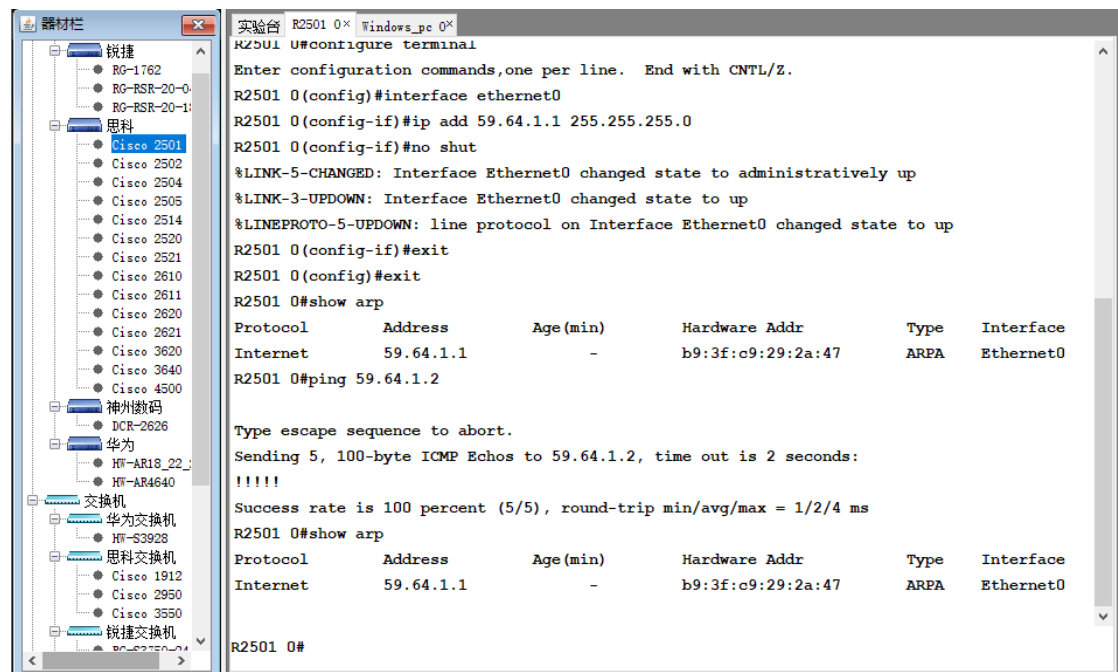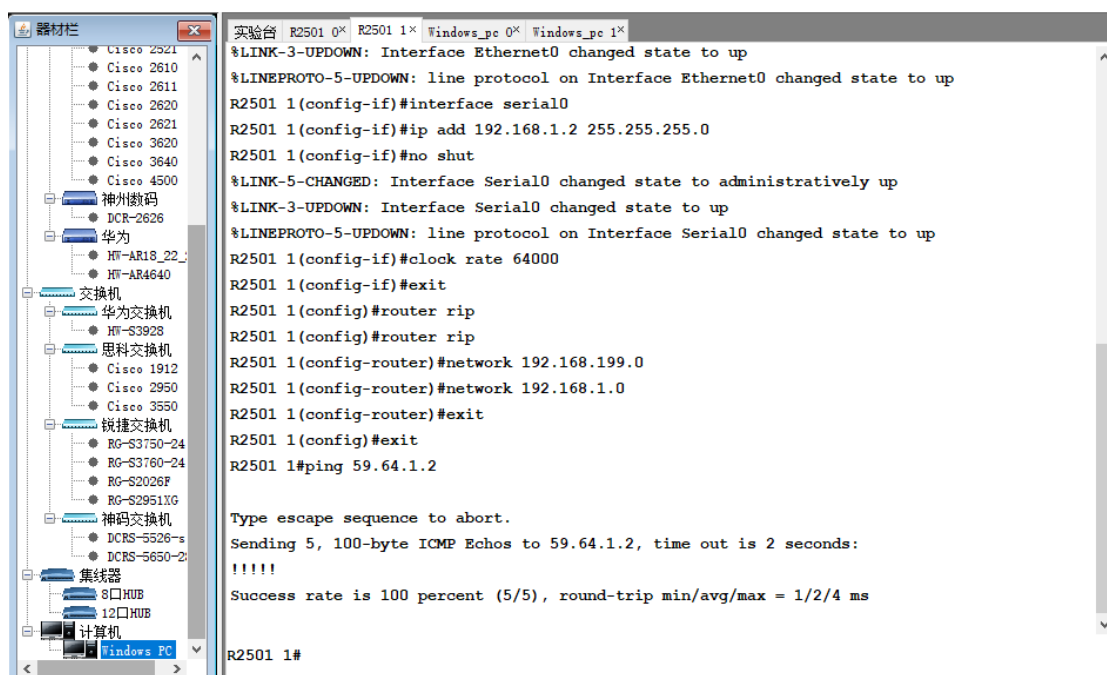