DWG2008 Using With FreeSwitch



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1. User SSH to login to the FreeSwitch server, here we use putty, enter your server's IP address, chose SSH:

Category: Session Logging Terminal Keyboard Bell Features	Basic options for your PuTTY session Specify the destination you want to connect to Host Name (or IP address) Port Freeswitch server's IP(xx,xx,xx,x) 22 Connection type: Does to be to
Session Logging Terminal Keyboard Bell Features	Basic options for your PuTTY session Specify the destination you want to connect to Host Name (or IP address) Freeswitch server's IP(xxxxxxx) 22 Connection type:
Logging Terminal Keyboard Bell Features	Specify the destination you want to connect to Host Name (or IP address) Freeswitch server's IP(xxxxxxx) 22 Connection type: Dest Name (or IP address)
Session Logging Terminal Keyboard Bell Features Window Appearance Behaviour Translation Selection Colours Connection Data Proxy Telnet Rlogin SSH SSH Serial	Load, save or delete a stored session Saved Sessions
	Close window on exit: Always Never Onen Cancel

Enter the directory the freeswitch's default configuration directory, add the gateway's configuration in /usr/local/freeswitch/conf/directory/default/, Because the DWG2008's gsm ports will receive the incoming call which send to freeswitch with sip protocol, so the DWG2008's gsm port should register to the freeswitch. Here i just config one gsm ports of DWG2008, if you have more gsm ports which insert the sim card, please add other sip users.

vi /usr/local/freeswitch/conf/directory/default/dag-fxo.xml

add those in this file:

<include>

<user id="dwg2008"> <params> <param name="password" value="\$\${default password}"/> <param name="vm-password" value="9999"/><!--if vm-password is omitted</pre> password param is used--> </params> <variables> <!--all variables here will be set on all inbound calls that originate from this user --> <variable name="user_context" value="public"/> <variable name="effective caller id name" value=" dwg2008"/> <variable name="effective_caller_id_number" value="2008"/> <!-- Don't write a CDR if this is false valid values are: true, false, a_leg and b_leg --> <variable name="process_cdr" value="true"/> </variables> </user> </include>

Note: the default_password is "1234", default in freeswitch, of course you can change it to any number you want.

3. Edit the outband dialplan in /usr/local/freeswitch/conf/dialplan/default.xml

vi /usr/local/freeswitch/conf/dialplan/default.xml

here we set number's prefix which you want to send to the gateway is "0", add one extension:

```
<extension name="dwg2008_gateway">
<condition field="destination_number" expression="^0(\d+)$">
<action application="answer"/>
<action application="set" data="ringback=${us-ring}"/>
<action application="bridge" data="sofia/internal/$1@Gateway's IP"/>
</condition>
</extension>
```

Please note the red line, the IP address is your gateway's IP.

4. Edit the outband dialplan in /usr/local/freeswitch/conf/dialplan/public/00_inbound_did.xml. Modify this file:

<include> <extension name="public_did"> <condition field="destination_number" expression="^(900)\$"> <action application="set" data="domain_name=\$\${domain}"/> <action application="transfer" data="1000 XML default"/> </condition>

</extension>

</include>

This configuration match the DID "900", when there is a incoming call, ring the extension 1000.

5. Press "F6" in freeswitch's console to refresh configuration:

freeswitch@debian> 2011-05-31 19:17:56.635307 [INFO] mod_enum.c:808 ENUM Reloaded
2011-05-31 19:17:56.638435 [INFO] switch_time.c:915 Timezone reloaded 530 definitions

6. Now we have finished the configuration of the freeswitch, let's config the DWG2008, first enter the IP address of the DWG2008 in the browser, the default username and password is the same: "admin".

Mobile	Inform	ation								
Р	ort Ty	ype IMSI	Status	Remaining Call Duration(min)	Carrier	Signal Quality	ASR(%)ACD	(s)PDD(s)Call Status
0 1 2 3 4 5 6 7	00000000000000000000000000000000000000	SM 4600291975888: SM SM SM SM SM SM SM	34 Mobile Registered No SIM Card No SIM Card No SIM Card No SIM Card No SIM Card No SIM Card No SIM Card	No Limit No Limit No Limit No Limit No Limit No Limit No Limit	CHINA MOBILE	ЧШ Ч Ч Ч Ч Ч Ч	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	Active Idle Idle Idle Idle Idle Idle Idle
SIP Info	ormatio	on								
P	ort s	SIP User ID	Register Status	Status	Port SIP User ID		Regi	ister Sta	atus	Status
0 2 4 6	C	dwg2008	Registered Unregistered Unregistered Unregistered	offhook onhook onhook onhook	1 3 5 7		Unre Unre Unre Unre	gistere gistere gistere gistere	d d d d	onhook onhook onhook onhook

