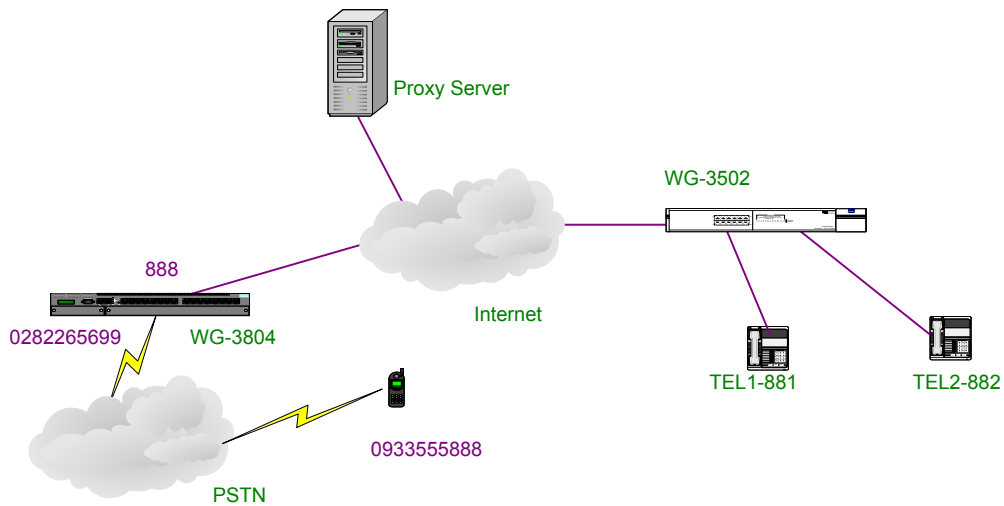


## FXO CallerID Detection

The Welltech FXO devices have the ability to detect the PSTN caller ID, but it must match two conditions, the PSTN Caller id must be a FSK caller id (the Welltech FXO device can not detect the DTMF type caller id till now.) and the FXO device must under hotline mode.

Below is the detail test scenario and configurations for FXO caller ID detected function:

### Test Scenario:



1. The 3804 and 3502 are under the same platform and register to the same proxy server.
2. 3804 is under hotline mode and hotline to the IVR of this platform.
3. The PSTN caller ID is FSK Bellcore mode.
4. Both of the 3804 and 3502 need to enable the caller id functions.
5. The caller is using mobile phone which number is 0933555888, and the user hopes to contact with the TEL1 which SIP number is 881.
  - a) Mobile phone user dial the PSTN number 0282265699 to contact with the FXO device, the FXO device is under hotline mode and hotline to the IVR, so user will hear a greeting from the server.
  - b) The mobile phone user should dial the extension number 881 to reach the TEL1 of 3502.
  - c) The TEL1 should display the Caller ID as 0933555888.

### Configuration of 3804:

1. You should make sure the 3804 can register to the server first.
2. Set hotline function.

The FXO can only send invite message with “pstn number” by hotline mode, otherwise it will send the invite message by its SIP number 888.

*Command: **line –config 1 hotline 555**, where 1 is the FXO port 1 and 555 is the IVR number.*

3. Enable Bellcore caller ID, so that the FXO has the ability of Bellcore caller id detection.

*Command: **sysconf –callerid 1**, where 1 is the Bellcore, type 2 is the ETSI type and 0 is disable.*

### Configuration of 3502:

1. You should make sure the 3502 can register to the server first.
2. Enable Bellcore caller ID, so that the 3502 has the ability of sending the caller id to the telephone set with Bellcore type.

Actually the caller id setting of 3502 is irrelevant to the PSTN caller id type.

