

* If you have another device as a SIP server, skip this article.

Open the Audio and VoIP Telephony | SIP Server Settings submenu. Here you need to configure Mobotix as a SIP server and create a list of clients - select SIP addresses for each device that will make and receive calls (doorphones and mobile devices).

🕑 mx10-18-178-207 SIP	Server Settings - Mozilla Fire	fox				- [1	×
ⓐ 🔏 192.168.0.110	0/admin/sipserverconfig					ABP -] -
	125 mx10-18-178-2	07 SIP Serv	er Settings					
SIP Server	(1)							
SIP Server:	On ~		Enable or di	sable SIP server.				
Server IP:	192.168.0.110, 10.18.178	8.207	IPs of the se	rver.				
Port:	5061		UDP port of f	he server.				
Realm:	MX_SIP		Realm for au	thentication.				and the second se
Missed calls:	Suppress ~		Enable notifi	cation of missed ca	lls.			
SIP Accounts								
SIP Address		User Name	Pas	sword				
102	@192.168.0.110	102	•••	•	8	Delete		
103	@192.168.0.110	103	•••	•	8	Delete		
104	@192.168.0.110	104	•••	•	8	Delete		
105	@192.168.0.110	105	•••	•	8	Delete		
106	@192.168.0.110	106	•••	•	8	Delete		
		Add new SIP	account	2				
Set	Factory Res	tore	Close					

- 1. Enable SIP server mode, If this particular Mobotix doorphone will switch calls between clients. Enter Realm: MX SIP
- 2. Create the required number of SIP clients. There must be at least two of them. The first client is the Mobotix doorphone, the second is the i3 pro application, which will communicate with it. Other clients are other intercoms or mobile devices.

2. SIP Client Settings. Setting up the doorphone as a SIP client.

Open the Audio and VoIP Telephony | SIP Client Settings submenu. Here you need to configure Mobotix as a SIP client so that it can make and receive calls.

We are considering the option when one Mobotix works as a server and a client, so in the SIP Client Settings we specify that Mobotix as a client is connected to itself as to the server.

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) 🔏 192.168.0	0.110/admin/voipconfig								@ -	Ĩ
ስ 🔶 мовс	TIX T25 mx10-18-	178-207 SIP (Client Settings			dergi di Pilan Mari			an (Burner Mary S	0
You can view the	current status and detai	led messages of	the SIP Client in th	e <u>SIP Client: Messages.</u>	Calls, Status	dialog.				_
General Phor	ne Settings									
SIP Cli	ent: Enabled ~)	Enable or dis	able SIP Client						
Hangup on Outgo Ca	oing Disabled ~ 1 alls:		Hang up an o call is trigger	ongoing call, if an outgoing ed.						
Parallel Dial	ing: Enabled ~	3	Enable or dis multiple phor	sable simultaneous calls to nes.						
SIP Accounts	2 Address	Auth	entication	Server	20	Available	Use as	Register		
User Name	Domain	User Name	Password	Hostname / Address	Port	as Proxy	Registrar	Expiration		
102	@ 192.168.0.110	102	••• 6	192.168.0.110	5061			5 min. V	Delete	
Network Sett	ings			Add new SIP acco	unt2					
Network Sett	ings rsal: Disabled	~	NAT traversal	Add new SIP acco	2					
Network Sett NAT Traver NAT Addres STUN ser	ings sal: Disabled s or ver:	Y	NAT traversal The DNS or II the STUN set	Add new SIP acco mode to use. P address of the router usi rver.	ng NAT or					
Network Sett NAT Traver NAT Addres STUN ser Router Addr Refresh Ti	ings sal: Disabled sver: ess 1 min. ~	Y 	NAT traversal The DNS or II the STUN ser When using t update the ro	Add new SIP acco	ng NAT or era will 8.					
Network Sett NAT Traver NAT Addres STUN ser Router Addr Refresh Ti SIP F	ings sal: Disabled s or ver: enes 1 min. ∨ me: 2ort: 5060	✓ 	NAT traversal The DNS or II the STUN set When using t update the ro Port to use fo	Add new SIP acco	ng NAT or era will 8.					

