



# How to dial extents in PBX\_branch directly through IVR in PBX\_head

Version: 2.0

Date: 2016.3.3

# 1. Introduction

This application note shows how to dial extens in MyPBX\_branch directly from the IVR of MyPBX\_head.

**Description:**

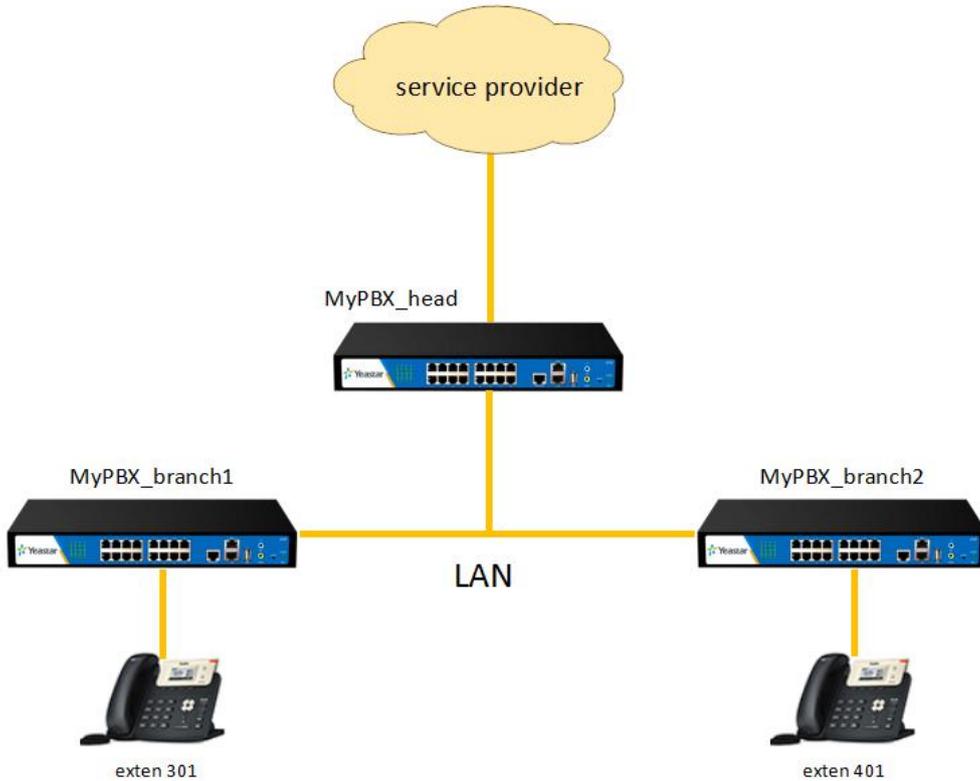
IP address of MyPBX\_head:192.168.6.2

IP address of MyPBX\_branch1:192.168.6.3

IP address of MyPBX\_branch2:192.168.6.4

Exten 301 is registered on the MyPBX\_branch1

Exten 401 is registered on the MyPBX\_branch2



## 2. Preparation

Make sure you can dial the exten 301 and exten 401 directly from the phone in MyPBX\_head. You can creat 2 outbound in MyPBX\_head as the following two pictures.

**Firmware version:**X.19.0.48

The screenshot shows the 'Add Outbound Route' configuration window for 'To\_branch1'. The 'Route Name' is 'To\_branch1'. The 'Password' field is empty. 'T.38 Support' and 'Rmemory Hunt' are both set to 'No'. 'Office Hours' is empty. Under 'Dial Patterns', there is one entry with 'Dial Pattern' '3XX', 'Strip' empty, and 'Prepend' empty. Under 'Member Extensions', the 'Available Extensions' list is empty, and the 'Selected' list contains SIP extensions 100 through 107. Under 'Member Trunks', 'Available Trunks' contains 'E1Trunk1(E1)' and 'E1Trunk2(E1)', and 'Selected' contains 'To\_branch1(SPS)'.

