最终配置参考

1. eNSP及VRP基础操作

1.2 熟悉VRP基本操作

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

header shell information "Welcome to Huawei certification lab"

header login information "hello"

#

clock timezone BJ add 08:00:00

clock daylight-saving-time Day Light Saving Time repeating 12:32 9-1 12:32 11-23 00:00 2005 2005

#

interface GigabitEthernet0/0/0

ip address 10.1.1.1 255.255.255.0

#

Return

1.3 熟悉常用的IP相关命令

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.0.1.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.2.254 255.255.255.0

#

return

1.4 配置通过Telnet登录系统

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.1.1.254 255.255.255.0

#

Return

<R2>display current-configuration

#

sysname R2

#

interface Ethernet0/0/0

ip address 10.1.1.1 255.255.255.0

#

return

<R3>display current-configuration

#

sysname R3

#

interface Ethernet0/0/0

ip address 10.1.1.2 255.255.255.0

#

return

1.5 配置通过STelnet登录系统

# 最终配置

<R1>display current-configuration

sysname R1

#

set cpu-usage threshold 80 restore 75

#

rsa peer-public-key 10.1.1.254

public-key-code begin

3047

0240

B910F7D8 EF50B04E CCF8692A 4F1B3FB3 202C3E66 B6D2C7EB FDBF0909 ED160F5E

76B5D916 CBB29432 F9044E04 8434B0AB E8FAB968 1672958B F732F788 0DA94F85

0203

010001

public-key-code end

peer-public-key end

#

interface GigabitEthernet0/0/0

ip address 10.1.1.1 255.255.255.0

#

ssh client 10.1.1.254 assign rsa-key 10.1.1.254

ssh client first-time enable

<R2>display current-configuration

sysname R2

#

aaa

authentication-scheme default

authorization-scheme default

accounting-scheme default

domain default

domain default\_admin

local-user admin password cipher %$%$K8m.Nt84DZ}e#<0`8bmE3Uw}%$%$

local-user admin service-type http

local-user huawei1 password cipher %$%$cRb~BL,]5D(!v-QiMgd$:RxE%$%$

local-user huawei1 privilege level 3

local-user huawei1 service-type ssh

#

interface GigabitEthernet0/0/0

ip address 10.1.1.254 255.255.255.0

#

stelnet server enable

#

user-interface vty 0 4

auth

protocol inbound ssh

1.6 配置通过FTP进行文件操作

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

ftp server enable

#

aaa

local-user ftp password cipher %$%$%/xlTEcUeFU\_="WB+iPI\_n:M%$%$

local-user ftp ftp-directory flash:

local-user ftp service-type ftp

#

interface GigabitEthernet0/0/0

ip address 10.0.1.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.2.254 255.255.255.0

#

Return

1. 静态路由

2.1 静态路由及默认路由基本配置

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface Ethernet0/0/0

ip address 192.168.10.1 255.255.255.0

#

interface Serial0/0/0

link-protocol ppp

ip address 10.0.12.1 255.255.255.0

#

ip route-static 0.0.0.0 0.0.0.0 10.0.12.2

#

Return

<R2>display current-configuration

#

sysname R2

#

interface Serial0/0/0

link-protocol ppp

ip address 10.0.23.2 255.255.255.0

#

interface Serial0/0/1

link-protocol ppp

ip address 10.0.12.2 255.255.255.0

#

ip route-static 192.168.10.0 255.255.255.0 Serial0/0/1

ip route-static 192.168.20.0 255.255.255.0 10.0.23.3

#

Return

<R3>display current-configuration

#

sysname R3

#

interface Ethernet0/0/0

ip address 192.168.20.3 255.255.255.0

#

interface Serial0/0/1

link-protocol ppp

ip address 10.0.23.3 255.255.255.0

#

ip route-static 0.0.0.0 0.0.0.0 Serial0/0/1

#

Return

2.2 浮动静态路由及负载均衡

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 192.168.10.1 255.255.255.0

#

interface Serial1/0/0

link-protocol ppp

ip address 10.1.12.1 255.255.255.0

#

interface Serial1/0/1

link-protocol ppp

ip address 10.1.13.1 255.255.255.0

#

ip route-static 192.168.20.0 255.255.255.0 10.1.13.3

ip route-static 192.168.20.0 255.255.255.0 10.1.12.2

#

Return

<R2>display current-configuration

#

sysname R2

#

interface Serial1/0/0

link-protocol ppp

ip address 10.1.12.2 255.255.255.0

#

interface Serial1/0/1

link-protocol ppp

ip address 10.1.23.2 255.255.255.0

#

ip route-static 192.168.10.0 255.255.255.0 10.1.12.1

ip route-static 192.168.20.0 255.255.255.0 10.1.23.3

#

Return

<R3>display current-configuration

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 192.168.20.1 255.255.255.0

#

interface Serial1/0/0

link-protocol ppp

ip address 10.1.23.3 255.255.255.0

#

interface Serial1/0/1

link-protocol ppp

ip address 10.1.13.3 255.255.255.0

#

ip route-static 192.168.10.0 255.255.255.0 10.1.13.1

ip route-static 192.168.10.0 255.255.255.0 10.1.23.2

#

Return

1. RIP

3.1 RIP路由协议基本配置

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface Ethernet0/0/0

ip address 10.0.12.1 255.255.255.0

#

interface LoopBack0

ip address 10.0.1.1 255.255.255.0

#

rip 1

version 2

network 10.0.0.0

#

return

<R2>display current-configuration

#

sysname R2

#

interface Ethernet0/0/0

ip address 10.0.12.2 255.255.255.0

#

interface LoopBack0

ip address 10.0.2.2 255.255.255.0

#

rip 1

version 2

network 10.0.0.0

#

return

3.2 配置RIPv2的认证

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 192.168.10.1 255.255.255.0

#

interface GigabitEthernet0/0/1

link-protocolppp

ip address 10.0.12.1 255.255.255.0

rip authentication-mode md5 nonstandard $GOOD\_=eh\*)f8\~B3e~&Z5%# 1

#

rip 1

version 2

network 192.168.10.0

network 10.0.0.0

#

return

<R2>display current-configuration

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 192.168.20.1 255.255.255.0

#

interface GigabitEthernet0/0/1

link-protocolppp

ip address 10.0.12.2 255.255.255.0

rip authentication-mode md5 nonstandard &-nhYkNR4BC,%TLlYj-OAF@#

#

rip 1

version 2

network 192.168.20.0

network 10.0.0.0

#

return

<R3>display current-configuration

#

sysname R3

#

Interface loopback0

ip address 192.168.10.10 255.255.255.0

#

Interface loopback1

ip address 192.168.20.20 255.255.255.0

#

interface GigabitEthernet0/0/1

link-protocolppp

ip address 10.0.12.1 255.255.255.0

rip authentication-mode md5 nonstandard $GOOD\_=eh\*)f8\~B3e~&Z5%# 1

#

rip 1

version 2

network 192.168.10.0

network 192.168.20.0

network 10.0.0.0

#

Return

3.3 RIP路由协议的汇总

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface Serial0/0/0

link-protocol ppp

ip address 192.168.12.1 255.255.255.0

#

rip 1

version 2

network 192.168.12.0

#

return

<R2>display current-configuration

#

sysname R2

#

interface Serial0/0/0

link-protocol ppp

ip address 192.168.23.2 255.255.255.0

#

interface Serial0/0/1

link-protocol ppp

ip address 192.168.12.2 255.255.255.0

#

rip 1

version 2

network 192.168.12.0

network 192.168.23.0

#

return

<R3>display current-configuration

#

sysname R3

#

interface Serial0/0/1

link-protocol ppp

ip address 192.168.23.3 255.255.255.0

rip summary-address 3.3.0.0 255.255.252.0

#

interface LoopBack0

ip address 3.3.0.3 255.255.255.0

#

interface LoopBack1

ip address 3.3.1.3 255.255.255.0

#

interface LoopBack2

ip address 3.3.2.3 255.255.255.0

#

interface LoopBack3

ip address 3.3.3.3 255.255.255.0

#

rip 1

undo summary

version 2

network 192.168.23.0

network 3.0.0.0

#

return

3.4 配置RIP的版本兼容、定时器及协议优先级

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.0.12.1 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 192.168.10.1 255.255.255.0

