厦門大學

信息学院软件工程系

《计算机网络》实验报告

题　　目 实验五 CISCO IOS 路由器基本配置

班　　级 软件工程 2018 级 2 班

姓　　名 林正男

学　　号 20420172201787

实验时间 2020 年 4 月 8 日

2020 年 4 月 8 日

1 实验目的

1.使用 Router eSIM v1.1 模拟器来模拟路由器的配置环境；

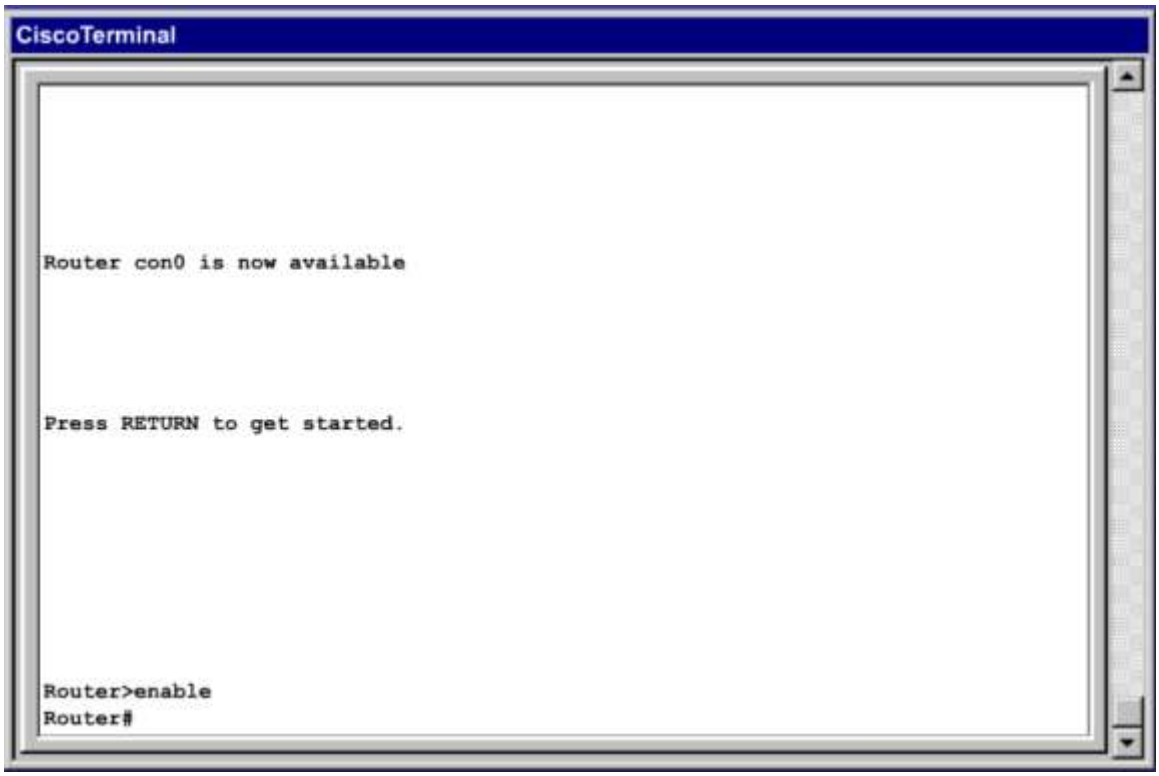
2.使用 CCNA Network Visualizer 6.0 配置静态路由、动态路由和交换机端口的 VLAN（虚拟局域网）。

2 实验环境

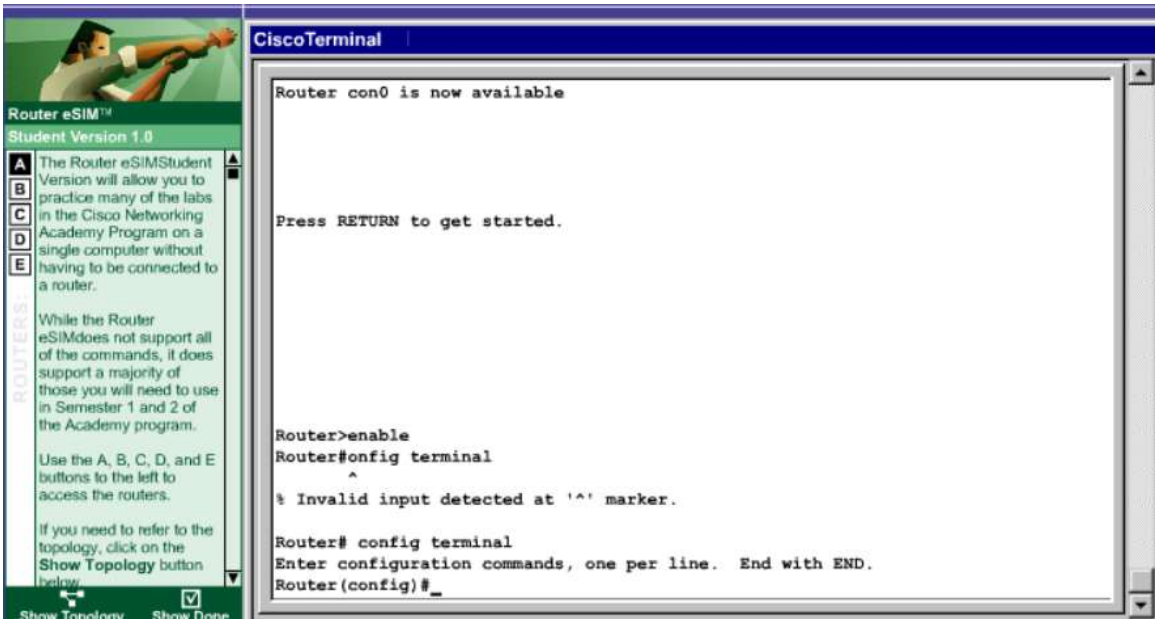
Windows10, Router_eSIM_v1, CCNA Network Visualizer 6.0

3 实验结果

1.路由器常规配置，使用 Router_eSIM_v1



enable 进入超级用户模式



进入全局配置模式

```
Router# config t
Enter configuration commands, one per line.  End with END.
Router(config)# hostname lab_5
lab_5(config)#
```

```
lab_5(config)# hostname lab_A
lab_A(config)#
```

改变路由器名字

```
Enter TEXT message.  End with the character '#'.
halo7777777 lab_5#
lab_5(config)#_
```

设置当日消息标题

```
lab_A(config)#ip host lab_A 192.5.5.1 205.7.5.1 201.100.11.1
lab_A(config)#ip host lab_B 219.17.100.1 199.6.13.1 201.100.11.2
lab_A(config)#ip host lab_C 223.8.151.1 204.204.7.1 199.6.13.2
lab_A(config)#ip host lab_D 210.93.105.1 204.204.7.2
lab_A(config)#ip host lab_E 210.93.105.2
lab_A(config)#_
```

