

XE200不同私网之间跨公网的NAT_FW隧道穿越业务的配置

一、组网需求

两台NAT/FW设备分别将两个私网与公网隔开，公网中布置一台XE语音服务器（作为位置服务器和处理服务器），私网1中布置一台语音网关和一台XE语音服务器（作为处理服务器）。私网2中布置一台语音网关和一台XE语音服务器（作为处理服务器）。

二、组网图

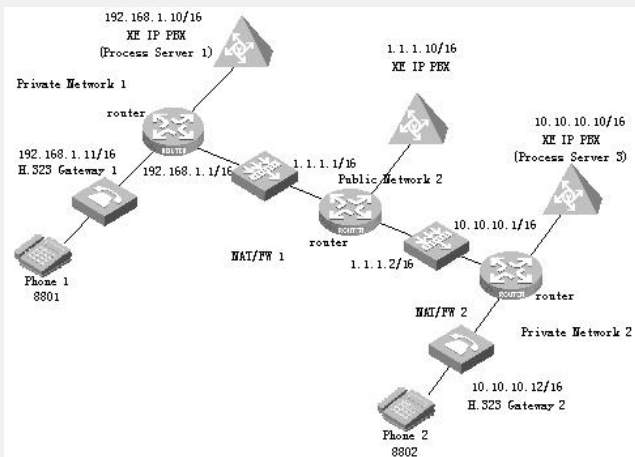


图1-1 不同私网之间NAT/FW隧道穿越配置举例组网图

三、配置步骤

1. 配置H.323 Gateway 1 (私网语音网关)

```
# 配置以太网接口
[VG1] interface ethernet 0
[VG1-Ethernet0] ip address 192.168.1.11 255.255.0.0
[VG1-Ethernet0] quit
# 配置语音实体
[VG1] voice-setup
[VG1-voice] dial-program
[VG1-voice-dial] entity 8888 voip
[VG1-voice-dial-entity8888] address ras
[VG1-voice-dial-entity8888] match-template ....
[VG1-voice-dial-entity8888] quit
[VG1-voice-dial] entity 8801 pots
[VG1-voice-dial-entity8801] line 0
[VG1-voice-dial-entity8801] match-template 8801
[VG1-voice-dial-entity8801] return
# 配置GK-Client
[VG1] voice-setup
[VG1-voice] gk-client
[VG1-voice-gk] gw-id h323gateway1
[VG1-voice-gk] gw-address ip 192.168.1.11
[VG1-voice-gk] gk-id xeippbx1 gk-addr 192.168.1.10 1719
[VG1-voice-gk] ras-on
```