The screenshot shows the 'Add Outbound Route' configuration window for 'To\_branch2'. The 'Route Name' is 'To\_branch2'. The 'Password' field is empty. 'T.38 Support' and 'Rmemory Hunt' are both set to 'No'. 'Office Hours' is empty. Under 'Dial Patterns', there is one entry with 'Dial Pattern' '4XX', 'Strip' empty, and 'Prepend' empty. Under 'Member Extensions', the 'Available Extensions' list is empty, and the 'Selected' list contains SIP extensions 100 through 107. Under 'Member Trunks', 'Available Trunks' contains 'E1Trunk1(E1)', and 'Selected' contains 'To\_branch2(SPS)'.

### 3. Configuration in SSH

#### Step 1. Download a putty in your PC

We can access MyPBX SSH using putty or other terminal tools.

Putty download link: [www.yeastar.com/download/tools/putty.exe](http://www.yeastar.com/download/tools/putty.exe).

#### Step 2. Open putty by SSH

1) Before we open the putty by ssh, we need check the settings in MyPBX first.

**Path:** System --- Network Settings --- LAN Settings

DHCP: No

Enable SSH: Yes Port: 8022

Enable FTP: Yes Port: 21

Hostname: MyPBX

IP Address: 192.168.6.217

Subnet Mask : 255.255.255.0

Gateway : 192.168.6.1

Primary DNS : 192.168.1.1

Secondary DNS :

IP Address2:

Subnet Mask2:

Save Cancel

2) Settings in putty

PuTTY Configuration

Category:

- Session
- Logging
- Terminal
- Keyboard
- Bell
- Features
- Window
- Appearance
- Behaviour
- Translation
- Selection
- Colours
- Connection
- Data
- Proxy
- Telnet
- Rlogin
- SSH
- Serial

Basic options for your PuTTY session

Specify the destination you want to connect to

Host Name (or IP address) Port

192.168.6.2 8022

Connection type:

Raw  Telnet  Rlogin  SSH  Serial

Load, save or delete a stored session

Saved Sessions

Default Settings

Load Save Delete

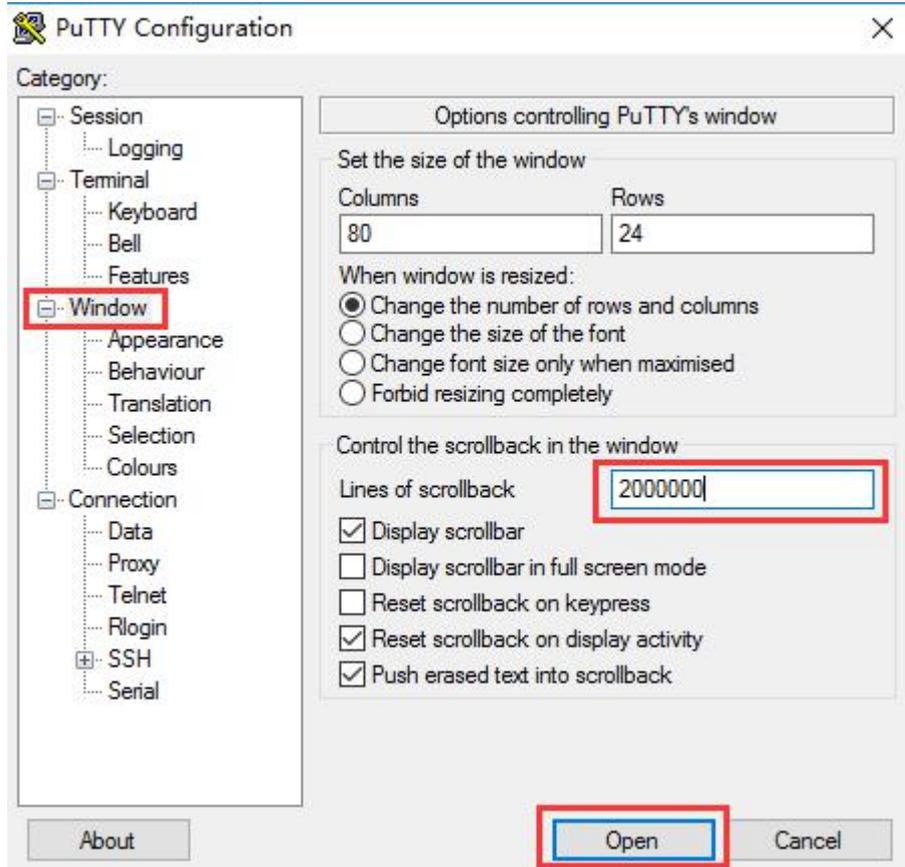
Close window on exit:

Always  Never  Only on clean exit

About Open Cancel

### 3)Settings in putty

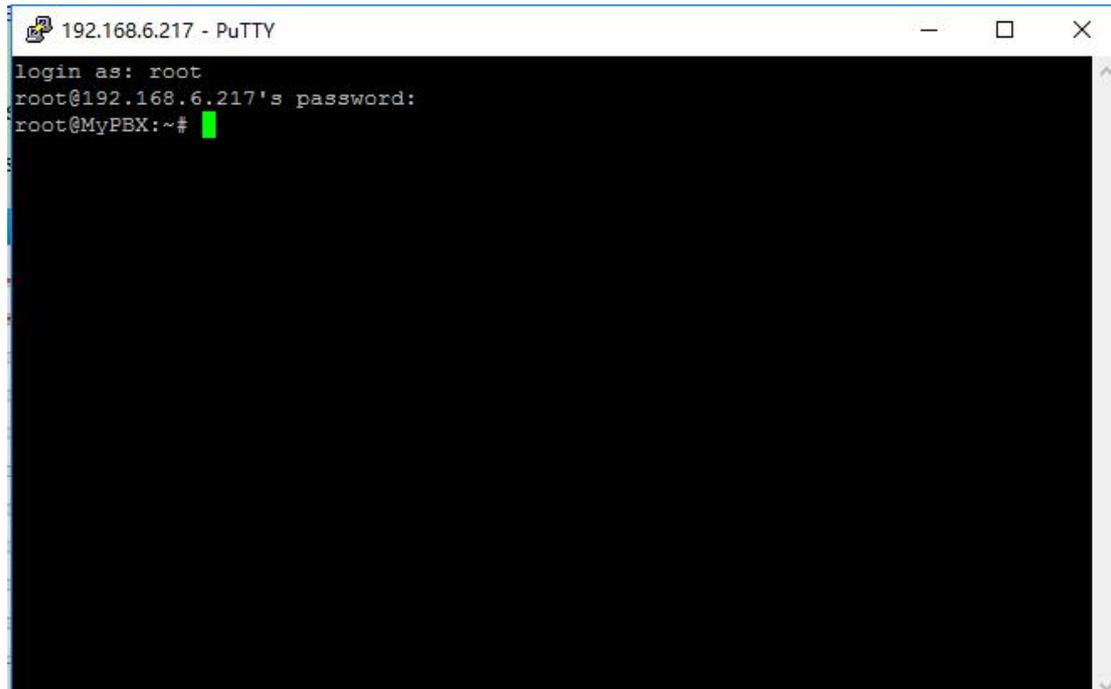
Change the value of Lines of scrollbar to 2000000,and then click 'Open'.