7. Chose the "SIP config" option under the "System Parameter", then modify like below:

Configuration		
SIP Proxy		
SIP Server Address	freeswitch's IP	
SIP Server Port(default: 5060)	5060	
Outbound Proxy		
Outbound Proxy Address]
Outbound Proxy Port	5060]
Use Random Port	No O Yes	
Local SIP Port	5060]
ls Register	🛇 No 🔍 Yes	
Register Interval(range: 1 - 3600s)	1800	s
T1	500	ms
T2	4000	ms
Τ4	5000	ms
TMAX	32000	ms
Keepalive Interval(range:0 - 3600s,0 means disable)	10	s
Enable 100rel	No O Yes	
Refer to Use Target Contact	No O Yes	

Then click the "save" option to save this page.

8. Chose the "Port Config" option to config the fxo port, I just have one analog pstn line which insert to the port0, so the configuration should like this:

Por	t Configuration		
	All ports register used same user ID	● No ◎ Yes	
	Current Port	Port 0 💌	This the username and
	SIP User ID Authenticate ID	dwg2008 dwg2008	 password which config in FreeSwitch
	Authenticale Password		
	Tx Gain Rx Gain	0dB ▼ -2dB ▼	Offhook Auto-Dial "900" is
	To VOIP Hotline	900	DID, it means the
	To PSTN Hotline Auto-Dial Delay Time	0 s	 DWG2008 will send the number "900" to
			freeswitch when the fxo
		Save	receive the incoming call.

9. Chose the "Service Config" option to modify the last step:

Enable PSTN Incoming Configuration Auto Outgoing Routing Type	○ No
IP to PSTN One Stage Dialing	🗇 No 💿 Yes
Send Original Caller ID for PSTN Incoming Calls	No Ves
DTMF Parameter	
DTMF Method	RFC2833
RFC2833 Payload Type	101
DTMF Volume	0dB 🗨
DTMF Interval	200 ms
Enable STUN	◉ No © Yes

Then save the webpage.

10. Chose "Port Group" option under the "Port Group Configuration", add a gsm port group:

ort Group Modify					
Index	0				
Description	all				
Select Mode	cyclic acsend	ling		-	
Port	Port 0	Port 1			
	Port 2	Port 3			
	Port 4	Port 5			
	Port 6	Port 7			
	ОК	Reset	Cancel		

Then click "OK".

11. Chose "IP->Tel Routing" option under the "Routing Configuration", add a routing group:

IP->Tel Routing Modify			
Index	31		
Description	all		
Source Prefix	any		
Source IP	IP	Any	
	IP Group		
Destination Prefix	any		
Destination	© Port	0 🔹	
	Port Group	0 <all></all>	
	OK	Reset Cancel	

12. Chose "Tel->IP Operation" under "Operation", Add one:

Tel->IP Operation Modif	y .
Index	9
Source Prefix	any
Source Port	Port Any
	◎ Port Group 0 <i></i>
Destination Prefix	any
Operation	© Forbid Call
	Allow Call
	🗹 Auto Call 🔲 Password Authentication
Description	auto
	OK Reset Cancel

13. The last step is to restart the DWG2008, chose the "Restart" option under "Tools", click the Restart.

Wait just one minute. Then use the sip phone which register with freeswitch to call out.

14. Use command "sofia status profile internal" in freeswitch console to check whether the gateway register to freeswitch:

Call-ID:	07129518405fe410cbfb86aba03b263f@172.16.50.3
User:	dwg2008@172.16.50.19
Contact:	"user" <sip:dwg2008@172.16.50.3></sip:dwg2008@172.16.50.3>
Agent:	dunno
Status:	Registered(UDP)(unknown) EXP(2011-05-31 23:08:34)
Host:	debian
IP:	172.16.50.3
Port:	5060
Auth-User:	dwg2008
Auth-Dsealm:	172.16.50.19
Auth-Realm:	17Ž.16.50.19
MWI-Account:	dwg2008@172.16.50.19

15. Use command "show calls" to show the call status:

call_created,call_created_epoch,function,caller_cid_name,caller_cid_num,caller_dest_num,caller_chan_name,caller_uuid,callee_cid_name,callee_cid_name,callee_est_num,ca lee_chan_name,callee_uuid,hostname 2011-00-31 22:13:27,1308631327,witch_ivr_multi_threaded_bridge,1234,1234,010010,sofia/internal/12340172.16.50.19,6cd5c04a-8b90-11e0-b6fa-6f81408a8e6c,Extension 1234, 234,10010,sofia/internal/100100172.16.50.3,6ce99c96-8b90-11e0-b6fb-6f81408a8e6c,deblan 1 cm-1