2. 配置H.323 Gateway 2 (私网语音网关)

```
# 配置以太网接口
[VG2] interface ethernet 0
[VG2-Ethernet0] ip address 10.10.10.12 255.255.0.0
[VG2-Ethernet0] quit
# 配置语音实体
[VG2] voice-setup
[VG2-voice] dial-program
[VG2-voice-dial] entity 8888 voip
[VG2-voice-dial-entity8888] address ras
```

```
[VG2-voice-dial-entity8888] match-template ....
[VG2-voice-dial] entity 8802 pots
[VG2-voice-dial-entity8802] line 0
[VG2-voice-dial-entity8802] match-template 8802
[VG2-voice-dial-entity8802] return
# 配置GK-Client
[VG2] voice-setup
[VG2-voice] gk-client
[VG2-voice-gk] gw-id h323gateway2
[VG2-voice-gk] gw-address ip 10.10.10.12
[VG2-voice-gk] gk-id xeippbx3 gk-addr 10.10.10.10 1719
[VG2-voice-gk] ras-on
3. 配置处理服务器1 (私网process-server)
# 配置以太网接口
[XE] interface ethernet 0/0
[XE-Ethernet0/0] ip address 192.168.1.10 255.255.0.0
[XE-Ethernet0/0] quit
[XE] ip route-static 0.0.0.0 0.0.0.0 192.168.1.1
# 配置网守
[XE] process-server
[XE-ps] ps-config xeippbx1 interface Ethernet 0/0
[XE-ps] heartbeat password xe200
[XE-ps] ls-mode remote ip-address 1.1.1.10
[XE-ps] start
[XE-ps] gatekeeper
[XE-ps-gk] start
4. 配置处理服务器2 (公网process-server)
# 配置以太网接口
[XE] interface ethernet 0/0
[XE-Ethernet0/0] ip address 1.1.1.10 255.255.0.0
[XE-Ethernet0/0] quit
# 配置网守
[XE] process-server
[XE-ps] ps-config xeippbx2 interface Ethernet 0/0
[XE-ps] heartbeat password xe200
[XE-ps] ls-mode local
[XE-ps] start
[XE-ps] gatekeeper
[XE-ps-gk] start
5. 配置处理服务器3 (私网process-server)
# 配置以太网接口
[XE] interface ethernet 0/0
[XE-Ethernet0/0] ip address 10.10.10.10 255.255.0.0
[XE-Ethernet0/0] quit
[XE] ip route-static 0.0.0.0 0.0.0.0 10.10.10.1
# 配置网守
[XE] process-server
[XE-ps] ps-config xeippbx3 interface Ethernet 0/0
[XE-ps] heartbeat password xe200
[XE-ps] ls-mode remote ip-address 1.1.1.10
[XE-ps] start
[XE-ps] gatekeeper
[XE-ps-gk] start
6. 配置位置服务器 (公网location-server)
# 配置位置服务器
[XE] location-server
[XE-ls] ls-config interface Ethernet 0/0
[XE-ls] call-mode h323 routed
[XE-ls] start
[XE-ls] domain PriDomain01
//设定域的名称
[XE-ls-domain-PriDomain01] attribute private
//配置域的私有属性
[XE-ls-domain-PriDomain01] quit
```

```

[XE-ls] domain PriDomain02
//设定域的名称
[XE-ls-domain-PriDomain02] attribute private
//配置域的私有属性
[XE-ls-domain-PriDomain02] quit
[XE-ls] domain PubDomain
//设定域的名称
[XE-ls-domain-PubDomain] attribute public
//配置域的公有属性
[XE-ls-domain-PubDomain] quit
[XE-ls] process-server xeippbx1
[XE-ls-ps-xeippbx1] ip-address 1.1.1.1
[XE-ls-ps-xeippbx1] heartbeat password xe200
[XE-ls-ps-xeippbx1] belongto PriDomain01
//配置process-server所有//域的名称（私有域）
[XE-ls-ps-xeippbx1] quit
[XE-ls] process-server xeippbx2
[XE-ls-ps-xeippbx2] ip-address 127.0.0.1
[XE-ls-ps-xeippbx2] heartbeat password xe200
[XE-ls-ps-xeippbx2] belongto PubDomain
//配置process-server所有域//的名称（公有域）
[XE-ls-ps-xeippbx2] quit
[XE-ls] process-server xeippbx3
[XE-ls-ps-xeippbx3] ip-address 1.1.1.2
[XE-ls-ps-xeippbx3] heartbeat password xe200
[XE-ls-ps-xeippbx3] belongto PriDomain02
//配置process-server所有//域的名称（私有域）
[XE-ls-ps-xeippbx3] quit
[XE-ls] nat&fw
[XE-ls-nat&fw] tunnelpeer tunnelpeer01 private xeippbx1 1.1.1.10 port 9600 public xe
ippbx2 1.1.1.1 port 9700
[XE-ls-nat&fw] tunnelpeer tunnelpeer02 private xeippbx3 1.1.1.10 port 9600 public xe
ippbx2 1.1.1.2 port 9700
[XE-ls-nat&fw] quit
[XE-ls] process-server xeippbx1
[XE-ls-ps-xeippbx1] tunnel enable
//启用process-server的隧//道功能
[XE-ls-ps-xeippbx1] quit
[XE-ls] process-server xeippbx2
[XE-ls-ps-xeippbx2] tunnel enable
//启用process-server的隧//道功能
[XE-ls-ps-xeippbx2] quit
[XE-ls] process-server xeippbx3
[XE-ls-ps-xeippbx3] tunnel enable
//启用process-server的隧//道功能
[XE-ls-ps-xeippbx3] quit
[XE-ls] gateway h323gateway1
[XE-ls-gw-h323gateway1] device-type h323
[XE-ls-gw-h323gateway1] dynamic-ip enable
[XE-ls-gw-h323gateway1] quit
[XE-ls] gateway h323gateway2
[XE-ls-gw-h323gateway2] device-type h323
[XE-ls-gw-h323gateway2] dynamic-ip enable
7. NAT/FW1的配置
# 配置以太网接口
<Quidway> system-view
[Quidway] interface GigabitEthernet 0/0
[Quidway-GigabitEthernet0/0] ip address 1.1.1.1 255.255.0.0
[Quidway-GigabitEthernet0/0] quit
[Quidway] interface GigabitEthernet 0/1
[Quidway-GigabitEthernet0/1] ip address 192.168.1.1 255.255.0.0
[Quidway-GigabitEthernet0/1] quit
# 配置访问控制列表。
[Quidway] acl number 2001

```

```
[Quidway-acl-basic-2001] rule permit source 192.168.1.0 0.0.0.255
[Quidway-acl-basic-2001] quit
[Quidway] interface GigabitEthernet 0/0
[Quidway-GigabitEthernet0/0] nat outbound 2001
//在接口下绑定nat到公网的ACL
[Quidway-GigabitEthernet0/0] nat server protocol udp global 1.1.1.1 9700 inside 192.168.1.10 9700
//将公网process-server映射到私网的process-server上
```

8. NAT/FW2的配置

配置以太网接口

```
<Quidway> system-view
[Quidway] interface GigabitEthernet 0/0
[Quidway-GigabitEthernet0/0] ip address 1.1.1.2 255.255.0.0
[Quidway-GigabitEthernet0/0] quit
[Quidway] interface GigabitEthernet 0/1
[Quidway-GigabitEthernet0/1] ip address 10.10.10.1 255.255.0.0
[Quidway-GigabitEthernet0/1] quit
# 配置访问控制列表。
[Quidway] acl number 2001
[Quidway-acl-basic-2001] rule permit source 10.10.10.0 0.0.0.255
[Quidway-acl-basic-2001] quit
[Quidway] interface GigabitEthernet 0/0
[Quidway-GigabitEthernet0/0] nat outbound 2001
[Quidway-GigabitEthernet0/0] nat server protocol udp global 1.1.1.2 9700 inside 10.10.10.10 9700
//将公网process-server映射到私网的//process-server上
```

四、配置关键点

和5.1类似，如果需要公、私网之间隧道穿越，首要条件是公网和私网都必须有process-server，而公网的process-server可以和location-server位于同一台XE上。可以参考5.1、私网与公网之间NAT&FW隧道穿越配置举例的配置关键点