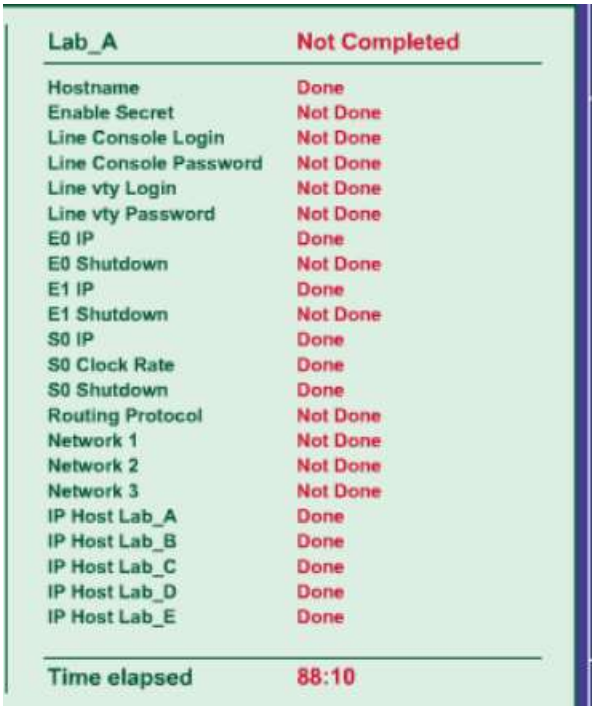
配置 IP 地址映射表

```
lab_A(config)#int eth 0
lab_A(config-if)#ip address 192.5.5.1 255.255.255.0
lab_A(config-if)#int eth 1
lab_A(config-if)#ip address 205.7.5.1 255.255.255.0
lab_A(config-if)#int serial 0
lab_A(config-if)#ip address 201.100.11.1 255.255.255.0
```

配置路由器接口的 IP 地址

```
lab_A(config)#interface serial 0
lab_A(config-if)#clock rate 56000
```

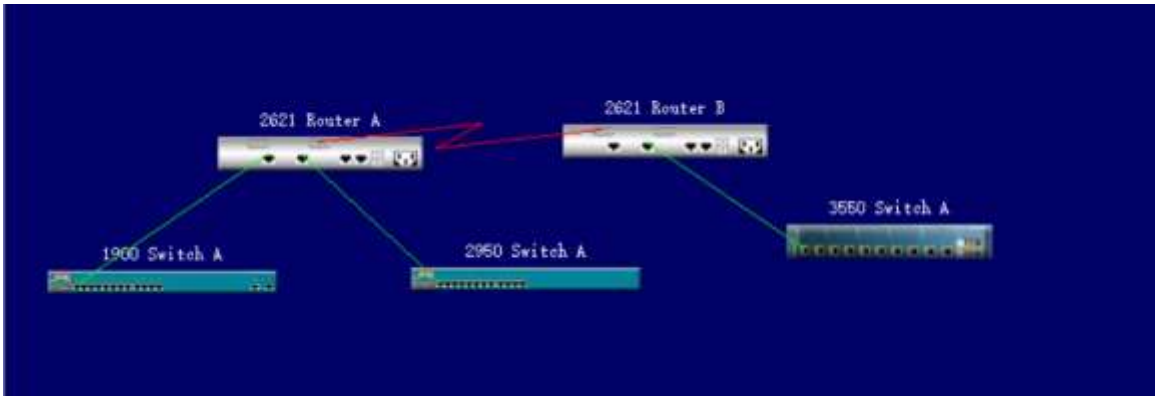
配置 serial 0 的时钟信号



Lab_A	Not Completed
Hostname	Done
Enable Secret	Not Done
Line Console Login	Not Done
Line Console Password	Not Done
Line vty Login	Not Done
Line vty Password	Not Done
E0 IP	Done
E0 Shutdown	Not Done
E1 IP	Done
E1 Shutdown	Not Done
S0 IP	Done
S0 Clock Rate	Done
S0 Shutdown	Done
Routing Protocol	Not Done
Network 1	Not Done
Network 2	Not Done
Network 3	Not Done
IP Host Lab_A	Done
IP Host Lab_B	Done
IP Host Lab_C	Done
IP Host Lab_D	Done
IP Host Lab_E	Done
Time elapsed	88:10

完成情况

2.静态路由配置，使用 CCNA Network Visualizer 6.0



模拟器上实验设备连接图

```
Enter configuration commands, one per line.  End with CNTL/Z
Router(config)#int f0/0
Router(config-if)#ip address 192.5.5.1 255.255.255.0
Router(config-if)#no shutdown
08:03:42 %LINK-3-UPDOWN:  Interface FastEthernet0/0, changed state to up
08:03:42 %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, change

Router(config-if)#int f0/1
Router(config-if)#ip address 205.7.5.1 255.255.255.0
Router(config-if)#no shutdown
08:04:35 %LINK-3-UPDOWN:  Interface FastEthernet0/1, changed state to up
08:04:35 %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, change

Router(config-if)#int s0/0
Router(config-if)#ip address 201.100.11.1 255.255.255.0
Router(config-if)#no shutdown
08:05:09 %LINK-3-UPDOWN:  Interface Serial0/0, changed state to up
08:05:09 %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed stat
```

配置路由器 A 各端口 ip 地址

```
RouteB(config)#int s0/1
RouteB(config-if)#ip address 201.100.11.2 255.255.255.0
RouteB(config-if)#no shutdown
08:10:59 %LINK-3-UPDOWN:  Interface Serial0/1, changed state to up
08:10:59 %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1, changed stat
```

```
RouteB(config)#int f0/0
RouteB(config-if)#ip address 199.6.13.1 255.255.255.0
RouteB(config-if)#no shutdown
08:13:02 %LINK-3-UPDOWN:  Interface FastEthernet0/0, changed state to up
08:13:02 %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, change
```

```
RouteB#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, * - candidate default
       U - per-user static route, o - ODR, P - periodic downloaded static route
       T - traffic engineered route

Gateway of last resort is not set
C     201.100.11.0/24 is directly connected, Serial0/1
C     199.6.13.0/24 is directly connected, FastEthernet0/0
```

配置路由器 B 各端口 ip 地址

```
RouteA#config t
Enter configuration commands, one per line.  End with CNTL/Z
RouteA(config)#ip route 199.6.13.0 255.255.255.0 201.100.11.2
RouteA(config)#exit
RouteA#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, * - candidate default
       U - per-user static route, o - ODR, P - periodic downloaded static route
       T - traffic engineered route

Gateway of last resort is not set
C     201.100.11.0/24 is directly connected, Serial0/0
C     205.7.5.0/24 is directly connected, FastEthernet0/1
C     192.5.5.0/24 is directly connected, FastEthernet0/0
S     199.6.13.0 [1/0] via 201.100.11.2
```

配置查看路由表

```
RouteA(config)#ip route 0.0.0.0 0.0.0.0 201.100.11.2

Gateway of last resort is 201.100.11.2 to network 0.0.0.0
S*  0.0.0.0 [1/0] via 201.100.11.2
```

```
RouteB>enable
RouteB#config t
Enter configuration commands, one per line.  End with CNTL/Z
RouteB(config)#ip route 0.0.0.0 0.0.0.0 201.100.11.1
RouteB(config)#exit
RouteB#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, * - candidate default
       U - per-user static route, o - ODR, P - periodic downloaded static route
       T - traffic engineered route

Gateway of last resort is 201.100.11.1 to network 0.0.0.0
S*  0.0.0.0 [1/0] via 201.100.11.1
C     201.100.11.0/24 is directly connected, Serial0/1
C     199.6.13.0/24 is directly connected, FastEthernet0/0
```