#

rip 1

version 2

network 10.0.0.0

network 192.168.10.0

preference 90

timers rip 20 120 60

#

return

<R2>display current-configuration

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.0.12.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 192.168.20.1 255.255.255.0

#

rip 1

version 2

network 10.0.0.0

network 192.168.20.0

#

return

3.5 配置RIP抑制接口及单播更新

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/1

ip address 172.16.1.254 255.255.255.0

#

rip 1

peer 172.16.1.100

peer 172.16.1.200

network 172.16.0.0

silent-interface GigabitEthernet0/0/1

#

Return

<R2>display current-configuration

#

sysname R2

#

interface Ethernet1/0/1

ip address 172.16.1.100 255.255.255.0

#

interface Ethernet1/0/0

ip address 172.16.2.254 255.255.255.0

#

rip 1

peer 172.16.1.254

peer 172.16.1.200

network 172.16.0.0

silent-interface Ethernet1/0/0

silent-interface Ethernet1/0/1

#

Return

<R3>display current-configuration

#

sysname R3

#

interface Ethernet1/0/1

ip address 172.16.1.200 255.255.255.0

undo rip output

#

interface Ethernet1/0/0

ip address 192.168.1.254 255.255.255.0

#

rip 1

peer 172.16.1.254

network 172.16.0.0

network 192.168.1.0

#

return

3.6 RIP与不连续子网

# 最终配置

<R1>display current-configuration

#

interface Ethernet0/0/0

ip address 10.0.12.1 255.255.255.0

#

rip 1

undo summary

version 2

network 10.0.0.0

#

<R2> display current-configuration

#

sysname R2

#

interface Ethernet0/0/0

ip address 10.0.12.2 255.255.255.0

#

interface Serial0/0/0

link-protocol ppp

ip address 192.168.23.2 255.255.255.0

#

rip 1

undo summary

version 2

network 10.0.0.0

network 192.168.23.0

#

<R3>display current-configuration

#

sysname R3

#

interface Serial0/0/0

link-protocol ppp

ip address 192.168.23.3 255.255.255.0

#

interface Serial0/0/1

link-protocol ppp

ip address 192.168.34.3 255.255.255.0

#

rip 1

undo summary

version 2

network 192.168.23.0

network 192.168.34.0

#

<R4>display current-configuration

#

sysname R4

interface Ethernet0/0/0

ip address 10.0.45.4 255.255.255.0

interface Serial0/0/1

link-protocol ppp

ip address 192.168.34.4 255.255.255.0

#

rip 1

undo summary

version 2

network 192.168.34.0

network 10.0.0.0

<R5>display current-configuration

#

sysname R5

#

interface Ethernet0/0/0

ip address 10.0.45.5 255.255.255.0

#

rip 1

undo summary

version 2

network 10.0.0.0

#

3.7 RIP的水平分割及触发更新

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 172.16.1.1 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 172.16.2.1 255.255.255.0

undo rip split-horizon

#

rip 1

version 2

network 172.16.0.0

#

Return

<R2>display current-configuration

#

sysname R2

#

interface Ethernet1/0/0

ip address 192.168.2.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 172.16.2.2 255.255.255.0

rip poison-reverse

#

rip 1

version 2

network 192.168.2.0

network 172.16.0.0

#

Return

<R3>display current-configuration

#

sysname R3

#

interface Ethernet1/0/0

ip address 192.168.1.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 172.16.1.2 255.255.255.0

#

rip 1

version 2

network 172.16.0.0

network 192.168.1.0

#

return

3.8 配置RIP路由附加度量值

# 最终配置

<r1>display current-configuration

#

interface GigabitEthernet0/0/0

ip address 20.1.1.1 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 20.2.2.1 255.255.255.0

rip metricin 2

#

interface GigabitEthernet0/0/2

ip address 10.1.1.254 255.255.255.0

#

rip 1

undo summary

version 2

network 10.0.0.0

network 20.0.0.0

#

Return

<r2>display current-configuration

sysname r2

#

interface GigabitEthernet0/0/0

ip address 20.1.1.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 30.1.1.2 255.255.255.0

rip metricout 3

#

rip 1

undo summary

version 2

network 20.0.0.0

network 30.0.0.0

<r3>display current-configuration

#

sysname r3

#

interface GigabitEthernet0/0/0

ip address 30.2.2.3 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 20.2.2.3 255.255.255.0

#

rip 1

undo summary

version 2

network 20.0.0.0

network 30.0.0.0

#

Return

<r4>display current-configuration

#

sysname r4

#

interface GigabitEthernet0/0/0

ip address 30.2.2.4 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 30.1.1.4 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 40.1.1.254 255.255.255.0

#

rip 1

undo summary

version 2

network 30.0.0.0

network 40.0.0.0

#

return

3.9 RIP的故障处理

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 192.168.1.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 192.168.2.2 255.255.255.0

#

rip 1

version 2

network 192.168.1.0

network 192.168.2.0

#

Return

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

interface Ethernet1/0/0

ip address 172.16.1.254 255.255.255.0

#

interface GigabitEthernet0/0/0

ip address 192.168.1.1 255.255.255.0

#

rip 1

version 2

network 172.16.0.0

network 192.168.1.0

#

Return

<R3>display current-configuration

[V200R003C00]

#

sysname R3

#

interface Ethernet1/0/0

ip address 172.16.2.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 192.168.2.1 255.255.255.0

#

rip 1

version 2

network 172.16.0.0

network 192.168.2.0

#

return

3.10 RIP的路由引入

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface Ethernet0/0/1

ip address 30.1.1.1 255.255.255.0

#

interface Ethernet0/0/2

ip address 10.1.1.1 255.255.255.0

#

interface Ethernet0/0/3

ip address 10.1.2.1 255.255.255.0

#

rip 1

undo summary

version 2

network 30.0.0.0

network 10.0.0.0

import-route static

#

ip route-static 40.1.1.0 255.255.255.0 30.1.1.2

#

return

<R2>display current-configuration

#

sysname R2

#

interface Ethernet0/0/0

ip address 20.1.1.254 255.255.255.0

#

interface Ethernet0/0/2

ip address 10.1.1.2 255.255.255.0

#

rip 1

undo summary

version 2

network 10.0.0.0

import-route direct

#

return

<R3>display current-configuration

#

sysname R3

#

interface Ethernet0/0/0

ip address 20.1.2.254 255.255.255.0

#

interface Ethernet0/0/3

ip address 10.1.2.2 255.255.255.0

#

rip 1

undo summary

version 2

network 10.0.0.0

network 20.0.0.0

#

return

<R4>display current-configuration

#

sysname R4

#

interface Ethernet0/0/1

ip address 30.1.1.2 255.255.255.0

#

interface Ethernet0/0/2

ip address 40.1.1.254 255.255.255.0

#

interface Ethernet0/0/3

#

ip route-static 0.0.0.0 0.0.0.0 30.1.1.1

#

Return

1. OSPF

4.1 OSPF单区域配置

# 最终配置

**<R1>display current-configuration**

[V200R003C00]

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 172.16.10.1 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 172.16.20.1 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 172.16.1.254 255.255.255.0

#

interface NULL0

#

ospf 1

area 0.0.0.0

network 172.16.1.0 0.0.0.255

network 172.16.10.0 0.0.0.255

network 172.16.20.0 0.0.0.255

#

Return

**<R2>display current-configuration**

[V200R003C00]

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 172.16.10.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 172.16.30.2 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 172.16.2.254 255.255.255.0

#

interface NULL0

#

ospf 1

area 0.0.0.0

network 172.16.2.0 0.0.0.255

network 172.16.10.0 0.0.0.255

network 172.16.30.0 0.0.0.255

#

Return

**<R3>display current-configuration**

[V200R003C00]

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 172.16.30.3 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 172.16.20.3 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 172.16.3.254 255.255.255.0

