01:04:40, GigabitEthernet0/0
     200.200.1.0/24 is variably subnetted, 2 subnets, 2 masks
C       200.200.1.0/24 is directly connected, GigabitEthernet0/1
```

```
L       200.200.1.10/32 is directly connected, GigabitEthernet0/1
S*   0.0.0.0/0 [1/0] via 200.200.1.254
Router#
```

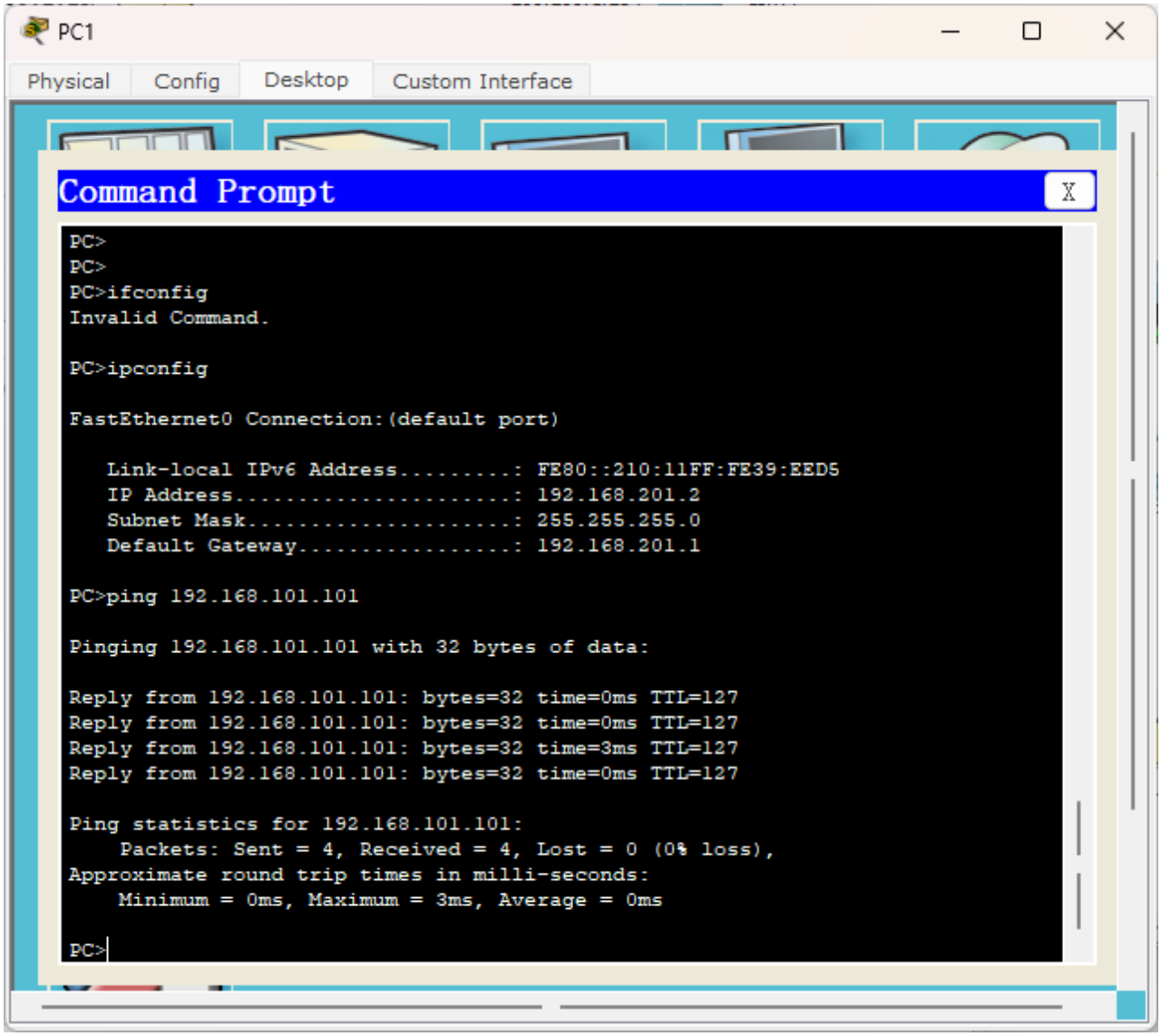
3.5 路由器2

```
Router#sh ip rout
