



- What is pmslink? Technical specifications and requirements
- How is it installed?
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- pmslink Service
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- Connection to PMS systems Configuration
- System Logs
- **)** Specifications of equipment / systems to be integrated



# 1 What is char pmslink?

char pmslink is much more than middleware, it is an intelligent, versatile and scalable integration system that provides a solution for any type of integration that is needed.

In a hotel, it connects a local equipment or system to a single PMS system







Connects different equipment or local systems to a single PMS system.





# 1 What is char pmslink?

Centralised multi-hotel environment with different equipment and systems, locally and/or remotely connected to different PMS systems.



In short, a single system that solves any connectivity in hotel environments.





# Technical specifications

pmslink is a modular system based on a Windows service that manages the connection of the different embedded systems through libraries and/or specific processes (devices) for each of them.



The limit of active connections will depend on the resources of the equipment where it is installed and the complexity of its maintenance.





# Technical specifications

The devices (DLLs) are multi-instance, capable of running simultaneously in the case of multiple connections to the same equipment, system or PMS.

Each connection (instance) has its own configuration file (driver), log file and working environment.

Each device has its own configuration interface.



Booking, occupancy and guest data are only stored for a limited time, usually for as long as they remain as guests.





### Minimum requirements

- For integration with PMS systems installed locally in the hotel, char pmslink needs to be installed on a PC in the hotel network.
- The PC requirements will depend on the complexity and the integrated system. For integration between a PMS and a standard system (PBX, IPTV, Hotspot, etc.), pmslink would need to have at least 1 GB HD, 1 GB RAM and a Windows7 or higher O.S. on a non-dedicated PC (physical or virtual).
- Internet access will be required so that char's technical department can perform maintenance, installation and commissioning of the system remotely.
- PMS system interface activated
- The cooperation of all involved systems (PMS, PBX, Hotspot, IPTV, ...) and hotel staff is necessary for the testing and verification of the installation.





### Installation

It is carried out through the installer provided in <a href="https://charpmslink.com/download/installer/pmslink\_installer.exe">https://charpmslink.com/download/installer/pmslink\_installer.exe</a>







### License activation

- Start the pmslink Monitor ('Start' Windows menu \ 'All programs' \ 'char PMS link' \ 'PMS link Monitor')
- Go to the menú 'PMS Link' \ 'License activation' and enter the license number provided when you purchased pmslink..



The license can be activated from the Internet (recommended) or in case of remote activation issues, it can be activated via email or phone call by contacting char technical support.



Incidents should be reported to https://charpmslink.com/helpdesk/





## Automatic start of Windows pmslink service

It is recommended to configure the automatic start of the service. To do it:

- Start pmslink Monitor ('Start' Windows menu \ 'All programs' \ 'char PMS link' \ 'PMS link Monitor')
- Go to 'PMS Link' menu \ 'Service' \ 'Enable auto start'.







### Automatic restart of Windows pmslink service

It is recommended to set up automatic reboot in case of error. To do it:

- Open the Windows Services (Control Panel / System and Security / Windows Tools / Services)
- Select the service: utile PMS link. Double click to open the property screen and select the "Recovery" tab
- Select the option "Restart the service" for the 3 error cases.

