How to integrate the Analog Gateway and the GSM Gateway in One OpenVox Box.

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OpenVox VoxStack GSM Gateway and Analog Gateway are Feature-rich, high availability, flexible modular gateway products. This Application Note introduces some methods about "how to integrate Analog Gateway and GSM Gateway in one OpenVox VoxStack Box".

Chapter 1: Hardware Setup

You should have hardware as below:

Some VS-GWM400G modules, Some GWM800S modules, and One OpenVox Gateway Box (2 Socket BOX or 5 Socket VoxStack BOX, as shown above is our 2 Socket VoxStack BOX).

Then connect your power supply.

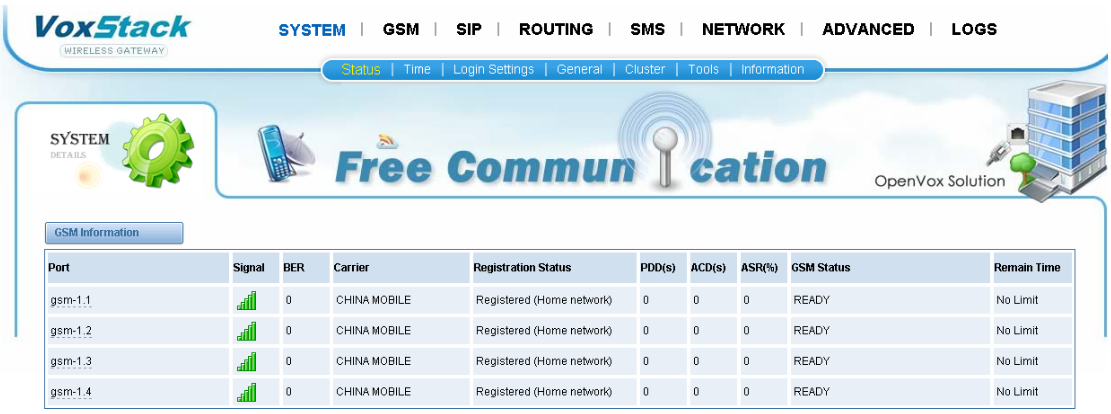
Chapter 2: Configure the Integrated Gateway

The GSM gateway modules (VS-GWM400G) and the Analog gateway modules (GWM800S) have their own independent operating systems.

The communication between GSM gateway modules and Analog Gateway modules is via the built-in switches of the OpenVox Box.

2.1: Login GSM Gateway Modules

For example:



Port	Signal	BER	Carrier	Registration Status	PDD(s)	ACD(s)	ASR(%)	GSM Status	Remain Time
gsm-1.1		0	CHINA MOBILE	Registered (Home network)	0	0	0	READY	No Limit
gsm-1.2		0	CHINA MOBILE	Registered (Home network)	0	0	0	READY	No Limit
gsm-1.3		0	CHINA MOBILE	Registered (Home network)	0	0	0	READY	No Limit
gsm-1.4		0	CHINA MOBILE	Registered (Home network)	0	0	0	READY	No Limit

You could see the GSM Gateway GUI.

Notice: About the IP address, please refer to the GSM Gateway user manual the Chapter 7.