#

interface NULL0

#

ospf 1

area 0.0.0.0

network 172.16.3.0 0.0.0.255

network 172.16.20.0 0.0.0.255

network 172.16.30.0 0.0.0.255

#

return

4.2 OSPF多区域配置

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.0.12.1 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.13.1 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.15.1 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.12.0 0.0.0.255

network 10.0.13.0 0.0.0.255

area 0.0.0.1

network 10.0.15.0 0.0.0.255

<R2>display current-configuration

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.0.12.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.24.2 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.26.2 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.12.0 0.0.0.255

network 10.0.24.0 0.0.0.255

area 0.0.0.2

network 10.0.26.0 0.0.0.255

<R3>display current-configuration

#

sysname R3

#

interface Ethernet4/0/0

ip address 10.0.3.254 255.255.255.0

#

interface GigabitEthernet0/0/0

ip address 10.0.34.3 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.13.3 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.35.3 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.3.0 0.0.0.255

network 10.0.13.0 0.0.0.255

network 10.0.34.0 0.0.0.255

area 0.0.0.1

network 10.0.35.0 0.0.0.255

<R4>display current-configuration

#

sysname R4

#

interface Ethernet4/0/0

ip address 10.0.4.254 255.255.255.0

#

interface GigabitEthernet0/0/0

ip address 10.0.34.4 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.24.4 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.46.4 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.4.0 0.0.0.255

network 10.0.24.0 0.0.0.255

network 10.0.34.0 0.0.0.255

area 0.0.0.2

network 10.0.46.0 0.0.0.255

<R5>display current-configuration

#

sysname R5

#

interface GigabitEthernet0/0/0

ip address 10.0.15.5 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.35.5 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.1.254 255.255.255.0

#

ospf 1

area 0.0.0.1

network 10.0.1.0 0.0.0.255

network 10.0.15.0 0.0.0.255

network 10.0.35.0 0.0.0.255

<R6>display current-configuration

#

sysname R6

#

interface GigabitEthernet0/0/0

ip address 10.0.26.6 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.46.6 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.4.254 255.255.255.0

#

ospf 1

area 0.0.0.2

network 10.0.2.0 0.0.0.255

network 10.0.26.0 0.0.0.255

network 10.0.46.0 0.0.0.255

4.3 配置OSPF的认证

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.0.12.1 255.255.255.0

#

interface LoopBack0

ip address 1.1.1.1 255.255.255.255

#

ospf 1

area 0.0.0.1

authentication-mode simple cipher %$%$uLH><^,C/Zu9F"Wr4`2P;4G\*%$%$

network 1.1.1.1 0.0.0.0

network 10.0.12.0 0.0.0.255

#

return

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.0.12.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.24.2 255.255.255.0

ospf authentication-mode md5 1 cipher %$%$O(rq6{i@~:ZxjOVu7@f!;sq]%$%$

#

interface GigabitEthernet0/0/2

ip address 10.0.23.2 255.255.255.0

#

interface LoopBack0

ip address 2.2.2.2 255.255.255.255

#

ospf 1

area 0.0.0.0

authentication-mode md5 1 cipher %$%$o~s#(Y9'`2&uxE;1e\_WE;<Td%$%$

network 2.2.2.2 0.0.0.0

network 10.0.23.0 0.0.0.255

area 0.0.0.1

authentication-mode simple cipher %$%$>c<a<69SDF!#8M;8GBGN;8,9%$%$

network 10.0.12.0 0.0.0.255

network 10.0.24.0 0.0.0.255

#

return

<R3>display current-configuration

[V200R003C00]

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 10.0.35.3 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.36.3 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.23.3 255.255.255.0

#

interface LoopBack0

ip address 3.3.3.3 255.255.255.255

#

ospf 1

area 0.0.0.0

authentication-mode md5 1 cipher %$%$b>g'8Gle#Ank|^3"RnaO;EXh%$%$

network 3.3.3.3 0.0.0.0

network 10.0.23.0 0.0.0.255

network 10.0.35.0 0.0.0.255

network 10.0.36.0 0.0.0.255

#

Return

<R4>display current-configuration

[V200R003C00]

#

sysname R4

#

interface GigabitEthernet0/0/0

ip address 10.0.24.4 255.255.255.0

ospf authentication-mode md5 1 cipher %$%$82'];lU:U:auL-%{~n4P;}&X%$%$

#

interface LoopBack0

ip address 4.4.4.4 255.255.255.255

#

ospf 1

area 0.0.0.1

authentication-mode simple cipher %$%$$iC}.E|#N.N];YLjT^),;792%$%$

network 4.4.4.4 0.0.0.0

network 10.0.24.0 0.0.0.255

#

Return

<R5>display current-configuration

[V200R003C00]

#

sysname R5

#

interface GigabitEthernet0/0/0

ip address 10.0.35.5 255.255.255.0

#

#

interface LoopBack0

ip address 5.5.5.5 255.255.255.255

#

ospf 1

area 0.0.0.0

authentication-mode md5 1 cipher %$%$}sc&9m~)\_VH\z7E\MphV;Fc(%$%$

network 5.5.5.5 0.0.0.0

network 10.0.35.0 0.0.0.255

#

Return

<R6>display current-configuration

[V200R003C00]

#

sysname R6

#

interface GigabitEthernet0/0/0

ip address 10.0.36.6 255.255.255.0

#

interface LoopBack0

ip address 6.6.6.6 255.255.255.255

#

ospf 1

area 0.0.0.0

authentication-mode md5 1 cipher %$%$cMpIQsdGLE([/e,rBSH%;F>O%$%$

network 6.6.6.6 0.0.0.0

network 10.0.36.0 0.0.0.255

#

Return

4.4 OSPF被动接口配置

# 最终配置

<R1>display current-configuration

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.0.3.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.13.1 255.255.255.0

#

ospf 1

silent-interface GigabitEthernet0/0/0

area 0.0.0.0

network 10.0.3.0 0.0.0.255

network 10.0.13.0 0.0.0.255

<R2>display current-configuration

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.0.23.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.4.254 255.255.255.0

#

ospf 1

silent-interface GigabitEthernet0/0/1

area 0.0.0.0

network 10.0.4.0 0.0.0.255

network 10.0.23.0 0.0.0.255

<R3>display current-configuration

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 10.0.13.3 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.23.3 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.30.3 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.13.0 0.0.0.255

network 10.0.23.0 0.0.0.255

network 10.0.30.0 0.0.0.255

<R4>display current-configuration

#

sysname R4

#

interface GigabitEthernet0/0/0

ip address 10.0.30.4 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.1.254 255.255.255.0

#

ospf enable 4 area 0.0.0.0

#

ospf 1

silent-interface all

undo silent-interface GigabitEthernet0/0/0

area 0.0.0.0

network 10.0.1.0 0.0.0.255

network 10.0.30.0 0.0.0.255

<R5>display current-configuration

#

sysname R5

#

interface GigabitEthernet0/0/0

ip address 10.0.30.5 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.2.254 255.255.255.0

#

ospf 1

silent-interface GigabitEthernet0/0/0

silent-interface GigabitEthernet0/0/1

area 0.0.0.0

network 10.0.2.0 0.0.0.255

network 10.0.30.0 0.0.0.255

4.5 理解OSPF Router-ID

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.0.1.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.12.1 255.255.255.0

#

interface LoopBack0

ip address 1.1.1.1 255.255.255.255

#

ospf 1 router-id 1.1.1.1

area 0.0.0.0

network 10.0.1.0 0.0.0.255

network 10.0.12.0 0.0.0.255

#

Return

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

router id 3.3.3.3

#

interface GigabitEthernet0/0/0

ip address 10.0.12.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.23.2 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.24.2 255.255.255.0

#

interface LoopBack0

ip address 2.2.2.2 255.255.255.0

#

ospf 1 router-id 2.2.2.2

area 0.0.0.0

network 10.0.12.0 0.0.0.255

network 10.0.23.0 0.0.0.255

network 10.0.24.0 0.0.0.255

#

Return

<R3>display current-configuration

[V200R003C00]

#

sysname R3

#

router id 3.3.3.3

#

interface GigabitEthernet0/0/0

ip address 10.0.23.3 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.2.254 255.255.255.0

#

interface LoopBack0

ip address 3.3.3.3 255.255.255.255

#

ospf 1 router-id 3.3.3.3

area 0.0.0.0

network 3.3.3.3 0.0.0.0

network 10.0.23.0 0.0.0.255

#

return

<R4>display current-configuration

[V200R003C00]

