**1.vlan方面：推荐一个vlan下的所有主机为一个子网网段**

连接电脑和http客户端的接口配置为access接口

交换机与交换机或路由器连接的接口配置为trunk接口---也可以配置为access接口但是为了扩展性，trunk接口更佳，允许vlan10到vlan100通过

对汇聚层交换配置对应的vlanif的ip地址

两个汇聚层交换机间配置eth-trunk，模式采用静态lacp

配置代码：

**交换机1**

sys

sys 1F\_sw1

vlan 10

quit

vlan 20

q

int g0/0/23

port link-type trunk

port trunk allow-pass vlan 10 90

int g0/0/24

port link-type access

port default vlan 10

int g0/0/1

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/2

port link-type trunk

port trunk allow-pass vlan 10 to 100

**交换机2：**

sys

sys 2F\_sw2

vlan 20

q

vlan 90

q

int g0/0/23

port link-type trunk

port trunk allow-pass vlan 20

int g0/0/24

port link-type access

port default vlan 20

int g0/0/1

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/2

port link-type trunk

port trunk allow-pass vlan 10 to 100

**交换机3：**

sys

sys sw3

vlan 30

q

vlan 90

q

int g0/0/23

port link-type trunk

port trunk allow-pass vlan 30

int g0/0/24

port link-type access

port default vlan 30

int g0/0/1

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/2

port link-type trunk

port trunk allow-pass vlan 10 to 100

**交换机4：**

sys

sys sw4

vlan 40

quit

vlan 90

q

int g0/0/23

port link-type trunk

port trunk allow-pass vlan 40

int g0/0/24

port link-type access

port default vlan 40

int g0/0/1

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/2

port link-type trunk

port trunk allow-pass vlan 10 to 100

**交换机5**

sys

sys 5F\_sw5

vlan 50

quit

vlan 90

q

int g0/0/23

port link-type trunk

port trunk allow-pass vlan 50

int g0/0/24

port link-type access

port default vlan 50

int g0/0/1

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/2

port link-type trunk

port trunk allow-pass vlan 10 to 100

**交换机6：**

sys

sys 6F\_sw6

vlan 60

quit

vlan 90

q

int g0/0/23

port link-type trunk

port trunk allow-pass vlan 60

int g0/0/24

port link-type access

port default vlan 60

int g0/0/1

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/2

port link-type trunk

port trunk allow-pass vlan 10 to 100

**核心交换机1：**

**Sys**

**Sys H\_sw1**

**Vlan batch 10 20 30 40 50 60 70 80 90**

int eth-trunk 1

mode lacp

quit

int g0/0/2

eth-trunk 1

int g0/0/6

eth-trunk 1

quit

lacp priority 100 //将优先级配置为100，成为主动端

int g0/0/11

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/12

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/13

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/14

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/15

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/16

port link-type trunk

port trunk allow-pass vlan 10 to 100

int eth-trunk 1

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/4

port link-type access

port default vlan 70

int g0/0/5

port link-type access

port default vlan 80

int vlanif 10

ip address 192.168.10.100 24

int vlanif 20

ip address 192.168.20.100 24

int vlanif 30

ip address 192.168.30.100 24

int vlanif 40

ip address 192.168.40.100 24

int vlanif 50

ip address 192.168.50.100 24

int vlanif 60

ip address 192.168.60.100 24

int vlanif 70

ip address 192.168.1.1 24

int vlanif 80

ip address 192.168.2.1 24

