SOFTWARE TEAM A Nihon Kohden Company Version: 03	Technical Documentation **SmartLink** (v3.26) Basic UDI: 805750990SMARTLINK3WM **XFramework Configuration Manual**

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Table of Contents

1. GENERAL INFORMATION 3
   1.1. Manufacturer Contact Details 3
   1.2. Trademarks 3
2. DOCUMENT INTENDED PURPOSE AND READERS 3
3. XFRAMEWORK 3
   3.1. Introduction 3
   3.2. XFramework Services 3
   3.3. XFramework User Interface 4
      3.3.1. XFramework Dashboard 4
      3.3.2. Dashboard Display options 5
      3.3.3. Dashboard services 5
      3.3.4. Dashboard options 6
      3.3.5. Service management 8

3.4. Example: Creating an XFramework Service and Binding it to a Bed 14

3.5. Example: Creating a Gateway Service 24

3.6. Removing Bindings to Edit Bed Names 25

3.7. Configuring CIS IHE HL7 Adapter for Data Exportation 29

1. GENERAL INFORMATION

1.1. Manufacturer Contact Details

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1.2. Trademarks

Trademarks, trade names and company names used in this document are for identification purposes only and are the property of their respective owners.

2. DOCUMENT INTENDED PURPOSE AND READERS

This document gives IT technicians and System Administrators instructions on how to configure XFramework.

3. XFRAMEWORK

3.1. Introduction

Source devices can transmit data by using different communication protocols (e.g. Serial or TCP communication).

XFramework is the SmartLink component responsible for the communication between data sources and SmartLink server.

Source information is processed through XFramework's adapters and converted to allow the forwarding to alarm communicators.

3.2. XFramework Services

XFramework operates via Windows services, to which data sources are connected. Services are configured with the necessary adapters to manage the conversion of the source data.

XFramework adapters can be of two types: Gateway and Instrument.

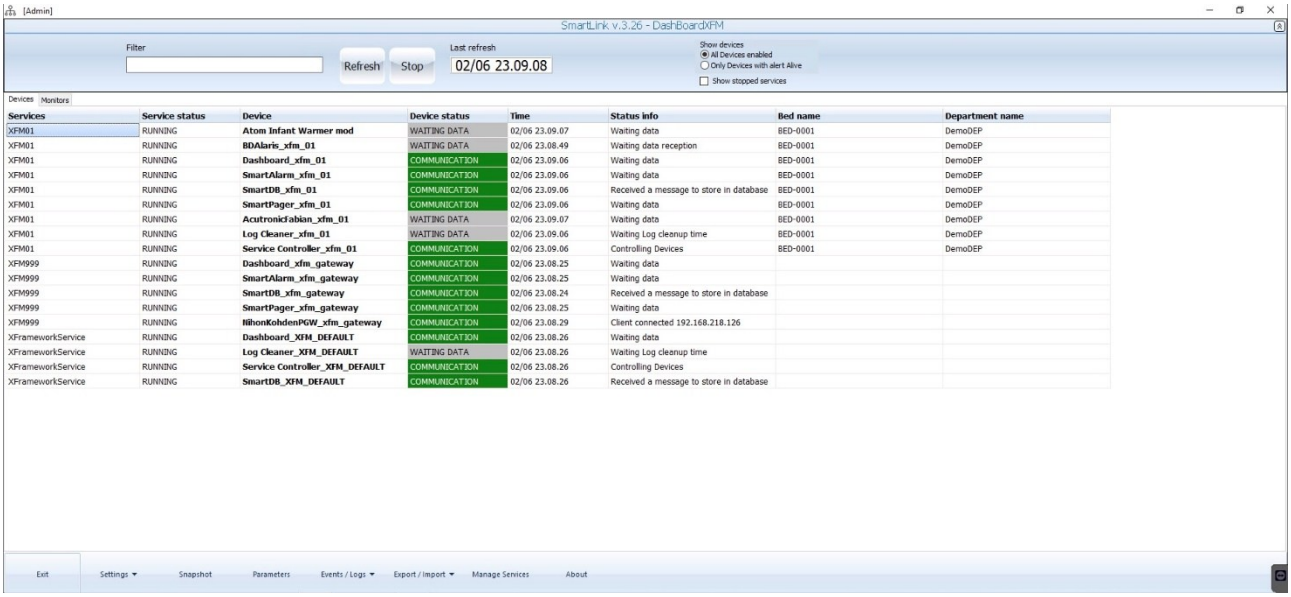
- Gateway adapters manage the communication with gateways to which instruments are connected.

