

Epygi QX IP PBX Integration with PMS using PMSLINK

Abstract: This document describes how to configure and connect the Epygi QX IP PBX to PMSLINK middleware from **char** for integrating it with the PMS system used in a hotel.



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1 Introduction

This document describes how to configure and connect the Epygi QX IP PBX (herein QX) to PMSLINK middleware from **char** (herein PMSLINK) for integrating it with the PMS system used in a hotel. The PMS specific actions with parameters supported by the QX are described here as well.

2 System Requirements

- QX IP PBX (one of the following models: QX50, QX200, QX2000 or QXISDN4+), running the FW version 6.1.20 or higher, connected to the network.
- PMSLINK integration license key to be installed on the QX.
- MS Windows machine installed with PMSLINK



3 QX Configuration and Connection to PMSLINK

The following needs to be installed and configured on the QX to activate the PMSLINK and support the PMS actions:

- Install the PMSLINK integration license key on the QX
- Add Class of Services (CoS) and assign to extensions and call routing rules on the QX
- Create User IDs (hotel maid IDs)
- Create Room Conditions codes (room status codes)
- Create and configure a Room Condition custom auto attendant with VoXML scenario

The section below describes the required configuration steps on the QX. Refer to the QX IP PBX <u>Administrator's Guide</u> to get more details.



3.1 Installing the PMSLINK Integration license key on QX

Type pmslink.cgi in the address field of the browser to open the PMSLINK Connection hidden page (Figure 1).

- Check the Enable checkbox to enable the PMSLINK Connection.
- Set the address of PC running PMSLINK in the Connect host (e.g. 192.168.70.25).
- Set 8081 in the Connect port.
- Set 8081 in the Listen port.
- Set PMSLINK Username.
- Set PMSLINK Password.

Please Note: The same username and password shall be configured in the PMSLINK.

C	epygi		✓Pending Events	Logged In As: Administrator (admin)	C Log Out
	QX50	PMSLINK Connection			
な 一日 市 し	Setup Extensions Interfaces Telephony	Connect Host: 192.168.70.25 Connect Port: 8081			
 <td>Firewall Network</td><td>Listen Port: 8081 Username: userid</td><td></td><td></td><td></td>	Firewall Network	Listen Port: 8081 Username: userid			
,III NE	Status Maintenance	Password: Generate Password User ID Mapping Table Room Condition Mapping Table Save			

Figure 1: PMSLINK Connection hidden page

3.2 Configure CoS types

Go to Telephony→Call Routing→Class of Services and check the Enable Class of Service checkbox. Then add the classes of service used by the hotel PMS. For example, CoS having name "1" for internal calls (calls between QX extensions), CoS with name "2" for local calls to PSTN, CoS with name "3" for long distance calls and CoS with name "4" for international calls.



C	epygi									Language 👻	✓Pending Events	Logged In As: Administrator (admin)	C Log Out
	QX200	Ov	erview	VoIP Carrier	Call Routing	Call Recording	NAT Traversa	I RTP	SIP	Advance	d		
•	Dashboard	Call F	Routing Tal	call Routing	Local AAA Table	SIP Tunnel	Class of Service						
* 8	Setup Extensions	Cla	ass of	Service	S								Help 🔻
÷.	Interfaces	<u>Go t</u>	o Extensi	ions Manageme	ent								
6	Telephony	Go to	Go to Conferences Management										
0	Firewall	<u>Go t</u>	Go to Call Routing Table										
0	Network												
.lıl	Status		nable Cla	ss of Service									
an C	Maintenance	+ A	+ Add ≥ Edit @ Delete										
				Nam	e				D	escription			
			1			Internal Calls							
			2			Local calls to	PSTN						
			3			Long distance	e calls						
			4			International	calls						
		2	Save										

Figure 2: Class of Service page

3.3 Assign CoS to Extensions

Go to the **Extensions Management** page, select the extensions to be used in hotel rooms and assign them the lowes CoS ("1" in our example above), which allows to make only internal calls.



Figure 3: Extensions Mangement - Edit Entry page



3.4 Assign CoS to call routing rules.

Go to the **Telephony**->**Call Routing Table** and assign **CoS** to routing rules. For CoS defined in our example above to make practical sense, you need to have at least the following four explicit rules in the Call Routing Table:

- Call routing rule for making internal calls between PBX extensions (assign CoS "1" to this rule),
- Call routing rule for making local calls to PSTN (assign CoS "2" to this rule),
- Call routing rule for long distance calls (assign CoS "3" to this rule),
- Call routing rule for making international calls (assign CoS "4" to this rule).

e e	pygi		Language 👻	✓Pending Events	Logged In As: Administrator (admin)	Log Out
QX	X200	Overview VoIP Carrier Call Routing Call Recording NAT Traversal RTP SIP	Advance	d		
🚯 Dash	shboard	Call Routing Table Call Routing Local AAA Table SIP Tunnel Class of Service				
🔅 Setu	dr.	Call Routing Wizard			I	Help 👻
inter	rfaces	Go Back				
📞 Tele	ephony					
🔥 Firev	wall	Class of Services - Edit Entry				
🔇 Netw	work					
III Statu	us	✓ 1 □ 2 □ 3 □ 4				
🔎 Main	ntenance					
		Previous		Next		

Figure 4: Call Routing Wizard

3.5 Add Staff names and IDs

Go back to the PMSLINK Connection hidden page (Figure 1) and press User ID Mapping Table to go to the User ID Mapping Table hidden page.