int vlanif 90

ip address 192.168.90.1 24

**核心交换机2：**

sys

sys H\_sw2

vlan batch 10 20 30 40 50 60 71 81 90

int eth-trunk 1

mode lacp

quit

int g0/0/2

eth-trunk 1

int g0/0/6

eth-trunk 1

quit

int g0/0/11

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/12

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/13

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/14

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/15

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/16

port link-type trunk

port trunk allow-pass vlan 10 to 100

int eth-trunk 1

port link-type trunk

port trunk allow-pass vlan 10 to 100

int g0/0/4

port link-type access

port default vlan 71

int g0/0/5

port link-type access

port default vlan 81

int g0/0/23

port link-type trunk

port trunk allow-pass vlan all

int vlanif 10

ip address 192.168.10.200 24

int vlanif 20

ip address 192.168.20.200 24

int vlanif 30

ip address 192.168.30.200 24

int vlanif 40

ip address 192.168.40.200 24

int vlanif 50

ip address 192.168.50.200 24

int vlanif 60

ip address 192.168.60.200 24

int vlanif 71

ip address 192.168.4.1 24

int vlanif 81

ip address 192.168.5.1 24

int vlanif 90

ip address 192.168.90.10 24

**路由器1：---IP地址配置**

sys

sys r1

int g0/0/1

ip address 192.168.1.2 24

int g0/0/2

ip address 192.168.4.2 24

int g2/0/0

ip address 115.200.23.1 24

int g2/0/2

ip address 192.168.70.1 24

int g2/0/1

ip address 192.168.9.1 24

int loop 1

ip address 1.1.1.1 32

**路由器2：---IP地址配置**

sys

sys r2

int g0/0/2

ip address 192.168.5.2 24

int g0/0/1

ip address 192.168.2.2 24

int g4/0/2

ip address 223.104.23.1 24

int g2/0/3

ip address 192.168.80.1 24

int g2/0/2

ip address 192.168.9.2 24

int loop 1

ip address 2.2.2.2 32

**2.dhcp方面：**在hx交换机上配置dhcp用于给接入层的主机分配地址---http客户端可能得自己设置地址不能dhcp自动获得，因此在配置dhcp地址池的时候应预先保留一部分的地址空间

**核心交换机1：**

sys

dhcp enable

ip pool vlan10

gateway-list 192.168.10.254

network 192.168.10.0 mask 24

lease day 1

excluded-ip-address 192.168.10.100 192.168.10.253

ip pool vlan20

gateway-list 192.168.20.254

network 192.168.20.0 mask 24

lease day 1

excluded-ip-address 192.168.20.100 192.168.20.253

ip pool vlan30

gateway-list 192.168.30.254

network 192.168.30.0 mask 24

lease day 1

excluded-ip-address 192.168.30.100 192.168.30.253

ip pool vlan40

gateway-list 192.168.40.254

network 192.168.40.0 mask 24

lease day 1

excluded-ip-address 192.168.40.100 192.168.40.253

ip pool vlan50

gateway-list 192.168.50.254

network 192.168.50.0 mask 24

lease day 1

excluded-ip-address 192.168.50.100 192.168.50.253

ip pool vlan60

gateway-list 192.168.60.254

network 192.168.60.0 mask 24

lease day 1

excluded-ip-address 192.168.60.100 192.168.60.253

ip pool vlan90

gateway-list 192.168.90.254

network 192.168.90.0 mask 24

lease day 1

excluded-ip-address 192.168.90.100 192.168.90.253

interface vlan 10

dhcp select global

interface vlanif 20

dhcp select global

interface vlanif 30

dhcp select global

interface vlanif 40

dhcp select global

interface vlanif 50

dhcp select global

interface vlanif 60

dhcp select global

interface vlanif 90

dhcp select global

**核心交换机2：**

sys

dhcp enable

