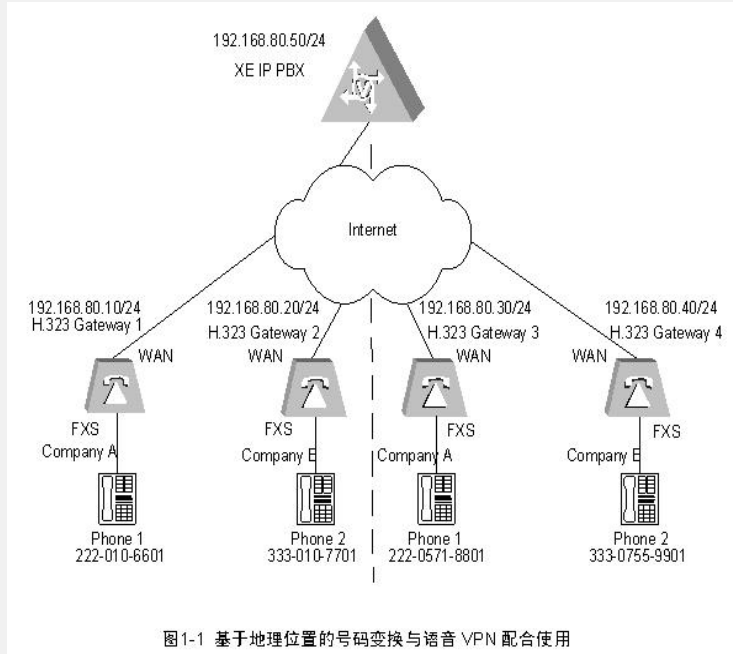


XE200/2000基于地理位置的号码变换与语音VPN配合使用的配置

一、组网：



二、问题描述：

一台XE 200语音服务器采用集中式组网，进行H.323呼叫。有两家公司A和B，总部都设在北京，同时A公司在杭州有分公司，B公司在深圳有分公司，两个公司之间有通话需求。以4台网关设备为例，其中H.323 Gateway 1和H.323 Gateway 3为A公司服务，地区码分别为010和0571，H.323 Gateway 2和H.323 Gateway 4为B公司服务，地区码分别为010和0755。A公司的语音VPN为vpn01，语音VPN前缀为222，B公司的语音VPN为vpn02，语音VPN前缀为333。

当gateway1下的phone1拨打gateway3下的phone1，由于同属于一个vpn下，只需要拨打05718801；但拨打gateway4下面的phone2时，需要拨打33307559901。

三、解决方法：

1. 配置H.323网守

```
# 配置以太网接口
[XE] interface Ethernet 0/0
[XE-Ethernet0/0] ip address 192.168.80.50 255.255.255.0
[XE-Ethernet0/0] quit
# 配置网守
[XE] process-server
[XE-ps] ps-config gkserver interface Ethernet 0/0
[XE-ps] heartbeat password xe
[XE-ps] ls-mode 0 local
[XE-ps] start
```

