

- ① Scope of integration
- ② Add device: Grandstream PBX
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① 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						
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 information.	Programming of alarm clocks in rooms.	Allows you to activate the Do Not Disturb function.	Allows you to turn on/off the phone's message LED.
Grandstream → PMS						
TARIFICACION	HOUSEKEEPING		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		Sending marked minibar charges from the room.		Sends alarm clock result notifications.	

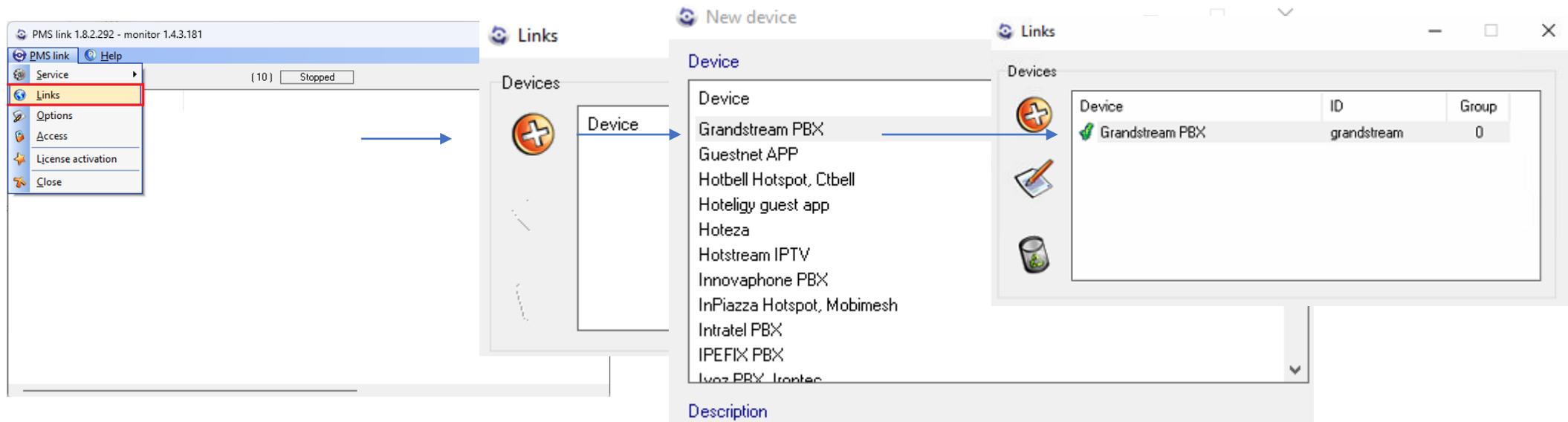
Guest information: First name, Last name, Language, VIP, Site, Stay (Arrival date, Departure date).

② Add device: Grandstream PBX

- 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'