								/	General Iniciar sesión	Recuperación Dependencia	s
Servicios (locales)	Servicios (locales)								Seleccione la respuesta d	lel equipo ante un error de es	te servicio.
	utile PMS link	Nombre	Descripción	Estado	Tipo de inicio	Iniciar sesión como			Ayudarme a seleccionar la	as acciones de recuperación.	
	Detener el servicio Pausar el servicio Reiniciar el servicio Descripción: utile PMS link	<ul> <li>SmartByte Network Service</li> <li>SMP de Espacios de almace</li> <li>Solicitante de instantáneas</li> <li>Soporte técnico del panel d</li> <li>SysMain</li> <li>Tarjeta inteligente</li> <li>Tarjeta inteligente</li> <li>Tarjeta relativa</li> <li>TeamViewer</li> <li>Telefonía</li> <li>Temas</li> <li>Thunderbolt(TM) Peer to Pe</li> <li>Ubicador de llamada a proc</li> <li>Ubicador de llamada a proc</li> </ul>	Servicio hos Coordina las Este servicio Administra TeamViewer Ofrece com Proporciona Thunderbolt En Windows Liva de deta	En ejecu En ejecu En ejecu En ejecu En ejecu En ejecu En ejecu	Automático Manual Manual (dese Manual Automático Manual (dese Automático Manual Automático Automático Manual Automático	Sistema local Servicio de red Sistema local Sistema local Servicio local Sistema local Servicio de red Sistema local Sistema local Sistema local Sistema local Servicio de red Servicio de red			Primer error: Segundo error: Sigujentes errores: Restablecer recuento de Reiniciar el servicio despu Habilitar acciones para con error	Reiniciar el servicio Reiniciar el servicio Reiniciar el servicio errores después de: ués de: a detenciones Opciones de r	días minuto: reinicio del equ
		Uso de datos	utile DMS link	En ejecu	Manual	Servicio local			Ejecutar programa		
		WalletService	Almacena o	En ejecu	Manual	Sistema local			P <u>r</u> ograma:		
		Warp JIT Service	Enables JIT cor	npilation sup	port in d3d10warp	dll for processes in whi	ich code				<u>E</u> xaminar.
		Waves Audio Services Waves Audio Universal Serv Windows Installer	Waves Audi Waves Audi Agrega, mo	En ejecu En ejecu	Automático Automático Manual	Sistema local Sistema local Sistema local			Parámetros de línea de	comandos: e errores al final de la línea de	comandos
		🥨 Windows Search 🥨 Windows Update	Proporciona Habilita la d	En ejecu	Automático (i Manual (dese	Sistema local Sistema local			(/fail=%1%)		



# Connection to the system / equipment

#### Through pmslink monitor:

- Select the device to integrate (IPTV, PBX, Hotspot, Key Access System, Automation, Guest App, ...)
- Configuration of the device



# Connection to the system / equipment

Once the system or equipment is selected, it must be configured for the connection:

Setup HMlistener CNX – 🗆 X	😂 Setup HMlistener CNX – 🗆 X
Description Link Settings	Description Link Settings
Connection PHSLINK - GrandStream PBX Link to GrandStream PBX using HMListener protocol. Server and guest soap connection. Data to send - Checkin - Checkin - Update - Checkout - Now	Intp://GRANDSTREAM_IP:8068         8067         User       char         Password       char
- Butguing calls - Room Status - Room Status - Robert	Apply <b>% Cancel</b>
Supported guest dat Setup HMlistener CNX	
Name Settings	
- Surmania - Language - UIP - UIP	Description Link Settings
- Site - Rrrival date Default HOTEL ID	Setup HMlistener CNX - X
General language translation General profile translation General VIP translation	Central Actions Diecony Pick Hates
PMS language     DbX language       Choice     DbX language       Cispitato     EN       Cispitato     ES       Contuguese>     PT       Cirenoto     FR       Citationo     IT       Cidapanese>     JP       Chrinese>     DH       Default language     Default profile       Default language     Default profile       Default language     Default profile	Guest Bereit         Serial Actions         Deckin         Update guest         Bookin         Caucar Display (account)         Guest Network         Detar NN Dec         Set N4D         Caucar Display (account)         (caucar Display (account) <t< td=""></t<>
<u>App</u>	



# Connection with PMS system

### Through pmslink monitor:

- Select the hotel PMS system
- Configuration of the connection

Links		_		×	
Devices					
	Device	ID	Group		
	🞸 Arantia PMS Adapter	arantia_pmsada	0		
	🞻 ASSA Mobile access app	assaapp	0		
<ul> <li>S</li> </ul>	🖋 Grandstream PBX	grandstream	0		
PMS links					
	PMS link	ID	Group		
<b>W</b>	🗳 Opera PMS (Oracle), PBX interface	operapbx	0		
<ul> <li>Image: Second sec</li></ul>					
			<u>C</u> lo:	se	

P)		
RS232)		1
P - RS232)		- 1
5232J		
15232) (TCPIP)		
ce(icrir)		
iite8, IV interface thro	ugh ICPIP	or
e (TCPIP - RS232)		
	- IS232) P - RS232) 232] 35232) 26 (TCPIP) ite8, TV interface thro ite8, TV interface thro (TCPIP - RS232)	15232) P - R5232) 15232) 35 (TCPIP) ite8, TV interface through TCPIP a (TCPIP - R5232)



