SIP Function Demonstration of IP Speaker

1. Configuration on Sip Server

Install **miniSIPServer** on PC as test SIP server (other SIP servers which support standard SIP protocol also can be used).

miniSIPServer software official site: https://www.myvoipapp.com/download/index.html

					Buy nov
	Do	ownlo	ad		
	miniSIPS	erver V37 (build	l 20200619)		
If you need special version to All versions are 30 days free Please visit here to get history Please refer to "Run miniSIPS Please refer to "Run miniSIPS	support more than trial without restric y versions. erver on Linux" if y erver on Raspberry	n 500 SIP clients, tions. ou want to run n Pi" if you want t	'phones, please co niniSIPServer on D o run miniSIPServ	ebian or Ubuntu s er on Pi.	ystems.
For Windows	20 clients	50 clients	100 clients	300 clients	500 clients
For Windows For Debian/Ubuntu (64-bit)	20 clients 20 clients	50 clients 50 clients	100 clients 100 clients	300 clients 300 clients	500 clients

For this demonstration, SIP server's IP is 10.199.13.42 (PC's address).

After SIP software installation, click **Local Users** to add/delete/modify a local user (local user can be indoor station, IP Speaker, soft phone, IP phone which support standard SIP protocol).



Click add on the Local User interface, enter username (account number of SIP device) and password (need define on SIP device), select IP address authorization, and enter IP address of device and port 5060 to add the device to the SIP server (authorization is optional).

1 miniSIPServer V3	7 (20 clients) bui	ld 20200607 -	- 🗆 ×
File Data Dial Pl	an Services I	Reports Maintain Window Help	
System	() External lines	Analyze called number	
2020-06-18	Local users		×
2020-06-18	🚻 Local user		×
2020-06-18 2020-06-18 2020-06-18	Basic Basic	call Forwarding services Follow Me service Supplementary services Advance ser	
2020-06-18 2020-06-18	User name	1001	354BB6'.
	User password	1001	D
	Description	speaker	
	☑ IP address a	authorization	9
	IP address	10.199.13.85	
	Port	5060	
	L		
		V OK 🚫 Cance	4

If devices are added to SIP server successfully, the icon near User name will turn blue, and users can dial the corresponding number of SIP devices to do SIP call.

sername	Description	Display name	Address	Other
1001	speaker		10.199.26.84:5060	SRItc/1.0.1
1002	linphone		10.199.13.40:5060	Linphone Desktop/4.1.1 (belle-sip/1.
1003	indoor station		10.199.13.81:5060	eXosip/3.6.0
1004	linphone		10.199.13.49:5060	Linphone Desktop/4.1.1 (belle-sip/1.
1006	logan		10.199.11.185:50	
1007	speaker		10.199.13.86:5060	SRItc/1.0.1

- 2. Configuration on IP Speaker
- 1) OEM model configuration

On the Hikvision IP Speaker Finder page, click the name of speaker to go to the configuration page.

Hikv	ision IP	Speaker	Finder V	1.2	Holp										_		×
Reflesh	Addres Add	Delete	Update	About	Exit									_			
Flag	MAC			IP Addres	s	Device	name	Device ty	pe	Version	Net interfac	e	Local	DeviceNumber		1	
Online Online	0.9.2	46.140.2	10.82	10.199.13		1007		DS-PA011	03	V6.0.1	10.199.13.4	42	LocalNetwork		Sub net mask Gateway ip DNS Server 0 DNS Server 0 DNS Server 1 First Server 1 Cloud Server 1p First Group Second Group CtrlUart Baud	255.25 10.195 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0,0.0,0 0,0,0,0 0 0,0,0,0 0 0 bps	5.25 13.2))
Set paran Set paran Set paran Set paran Set paran Set paran Set paran Set paran	n of 10.1 n of 10.1	99.13.85 99.13.86 99.26.86 99.13.86 99.13.86 99.13.86 99.13.86 99.13.86	has beer has beer has beer has beer has beer has beer has beer	n successfi n successfi n successfi n successfi n successfi n successfi n successfi	ul ul ul ul ul ul												^
C	ount 1		Licens	e 65276													

Select the SIP TAB, enter the SIP server address to bind the speaker to the server, set **SIP port** as 5060, **SIP number** as the call number of the speaker, and **SIP password** to be the same as the password set on the server.