#

sysname R4

#

interface GigabitEthernet0/0/0

ip address 10.0.24.4 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.3.254 255.255.255.0

#

interface LoopBack0

ip address 4.4.4.4 255.255.255.255

#

ospf 1 router-id 3.3.3.3

area 0.0.0.0

network 10.0.3.0 0.0.0.255

network 10.0.24.0 0.0.0.255

#

Return

4.6 OSPF的DR与BDR

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

router id 1.1.1.1

#

interface GigabitEthernet0/0/0

ip address 172.16.1.1 255.255.255.0

ospf dr-priority 100

#

interface GigabitEthernet0/0/1

#

interface GigabitEthernet0/0/2

#

interface NULL0

#

interface LoopBack0

ip address 1.1.1.1 255.255.255.255

#

ospf 1

area 0.0.0.0

network 172.16.1.0 0.0.0.255

#

Return

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

router id 2.2.2.2

#

interface GigabitEthernet0/0/0

ip address 172.16.1.2 255.255.255.0

ospf dr-priority 50

#

interface GigabitEthernet0/0/1

#

interface GigabitEthernet0/0/2

#

interface NULL0

#

ospf 1

area 0.0.0.0

network 172.16.1.0 0.0.0.255

#

Return

<R3>display current-configuration

[V200R003C00]

#

sysname R3

#

router id 3.3.3.3

#

interface GigabitEthernet0/0/0

ip address 172.16.1.3 255.255.255.0

#

interface GigabitEthernet0/0/1

#

interface GigabitEthernet0/0/2

#

interface NULL0

#

ospf 1

area 0.0.0.0

network 172.16.1.0 0.0.0.255

#

Return

<R4>display current-configuration

[V200R003C00]

#

sysname R4

#

router id 4.4.4.4

#

interface GigabitEthernet0/0/0

ip address 172.16.1.4 255.255.255.0

ospf dr-priority 0

#

interface GigabitEthernet0/0/1

#

interface GigabitEthernet0/0/2

#

interface NULL0

#

ospf 1

area 0.0.0.0

network 172.16.1.0 0.0.0.255

4.7 OSPF开销值、协议优先级及计时器的修改

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

interface Serial4/0/0

link-protocol ppp

ip address 10.0.12.1 255.255.255.0

#

interface GigabitEthernet0/0/0

ip address 10.0.1.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.13.1 255.255.255.0

ospf cost 1000

ospf timer hello 20

#

ospf 1

preference 110

area 0.0.0.0

network 10.0.1.0 0.0.0.255

network 10.0.12.0 0.0.0.255

network 10.0.13.0 0.0.0.255

#

<R2>display current-configuration

#

sysname R2

#

#

interface Serial4/0/0

link-protocol ppp

ip address 10.0.12.2 255.255.255.0

#

interface Serial4/0/1

link-protocol ppp

ip address 10.0.24.2 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.12.0 0.0.0.255

network 10.0.24.0 0.0.0.255

#

<R3>display current-configuration

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 10.0.13.3 255.255.255.0

ospf timer hello 20

#

interface GigabitEthernet0/0/1

ip address 10.0.34.3 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.13.0 0.0.0.255

network 10.0.34.0 0.0.0.255

#

<R4>display current-configuration

#

sysname R4

#

interface Serial4/0/0

link-protocol ppp

ip address 10.0.24.4 255.255.255.0

#

interface GigabitEthernet0/0/0

ip address 10.0.34.4 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.45.4 255.255.255.0

#

ospf 1

preference 110

area 0.0.0.0

network 10.0.24.0 0.0.0.255

network 10.0.34.0 0.0.0.255

network 10.0.45.0 0.0.0.255

#

<R5>display current-configuration

#

sysname R5

#

interface GigabitEthernet0/0/0

ip address 10.0.45.5 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.2.254 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.2.0 0.0.0.255

network 10.0.45.0 0.0.0.255

#

4.8 连接RIP与OSPF网络

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.2.2.1 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 20.2.2.1 255.255.255.0

#

ospf 1

import-route rip 1

area 0.0.0.0

network 20.2.2.0 0.0.0.255

#

rip 1

undo summary

version 2

network 10.0.0.0

import-route ospf 1 cost 3

#

return

<R2>display current-configuration

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.2.2.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.1.1.254 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 24.1.1.2 255.255.255.0

#

rip 1

undo summary

version 2

network 10.0.0.0

network 20.0.0.0

network 24.0.0.0

#

return

<R3>display current-configuration

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 20.1.1.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 20.2.2.3 255.255.255.0

#

ospf 1

area 0.0.0.0

network 20.2.2.0 0.0.0.255

network 20.1.1.0 0.0.0.255

#

return

4.9 使用RIP、OSPF发布默认路由

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.2.2.1 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 20.2.2.1 255.255.255.0

#

ospf 1

default-route-advertise always

area 0.0.0.0

network 20.2.2.0 0.0.0.255

#

rip 1

undo summary

default-route originate

version 2

network 10.0.0.0

#

return

<R2>display current-configuration

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.2.2.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.1.1.254 255.255.255.0

#

rip 1

undo summary

version 2

network 10.0.0.0

#

return

<R3>display current-configuration

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 20.1.1.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 20.2.2.3 255.255.255.0

#

ospf 1

area 0.0.0.0

network 20.1.1.0 0.0.0.255

network 20.2.2.0 0.0.0.255

#

Return

1. VRRP

5.1 VRRP基本配置

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 172.16.2.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 172.16.3.254 255.255.255.0

#

ospf 1

area 0.0.0.0

network 172.16.0.0 0.0.255.255

network 172.16.2.0 0.0.0.255

network 172.16.3.0 0.0.0.255

#

return

<R2>display current-configuration

#

sysname R2

#

interface Ethernet0/0/1

ip address 172.16.1.100 255.255.255.0

vrrp vrid 1 virtual-ip 172.16.1.254

vrrp vrid 1 priority 120

#

interface GigabitEthernet0/0/0

ip address 172.16.2.100 255.255.255.0

#

ospf 1

area 0.0.0.0

network 172.16.0.0 0.0.255.255

network 172.16.1.0 0.0.0.255

network 172.16.2.0 0.0.0.255

#

Return

<R3> display current-configuration

#

sysname R3

#

interface Ethernet0/0/1

ip address 172.16.1.200 255.255.255.0

vrrp vrid 1 virtual-ip 172.16.1.254

#

interface GigabitEthernet0/0/1

ip address 172.16.3.200 255.255.255.0

#

ospf 1

area 0.0.0.0

network 172.16.0.0 0.0.255.255

network 172.16.1.0 0.0.0.255

network 172.16.3.0 0.0.0.255

#

return

5.2 配置VRRP多备份组

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 172.16.2.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 172.16.3.254 255.255.255.0

#

ospf 1

area 0.0.0.0

network 172.16.2.254 0.0.0.0

network 172.16.3.254 0.0.0.0

#

Return

<R2>display current-configuration

#

sysname R2

#

interface Ethernet0/0/1

ip address 172.16.1.254 255.255.255.0

vrrp vrid 1 virtual-ip 172.16.1.254

vrrp vrid 1 priority 120

vrrp vrid 2 virtual-ip 172.16.1.253

vrrp vrid 2 priority 200

vrrp vrid 2 preempt-mode disable

#

interface GigabitEthernet0/0/0

ip address 172.16.2.100 255.255.255.0

#

ospf 1

area 0.0.0.0

network 172.16.1.100 0.0.0.0

network 172.16.2.100 0.0.0.0

#

Return

<R3>display current-configuration

#

sysname R3

#

interface Ethernet0/0/0

#

interface Ethernet0/0/1

ip address 172.16.1.200 255.255.255.0

vrrp vrid 1 virtual-ip 172.16.1.254

vrrp vrid 1 priority 254

vrrp vrid 2 virtual-ip 172.16.1.253

vrrp vrid 2 priority 120

#

interface GigabitEthernet0/0/1

ip address 172.16.3.200 255.255.255.0

#

ospf 1

area 0.0.0.0

network 172.16.1.200 0.0.0.0

network 172.16.3.200 0.0.0.0

#

Return

5.3 配置VRRP的跟踪接口及认证

# 最终配置

<R1>display current-configuration

sysname R1

interface GigabitEthernet0/0/0

ip address 172.16.2.254 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 172.16.3.254 255.255.255.0

