

XE200基于地区码的号码变换业务的实现

一、组网需求

一台XE200语音服务器采用集中式组网，进行H.323呼叫。共有4个网关设备，其中H.323 Gateway 1和H.323 Gateway 2的地区码为010，H.323 Gateway 3和H.323 Gateway 4的地区码为020。

二、组网图

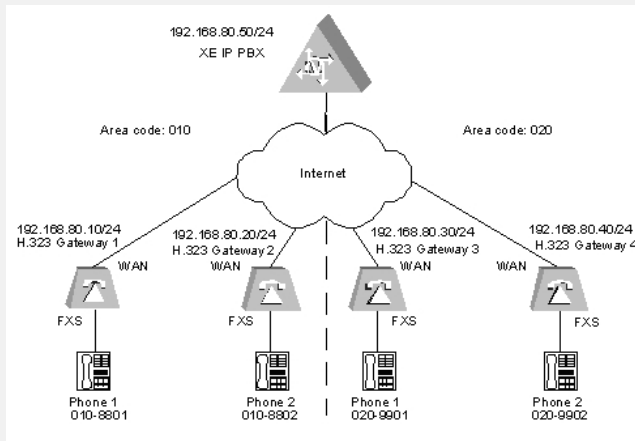


图1-1 H.323网守与位置服务器集中式组网图

三、配置步骤

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
```

配置网守

```
[XE] process-server
[XE-ps] ps-config gkserver interface Ethernet 0/0
[XE-ps] heartbeat password xe
[XE-ps] start
[XE-ps] gatekeeper
[XE-ps-gk] 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] ip-address 127.0.0.1
[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 //使能区域码变换//功能（缺省已启用）
```

配置网关设备

```
[XE-ls] gate-way gw01
[XE-ls-gw-gw01] device-type h323
[XE-ls-gw-gw01] dynamic-ip enable
[XE-ls-gw-gw01] area-code 010 //配置网关所属的//area-code
[XE-ls-gw-gw01] quit
```

```
[XE-ls] gate-way gw02
```

```
[XE-ls-gw-gw02] device-type h323
[XE-ls-gw-gw02] dynamic-ip enable
[XE-ls-gw-gw02] area-code 010 //配置网关所属的//area-code
[XE-ls-gw-gw02] quit
```

```
[XE-ls] gate-way gw03
```

```
[XE-ls-gw-gw03] device-type h323
[XE-ls-gw-gw03] dynamic-ip enable
[XE-ls-gw-gw02] area-code 020 //配置网关所属的//area-code
[XE-ls-gw-gw03] quit
[XE-ls] gate-way gw04
[XE-ls-gw-gw04] device-type h323
[XE-ls-gw-gw04] dynamic-ip enable
[XE-ls-gw-gw04] area-code 020 //配置网关所属的//area-code
[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] address ras
[VG1-voice-dial-entity1] match-template 0.....
[VG1-voice-dial-entity1] quit
[VG1-voice-dial] entity 2 voip
[VG1-voice-dial-entity2] address ras
[VG1-voice-dial-entity2] match-template 88..
[VG1-voice-dial-entity2] 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] 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] address ras
[VG2-voice-dial-entity1] match-template 0.....
[VG2-voice-dial-entity1] quit
[VG2-voice-dial] entity 2 voip
[VG2-voice-dial-entity2] address ras
[VG2-voice-dial-entity2] match-template 88..
[VG2-voice-dial-entity2] quit
[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] 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] address ras
[VG3-voice-dial-entity1] match-template 0.....
[VG3-voice-dial-entity1] quit
[VG3-voice-dial] entity 2 voip
[VG3-voice-dial-entity2] address ras
[VG3-voice-dial-entity2] match-template 99..
[VG3-voice-dial-entity2] quit
[VG3-voice-dial] entity 9901 pots
[VG3-voice-dial-entity9901] line 0
[VG3-voice-dial-entity9901] match-template 9901
[VG3-voice-dial-entity9901] 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 192.168.80.30 255.255.255.0
[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] address ras
[VG4-voice-dial-entity1] match-template 0.....
[VG4-voice-dial-entity1] quit
[VG4-voice-dial] entity 2 voip
[VG4-voice-dial-entity2] address ras
[VG4-voice-dial-entity2] match-template 99..
[VG4-voice-dial-entity2] quit
[VG4-voice-dial] entity 9902 pots
[VG4-voice-dial-entity9902] line 0
[VG4-voice-dial-entity9902] match-template 9902
[VG4-voice-dial-entity9902] return
# 配置GK-Client
[VG4-voice] gk-client
[VG4-voice-gk] gw-id gw04
[VG3-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

```

四、配置关键点

利用地区码实现号码变换，属于同一地区码的语音网关下的电话之间互相拨打，只需要拨打短号就可以了，而属于不同area-code的语音网关之间的电话互相拨打的时候，需要拨打地区码+短号。如：Gateway 1和Gateway 2同属于area-code 010，所以8801可以直接拨打8802（需要注意的事，8801拨打0108802也是一样的效果）；Gateway 1和Gateway 3属于不同的area-code（Gateway 3属于020），所以8801拨打Gateway 3下挂的电话时，被叫号码为area-code+ Gateway 3注册的短号，即0209901；同样的9901拨打Gateway 2下挂的电话号码时需要拨打0108802。