

SMG1002-2S VOIP Gateway

Installation Manual

VER 1.5



Synway Information Engineering Co.,Ltd

www.synway.net

CONTENT

1.Appearance Description	2
1.1 Front Panel	2
1.2 Rear Panel	2
2.Hardware Connection	3
3.Basic WEB Settings	3
3.1 Network Setting	4
3.2 Protocol And Number Setting	5
3.2.1 SIP Protocol And Number Setting	5
3.2.2 MGCP Protocol And Number Setting	6
3.3 Call Route Setting	6
4.Operation Test	7

Appearance Description

1.1 Front Panel



Image 1-1 Front Panel

Indicator	Description
Power	Power indicator, turn the lights connected to the power supply for the long bright state.
Active	Status indicators, the normal operation of the lamp is flashing
Port 1-2	Port work light, off-hook, ringing, the lights are flashing during a call, the standby is off.

Table 1-1 Front panel connectors and LEDs

1.2 Rear Panel



Image 2-2 Rear Panel

The rear panel connectors and LEDs	Description
DC 12V	Power cord interface, connect the power cord.
WAN	Equipment upstream interface, when in the 10M Ethernet port rate, the green light, orange light off; When working in the 100M Ethernet port speed, green and orange lights are on, when the flow of data out of date, the green light, orange lights flashing.

LAN	Device configuration interface, when in the 10M Ethernet port rate, the green light, orange light off; When working in the 100M Ethernet port speed, green and orange lights are on, when the flow of data out of date, the green light, orange lights flashing.
1-2	FXS connected to a telephone or PBX trunk interfaces.

Table 1-2 Rear panel connectors and LEDs

Hardware Connection

Firstly, using the power supplied in the package box to connect SMG1002-2S to power on it. And WAN port SMG1002-2S Series integrated access devices connected to the hub or switch, as shown in Figure 2-1. Making SMG1002-2S to connect with the service network, and then connecting the PC to the LAN port of SMG1002-2S, making data configuration for SMG1002-2S and Port1-2 connected to the phone.

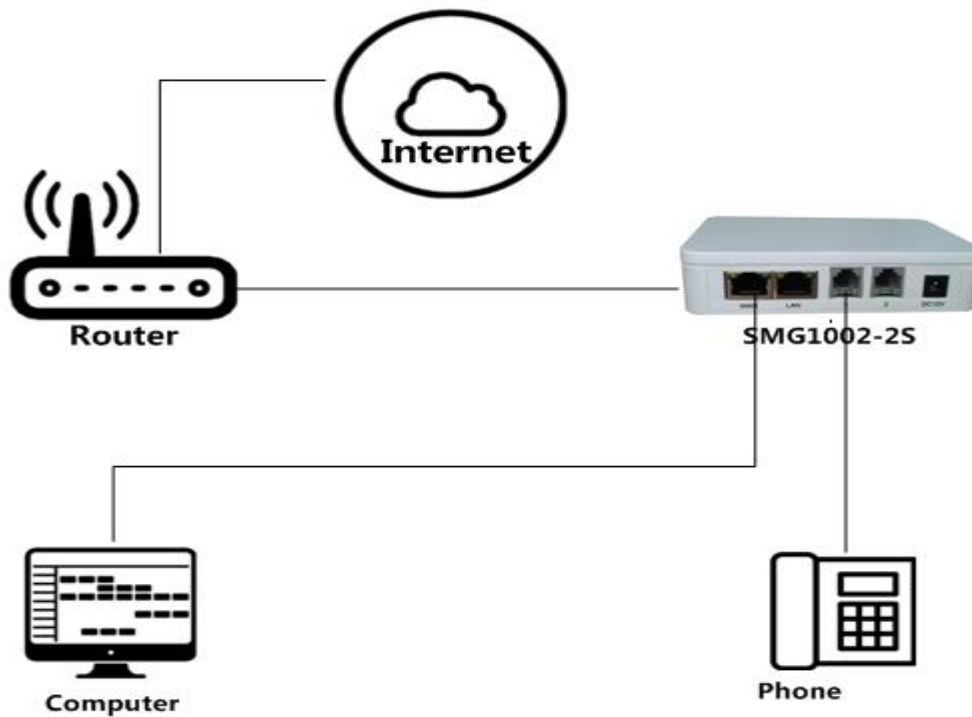


Figure 2-1 SMG1002-2S Series Integrated Access Device as a proxy server connection

Basic WEB Settings

Entering the Web interface to configure the SMG1002-2S . The default of LAN port address is 192.168.11.1.

