

## XE200/2000基于变换规则的号码变换的配置

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#### 一、组网：

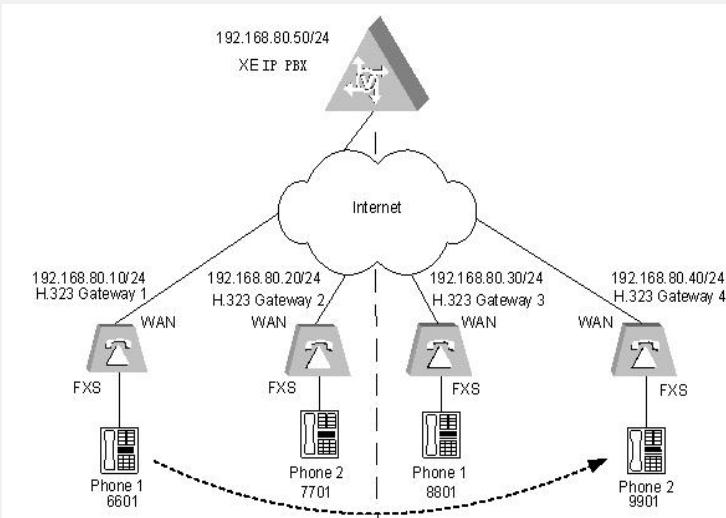


图1-1 基于变换规则的号码变换

#### 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。以某个公司内部VoIP网络为例，由于工作需要，员工可能会调换工位，使员工使用的电话号码发生变化，为了不影响某些重要领导的工作，可以将拨打某位领导原号码的呼叫通过号码变换转接到新的号码上，从而避免重要电话被漏接的情况发生。如某位领导原有电话号码为6601，工位调整后，新的电话号码为9901，则通过号码变换将拨打6601的呼叫变换为拨打9901。

#### 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 # 配置PS的心跳密码 #  
[XE-ps] ls-mode 0 local # 指定使用本地位置服务器 #  
[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] heartbeat password xe  
# 配置LS的心跳密码 #  
# 启用基于变换规则的号码变换功能  
[XE-ls] policy num-substitute enable  
# 创建号码变换规则表  
[XE-ls] number-substitute 1
```

```
# 创建号码变换规则
[XE-ls-sst-1] rule 0 callee 6601 9901 before
#将拨打6601的号码转为9901#
# 绑定全局下使用的号码变换规则
[XE-ls] substitute 1
# 配置网关设备
[XE-ls] gateway gw01
[XE-ls-gw-gw01] device-type h323
# 配置 gw01的类型为H323#
[XE-ls-gw-gw01] dynamic-ip enable
# 允许网关设备IP地址动态更新 #
[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] quit
[XE-ls] gateway gw03
[XE-ls-gw-gw03] device-type h323
[XE-ls-gw-gw03] dynamic-ip enable
[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] 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
#配置IP网络侧语音实体1#
[VG1-voice-dial-entity1] match-template ....
# 配置任意四位号码作为语音实体1被叫号码模板 #
[VG1-voice-dial-entity1] address ras
# 配置动态路由策略，GW和GK SERVER通过交互RAS信令，由GK SERVER 动态
返回与被叫号码匹配的对端GW 地址
[VG1-voice-dial-entity1] quit
[VG1-voice-dial] entity 6601 pots
#配置语音实体6601，映像本地语音设备#
[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
#激活GK-Client#
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 ....
```

```
[VG2-voice-dial-entity1] address ras
[VG2-voice-dial-entity1] 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
[VG3-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 ....
[VG3-voice-dial-entity1] address ras
[VG3-voice-dial-entity1] 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 ....
[VG4-voice-dial-entity1] address ras
[VG4-voice-dial-entity1] 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 创建号码变换规则  
[XE-ls-sst-1] rule 0 callee 6601 9901 before
- 7.2 启用基于变换规则的号码变换功能  
[XE-ls] policy num-substitute enable
- 7.3 配置LS和PS的心跳密码保持一致

[xe-ls-ps-gkserver] heartbeat password xe  
[XE-ps] heartbeat password xe