

HCP2.5 Self-developed IP Speaker Business Delivery Solution

Software support department

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HIKVISION HCP 2.5 Self-developed IP Speaker Business Delivery Solution

1. Introduction

1.1 Background

The IP Speaker business introduces a new product, self-developed IP Speaker, to HCP in the baseline version 2.4.1. The self-developed Speaker has added support for TTS (Text to speech), Two way Audio (Ceiling and Horn support), and built-in eMMC storage functions, greatly enhancing market competitiveness.



1.2 Goal

IThrough the delivery manual of this solution, we fully understand the necessary conditions for the deployment process of self-developed IP Speaker, such as network, ports, and the implementation of business processes. There is evidence to follow during the delivery process.

1.3 Terminology and Abbreviations

Terminology/Abbreviations	Meaning						
НСР	Overseas	HikCentral	Platform,	abbreviated	as		



HikCentral Professional.

2. Overall architecture

2.1 system Topology

In the IP Spaeker business, we support real-time broadcast audio, real-time shouting, timed broadcast audio, linkage alarm broadcasting, and other business scenarios.



2.2 System Domain Scheme

2.2.1 LAN deployment

A pure LAN refers to the interconnection and interconnection of various links of the network, without any port restrictions or blockages.

The LAN environment is relatively simple and common, and there is no need for platform related port mapping. If the built-in firewall of the server operating system needs to be turned on, it is necessary to refer to the port dependency table and turn on the relevant platform ports. You can use the "telnet" command or Socket Tool to check if the port is open.



2.2.2 Multi domain deployment

When the server, device, and access end (browser, central client) belong to an isolated internal and external network segment, a WAN IP needs to be configured to map the corresponding ports. The ports in the port list need to be mapped and WAN IP configured based on the actual usage scenarios and functions of the customer.

Source Device	Destination Device	Destination Port Number (Listening)	Protocol	Port Description
Web Client, Control Client	SYS	80	ТСР	Used for Web Client & Control Client access in HTTP protocol
Web Client, Control Client	SYS	443	ТСР	Used for Web Client & Control Client access in HTTP protocol
ISUP Device	SYS	7660	ТСР	Used for receiving registration from ISUP devices
ISUP Device	SYS	7332	ТСР	Used for receiving alarm from ISUP devices
ISUP Device	SYS	7334	UDP	Used for receiving alarm from ISUP devices
Streaming Server	SYS	7661	ТСР	Used for getting stream from ISUP device via Streaming Server
ISUP Device	SG/SMS	16001	ТСР	ISUP Port for Two-Way Audio
ISUP Device	SG/SMS	16003	ТСР	ISUP port for Broadcasting
ISUP Device	SYS	6123	ТСР	Used for the picture storage of ISUP devices
Web Client, Control Client	SG/SMS	554	ТСР	Used for getting stream for live view (real-time streaming port)
Web Client, Control Client	SG/SMS	559	ТСР	Used for getting stream for Google Chrome, Firefox, or Safari
Web Client, Control Client	SG/SMS	10000	ТСР	Used for getting stream for playback (video file streaming port)



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ISUP Device	SG/SMS	16000	ТСР	Used for getting stream from ISUP device via plugin
SYS	SG/SMS	6001	ТСР	Used for getting the status of the Streaming Serve
SYS	SG/SMS	6678	ТСР	Used for editing configuration for Streaming Server
SYS	SMS	8208	ТСР	Listen port for Service Manager after encrypted transmission enabled

See HikCentral Professional V2.5.0 Communication Matrix for more details.

3. Project information collection

3.1 Basic information collection

Before delivery, it is necessary to obtain the overall information of the project to lay

the groundwork for delivery implementation. The key content is as follows:

- Basic information of the project. Including project background, version, scale, etc.
- > Product access situation. Including product model, quantity, etc.
- Server software and hardware. Including the number of software and hardware, performance, network cards, etc.
- > Network environment. Including network topology and bandwidth.
- > Other materials such as preliminary solutions.