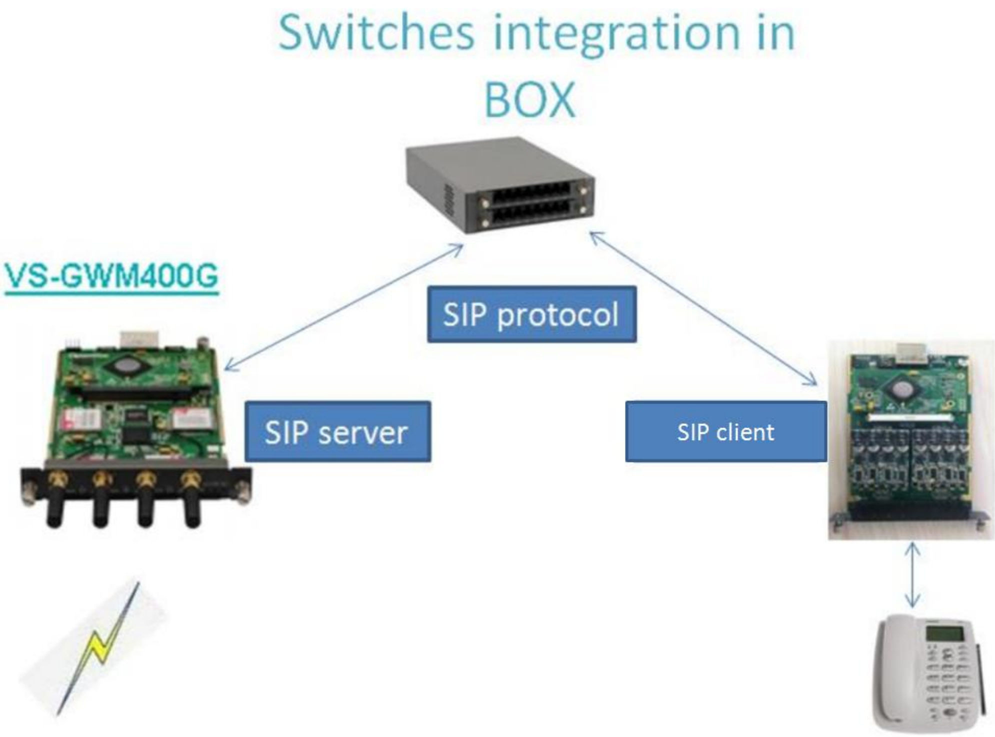
2.2: Login the Analog Gateway Modules

As follows:

You will see the Analog Gateway GUI, about how to login Analog Gateways, please refer to the user manual of Analog Gateway.

2.2: Configure the communication

The GSM modules with the Analog Gateway modules communicate via the SIP protocols. So we should create SIP connection between the GSM gateway and the Analog Gateway. The topology is shown below:

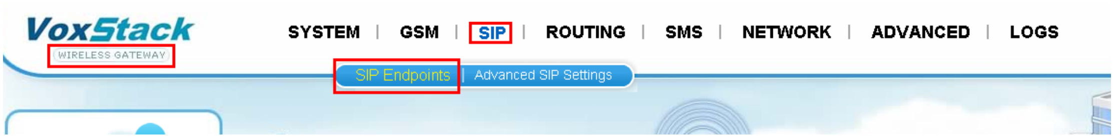


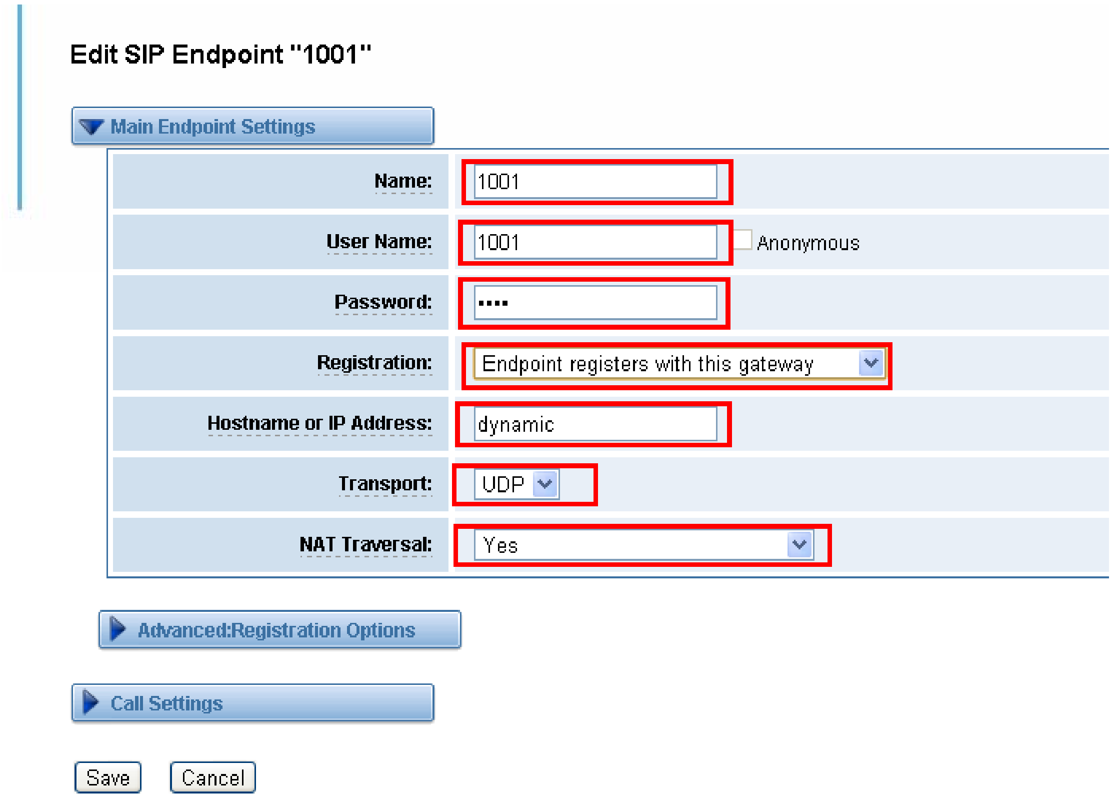
Notice: You can use other ways (for example: IP2IP) to connect the GSM modules and the Analogy modules, about more details, please refer to the manual of GSM Gateway user manual.