配置默认路由

A

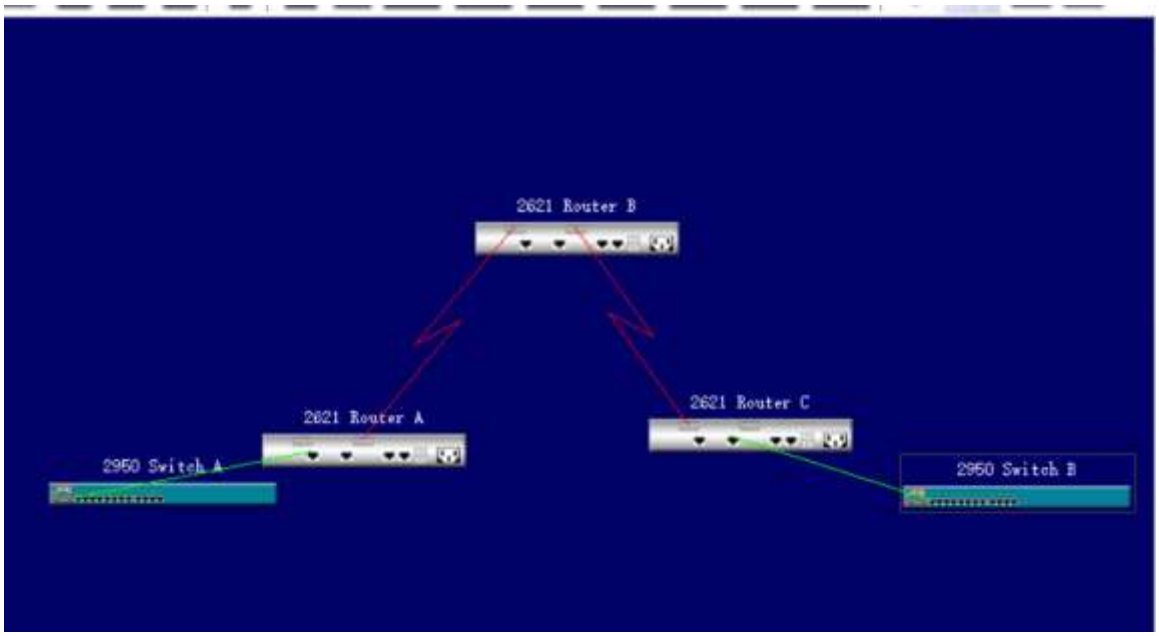
```
RouteA>enable
RouteA#ping 192.5.5.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.5.5.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms
RouteA#ping 205.7.5.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 205.7.5.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms
RouteA#ping 199.6.13.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 199.6.13.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms
RouteA#
```

B

```
RouteB>enable
RouteB#ping 192.5.5.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.5.5.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms
RouteB#ping 205.7.5.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 205.7.5.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms
RouteB#ping 199.6.13.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 199.6.13.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms
RouteB#
```

检验连通性

3.动态路由配置，使用 CCNA Network Visualizer 6.0



模拟器上实验设备连接图

```
Router>enable
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z
Router(config)#int f0/1
Router(config-if)#ip address 172.16.1.1 255.255.255.0
Router(config-if)#no shutdown
09:40:19 %LINK-3-UPDOWN:  Interface FastEthernet0/1, changed state to up
09:40:19 %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, change
```

```
Router(config)#int s0/0
Router(config-if)#ip address 10.1.1.1 255.255.255.0
Router(config-if)#no shutdown
```

```
Router(config-if)#int s0/1
Router(config-if)#ip address 10.1.1.2 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int s0/0
Router(config-if)#ip address 10.2.2.2 255.255.255.0
Router(config-if)#no shutdown
09:48:01 %LINK-3-UPDOWN:  Interface Serial0/0, changed state to up
09:48:01 %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0, changed stat
```

```
Router>enable
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z
Router(config)#int s0/1
Router(config-if)#ip address 10.2.2.3 255.255.255.0
Router(config-if)#no shutdown
09:50:35 %LINK-3-UPDOWN:  Interface Serial0/1, changed state to up
09:50:35 %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1, changed stat

Router(config-if)#int f0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
09:52:02 %LINK-3-UPDOWN:  Interface FastEthernet0/0, changed state to up
09:52:02 %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, change

Router(config-if)#
```

各个路由器各端口 ip 配置

```
Router(config)#router rip
Router(config-router)#network 10.0.0.0
Router(config-router)#network 172.16.0.0
```

```
Router>enable
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z
Router(config)#router rip
Router(config-router)#network 10.0.0.0
Router(config-router)#
```

```
Router>enable
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z
Router(config)#router rip
Router(config-router)#network 192.168.1.0
Router(config-router)#network 10.0.0.0
Router(config-router)#
```

RIP 配置

A

```
Router>enable
Router#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, * - candidate default
       U - per-user static route, o - ODR, P - periodic downloaded static route
       T - traffic engineered route

Gateway of last resort is not set

    172.16.0.0/24 is subnetted, 1 subnets
C      172.16.1.0 is directly connected, FastEthernet0/1
    10.0.0.0/24 is subnetted, 2 subnets
C      10.1.1.0 is directly connected, Serial0/0
R      10.2.2.0 [120/1] via 10.1.1.2, 00:00:25, Serial0/0
R      192.168.1.0 [120/2] via 10.1.1.2, 00:00:25, Serial0/0
Router#
```

B

```
Router>enable
Router#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, * - candidate default
       U - per-user static route, o - ODR, P - periodic downloaded static route
       T - traffic engineered route

Gateway of last resort is not set

    172.16.0.0/24 is subnetted, 1 subnets
R      172.16.1.0 [120/1] via 10.1.1.1, 00:00:12, Serial0/1
    10.0.0.0/24 is subnetted, 2 subnets
C      10.1.1.0 is directly connected, Serial0/1
C      10.2.2.0 is directly connected, Serial0/0
R      192.168.1.0 [120/1] via 10.2.2.3, 00:00:12, Serial0/0
```