Property DS-PA0103	X
	DS-PA0103 Parameter settings
Information BaseParam - IntercomParam ControlStatus - Input3 - Input3 - Input3 - ControlUart - SIP - RTPListen	SIP setting SIP Server IP 10.199.13.42 SIP Port 5060 SIP SIP number 1007 SIP password **** [note]SIP registration port option requires device frmware version greater than 4.0
Defaul Save to def	ault Export param Import param Save Cancel

On the IntercomParam page, set the Time of answer to: 5(seconds)

When another device makes a call to the IP speaker, it will automatically pick up the call after 5 seconds.

Property DS-PA0103					×
	DS-PA01	03 Parameter settings			
Information BaseParam ControlStatus ControlStatus Input3 ControlUart SIP RTPListen	AudioInput Gain Intercom Use of e Codec ty Intercom Monitor F	A Mic Z0 Inc Z0 Inc Z0 Inc Z0 Inc Z0 Inc Z0 Inc Inc	(0) © Disaboe		
Defaul Save to d	fault Export param	Import param	Save	Cancel	

2) Hikvision Model Configuration

Log in to the web side of the device, and access the SIP configuration page as shown in the following figure.

HIKVI	SION				
0	System ^	SIP			
Overview	System Configuration	Bnable			
Configure	User Management	SIP Acco	unt		
	Network V	* Account	102		
Maintenance and Security	Audio	* Password	•••	Ø	
	Two-Way Audio Configuration	* Display Name	102		
	Broadcast S 2 s				
	Alarm Configuration	SIP Serve	er		
		* Server Address	10.9.96.110		
		* Server Port	5060		
		* Registration Expiration	3600	S	
		*Heartbeat Cycle	60	S	
		Two-Wa	y Audio Configuration		
		*Encoding/Decoding Format	G.711u X G.711a X G.7	22 × ×	
			Type	Sorting	
			G.711u	=	
			G.711a	Ξ	
			G.722 通过拖拽表格右侧图标,可对音;		
		Save			

The call number entered in **Account** is the same as the user name set on the SIP server. In the **Password** field, enter the password set by the server side. **Display Name** can be customized. Set **Server Address** to the IP address of the SIP Server and **Server Port** to 5060. Keep the **Registration Expiration** and **Heartbeat Cycle** as default values unless required. **Encoding/Decoding Format** can rank priorities according to demand of environment in real.

3. Soft Phone Configuration

This demonstration will choose MicroSIP as soft phone, the download address is:

https://www.microsip.org/

Open MicroSip, open setting interface and click Add Account.



Enter **SIP Server's address**, fill call number in **Username**, IP address of MicroSIP in **Domain** and set a password for sip account, then click **Save** to save configuration.

0	MicroSIP - 101		_		\times
Aco	ount		Х		•
	Account Name		٦		
	SIP Server	10.9.96.46	2		
	SIP Proxy		2		
	Username*	101	2		
	Domain*	10.9.96.51	2		
	Login		2		
	Password	*****	2		
		· · · · · · · · · · · · · · · · · · ·			
	Display Name		2		
	Voicemail Number		2		
	Dialing Prefix		2		
	Dial Plan		2		
		Hide Caller ID	2		
	Media Encryption	Disabled \vee	2		
	Transport	UDP ~	2		
	Public Address	Auto ~	2		
	Register Refresh	300 Keep-Alive 15			
		Publish Presence	2		101
		Allow IP Rewrite	2		HH170-1-4
			2	2	
		Disable Session Timers	2		
x		Save Cancel			

After finishing settings on SIP Server (refer to Configuration on Sip Server

), input account number of IP speaker on MicroSIP and then users can talk to IP Speaker.

4. Indoor Station Configuration

For this demonstration, DS-KH8350 indoor station is chosen as the SIP intercom device.

On local interface of DS-KH8350, enter SIP settings interface and choose **SIP Protocol** as standard protocol, configuration will be finished after device rebooting.

VolP Account	and the second second
VoIP Account	etwork
VoIP Account	evice
	IP Settin
0 s	ync Time
fin Re	Restore

After rebooting, enter **VoIP Account** configuration interface, and input SIP server information.

		VoIP Account	×	
SIP Protocol	Sta Display Name			D Local Info
	Phone Number			Network
	Register Name			SIP Setting
	Password			Sync Time
	SIP Domain			In Restore
	SIP Server Port	5060		
	Expires	60	and the	Martin State

After completing indoor station configuration and add device to SIP sever, enter call number of IP Speaker on interface of indoor station, then indoor station can phone IP Speaker and talk.