ip pool forvlan10

gateway-list 192.168.10.254

network 192.168.10.0 mask 24

lease day 1

excluded-ip-address 192.168.10.1 192.168.10.100

excluded-ip-address 192.168.10.200 192.168.10.253

ip pool forvlan20

gateway-list 192.168.20.254

network 192.168.20.0 mask 24

lease day 1

excluded-ip-address 192.168.20.1 192.168.20.100

excluded-ip-address 192.168.20.200 192.168.20.253

ip pool forvlan30

gateway-list 192.168.30.254

network 192.168.30.0 mask 24

lease day 1

excluded-ip-address 192.168.30.1 192.168.30.100

excluded-ip-address 192.168.30.200 192.168.30.253

ip pool forvlan40

gateway-list 192.168.40.254

network 192.168.40.0 mask 24

lease day 1

excluded-ip-address 192.168.40.1 192.168.40.100

excluded-ip-address 192.168.40.200 192.168.40.253

ip pool forvlan50

gateway-list 192.168.50.254

network 192.168.50.0 mask 24

lease day 1

excluded-ip-address 192.168.50.1 192.168.50.100

excluded-ip-address 192.168.50.200 192.168.50.253

ip pool forvlan60

gateway-list 192.168.60.254

network 192.168.60.0 mask 24

lease day 1

excluded-ip-address 192.168.60.1 192.168.60.100

excluded-ip-address 192.168.60.200 192.168.60.253

ip pool forvlan90

gateway-list 192.168.90.254

network 192.168.90.0 mask 24

lease day 1

excluded-ip-address 192.168.90.1 192.168.90.100

excluded-ip-address 192.168.90.200 192.168.90.253

interface vlanif 10

dhcp select global

interface vlanif 20

dhcp select global

interface vlanif 30

dhcp select global

interface vlanif 40

dhcp select global

interface vlanif 50

dhcp select global

interface vlanif 60

dhcp select global

interface vlanif 90

dhcp select global

**3.mstp（生成树协议）方面**：接入层和汇聚层的交换机配置mstp协议，实现不同vlan对应的mstp实例的根桥不同以实现负载分担和主备备份-----注意：对于一个vlan来说mstp的根桥和vrrp的主交换机应该一致

**核心交换机1：**

sys

stp region-configuration

region-name campusnet1

revision-level 1

instance 1 vlan 10 // instance 实现负载均衡

instance 2 vlan 20

instance 3 vlan 30

instance 4 vlan 40

instance 5 vlan 50

instance 6 vlan 60

active region-configuration

stp instance 1 root primary

stp instance 2 root primary

stp instance 3 root primary

stp instance 4 root secondary

stp instance 5 root secondary

stp instance 6 root secondary

**核心交换机2：**

sys

stp region-configuration

region-name campusnet1

revision-level 1

instance 1 vlan 10

instance 2 vlan 20

instance 3 vlan 30

instance 4 vlan 40

instance 5 vlan 50

instance 6 vlan 60

active region-configuration

quit

stp instance 1 root secondary

stp instance 2 root secondary

stp instance 3 root secondary

stp instance 4 root primary

stp instance 5 root primary

stp instance 6 root primary

**交换机1：**

sys

stp region-configuration

region-name campusnet1

revision-level 1

instance 1 vlan 10

active region-configuration

**交换机2：**

sys

stp region-configuration

region-name campusnet1

revision-level 1

instance 2 vlan 20

active region-configuration

**交换机3：**

sys

stp region-configuration

region-name campusnet1

revision-level 1

instance 3 vlan 30

active region-configuration

**交换机4：**

sys

stp region-configuration

region-name campusnet1

revision-level 1

instance 4 vlan 40

active region-configuration

**交换机5：**

sys