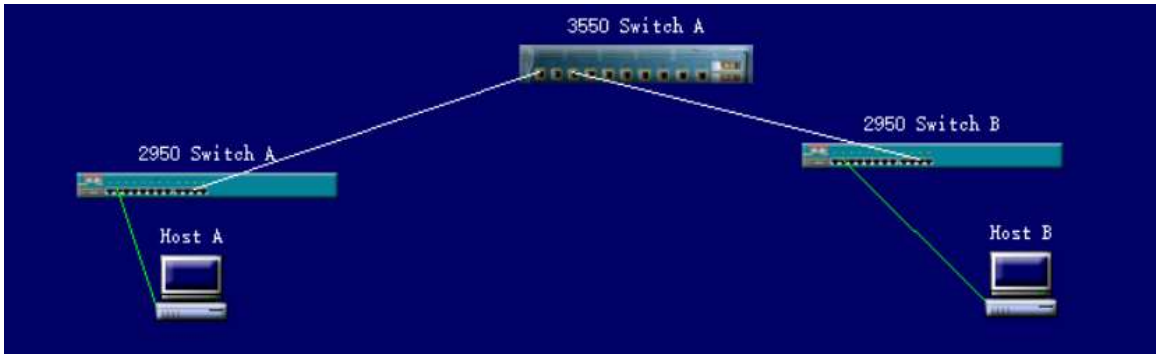
C

```
Router>enable
Router#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, * - candidate default
       U - per-user static route, o - ODR, P - periodic downloaded static route
       T - traffic engineered route

Gateway of last resort is not set

    172.16.0.0/24 is subnetted, 1 subnets
R      172.16.1.0 [120/2] via 10.2.2.2, 00:00:05, Serial0/1
    10.0.0.0/24 is subnetted, 2 subnets
R      10.1.1.0 [120/1] via 10.2.2.2, 00:00:05, Serial0/1
C      10.2.2.0 is directly connected, Serial0/1
C      192.168.1.0/24 is directly connected, FastEthernet0/0
```

各路由表查看，R 开头即为动态配置，通过 RIP 协议学到

4.基于交换机端口 VLAN 配置，使用 CCNA Network Visualizer 6.0

1)实例一，典型的快速以太局域网中实现 VLAN



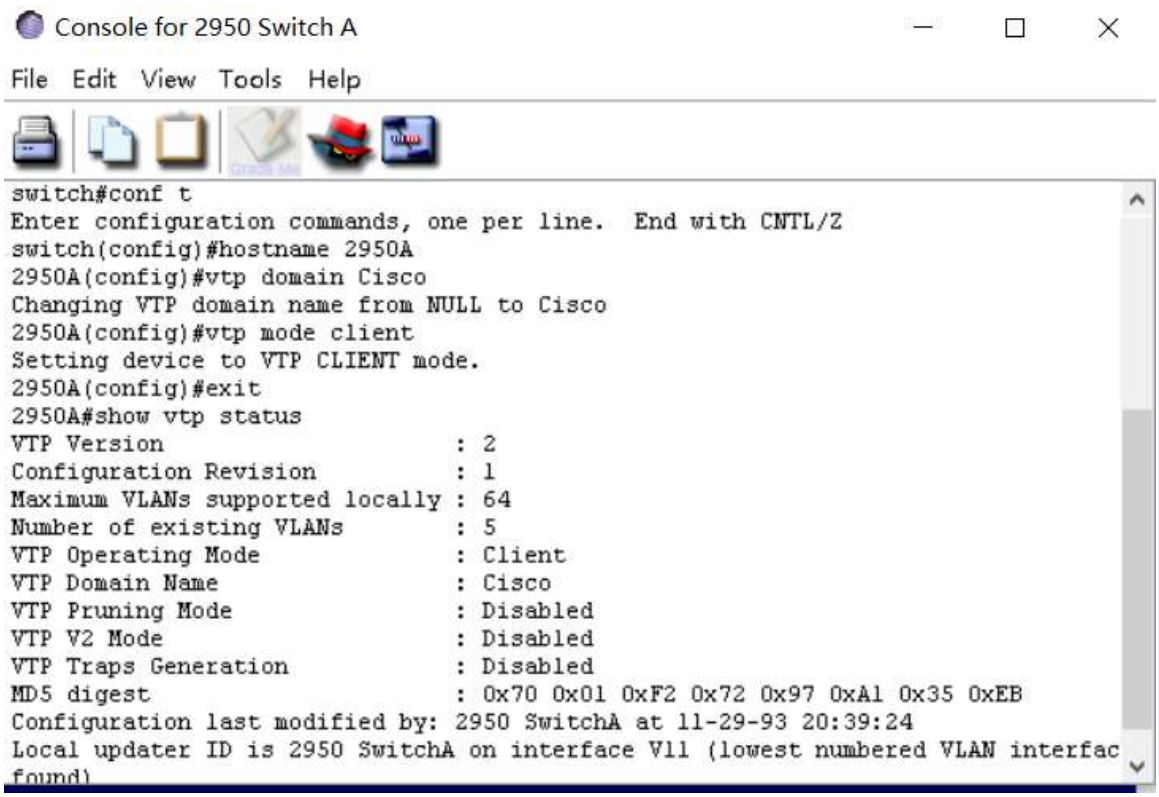
模拟器中的设备连接图

①设置 VTP 域

```
3550A(config)#vtp domain Cisco
Changing VTP domain name from NULL to Cisco
```

```
3550A#show vtp status
VTP Version                     : 2
Configuration Revision          : 1
Maximum VLANs supported locally : 64
Number of existing VLANs        : 5
VTP Operating Mode              : Server
VTP Domain Name                 : Cisco
VTP Pruning Mode                : Disabled
VTP V2 Mode                     : Disabled
VTP Traps Generation            : Disabled
MD5 digest                      : 0x70 0x01 0xF2 0x72 0x97 0xA1 0x35 0xEB
Configuration last modified by: 0.0.0.0 at 11-29-93 20:39:24
Local updater ID is 0.0.0.0 on interface Vl1 (lowest numbered VLAN interface
found)
3550A#
```

①设置 VTP 域，并设置用户模式




```
switch>en
switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z
switch(config)#hostname 2950B
2950B(config)#vtp domain Cisco
Changing VTP domain name from NULL to Cisco
2950B(config)#vtp mode client
Setting device to VTP CLIENT mode.
```

②配置 trunk

核心机

```
3550A(config)#int fa0/1
3550A(config-if)#switchport trunk encapsulation ?
  dotlq      Interface uses only 802.1q trunking encapsulation when trunking
  isl        Interface uses only ISL trunking encapsulation when trunking
  negotiate  Device will negotiate trunking encapsulation with peer on
             interface
```

```
3550A(config-if)#switchport trunk encapsulation dotlq
11:03:29: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, chang
to down
11:03:29: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, chang
3550A(config-if)#switch mode trunk
```

```
3550A(config-if)#interface fa0/3

3550A(config-if)#switchport trunk encapsulation dotlq
11:04:26: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, chang
to down
11:04:26: %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, chang
3550A(config-if)#switchport mode trunk
3550A(config-if)#
```

A

```
2950A>en
2950A#conf t
Enter configuration commands, one per line.  End with CNTL/Z
2950A(config)#int fa0/11
2950A(config-if)#switchport mode trunk
2950A(config-if)#
```

B

```
2950B>en
2950B#conf t
Enter configuration commands, one per line.  End with CNTL/Z
2950B(config)#int fa0/11
2950B(config-if)#switchport mode trunk
2950B(config-if)#
```