③ Device configuration: Grandstream PBX

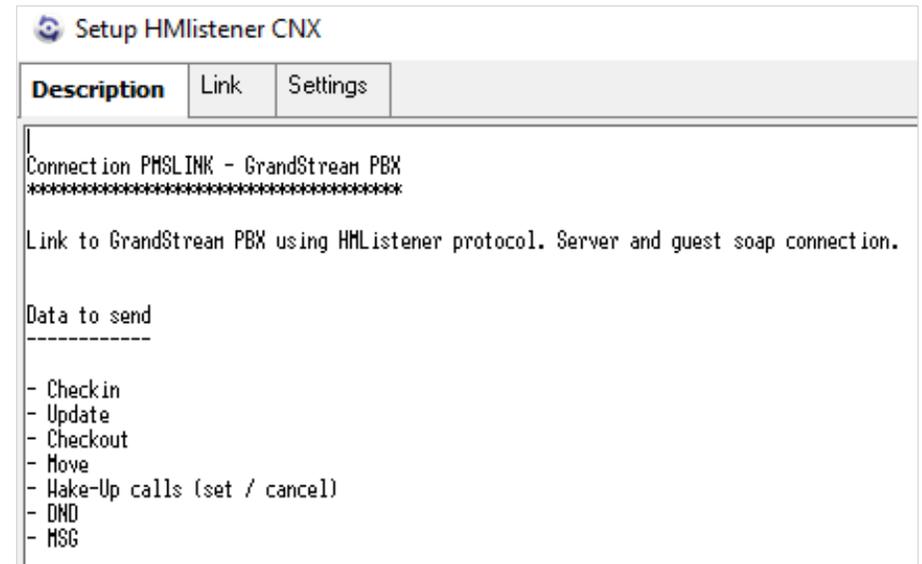
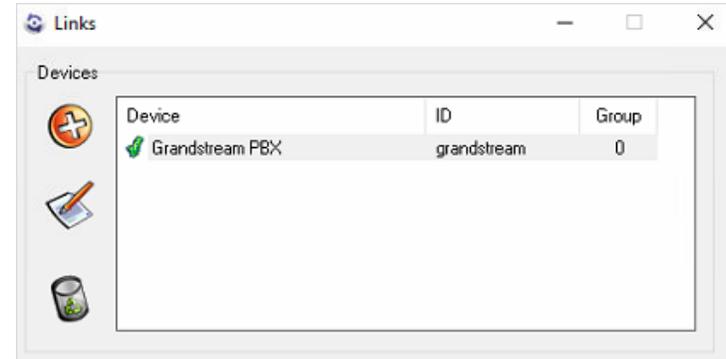
- Double-click on the 'Grandstream PBX' device

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



3 Device configuration: Grandstream PBX

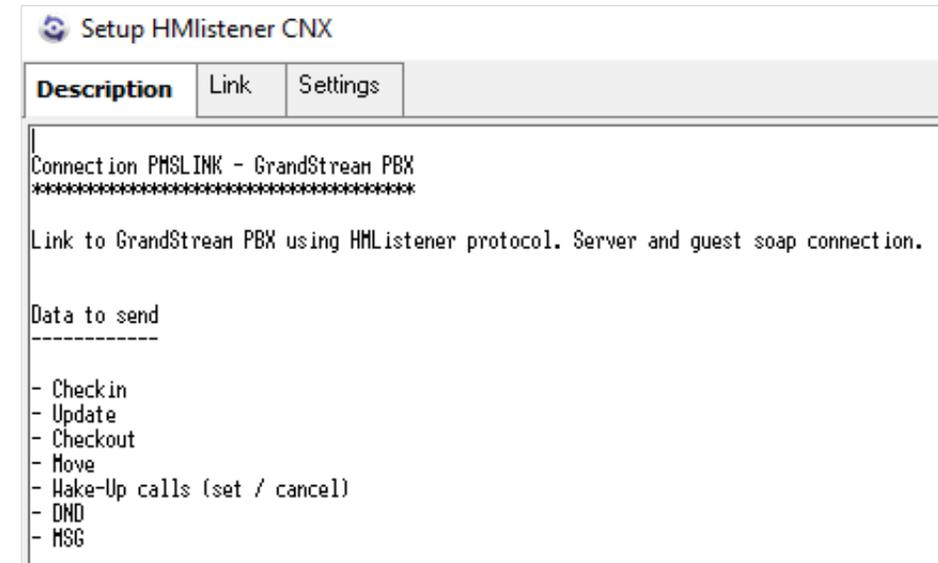
Tab: Description

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"



3 Device configuration: Grandstream PBX

Tab: Link

In "Link", you must enter the following data:

- **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

PMS

Basic Settings Room Status Wakeup Service

PMS Module: Hmobile

Wakeup Prompt: Wake Call

* PMS URL: http://172.16.0.11:8081/soap

* UCM Port: 8082

* Username: Char

* Password: Char

Setup HMListener CNX

Description Link Settings

HMListener GUEST: Server address http://192.168.21.230:8068

HMListener SERVER: Port 8067 Check receive authentication

User Char

Password Char

Debug

Apply Cancel

Grandstream Documentation:
https://www.grandstream.com/hubfs/Product_Documentation/HMobile_PMS_Guide.pdf

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

3 Device configuration: Grandstream PBX

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:

Interno	1
Local	2
Nacional	3
Internacional	4

* Capture control panel - Extension/Trunk > Outbound routes

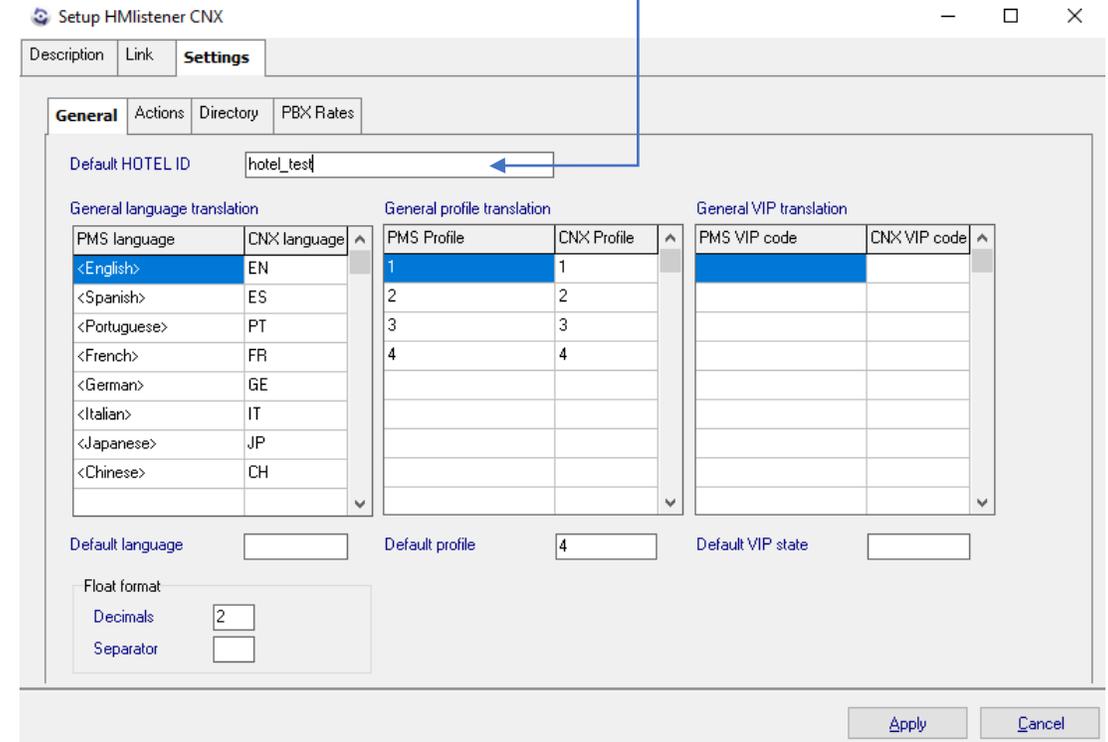
General profile translation

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

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

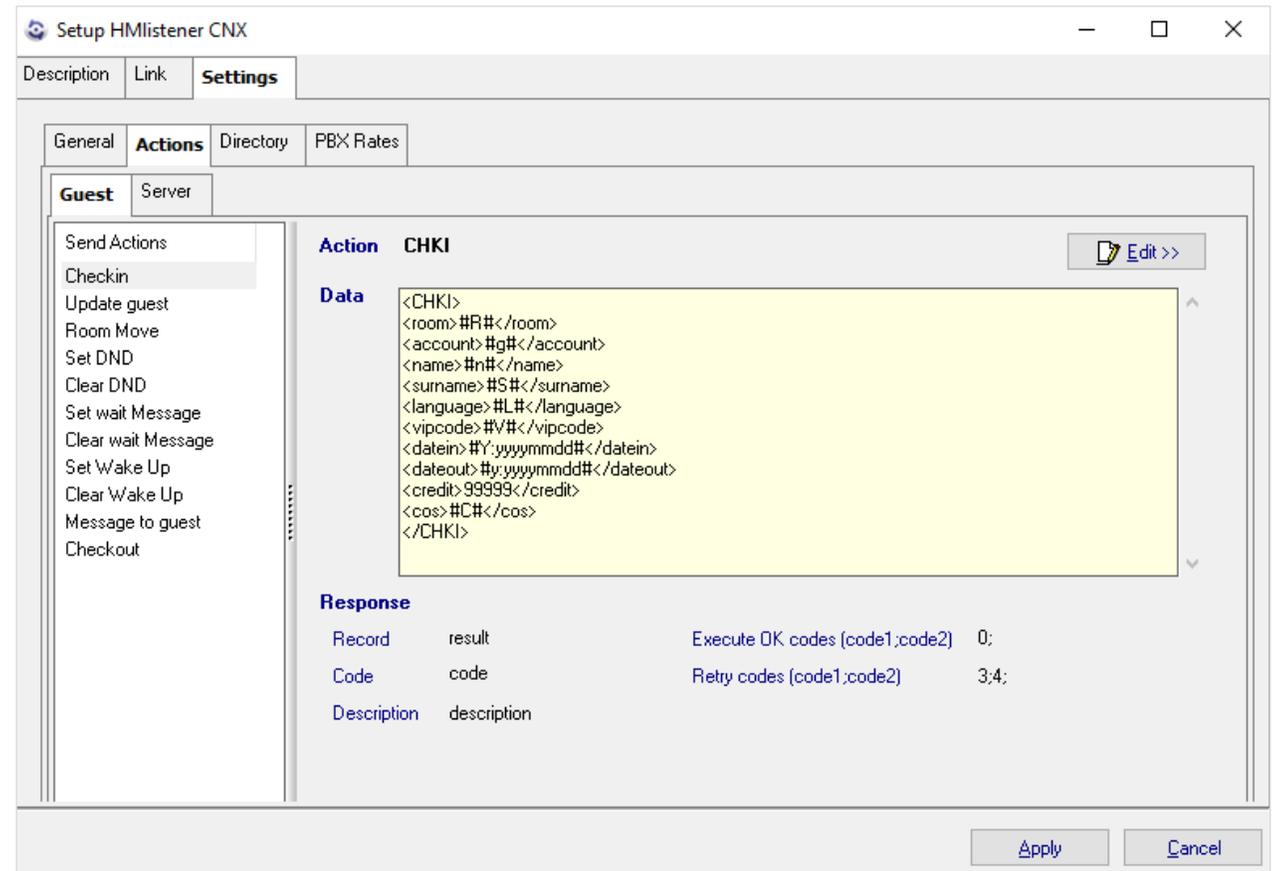


③ Device configuration: Grandstream PBX

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.



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.

The screenshot displays the 'Setup HMListener CNX' configuration window. The 'Settings' tab is active, and the 'Directory' sub-tab is selected. The 'Hotels' section contains a table with the following data:

PMS ID	PMS alias	CNX ID	CNX alias
hotel_test_2		hotel_test	

The 'Rooms' section contains a table with the following data:

PMS room	CNX address	CNX additional addresses
101	1101	
102	1102	
201	2201	
202	2202	
203	2203	22203,

Blue arrows indicate the flow of information: one arrow points from the 'hotel_test_2' value in the 'Hotels' table to the 'New' button in the 'Rooms' section, and another arrow points from the 'hotel_test' value in the 'Hotels' table to the 'CNX ID' column header in the 'Rooms' table.

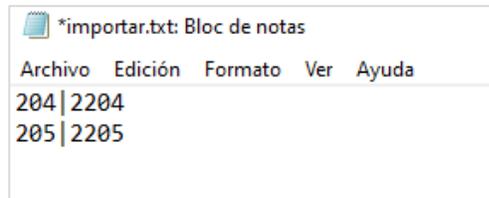


The manufacturer specifies that all room extensions should be created as "rooms" in switchboard. To do this, go to: "Value-added features" -> "PMS" -> "Room status". Please remember that when adding the "rooms"; "Address", "Room Number" and "Extension" must match.

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.



- 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".