The setting is based on the telephone set, if your telephone can only accept the Bellcore type, then you should configure the Bellcore type of your 3502. If your telephone can only accept the ETSI type, then you should configure the ETSI type of your 3502

*Command: **sysconf –callerid 1**, where 1 is the Bellcore type, 2 is the DTMF type, 3 is ETSI type and 0 is disable.*

### Debug mode of 3802:

You can enable the debug mode by [debug –a vp sip fsm] and [debug –o] commands to check the FXO caller id detection.

```
usr/config$ debug –a vp sip fsm
```

```
usr/config$ debug -o
```

```
usr/config$ debug -s
```

Current debug type enabled :

Debug Mode is open

```
DEBUG-> vp sip fsm
```

usr/config\$ msg.cid=0 msg.command=105 at send2AP  
pipeEventHandle is comming msg.cid=0 msg.command=105!!  
VP\_DAA detect Line 0 RING  
CallIndex[0]=0  
slot=0 is into the FXO\_State\_Machine  
SelectCodec -----notactive channel 0 codec 1

Channel 0 select codec UsrChIn 1 and ChIn 1

SelectPacketLen ----- notactive channel 0 TxM 4

OpenChannel0 ----- codec 1 active 1 RTP\_active 1

vpEvent\_handler CID=0 event=8

0-EV\_RTCP

vpEvent\_handler CID=0 event=25

0-EV\_DETECT\_ANSWER\_TONE

vpEvent\_handler CID=0 event=34

If the FXO can detect the caller id well, the blue text will appear.

**0-EV\_DETECT\_CALLER\_ID**

msg.cid=0 msg.command=146 at send2AP

pipeEventHandle is comming msg.cid=0 msg.command=146!!

**MyCall[CallIndex[msg.cid]].Originator.Number= 0933555888**

vpEvent\_handler CID=0 event=13

0-EV\_END\_MODEM

vpEvent\_handler CID=0 event=8

0-EV\_RTCP

msg.cid=0 msg.command=105 at send2AP

pipeEventHandle is comming msg.cid=0 msg.command=105!!

slot=0 is into the FXO\_State\_Machine

cid= 0,channel=0,MyCall[channel].Originator.Type=1

default Routing table Terminator\_Type=2

Slot=0 has One Route Entry Found, Dst port Type: 2

MyCall[CallIndex[cid]].input\_str\_DTMF=888

Line: 0, Event 105 Occured, State Change from (IDLE) to (RING)

Set\_DTMF\_Type ----- channel0, type = 0

Set\_FAX\_Type ----- channel0, type = 1

Set\_DJBufCmd ----- channel0, type = 1msg.cid=0 msg.command=148 at send2AP

pipeEventHandle is comming msg.cid=0 msg.command=148!!

slot=0 is into the FXO\_State\_Machine

proceed\_dial cid=0

Start dialling at proceed\_dial()

destString=To:sip:555@192.168.64.3

\*\*\*\*\* Line : 0, Start Inviting \*\*\*\*\*

strDes To:sip:555@192.168.64.3, strOri From:"0933555888"<sjp:888@192.168.64.3>

.....  
.....  
.....

The caller id display info should be display

### Note:

The parameters of PSTN caller ID still have some difference between country to country, even from telecom to telecom in the same country. So maybe the FXO can not detect well in your country. We suggest you to adjust the higher input volume and the [Ring Before Answer] value to test again, the commands are as below:

1. **[voice -volume 1 input 35]**, set the input volume of FXO port 1 to 35.  
The “db” value may decrease when the “tone” of Caller id goes to FXO via PSTN; and the FXO maybe not able to detect the Caller id tone, so we set the input volume to 35 or higher to avoid this error. The input volume default is 32.
2. **[sysconf -rba 3]**, to extend the time FXO ring detection.  
The caller ID data may send too late and the duration of FXO caller id detection was expire, so we can extend the [Ring Before Answer] value to avoid this issue. The “rba” time default is 1.
3. The FXO device still can not detect the DTMF caller id. If you make sure the caller id of your telecom is FSK (Bellcore or ETSI) type but the FXO still can not detect the caller id well, please give us the detail spec. of your telecom’s caller id so that we can check this issue in Welltech LAB.