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 200.200.2.254 to network 0.0.0.0

     2.0.0.0/32 is subnetted, 2 subnets
C       2.2.2.1/32 is directly connected, Loopback0
O       2.2.2.2/32 [110/2] via 192.168.102.1, 00:56:45, GigabitEthernet0/0
     192.168.102.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.102.0/24 is directly connected, GigabitEthernet0/0
L       192.168.102.254/32 is directly connected, GigabitEthernet0/0
O    192.168.202.0/24 [110/2] via 192.168.102.1, 00:56:32, GigabitEthernet0/0
     200.200.2.0/24 is variably subnetted, 2 subnets, 2 masks
C       200.200.2.0/24 is directly connected, GigabitEthernet0/1
L       200.200.2.10/32 is directly connected, GigabitEthernet0/1
S*   0.0.0.0/0 [1/0] via 200.200.2.254
Router#
```

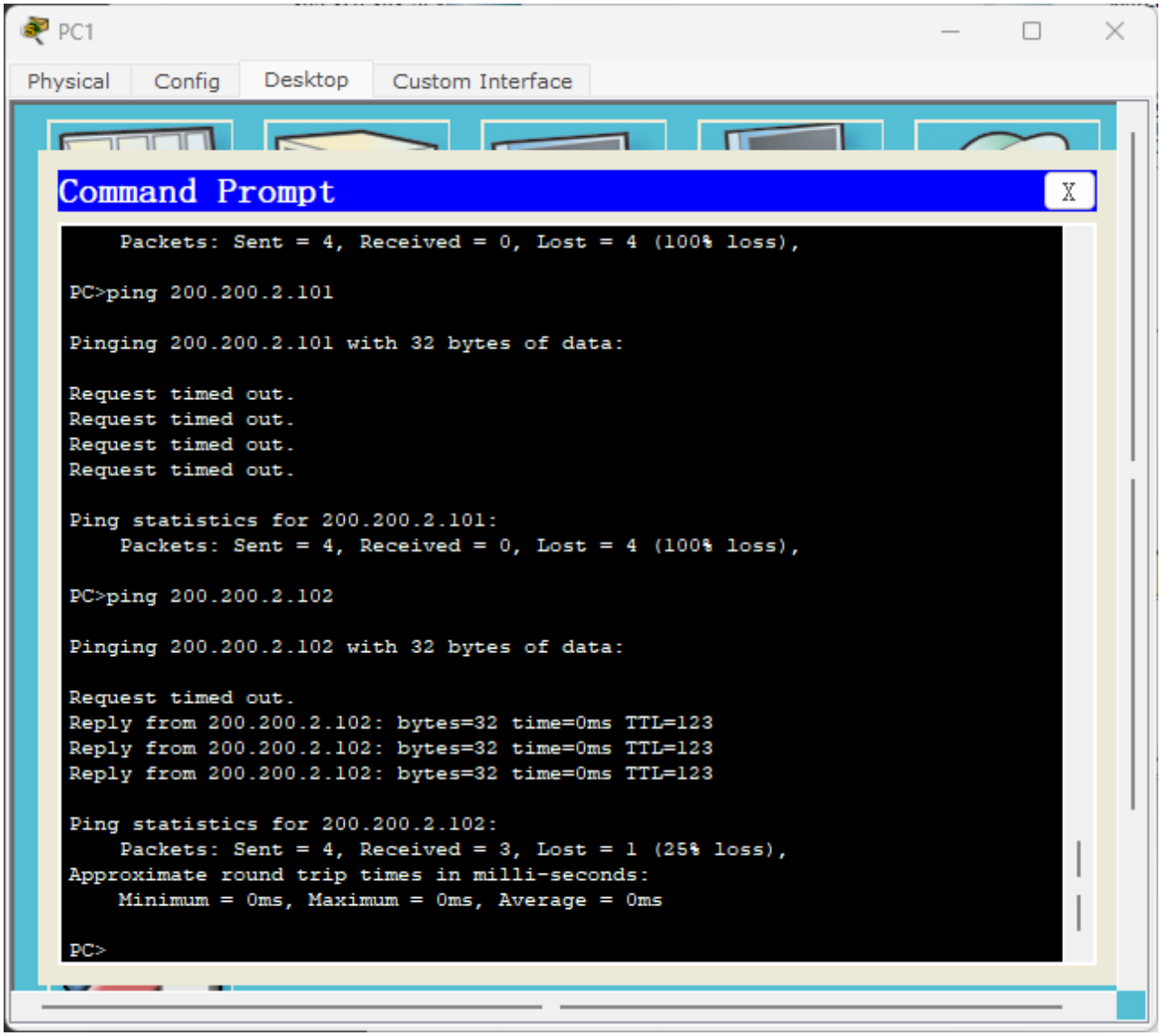