3.2 Network environment confirmation

In general, regardless of the network situation, the following information needs to

be confirmed in advance before project implementation and deployment:

- Confirm the network deployment between the monitoring center and all clients, and whether it includes security protection media such as firewall, routing mapping, etc.
- Confirm that the network between the device and the monitoring center server can be connected (for example, using tools such as Socket Tool for key port troubleshooting) to ensure that the device can be added to the platform normally.
- > Confirm the network interconnection between various servers in the monitoring center, and it is recommended that the network port of the central switch be at least gigabit.
- > Confirm the size of the exit bandwidth for customers to access the internet (if web and client access is required)
- > Is the required port for the business open, such as TCP 7660

3.3 server hardware performance requirements

- The Control Client cannot be deployed in a virtual machine environment. \triangleright
- \triangleright If the HCP platform is to be deployed in a virtual machine environment, it is recommended to configure the virtual machine to 1.5 times the normal configuration. For example, if a normal server requires 8GB of memory, the configuration of the virtual machine is $8GB \times 1.5 = 12GB$ of memory, and other performance can be calculated accordingly.
- > If the virtual machine needs to change its hardware configuration or migrate to



another server, such as CPU and RAM hardware information changes, please

deactivate the HCP license first and reactivate it after the update is completed.

The specific requirements for SYS Server are as follows:

	SYS Configurations							
Feature	Low-End	High-End						
CPU	Intel [®] Core™ i5-8500 @ 3.00 GHz	Intel [®] Xeon [®] E-2124 @ 3.30 GHz	Intel [®] Xeon [®] Silver 4110 @ 2.10 GHz					
RAM	8 GB	16 GB	16 GB					
NIC	GbE Network Interface Card	GbE Network Interface Card	GbE Network Interface Card					
HDD for OS	SATA-II 7200 RPM Enterprise Class HDD	SATA-II 7200 RPM Enterprise Class HDD	SATA-II 7200 RPM Enterprise Class HDD					
HDD for Picture Storage	Surveillance-class HDD or high performance network HDD. It should support 10 MB/s writing and 10 MB/s reading.	Enterprise-class HDD or high performance network HDD. It should support 20 MB/s writing and 20 MB/s reading.	Enterprise-class HDD or high performance network HDD It should support 20 MB/s writing and 20 MB/s reading.					
HDD Capacity	At least 650 GB	At least 650 GB	At least 650 GB					
OS	Microsoft [®] Windows 8.1 64-bit	Microsoft [®] Windows Server 2012 (R2) 64-bit	Microsoft [®] Windows Server 2012 (R2) 64-bit					
Virtual Machine	Amazon AWS EC2 Instance: c5.xlarge CPU: Intel [®] Xeon [®] Cascade Lake @ 3.60 GHz vCPU Count: 4 RAM: 8 GB Storage: EBS NIC: 10 Gbps	Amazon AWS EC2 Instance: m5.xlarge CPU: Intel® Xeon® Platinum 8175M @ 3.10 GHz vCPU Count: 4 RAM: 16 GB Storage: EBS NIC: 10 Gbps	-					
	Microso Instance CPU: Intel Xeon® E5-	ft Azure e: B4MS 2673 v4 @ 2.30 GHz	-					
1	I VCPU C							

Note: For updates on different configuration implementation functions and

performance requirements, please refer to the 《HikCentral Professional V2.5

System Requirements&Performance》 document.

The PC hardware performance requirements for the client are as follows:

Configurations						
Feature Configuration 1		Configuration 2	Configuration 3			
CPU	Intel [®] Core™ i5-9400/F	Intel [®] Core™ i3-8100 @ 3.60 GHz	Intel [®] Core™ i7-8700k @ 3.70 GHz			
RAM	8 GB	8 GB	16 GB			
NIC	GbE Network Interface Card	GbE Network Interface Card	GbE Network Interface Card			
Graphics Card	NVIDIA [®] GeForce GTX 1050Ti	Intel [®] UHD Graphics 630+GT1030	NVIDIA [®] GeForce RTX 2080			
OS	Microsoft [®] Windows 10 (64-bit)	Microsoft [®] Windows 10 (64-bit)	Microsoft [®] Windows 10 (64-bit)			

The server and client operating system requirements are as follows:



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Feature	Description
	Microsoft® Windows 7 SP1 (64-bit)
	Microsoft® Windows 8.1 (64-bit)
	Microsoft® Windows 10 (64-bit)
	Microsoft® Windows Server 2008 R2 SP1 (64-bit)
OS for HikCentral Professional	Microsoft [®] Windows Server 2012 (64-bit)
Server	Microsoft® Windows Server 2012 R2 (64-bit)
	Microsoft [®] Windows Server 2016 (64-bit)
	Microsoft [®] Windows Server 2019 (64-bit)
	*For Windows 8.1 and Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355)
	updated in April, 2014.
	Microsoft [®] Windows 7 SP1 (32/64-bit)
	Microsoft® Windows 8.1 (32/64-bit)
	Microsoft® Windows 10 (64-bit)
	Microsoft [®] Windows Server 2008 R2 SP1 (64-bit)
OS for Control Client	Microsoft® Windows Server 2012 (64-bit)
os for control chem	Microsoft [®] Windows Server 2012 R2 (64-bit)
	Microsoft [®] Windows Server 2016 (64-bit)
	Microsoft® Windows Server 2019 (64-bit)
	*For Windows 8.1 and Windows Server 2012 R2, make sure it is installed with the rollup (KB2919355) updated in April, 2014.

Note: It is not recommended to install any other unnecessary software on the server side. If the system's firewall needs to be enabled, it needs to be opened according to the dependency table 《 HikCentral Professional V2.4.1 Communication Matrix 20230512 document.

Number of IP Speakers 128 Number of broadcast groups 128 Number of Speaker Units per Broadcast 128 Group Number of media libraries 100 Number of audio for a single media 100 library Number of scheduled broadcast plans 100 Audio size limit <10Mb

3.4 Limit on the number of IP Speaker

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4. IP Speaker Business Delivery Implementation

4.1 Product selection and basic function display

By combining HCP and IP Speaker devices, demonstrate the achievable functions,

how to achieve them, and the results achieved.

4.1.1 Product Selection

HIKVISION

HCP version: HikCentral_ Professional_ V2.4.1 and subsequent versions



IP Speaker Selection:

4.2 IP Speaker Configuration

4.2.1 Add Device

A. Device Registration

Unlike the original OEM equipment, the self-developed IP Speaker is registered on

the platform through the ISUP protocol.

Log in to the device web end, enter Configure>Working Mode>ISUP, enter the HCP

server address, ISUP registration port (default is 7660, please check the watchdog



settings), Device ID and Secret Key customization

HIKVI	HIKVISION						
函	System	Y ISUP	Hik-Connect				
Overview	Network	^					
٥	Network Configuration		Enable				
Conligure	Network Service		Protocol Version	ISUP5.0	~		
الله Maintenance	Working Mode		* Server Address	10.41.8.171	HCP Server Address		
and Security	Audio		* Port No.	7660	ISUP Registered Port		
	Two-Way Audio Configuratio	on	* Device ID	speaker03			
	Broadcast Settings		* Secret Key	12345	0		
	Alarm Configuration		Registration Status	Online			
				Save			

B. Adding devices on HCP

On the HCP web side Device ->Device and Server ->IP Speaker, select the ISUP

protocol, enter the Device ID and password, and add it.

After completing the addition, try refreshing the add page several times, and

sometimes the device's online status will not be immediately displayed.

Note: Self developed IP Speaker does not require an SD card, so the platform

cannot format operations.

Remote configuration: It is necessary to switch the platform to Https access from

System>Security>Transport Protocol.



4.2.2 Basic configuration on the HCP platform

A. Camera channel for associated devices

Enter Device>Area>Speaker Unit to adjust the device volume and associate the

IP Speaker with the ground.

Click on the resource point of the IP Speaker, select the camera channel to associate

with that resource point, and the maximum number supported is 4.

🧿 HikCentral Professional 🛛 🏫	Video Event and Alarm Pe	rson Account and Security Dev	Device 🗘 Maintenance
Deutee 7	+ : : :	Supports global sorting for the list	re list data.
Device and Server	🚱 HikCentral Professional 🗸 🗸	\bigcirc horn	
I Area	Search	Basic Information	
Firmware Upgrade	10.9.113.19ipc		*Name hom
Device Application	ipc III IPspeaker-01	Link Camera	Camera () Max. camera(s) allowed: 4. It has already linked to 2.
	shigong-speaker		Available Selected
			Search Q, Search
			> 🔄 🔃 10.9.113.19ipc
			> □ @ ipc iPCam_ ipc ↑ ↓ 04 ipc ↑ ↓
			> ☐ # shigong-speaker < ☐ IPCam_ ipc ↑ ↓
			Save Cancel

B. Associated resource points on the map

Enter Visual Map -> Map settings -> Add map, and drag the device resource point

onto the map

Note: When the resource point alarm is triggered, it is not supported for the



resource point to turn red.