stp region-configuration

region-name campusnet1

revision-level 1

instance 5 vlan 50

active region-configuration

**交换机6：**

sys

stp region-configuration

region-name campusnet1

revision-level 1

instance 6 vlan 60

active region-configuration

**4.vrrp方面：**对汇聚层和核心层的交换机路由器配置vrrp协议，实现不同vlan的主备备份和负载分担-----注意：对于一个vlan来说mstp的根桥和vrrp的主交换机应该一致

**核心交换机1：**

sys

int vlanif 10

vrrp vrid 1 virtual-ip 192.168.10.254

vrrp vrid 1 priority 110

vrrp vrid 1 preempt-mode timer delay 3

vrrp vrid 1 authentication-mode md5 campus

int vlanif 20

vrrp vrid 2 virtual-ip 192.168.20.254

vrrp vrid 2 priority 110

vrrp vrid 2 preempt-mode timer delay 3

vrrp vrid 2 authentication-mode md5 campus

int vlanif 30

vrrp vrid 3 virtual-ip 192.168.30.254

vrrp vrid 3 priority 110

vrrp vrid 3 preempt-mode timer delay 3

vrrp vrid 3 authentication-mode md5 campus

int vlanif 40

vrrp vrid 4 virtual-ip 192.168.40.254

vrrp vrid 4 priority 90

vrrp vrid 4 preempt-mode timer delay 3

vrrp vrid 4 authentication-mode md5 campus

int vlanif 50

vrrp vrid 5 virtual-ip 192.168.50.254

vrrp vrid 5 priority 90

vrrp vrid 5 preempt-mode timer delay 3

vrrp vrid 5 authentication-mode md5 campus

int vlanif 60

vrrp vrid 6 virtual-ip 192.168.60.254

vrrp vrid 6 priority 90

vrrp vrid 6 preempt-mode timer delay 3

vrrp vrid 6 authentication-mode md5 campus

int vlanif 90

vrrp vrid 9 virtual-ip 192.168.90.254

vrrp vrid 9 priority 90

vrrp vrid 9 preempt-mode timer delay 3

vrrp vrid 9 authentication-mode md5 campus

**核心交换机2：**

sys

int vlanif 10

vrrp vrid 1 virtual-ip 192.168.10.254

vrrp vrid 1 priority 90

vrrp vrid 1 preempt-mode timer delay 3

vrrp vrid 1 authentication-mode md5 campus

int vlanif 20

vrrp vrid 2 virtual-ip 192.168.20.254

vrrp vrid 2 priority 90

vrrp vrid 2 preempt-mode timer delay 3

vrrp vrid 2 authentication-mode md5 campus

int vlanif 30

vrrp vrid 3 virtual-ip 192.168.30.254

vrrp vrid 3 priority 90

vrrp vrid 3 preempt-mode timer delay 3

vrrp vrid 3 authentication-mode md5 campus

int vlanif 40

vrrp vrid 4 virtual-ip 192.168.40.254

vrrp vrid 4 priority 110

vrrp vrid 4 preempt-mode timer delay 3

vrrp vrid 4 authentication-mode md5 campus

int vlanif 50

vrrp vrid 5 virtual-ip 192.168.50.254

vrrp vrid 5 priority 110

vrrp vrid 5 preempt-mode timer delay 3

vrrp vrid 5 authentication-mode md5 campus

int vlanif 60

vrrp vrid 6 virtual-ip 192.168.60.254

vrrp vrid 6 priority 110

vrrp vrid 6 preempt-mode timer delay 3

vrrp vrid 6 authentication-mode md5 campus

int vlanif 90

vrrp vrid 9 virtual-ip 192.168.90.254

vrrp vrid 9 priority 110

vrrp vrid 9 preempt-mode timer delay 3

vrrp vrid 9 authentication-mode md5 campus

**5.nat方面：**在核心层交换机的出口流量处配置nat映射，acl设置成对内网已知的网段允许nat映射

**R1和2：**

**R1**

sys

acl 2999

rule 5 permit source 0.0.0.0 0.0.255.255

quit

int g2/0/0

nat outbound 2999

**R2**

sys

acl 2999

rule 5 permit source 0.0.0.0 0.0.255.255

quit

Int g4/0/2

nat outbound 2999

quit

**6.ospf方面：**

**核心交换机1：**

sys

ospf 1

area 0

network 192.168.10.100 0.0.0.255

network 192.168.20.100 0.0.0.255

network 192.168.30.100 0.0.0.255

network 192.168.40.100 0.0.0.255

network 192.168.50.100 0.0.0.255

