

1 Scope of integration

- 2 Add device: Grandstream PBX
- 3 Device configuration: Grandstream PBX
- **4** System logs / Common incidents

Training guide for Grandstream PBX

# 

# Scope of integration

The integration of the PMS system with Grandstream provides hotel benefits to the PBX system, exchanging information from one direction to another:

PMS → Grandstream									
<b>%</b>						Ç			
CHECK IN	CHECK OUT	ROOM MOVE	ROOM UPDATE	DESPERTADOR	DND	MENSAJES			
Allows outgoing calls. Name assignment.	Disables the ability to make outbound calls.	Move the guest information to the new room.	Update guest Programming of alarm information. clocks in rooms.		Allows you to activate the Do Not Disturb function.	Allows you to turn on/off the phone's message LED.			
		Gi	randstream $ ightarrow$ PN	/IS					
\$		<b>∞</b> *		<sup>555</sup>	1				
TARIFICAC	CION	HOUSEKEEPING	G	MINIBAR	NOTIFICACIONES				
Send calls made by guests (with their price) for billing by the PMS.		Sending cleaning codes (Room Status) marked from the room. Status codes: 1 to 6		g marked minibar charges from the room.	Sends alarm clock	result notifications.			

Guest information: First name, Last name, Language, VIP, Site, Stay (Arrival date, Departure date).



 To start configuring the appliance, run PMSlink monitor 'pmslkmtr.exe' which is located by default in the C:\charwin\utile\pmslink.

The access password is: master

Once opened, select menu "PMS link" Links' > 'Devices' > 'Grandstream PBX' > 'Apply'





Double-click on the 'Grandstream PBX' device

A new panel opens in which the device settings are divided into three main tabs:

- Description
- Link
- Settings

(Within the 'Settings' tab, you will find four sub-tabs that will allow you to adjust different aspects)

- General
- Actions
- Directory
- Rates

Device	ID	Group
🗳 Grandstream PBX	grandstream	0

Setup HM	listener	CNX				
Description	Link	Settings				
Connection PMSLINK - GrandStreaн PBX жижники конструкцийн Алариан (PBX) Link to GrandStreaн PBX using HMListener protocol. Server and guest soap connection.						
Data to send 						
- Update - Checkout - Move - Hake-Up calls - DND - MSG	(set / c	ancel)				



#### Tab: Description

The "Description" tab details the actions that are sent and received between the PBX and the pmslink service, the guest data that is processed, the languages and the status changes supported.

In addition, a section is included with the required data that the switchboard technician must provide to configure the link and the steps to follow to perform a basic configuration in the service.

This information is also available in the directories:

C:\charwin\utile\pmslink\link\ After the device is added and in C:\charwin\utile\pmslink\data\cnx, with the name "grandstream\_pbx.txt"

Setup HMlistener CNX								
Description	Link	Settings						
 Connection PHSL ***************** Link to GrandSt	INK - Gra HoHOHOHOHOHOHO ream PBX	andStream PB popopopopo using HMLis	X * tener protocol. Server and guest soap connection.					
Data to send 								
- Checkin - Update - Checkout - Move - Hake-Up calls - DND - MCC	(set / c	ancel)						



## Tab: Link

PMS



- Server address: http:// switchboard \_IP\_ Address :Port configured in "UCM Port"
- Server:Port: Set port used to "URL del PMS"
- Corresponding User y password.

#### **IMPORTANT**

It is essential to verify that the ports used are open in the firewall, as well as to ensure that communication can be established with the equipment from the control panel of the switchboard, using the network diagnostic tool located in Maintenance > Network Troubleshooting > IP Ping



\* Capture control panel Grandstream>Functions added values>PMS>Basic settings>PMS module (Hmobile)



Sitio:

## Tab: Settings > General

In Default HOTEL ID: Enter the "Site" configured in Grandstream:

\* Capture control panel>Functions added values>PMS>Basic settings>PMS module (Hmobile)

#### General language translation

It allows a conversion between the language of the PMS (PMS language) and the language (CNX language) that will be sent to the switchboard. By default, the following states exist:



\* Capture control panel - Extension/Trunk>Outbound routes

#### General profile translation

It allows a conversion between the class of service that arrives from the PMS and the one that is sent to the switchboard.

#### **General VIP translation**

No applies

	ho	tel_tes	t											
📀 Setup HMli	stene	r CNX										_		×
Description Lir	nk	Setting	5											
General	Actions	s Directo	ory	PBX Rate	s									
Default HO	TEL I	D	hote	_test		-								
General lar	nguage	e translatio	on			General profile transla	ation			General VIP translation				
PMS lang	uage		CNX	language	^	PMS Profile	CNX	Profile	^	PMS VIP code	CNX VIP c	ode 🔺	•	
<english></english>			EN			1	1							
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Default lan	guage	.				Default profile	4			Default VIP state				
Float for Decima Separa	mat als itor	2												
											Apply		<u>C</u> an	cel

In the "Default" box it is possible to set a default language and profile for cases in which this data is not received from the PMS



## 3 Device configuration: Grandstream PBX

#### Tab: Settings > Actions

In this section, you will find the actions sent by "guest" and received by the "server" service.