- Source information sent by a gateway already contain department and bed name information. As such, XFramework will convert it and forward it to SmartLink.
  - Gateway adapters will use dedicated XFramework services to operate.
- Instrument adapters manage the communication with instruments which directly connect to XFramework
  - In the absence of a Gateway, information of department name and bed name are manually configured in the XFramework service. This information is then added to the converted message which will be forwarded to SmartLink.
    - As such, an XFramework service shall be created for each bed that needs to be managed in SmartLink.
      - Instrument adapters are loaded to the service, in relation to the connected instruments.

3.3. XFramework User Interface

3.3.1. XFramework Dashboard

XFramework Dashboard provides an overview of the communication of instruments with SmartLink.



3.3.2. Dashboard Display options



Filter: allows the user to search for a specific XFramework service

Refresh: allows the user to manually refresh the status of the services

Stop: allows the user to interrupt the automatic refresh of the dashboard

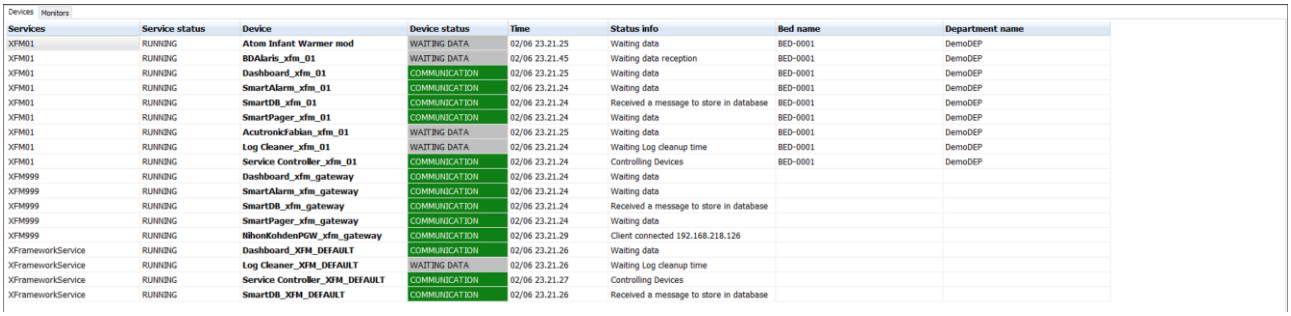
Last refresh: information regarding the last time the dashboard information has been refreshed

All Devices enabled: the dashboard will only display information regarding services that are running

Only Devices with alert Alive: the dashboard will only display information regarding services in which an error has occurred

Show stopped services: the dashboard will also display information regarding services that are not running

3.3.3. Dashboard services



Devices | Monitors

Services	Service status	Device	Device status	Time	Status info	Bed name	Department name
XFM01	RUNNING	Atom Infant Warmer mod	WAITING DATA	02/06 23.21.25	Waiting data	BED-0001	DemoDEP
XFM01	RUNNING	BDAlaris_xfm_01	WAITING DATA	02/06 23.21.45	Waiting data reception	BED-0001	DemoDEP
XFM01	RUNNING	Dashboard_xfm_01	COMMUNICATION	02/06 23.21.25	Waiting data	BED-0001	DemoDEP
XFM01	RUNNING	SmartAlarm_xfm_01	COMMUNICATION	02/06 23.21.24	Waiting data	BED-0001	DemoDEP
XFM01	RUNNING	SmartDB_xfm_01	COMMUNICATION	02/06 23.21.24	Received a message to store in database	BED-0001	DemoDEP
XFM01	RUNNING	SmartPager_xfm_01	COMMUNICATION	02/06 23.21.24	Waiting data	BED-0001	DemoDEP
XFM01	RUNNING	AcutronicFabian_xfm_01	WAITING DATA	02/06 23.21.25	Waiting data	BED-0001	DemoDEP
XFM01	RUNNING	Log Cleaner_xfm_01	WAITING DATA	02/06 23.21.24	Waiting Log cleanup time	BED-0001	DemoDEP
XFM01	RUNNING	Service Controller_xfm_01	COMMUNICATION	02/06 23.21.24	Controlling Devices	BED-0001	DemoDEP
XFM999	RUNNING	Dashboard_xfm_gateway	COMMUNICATION	02/06 23.21.24	Waiting data		
XFM999	RUNNING	SmartAlarm_xfm_gateway	COMMUNICATION	02/06 23.21.24	Waiting data		
XFM999	RUNNING	SmartDB_xfm_gateway	COMMUNICATION	02/06 23.21.24	Received a message to store in database		
XFM999	RUNNING	SmartPager_xfm_gateway	COMMUNICATION	02/06 23.21.24	Waiting data		
XFM999	RUNNING	NihonKohdenPGW_xfm_gateway	COMMUNICATION	02/06 23.21.29	Client connected 192.168.218.126		
XFrameworkService	RUNNING	Dashboard_XFM_DEFAULT	COMMUNICATION	02/06 23.21.26	Waiting data		
XFrameworkService	RUNNING	Log Cleaner_XFM_DEFAULT	WAITING DATA	02/06 23.21.26	Waiting Log cleanup time		
XFrameworkService	RUNNING	Service Controller_XFM_DEFAULT	COMMUNICATION	02/06 23.21.27	Controlling Devices		
XFrameworkService	RUNNING	SmartDB_XFM_DEFAULT	COMMUNICATION	02/06 23.21.26	Received a message to store in database		