6	epygi				✓Pending Events	Logged In As: Administrator (admin)	C Log Out
	QX50	Us	er ID Mapping Table				
	Dashboard		To Durit				
•	Setup	G	O BACK				
	Extensions	+ A	dd 🗇 Delete		Q		
÷.	Interfaces		User ID		Name		
6	Telephony		1	Maria			
0	Firewall		2	Khloe			
Q	Network		3	Kate			
.II	Status						
. C	Maintenance						

Figure 5: PMSLINK Connection - User ID Mapping Table hidden page



3.6 Add room condition mapping table

Click on the Room Condition Mapping Table link to open the Room Condition Mapping Table hidden page.

C	epygi				✓Pending Events	Logged In As: Administrator (admin)	Log Out
Æ	OX50 Room Condition Mapping Table						
ø	Setup	G Go Back					
	Extensions	+ Ac	dd 🗇 Delete		Q		
÷.	Interfaces		Code	Name			
6	Telephony		1	Dirty/Vacant			
0	Firewall		2	Dirty/Occupied			
Q	Network		3	DND			
.11	Status		·				
×	Maintenance						

Figure 6: PMSLINK Connection - Room Condition Mapping Table hidden page

3.7 Create Auto Attendant to Update the Room Status from Hotel Room Phone

Go to the Extensions Management page, select the default auto attendant (00) or add a new one (for example, extension #10). Press the hyperlinked Auto Attendant name to go to the Extensions Management – Edit Entry page, then press Attendant Scenario to select Attendant Scenario choose VXML Scenario option and add the following files downloaded from Epygi's support portal:

- room_status.xml VoXML default scenario file,
- pmsenterroomstatus.wav, pmsenteruserid.wav, pmsincorrectenterroomstatus.wav, pmsincorrectenteruserid.wav audio files used by Epygi's default scenario.

Calling to that auto attendant and following its voice menu allows the hotel staff (users) to update the room condition statuses from the hotel room phone.

🕜 epygi					Language 👻	✓Pending Events	Logged In As: Administrator (admin)	C Log Out
QX200	Overview Extensions Dialing Director	es Conferences	Recordings	Receptionist	ACD	Authorized F	Phones	
Dashboard	Extensions Add Extension Add Multiple Extens	ions Bulk Import						
🔅 Setup	Unload Custom Scenario	Voice Mes	sanes					
Extensions		VOICE MICE	sayes					
interfaces	G Back							
📞 Telephony	Attandant: 10							
irewall	Attendant. Tu							
Network	Custom Volce Messages							
.III Status	pmsincorrectenteruserid.wav	Download	<u>Remove</u>					
🔊 Maintenance	pmsenteruserid.wav	Download	Remove					
	pmsenterroomstatus.wav	Download	<u>Remove</u>					
	pmsincorrectenterroomstatus.wav	Download	Remove					
	Choose File No file chosen							
	Save							

Figure 7: Upload Custom Scenario Voice Messages page



4 The List of PMS Requests with Parameters Supported by QX

- Guest Check-In
- Guest data change
- <u>Do not disturb</u>
- Set / cancel wakeup
- <u>Guest checkout</u>
- Phone CALL
- <u>Status codes</u>



4.1 Guest Check-In

Is sent from the PMSLINK/PMS to the QX to notify about the arrival of the guest.

Supported Parameters				
Address	Room extension			
name	Guest First Name			
surname	Guest Last Name			
COS	Class of service assigned to the guest room			
	extension			

4.2 Guest data change

Is sent to update changes in the guest data.

Supported Parameters				
Address	Room extension			
name	Guest First Name			
surname	Guest Last Name			
COS	Class of service assigned to the guest (type of phone calls allowed)			

4.3 Do not disturb

Is sent to enable/disable DND status.

Supported Parameters				
Address	Room extension			
status	[Required] Status assignment: 0 = disable. 1 = enable.			

4.4 Set / cancel wakeup

Is sent to set or cancel a wakeup.

Supported Parameters				
Address	Room extension			
w_action	[Required]. Action ID: 1 = set. 0 = cancel.			
w_mode	Mode: $1 = single$ (default). $2 = daily$.			
w_date	Date of wakeup in YYYYMMDD format.			
w_time	Wakeup time in format HHMM.			



4.5 Guest checkout

Is sent to notify a guest departure.

Supported Parameters				
Address	Room extension			

4.6 Phone CALL

Is sent from PBX to PMSLINK/PMS to inform about call details when the call ends.

Supported Parameters	
Address	Room extension
room	Room. It may be equal, or not, to the address value
c_type	[Required]. Call Type:
	1: Outgoing, external.
	2: Incoming, external.
	3: Internal (from extension to extension).
c_date	[Required]. Date of the call in format YYYYMMDD
c_time	[Required]. Time of the call in format HHMMSS
caller	[Required]. Address (extension or external number) related to the call origin
called	[Required]. Address (extension or external number) related to the call
	destination
user	User (pin) who made the call
duration	[Required]. Call duration in format HHMMSS

4.7 Status codes

Is sent from PBX to PMSLINK/PMS to notify about room status.

Supported Parameters	
Address	Room extension
s_date	Status date in format YYYYMMDD
s_time	Status time in format HHMMSS
maid	ID of the user that generates the status code
status	Status code

5 References

• Admin guide for Epygi QX IP PBX



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