network 192.168.60.100 0.0.0.255

network 192.168.1.1 0.0.0.255

network 192.168.2.1 0.0.0.255

network 192.168.90.1 0.0.0.255

**核心交换机2：**

sys

ospf 1

area 0

network 192.168.10.200 0.0.0.255

network 192.168.20.200 0.0.0.255

network 192.168.30.200 0.0.0.255

network 192.168.40.200 0.0.0.255

network 192.168.50.200 0.0.0.255

network 192.168.60.200 0.0.0.255

network 192.168.4.1 0.0.0.255

network 192.168.5.1 0.0.0.255

network 192.168.90.10 0.0.0.255

**路由1：**

sys

ospf 1

area 0

network 192.168.1.2 0.0.0.255

network 192.168.4.2 0.0.0.255

network 192.168.70.1 0.0.0.255

network 192.168.9.1 0.0.0.255

network 115.200.23.1 0.0.0.255

network 1.1.1.1 0.0.0.0

**路由2：**

sys

ospf 1

area 0

network 192.168.5.2 0.0.0.255

network 192.168.2.2 0.0.0.255

network 192.168.80.1 0.0.0.255

network 192.168.9.2 0.0.0.255

network 223.104.23.1 0.0.0.255

network 2.2.2.2 0.0.0.0

至此各个主机ping 1.1.1.1 ；2.2.2.2；115.200.23.2；223.104.23.2都能ping通

**7 igmp和pim（**直接利用单播路由表的路由信息进行组播报文RDF检查，创建组播路由表项，转发组播报文**）方面：**

**核心交换机1：**

sys

multicast routing-enable

int vlanif 10

pim sm

int vlanif 20

pim sm

int vlanif 30

pim sm

int vlanif 40

pim sm

int vlanif 50

pim sm

int vlanif 60

pim sm

int vlanif 70

pim sm

int vlanif 80

pim sm

int vlanif 90

pim sm

quit

int vlanif 10

igmp enable

igmp version 2

int vlanif 20

igmp enable

igmp version 2

int vlanif 30

igmp enable

igmp version 2

int vlanif 40

igmp enable

igmp version 2

int vlanif 50

igmp enable

igmp version 2

int vlanif 60

igmp enable

igmp version 2

pim

static-rp 1.1.1.1

**核心交换机2：**

sys

multicast routing-enable

int vlanif 10

pim sm

int vlanif 20

pim sm

int vlanif 30

pim sm

int vlanif 40

pim sm

int vlanif 50

pim sm

int vlanif 60

pim sm

int vlanif 71

pim sm

int vlanif 81

pim sm

int vlanif 91

pim sm

quit

int vlanif 10

igmp enable

igmp version 2

int vlanif 20

igmp enable

igmp version 2

int vlanif 30

igmp enable

igmp version 2

int vlanif 40

igmp enable

igmp version 2

int vlanif 50

igmp enable

igmp version 2

int vlanif 60

igmp enable

igmp version 2

pim

static-rp 1.1.1.1

**路由器1：**

sys

multicast routing-enable

int g0/0/1

pim sm

int g0/0/2

pim sm

int g2/0/2

pim sm

int g2/0/0

pim sm

int g2/0/1

pim sm

int loopback 1

pim sm

quit

pim

static-rp 1.1.1.1

c-bsr priority 3

c-bsr loopback 1

c-rp priority 1

c-rp loopback 1

quit

**路由器2：**

sys

multicast routing-enable

int g4/0/2

pim sm

int g0/0/1

pim sm

int g0/0/2

pim sm

int g2/0/3

pim sm

int g2/0/2

pim sm

int loopback 1

pim sm

quit

pim

static-rp 1.1.1.1

c-rp priority 3

c-rp loopback 1

quit

至此，各个主机都能收到组播源的数据（需要vlc播放器）

**8.bfd方面：**bfd协议用于辅助vrrp和（ospf协议）实现快速切换主备，以减少流量的丢失提高网络健壮性

**核心交换机1：**

配置静态BFD会话

# 在SwitchA上配置BFD会话

sys

bfd 1 bind peer-ip 192.168.1.2 source-ip 192.168.1.1

bfd 1

discriminator local 11

discriminator remote 21

detect-multiplier 3

min-tx-interval 100

min-rx-interval 100

commit

quit

# bfd 2

**bfd 2 bind peer-ip 192.168.2.2 source-ip 192.168.2.1**

**bfd 2**

**discriminator local 12**

**discriminator remote 22**

**detect-multiplier 3**

**min-tx-interval 100**

**min-rx-interval 100**

**commit**

**quit**

int vlanif 10