2.3: Application 1: Use Analog Phones to Send Calls via GSM Modules

2.3.1: Step 1: Setup a SIP Server on the GSM Gateway Modules.

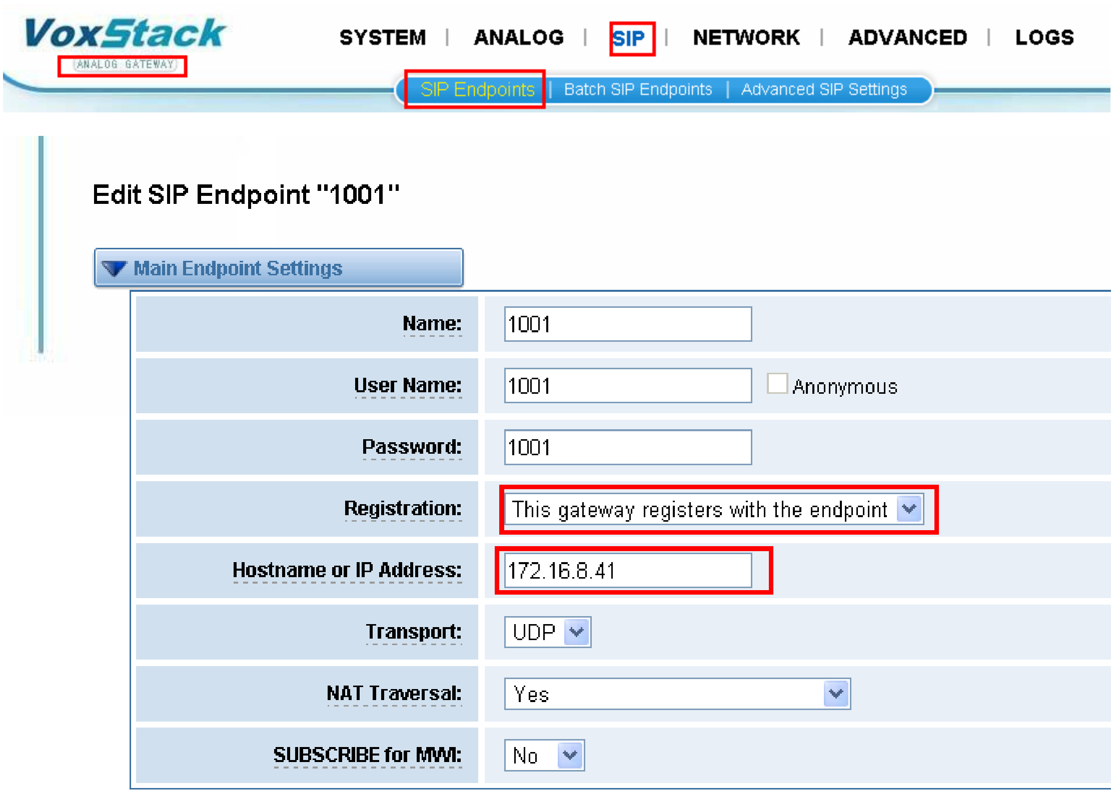
For example:





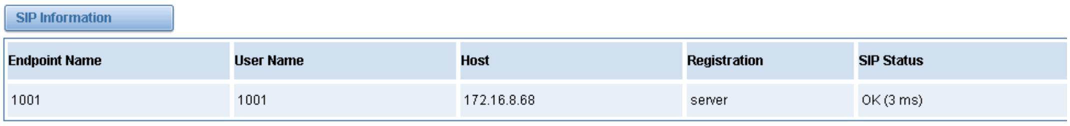
2.3.2: Setup a SIP Client Register to the GSM Gateway SIP Server

As follows:



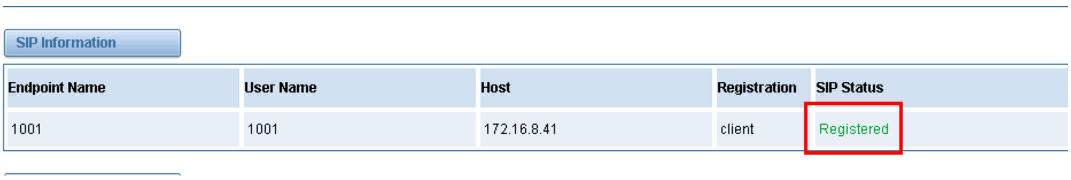
Now you can see the SIP register statues in the GSM Gateway and the Analog Gateway.

GSM Gateway


SIP Information

Endpoint Name	User Name	Host	Registration	SIP Status
1001	1001	172.16.8.68	server	OK (3 ms)

