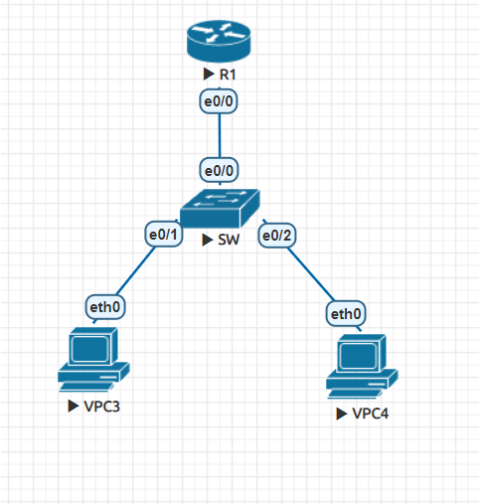
計算機網路期末

110810532 汪建同

1.

2.



SW:

```
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#exit
Switch(config)#int e0/0
Switch(config-if)#swi
Switch(config-if)#switchport trunk encapsulation dot1q
Switch(config-if)#switchport mode trunk
0, changed state to up
Switch(config-if)#int e0/1
Switch(config-if)#swit
Switch(config-if)#switchport access vlan 10
Switch(config-if)#sw
Switch(config-if)#switchport mode access
Switch(config-if)#int e0/2
Switch(config-if)#switchport access vlan 20
Switch(config-if)#switchport mode access
```

R1:

```
Router(config)#int e0/0.10
Router(config-subif)#iencapsulation dot1Q 10
*Dec 31 23:29:45.772: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on E
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(config-subif)#iencapsulation dot1Q 10
                    ^
% Invalid input detected at '^' marker.

Router(config-subif)#encapsulation dot1Q 10
Router(config-subif)#ip addr 192.168.10.254 255.255.255.0
Router(config-subif)#int e0/0.20
Router(config-subif)#encapsulation dot1Q 20
Router(config-subif)#ip addr 192.168.20.254 255.255.255.0
Router(config-subif)#
```

```
Router>en
Router#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int e0/0
Router(config-if)#no shut
Router(config-if)#i
*Dec 31 23:16:49.921: %LINK-3-UPDOWN: Interface Ethernet0/0, changed state to up
*Dec 31 23:16:50.925: %LINEPROTO-5-UPDOWN: Line protocol on Interface Ethernet0/
0, changed state to up
Router(config-if)#int e0/0.10
Router(config-subif)#
*Dec 31 23:17:04.155: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on Ethe
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(config-subif)#encapsulation dot1Q 10
Router(config-subif)#
*Dec 31 23:17:59.046: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on Ethe
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(config-subif)#
*Dec 31 23:18:57.452: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on Ethe
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(config-subif)#
*Dec 31 23:19:47.469: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on Ethe
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(config-subif)#
*Dec 31 23:20:36.111: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on Ethe
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(config-subif)#ip dhcp pool mypool
Router(dhcp-config)#network 192.168
*Dec 31 23:21:35.024: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on Ethe
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(dhcp-config)#network 192.168.10.0 255.255.255.0
```

```
Router(dhcp-config)#network 192.168.10.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.10.254
Router(dhcp-config)#dns-server 8.8.8.8
*Dec 31 23:23:27.121: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on Ethe
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(dhcp-config)#dns-server 8.8.8.8
Router(dhcp-config)#exit
Router(config)#
*Dec 31 23:24:22.980: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on Ethe
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(config)#int e0/0.20
Router(config-subif)#encapsulation dot1Q 20
Router(config-subif)#
*Dec 31 23:25:14.541: %CDP-4-DUPLEX_MISMATCH: duplex mismatch discovered on Ethe
rnet0/0 (not full duplex), with Switch Ethernet0/0 (full duplex).
Router(config-subif)#ip dhcp pool my poo2
Router(dhcp-config)#network 192.168.20.0 255.255.255.0
Router(dhcp-config)#default-router 192.168.20.254
Router(dhcp-config)#dns-server 8.8.8.8
Router(dhcp-config)#exit
Router(config)#ip dhcp excluded-address 192.168.2.250 192.168.2.254
```