C. Configure the storage location for device events

(1) Enter Speaker Unit ->Basic Settings, select the presence of a local server or pstor server. Note: When using local storage, if the storage space is full, there is a risk of audio files being overwritten. It is recommended to use a microserver or configure the local storage resource pool separately

- (2) Turn on 'Live Broadcasting Recording' to record real-time broadcast event recording and event audio.
- (3) Flow collection method:
- ✓ By default, direct connection or proxy will be selected based on the login



client on both internal and external networks.

- ✓ By default, passing through the center is through built-in streaming media
- ✓ If external streaming media is configured in this area, external streaming

media will be used. If not, internal streaming media will be used.

🔞 HikCentral Professional 🔥 🔡	Video Portable Enforcement Visi	al Map Event and Alarm Person Device	
Audio Broadcast 💽	Basic Configuration		
Speaker Unit Group			
D Media Library	Audio File		
I have Decondence and Deconding	*Save Audio File to	Local Storage \checkmark	
Eive Broadcast and Recording		When local storage is selected, if the storage space is full, audio files might be over the storage space is full.	erwritten. It is recommended that you select pStor or confi
Live Broadcast	* Resource Pool	Local Resource Pool (1)	
Live broadcast Recording		vsm_local_pool	
Scheduled Broadcast		127 GB Free of 770 GB	
len Linked Broadcast			
Basic Configuration	Live Broadcast Recording		
	*Live Broadcast Recording	V	
	*Save Recording File to	Local storage	
	*Resource Pool	Local Resource Pool (1)	
		vsm_local_pool	
		127 GB Free of 770 GB	
	Live Broadcast Parameters		
	*Broadcast Mode	Via Center Proxy ~	
	*Encoding Format	G711_u ~	
		Save	

The location of local storage can be configured on **Storgae > Storage on SYS Server:**

S	h	7=	A For system security, you can only edit it w	ia the Web Client running on the SYS server.				
ays			Storage on SYS Server					
45	Normal	^						
			Local Storage Configuration					
			Enable Local Storage					
			Picture Storage					
				 The stored pictures include pictures configure 	ured by users and pictures uploaded	by resources which ar	e	
		~		stored on the local server.				
	Network		Storage Location	Disk (2)				
0	Storage	^	- storage zotation		D			
	Storage on SYS Server							
				82 GB Free of 155 GB	127 GB Free of 770 G	В		
	5II	~	Set Quota for Pictures					
-	Email							
	Security	~	*Storage Quota			GB		
	Third-Party Integration	~	File Storage					
	Advanced	~	The storage	① File storage: store video and audio files con	figured on the platform.			
	Workbench Management		Resource Pool					
B	Company Information			Name	Overwrite Strategy	Remaining /	Total Capacity	Operation
				vsm_local_pool	Overwrite by Capacity	127/770(GB)		0
				Save				



D. Configure broadcast group

Enter Audio Broadcasts -> Speaker Unit Group and click Add Broadcast Group.

Audio Broadcast 🧮 🥶	Ca 🖉 🖞	+ Add 🔳 Delete 🔇 Vo	lume				
Speaker Unit Group	Search	Name	Area	Terminal Status	Alarm Volume	Volume	Audio File
D Media Library	E SpreakerTest	Broadcast 01	SpeakerTest	Online	43	43	0 🗎
Use Broadcast and Recording							
Live Broadcast							
Live Broadcast Recording							
Scheduled Broadcast							
問 Linked Broadcast							
Basic Configuration							

After adding, simply add the resource point of the IP Speaker device.

