

How to Configure Mobotix T24/T25 IP Video Door Station Device on the Quadro IP PBX



Revision: 1.0

Abstract: This document describes how to configure Quadro IP PBX with the Mobotix T24/T25 IP Video Door Station device for a standard door open scenario.

Document Revision History

Revision	Date	Description	Valid for SW	Valid for models
1.0	18-Feb-14	Initial release	5.3.x	Quadro IP PBXs

Table of Contents:

1	Introdu	ction
2	Require	ments and Preparations4
3	Configu	ration4
	3.1 Cor	figuring the Quadro IP PBX5
	3.1.1	Configuring Mobotix T24/T25 IP Video Door Station Device as an IP Line on the Quadro IP PBX5
	3.1.2	Configuring Many Extension Ringing for the IP Video Phones on the Quadro IP PBX7
	3.2 Mot as I	ootix T24/T25 IP Video Door Station Device Configuration P Line of Quadro IP PBX9
4	IP Video	Phone Configuration Notice11
5	How to	Use this Scenario12
6	Referen	ces

1 Introduction

The Mobotix T24/T25 IP Video Door Station (hereinafter Mobotix IP Video Door Station) is a complete outdoor system that can be used as a door or gate entry device. The Mobotix IP Video Door Station can be configured on the Quadro IP PBX to make and receive IP video calls similar to other IP video phones. It allows users on the Quadro IP PBX to have video conversations with visitors at the door. Once the call is answered and visual identification is established, users can activate the electric door opener by pressing a button on their IP video phone.

The Quadro IP PBXs can support many different application scenarios using Mobotix IP Video Door Station device. This document describes the basic configuration settings on the Quadro IP PBX and Mobotix IP Video Door Station for a standard usage scenario. Features, settings and connections specific to the Mobotix IP Video Door Station are beyond the scope of this document.

2 Requirements and Preparations

- The Quadro IP PBX is located in the home/office and connected to the network with the DHCP server enabled for the LAN interface,
- Two or more Epygi supported IP video phones are located in the home/office, connected to the Quadro and configured as IP lines on the Quadro IP PBX LAN interface,
- SW version 5.3.x or higher running on the Quadro IP PBX,
- Mobotix IP Video Door Station device is located at the entry area near the door, connected on the LAN interface of the Quadro, like other IP video phones, and powered up.
- Valid for Mobotix IP Video Door Station device VoIP version: 2.6.37.6+

Please Note: Although Grandstream GXV3140 IP video phone is mentioned by MOBOTIX as a preferred remote video station for the Mobotix, any Epygi supported IP video phone such as Polycom VVX 1500, Grandstream GXV3175 or Yealink VP530 can be used to operate with the Mobotix IP Video Door Station for this scenario.

Please Note: MOBOTIX provides the MxEasy software (for Windows, Mac and Linux) free of charge to set up and operate the Mobotix IP Video Door Station with a PC. The Mobotix IP Video Door Station can be installed easily for most application scenarios using MxEasy. To use the MxEasy for configuring Mobotix IP Video Door Station device go to the

www.mobotix.com-> Support ->Software Downloads->MxEasy page and download the
MxEasy_*_Setup.exe file.

3 Configuration

This document describes how to configure Quadro IP PBX with Mobotix IP Video Door Station to support the following standard application scenario:

- Visitor presses the doorbell button on the Mobotix IP Video Door Station.
- All IP video phones connected to the Quadro start ringing simultaneously.
- One of the IP video phone users picks up the phone to answer.
- Mobotix IP Video Door Station requires a PIN code for authorization.

- User enters the preconfigured PIN code and speaks to visitor who is at the entrance.
- The live image of the door camera is displayed in the color display for the IP video phone.
- User can then press the appropriate digit on the IP video phone dial pad to activate the electric door opener (see Figure 8).

Attention: When a visitor rings the doorbell and no one answers, voicemail is activated on the Quadro, and visitors can leave a voice message in the voice mailbox for an extension on the Quadro. Users on the Quadro can listen to these voice messages from the video phone. Additionally, all voice messages can be sent as attachments via email to the predefined recipients as .wav files.

3.1 Configuring the Quadro IP PBX

The steps below describe the basic configuration on the Quadro IP PBX for desired scenario. Refer to the Quadro Administrator's Guide for advanced configuration.