<R2>display current-configuration

sysname R2

interface Ethernet1/0/1

ip address 172.16.1.100 255.255.255.0

vrrp vrid 1 virtual-ip 172.16.1.254

vrrp vrid 1 priority 120

vrrp vrid 1 track interface GigabitEthernet0/0/0 reduced 50

vrrp vrid 1 authentication-mode md5 %$%$!B56J6".AW`Os:5nOIM96GU"%$%$

#

interface GigabitEthernet0/0/0

ip address 172.16.2.100 255.255.255.0

<R3>display current-configuration

sysname R3

interface Ethernet1/0/1

ip address 172.16.1.200 255.255.255.0

vrrp vrid 1 virtual-ip 172.16.1.254

vrrp vrid 1 authentication-mode md5 %$%$xASELV]Z77V(rDFgUna@6FBd%$%$

#

interface GigabitEthernet0/0/1

ip address 172.16.3.200 255.255.255.0

1. 基础过滤工具

6.1 配置基本的访问控制列表

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.0.13.1 255.255.255.0

#

interface LoopBack0

ip address 1.1.1.1 255.255.255.255

#

ospf 1

area 0.0.0.0

network 1.1.1.1 0.0.0.0

network 10.0.13.0 0.0.0.255

#

return

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.0.23.2 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.23.0 0.0.0.255

#

return

<R3>display current-configuration

[V200R003C00]

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 10.0.13.3 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.23.3 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.34.3 255.255.255.0

#

interface LoopBack0

ip address 3.3.3.3 255.255.255.0

#

ospf 1

area 0.0.0.0

network 3.3.3.3 0.0.0.0

network 10.0.13.0 0.0.0.255

network 10.0.23.0 0.0.0.255

network 10.0.34.0 0.0.0.255

#

Return

<R4>display current-configuration

[V200R003C00]

#

sysname R4

#

acl number 2000

rule 5 permit source 1.1.1.1 0

rule 8 permit source 3.3.3.3 0

rule 10 deny

#

interface GigabitEthernet0/0/0

ip address 10.0.34.4 255.255.255.0

#

interface LoopBack0

ip address 4.4.4.4 255.255.255.0

#

ospf 1

area 0.0.0.0

network 4.4.4.4 0.0.0.0

network 10.0.34.0 0.0.0.255

#

user-interface vty 0 4

acl 2000 inbound

set authentication password cipher %$%$8ir\_JOp^L>rX3)$\*,VL0,#[Yk^Ym76n[+Mw]h#1iCyE4#[\,%$%$

#

Return

6.2 配置高级的访问控制列表

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 10.0.13.1 255.255.255.0

#

interface LoopBack0

ip address 1.1.1.1 255.255.255.255

#

ospf 1

area 0.0.0.0

network 1.1.1.1 0.0.0.0

network 10.0.13.0 0.0.0.255

#

return

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.0.23.2 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.23.0 0.0.0.255

#

return

<R3>display current-configuration

[V200R003C00]

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 10.0.13.3 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.23.3 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 10.0.34.3 255.255.255.0

#

interface LoopBack0

ip address 3.3.3.3 255.255.255.0

#

ospf 1

area 0.0.0.0

network 3.3.3.3 0.0.0.0

network 10.0.13.0 0.0.0.255

network 10.0.23.0 0.0.0.255

network 10.0.34.0 0.0.0.255

#

Return

<R4>display current-configuration

[V200R003C00]

#

sysname R4

#

acl number 2000

rule 5 permit source 1.1.1.1 0

rule 8 permit source 3.3.3.3 0

rule 10 deny

#

acl number 3000

rule 5 permit ip source 1.1.1.1 0 destination 4.4.4.4 0

#

interface GigabitEthernet0/0/0

ip address 10.0.34.4 255.255.255.0

#

interface LoopBack0

ip address 4.4.4.4 255.255.255.0

#

interface LoopBack1

ip address 40.40.40.40 255.255.255.255

#

ospf 1

area 0.0.0.0

network 4.4.4.4 0.0.0.0

network 10.0.34.0 0.0.0.255

network 40.40.40.40 0.0.0.0

#

user-interface vty 0 4

acl 3000 inbound

authentication-mode password

set authentication password cipher %$%$2cAF6"\*I=@yM\CNaL&V.,"\./I<`X#iO{)7]"/Lz4d(3"\1,%$%$

#

return

6.3 配置前缀列表

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/0

ip address 40.1.1.1 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 20.1.1.1 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 30.1.1.1 255.255.255.0

#

rip 1

undo summary

version 2

network 20.0.0.0

network 30.0.0.0

network 40.0.0.0

filter-policy ip-prefix 1 import

#

ip ip-prefix 1 index 30 deny 10.1.1.0 25 greater-equal 25 less-equal 25

ip ip-prefix 1 index 40 permit 0.0.0.0 0 less-equal 32

#

Return

<R2>display current-configuration

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.1.1.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 20.1.1.2 255.255.255.0

##

rip 1

undo summary

version 2

network 10.0.0.0

network 20.0.0.0

#

Return

<R3>display current-configuration

#

sysname R3

#

interface GigabitEthernet0/0/0

ip address 10.2.2.3 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 30.1.1.3 255.255.255.0