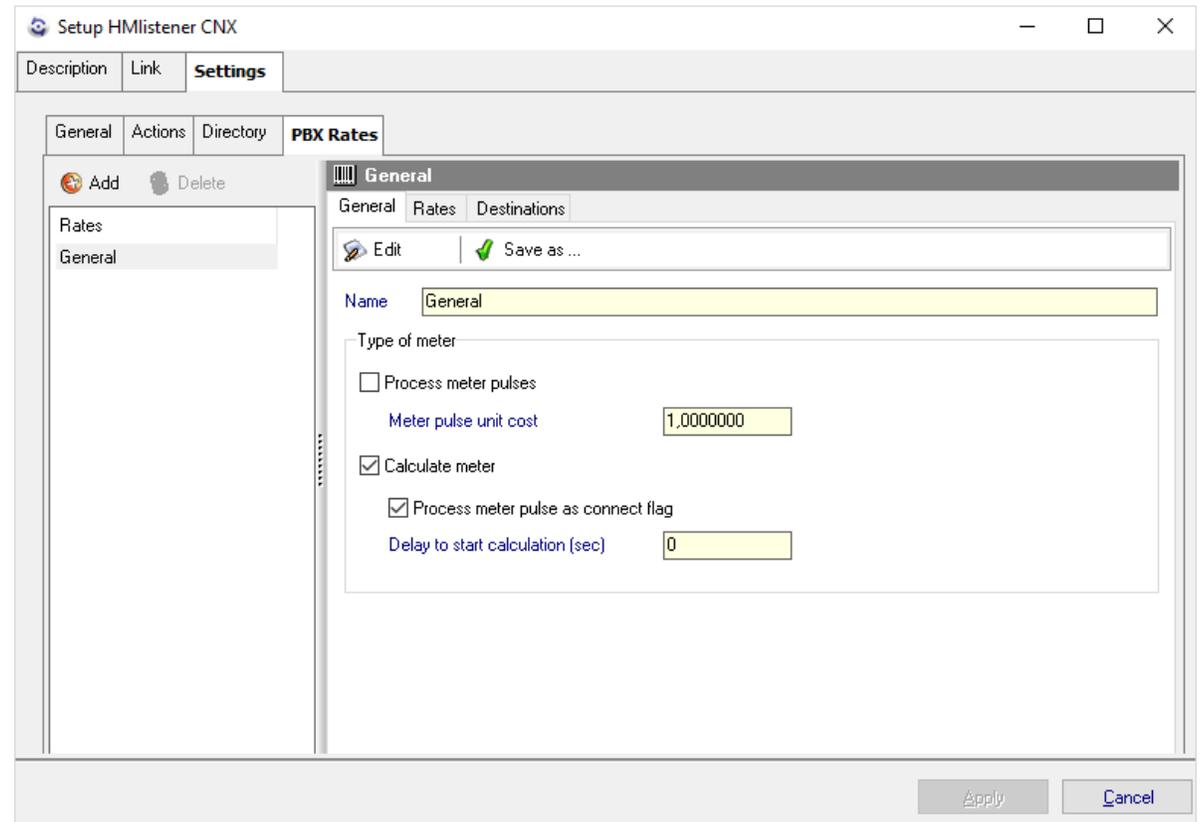


The functions of "PMS alias" and "CNX alias" can be left blank, as they are used in particular configurations and scenarios that will not be addressed in this case.

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.



③ Device configuration: Grandstream PBX

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".

The screenshot shows the 'General' tab with sub-tabs for 'General', 'Rates', and 'Destinations'. The 'Rate types' section has 'Add', 'Delete', and 'Edit' buttons. A list of rate types includes 'Gratisito', 'Internacional', 'Movil', and 'Nacional'. A 'New rate type' dialog box is open, with 'Description' set to 'Especial'. Below the dialog, the 'Rate : Internacional' section shows a table with parameters:

Days	Start	End	Connect	Exemption	Frequency	Unit cost
Mo,Tu,We,Th,Fr,Sa,Su	0:00:00	23:59:59	0,0000000	0	60	0,6500000

The screenshot shows the 'Destinations' tab with sub-tabs for 'General', 'Rates', and 'Destinations'. The 'Destinations' section has 'Add', 'Delete', and 'Edit' buttons. A table lists destinations with their headers and associated rate types:

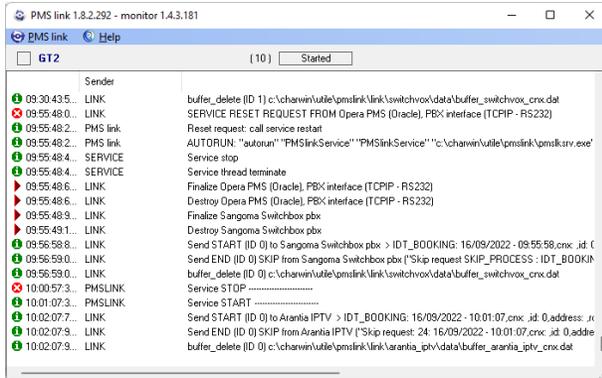
Header	Rate type
00	Internacional
6	Movil
7	Movil
9	Nacional
900	Internacional

A 'New destination' dialog box is open, with 'Header' set to '00356', 'Min length' empty, and 'Rate' set to 'Gratisito' (with a dropdown menu showing other options: 'Gratisito', 'Internacional', 'Movil', 'Nacional').

④ System logs / Common incidents

The char pmslink system generates logs of all managed connections.

pmslink communications log:



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:

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

pmslink device logs:



Integrated device logs (PMS, IPTV, PBX, Hotspot, ...):

C:\charwin\utile\pmslink\link\<PMS/System/device>\trace

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: <https://charpmslink.com/helpdesk/>



All log files are stored for 30 days.

④ System logs / Common incidents

Incidence	Possible cause	Solution																		
<p>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".</p>	<p>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.</p>	<p>It will be necessary to perform a translation on the corresponding PMS device in pmslink, so that it is indicated that when receiving a "0" or "1" a "1" is sent to the corresponding PMS.</p> <div data-bbox="1640 482 2221 779" data-label="Table"> <p>Room Status translation</p> <table border="1"> <thead> <tr> <th>Device code</th> <th>FIAS code</th> <th></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>1</td> <td>▲</td> </tr> <tr> <td>1</td> <td>1</td> <td></td> </tr> <tr> <td>2</td> <td>2</td> <td></td> </tr> </tbody> </table> </div>	Device code	FIAS code		0	1	▲	1	1		2	2							
Device code	FIAS code																			
0	1	▲																		
1	1																			
2	2																			
<p>Charge called wrong: Sometimes, the telephone exchange sends the phone numbers to our software with an additional zero at the beginning, which causes our system to not be able to rate the call correctly.</p>	<p>This situation is due to the configuration of the switchboard that sends the call data in this way. However, we have not received a clear answer from the manufacturer as to why this happens.</p>	<p>It will be necessary to configure the rates including the possible additional destinations with the initial 0. 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.</p> <div data-bbox="1559 1119 2303 1310" data-label="Table"> <table border="1"> <tbody> <tr> <td>06</td> <td>Movil</td> <td>0</td> </tr> <tr> <td>07</td> <td>Movil</td> <td>0</td> </tr> <tr> <td>09</td> <td>National</td> <td>0</td> </tr> <tr> <td>6</td> <td>Movil</td> <td>0</td> </tr> <tr> <td>7</td> <td>Móvil</td> <td>0</td> </tr> <tr> <td>9</td> <td>National</td> <td>0</td> </tr> </tbody> </table> </div>	06	Movil	0	07	Movil	0	09	National	0	6	Movil	0	7	Móvil	0	9	National	0
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9	National	0																		

④ System logs / Common incidents

Incidence	Possible cause	Solution
<p>Guest details are not updated or the line is opened/closed after check-in and check-out.</p>	<p>Several causes, we recommend reviewing specific log located in C:\charwin\utile\pmslink\link\grands tream\trace for more details.</p>	<ol style="list-style-type: none"> 1. The registered room number does not match the one expected by the switchboard (room) 2. The hotel ID configured in the PBX device and PMS in pmslink does not match the site configured in the PBX 3. Review user/password configured on both sites 4. 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. 5. 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.
<p>The alarm clock does not work.</p>	<p>The room is not found in checkin or there are discrepancies in the date / time.</p>	<p>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.</p>