③创建 VLAN

```
3550A>en
3550A#conf t
Enter configuration commands, one per line.  End with CNTL/Z
3550A(config)#vlan 10
3550A(config-vlan)#vlan 20
3550A(config-vlan)#exit
3550A(config)#exit
3550A#show vlan

VLAN Name                              Status    Ports
---- --------------------------------- --------- -------------------------------
1    default                           active    Fa0/3, Fa0/4, Fa0/5, Fa0/6
                                                 Fa0/7, Fa0/8, Fa0/9, Fa0/10
10   VLAN0010                          active
20   VLAN0020                          active
1002 fddi-default                      active
1003 token-ring-default                active
1004 fddinet-default                   active
1005 trnet-default                     active
```

④分配交换机端口加入 VLAN

```
2950A(config)#int fa0/2
2950A(config-if)#switchport access vlan 10
2950A(config-if)#
```

```
2950B(config)#int fa0/2
2950B(config-if)#switchport access vlan 20
2950B(config-if)#
```

⑤配置第三层交换机

```
3550A(config)#int vlan 10
3550A(config-if)#ip address 10.10.10.1 255.255.255.0
3550A(config-if)#no shutdown
3550A(config-if)#int vlan 20
3550A(config-if)#ip address 20.20.20.1 255.255.255.0
3550A(config-if)#no shutdown
3550A(config-if)#
```

```
3550A(config)#ip routing
```

启用路由

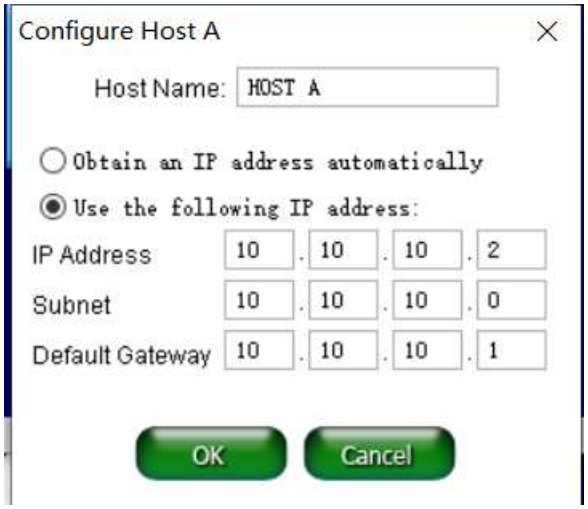
⑥配置各交换机的管理地址

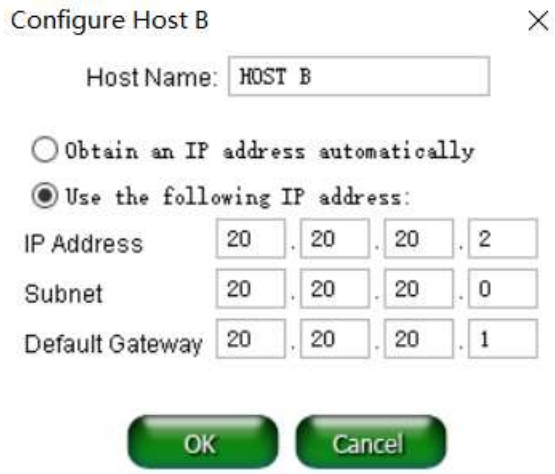
```
3550A(config)#int vlan 1
3550A(config-if)#ip address 192.168.10.1 255.255.255.0
3550A(config-if)#no shut
```

```
2950A(config)#int vlan 1
2950A(config-if)#ip address 192.168.10.2 255.255.255.0
2950A(config-if)#no shut
```

```
2950B(config)#int vlan 1
2950B(config-if)#ip address 192.168.10.3 255.255.255.0
2950B(config-if)#no shut
```