	HUEO POTUSUIE ETITOTOETTIETIE	пораглар степсано мант и		ompleted		•	· · · · · · · · · · · · · · · · · · ·
Audio Broadcast 🧧	te 🗹 🛙	🕂 Add 🔋 Delete 🖾 Volum	Operation	ompresso.			
🔀 Speaker Unit Group	Search	Add Speaker Unit	Te	rminal Status	Alarm Volume	Volume	Audio File
D Media Library	SpreakerTest	Search					
${\displaystyle \oint}^{{}^{{}^{{}^{{}^{{}^{{}^{{}^{{}^{{}^{$		✓ I Speakeriest ✓ III Speakeriest ✓ III Broadcast 01					
Live Broadcast							
Live Broadcast Recording							
F8 Scheduled Broadcast							
K Linked Broadcast							
		Add					

At the same time, batch set the volume of the broadcast group, with a range of 1-

100.

idcast 🖻	Ce 🖌 🗓	+ Add 🛛 🗇 Delete	♦ Volume	eration completed.		
· Unit Group	Search	✓ Name	Aleren (President Maluma	itus	Alarm Volume	Volume
.ibrary	SpreakerTest	Broadcast 01		43 🗘	43	43
adcast and Recording				ОК		
adcast						
adcast Recording						

E. Configure Media Library

Enter **Speaker Unit -> Media Library** and create a media group.

							_
A		Æ		+ Add 🗊 Delete			
ŧ	🖉 Speaker Unit Group		Search	Name :	Format	Size	Operatio
Ē	Media Library		Geria Directory Media Directory MediaTest	vearesame	mp3	5128K8	ځ
R	Live Broadcast and Recording	, ^		listen	mp3	6511KB	÷
Ĩ							

Upload audio files in the already created media group.





Note:The IE browser currently does not support uploading audio files. Please

operate on other browsers such as Chrome.

When uploading each time, clicking "upload" will ensure successful upload.

Name +	翻译 复制 提素 〇 Format
Uploading Progress	
Ready to start.	
Details	0%
Name	Status
CheeryPiano_Ending.mp3	😣 Not uploaded
	Upload Close

Note: The maximum number of audio is 100, and the supported formats are MP3 and WAV formats less than 10MB.

F. Configure NIC receiving address

Please make sure to configure it as the local IP address of the server in System

Configuration ->Address for Receiving Device info.



9	HikCentral Professional	↑		Video	Event and	Alarm	Person	Account and Security De	rice	Maintenance		<u> </u>	<u> </u>	
sj			≡ A	ddress	for Recei	iving D	evice Inf	o						
8	🖗 Normal		~											
								 1. You must choose the current alarm information of the device. 	ices co	ised NIC of SYS server to receive th onnected via ONVIF protocol, and	e to			
								perform live view and playba protocol.	ick for t	the devices connected via ISUP				
								2. Make sure the server's po	ts rang	ging from 8087 to 8097 are availab	ole.			
						B	P Address	 Get from NIC 						
								C Enter Manually						
C.	Network		^									1		
						*1	VIC Name	{2E94E732-40B1-445D-9BF4-3	74962	22DD89}	~			
						NIC D	escription	Intel(R) I210 Gigabit Network Co	nnectio	ion				
						NIC MAG	C Address	3CECEFB0ECB9						
	Address for Receiving Devic	e Info				NIC IPv4	4 Address	10.41.8.171						
G] Storage		~			NIC IPv6	6 Address	fe80::33f1:67f5:760d:e51f						
é	Email		~					Save						
Ð	🕀 Security		~											
Ŕ	Third-Party Integration		~											
Ą	Advanced		~											
3	Workbench Management													
Ē	Company Information													

4.3 IP Speaker business function display

4.3.1 Live Broadcast

Enter Live Broadcast and Recording on the web side, select the configured broadcast group or resource point in the resource area, and you can choose "Speak" mode and "Audio file" mode. Speak corresponds to the real-time call function, and Audio file corresponds to the real-time broadcast function.