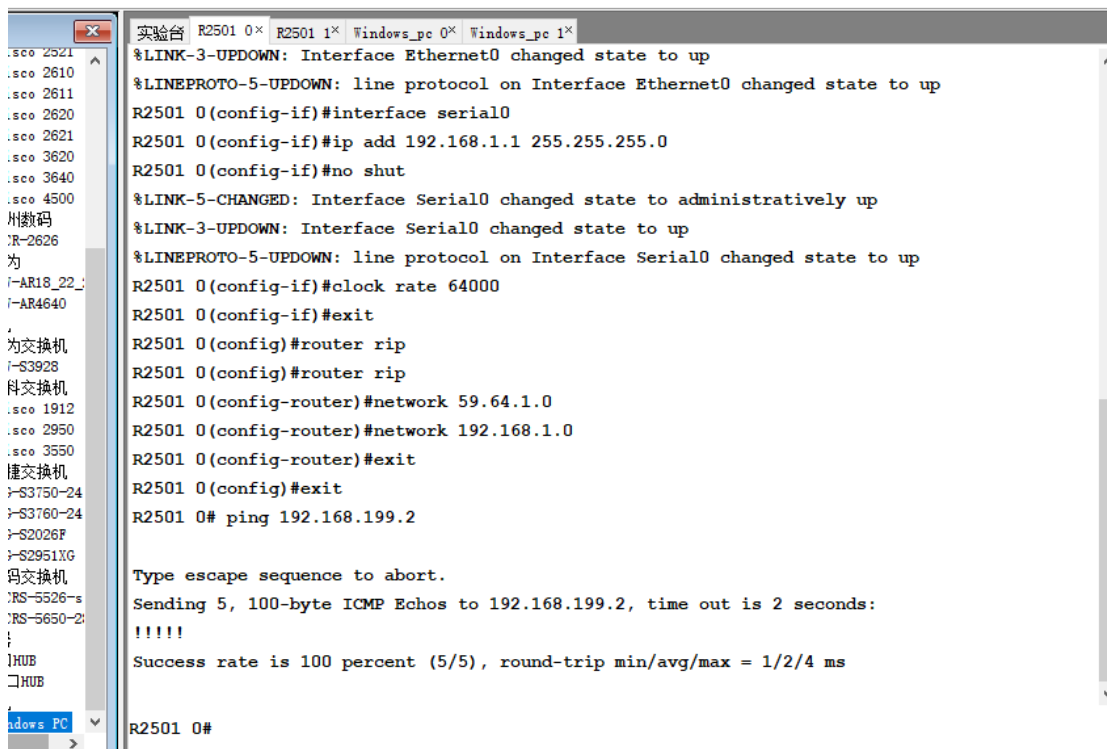# 虚拟平台第三次实验