### 4)Login by ssh

**Account:**root

**Password:**ys123456



### Step 3. Edit by SSH

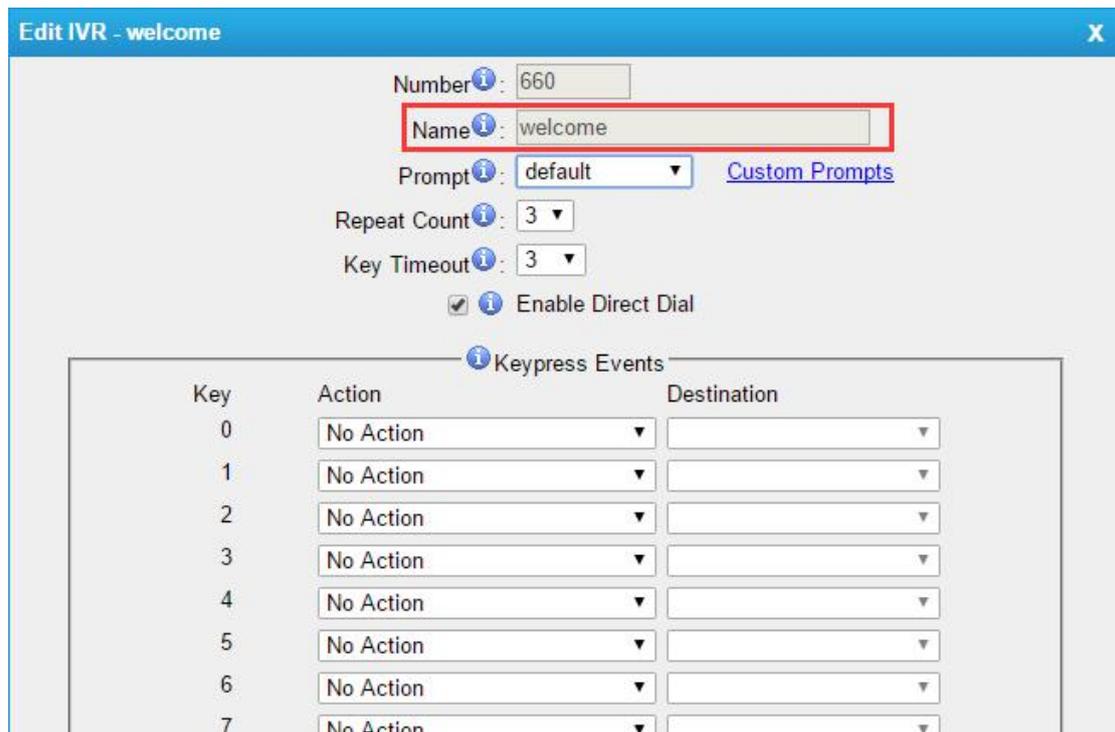
1) type `'vi /etc/asterisk/extensions.conf'` in the putty and press keyboard 'Enter' .



2) Find the IVR in MyPBX\_head that you need to dial to the extens in branch directly.

**Path:** PBX---Inbound Call Control---IVR

The name of IVR is 'welcome' here.



3)Go back to the putty again to find the IVR.

Type `'/'` and `'welcome'` to find the IVR called welcome.

```

192.168.6.217 - PuTTY
#include spms.conf
[general]
static = yes
writeprotect = no
autofallthrough = yes
clearglobalvars = yes
priorityjumping = no
extenpatternmatchnew = no
[globals]
TOUCH_MONITOR_FORMAT = wav_alaw
TOUCH_MIXMONITOR_FORMAT = wav_alaw
DIALOPTIONS = tTkKwXx
PRESS5TOLEVMSG_ENABLE = 1
ABSOLUTE_TIMEOUT = 6000
RINGTIME = 60
TRANSFER_INCOMING_CALLERID = 0
RINGTIME_104=30
RINGTIME_103=30
RINGTIME_102=30
RINGTIME_101=30
RINGTIME_100=30
RINGTIME_601=30
RINGTIME_602=30
/welcome
    
```