2. 配置位置服务器

```
# 配置位置服务器
[XE] location-server
[XE-ls] ls-config interface Ethernet 0/0
[XE-ls] process-server gkserver
[xe-ls-ps-gkserver] heartbeat password xe
# 启用基于地理位置的号码变换功能#
[XE-ls] policy area-code-substitute enable
```

```

# 启用语音VPN功能#
[XE-ls] policy voice-vpn enable
# 配置语音VPN#
[XE-ls] voice-vpn vpn01
#创建语音vpn01, 并设置其拨打前缀222#
[XE-ls-vpn01] prefix 222
[XE-ls-vpn01] quit
[XE-ls] voice-vpn vpn02
#创建语音vpn02, 并设置其拨打前缀333#
[XE-ls-vpn02] prefix 333
[XE-ls-vpn02] quit
# 配置网关设备
[XE-ls] gateway gw01
[XE-ls-gw-gw01] device-type h323
[XE-ls-gw-gw01] dynamic-ip enable
[XE-ls-gw-gw01] area-code 010
#为网关gw01下面的所有pots实体增加区号010 #
[XE-ls-gw-gw01] default-vpn vpn01
#将网关gw01下面的所有pots实体划入语音vpn01内#
[XE-ls-gw-gw01] quit
[XE-ls] gateway gw02
[XE-ls-gw-gw02] device-type h323
[XE-ls-gw-gw02] dynamic-ip enable
[XE-ls-gw-gw02] area-code 010
#为网关gw02下面的所有pots实体增加区号010#
[XE-ls-gw-gw02] default-vpn vpn02
#将网关gw02下面的所有pots实体划入语音vpn02内#
[XE-ls-gw-gw02] quit
[XE-ls] gateway gw03
[XE-ls-gw-gw03] device-type h323
[XE-ls-gw-gw03] dynamic-ip enable
[XE-ls-gw-gw03] area-code 0571
#为网关gw03下面的所有pots实体增加区号0571#
[XE-ls-gw-gw03] default-vpn vpn01
#将网关gw03下面的所有pots实体划入语音vpn01内#
[XE-ls-gw-gw03] quit
[XE-ls] gateway gw04
[XE-ls-gw-gw04] device-type h323
[XE-ls-gw-gw04] dynamic-ip enable
[XE-ls-gw-gw04] area-code 0755
#为网关gw04下面的所有pots实体增加区号0755#
[XE-ls-gw-gw04] default-vpn vpn02
#将网关gw04下面的所有pots实体划入语音vpn02内#
[XE-ls-gw-gw04] quit
# 启用位置服务器
[XE-ls] start
3. 配置H.323 Gateway 1
# 配置以太网接口
[VG1] interface ethernet 0
[VG1-Ethernet0] ip address 192.168.80.10 255.255.255.0
[VG1-Ethernet0] quit
# 配置语音实体
[VG1] voice-setup
[VG1-voice] dial-program
[VG1-voice-dial] entity 1 voip
[VG1-voice-dial-entity1] match-template 0571....
[VG1-voice-dial-entity1] address ras
[VG1-voice-dial-entity1] quit
[VG1-voice-dial] entity 2 voip
[VG1-voice-dial-entity2] match-template 66..
[VG1-voice-dial-entity2] address ras
[VG1-voice-dial-entity2] quit
[VG1-voice-dial] entity 3 voip
[VG1-voice-dial-entity3] match-template 333....

```

```
[VG1-voice-dial-entity3] address ras
[VG1-voice-dial-entity3] quit
[VG1-voice-dial] entity 4 voip
[VG1-voice-dial-entity4] match-template 3330755....
[VG1-voice-dial-entity4] address ras
[VG1-voice-dial-entity4] quit
[VG1-voice-dial] entity 6601 pots
[VG1-voice-dial-entity6601] match-template 6601
[VG1-voice-dial-entity6601] line 0
[VG1-voice-dial-entity6601] return
# 配置GK-Client
[VG1-voice] gk-client
[VG1-voice-gk] gw-id gw01
[VG1-voice-gk] gw-address ip 192.168.80.10
[VG1-voice-gk] gk-id gkserver gk-addr 192.168.80.50 1719
[VG1-voice-gk] ras-on
```

4. 配置H.323 Gateway 2

```
# 配置以太网接口
[VG2] interface ethernet 0
[VG2-Ethernet0] ip address 192.168.80.20 255.255.255.0
[VG2-Ethernet0] quit
# 配置语音实体
[VG2] voice-setup
[VG2-voice] dial-program
[VG2-voice-dial] entity 1 voip
[VG2-voice-dial-entity1] match-template 0755....
[VG2-voice-dial-entity1] address ras
[VG2-voice-dial-entity1] quit
[VG2-voice-dial] entity 2 voip
[VG2-voice-dial-entity2] match-template 77..
[VG2-voice-dial-entity2] address ras
[VG2-voice-dial-entity2] quit
[VG2-voice-dial] entity 3 voip
[VG2-voice-dial-entity3] match-template 222....
[VG2-voice-dial-entity3] address ras
[VG2-voice-dial-entity3] quit
[VG2-voice-dial] entity 4 voip
[VG2-voice-dial-entity4] match-template 2220571....
[VG2-voice-dial-entity4] address ras
[VG2-voice-dial-entity4] quit
[VG2-voice-dial] entity 7701 pots
[VG2-voice-dial-entity7701] match-template 7701
[VG2-voice-dial-entity7701] line 0
[VG2-voice-dial-entity7701] return
# 配置GK-Client
[VG2-voice] gk-client
[VG2-voice-gk] gw-id gw02
[VG2-voice-gk] gw-address ip 192.168.80.20
[VG2-voice-gk] gk-id gkserver gk-addr 192.168.80.50 1719
[VG2-voice-gk] ras-on
```