It is recommended not to modify any parameters in this section without prior consultation, as this could adversely affect the use of the system.





## 3) Device configuration: Grandstream PBX

### Tab: Settings > Directory

In this section you must add, delete or modify the list of extensions and rooms.

To make these changes, the following steps must be followed:

- Add the "PMS ID" and "CNX ID" with the Hotel ID entered in the devices corresponding to the PBX and PMS.
- Once done, select "New" and add the corresponding room and extension.

	Setup HMIistener CNX
FIAS pmslink setup : Opera PMS (Oracle), PBX interface (TCPIP - RS;	Description Link Settings
Description Connection Settings Advanced	General Actions Directory PBX Rates
Hotel ID hotel_test_2	Default HOTEL ID hote_test
Setup HMlistener CNX	- 🗆 X
Description Link Settings	
General Actions Directory PBX Rates	
Hotels	Rooms
New Edi: Delete	New Edit Delete
PMS ID PMS alias CNX ID 🗡 CNX alias	PMS room CNX address CNX additional addresses
hotel_test_2 hotel_test	101 1101
	102 1102
	201 2201
	202 2202
	203 2203 22203,

[]

The manufacturer specifies that all room extensions should be created as "rooms" in switchboard. To do this, go to: "Value-added features" -> "PMS" -> "Room status".

Please remember that when adding the "rooms"; "Address", "Room Number" and "Extension" must match.



## Tab: Settings > Directory

Another option is to perform an import. To do this, follow these steps:

• Create a file that contains the list of rooms and extensions separated by the vertical bar "|". On the left side, the room and on the right, the extension.

//////////////////////////////////////									
Archivo	Edición	Formato	Ver	Ayuda					
204 220 205 220	04 05								

- After that, select "New"> "Import >>" and choose the file to import.
- In some cases, a room may have more than one telephone terminal, to add it, select "CNX Additional addresses".

🔕 Setup room			-		×
PMS Room	101				
CNX Address	1101				
CNX Additional addresses (address1,address2)	11101				
	Save and Nev	V			
Import >>		Apply		<u>C</u> ano	cel

The functions of "PMS alias" and "CNX alias" can be left blank, as they are used in particular configurations and scenarios that will not be addressed in this case.



# 3 Device configuration: Grandstream PBX

#### Tab: Settings > Rates > General

Disable the option "Process meter pulses" since the control unit does not provide steps, but seconds.

- To do this, select "Edit", uncheck and "Apply"
- If desired, it is possible to delay the calculation time in seconds, entering the seconds in the box.

Setup HMlistener CNX		_		>
escription Link Settin	gs			
General Actions Direct	PBX Rates			
🚱 Add 🛛 🐁 Delete	III. General			
Rates	General Rates Destinations			
General	🔊 Edit 🚽 Save as			
	Name General			
	Calculate meter			
	Process meter pulse as connect flag			
	Delay to start calculation (sec)			
		Apply	<u>C</u> an	icel



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#### Tab: Settings > Rates > Rates | Destination

In "Rates" you must configure the type of destination National, international, free, special, etc.)

- To do this, select "Add", type the destination type in the description and select "Apply".
- In the box below you can add additional parameters, such as the days on which the price will be charged, the start and end date of such tariff, the price per call establishment, the excluded call time that will not be charged, the frequency in seconds and the price per unit.

In "**Destinations**" the header that is used is added and then associated with each type of destination.

- To do this, select "Add", enter the digits of the corresponding header and in the drop-down menu select "Rate" the previously configured destination type.
- It also offers the option to add a minimum length from "Min length".



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The char pmslink system generates logs of all managed connections.