实验结果

1 PC2

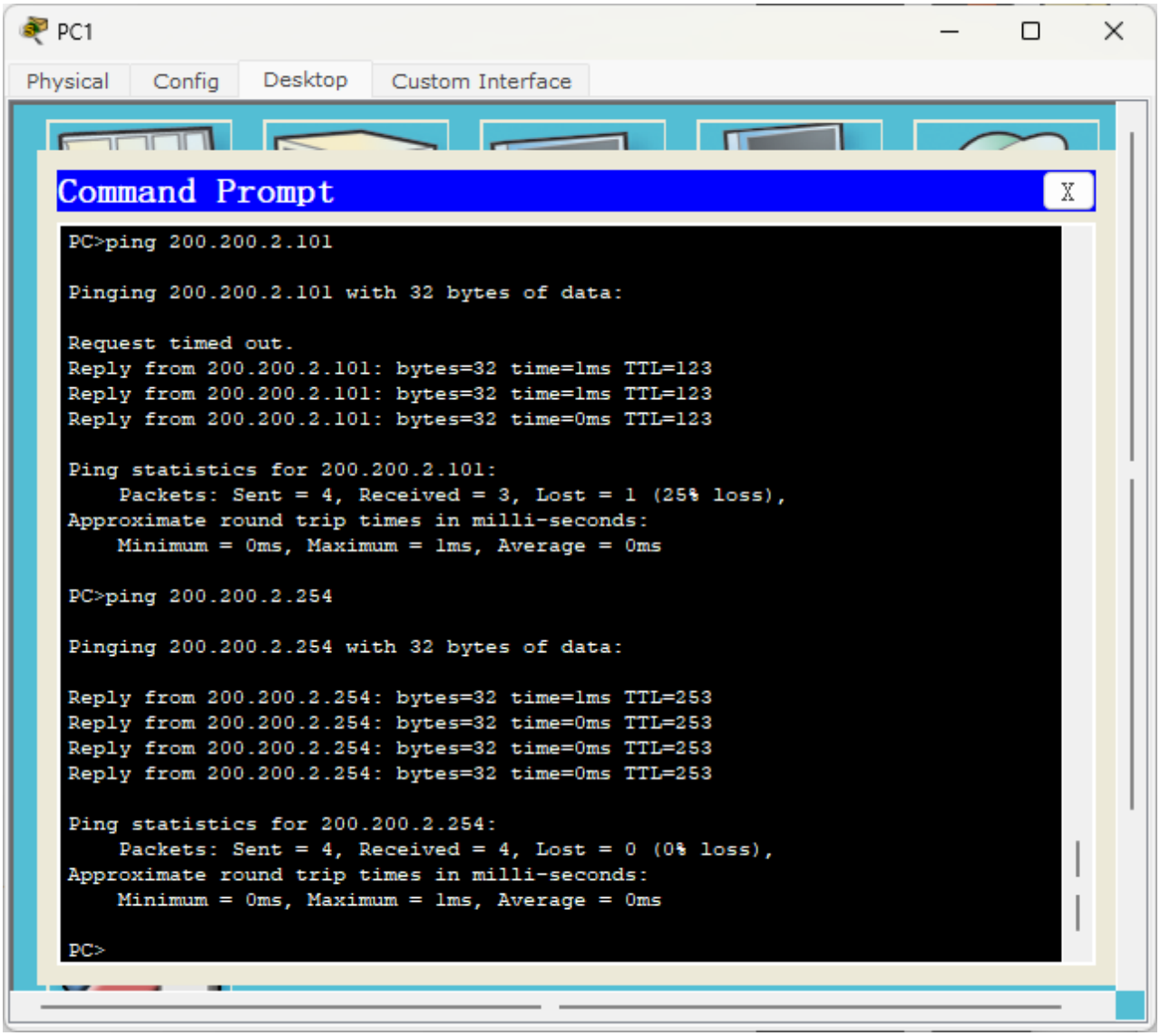
1.1 ping 192.168.101.101



1.2 ping 200.200.2.102

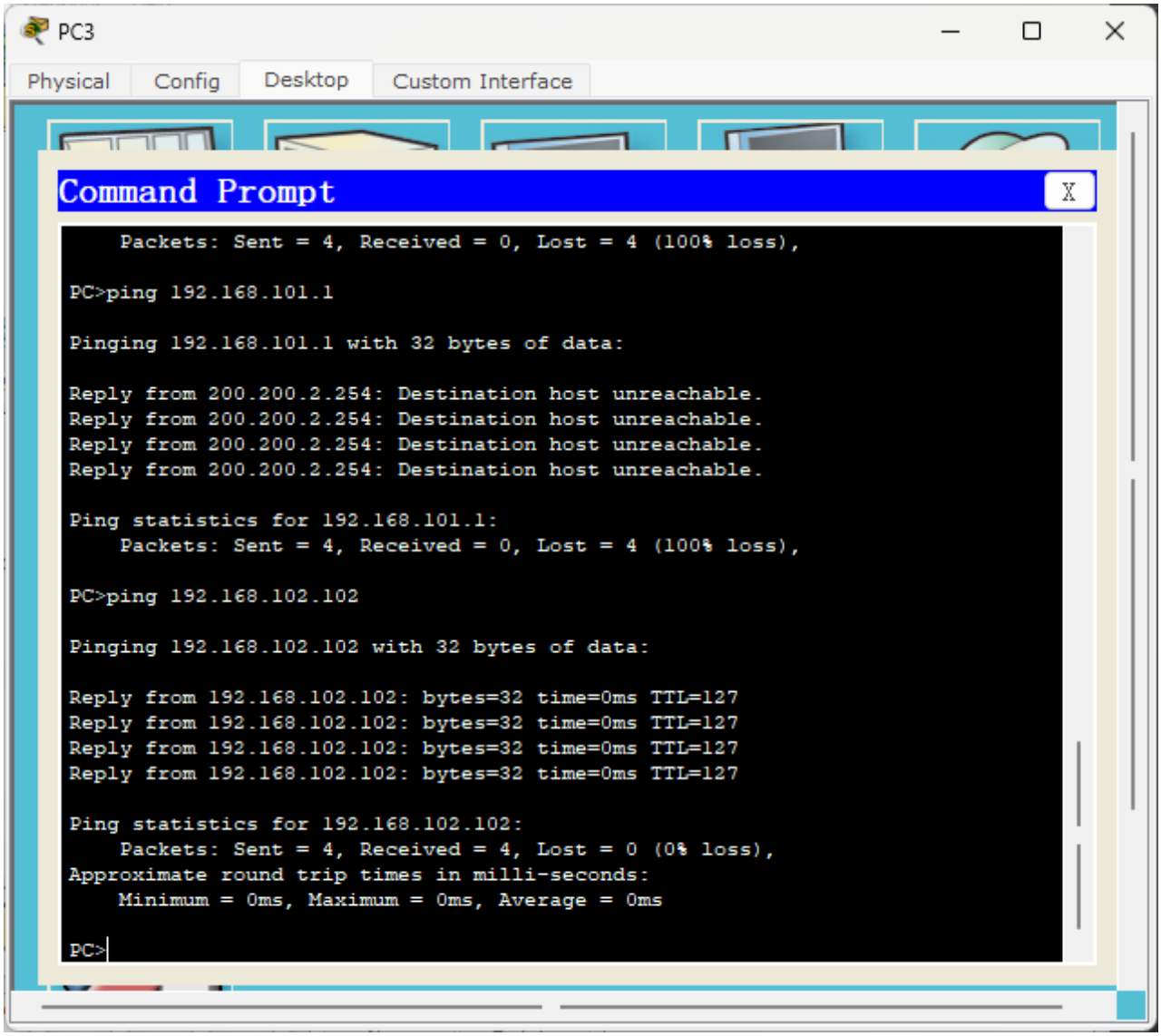


1.3 ping 200.200.2.254

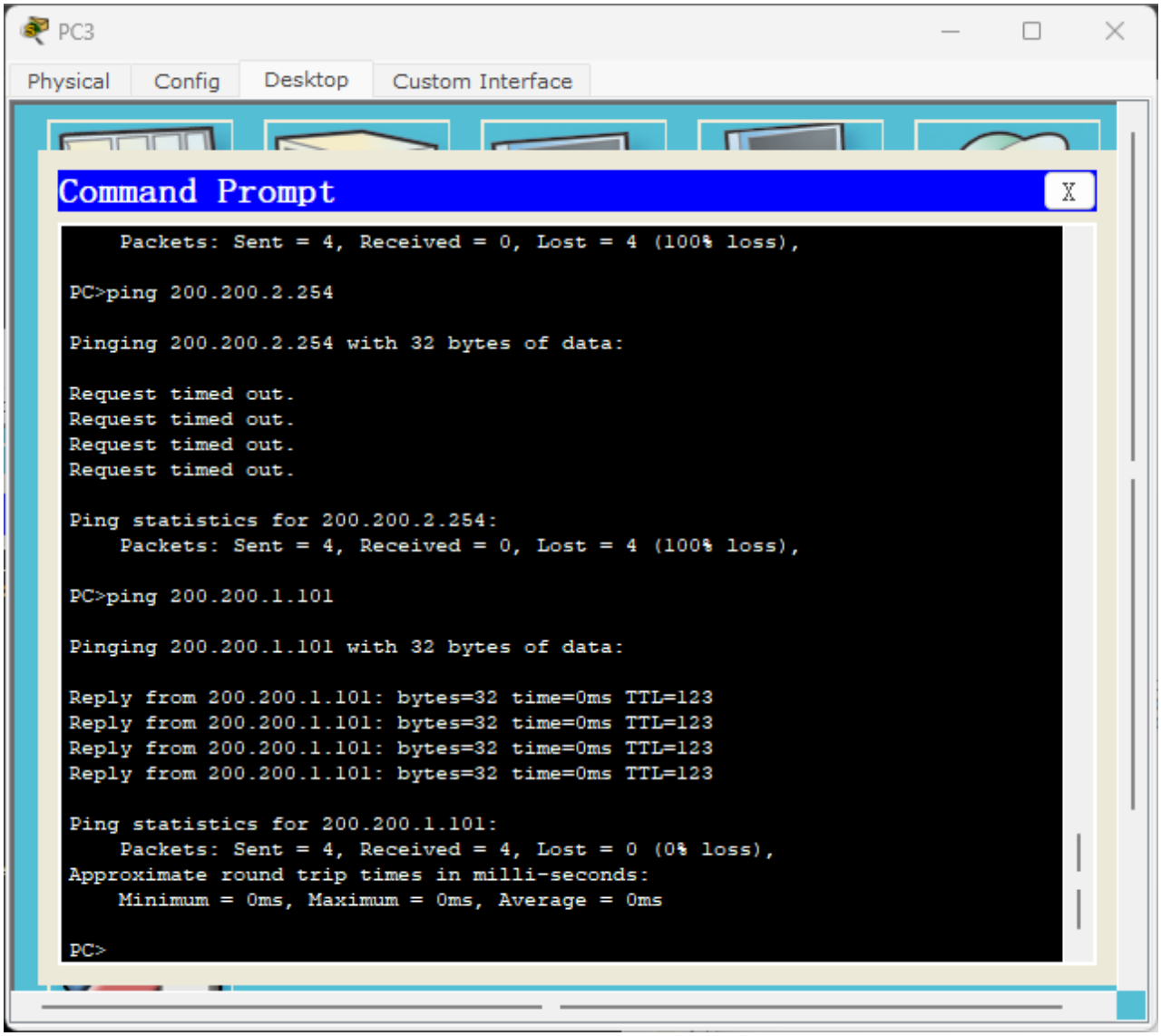


2 PC4

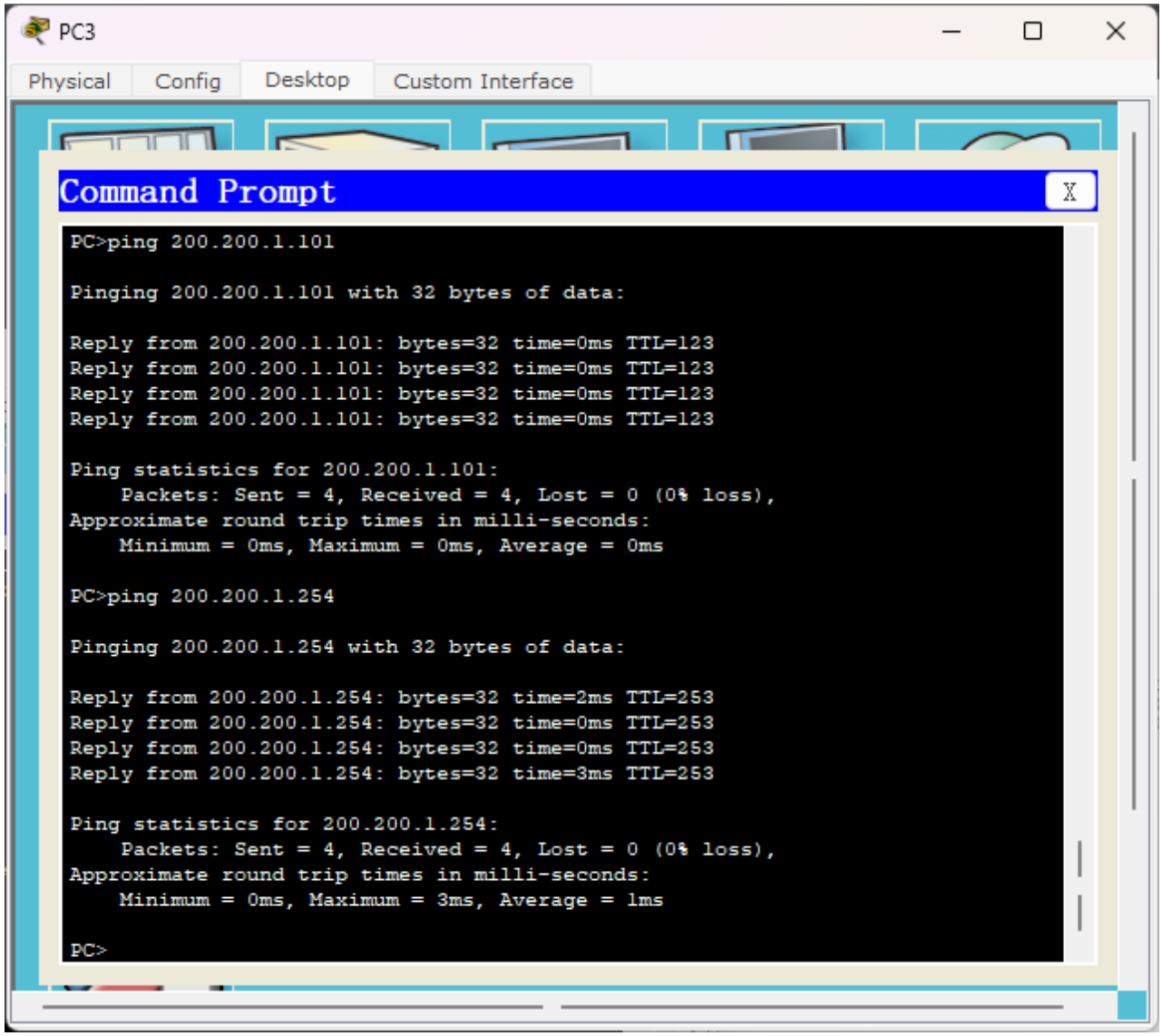
2.1 ping 192.168.102.102



2.2 ping 200.200.1.101



2.3 ping 200.200.1.254


PC3
Physical
Config
Desktop
Custom Interface
Command Prompt
PC>ping 200.200.1.101
Pinging 200.200.1.101 with 32 bytes of data:
Reply from 200.200.1.101: bytes=32 time=0ms TTL=123
Reply from 200.200.1.101: bytes=32 time=0ms TTL=123
Reply from 200.200.1.101: bytes=32 time=0ms TTL=123
Reply from 200.200.1.101: bytes=32 time=0ms TTL=123
Ping statistics for 200.200.1.101:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 0ms, Average = 0ms
PC>ping 200.200.1.254
Pinging 200.200.1.254 with 32 bytes of data:
Reply from 200.200.1.254: bytes=32 time=2ms TTL=253
Reply from 200.200.1.254: bytes=32 time=0ms TTL=253
Reply from 200.200.1.254: bytes=32 time=0ms TTL=253
Reply from 200.200.1.254: bytes=32 time=3ms TTL=253
Ping statistics for 200.200.1.254:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 3ms, Average = 1ms
PC>