一、ARP 的操作实验
1. 拖放器材，连接及开机
2. 配置 PC0 的 ip 地址：59.64.1.2 255.255.255.0
3. 配置路由器
4. 实验截图

二、RIP 路由的配置实验
1. 拖放器材，连接及开机
2. 配置路由器 R0，参照方法上次实验
3. 配置路由器 R1，同上
4. 配置 PC0ip 地址：59.64.1.2 ，子网掩码：255.255.255.0 ，配置默认网关： 59.64.1.1
5. 配置 PC1ip 地址：192.168.199.2 ， 子网掩码：255.255.255.0 ， 配置默认网关：192.168.199.1
6. 实验截图

```
%LINK-3-UPDOWN: Interface Ethernet0 changed state to up
%LINEPROTO-5-UPDOWN: line protocol on Interface Ethernet0 changed state to up
R2501 0(config-if)#interface serial0
R2501 0(config-if)#ip add 192.168.1.1 255.255.255.0
R2501 0(config-if)#no shut
%LINK-5-CHANGED: Interface Serial0 changed state to administratively up
%LINK-3-UPDOWN: Interface Serial0 changed state to up
%LINEPROTO-5-UPDOWN: line protocol on Interface Serial0 changed state to up
R2501 0(config-if)#clock rate 64000
R2501 0(config-if)#exit
R2501 0(config)#router rip
R2501 0(config)#router rip
R2501 0(config-router)#network 59.64.1.0
R2501 0(config-router)#network 192.168.1.0
R2501 0(config-router)#exit
R2501 0(config)#exit
R2501 0# ping 192.168.199.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.199.2, time out is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms

R2501 0#
```



```
%LINK-3-UPDOWN: Interface Ethernet0 changed state to up
%LINEPROTO-5-UPDOWN: line protocol on Interface Ethernet0 changed state to up
R2501 1(config-if)#interface serial0
R2501 1(config-if)#ip add 192.168.1.2 255.255.255.0
R2501 1(config-if)#no shut
%LINK-5-CHANGED: Interface Serial0 changed state to administratively up
%LINK-3-UPDOWN: Interface Serial0 changed state to up
%LINEPROTO-5-UPDOWN: line protocol on Interface Serial0 changed state to up
R2501 1(config-if)#clock rate 64000
R2501 1(config-if)#exit
R2501 1(config)#router rip
R2501 1(config)#router rip
R2501 1(config-router)#network 192.168.199.0
R2501 1(config-router)#network 192.168.1.0
R2501 1(config-router)#exit
R2501 1(config)#exit
R2501 1#ping 59.64.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 59.64.1.2, time out is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms

R2501 1#
```

三、OSPF 实验

1. 拖放器材，连接及开机
2. 配置路由器 R0，详见实验指导文档
3. 配置路由器 R1，详见实验指导文档
4. 配置 PC0IP 地址：59.64.1.2 ，子网掩码：255.255.255.0 ，配置默认网关： 59.64.1.1
5. 配置 PC1IP 地址：192.168.199.2 ， 子网掩码：255.255.255.0 ， 配置默认网关：192.168.199.1
6. 实验截图

实验台 R2501 0× R2501 1× Windows_pc 0× Windows_pc 1×

```
%LINEPROTO-5-UPDOWN: line protocol on Interface Serial0 changed state to up
R2501 0(config-if)#clock rate 64000
R2501 0(config-if)#exit
R2501 0(config)#router ospf 1
R2501 0(config)#router ospf 1
R2501 0(config-router)#network 59.64.1.0 0.0.0.255 area 0
R2501 0(config-router)#network 192.168.1.0 0.0.0.255 area 0
R2501 0(config-router)#exit
R2501 0(config)#exit
R2501 0#traceroute 192.168.199.2


Type escape sequence to abort.
Tracing the route to192.168.199.2

  192.168.199.2 20 maec  16 meec *
R2501 0#ping 192.168.199.2


Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.199.2, time out is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms


R2501 0#
```

实验台 R2501 0× R2501 1× Windows_pc 0× Windows_pc 1×

```
R2501 1(config)#router ospf 1
R2501 1(config)#router ospf 1
R2501 1(config-router)#network 192.168.199.0 0.0.0.255 area 0
R2501 1(config-router)#network 192.168.1.0 0.0.0.255 area 0
R2501 1(config-router)#traceroute 59.64.1.2
                    ^
% invalid input detected at '^' marker.
R2501 1(config-router)#exit
R2501 1(config)#exit
R2501 1#traceroute 59.64.1.2


Type escape sequence to abort.
Tracing the route to59.64.1.2

  59.64.1.2 20 maec  16 meec *
R2501 1#ping 59.64.1.2


Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 59.64.1.2, time out is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/4 ms


R2501 1#
```