Set the IP address of PC which is connected with LAN port to the same network segment. And then, open the IE browser, enter the LAN port IP in the address bar to login the WEB network management device for business configuration. WEB default user name and password are: admin.



Figure2-6 WEB Login Interface

3.1 Network Setting

The WAN port of SMG1002-2S supports 3 different operating modes which are DHCP, PPPoE, and Static. Users can set "the WAN configuration" in the Web, such as IP address, mask, IP address, DSN and so on. Make SMG1002-2S accessing to business network normally.

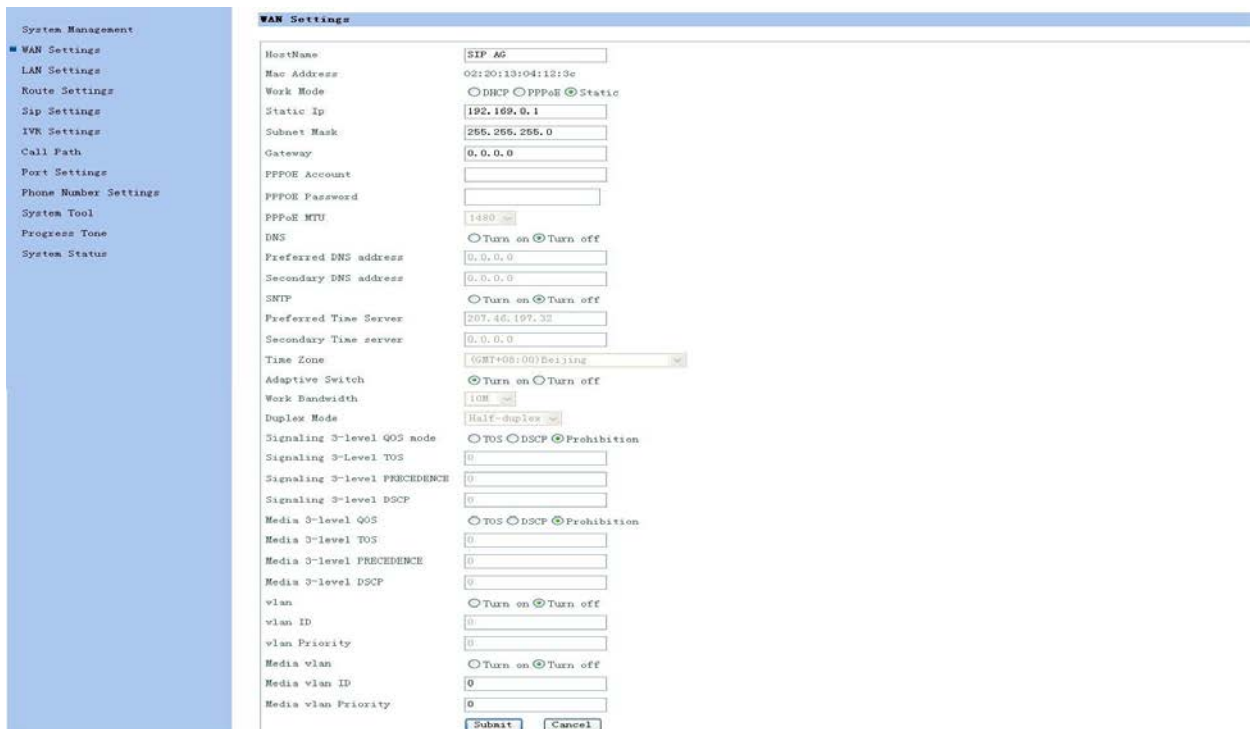


Figure3-2 WAN Setting Interface

3.2 Protocol And Number Setting

SMG1002-2S supports both SIP and MGCP protocols. Before the configuration of protocol and number, SMG1002-2S needs to determine the type of VOIP protocol that the softswitch communicates with SMG1002-2S and obtain information such as softswitch address and account number.