- 1. Launch SIP Client client mode to make and receive calls.
- 2. Create ONE entry in the SIP Accounts list, you do not need to create multiple. The doorphone will be accessible by the address configured in this entry
- 3. Enter the data for one of the accounts created earlier in SIP Server Settings. This account must be created first in SIP Server Settings:

🏫 🔶 мовотіх	T25 mx10-18-178-2	207 SIP Serve	er Settings		60
SIP Server				A.	
SIP Server:	On ~		Enable or dis	able SIP server.	
Server IP:	192.168.0.110, 10.18.17	8.207	IPs of the ser	ver.	
Port:	5061		UDP port of th	ne server.	
Realm:	MX_SIP		Realm for aut	thentication.	
Missed calls:	Suppress ~		Enable notific	ation of missed calls	s.
SIP Accounts					
SIP Address		User Name	Pass	word	
102	@192.168.0.110	102	•••	ê	Delete
103	@192.168.0.110	103	•••	6	Delete
104	@102.109.0.110	104			Delete

4. Specify the address of the SIP server to which the Mobotix doorphone will be connected. In our case, the SIP server address is the same as the client's address, but it will be different if the server is another device.

Scroll the SIP Client Settings down, configure the audio and video to achieve the maximum quality of connection:

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192.100.0.110	yaumin/voipcomig			
🛉 🔶 мовотіх	T25 mx10-18-178-207 SIP Clie	ent Settings		0
Auto Hide OSD:	Disabled ~	Enable or disable automatic hiding of the On-Screen Display.		
Setup OSD:	Enabled ~	Enable or disable the Setup On-Screen Display.		
Home View:	None ~	Enable the Home View by assigning the desired Display Mode.		
Audio Codec Set	ttings			
Use G.722 Codec		Activate or deactivate the use of the G.722 codec (HD audio).		
Use PCMA Codec		Activate or deactivate the use of the PCMA codec.		
Use PCMU Codec		Activate or deactivate the use of the PCMU codec.		
Use GSM Codec		Activate or deactivate the use of the GSM codec.		
Video Settings	9			
Video:	Enabled V	Enable or disable video.		
Video Bit Rate:	500 kbit/s ~	The data rate for video encoding in kbits per second. The encoder tries to stay below this rate but may exceed it on large changes in the image. Note, that this is the output rate of the video encoder, not the data rate on the network!		
Preferred Codec:	H.264 V	The preferred video codec.		
Setup Mode				
Satur Mada	Evnort Cotun	Chance the cature time. Ouick Setue can		>
Set	Factory Restore	Close		

- 1. Turn on the PCMA or PCMU codec
- 2. Turn on H.264 video transmission

3. Outgoing Call Settings. Setting up the caller group that Mobotix calls when you tap the call

Open the Audio and VoIP Telephony | Outgoing Call Settings

submenu. Here we will create a "call profile", in which we will add all the clients to which the Mobotix doorphone will try to call by pressing the "Call" button.

If you have only one client, except the doorphone itself, then only this client will be listed in the profile.

To create a profile, click the "Add new profile" button below the profile list.

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🏫 🔶 мо	BOTIX T25 mx10-18-1	178-207 Outgoing C	Calls Settings	00
Test Profil	e		4	^
Vame	call_all ~	Test	Note: Set the changes to a profile before	e you test it.
Profile	Configuration			
call_all	Phone Number or SIP Address	Dial Dial Attempts Timeout	SIP Proxy	
Delete	103	1 ~ 20 ~	192.168.0.110 (102@192.168.0.110) ~	Remove
	104	1 ~ 20 ~	192.168.0.110 (102@192.168.0.110) ~	Remove
	105	1 ~ 20 ~	192.168.0.110 (102@192.168.0.110) ~	Remove
	106	1 ~ 20 ~	192.168.0.110 (102@192.168.0.110) ~	Remove
			0	Add
	Connection type:	SIP Video		1
	Message name:	DoorBell	~	
	Confirm call with PIN co	de:	A	
	After the message has I	been sent: Intercom 🗸	Jou intend to use all audio modes (S Intercom) make sure you have activate <u>Speaker and Microphone</u> dialog.	Speak, Listen, ed all options in the
	Camera Remote Control	On 🗸	Note: configure the remote control par dial-out profile) in the Incoming Calls S	rameters (e.g. the Settings dialog.
	Hangup after:	1 minute	~	
MxEasy1030	Phone Number or SIP Address	Dial Dial Attempts Timeout	SIP Proxy	
Delete	102		102 169 0 110 /102@102 169 0 110)	ı

(/s/attachments/15553/6/1/8a27e362515f2a7ff3a2561f43970c3d.png)

- 1. Add to the list all SIP clients that need to be called when the button is pressed on the doorphone. SIP Proxy is the Mobotix doorphone address as a SIP client (the panel that Mobotix calls will see this address in the incoming call)
- 2. Turn on dialer mode: SIP Video
- 3. Turn on the talk mode: Intercom, to make a two-way communication
- 4. Click the "Set" button, select the profile you created and click the "Test" button to simulate pressing the doorphone button.