#

rip 1

undo summary

version 2

network 10.0.0.0

network 30.0.0.0

#

Return

<R4>display current-configuration

#

sysname R4

#

interface GigabitEthernet0/0/0

ip address 40.1.1.4 255.255.255.0

#

rip 1

undo summary

version 2

network 40.0.0.0

#

Return

1. 交换机基础配置

7.1 交换机基础配置

# 最终配置

<S1>display current-configuration

#

sysname S1

#

interface Ethernet0/0/1

undo negotiation auto

speed 10

#

interface GigabitEthernet0/0/1

port media type copper

undo negotiation auto

speed 100

<s2>display current-configuration

#

sysname S2

#

interface Ethernet0/0/1

undo negotiation auto

speed 10

#

interface GigabitEthernet0/0/2

port media type copper

undo negotiation auto

speed 100

<S3>display current-configuration

#

sysname S3

#

interface GigabitEthernet0/0/1

undo negotiation auto

speed 100

#

interface GigabitEthernet0/0/2

undo negotiation auto

speed 100

#

7.2 理解ARP及Proxy ARP

# 最终配置

<R1>display current-configuration

#

sysname R1

#

interface GigabitEthernet0/0/1

ip address 10.1.1.254 255.255.255.0

arp-proxy enable

#

interface GigabitEthernet0/0/2

ip address 10.1.2.254 255.255.255.0

arp-proxy enable

#

arp static 10.1.1.1 5489-98cf-1852

arp static 10.1.1.2 5489-98cf-4f63

arp static 10.1.2.3 5489-98cf-5404

#

1. VLAN

8.1 VLAN基础配置及Access接口

# 最终配置

<S1>display current-configuration

#

sysname S1

#

vlan batch 10 20

#

interface Ethernet0/0/1

port link-type access

port default vlan 10

#

interface Ethernet0/0/2

port link-type access

port default vlan 10

#

interface Ethernet0/0/3

port link-type access

port default vlan 20

<S2>display current-configuration

sysname S2

#

vlan batch 30 40

#

interface Ethernet0/0/1

port link-type access

port default vlan 30

#

interface Ethernet0/0/2

port link-type access

port default vlan 40

#

8.2 跨交换机实现VLAN间通信

# 最终配置

<S1>display current-configuration

#

sysname S1

#

vlan batch 10 20

#

vlan 10

description R&D

vlan 20

description Market

#

interface Ethernet0/0/1

port link-type trunk

port trunk allow-pass vlan 10 20

#

interface Ethernet0/0/2

port link-type access

port default vlan 10

#

interface Ethernet0/0/3

port link-type access

port default vlan 20

#

Return

<S2>display current-configuration

#

sysname S2

#

vlan batch 10 20

#

vlan 10

description R&D

vlan 20

description Market

#

interface Ethernet0/0/2

port link-type trunk

port trunk allow-pass vlan 10 20

#

interface Ethernet0/0/3

port link-type access

port default vlan 10

#

interface Ethernet0/0/4

port link-type access

port default vlan 20

#

Return

<S3>display current-configuration

#

sysname S3

#

vlan batch 10 20

#

vlan 10

description R$D

vlan 20

description Market

#

interface GigabitEthernet0/0/1

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

interface GigabitEthernet0/0/2

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

Return

8.3 理解Hybrid接口的应用

# 最终配置

<S1>display current-configuration

#

sysname S1

#

vlan batch 10 20 30

#

interface Ethernet0/0/1

port hybrid tagged vlan 10 20 30

#

interface Ethernet0/0/2

port hybrid pvid vlan 20

port hybrid untagged vlan 20 30

#

interface Ethernet0/0/3

port hybrid pvid vlan 10

port hybrid untagged vlan 10 30

#

interface Ethernet0/0/4

port hybrid pvid vlan 30

port hybrid untagged vlan 10 20 30

#

<S2>display current-configuration

#

sysname S2

#

vlan batch 10 20 30

#

interface Ethernet0/0/1

port hybrid tagged vlan 10 20 30

#

interface Ethernet0/0/2

port hybrid pvid vlan 20

port hybrid untagged vlan 20 30

#

interface Ethernet0/0/3

port hybrid pvid vlan 10

port hybrid untagged vlan 10 30

#

8.4 利用单臂路由实现VLAN间路由

# 最终配置

<S1>display current-configuration

sysname S1

#

vlan batch 10 20 30

interface GigabitEthernet0/0/1

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

interface GigabitEthernet0/0/2

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

interface GigabitEthernet0/0/3

port link-type trunk

port trunk allow-pass vlan 2 to 4094

<S2>display current-configuration

#

sysname S2

#

vlan batch 10 20

#

interface Ethernet0/0/1

port link-type access

port default vlan 10

#

interface Ethernet0/0/2

port link-type access

port default vlan 20

interface GigabitEthernet0/0/2

port link-type trunk

port trunk allow-pass vlan 2 to 4094

<S3>display current-configuration

#

sysname S3

#

vlan batch 30

#

interface Ethernet0/0/1

port link-type access

port default vlan 30

#

interface GigabitEthernet0/0/2

port link-type trunk

port trunk allow-pass vlan 2 to 4094

<R1>display current-configuration

sysname R1

#

interface GigabitEthernet0/0/1

#

interface GigabitEthernet0/0/1.1

dot1q termination vid 10

ip address 10.1.1.254 255.255.255.0

arp broadcast enable

control-vid 10 dot1q-termination

#

interface GigabitEthernet0/0/1.2

dot1q termination vid 20

ip address 20.1.1.254 255.255.255.0

arp broadcast enable

control-vid 20 dot1q-termination

#

interface GigabitEthernet0/0/1.3

dot1q termination vid 30

ip address 30.1.1.254 255.255.255.0

arp broadcast enable

control-vid 30 dot1q-termination

#

8.5 利用三层交换机实现VLAN间路由

# 最终配置

<S1>display current-configuration

#

sysname S1

#

VLAN batch 10 20

#

interface VLANif10

ip address 192.168.1.254 255.255.255.0

#

interface VLANif20

ip address 192.168.2.254 255.255.255.0

#

interface GigabitEthernet0/0/1

port link-type access

port default VLAN 10

#

interface GigabitEthernet0/0/2

port link-type access

port default VLAN 10

#

interface GigabitEthernet0/0/3

port link-type access

port default VLAN 20

#

interface GigabitEthernet0/0/4

port link-type access

port default VLAN 10

#

return

1. 生成树

9.1 STP配置和选路规则

# 最终配置

<S1>display current-configuration

#

sysname S1

#

stp mode stp

stp instance 0 root primary

#

return

<S2>display current-configuration

#

sysname S2

#

stp mode stp

stp instance 0 root secondary

#

return

<S3>display current-configuration

#

sysname S3

#

stp instance 0 priority 4096

#

stp mode stp

#

interface Ethernet0/0/2

stp instance 0 cost 2

#

return

<S4>display current-configuration

#

sysname S4

#

stp mode stp

#

interface Ethernet0/0/2

stp instance 0 cost 2000

#

return

9.2 配置STP定时器

# 最终配置

<S1>display current-configuration

#

sysname S1

#

stp mode stp

stp timer-factor 10

stp instance 0 root primary

#

interface Ethernet0/0/1

stp bpdu-filter enable

<S2>display current-configuration

#

sysname S2

#

stp mode stp

stp timer-factor 10

stp instance 0 root secondary

<S3>display current-configuration

#

sysname S3

#

stp mode stp

stp timer-factor 10

<S4>display current-configuration

#

sysname S4

#

stp mode stp

stp timer-factor 10

9.3 RSTP基础配置

# 最终配置

<S1>display current-configuration

#

sysname S1

#

stp mode rstp

stp instance 0 root primary

#

#

interface GigabitEthernet0/0/1

#

interface GigabitEthernet0/0/2

#

interface GigabitEthernet0/0/3

#

interface GigabitEthernet0/0/4

#

<S2>display current-configuration

#

sysname S2

#

stp mode rstp

stp instance 0 root secondary

#

interface GigabitEthernet0/0/1

#

interface GigabitEthernet0/0/2

#

interface GigabitEthernet0/0/3

#

interface GigabitEthernet0/0/4

#

<S3>display current-configuration

#

sysname S3

#

stp mode rstp

#

interface Ethernet0/0/1

#

interface Ethernet0/0/2

#

interface Ethernet0/0/3

#

interface Ethernet0/0/4

#

<S4>display current-configuration

#

sysname S4

#

stp mode rstp

#

interface Ethernet0/0/1

stp edged-port enable

#

interface Ethernet0/0/2

#

interface Ethernet0/0/3

#

interface Ethernet0/0/4

#

9.4 MSTP基础配置