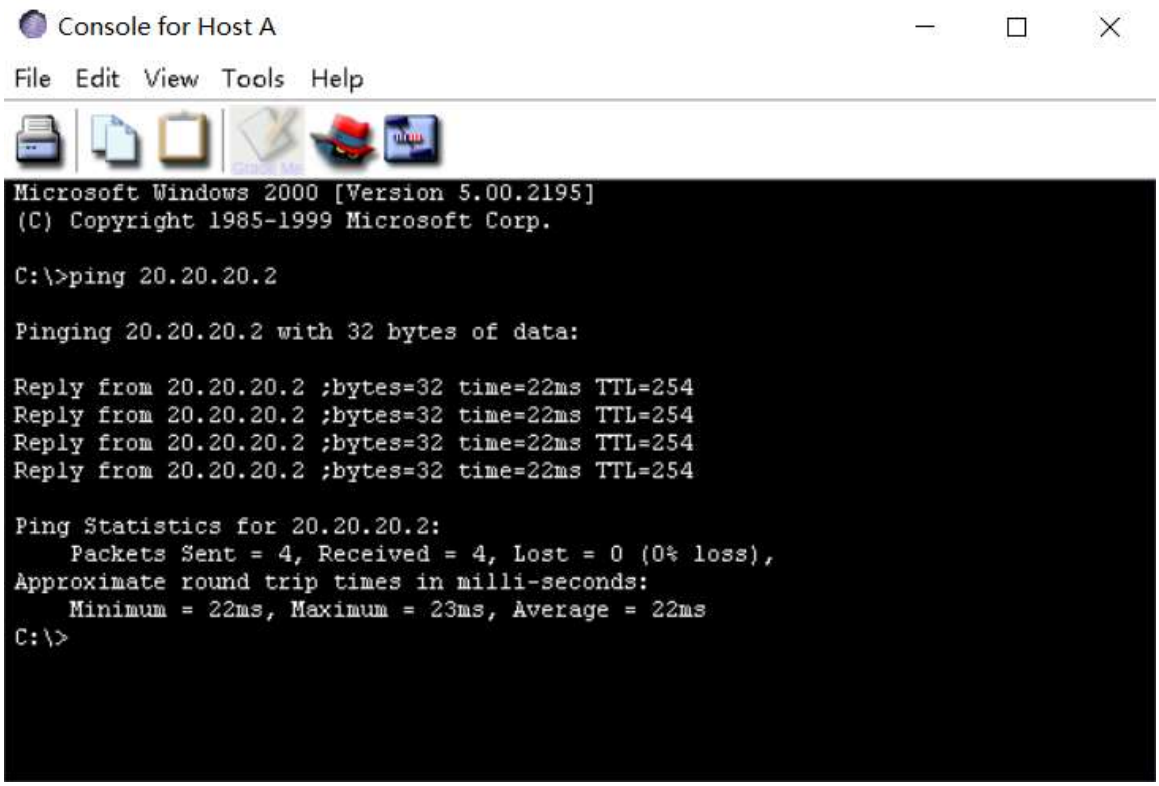
⑦配置 HOST A 和 HOST B，并进行测试





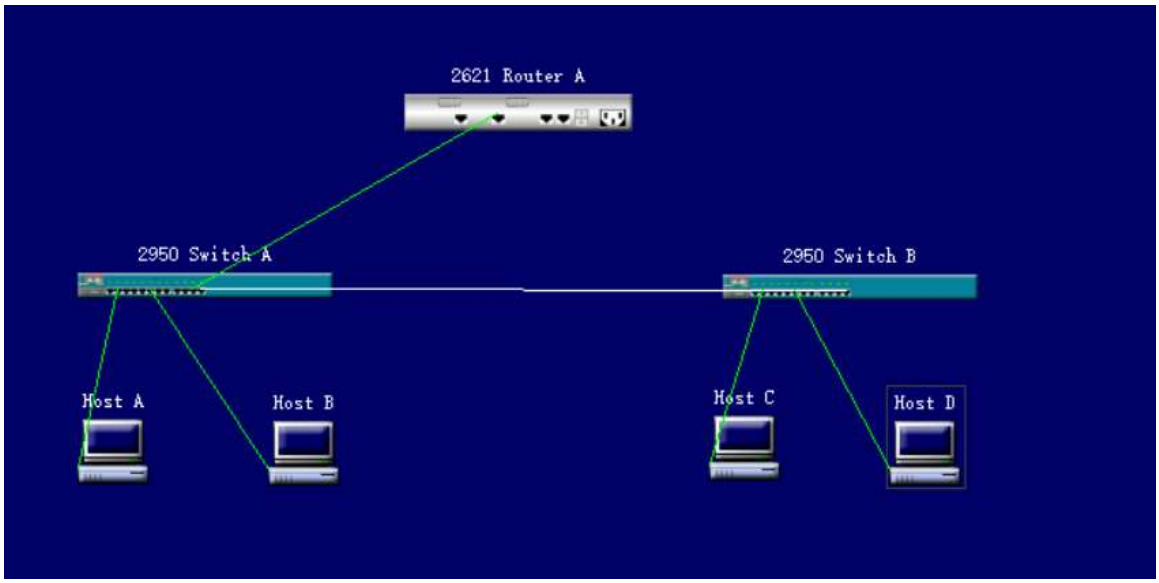

```
3550A>en
3550A#ping 192.168.10.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.10.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms
3550A#ping 192.168.10.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.10.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/4/4 ms
3550A#
```

在 3550 交换机上分别 ping 2950 交换机



在主机 A 上 ping 主机 B，验证不同 VLAN 连通性

1)实例二，实现 VLAN 跨越多个交换机及不同 VLAN 之间的通信



模拟器上实验设备连接图

① 配置 VTP

```
switch>en
switch#config t
Enter configuration commands, one per line.  End with CNTL/Z
switch(config)#hostname 2950A
2950A(config)#vtp domain Test
Changing VTP domain name from NULL to Test
2950A(config)#vtp mode?
mode
2950A(config)#vtp mode ?
  client       Set the device to client mode.
  server       Set the device to server mode.
  transparent  Set the device to transparent mode.
```

```
2950A#show vtp status
VTP Version                     : 2
Configuration Revision          : 1
Maximum VLANs supported locally : 64
Number of existing VLANs        : 5
VTP Operating Mode              : Server
VTP Domain Name                 : Test
VTP Pruning Mode                : Disabled
VTP V2 Mode                     : Disabled
VTP Traps Generation            : Disabled
MD5 digest                      : 0x70 0x01 0xF2 0x72 0x97 0xA1 0x35 0xEB
Configuration last modified by: 0.0.0.0 at 11-29-93 20:39:24
Local updater ID is 0.0.0.0 on interface Vl1 (lowest numbered VLAN interface
found)
2950A#
```

② 启动 Trunk

```
2950A#config t
Enter configuration commands, one per line.  End with CNTL/Z
2950A(config)#in fa0/12
2950A(config-if)#switchport mode ?
  access   Set trunking mode to ACCESS unconditionally
  dynamic  Set trunking mode to dynamically negotiate access or trunk mode
  trunk    Set trunking mode to TRUNK unconditionally

2950A(config-if)#switchport mode trunk
2950A(config-if)#in fa0/11
2950A(config-if)#switchport mode trunk
2950A(config-if)#
```

```
2950B(config)#int fa0/12
2950B(config-if)#switchport mode ?
  access   Set trunking mode to ACCESS unconditionally
  dynamic  Set trunking mode to dynamically negotiate access or trunk mode
  trunk    Set trunking mode to TRUNK unconditionally

2950B(config-if)#switchport mode trunk
2950B(config-if)#int fa0/11
2950B(config-if)#switchport mode trunk
```

③ 创建 VLAN

```
2950A#vlan database
2950A(vlan)#vlan2 name vlan2
             ^
% Invalid input detected at '^' marker.
2950A(vlan)#vlan 2 name vlan2
VLAN 2 added:
    Name: vlan2
2950A(vlan)#vlan 3 name vlan3
VLAN 3 added:
    Name: vlan3
2950A(vlan)#exit
```

④ 分配端口到 VLAN

2950A

```
2950A(config)#int fa0/2
2950A(config-if)#switchport access vlan 2
2950A(config-if)#switchport mode access
2950A(config-if)#int fa0/6
2950A(config-if)#switchport access vlan 3
2950A(config-if)#switchport mode access
2950A(config-if)#
```

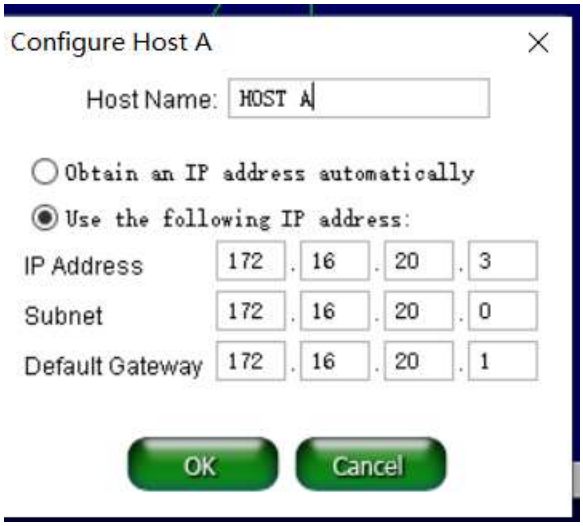
2950B

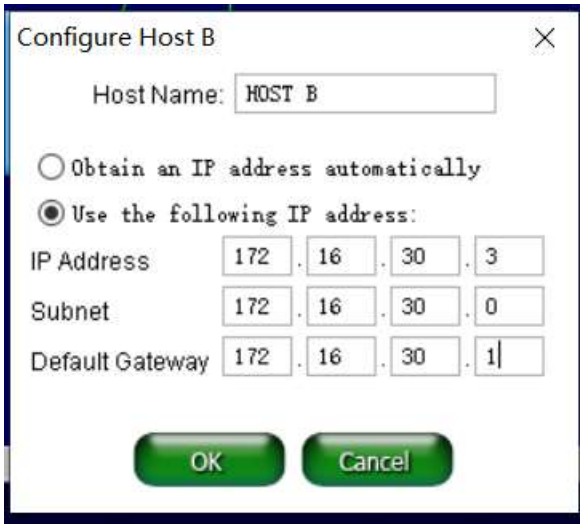
```
Enter configuration commands, one per line.  End with CNTL/Z
2950B(config)#int fa0/2
2950B(config-if)#switchport access vlan 2
2950B(config-if)#switchport mode access
2950B(config-if)#in fa0/6
2950B(config-if)#switchport access vlan 3
2950B(config-if)#switchport mode access
2950B(config-if)#exit
2950B(config)#_
```