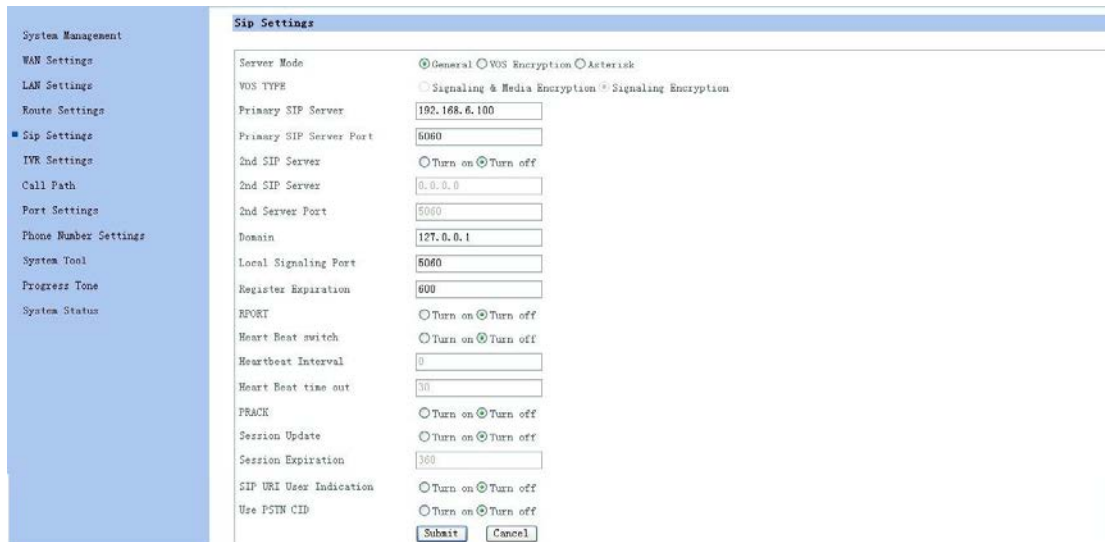
Usually, SMG1002-2S will not support the different VOIP protocols at same time, so when setting the protocol and number, users only need to set the parameters consistent with the softswitch's protocol. The following two VOIP protocol are supported by SMG1002-2S, registration of the specific configuration of the softswitch instructions depend on the actual situation to configure:

3.2.1 SIP Protocol And Number Setting

Fill sip server's domain, under normal circumstances, and fill the same SIP server IP address for the domain; butt IMS, IMS platform to fill in the domain name.

When registering softswitch with SIP protocol, Users should set the "active server" and "domain" as softswitch IP addresses in "SIP configuration" in WEB, and set the "active server port" as same as "softswitch registered Port" .This equipment SIP signaling port, the default value is 5060.

Click Sip Settings to modify in the interface below



Sip Settings	
Server Mode	<input checked="" type="radio"/> General <input type="radio"/> VOS Encryption <input type="radio"/> Asterisk
VOS TYPE	<input type="radio"/> Signaling & Media Encryption <input checked="" type="radio"/> Signaling Encryption
Primary SIP Server	<input type="text" value="192.168.6.100"/>
Primary SIP Server Port	<input type="text" value="5060"/>
2nd SIP Server	<input type="radio"/> Turn on <input checked="" type="radio"/> Turn off
2nd SIP Server	<input type="text" value="0.0.0.0"/>
2nd Server Port	<input type="text" value="5060"/>
Domain	<input type="text" value="127.0.0.1"/>
Local Signaling Port	<input type="text" value="5060"/>
Register Expiration	<input type="text" value="600"/>
REPORT	<input type="radio"/> Turn on <input checked="" type="radio"/> Turn off
Heart Beat switch	<input type="radio"/> Turn on <input checked="" type="radio"/> Turn off
Heartbeat Interval	<input type="text" value="0"/>
Heart Beat time out	<input type="text" value="30"/>
PRACK	<input type="radio"/> Turn on <input checked="" type="radio"/> Turn off
Session Update	<input type="radio"/> Turn on <input checked="" type="radio"/> Turn off
Session Expiration	<input type="text" value="360"/>
SIP URI User Indication	<input type="radio"/> Turn on <input checked="" type="radio"/> Turn off
Use PSTN CID	<input type="radio"/> Turn on <input checked="" type="radio"/> Turn off
<input type="button" value="Submit"/> <input type="button" value="Cancel"/>	

Figure3-3 SIP Setting Interface

After the above settings, in the "Number Configuration" -> "Number Batch Edit", assign a number to the service port of the device, set the uplink protocol of the port to "SIP", set the "Phone number "and "Authentication Name" as assigned user account name of softswitch, "registered password" set to the corresponding user

account password, and open the port registration.

3.2.2 MGCP Protocol And Number Setting

Setting the "MGCP address " as "softswitch's IP address", and "MGCP port " should be set as same as "MGCP protocol port",When SMG1002-2S registers softswitch with MGCP protocol, the default port of MGCP protocol is 2727.The Local Domain Name is set to the device domain name specified by the Softswitch, and the End Node Prefix is set to the softswitch prefix of the endpoint name assigned to the device.