vrrp vrid 1 track bfd-session 11 reduced 10

vrrp vrid 1 track bfd-session 12 reduced 10

int vlanif 20

vrrp vrid 2 track bfd-session 11 reduced 10

vrrp vrid 2 track bfd-session 12 reduced 10

int vlanif 30

vrrp vrid 3 track bfd-session 11 reduced 10

vrrp vrid 3 track bfd-session 12 reduced 10

**核心交换机2：**

sys

bfd

bfd 3 bind peer-ip 192.168.5.2 source-ip 192.168.5.1

bfd 3

discriminator local 13

discriminator remote 23

detect-multiplier 3

min-tx-interval 100

min-rx-interval 100

commit

quit

# bfd 4

bfd 4 bind peer-ip 192.168.4.2 source-ip 192.168.4.1

bfd 4

discriminator local 14

discriminator remote 24

detect-multiplier 3

min-tx-interval 100

min-rx-interval 100

commit

quit

int vlanif 40

vrrp vrid 4 track bfd-session 13 reduced 10

vrrp vrid 4 track bfd-session 14 reduced 10

int vlanif 50

vrrp vrid 5 track bfd-session 13 reduced 10

vrrp vrid 5 track bfd-session 14 reduced 10

int vlanif 60

vrrp vrid 6 track bfd-session 13 reduced 10

vrrp vrid 6 track bfd-session 14 reduced 10

**路由器1：**

sys

bfd

bfd 1 bind peer-ip 192.168.1.1 source-ip 192.168.1.2

bfd 1

discriminator local 21

discriminator remote 11

detect-multiplier 3

min-tx-interval 100

min-rx-interval 100

commit

quit

bfd 4

bfd 4 bind peer-ip 192.168.4.1 source-ip 192.168.4.2

bfd 4

discriminator local 24

discriminator remote 14

detect-multiplier 3

min-tx-interval 100

min-rx-interval 100

commit

quit

**路由器2：**

sys

bfd

bfd 2 bind peer-ip 192.168.2.1 source-ip 192.168.2.2

bfd 2

discriminator local 22

discriminator remote 12

detect-multiplier 3

min-tx-interval 100

min-rx-interval 100

commit

quit

#bfd 3

bfd 3 bind peer-ip 192.168.5.1 source-ip 192.168.5.2

bfd 3

discriminator local 23

discriminator remote 13

detect-multiplier 3

min-tx-interval 100

min-rx-interval 100

commit

quit

**display vrrp brief**

**display vrrp 1**

**9.端口镜像/防火墙方面：在核心层路由器连接防火墙侧配置端口镜像，使其通过流量同时复制到防火墙，用于入侵检测或者攻击分析**

**路由器1：**

sys

observe-port interface GigabitEthernet 2/0/2

int g0/0/1

mirror to observe-port both

int g0/0/2

mirror to observe-port both

int g2/0/0

mirror to observe-port both

int g2/0/1

mirror to observe-port both

**路由器2：**

sys

observe-port interface GigabitEthernet 2/0/3

int g0/0/1

mirror to observe-port both

int g0/0/2

mirror to observe-port both

int g2/0/2

mirror to observe-port both

int g4/0/2

mirror to observe-port both

**10.telnet配置交换机和路由器**

**路由器1、2和核心交换机：**

sys

aaa

local-user campaus privilege level 15

local-user campaus password cipher campaus

quit

user-interface vty 0 4

authentication-mode aaa

quit

**dns：**

**核心交换机1/2：**

sys

ip pool forvlan10

dns-list 223.104.23.20

ip pool forvlan20

dns-list 223.104.23.20

ip pool forvlan30

dns-list 223.104.23.20

ip pool forvlan40

dns-list 223.104.23.20

ip pool forvlan50

dns-list 223.104.23.20

ip pool forvlan60

dns-list 223.104.23.20

**12.楼层交换机配置；**

**一楼交换机1**

Vlan batch 10 90

Interface GigabitEthernet 0/0/23

Port link-type trunk

Port trunk allow-pass vlan all

Port trunk pvid vlan 90

Q

Interface Vlanif 90

Ip address 192.168.90.11 24

Q

**二楼交换机1**

Vlan batch 20 90