6 Connection to PMS system- Configuration

## Connection to PMS system

When the PMS system to be connected is selected, the connection to the system is configured:

FIAS pmslink setup : Opera PMS (Oracle), PBX interface (TCPIP - F	RS232) —								
Description Connection Settings Advanced									
Connection PHSLINK - Oracle Opera PHS / Hospitality Suites, PBS interfac	e *								
Certified Protocol: FIRS ver. 2.0.4, IFC minimum version Build 7.40 (15)	SIAS pmslink setup : Opera PMS (Oracle), PBX in	erface (TCPIP - RS232)	– 🗆 🗙						
Certified Protocol: FIRS ver. 2.0.4, IFC minimum version Build 7.40 (15) Oracle Opera PMS settings required: IFC Nome: TBS UPF Settings required: IFC Nome: TBS	FIAS preslink setup : Opera PMS (Oracle), PBX in     Description     Connection     Setting: Advanced      Fias server addless     FIAS server_port     5020      COM port     COM1     Baud rate     4800     Data bits     8     Parity     Ninguna     Stop     1     Fiow control     Software     Xon (ASCII)     17     Xofi (ASCII)     19     RX buffer     1024	erface (TCPIP - RS232)	- ×	FIAS pmslink setup : Opera PMS I scription Connection Settings Ad Hotel ID Inclet Active records Charges PBX Charges PBX Charges PBX Charges INV Charges INV Charg	(Oracle), PBX interface (TCPIP - RS232) Ivanced	Internet profile speci Internet profiles Database Synchron	ID AD     ID AD     Id D AD     Id     Id D AD     Id     Id D AD     Id     Id D AD     Id     I	W interface (TCPIP - RS232)	X
								v	
							L		
									Apply Cancel



# 7 System logs

The char pmslink system generates logs of all managed connections.

## pmslink communications log:

PMS link 1	.8.2.292 - monitor	r 1.4.3.181	-		×
PMS link	Help				
GT2		(10) Started			
	Sender				
09:30:43:5	LINK	buffer_delete (ID 1) c:\charwin\utile\pmslink\link\switc	hvox\data\buffer_switchvox_	cnx.dat	
3 09:55:48:0	LINK	SERVICE RESET REQUEST FROM Opera PMS (Orac	cle), PBX interface (TCPIP - R	5232)	
09:55:48:2	PMS link	Reset request: call service restart			
09:55:48:2	PMS link	AUTORUN: "autorun" "PMSlinkService" "PMSlinkSer	vice" "c:\charwin\utile\pmslin	k\pmslksrv	/.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 - R	S232)		
09:55:48:6	LINK	Destroy Opera PMS (Oracle), PBX interface (TCPIP - R	\$232)		
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:
09:56:59:0	LINK	Send END (ID 0) SKIP from Sangoma Switchbox pbx (	Skip request SKIP_PROCES	S:IDT_BC	оки
09:56:59:0	LINK	buffer_delete (ID 0) c:\charwin\utile\pmslink\link\switc	hvox\data\buffer_switchvox_	cnx.dat	
3 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:	id: 0,addre	ass: "r
10:02:07:9	LINK	Send END (ID 0) SKIP from Arantia IPTV ("Skip reques	st: 24: 16/09/2022 - 10:01:07,	enx: ,id: 0,	addre
10:02:07:9	LINK	buffer, delete (ID, II) c:\charwin\utile\pmslink\link\aran	ia intv∆data∖buffer arantia in	hy, envidal	e i