🤨 HikCentral Professional 🛛 🏫	 Video	Portable Enforcement	Visual Map	Event and Alarm	Person	Device
Audio Broadcast	Live Broa	dcast				
Speaker Unit Group			0.5			
Media Library		*Speake	r Unit 💿 Grou 🔿 Area	ib		
${ atural}^{{f q}}$ Live Broadcast and Recording						
Live Broadcast			Dis	play Terminals Not Gr	ouped	
Live Broadcast Recording			Sea	rch		Q
			\sim	SpreakerTest		
				Broadcast 01		
Linked Broadcast						
Basic Configuration						
						1
		*Broadcast f	vlode 💿 Spea	ık		
			🔿 Audi	o File		
			⊖ Cust	om Broadcast Content	t©	
]
			Sta	rt		

After selecting the Speak mode, real-time transmission is achieved through local audio devices such as microphones to the device end.

After selecting the Audio mode, first select the uploaded audio library files and prioritize downloading them to the local end to ensure the quality of audio transmission.

Select Custom Broadcast Content to play the input custom text (only supported in English), and you can choose to play it once or for a certain time period. Only selfdeveloped Speakers support this feature.



Audio Broadcast	Ū	Live Broadcast	
Speaker Unit Group		*Speaker Unit	Group O area
 Live Broadcast and Recording Live Broadcast Live Broadcast Recording Scheduled Broadcast Linked Broadcast Basic Configuration 			Chiea Display Terminals Not Grouped Search ✓ ♥ ■ SpreakerTest ♥ ♥ ■ Broadcast 01
		*Broadcast Mode	Speak
			Custom Broadcast Content Hello
		*Play Mode	 Once Specified Duration 1 Second ◊

Click "Start" to achieve real-time broadcasting.

Speaker Unit Group Media Library Unit Broadcast and Recording		Display Terminal	ls Not Grouped		
Media Library					
		Search	Broadcast		
		🖂 🖬 🖬 Sprea		addita	
Live Broadcast		Mil Bro		Plaving: listen	
Live Broadcast Recording			Details Speaker Unit	Status	Operation
📲 Scheduled Broadcast			Broadcast 01	 Connected. 	• •
📕 Linked Broadcast					
Basic Configuration					
	*Broadcast Mode	O Speak			
		Audio File Oustom Broadca			
		⊥ Download ◎			
		Search			Stop
		🗸 🚞 Media Direc	tory		
		🗸 🚞 MediaTes	t		
		weares	ame		

Real time broadcasts and TTS content records can be found in 'live broadcast recording', and corresponding audio downloads are supported.



- 4	HikCentral Professional	۰.	Video Event and Alarm Person Ao	count and	Secur	ity Device Maintenance				± ⊂ Ø	I ≡ admin≚
A		₫	Live Broadcast Recording			Broadcaster	Speaker Unit	Start Time	Broadcast Mode	File Size	Operation
6			Start Time		>	admin	2	2023-07-03 10:03:11	Custom Broadcast Content		в
Ê		ŵ	2023/07/03 00:00:00 E		>	admin	1	2023-07-03 17:02:39	Speak	75KB	±.
1	e Live Broadcast and Recording	^	End Time		>	admin	2	2023-07-03 17:03:06	Audio Fie	109KB	<u>.</u>
	Live Broadcast		2023/07/05 23:59:59 E	3							
4	Live Broadcast Recording		Broadcaster								
F											
Ē											

Note: Ensure that the current web control controls are running properly.

4.3.2 Scheduled Broadcast

Due to the fact that scheduled broadcasts distribute tasks to devices for playback based on device time, it is recommended to use NTP timing or manually adjust timing on the device end to prevent issues with inaccurate device time.

(1) Unified distribution through the platform: enter System>Network>NTP, enter the NTP service address, click save, and it will be distributed to the device. Ensure that the device is connected to the NTP service network.

🎯 HikCentral Professional 🛛 🔒 🕴 Video	Event and Alarm Person	Account and Security Device Maintenance		
System 🖻 NTP				
🛞 Normal 🔨				
User Preference	 Time Synchronization 			
Holiday Settings		 (i) 1. For the devices added via ONVIF protocol, time sy fail. Please configure the NTP settings of the device 	nchronization will ria the device's web	
Printer Settings		page and make sure the device's NTP settings is san 2. The NTP parameters of devices added via Hik-Pro	e with the system's. Connect are	
Card Template		configured by Hik ProConnect.		
🖉 Network 🔨	*NTP Server Address	10.25.169.14	Detect Local	
NTP	* NTP Port	123		
Active Directory	* Interval	1	min	
Device Access Protocol	incervar	'	11111	
Hik-Partner Pro Access		Test		
WAN Access		() You can check whether the NTP server is available vi	a test and view the	
Address for Receiving Device Info		platform time.		
🗒 Storage 🗸 🗸	Configure WAN Mapping			
🖻 Email 🗸 🗸		Save		
\oplus Security \checkmark				
Third-Party Integration				
Advanced Y				