Creating a call profile is not enough, you still need to configure its use when you press the "Call" button on the doorphone:

4. Setting up calling the clients when you press a call on the doorphone

To do this, close Admin menu and return to the main page of the Mobotix web-interface.

Open the Setup menu, and in it the Event Control | Action Group Overview submenu.

Line D 16 fps V Display M	de v Panorama	V 0	2 1					
Admin Menu HXEARU 31218-18-	178-297			1	-	1	3914-	13-31 CEST 89:5
Setup Menu	😻 mx10-18-178-207 Ac	tion Group Overview -	Mozilla Firefox			- 0	×	
VoIP Home View	③ 192.168.0.110/c	ontrol/actions						
MxPEG on	2	18.18.02.044A.7989Z					-	
MxPEG off	🏫 🔶 МОВОТІ)	T25 mx10-18-1	78-207 Actio	n Group (Overview		00	1 2 3 4 5
Open Door	Name	Arming			Events & Actions	Edit		A
Light ON/OFF	Dell Dutter (Cell all)	Capillad			010	_	_	
UC Event	Bell Button (Call all)	(No time ta	hle)	~	CL	Edit		1
Play Sound		[(No diffe to	ule)	-				
Play Last Event								
Event List			Add r	new group				
Multiwatcher	11							
1x Zoom	Set	Restore	Close					
Zoom +		Restore	ciose					
Zoom -								
Center Pan		Sector Contractor	hard and a start of	1. S. S. S. S.	and a second second			
Normal Image								
Panorama Image								
1990								

0 192.168.0.110/control/actio	ons?group=2	(B) - 👔
	d0 19 179 207 Action Crown Dotail	
	Value	S 7 1
Action Group	Bell Button (Call all)	Name: The name is purely informational.
	Enabled ~	Arming: Controls this action group: Enabled: activate the group. Off deactivate the group. Sil group armed by signal input. CS: group armed by oustom signal as defined in <u>General Event Settings</u> .
	(No time table) ~	Time Table: Time table for this action profile (<u>Time Tables</u>).
Event Selection	Image Analysis: AS ^ Internal: Ring (Signal: SI) Signal: UC Signal: CameraBellButton v	Event Selection: Select the events which will trigger the actions below. Use (CIV)Cloid to select more than one event. Events in brackets need to be <u>activated</u> first.
Action Details	0	Action Deadtime: Time to wait [03600 s] before a new action can take place.
	Simultaneously	Action Chaining: Choose how the status of each subaction influences the execution of all others. Simultaneously: All actions are executed simultaneously: Simultaneously until first success: Simultaneous execution, but as soon as one action succeeds (i.e. has been completed or the phone is ploted up), all others are terminated. Consecutively: All actions are executed in the specified order. Consecutively: All infinitriative: Consecutive execution, but as soon as one action fails, the following actions are not executed.
Actions	O Value	Explanation
Action 1	Phone Call: call_all	Action Type and Profile: Select the Action Profile to be executed.
Delete	60	Action Timeout or Duration: If this action runs longer than the time specified [0.3600 s], it is aborted and returns an error, 10 deactivate. For <i>Image Profile</i> action, this is the duration and no error returns.
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- 1. In Event Selection, select the Signal: CameraBellButton action. The action is triggered when the "Bell" button on the doorphone is pressed.
- 2. Click the Add new Action and select Phone Call: call_all. We created the call_all profile in the previous step of the configuration. Now when you click on the call, the call will go to all clients. As soon as one client answers, the calling other clients will be completed.

PS: Calling the profile from the button can also be configured using MxEasy. Return to the Admin menu via the Mobotix web-interface main page to continue the configuration.

5. Incoming Call Settings. Setting up the doorphone permissions to receive incoming calls.

In the Admin menu open the Audio and VoIP Telephony | Incoming Call Settings submenu. The rules for receiving calls by the doorphone are configured here.