#### pmslink communications log:

PMS link 1	.8.2.292 - monitor 1.4.3	.181	-		$\times$
PMS link	<u>Help</u>				
GT2		(10) Started			
	Sender				
09:30.43:5	LINK	buffer_delete (ID 1) c:\charwin\utile\pmslink\link\switchvox\data\buffer_sv	vitchvox_c	nx.dat	
😫 09:55:48:0	LINK	SERVICE RESET REQUEST FROM Opera PMS (Dracle), PBX interface (T	CPIP - RS	232)	
09:55:48:2	PMS link	Reset request: call service restart			
09:55:48:2	PMS link	AUTORUN: "autorun" "PMSlinkService" "PMSlinkService" "c:\charwin\ut	ile\pmslink	Apmslksry	/.exe'
09:55:48:4	SERVICE	Service stop			
09:55:48:4	SERVICE	Service thread terminate			
• 09:55:48:6	LINK	Finalize Opera PMS (Oracle), PBX interface (TCPIP - RS232)			
• 09:55:48:6	LINK	Destroy Opera PMS (Oracle), PBX interface (TCPIP - RS232)			
• 09:55:48:9	LINK	Finalize Sangoma Switchbox pbx			
• 09:55:49:1	LINK	Destroy Sangoma Switchbox pbx			
09:56:58:8	LINK	Send START (ID 0) to Sangoma Switchbox pbx > IDT_BOOKING: 16/09/	2022 - 09:	55:58,cnx	: .id: C
09:56:59:0	LINK	Send END (ID 0) SKIP from Sangoma Switchbox pbx ("Skip request SKIP_F	ROCESS	: IDT_BC	JOKIN
09:56:59:0	LINK	buffer_delete (ID 0) c:\charwin\utile\pmslink\link\switchvox\data\buffer_sv	vitchvox_c	:nx.dat	
😫 10:00:57:3	PMSLINK.	Service STOP			
10:01:07:3	PMSLINK.	Service START			
10:02:07:7	LINK	Send START (ID 0) to Arantia IPTV > IDT_BOOKING: 16/09/2022 - 10.01	:07,cnx ,i	d: 0,addre	1, 228
0 10:02:07:9	LINK	Send END (ID 0) SKIP from Arantia IPTV ("Skip request: 24: 16/09/2022 -	10:01:07,0	nx ,id: 0,	addre
10:02:07:9	LINK	buffer_delete (ID 0) c:\charwin\utile\pmslink\link\arantia_iptv\data\buffer_	arantia_ipt	v_cnx.da	: I

In pmslink Monitor, events about communications between devices are detailed.

The log is stored in log files. They are standard text files. The pmslink communications log is located at:

#### pmslink communications logs: P

C:\charwin\utile\pmslink\trace\pmslink

### pmslink device logs:

Row_assaapp_20220627.txt: Bloc de notas		- D	>
Archivo Edición Figimato Ver Ayuda			
08:48:41:986 [] process CREATE RESERVATION			
08:48:41:987 [ HTTPclient: REQUEST: URL: https://hospitality-mobile-access.a	ssaablov.com/operator/re	servation	
08:48:41:987 I HTTPclient: RECUEST: PARAMS:			
08-48-41-987 T HTTP:lient: REQUEST: METHOD: POST			
DR-48-41-987 > HTTP: leat: RECUEST: EXTRA HEADERS: authorization: Token 64vac	dda2265agg76686ashaciya8	3b7aukn8t78baaa695e3b	
DE-49-41-097 \ UTTP-light- PENDET- DOV- ("musts"-[["name"-"Nim141Ha-Caud?	22th Oncan Oncan" "amail	"-"726s con" "commonAccess"-[1]	
("name": "Byan Thomas" "amail": "248e com" "commonarcass": [1] ("name": "Erin Ch	anman" "email":"258e con	"componectant" [1] ("name": "im	
Pasks" "ampil":"263ms com" "common/crass":[1]] "avternalId":"155507" "start"	"7072-05-13" "end":"207	2-06-17" "accessDoint"-"101")	· ·
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DE-48-42-124 TUTTE liest: OPEN			
08:49:42:404     HTTP: lient: REVIEST carpones: CODE: 303 Accepted			
DE.49.43.401 JUTTE-Linet, DECUEST response: UEDEEC, UTTELS 5, 203 Accepted	13481040-to. No. 27 3.	3032 05.40.53 (Winthestory of	400
Tuna: application/und assablou mobile-access operator-4 0-icon#13#10#Conte	st-length: 111#12##10#Co	reaction: keen-alive#13##10#Conten	
Type: application/via assaulty.motile access upper ator - a or plotation inter-	#10#	emettion. Keep-diitewijwwiowcoch	S
control a doi lutraliante a control constanti a control de la control de	anda (darmaned rang darm	1011 3-17-101-01 1	
<pre>db:48:42:492[c]HTTPCLIERC: REQUEST RESponse: DATA: { location : /operator/re /"unlum":Top "unlt": "MTLLTEECOMME"}}</pre>	2010/01096401-2/3/-4720-	0932-200703938054 , Offset :	
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es-to-to-to-to-to-to-to-to-to-to-to-to-to-			
65:45:45:454][ASSA 65] RESULT	sambles and ferrentes (no		
deleterestering and a second s	ssaabioy.com/operator/re	SATC/01090801-2/0/-4520-0335-	
240/83934054			
08:48:43:484[1]HITPCIIENT: REQUEST: PARAMS:			
estatation and intercent request remotion and			
08:48:43:484)> H11PCIIent: REQUEST: EXTRA HEADERS: BUTHOPIZETION:TOKEN 64Vac	pod7562888/6686020bc3A96	an/duknat/epoppessman	
08:48:43:485)>[HTTPClient: REQUEST: BODY:			
08:48:43:485[>]HTIPCIIENT: REQUEST: EXECUTE			
08:48:43:675 I HTTPCIIENT: OPEN			
08:48:43:731 < HTTPclient: REQUEST response: CODE: 200 DK			
08:48:43:731 < HTTPCIIent: REQUEST PESDONSE: HEADERS: HTTP/1.1 200 DK#13##10	#Date: Mon, 27 Jun 2022	eo:48:43 GMT#13##10#Content-Type	ð
application/vnd.assaabloy.mobile-access.operator-4.0+json#13##10#Content-Len	gth: 51#13##10#Connectio	n: keep-alive#13##10#Cache-Contr	01:
no-cache, no-transform#13##10#Vary: Accept-Encoding#13##10##13##10#			
08:48:43:731 < HTTPC11ent: REQUEST response: DATA: {"status":"INVALID-DATE",	"response":["message":""	33	
0B:48:43:732 I HTTPclient: CLOSE			
08:48:43:732 I ASSA GET RESULT = RESULT: DK			
08:48:43:732 E process CREATE RESERVATION ERROR: NULL reservation id			
08:48:43:732 E Process CREATE RESERVATION ERROR: DATA_ERROR - {"status":"IN	VALID-DATE", "response":{	message : "}}	
08:48:43:738 > SEND ALERT : "D" "javier.querol@char.es" "ERROR when creatin	g reservation 155597" "E	RROR when creating reservation	
155597 for room 103" "c:\charwin\utile\pmslink\link\assaappcnx.cnx" "c:\char	win\utile\pmslink\link\a	ssaapp\trace\mail_alert\"	
08:48:43:738 I BOOKING PROCESS RESULT: DATA_ERROR			
	Linea 1, columna 1	100% Windows (CRLF) UTF-8	