(2) Device web proofreading time:



HIKVI.	SION			
ø	System ^	Basic Information Time Settings		
Configure	System Configuration			
<u>ه</u> Maintenance	User Management	Device Time	2023-07-03 17:09:47	
and Security	Network V	Time Zone		
	Audio	Time Synchronization mode	NTP Time Sync Manual Time Sync	
	Two-Way Audio Configuration	Set Time	2023-07-03 17:09:38	Cancel Sync. with Com
	Broadcast Settings		Save	
	Alarm Configuration			

Enter the "Scheduled Broadcast" on the web side and add a scheduled broadcast plan.

Define a plan name and select resource points, define the frequency of scheduled broadcasts as daily, weekly, or custom time points, the date and time period of the broadcast plan, and the exact time point of playback.

For example, if a daily broadcast schedule is set from July 18th to 30th, 2023, with a time point of 8am, then starting from July 18th, the broadcast schedule will be executed every day at 8am.

The larger the number of plan priorities, the higher the priority level; In the event of a conflict between two plans, priority should be given to broadcasting plans with higher levels.



🤨 HikCentral Professional 🏫 🔡	Video Event and Alarm Person	Account and Security	Device Mainten	ance	
Audio Broadcast 🧧	Edit Scheduled Broadcast				
Speaker Unit Group					
📄 Media Library	*Name	test01			
U ^{II} Live Broadcast and Recording	*Speaker Unit	Group			
Live Broadcast		🔿 Area			
Live Broadcast Recording		+ Add 🗊 Delete			
,		Name	Operation		
FB Scheduled Broadcast		ceiling1	Ū		
Basic Configuration		cabniet	Ū		
		hom	Ū		
			-		
	*Period Type	Every Day		~	
	*Start Date and End Date	2023/06/20	-	2023/06/20	
	*Playing Time	+ Add 🗊 Delete Al	I		
		Broadcast Time	Play Mode	Operation	
		19:21:00	Once	∠ ū	
	*Broadcast Priority	5		~	
	broadabt monty	-			
	*Audio File	+ Add 🛛 🗇 Delete All			
		File Name	Duration	Operation	
		Pieth day, audio 2	00:00:37		
		birtriday-addioz	00.00.37	↓ Ш	

A broadcast plan can set multiple audio, and the audio can be dragged up and

down to set the playback order.

The playback mode can be set to play at once or for a fixed duration.

*Audio File	+ Add 🔲 Delete						
	File Name	,	Duration		Opera	tion	
	1234		00:01:10		\uparrow	\downarrow	Ū
	early_bird2	2-12	00:02:13		\uparrow	\downarrow	Ū
	CheeryPia	no_Endi	00:01:04		\uparrow	\downarrow	Ū
*Play Mode	ode 🔿 Once						
	• Specified Duration						
	00:00:00						Ŀ

IP Speaker Priority:



When Bluetooth is turned on, if the priority of timed audio is lower than 3, there

may be no sound. Therefore, it is recommended to start setting the priority of

timed broadcasting from 4.

Attached IP Speaker Priority Policy:

	表1: 设备不同音频通道混音/打断规则							
	实时广播	定时广播	蓝牙	3.5mm音频输入				
实时广播	打断,优先级高打断优先级低,优先级相同不打断	混音,优先级高音量高于优先级低	混音,优先级高音量高于优先级低	混音,优先级高音量高于优先级低				
定时广播	混音,优先级高音量高于优先级低	打断,优先级高打断优先级低,优先级相同不打断	混音,优先级高音量高于优先级低	混音,优先级高音量高于优先级低				
蘆牙	混音,优先级高音量高于优先级低	混音、优先级高音量高于优先级低	NA	混音、优先级高音量高于优先级低				
3.5mm音频输入	混音,优先级高音量高于优先级低	混音,优先级高音量高于优先级低	混音,优先级高音量高于优先级低	NA				
	表2: 设备不同音频通道优先级							
音頻类型(IP Speaker默认)	优先级	备注						
喊话 (实时广播)	7							
实时播放音频 (实时广播)	7							
插播TTS (实时广播)	7							
报警联动音频 (定时广播)	12							
定时播放音频 (定时广播)	5							
蓝牙	3							
3.5mm音频输入	3							
	表3: HCP下发音频优先级	-						
音頻类型(HCP下发)	优先级	备注						
实时广播模块	15	HCP下发音频的优先级, 每项模块中的不同音频下发方 式, 优先级都与模块优先级相同。						
定时广播模块	用户自定义							
报警联动模块	13	紧急避险和报警联动,下发播放命令前会先下发停止音 <u>频文件播放,因此表1规则不适用。</u> 急避险和报警联动,下发播放命令前会先下发停止音频	-					
紧急避险模块	14	文件播放,因此表1规则不适用。						
TTS	优先级随业务模块变化。如是实时广播下发TTS.优先级就是15。		7					

4.3.3 Alarm linkage broadcasting function

Enter Event and Alarm -> Normal Event and Alarm-> Actions-> Add linkage Action Click link Speaker Unit.

88	6 HikCentral Professiona	al Web Client	Ø Weard ≡ Ma
≡	Event and Alarm	⊖Add Event and Alarm	
<u>B</u>		Basic Information Actions Re	sceiving Schedule Alarm Settings
	Normal Event and Al		SSource STriggering Event
庅			
Q		Description	Enter the instructions to handle the event/alarm or remarks for the event/alarm. (2) Trigger Recording (2) Capture Picture (2) Create Tag Link Access Foint
		*Color	+#0000
		 Ignore Recurred Event/Alarm Actions 	Q. Tragger PTZ D: Link Third-Party Integrated Resource Si Send Travel Send Travel D: Link Third-Party Integrated Resource Si Send Travel D: Link Graden Typent Ti Link Graden Typent
		Actions	Add Linksge Action
		Receiving Schedule	
		Receiving Schedule Template	Schedule Template

Select the device that needs to be linked to play audio files or TTS.



		Add Linkage Action	
🗐 Link Speaker Unit			直 ~
Speaker Unit * ① No more than 64 sp + Add	veaker units can be linked. Nete All		
Speaker Unit 🕴	Area ≑	Operation	
Broadcast 01	ip	Ξ.	
Play Audio File*			
1001		N I I I I I I I I I I I I I I I I I I I	

Check if the audio is sent to the device normally. If it fails, a prompt will appear in

the actions column of the alarm.

BitCentral Professiona	al web Client						(2) Wizard ≡	Ma
Event and Alarm	Total	L User						
🛱 Event and Alarm Co ^	1 0 0	1 0 0						
Normal Event and	Configu Disabled Exception	Configur Disabled Exception						
Combined Alarm	+ Add 🛛 Delete 🗱 Delete All Invalid Ite	ems 🔅 Triggering Alarm 🛛 🛇 Enabled 🗸	⊖ Disable ~ ③ Test □ Alarm					_
	Event Name 🗧	Source ‡	Triggering Event	Trigger Alarm 3	Y Alarm Priority :	Y ∣ Status ‡	Y Actions	
Val Basic Settings *	> 🔲 📕 admin - User Login	admin	User Login	Yes	High	Enabled	۲ 1	Т
Q Search v						đ	Link Speaker Unit The Island speaker with Broadcast Or plays the audio for CheeryPlano_Ending.	

4.3.4 Client business function display

A. Implement resource point linkage preview

Enter the client ->Monitoring, click on the broadcast device resource point, and

you can see the linked video preview and playback.

HCP 2.5 Self-developed IP Speaker Business Delivery Solution



B. Broadcasting and two-way intercom

HIKVISION

Enter the client monitoring or Tool>Broadcast or Map, select the resource point, and perform real-time audio broadcasting, real-time calling, TTS, and two-way intercom (device supported) functions.







If an alarm event is triggered, it can also be broadcasted or two-way intercom to



the Alarm Center.