# 最终配置

<S1>display current-configuration

#

sysname S1

#

vlan batch 10 20

#

stp instance 1 root primary

stp instance 2 root secondary

#

stp region-configuration

region-name huawei

revision-level 1

instance 1 vlan 10

instance 2 vlan 20

active region-configuration

#

interface Ethernet0/0/1

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

interface Ethernet0/0/2

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

interface Ethernet0/0/3

port link-type access

port default vlan 10

#

return

<S2> display current-configuration

#

sysname S2

#

vlan batch 10 20

#

stp instance 2 priority 0

stp instance 1 root secondary

#

stp region-configuration

region-name huawei

revision-level 1

instance 1 vlan 10

instance 2 vlan 20

active region-configuration

#

interface Ethernet0/0/1

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

interface Ethernet0/0/2

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

interface Ethernet0/0/3

port link-type access

port default vlan 20

#

return

<S3>display current-configuration

#

sysname S3

#

vlan batch 10 20

#

stp region-configuration

region-name huawei

revision-level 1

instance 1 vlan 10

instance 2 vlan 20

active region-configuration

#

interface Ethernet0/0/1

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

interface Ethernet0/0/2

port link-type trunk

port trunk allow-pass vlan 2 to 4094

#

interface Ethernet0/0/3

port link-type access

port default vlan 10

#

interface Ethernet0/0/4

port link-type access

port default vlan 20

#

return

1. 其他交换技术

10.1 GVRP基础配置

# 最终配置

<s1>display current-configuration

#

sysname s1

#

vlan batch 10 20

#

gvrp

#

interface Ethernet0/0/1

port link-type access

port default vlan 10

#

interface Ethernet0/0/2

port link-type access

port default vlan 20

#

interface GigabitEthernet0/0/1

port link-type trunk

port trunk allow-pass vlan 2 to 4094

gvrp

#

Return

<s2>display current-configuration

#

sysname s2

#

vlan batch 10 20

#

gvrp

#

interface GigabitEthernet0/0/1

port link-type trunk

port trunk allow-pass vlan 2 to 4094

gvrp

gvrp registration forbidden

#

interface GigabitEthernet0/0/2

port link-type trunk

port trunk allow-pass vlan 2 to 4094

gvrp

#

Return

<s3> display current-configuration

#

sysname s3

#

vlan batch 10 20

#

gvrp

#

interface GigabitEthernet0/0/1

port link-type trunk

port trunk allow-pass vlan 2 to 4094

gvrp

#

interface GigabitEthernet0/0/2

port link-type trunk

port trunk allow-pass vlan 2 to 4094

gvrp

#

Return

<s4>display current-configuration

#

sysname s4

#

vlan batch 10 20

#

gvrp

#

interface Ethernet0/0/1

port link-type access

port default vlan 10

#

interface Ethernet0/0/2

port link-type access

port default vlan 20

#

interface GigabitEthernet0/0/1

port link-type trunk

port trunk allow-pass vlan 2 to 4094

gvrp

#

return

10.2 Smart-Link与Monitor-Link

# 最终配置

<S1>display current-configuration

#

sysname S1

#

interface Ethernet0/0/3

stp disable

#

interface Ethernet0/0/4

stp disable

#

interface NULL0

#

smart-link group 1

restore enable

smart-link enable

port Ethernet0/0/3 master

port Ethernet0/0/4 slave

timer wtr 30

#

return

<S2>display current-configuration

#

sysname S2

#

monitor-link group 1

port GigabitEthernet0/0/1 uplink

port Ethernet0/0/3 downlink 1

timer recover-time 10

#

Return

10.3 配置Eth-Trunk链路聚合

# 最终配置

<S1>display current-configuration

#

sysname S1

#

lacp priority 100

#

interface Eth-Trunk1

mode lacp-static

max active-linknumber 2

#

interface GigabitEthernet0/0/1

eth-trunk 1

lacp priority 100

#

interface GigabitEthernet0/0/2

eth-trunk 1

lacp priority 100

#

interface GigabitEthernet0/0/5

eth-trunk 1

#

return

<S2>display current-configuration

#

sysname S2

#

interface Eth-Trunk1

mode lacp-static

#

interface GigabitEthernet0/0/1

eth-trunk 1

#

interface GigabitEthernet0/0/2

eth-trunk 1

#

interface GigabitEthernet0/0/5

eth-trunk 1

#

#return

1. 广域网

11.1 WAN接入配置

# 最终配置

<R1>display current-configuration

interface Ethernet0/0/1

ip address 172.16.2.254 255.255.255.0

#

interface Serial1/0/0

link-protocol ppp

ip address 192.168.1.2 255.255.255.0

#

interface Serial1/0/1

link-protocol hdlc

ip address 192.168.2.2 255.255.255.0

#

dialer-rule

dialer-rule 1 ip permit

ip route-static 172.16.1.0 255.255.255.0 192.168.1.1

ip route-static 172.16.3.0 255.255.255.0 Serial1/0/1

<R2>display current-configuration

interface Ethernet0/0/1

ip address 172.16.1.254 255.255.255.0

#

interface Serial1/0/0

link-protocol ppp

ip address 192.168.1.1 255.255.255.0

#

ip route-static 0.0.0.0 0.0.0.0 192.168.1.2

<R3>display current-configuration

interface Ethernet0/0/1

ip address 172.16.3.254 255.255.255.0

#

interface Serial1/0/1

link-protocol hdlc

ip address 192.168.2.1 255.255.255.255

#

ip route-static 0.0.0.0 0.0.0.0 Serial1/0/1

11.2 PPP的认证

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

interface Serial4/0/0

link-protocol ppp

ppp chap user R1

ppp chap password cipher %$%$GMV(\*i<^!!:-;{5SNomM,#5\_%$%$

ip address 10.0.13.1 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.1.0 0.0.0.255

network 10.0.13.0 0.0.0.255

#

Return

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

interface GigabitEthernet0/0/0

ip address 10.0.23.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 10.0.2.254 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.2.0 0.0.0.255

network 10.0.23.0 0.0.0.255

#

return

<R3>display current-configuration

[V200R003C00]

#

sysname R3

#

aaa

local-user R1 password cipher %$%$px4!YD>n<OtnP~\*/nz2/=`<2%$%$

local-user R1 service-type ppp

#

firewall zone Local

priority 15

#

interface Serial4/0/0

link-protocol ppp

ppp authentication-mode chap

ip address 10.0.13.3 255.255.255.0

#

interface GigabitEthernet0/0/0

ip address 10.0.23.3 255.255.255.0

#

ospf 1

area 0.0.0.0

network 10.0.13.0 0.0.0.255

network 10.0.23.0 0.0.0.255

#

Return

11.3 帧中继基本配置

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

interface Serial1/0/0

link-protocol fr

ip address 10.1.1.1 255.255.255.0

#

interface Serial1/0/0.1

fr dlci 103

ip address 20.1.1.1 255.255.255.0

#

interface Serial1/0/1

link-protocol ppp

#

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

firewall zone Local

priority 15

#

interface Serial1/0/0

link-protocol fr

undo fr inarp

fr map ip 10.1.1.1 201 broadcast

ip address 10.1.1.2 255.255.255.0

#

ip route-static 20.1.1.3 255.255.255.255 10.1.1.1

#

Return

<R3>display current-configuration

[V200R003C00]

#

sysname r3

#

interface Serial1/0/0

link-protocol fr

ip address 20.1.1.3 255.255.255.0

#

ip route-static 10.1.1.2 255.255.

#

return

11.4 OSPF在帧中继网络中的配置

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

interface Serial1/0/0

link-protocol fr

undo fr inarp

fr map ip 10.0.123.2 102

fr map ip 10.0.123.3 103

ip address 10.0.123.1 255.255.255.0

ospf dr-priority 100

#

interface LoopBack0

ip address 10.1.1.1 255.255.255.255

#

ospf 1 router-id 10.1.1.1

peer 10.0.123.2

peer 10.0.123.3

area 0.0.0.0

network 10.0.123.1 0.0.0.0

network 10.1.1.1 0.0.0.0

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

interface Serial1/0/0

link-protocol fr

undo fr inarp

fr map ip 10.0.123.1 201

fr map ip 10.0.123.3 201

ip address 10.0.123.2 255.255.255.0

#

interface LoopBack0

ip address 10.1.2.2 255.255.255.255

#

ospf 1 router-id 10.1.2.2

peer 10.0.123.1

area 0.0.0.0

network 10.0.123.2 0.0.0.0

network 10.1.2.2 0.0.0.0

<R3>display current-configuration

[V200R003C00]