Services: the name of the XFramework Service

Service status: the status of the service

- RUNNING: the XFramework service is running
- STOPPED: the XFramework service is stopped

Device: the name of the instrument which has been connected to the services

Device status: the status of the connected instrument

- COMMUNICATION: communication with the instrument has been established successfully
- WAITING DATA: communication with the instrument has not been established yet
  - DISCONNECTED: communication with the instrument has interrupted

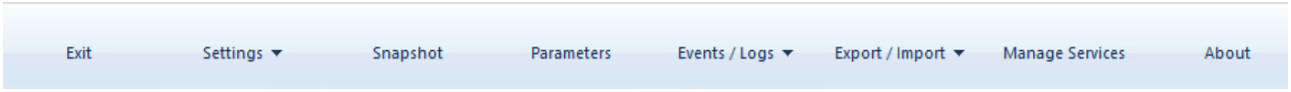
Time: the time in which the status has occurred

Status info: additional information regarding the status of the service/device

Bed name: the name of the bed of which the service is connected

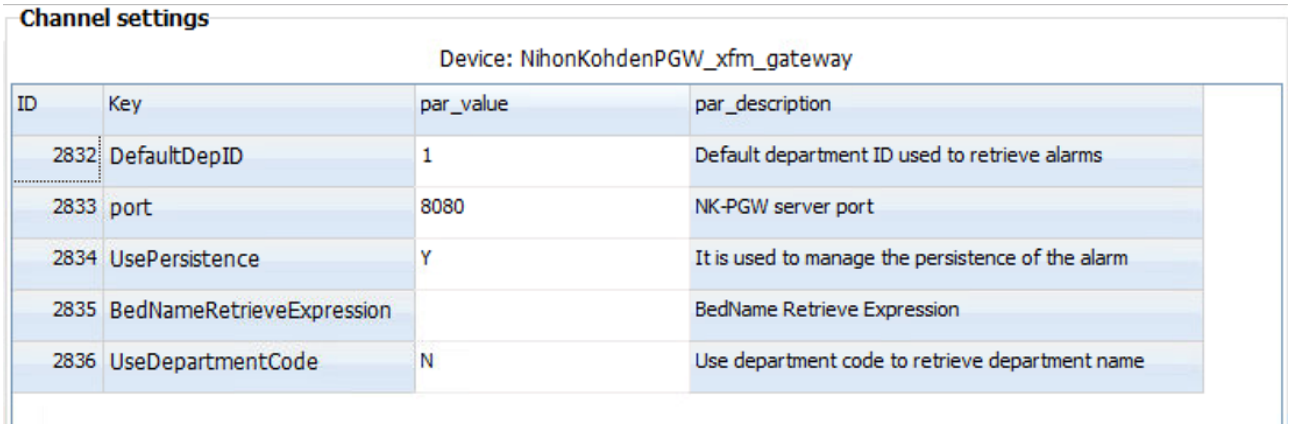
Department: the name of the department of which the bed is connected