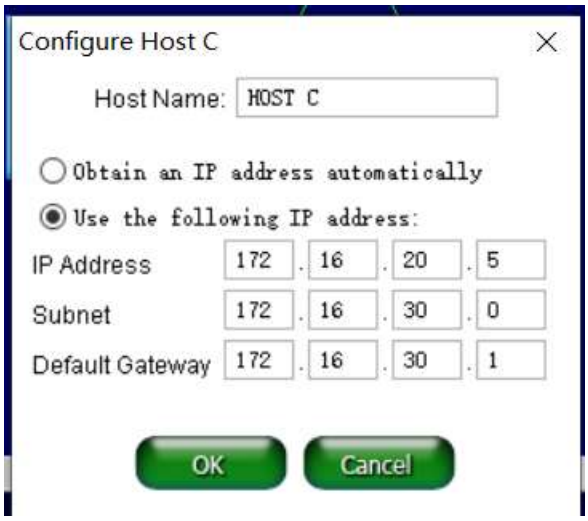
⑤ 配置 VLAN 之间的路由

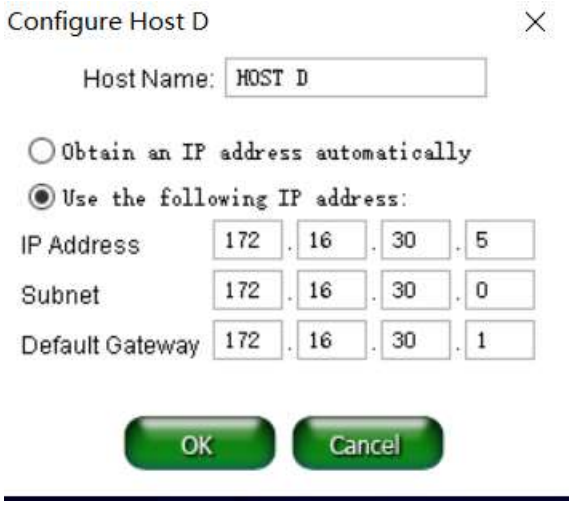
```
R2621(config-if)#int fa 0/0.1
R2621(config-subif)#encapsulation dotlq 1
R2621(config-subif)#ip address 172.16.10.1 255.255.255.0
R2621(config-subif)#int fa 0/0.2
R2621(config-subif)#encapsulation dotlq 2
R2621(config-subif)#ip address 172.16.20.1 255.255.255.0
R2621(config-subif)#int fa 0/0.3
R2621(config-subif)#encapsulation dotlq 3
R2621(config-subif)#ip address 172.16.30.1 255.255.255.0
R2621(config-subif)#exit
R2621(config)#_
```