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i) 🔏 192.168.0.110/	admin/audio_callin		ABP - 🔳
	T25 mx10-18-178-207	Incoming Calls Settings	00
Incoming Calls Settin	gs		^
Phone Call-In	VoIP ~	Activate or deactivate VoIP phone calls into the cam	era.
Accepted Phone Numbers or SIP Addresses	, d	You can enter several phone numbers or SIP addre Only calls <i>originating from</i> these numbers or S e answered by the camera. To help you identified address is shown here: Unknown; the <i>la</i> address is shown here: Unknown. Simply call the camera from a device that you want the access your camera, close and reopen this page and phone number or SIP address to the list.	sses, one per IP addresses / the caller, the ast calling SIP to be able to nd add the
		If you do not enter anything, all calls will be answere reasons this is not recommended!	d. For security
Accepted SIP Proxies		You can enter several SIP Proxy addresses, one pe tions which request to answer to one of these ccepted by the camera.	r line. Only call addresses will
		If you do not enter anything, all invitations will be acc security reasons this is not recommended!	cepted. For
Welcome Message	- none - V	Select the voice message that callers will hear, e.g. or to identify the camera.	to greet them
PIN Code	۵ ۵	You can enter a Personal Identification Number to re the camera. If a PIN code is set, the caller has to en using the telephone's keypad.	estrict access to ter this code
Audio Mode	Intercom V	Select the audio mode. The available audio modes audio settings and the model of the camera.	depend on your
Intercom Settinas	Throchold Duration	The Intercom audio mode simulates an intercom b	etween the
Set	Factory Restore	Close	

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- 1. Clear these fields if the doorphone should receive calls from all clients. If not from all - enter the list of clients, as written in the instructions to the doorphone.
- 2. Turn on the Intercom mode for incoming calls so that the communication is two-way

6. Setting up the iRidium project to connect i3 pro and Mobotix

Download the Mobotix SIP project for tablet (https://s3.amazonaws.com /iridiumdeveloperdoc

/SIP/ SIP+%5BDoorphone+Mobotix%5D+tablet%2C+PC.irpz) and smartphone (https://s3.amazonaws.com/iridiumdeveloperdoc

/SIP/ SIP+%5BDoorphone+Mobotix%5D+smartphone.irpz). This project is specially created to connect i3 pro with Mobotix. It allows you to watch video from the doorphone camera at any time (without making a call), call a doorphone and accept a call. It can work with several doorphones. With a certain configuration, the project can receive Push notifications from the Mobotix SIP server when the i3 pro is closed or minimized.

Stages of configuring the project:

6.1. Setting up the SIP driver to connect to the Mobotix SIP server

6.2. Setting up the script to receive video from the cameras and the for the operation of doorphone "Call" buttons

6.3. [Optionaly] Setting up call notification when i3 pro is closed

6.1. Setting up the SIP driver

Open the Mobotix SIP project in iRidium Studio on PC, select the SIP driver and set up:

- Host: the IP-address of the Mobotix SIP server
- SIP ID: the SIP client's number he uses in i3 pro (we created clients in the SIP Server Settings, select free number)
- Caller ID: the client's name (same as SIP ID or any other)
- Password: the client's password, configured on the SIP server

PROJECT DEVICE PANEL		
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Project Tokens		
Drivers		ō.
t SIP		ect
PROPERTIES		GC
Name	SIP	Clo
Driver Type	SIP (UDP)	hn
Debug Level	Debug	
Local Connection		
Host	192.168.0.110	
Port	5061	
Password	103	
Caller ID	103	
SIP ID	103	
First RTP Port	7078	
Last RTP Port	9078	
Use SIP TONE	False	
Use DTMF TONE	True	
External IP		
Codec PCMU	True	
Codec PCMA	True	
Codec GSM	True	
Codec H263	True	
Codec H263-1998	True	
Echo Cancellation	True	
Volume Control	False	
Noise Suppression	False	
Use Dedine	False	
Codec G722	False	

Leave the other settings by default, they are specially configured to connect to the Mobotix SIP server .

If you are using another SIP server (not Mobotix), the settings Port, First RTP Port, Last RTP Port may be different. Save the project.

Launch the project in iRidium Studio > Emulator, open the page with the doorphone.

If the connection to the SIP server is successful you will see the "On Hook " status in the upper right corner of the doorphone window.

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Back entrance	\sim	On I	Hook	ζ
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After this, configure the script in the project, It is needed to receive video

from the camera and make calls to the doorphone:

6.2. Setting up the script of the Mobotix SIP project

This script will provide a call to the doorphone when you press the "Call" button in the project, process Push notifications if you configure sending Push from Mobotix (http://support.iridiummobile.net/topics/12042-otpravitpush-uvedomlenie-o-zvonke-iz-mobotix), and display the video stream from the Mobotix camera.