#

sysname R3

#

interface Serial1/0/0

link-protocol fr

undo fr inarp

fr map ip 10.0.123.1 301

fr map ip 10.0.123.2 301

ip address 10.0.123.3 255.255.255.0

#

interface LoopBack0

ip address 10.1.3.3 255.255.255.255

#

ospf 1 router-id 10.1.3.3

peer 10.0.123.1

area 0.0.0.0

network 10.0.123.3 0.0.0.0

network 10.1.3.3 0.0.0.0

1. DHCP

12.1 配置基于接口地址池的DHCP

# 最终配置

<R1>display current-configuration

#

sysname R1

#

dhcp enable

#

interface GigabitEthernet0/0/0

ip address 192.168.1.254 255.255.255.0

dhcp select interface

dhcp server excluded-ip-address 192.168.1.1 192.168.1.10

dhcp server lease day 2 hour 0 minute 0

#

interface GigabitEthernet0/0/1

ip address 192.168.2.254 255.255.255.0

dhcp select interface

dhcp server dns-list 8.8.8.8

#

return

12.2 配置基于全局地址池的DHCP

# 最终配置

<R1>display current-configuration

#

sysname R1

#

dhcp enable

#

ip pool huawei1

gateway-list 192.168.1.254

network 192.168.1.0 mask 255.255.255.0

excluded-ip-address 192.168.1.250 192.168.1.253

lease day 2 hour 0 minute 0

dns-list 8.8.8.8

#

ip pool huawei2

gateway-list 192.168.2.254

network 192.168.2.0 mask 255.255.255.0

dns-list 8.8.8.8

#

interface GigabitEthernet0/0/0

ip address 192.168.1.254 255.255.255.0

dhcp select global

#

interface GigabitEthernet0/0/1

ip address 192.168.2.254 255.255.255.0

dhcp select global

#

return

12.3 配置DHCP中继

# 最终配置

<R1>display current-configuration

#

sysname R1

#

dhcp enable

#

interface Ethernet0/0/1

ip address 10.1.1.254 255.255.255.0

dhcp select relay

dhcp relay server-ip 100.1.1.1

#

interface GigabitEthernet0/0/0

ip address 200.1.1.1 255.255.255.0

#

ospf 1 router-id 1.1.1.1

area 0.0.0.0

network 10.1.1.0 0.0.0.255

network 200.1.1.0 0.0.0.255

#

<R2>display current-configuration

#

sysname r2

#

interface GigabitEthernet0/0/0

ip address 200.1.1.2 255.255.255.0

#

interface GigabitEthernet0/0/1

ip address 100.1.1.2 255.255.255.0

#

ospf 1 router-id 2.2.2.2

area 0.0.0.0

network 100.1.1.0 0.0.0.255

network 200.1.1.0 0.0.0.255

#

<R3>display current-configuration

#

sysname R3

#

dhcp enable

#

ip pool dhcp-pool

gateway-list 10.1.1.254

network 10.1.1.0 mask 255.255.255.0

ospf 1 router-id 3.3.3.3

area 0.0.0.0

network 100.1.1.0 0.0.0.255

#

1. IPv6

13.1 IPv6基础配置

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

ipv6

#

interface GigabitEthernet0/0/0

ipv6 enable

ipv6 address 2001:3:FD::/64 eui-64

ipv6 address auto link-local

#

interface GigabitEthernet0/0/1

ipv6 enable

ipv6 address 2031:0:130F::1/64

#

ipv6 route-static 2002:3:DE:: 64 2031:0:130F::2

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

ipv6

#

interface GigabitEthernet0/0/0

ipv6 enable

ipv6 address 2002:3:DE::/64 eui-64

ipv6 address auto link-local

#

interface GigabitEthernet0/0/1

ipv6 enable

ipv6 address 2031:0:130F::2/64

#

ipv6 route-static :: 0 2031:0:130F::1

13.2 RIPng基础配置

# 最终配置

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

ipv6

#

interface GigabitEthernet0/0/0

ipv6 enable

ipv6 address 2001::1/64

ripng 1 enable

#

interface GigabitEthernet0/0/1

ipv6 enable

ipv6 address 2002::1/64

ripng 1 enable

#

ripng 1

#

Return

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

ipv6

#

interface GigabitEthernet0/0/0

ipv6 enable

ipv6 address 2001::2/64

ripng 1 enable

#

interface GigabitEthernet0/0/1

ipv6 enable

ipv6 address 3001::e/64

ripng 1 enable

#

ripng 1

#

Return

<R3>display current-configuration

[V200R003C00]

#

sysname R3

#

ipv6

#

interface GigabitEthernet0/0/0

ipv6 enable

ipv6 address 3002::E/64

ripng 1 enable

#

interface GigabitEthernet0/0/1

ipv6 enable

ipv6 address 2002::2/64

ripng 1 enable

#

ripng 1

#

return

13.3 OSPFv3基础配置

# 最终配置

<R1>**display current-configuration**

sysname R1

#

ipv6

#

ospfv3 1

router-id 1.1.1.1

#

interface GigabitEthernet0/0/0

ipv6 enable

ipv6 address 2009::1/64

ipv6 address 2001::1/64

ospfv3 1 area 0.0.0.0

#

interface GigabitEthernet0/0/1

ipv6 enable

ipv6 address 2002::1/64

ospfv3 1 area 0.0.0.1

#

Return

<R2>**display current-configuration**

sysname R2

#

ipv6

#

ospfv3 1

router-id 2.2.2.2

#

interface GigabitEthernet0/0/0

ipv6 enable

ipv6 address 2001::2/64

ospfv3 1 area 0.0.0.0

#

interface GigabitEthernet0/0/1

ipv6 enable

ipv6 address 2003::2/64

ospfv3 1 area 0.0.0.2

#

return

<R3>**display current-configuration**

sysname R3

#

ipv6

#

ospfv3 1

router-id 3.3.3.3

#

interface Ethernet1/0/0

ipv6 enable

ipv6 address 3001::E/64

ospfv3 1 area 0.0.0.1

#

interface GigabitEthernet0/0/1

ipv6 enable

ipv6 address 2002::3/64

ospfv3 1 area 0.0.0.1

#

interface GigabitEthernet0/0/2

<R4>**display current-configuration**

sysname R4

#

ipv6

#

ospfv3 1

router-id 4.4.4.4

#

interface Ethernet1/0/0

ipv6 enable

ipv6 address 3002::E/64

ospfv3 1 area 0.0.0.2

#

interface GigabitEthernet0/0/1

ipv6 enable

ipv6 address 2003::4/64

ospfv3 1 area 0.0.0.2

1. 其他特性

14.2 SNMP基础配置

# 最终配置

<Agent>display current-configuration

#

sysname Agent

#

snmp-agent local-engineid 800007DB03000000000000

snmp-agent community read %$%$A\!Y7j/0sYyg)\SLoP|0,+\_@%$%$

snmp-agent community write %$%$;K6@0->8n;.+guRy3"xU,+\_@%$%$

snmp-agent sys-info contact call admin 020-38370606

snmp-agent sys-info location Guangzhou China

snmp-agent sys-info version v3

snmp-agent target-host trap-hostname adminNMS2 address 10.1.1.2 udp-port 9991 trap-paramsname trapNMS2

snmp-agent trap source LoopBack0

snmp-agent trap enable

snmp-agent trap queue-size 200

snmp-agent trap life 240

snmp-agent

#

interface GigabitEthernet0/0/0

ip address 10.1.1.254 255.255.255.0

#

return

14.3 GRE 协议基础配置

# 最终配置

<R1>display current-configuration

sysname R1

#

interface Ethernet2/0/0

ip address 192.168.10.1 255.255.255.0

#

interface Serial1/0/0

link-protocol ppp

ip address 10.1.12.1 255.255.255.0

#

interface NULL0

#

interface Tunnel0/0/0

ip address 172.16.1.1 255.255.255.0

tunnel-protocol gre

source 10.1.12.1

destination 10.1.23.1

#

rip 1

version 2

network 192.168.10.0

network 172.16.0.0

#

ip route-static 0.0.0.0 0.0.0.0 10.1.12.2

#

Return

<R2>display current-configuration

sysname R2

#

interface Serial1/0/0

link-protocol ppp

ip address 10.1.12.2 255.255.255.0

#

interface Serial1/0/1

link-protocol ppp

ip address 10.1.23.2 255.255.255.0

#

Return

<R3>display current-configuration

sysname R3

#

interface Ethernet2/0/0

ip address 192.168.20.1 255.255.255.0

#

interface Serial1/0/0

link-protocol ppp

ip address 10.1.23.1 255.255.255.0

#

interface NULL0

#

interface Tunnel0/0/0

ip address 172.16.1.2 255.255.255.0

tunnel-protocol gre

source 10.1.23.1

destination 10.1.12.1

#

rip 1

version 2

network 192.168.20.0

network 172.16.0.0

#

ip route-static 0.0.0.0 0.0.0.0 10.1.23.2

#

return

14.4 配置NAT

<R1>display current-configuration

[V200R003C00]

#

sysname R1

#

acl number 2001

rule 5 permit source 20.1.1.0 0.0.0.255

#

nat address-group 1 202.169.10.50 202.169.10.60

#

interface GigabitEthernet0/0/0

ip address 202.169.10.1 255.255.255.0

arp-proxy enable

nat static global 202.169.10.5 inside 10.1.1.1 netmask 255.255.255.255

nat outbound 2001 address-group 1 no-pat

#

interface GigabitEthernet0/0/1

ip address 10.1.1.254 255.255.255.0

#

interface GigabitEthernet0/0/2

ip address 20.1.1.254 255.255.255.0

#

interface NULL0

#

ip route-static 0.0.0.0 0.0.0.0 202.169.10.2

#

Return

<R2>display current-configuration

[V200R003C00]

#

sysname R2

#

snmp-agent local-engineid 800007DB03000000000000

snmp-agent

#

interface GigabitEthernet0/0/0

ip address 202.169.10.2 255.255.255.0

#

interface LoopBack0

ip address 202.169.20.1 255.255.255.0

#

return