3.1.1 Configuring Mobotix T24/T25 IP Video Door Station Device as an IP Line on the Quadro IP PBX

To configure the Mobotix IP Video Door Station as an IP line on the Quadro, login to the Quadro Web Management from your PC by entering the IP address in a browser (user name "admin", default password "19"):

- 1. In the Quadro management main menu access the *Telephony->Line Settings->IP Line Settings* page to configure the IP Line that will be used for Mobotix.
- 2. From the **Attached Extension** column, choose an extension to be assigned to the Mobotix (extension 134 in this example) and click on the corresponding IP line link (see Figure 1).

Main S	System	Users	Conference	es Telephony	Internet Uplink	Network	diaqu
	etting	39 	Cottingo				
<u>)hboaru</u>	Line Se	Tings IP L	.INE Setunya	1			
Enab	le Fin in	ore version	control				
Ponfigur	e IP pho	mes from:	Control				
Phones I	Default T	Tomplata:					
lanade (IP Phon	emplate.	toc			systemoerauit +	
Jpload IF	P Phone	<u>/s Logo</u>	<u>85</u>				
-XS Gate	away May	nagement					
IP Lir	<u>ne 22</u>	124	SIP	UserName: locex	t124, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	Jefault <u>Advanced</u>
IP Lir	<u>ne 23</u>	<u>125</u>	SIP	UserName: locex	t125, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	lefault <u>Advanced</u>
IP Lir	<u>ne 24</u>	<u>126</u>	SIP	UserName: locex	t126, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	lefault <u>Advanced</u>
IP Lir	<u>ne 25</u>	<u>127</u>	SIP	UserName: locex	t127, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	lefault <u>Advanced</u>
<u>IP Lir</u>	<u>ne 26</u>	128	SIP	UserName: locex	t128, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	lefault <u>Advanced</u>
IP Lir	<u>ne 27</u>	<u>129</u>	SIP	UserName: locex	t129, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	lefault <u>Advanced</u>
IP Lir	<u>ne 28</u>	<u>130</u>	SIP	UserName: locex	t130, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	lefault <u>Advanced</u>
IP Lir	<u>ne 29</u>	<u>131</u>	SIP	UserName: locex	t131, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	lefault <u>Advanced</u>
IP Lir	<u>ne 30</u>	<u>132</u>	SIP	UserName: locex	t132, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	lefault <u>Advanced</u>
<u>IP Lir</u>	<u>ne 31</u>	<u>133</u>	SIP	UserName: locex	t133, Model: QXFXS24	4, 00:f0:00:f0:32:32, Template: systemd	lefault <u>Advanced</u>
IP Lir	ne 32	<u>134</u>	SIP	UserName: locex	t134, Model: Other		
					Show disabl	ed IP lines	
-			-				

- **3.** Configure the selected IP line as follows:
 - Select the **SIP Phone** radio button (see Figure 2).
 - Select **Other** from the **Phone Model** drop down list.
 - Specify **Username** and **Password** fields.

Please Note: The same **Username** and **Password** should be specified when configuring Mobotix IP Video Door Station device in 3.2.

• Click **Save** to submit the changes.

Attention: The DHCP Server for LAN interface option is disabled by default on Quadro IP PBX. So go to Network->DHCP Server Settings and enable the DHCP Server option on the Quadro LAN interface.

Attention: The Enable PnP for IP lines option is enabled by default on Quadro IP PBX. Go to the *Telephony->Line Settings->IP Line Settings* page and disable the Enable PnP for IP lines option.

Main System	Users Conferences Telephony Internet Uplink Network	epygi"
P Line Set	tings - IP Line 32	
 Inactive 		
SIP Phone	Phone Model: Other	
	MAC Address:	
	Line Appearance: 2	
	Username: locext134	
	Password: Generate Password	
	Transport: UDP 🔻	
	Use Session Timer	
	Use template:	
	Enable Hot Desking Capability	
	Hot Desking Automatic Logout:	
	Never	
	After hour(s) min	
	At 0 ▼ : 0 ▼	
Save	Back	Help
lease check you	r <u>pending events!</u> Eovai Technologies, Ltd. All rights reserved.	