⑥ 配置主机 HOST A、HOST B、 HOST C、HOST D

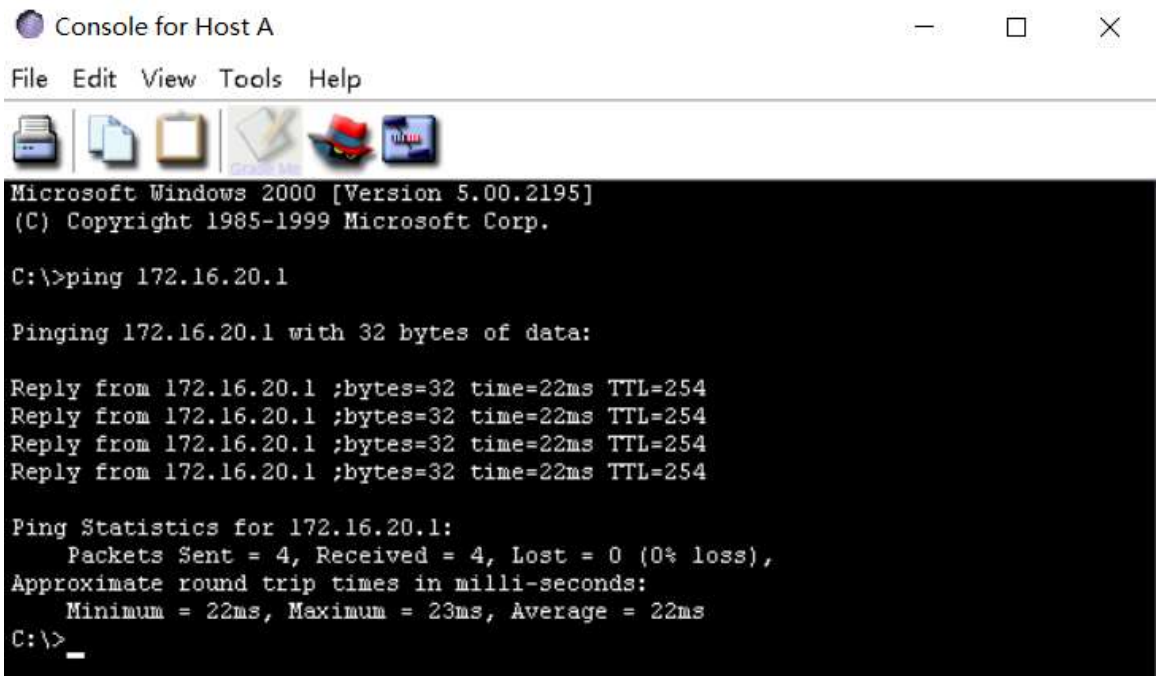




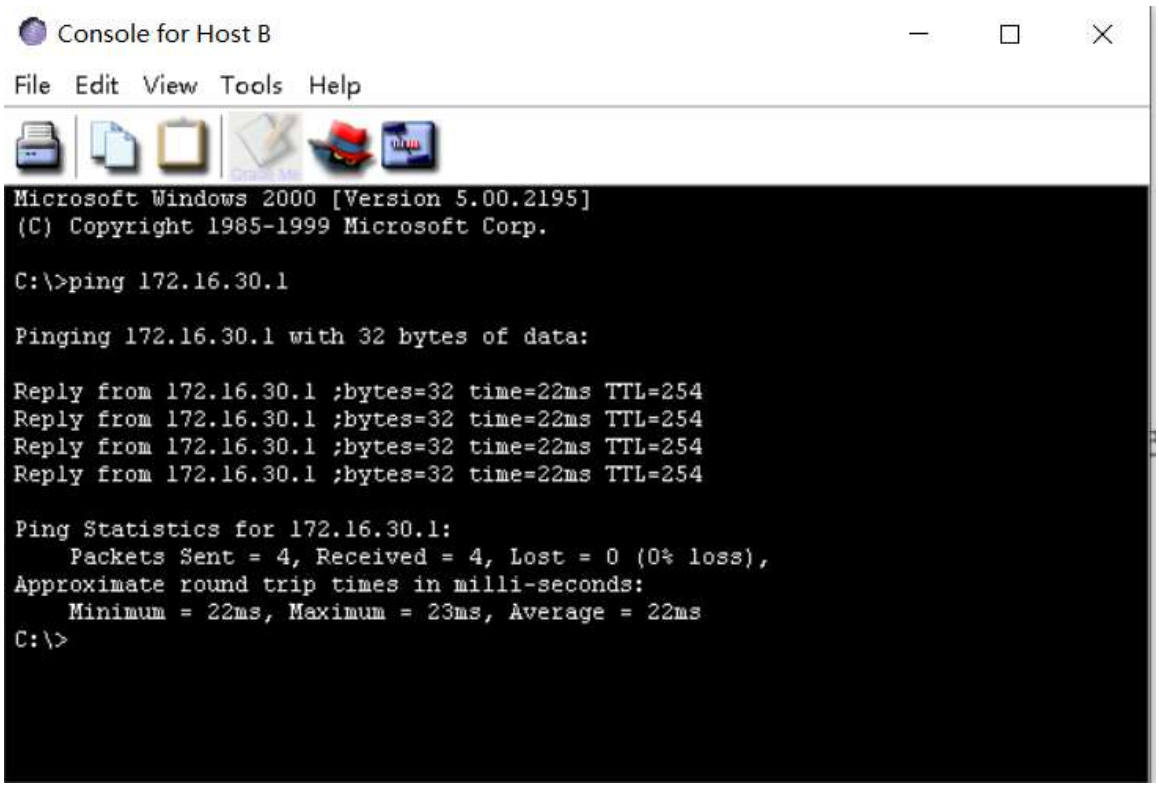

Configure Host C
Host Name: HOST C
Obtain an IP address automatically
Use the following IP address:
IP Address 172 . 16 . 20 . 5
Subnet 172 . 16 . 30 . 0
Default Gateway 172 . 16 . 30 . 1
OK
Cancel


Configure Host D
Host Name: HOST D
Obtain an IP address automatically
Use the following IP address:
IP Address 172 . 16 . 30 . 5
Subnet 172 . 16 . 30 . 0
Default Gateway 172 . 16 . 30 . 1
OK
Cancel

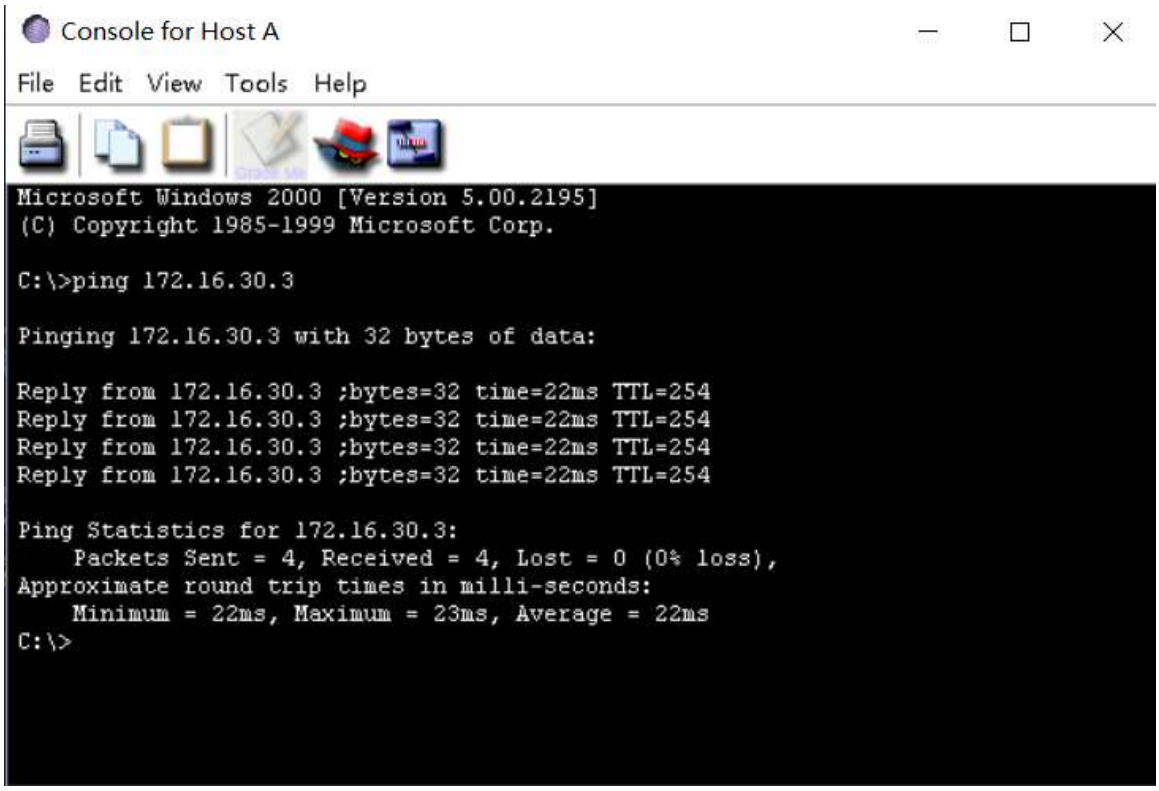
⑦验证连通性



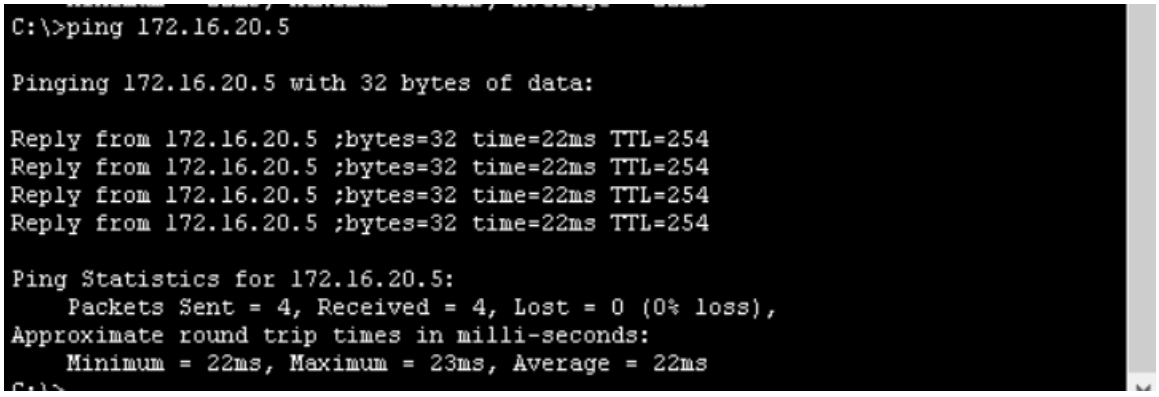
在 HOST A 上 ping 172.16.20.1



在 HOST B 上 ping 172.16.30.1



在 HOST A 上 ping HOST B 验证不同的 VLAN 连通性



在 HOST A 上 ping HOST C 验证不同交换机同一 VLAN 上的连通性

4 实验总结

1.学习了配置路由器的基本流程，先配置端口，在动态或者静态配置路由表等。

2.学习了动态和静态配置的基本过程和特点与区别。

3.学习了端口号，子网掩码等名词的含义

4.学习了 VLAN 的基本工作原理，基本配置方法