## pmslink devices log:

Brow_esseepp_20220627.txt: Bloc de notes	- D ×
Archivo Edición Figmato Ver Ayuda	
08:48:41:986 I process CREATE RESERVATION	
08:48:41:987 [] HTTPclient: REQUEST: URL: https://hospitality-mobile-access.assaabloy.com/operator/reser	vation
68:48:41:987 I HTTPclient: REQUEST: PARAMS:	
08:48:41:987 [ HTTPclient: REQUEST: METHOD: POST	
BE:48:41:987 > HTTPclient: REQUEST: EXTRA HEADERS: authorization:Token 64vacddq2265agg76686osbpcjva83h7	gukn8t70bopp695m3h
08:48:41:987 > HTTPclient: REQUEST: BODY: {"guests":[{"name":"Ni#241#a-Say#233#h Omran Omran","enail":"	23@e.com", "commonAccess":[]},
{"name":"Ryan Thomas", "email":"24We.com", "commonAccess":[]}, {"name":"Erin Chapman", "email":"25We.com", "	commonAccess":[]), ("name": "Any
Peake", "email": "2639e.com", "commonAccess":[]]], "externalId": "155597", "start": "2022-06-13", "end": "2022-0	6-17", "accessPoint": "103"}
08:48:41:988 > HTTPclient: REQUEST: EXECUTE	
08:48:42:134 I HTTPclient: OPEN	
08:48:42:491 < HTTPclient: REQUEST response: CODE: 202 Accepted	
08:48:42:491 < HTTPclient: REQUEST response: HEADERS: HTTP/1.1 202 Accepted#13##10#Date: Mon, 27 Jun 20	22 06:48:42 GMT#13##10#Content-
Type: application/vnd.assaabloy.mobile-access.operator-4.0+json#13##10#Content-Length: 113#13##10#Conne	ction: keep-alive#13##10#Cache-
Control: no-cache#13##10#Access-Control-Expose-Headers: Location#13##10##13##10#	
08:48:42:492 < HTTPclient: REQUEST response: DATA: {"location":"/operator/result/d1680a6f-5797-4250-b93	2-2a67e393a054", "offset":
{"value":100,"unit":"MILLISECONDS"}}	
08:48:42:492 I HTTPclient: CLOSE	
08:48:43:484 I ASSA GET RESULT	
08:48:43:484 [I]HTTPclient: REQUEST: URL: https://hospitality-mobile-access.assaabloy.com/operator/resul	t/d1680a6f-5797-4250-b932-
2a67e393a054	
08:48:43:484 I HTTPclient: REQUEST: PARAMS:	
08:48:43:484 I HTTPclient: REQUEST: METHOD: GET	
08:48:43:484 > HTTPclient: REQUEST: EXTRA HEADERS: authorization:Token 64vacddq2265agg76686osbpcjva03h7	qukn8t70bopp695m3h
08:48:43:485 > HTTPclient: REQUEST: BODY:	
08:48:43:485 > HTTPclient: REQUEST: EXECUTE	
08:48:43:675 I HTTPclient: OPEN	
08:48:43:731 < HTTPclient: REQUEST response: CODE: 200 OK	
08:48:43:731 < HTTPclient: REQUEST response: HEADERS: HTTP/1.1 200 OK#13##10#Date: Mon, 27 Jun 2022 06:	48:43 GMT#13##18#Content-Type:
application/vnd.assaabloy.mobile-access.operator-4.0+json#13##10#Content-Length: 51#13##10#Connection:	keep-alive#13##10#Cache-Control:
no-cache, no-transform#13##10#Vary: Accept-Encoding#13##10##13##10#	
08:48:43:731 <td></td>	
08:48:43:732 I HTTPclient: CLOSE	
08:48:43:732 I ASSA GET RESULT - RESULT: OK	
08:48:43:732 E process CREATE RESERVATION ERROR: NULL reservation id	
08:48:43:732 E process CREATE RESERVATION ERROR: DATA_ERROR - {"status":"INVALID-DATE","response":{"me	<pre>ssage*:**}</pre>
08:48:43:738 >[SEND ALERT : "D" "javier.querol@char.es" "ERROR when creating reservation 155597" "ERRO	R when creating reservation
155597 for room 103" "c:\charwin\utile\pmslink\link\assaappcnx.cnx" "c:\charwin\utile\pmslink\link\assa	app\trace\mail_alert\"
08:48:43:738 I BOOKING PROCESS RESULT: DATA_ERROR	
Linea 1, columna 1	109% Windows (CRLF) UTF-8

In pmslink Monitor, events on inter-device communications are detailed.

The log is stored in log files. These are standard text files. The pmslink communications log can be found at :

pmslink communications log:
 C:\charwin\utile\pmslink\trace\pmslink

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

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

All log files are stored for 30 days.



# Specific documentation

For each type of system to be connected to pmslink there is specific documentation detailing the scope of the integration and how to configure each device:

- Specifications on device to be connected(PBX, IPTV, Hotspot, Key Access Systems, etc.)
  - Device configuration
- Connection to PMS system
  - Configuration of the PMS device
- Interpretation of logs of connected systems.