Configuration for DGW100-S interworking with IMS

http://www.redstonesystems.com/show/398.html (DGW100-S User Manual)

1,Log-in as admin using the default IP: 192.168.2.240 , default Password：dgw100.

2, After the equipment is turned on, it is assigned a fixed IP address.

ETH

Setup	Static IP address ⌄
IP address	192 . 168 . 2 . 240
Subnet mask	255 . 255 . 0 . 0
Default gateway	192 . 168 . 2 . 1
Primary DNS server	. . .
Secondary DNS server	. . .

3，The auxiliary port cannot be used as a control port for the equipment interface.

AUX

Mode	LAN port (IP address configura ⌄
IP address	. . .
Subnet mask	. . .

4，Configurate the Registrar Server and the Subdomain Name. Select **Per SIP Trunk** as its Registrar mode.

Local signaling port	5060	(Range: 1 - 9999, Default: 5060)
Registrar server	192.168.2.159:7878	
Proxy server	192.168.2.159:7878	e.g. 168.33.134.51:5000 or www.sipproxy.com:5000
Backup SIP proxy		e.g. 168.33.134.53:5000
Primary server heartbeat detection	☐	
Subdomain name	ims.sd.chinamobile.com	
Registrar mode	Per SIP trunk	
Registration expiration	600	s

The Domain Name of the User is:ims.sd.chinamobile.com　（This Domain Name is the IMS User Domain Name of the China Mobile, Shandong, and there will be some changes in other areas or by other service operators）.

5，For SIP Trunk registration, the number's accuracy must be checked and the prefix is +86531(the Jinan Area), filling out the username, the suffix is: @ims.sd.chinamobile.com.

Routing　◉ Sequential hunting　○ Round-robin hunting

➕ Add　➕ Quick Addition　➕ Batch adding　✏ Batch configuration　🗑 Delete SIP trunk

☐	ID	Register status	Number	Concurren...	Username	Password ❓	Registration	Outbound call	Del

No data

Save

6，Modify the Line Framing. (Note：normally, it isn't necessary to change it.)

On **Basic>TDM** page, modify the Line Framing Mode (Abbreviation: Delivery & Test, this is a negotiation, and you can try it out if the link is unavailable).
If the DS1 Type is set to T1 then line Framing can be set to D4, SF(Super Frame), and ESF(Extended Super Frame) mode.
If the DS1 Type is set to E1 then Line Framing can be set to E1_MF_CRC mode.

7，On **ISDN >Application** page, select the **Switch Type**. (Note: if the peer terminal is Network, then choose User, if the peer terminal is User, then choose Network).
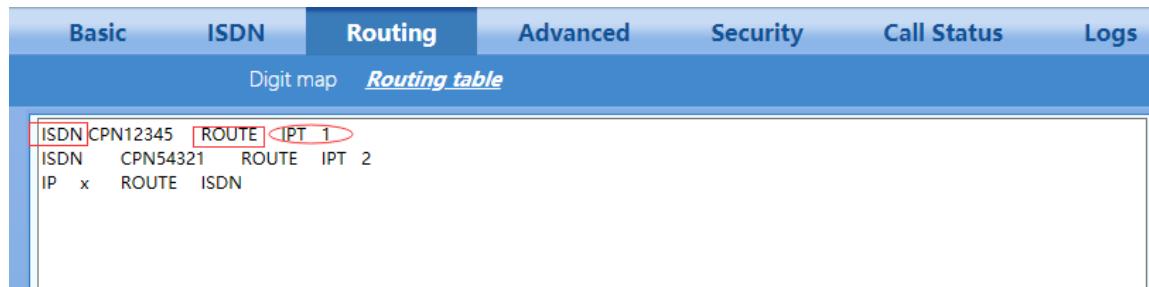

8，On **ISDN> Application>Nail-up connection** page：enable "No CPDN and channel ID will be applied".

9，On **Routing>Routing table** page, set the routing rules as follows:

The number's outbound calls must go via the designated outside line: send the calling number 12345 from ISDN to the first IP outside line.