Interface GigabitEthernet 0/0/23

Port link-type trunk

Port trunk allow-pass vlan 20 90

Port trunk pvid vlan 90

Q

Interface Vlanif 90

Ip address 192.168.90.12 24

Q

**三楼交换机1**

Vlan batch 30 90

Interface GigabitEthernet 0/0/23

Port link-type trunk

Port trunk allow-pass vlan 30 90

Port trunk pvid vlan 90

Q

Interface Vlanif 90

Ip address 192.168.90.13 24

Q

**四楼交换机1**

Vlan batch 40 90

Interface GigabitEthernet 0/0/23

Port link-type trunk

Port trunk allow-pass vlan 40 90

Port trunk pvid vlan 90

Q

Interface Vlanif 90

Ip address 192.168.90.14 24

Q

**五楼交换机1**

Vlan batch 50 90

Interface GigabitEthernet 0/0/23

Port link-type trunk

Port trunk allow-pass vlan 50 90

Port trunk pvid vlan 90

Q

Interface Vlanif 90

Ip address 192.168.90.15 24

Q

**六楼交换机1**

Vlan batch 60 90

Interface GigabitEthernet 0/0/23

Port link-type trunk

Port trunk allow-pass vlan 60 90

Port trunk pvid vlan 90

Q

Interface Vlanif 90

Ip address 192.168.90.16 24

Q

**13.AC控制器配置：**

sys

sys AC

user-interface vty 0 4

protocol inbound telnet

authentication-mode aaa

q

aaa

local-user admin password irreversible-cipher Panpenghui@123

local-user admin service-type telnet

local-user admin privilege level 15

vlan batch 90

interface GigabitEthernet 0/0/24

port link-type trunk

port trunk allow-pass vlan all

port trunk pvid vlan 90

interface vlanif 90

ip address 192.168.90.99 24

Capwap source interface vlanif 90

**1.创建SSID文件并定义SSID**

Wlan

Ssid-profile name 1F

Ssid 1F

Quit

Wlan

Ssid-profile name 2F

Ssid 2F

Quit

Ssid-profile name 3F

Ssid 3F

Quit

Ssid-profile name 4F

Ssid 4F

Quit

Ssid-profile name 5F

Ssid 5F

Quit

Ssid-profile name 6F

Ssid 6F

Quit

**2.创建AP组，并将AP组关联到SSID和VLAN**

创建VAP配置文件

Vap-profile name 1F

Service-vlan vlan-id 10

Ssid-profile 1F

Quit

Vap-profile name 2F

Service-vlan vlan-id 20

Ssid-profile 2F

Quit

Vap-profile name 3F

Service-vlan vlan-id 30

Ssid-profile 3F

Quit

Vap-profile name 4F

Service-vlan vlan-id 40

Ssid-profile 4F

Quit

Vap-profile name 5F

Service-vlan vlan-id 50

Ssid-profile 5F

Quit

Vap-profile name 6F

Service-vlan vlan-id 60

Ssid-profile 6F

Quit

**3.配置AP组引用VAP模板**

Ap-group name PPH1

Vap-profile F1 wlan 1 radio 0

Vap-profile F1 wlan 1 radio 1

Ap-group name PPH2

Vap-profile F2 wlan 1 radio 0

Vap-profile F2 wlan 1 radio 1

Ap-group name PPH3

Vap-profile F3 wlan 1 radio 0

Vap-profile F3 wlan 1 radio 1

Ap-group name PPH4

Vap-profile F4 wlan 1 radio 0

Vap-profile F4 wlan 1 radio 1

Ap-group name PPH5

Vap-profile F5 wlan 1 radio 0

Vap-profile F5 wlan 1 radio 1

Ap-group name PPH6

Vap-profile F6 wlan 1 radio 0

Vap-profile F6 wlan 1 radio 1

Quit

**4.将AP加入到AP组中，并配置AP名、AP组；**

Ap-id 1 ap-mac 00E0-FC3F-0C90

AP-NAME KJ-1F-AP1

Ap-group PPH1

Q

Ap-id 2 ap-mac 00E0-FCF9-0F20

Ap-name KJ-2F-AP1

Ap-group PPH2

Quit

Ap-id 3 ap-mac 00E0-FCBC-51D0

Ap-name KJ-3F-AP

Ap-group PPH3

Quit

Ap-id 4 ap-mac 00E0-FC0E-1470

Ap-name KJ-4F-AP1

Ap-group PPH4

Quit

Ap-id 5 ap-mac 00E0-FCCA-4C10

Ap-name KJ-5F-AP1

Ap-group PPH5

Quit

Ap-id 6 ap-mac 00E0-FC84-50B0

Ap-name KJ-6F-AP1

Ap-group PPH6

Quit

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致谢