3.1.2 Configuring Many Extension Ringing for the IP Video Phones on the Quadro IP PBX

To configure the Many Extension Ringing on the Quadro, follow the steps below:

 Log into the Quadro as an administrator and access the Caller ID Based Services for an extension (extension 105 in this example): Users->Extensions Management->Click on Extension 105->Caller ID Based Services->Many Extension Ringing page (see Figure 3).

Main	Voice Mail	Your Extension	Suj	oplementary Services					
caller ID Based Services for Any Address									
xtens	sion: 105								
Hiding	Caller Informa	tion	🖉 Er	able Service					
Incom	ing Call Blockir	19	Enal	ble/Disable <u>Select all</u> Invers	rse Selection				
Outgo	ing Call Blockin	10		Call to	State				
Distin	ctive Ringing			101	Disabled (Line Attached)				
<u>Call H</u>	lunting			102	Disabled (Line Attached)				
Many	Extension Ring	inq		103 Yealink VP530	Enabled (Line Attached)				
<u>Uncor</u>	nditional Call Fo	orwarding		104 Grandstream GXV317	75 Enabled (Line Attached)				
Busy (Call Forwarding	L		105 Delveem M/V4500	Enclose (Line Attached)				
No An	swer Call Forw	arding		105 Polycom VVX1500	Enabled (Line Attached)				
<u>Unreq</u>	istered/Inacces	sible Call Forwarding		106 Aastra6735i	Disabled (Line Attached)				
Find N	le / Follow Me			107 Grandstream 2120	Disabled (Line Attached)				
Interco	<u>om</u>			108 Grandstream 2200	Disabled (Line Attached)				
Emero	gency Interrupt			109	Disabled (Line Attached)				
voicer				110	Disabled (Line Attached)				
			F	111	Disabled (Line Attached)				
					Disabled (Line Autoried)				

- From the list of extensions, enable the extensions for all configured IP video phones that will participate in the Many Extension Ringing for the selected extension (extension 105 in this example).
- **3.** The voicemail is active by default on all extensions on the Quadro, so if nobody answers, the call from the visitor will go to voice mailbox of extension 105.
- 4. If the Send new voice message via email option is enabled and configured in the Voice Mail Settings for extension 105, then all newly received voicemails will be send via e-mail as attachment to the defined recipients.
- **5.** The advanced Quadro configuration can be done if you need to forward an incoming call to a cell phone via PSTN or ITSP.

3.2 Mobotix T24/T25 IP Video Door Station Device Configuration as IP Line of Quadro IP PBX

To configure Mobotix IP Video Door Station device to function with the Quadro, follow the steps below:

- Connect the device to the LAN interface of Quadro IP PBX.
- Log in to Mobotix IP Video Door Station device by entering the IP address in a browser (default user name "admin", default password "meinsm") and factory reset the device.

By default, DHCP is enabled on the unit so it will receive an IP address from the Quadro DHCP server.

Run the **MxEasy** setup file. The main window for MxEasy will open.

1. Go to the **Camera->Camera Options** menu and select the **VoIP** tab (see Figure 4).

📉 Camera Opti	ons: mx10-:	12-232-119	_	_	_	X
🔍 Audio	LEDs	😡 Connection	⊘ Time	🔗 VoIP	🔀 E-Mail	ta Recording
Activate SI	IP telephony					
locext1	34@172.30.	0.1 🔀				+
SIP user	r name: loc	ext134]		
Local ac	count:			-		
	SIP ID:					
SIP pas	ssword: ••	•••••				
Re	gistrar: 17	2.30.0.1	•			
SIP a	ddress: loce	xt134@172.30.0.1				
			l	OK	Cancel	Apply

Figure 4

Press the _____button to add a new account.

Configure the new account as follows:

- Set the SIP user name field to the Username entered in "IP Line Settings" page of Quadro IP PBX.
- Set the **SIP password** field to the **Password** entered in "IP Line Settings" page of Quadro IP PBX.

- Set the **Registrar** field to the IP address of Quadro's interface.
- Press the **Apply** button.
- Next step will be to click on the Camera->Door Station Options menu and select the Doorbell tab (see Figure 5).