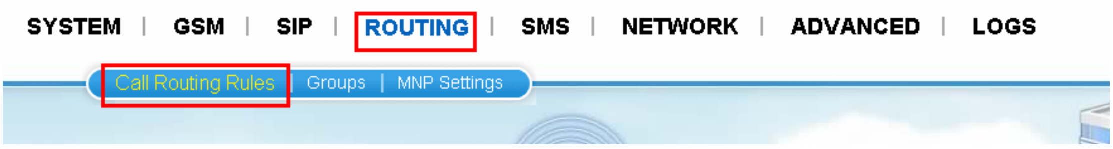
Analogy Gateway

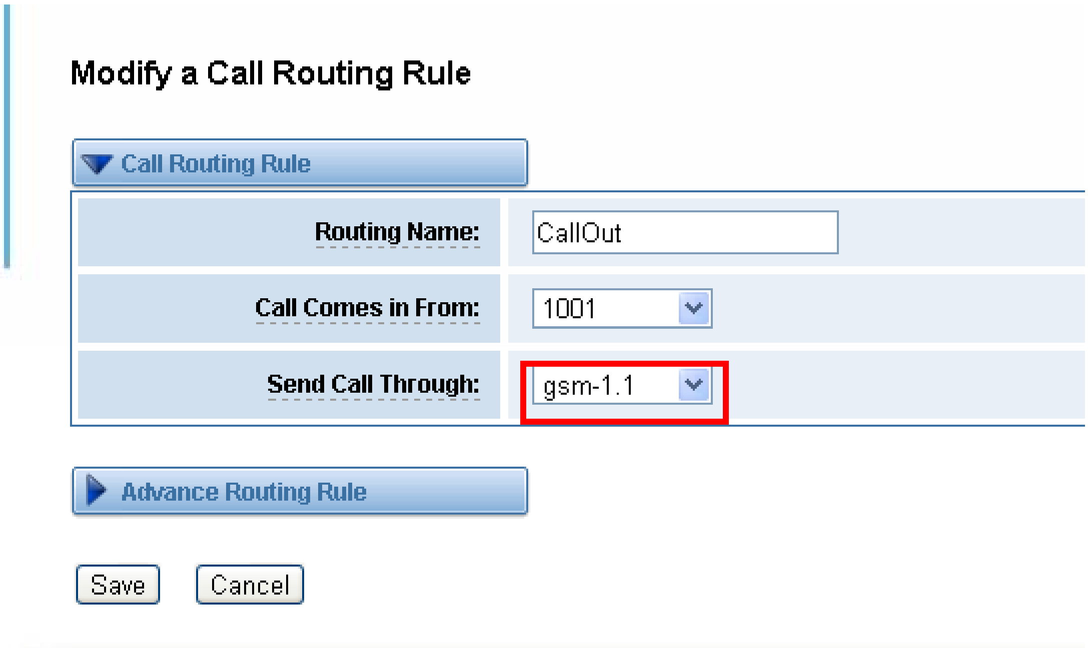

SIP Information

Endpoint Name	User Name	Host	Registration	SIP Status
1001	1001	172.16.8.41	client	Registered

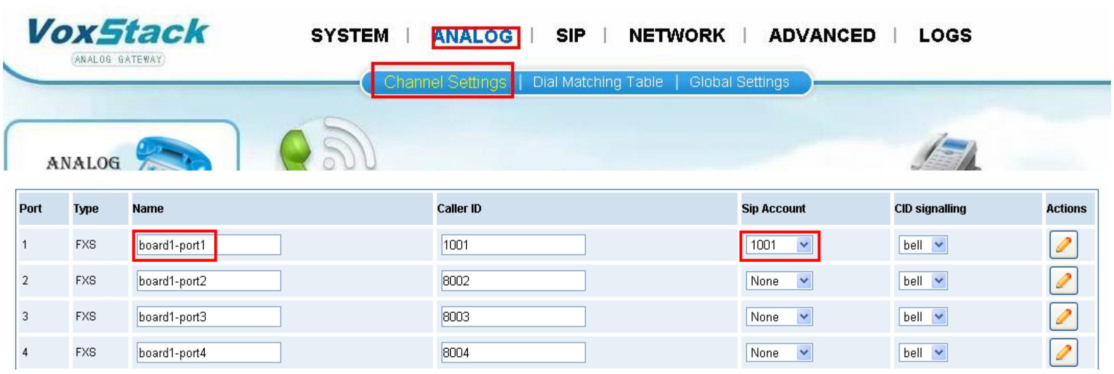
2.3.3: Setup the Router in the GSM Gateway

For example:





2.3.4: SIP and the Analogy Port in the Analogy Gateway



2.3.5: Test Calls Out via the GSM Gateway

Now we connect an Analogy phone to the Analogy Gateway port 1, and try to call the number 10086.

You will see the call have been established in the GSM Gateway and the Analogy Gateway.

Analog Gateway

Port	Name	Type	Caller ID	Sip Account	Port Status
1	board1-port1	FXS	1001	1001	Call Active Called to 10086 00:00:16
2	board1-port2	FXS	8002		OnHook

GSM Gateway

Port	Signal	BER	Carrier	Registration Status	PDD(s)	ACD(s)	ASR(%)	GSM Status	Remain Time
gsm-1.1		0	CHINA MOBILE	Registered (Home network)	0	0	0	READY	No Limit
gsm-1.2		0	CHINA MOBILE	Registered (Home network)	0	0	0	READY	No Limit
gsm-1.3		0	CHINA MOBILE	Registered (Home network)	0	0	0	CALL PROGRESS Called to 10086	No Limit
gsm-1.4		0	CHINA MOBILE	Registered (Home network)	0	0	0	READY	No Limit

Notice: This application can be used to any OpenVox Gateway BOX, 2 sockets or 5 sockets, and you can combine your BOX freely, only according to your needs.

Of course, you could pull network cables when you finished the configuration. In the other words, you can use it without any PBX.