5. 配置H.323 Gateway 3

```
# 配置以太网接口
[VG3] interface ethernet 0
[VG3-Ethernet0] ip address 192.168.80.30 255.255.255.0
[VG3-Ethernet0] quit
# 配置语音实体
[VG3] voice-setup
[VG3-voice] dial-program
[VG3-voice-dial] entity 1 voip
[VG3-voice-dial-entity1] match-template 010....
[VG3-voice-dial-entity1] address ras
[VG3-voice-dial-entity1] quit
[VG3-voice-dial] entity 2 voip
[VG3-voice-dial-entity2] match-template 88..
```

```
[VG3-voice-dial-entity2] address ras
[VG3-voice-dial-entity2] quit
[VG3-voice-dial] entity 3 voip
[VG3-voice-dial-entity3] match-template 333010....
[VG3-voice-dial-entity3] address ras
[VG3-voice-dial-entity3] quit
[VG3-voice-dial] entity 4 voip
[VG3-voice-dial-entity4] match-template 3330755....
[VG3-voice-dial-entity4] address ras
[VG3-voice-dial-entity4] quit
[VG3-voice-dial] entity 8801 pots
[VG3-voice-dial-entity8801] match-template 8801
[VG3-voice-dial-entity8801] line 0
[VG3-voice-dial-entity8801] return
# 配置GK-Client
[VG3-voice] gk-client
[VG3-voice-gk] gw-id gw03
[VG3-voice-gk] gw-address ip 192.168.80.30
[VG3-voice-gk] gk-id gkserver gk-addr 192.168.80.50 1719
[VG3-voice-gk] ras-on
```

6. 配置H.323 Gateway 4

```
# 配置以太网接口
[VG4] interface ethernet 0
[VG4-Ethernet0] ip address 192.168.80.40 255.255.255.0
[VG4-Ethernet0] quit
#配置语音实体
[VG4] voice-setup
[VG4-voice] dial-program
[VG4-voice-dial] entity 1 voip
[VG4-voice-dial-entity1] match-template 010....
[VG4-voice-dial-entity1] address ras
[VG4-voice-dial-entity1] quit
[VG4-voice-dial] entity 2 voip
[VG4-voice-dial-entity2] match-template 99..
[VG4-voice-dial-entity2] address ras
[VG4-voice-dial-entity2] quit
[VG4-voice-dial] entity 3 voip
[VG4-voice-dial-entity3] match-template 222010....
[VG4-voice-dial-entity3] address ras
[VG4-voice-dial-entity3] quit
[VG4-voice-dial] entity 4 voip
[VG4-voice-dial-entity4] match-template 2220571....
[VG4-voice-dial-entity4] address ras
[VG4-voice-dial-entity4] quit
[VG4-voice-dial] entity 9901 pots
[VG4-voice-dial-entity9901] match-template 9901
[VG4-voice-dial-entity9901] line 0
[VG4-voice-dial-entity9901] return
# 配置GK-Client
[VG4-voice] gk-client
[VG4-voice-gk] gw-id gw04
[VG4-voice-gk] gw-address ip 192.168.80.40
[VG4-voice-gk] gk-id gkserver gk-addr 192.168.80.50 1719
[VG4-voice-gk] ras-on
```

7. 配置关键点

- 7.1 在xe上启动号码变换功能，并为每个注册网关分配area-code
- 7.2 启用vpn功能，创建vpn后，将网关包括到各个定义好的vpn中。
- 7.3 相同vpn内互打，不用加前缀，不同vpn互打，必须加前缀，直接拨打区号 + 区内号码不能打通。