After you type `'/welcome'`,you can see the contest called voicemail-custom-welcome.Copy the whole context.

```

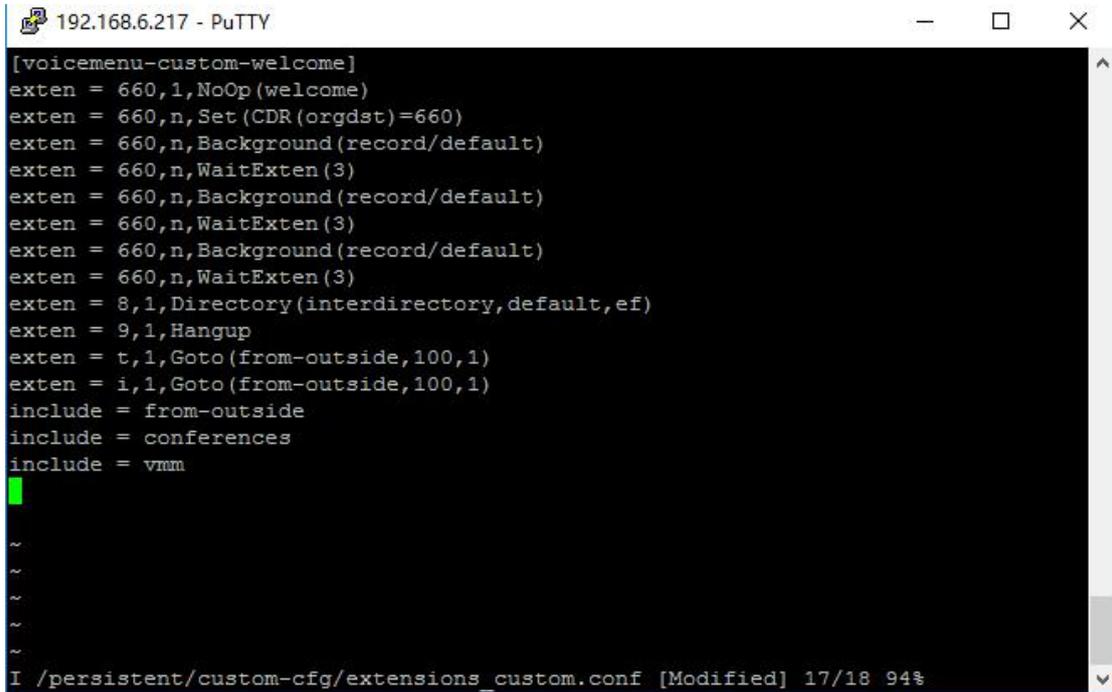
192.168.6.217 - PuTTY
same = n,Answer
same = n,Wait(1)
same = n,ChanSpy(${DIALPARAM_OF_EXTEN${EXTEN:${PRILEN}}},Bq)
same = n,Hangup

[voicemail-custom-welcome]
exten = 660,1,NoOp(welcome)
exten = 660,n,Set(CDR(orgdst)=660)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 8,1,Directory(interdirectory,default,ef)
exten = 9,1,Hangup
exten = t,1,Goto(from-outside,100,1)
exten = i,1,Goto(from-outside,100,1)
include = from-outside
include = conferences
include = vmm

[voicemenus]
exten = 660,1,Goto(voicemail-custom-welcome,660,1)
- /etc/asterisk/extensions.conf 840/4416 19%
    
```



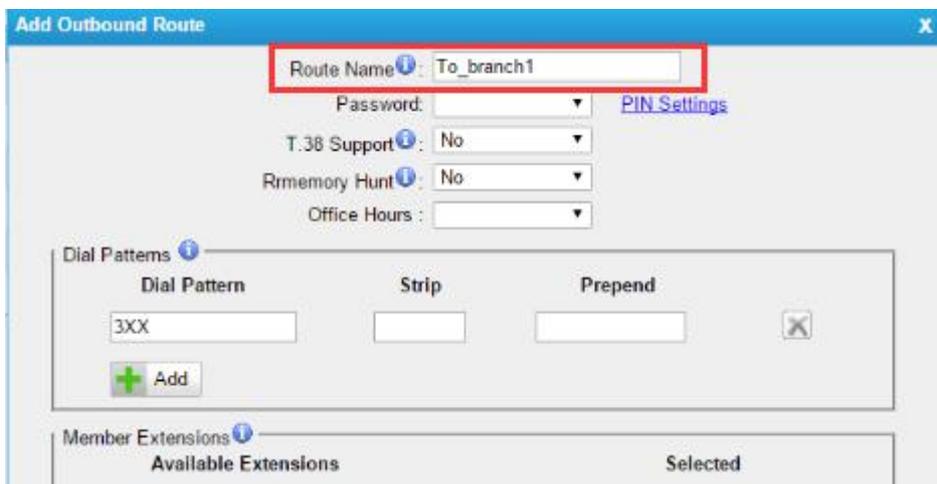
You can see the following pictures after you copy the whole context.



```
192.168.6.217 - PuTTY
[voicemail-custom-welcome]
exten = 660,1,NoOp(welcome)
exten = 660,n,Set(CDR(orgdst)=660)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 8,1,Directory(interdirectory,default,ef)
exten = 9,1,Hangup
exten = t,1,Goto(from-outside,100,1)
exten = i,1,Goto(from-outside,100,1)
include = from-outside
include = conferences
include = vmm
~
~
~
~
I /persistent/custom-cfg/extensions_custom.conf [Modified] 17/18 94%
```