Click the "JS" button on the iRidium Studio toolbar to go to the script editor. Select the script file "Mobotix DoorPhone ADD":



For example, configure a connection with one doorphone. For this you need to create one set of settings in the script (comments are removed):

```
IR.AddListener(IR.EVENT_START, 0, function()
{
   var mobotix1 = new add_mobotix_door_phone("Main entrance
                  "mobotix 1",
                  ["192.168.0.110", "admin", "meinsm", "102
                  );
});
```

In this example:

- "Main entrance" a random name for your doorphone. It will be displayed in the visualization interface when you open the doorphone page and while an incoming call
- · "mobotix 1" pop-up page name in the visualization interface that displays video from the doorphone camera, "call" button, "Open the door / Switch the light buttons". This pop-up contains a special set of graphic elements. To create a new pop you need to copy the available ones. Do not remove items from the pop-up (if it is necessary, you can move them out of the pop-up range)
- "192.168.0.110" Mobotix doorphone IP-address (the doorphone from which you need to receive a video stream)
- · "admin" admin login, which you use to enter the Mobotix doorphone web-interface
- "meinsm" admin password, which you use to enter the Mobotix doorphone web-interface
- "102" doorphone SIP address as a SIP client (you configured it in the Admin menu of the doorphone, in the SIP Client Settings submenu)

If there are two or more doorphones you need to create two or more sets

of settings by the principle:

```
IR.AddListener(IR.EVENT_START, 0, function()
{
    var mobotix1 = new add_mobotix_door_phone(...);
    var mobotix2 = new add_mobotix_door_phone(...);
    . . .
    var mobotixN = new add_mobotix_door_phone(...);
});
```

Example of the "Mobotix_DoorPhone_ADD" file for two doorphones (comments removed):

```
IR.AddListener(IR.EVENT_START, 0, function()
{
    var mobotix1 = new add_mobotix_door_phone("Main entrand
                  "mobotix 1",
                  ["192.168.0.110", "admin", "meinsm", "102
                  );
    var mobotix2 = new add_mobotix_door_phone("Back entrand
                  "mobotix 2",
                  ["192.168.0.111", "admin", "meinsm", "104
                  );
});
```

Save the script and project.

Launch the project in iRidium Studio > Emulator, open the page with the configured doorphone. If the script is correctly configured, you will see the video from the doorphone camera, and when you press the "Call button" you will call the Mobotix doorphone:



If the light control and door opening are connected to the dry contacts of the doorphone, the "open door" and "Switch light" buttons will also work.

6.3. [optionaly] Setting up call notification when i3 pro is closed

If you do not configure notifications for i3 pro, the application will not receive calls from the doorphone when it is closed or minimized. This means that without configuration only wall panels from i3 pro where the application is open all the time will receive calls.

For mobile devices where the application is not always open, you need to configure the PC (or other hardware solution) with the iRidium Server program and, according to the instructions, set up sending call from Mobotix to i3 pro via iRidium Server:

· Instruction for setting up notification (http://support.iridiummobile.net/topics/12042-otpravit-pushuvedomlenie-o-zvonke-iz-mobotix/)

7. Finish the setting. Upload the project in iRidium Cloud

Save the finished project. It can be combined with your own visualization project or used independently.

If you have configured 6.3 (sending notifications), Mobotix SIP projects must be downloaded on the control panel via the iRidium Cloud (see the instructions in article 6.3).

iRidium Cloud should be used to work with commercial iRidium licenses (in the Emulator you use the test mode of operation).

Note that when uploading the SIP Mobotix project to different control panels, different clients must be configured in the SIP driver (you can not use one client on several iRidium calling panels, just as you can not configure several doorphones as one SIP client).

For example, if configuration is correct, the smartphone with i3 pro will be the client 103, and the tablet with i3 pro - client 105.

The doorphone will be the client 102, the second intercom connected to the SIP server, configured on the first doorphone - client 104.

For other Mobotix settings, see the official documentation on mobotix.com.

Server + Modbus (http://support.iridiummobile.net /knowledge-bases/6/articles/248iridium-server-modbus)

Next article: Set up SIP server 3CX PhoneSystem ≫ (http://support.iridiummobile.net /knowledge-bases/6/articles/49set-up-sip-server-3cxphonesystem)

Customer support service (//userecho.com?pcode=pwbue_label_iridiummobile) by UserEcho