For example, the softswitch assigns 32 user nodes to the device "weych". The node ID of each user is "aaln / 01-aaln / 2". The MGCP configuration of the SMG1002-2S is shown in the following figure. The local domain name is set to "weych" The node prefix sets "aaln /" with the same 32 user nodes.

After making the above settings, assign the number to the device port in the "Number Configuration" -> "Number Batch Edit", set the port upstream protocol to "MGCP", and set the phone number to the suffix of the name specified by the softswitch Section, while opening port registration. For example, the softswitch assigns 32 user nodes to the device "weych". The node ID of each user is "aaln / 01-aaln / 2". Set the telephone number of the port as 01,02 as shown in the figure below.

3.3 Call Route Setting

When using the SIP protocol, SMG1002-2S supports adding different call rules to define the number conversion and routing IP in routing table. In WEB setting interface, Select" Call Path", users can see a default "DigitMap-Default", besides this default Call Path, user can manually add his own. When the call path is set, users can go to "Port Settings"→"Basic Settings" to choose the one to activate, as shown below:

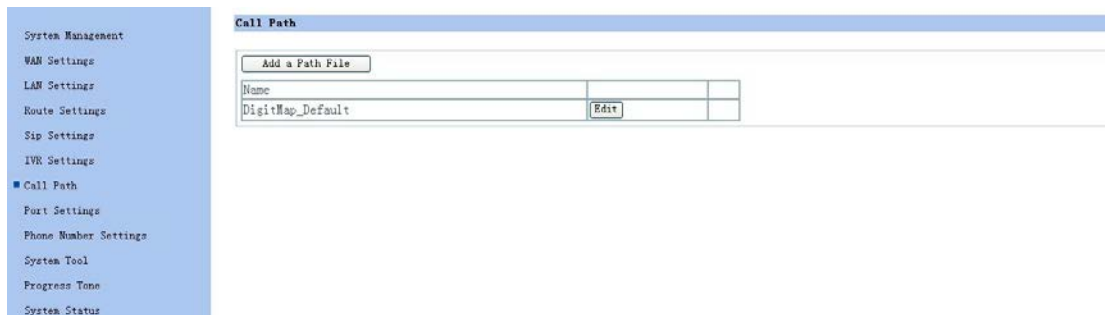


Figure3-7 Call Path Setting Interface

By Clicking "Edit", User can check the detailed rules, call rules are consisted by "0-9, .,*,#,X"(represents number 0-9,)and []" For example, [1,3,4-6,9]=13,4,5,6,9.

When Routing IP is 0.0.0.0, then the call will be sent to the server address edited in "SIP Settings; If the routing IP is a specified IP then the calls will be forwarded accordingly(p2p), as below.

- System Management
- WAN Settings
- LAN Settings
- Route Settings
- Sip Settings
- IVR Settings
- Call Path**
- Port Settings
- Phone Number Settings
- System Tool
- Progress Tone
- System Status

Call Path

Path File Name:

Number	DigitMap	Route Ip	Sip Port	Callee Change	Calling Change		
1	[1-9]x.	0.0.0.0	5060		Turn off	<input type="button" value="Edit"/>	
2	0xxx	127.0.0.1	5060		Turn off	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
3	*71*x.	0.0.0.0	5060		Turn off	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
4	0[1-9]x.	0.0.0.0	5060		Turn off	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

Figure3-8 Edit call path interface

Operation Test

After the completion of configuring the operational data, reboot the device and log in to the WEB configuration interface. And then check the registration status of each port in "Number Configuration", the status of the port is "registered" as soon as the registration succeeds. And connect The SMG1002-2S Port1-2 to telephone for dial test, test SMG1002-2S the caller and the called and other business conditions.

- System Management
- WAN Settings
- LAN Settings
- Route Settings
- Sip Settings
- IVR Settings
- Call Path
- Port Settings
- Phone Number Settings**
- System Tool
- Progress Tone
- System Status

Phone Number Settings

[Port bulk configuration]

Name	Port Type	Status		
6001	FXS	Activated	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
6002	FXS	Activated	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

Figure 3-11 phone number setting interface

Synway Information Engineering Co., Ltd.
 HQ Add: Synway R&D Building, NO.3756, Nanhuan Rd. Hangzhou, P.R.China
 Tel: +86 571 88861158 Fax: +86 571 88850923 Email: marketing@synway.cn