5) Find the name of the outbound route

**Path:** PBX---Outbound Call Control---Outbound Routes



The screenshot shows the 'Add Outbound Route' configuration window. The 'Route Name' field is highlighted with a red box and contains the text 'To\_branch1'. Other fields include 'Password', 'T.38 Support' (set to 'No'), 'Rmemory Hunt' (set to 'No'), and 'Office Hours'. Below these is a 'Dial Patterns' section with a table:

Dial Pattern	Strip	Prepend
3XX		

There is an 'Add' button below the table and a 'Member Extensions' section at the bottom with 'Available Extensions' and 'Selected' columns.

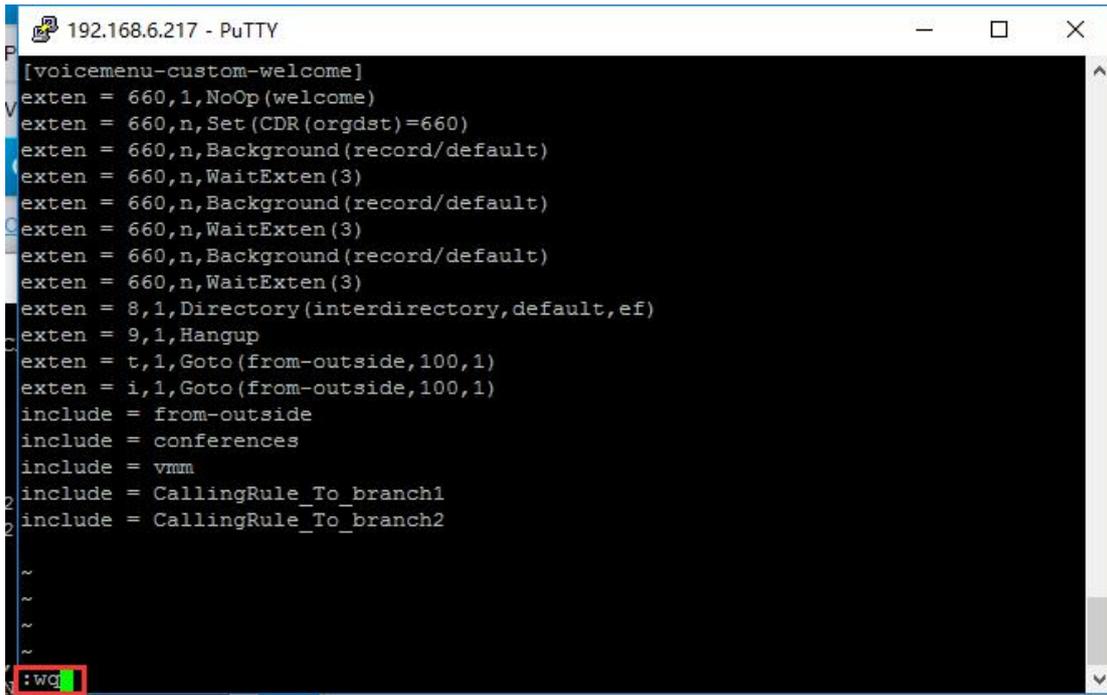


6)Go back to the putty and add two lines of script.  
Insert the following two lines of script,To\_branch1 and To\_branch2 are the name of outbound routes,so they may be not the same in your site.