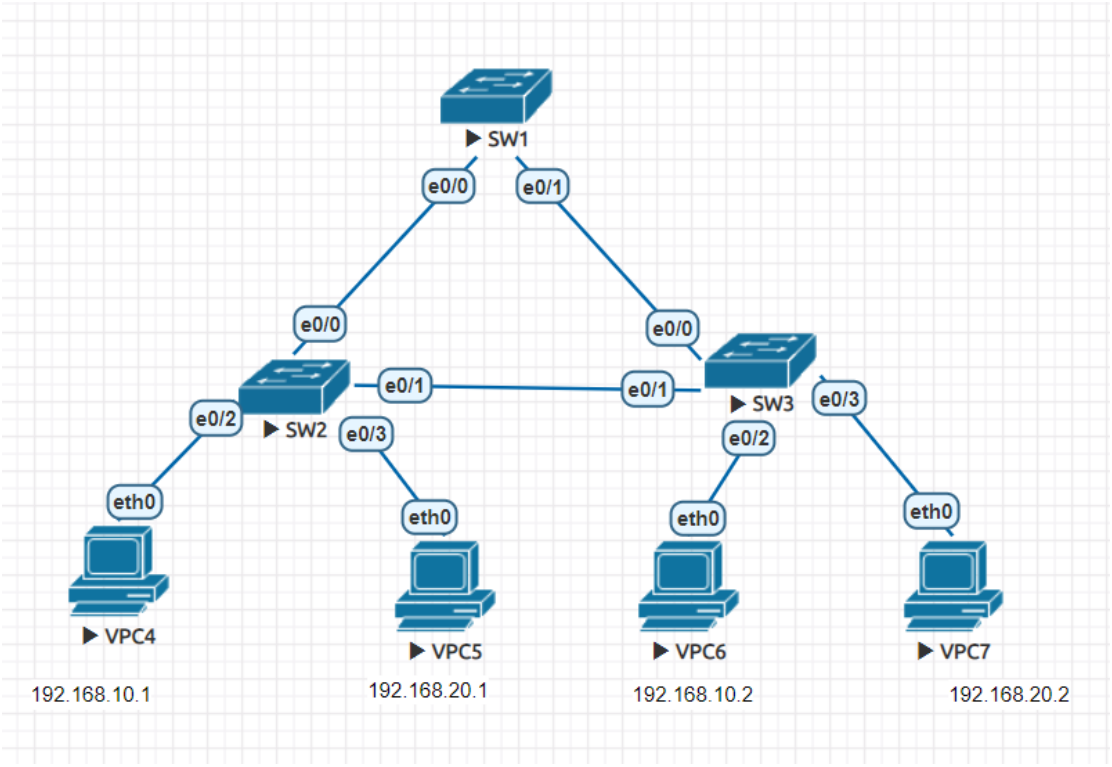
VPC3:

```
VPCS> ip dhcp
DDORA IP 192.168.10.1/24 GW 192.168.10.254
```

VPC4:

```
VPCS> ip dhcp
DDORA IP 192.168.20.1/24 GW 192.168.20.254
```

3.



SW1:

```
Switch(config)#int range e0/0,e0/1
Switch(config-if-range)#switchport trunk encapsulation dot1q
Switch(config-if-range)#switchport mode trunk
Switch(config-if-range)#
```

SW2:

```
Switch(config)#int e0/2
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
% Access VLAN does not exist. Creating vlan 10
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
Switch(config-if)#int e0/3
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 20
% Access VLAN does not exist. Creating vlan 20
Switch(config-if)#sw access vlan 20
```

```
Switch(config-if)#int range e0/0,e0/1
Switch(config-if-range)#switchport trunk encapsulation dot1q
Switch(config-if-range)#switchport mode trunk
Switch(config-if-range)#spanning-tree vlan 20 priority 8192
```

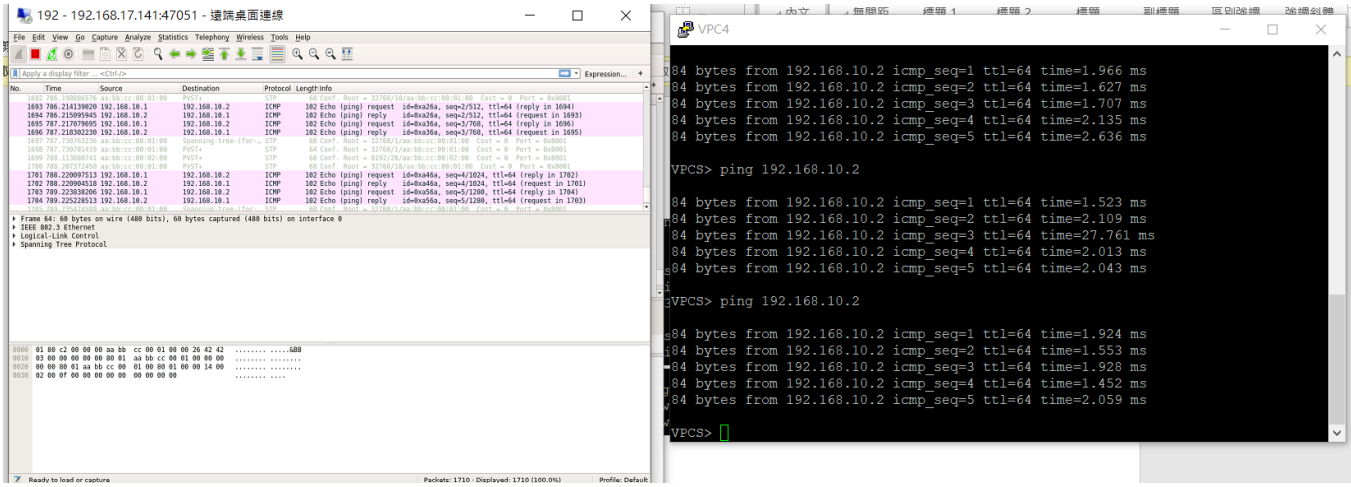
SW3:

```
Enter configuration commands, one per line.  End wi
Switch(config)#int e0/2
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
% Access VLAN does not exist. Creating vlan 10
Switch(config-if)#int e0/3
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 20
% Access VLAN does not exist. Creating vlan 20
```

```
Switch(config-if)#int range e0/0,e0/1
Switch(config-if-range)#switchport trunk encapsulation dot1q
Switch(config-if-range)#switchport mode trunk
```

Ping:

Sw2 e0/0, vlan10:



Sw2 e0/1, vlan20