10，On **Advanced> SIP** page. Enable IMS.
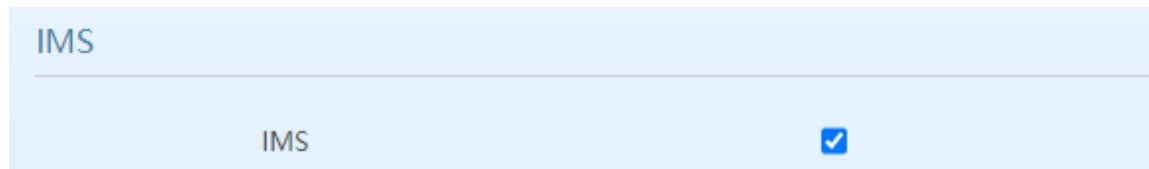
Register the IMS username and select IMS here.

11，Log management—check the IDSN status. The normal ISDN line connection is as below:

State	State, include: ● IS represents that both the physical link and the signal link of ISDN have been connected. ● OOS represents that the physical link of ISDN has been connected but the signal link hasn't been connected. ● MOOS represents that neither the physical link nor the signal link of ISDN have been connected.
Int Id	Interface Id, its value is 0.
side	Including User Side and Network Side, both shall be used in pairs at both terminals of ISDN, if one terminal is User, then another terminal must be Network.
echo	Echo Elimination. ● On: Enable the function of "Echo Elimination" ● Off: Disable the function of "Echo Elimination"
hunting	Search the idle timeslot, with 2 methods totally: ● FORWARD ● BACKWARD
DS1	Types of interface card: T1 or E1, with 2 kinds of Connection State: ● UP(Connected) ● Down (Disconnected)

12，Register IMS username for the DGW100-S.

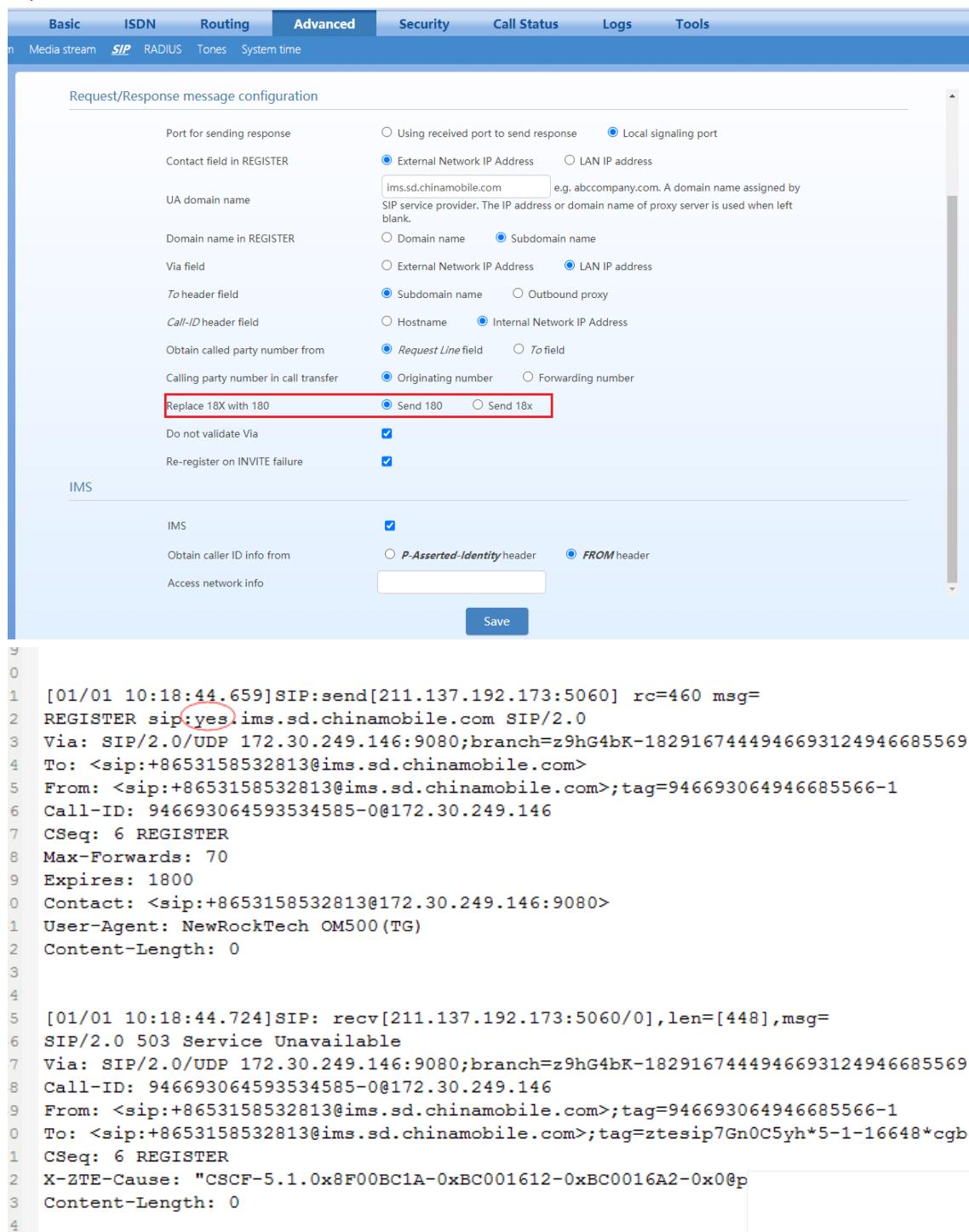How to use computer to login the web interface of the equipment:

Find a switch and plug the mobile line into the switch, connect the ETH port of the DGW100-S to the switch and then connect the computer to the switch. Set the IP Address of the computer and the DGW100-S in the same network segment, and it isn't necessary to set the computer's gateway address.

The E1 network line side of the DGW100-S:1245—4512(Note: white-orange is 1, orange is 2, white-blue is 4, blue is 5.
Another side: white-blue is 1, blue is 2, white-orange is 4, orange is 5).

Note：

If it cannot call-in or there is no ring-back tone while call-in, then set the request/response message configuration of the DGW100-S on **Advanced>SIP** page and select **Send 180** to replace 18x with 180.


```
9
0
1   [01/01 10:18:44.659]SIP:send[211.137.192.173:5060] rc=460 msg=
2   REGISTER sip:yes.ims.sd.chinamobile.com SIP/2.0
3   Via: SIP/2.0/UDP 172.30.249.146:9080;branch=z9hG4bK-18291674449466693124946685569
4   To: <sip:+8653158532813@ims.sd.chinamobile.com>
5   From: <sip:+8653158532813@ims.sd.chinamobile.com>;tag=946693064946685566-1
6   Call-ID: 946693064593534585-0@172.30.249.146
7   CSeq: 6 REGISTER
8   Max-Forwards: 70
9   Expires: 1800
0   Contact: <sip:+8653158532813@172.30.249.146:9080>
1   User-Agent: NewRockTech OM500(TG)
2   Content-Length: 0
3
4
5   [01/01 10:18:44.724]SIP: recv[211.137.192.173:5060/0],len=[448],msg=
6   SIP/2.0 503 Service Unavailable
7   Via: SIP/2.0/UDP 172.30.249.146:9080;branch=z9hG4bK-18291674449466693124946685569
8   Call-ID: 946693064593534585-0@172.30.249.146
9   From: <sip:+8653158532813@ims.sd.chinamobile.com>;tag=946693064946685566-1
0   To: <sip:+8653158532813@ims.sd.chinamobile.com>;tag=ztesip7Gn0C5yh*5-1-16648*cgb.5
1   CSeq: 6 REGISTER
2   X-ZTE-Cause: "CSCF-5.1.0x8F00BC1A-0xBC001612-0xBC0016A2-0x0@p
3   Content-Length: 0
4
```

While the word "yes" or "no" appears in registration message before the IMS , then delete the parameter "SIP_REG_SUB_DOMAIN = yes "in the backstage file "var/config app.ini".