Integrated device logs (PMS, IPTV, PBX, Hotspot, ...): C:\charwin\utile\pmslink\link\<**PMS/System/device>**\trace P

The use of these logs facilitates the detection of incidents, and the report of the same must be made to the technical support of char: <u>https://charpmslink.com/helpdesk/</u>

All loa files are stored for 30 days.

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# System logs / Common incidents

Incidence	Possible cause	Solution				
Incidence marking cleaning status: There is an incident in previous versions of the UCM in which, when dialing the code "1" on the phones to request the cleaning service, the pmslink service receives a "0" or a "1".	This is because the PBX sends a status of "0" when the room is at check-out and a status of "1" when the room is at checkin.	It will be neces PMS device in "0" or "1" a "1"	ssary to perform a t pmslink, so that it is is sent to the corres Room Status translation Device code 0 1 2	ranslation o indicated th ponding PM FIAS code 1 1 2	n tho nat w S.	e corresponding when receiving a

Charge called wrong: Sometimes, the additional zero at the beginning, which causes our system to not be able to rate the call correctly.

This situation is due to the configuration telephone exchange sends the phone of the switchboard that sends the call numbers to our software with an data in this way. However, we have not received a clear answer from the manufacturer as to why this happens.

It will be necessary to configure the rates including the possible additional destinations with the initial O. For example, if domestic destinations "9" and mobile destinations "6" have been added, it is also necessary to add destinations "09" and "06" and associate them with their respective rates.

06	Movil	0
07	Movil	0
09	National	0
6	Movil	0
7	Móvil	0
9	National	0

# char pmslink

# 4 System logs / Common incidents

Incidence	Possible cause	Solution
Guest details are not updated or the line is opened/closed after check-in and check-out.	Several causes, we recommend reviewing specific log located in C:\charwin\utile\pmslink\link\grands tream\trace for more details.	<ol> <li>The registered room number does not match the one expected by the switchboard (room)</li> <li>The hotel ID configured in the PBX device and PMS in pmslink does not match the site configured in the PBX</li> <li>Review user/password configured on both sites</li> <li>Failure in connection with the switchboard. Check the network connection and check if the ports applied in the configuration have an input-output rule created.</li> <li>Check the type of service sent to the PBX in the log under the <cos>number label<cos>. It should be a 4, otherwise, make the relevant translation between PMS-PBX.</cos></cos></li> </ol>
The alarm clock does not work.	The room is not found in checkin or there are discrepancies in the date / time.	In addition to the possible causes mentioned above for the checkin, check-out and lines update problem, it is important to verify that the PBX time is correct and that the date and time of alarm clock programming from the PMS are also accurate.