**include = CallingRule\_To\_branch1**  
**include = CallingRule\_To\_branch2**

```
[voicemail-custom-welcome]
exten = 660,1,NoOp(welcome)
exten = 660,n,Set(CDR(orgdst)=660)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 8,1,Directory(interdirectory,default,ef)
exten = 9,1,Hangup
exten = t,1,Goto(from-outside,100,1)
exten = i,1,Goto(from-outside,100,1)
include = from-outside
include = conferences
include = vmm
include = CallingRule_To_branch1
include = CallingRule_To_branch2
~
~
~
~
I /persistent/custom-cfg/extensions_custom.conf [Modified] 19/19 100%
```

After you insert the script,press keyboard **`Esc`** ,and type **`:wq`** in the putty to save the file.



```
[voicemail-custom-welcome]
exten = 660,1,NoOp(welcome)
exten = 660,n,Set(CDR(orgdst)=660)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 8,1,Directory(interdirectory,default,ef)
exten = 9,1,Hangup
exten = t,1,Goto(from-outside,100,1)
exten = i,1,Goto(from-outside,100,1)
include = from-outside
include = conferences
include = vmm
include = CallingRule_To_branch1
include = CallingRule_To_branch2

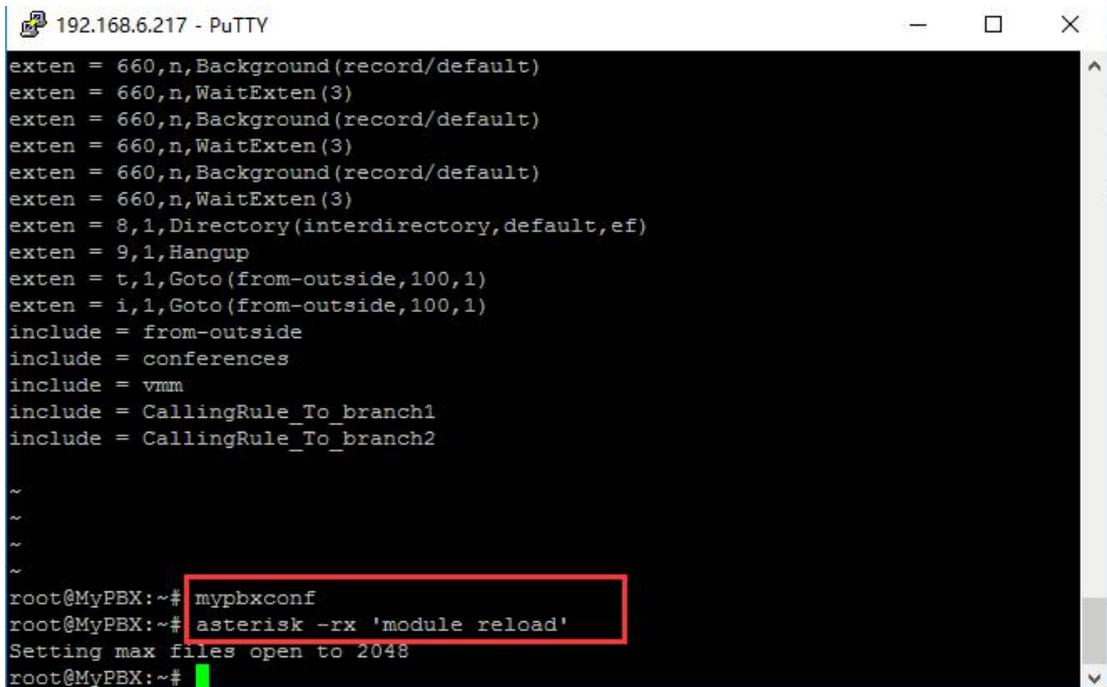
~
~
~
~
:wq
```

7) Make the file effect

Type the following two commands to make the file effect

**mypbxconf**

**asterisk -rx 'module reload'**



```
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 660,n,Background(record/default)
exten = 660,n,WaitExten(3)
exten = 8,1,Directory(interdirectory,default,ef)
exten = 9,1,Hangup
exten = t,1,Goto(from-outside,100,1)
exten = i,1,Goto(from-outside,100,1)
include = from-outside
include = conferences
include = vmm
include = CallingRule_To_branch1
include = CallingRule_To_branch2

~
~
~
~
root@MyPBX:~# mypbxconf
root@MyPBX:~# asterisk -rx 'module reload'
Setting max files open to 2048
root@MyPBX:~#
```

8) Try have a test now.

<End>