🚳 Door Station Options: mx10-12-232-119	x
🕐 Doorbell 📃 Equipment	
▲ When ringing: Main Bell execute the following profile: 1 - Ring and Mailbox	
Call the following remote stations:	
VideoOverIP "Test" videoOverIP " videoOve	
VideoOverIP "Test" Add Remote Station	
☑ Plate Remote Station ☑ Plate Edit Remote Station	
Edit Remote Stations Search Door Station Devices	
OK Cancel Apply	

• Enable the **Call the following remote stations** option and press the + button to **Add Remote Station**.

Specify the following for the **Remote Station** menu (see Figure 6):

- Name the remote station.
- Select **VideoOverIP** from the **Type** drop-down list.
- Specify the contact number in the **Address** field. (This is an extension on the Quadro, 105 in this example).
- Select the **Account**.
- Specify a **PIN Code** to access the Mobotix device capabilities (123 in this example).

Remote	Station 📃 🗆 💌
Name:	Test
Type:	(VideoOverIP 🔹
Address:	105
Account:	locext134@172.30.0.1
PIN Code:	123
	OK Cancel

4 IP Video Phone Configuration Notice

To make a call through Mobotix device, the extension used for Mobotix configuration should support **H264** video codec (see Figure 7).

Main Exte	System Users Conferences Telephony Internet Uplink Network nsion 134 Codecs		epyg1*
Enat	ole/Disable Select all Inverse Selection Move Up Move Down Make preferred		
	Audio Codecs	State	
	G.711u (PCM audio coding standard, 8 kHz sample rate, 8 bits, 64 kbit/s data rate) (preferred)	Enabled	
	G.711a (PCM audio coding standard, 8 kHz sample rate, 8 bits, 64 kbit/s data rate)	Enabled	
	G.729a (CS-ACELP speech coding at 8 kbit/s rate)	Enabled	
	G.726-16 (ADPCM speech coding at 16 kbit/s rate)	Disabled	
	G.726-24 (ADPCM speech coding at 24 kbit/s rate)	Disabled	
	G.726-32 (ADPCM speech coding at 32 kbit/s rate)	Disabled	
	G.726-40 (ADPCM speech coding at 40 kbit/s rate)	Disabled	
	iLBC (internet Low Bit Rate Coder at 13,33 kbit/s rate)	Disabled	
	G.722 (HD audio coding at 48-64 kbit/s data rate, 16 kHz sample rate)	Disabled	
	G.722.1 (HD audio coding at 24-32 kbit/s data rate, 16 kHz sample rate)	Disabled	
	TDVC (Time Domain Voicing Cutoff at 1,95 kbit/s rate)	Disabled	
	Video Codecs	State	
	H.264 (Advanced video coding for low bit rate communication)	Enabled	
	H.263 (Video coding for low bit rate communication)	Disabled	
	H.263+ (Video coding for low bit rate communication)	Disabled	
🗹 Ou	t of Band DTMF Transport		
🖉 Ena	able T.38 FAX		
🗷 Ena	able Pass Through FAX		
🗆 Eni	able Pass Through Modem		
E Foi	rce Self Codecs Preference for Inbound Calls		
Secur	re RTP Settings		
RTP	Policy: Make unsecure calls, accept anything		
Sa ease inht (C	ave Back check vour pendina events[Help

Figure 7

Below is the list of Video IP phones that are supported on the Quadro:

- Polycom VVX1500
- Grandstream GXV3140
- Grandstream GXV3175
- Yealink VP530

5 How to Use this Scenario

- Visitor at the door presses the doorbell button on Mobotix.
- All IP video phones that are involved in **Many Extension Ringing** group (see section <u>3.1.2</u>) start ringing.
- One of users picks up the phone to answer, and the voice responder requires to insert a PIN code (**123** in this example, see Figure 6).
- The user talks to visitor and presses the open door appropriate digit 1 (see Figure 8) using the IP video phone dial pad.

Please Note: This scenario is tested on Epygi supported video IP phones (Grandstream GXV3140, Grandstream GXV3175, Polycom VVX1500 and Yealink VP530).



Figure 8

6 References

The following documents can be helpful for further configuration of the Quadro IP PBX.

- Quadro Manual II Administrator's Guide can be downloaded from Epygi's WEB portal at <u>www.epygi.com</u>
- Additional documentation about the Mobotix IP Video Door Station device may be found at <u>http://www.mobotix.com</u>

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