3.3.4. Dashboard options



Exit: exit the XFramework Dashboard

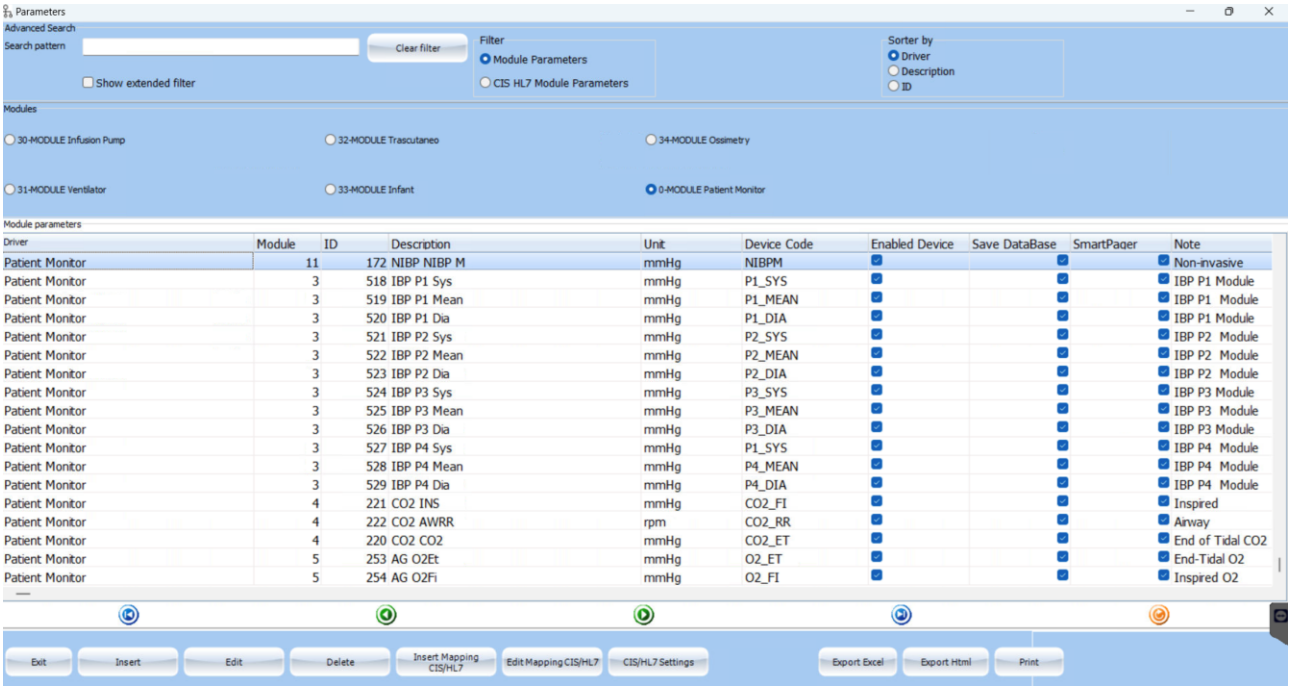
Settings: view and edit configuration settings of the selected service



ID	Key	par_value	par_description
2832	DefaultDepID	1	Default department ID used to retrieve alarms
2833	port	8080	NK-PGW server port
2834	UsePersistence	Y	It is used to manage the persistence of the alarm
2835	BedNameRetrieveExpression		BedName Retrieve Expression
2836	UseDepartmentCode	N	Use department code to retrieve department name

Snapshot: view a snapshot of the parameters which have been sent from an instrument

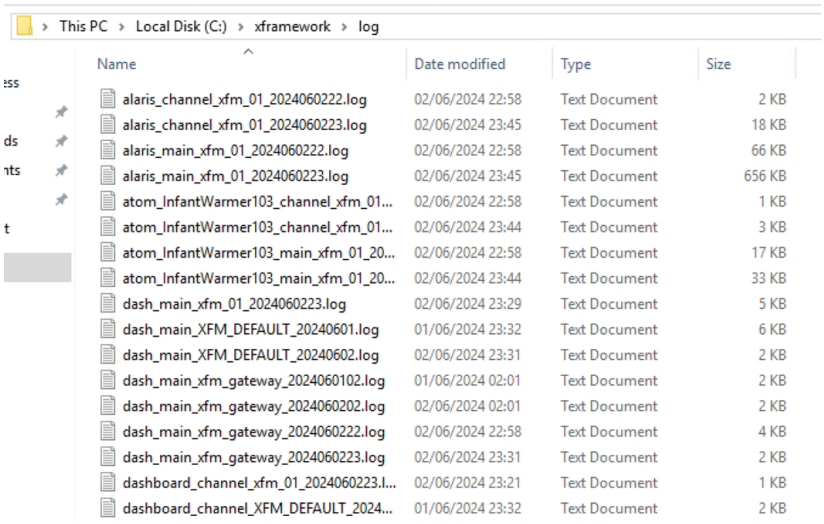
Parameters: view and edit information regarding the parameters which are managed by XFramework



Driver	Module	ID	Description	Unit	Device Code	Enabled Device	Save DataBase	SmartPager	Note
Patient Monitor	11	172	NIBP NIBP M	mmHg	NIBPM	☑	☑	☑	Non-invasive
Patient Monitor	3	518	IBP P1 Sys	mmHg	P1_SYS	☑	☑	☑	IBP P1 Module
Patient Monitor	3	519	IBP P1 Mean	mmHg	P1_MEAN	☑	☑	☑	IBP P1 Module
Patient Monitor	3	520	IBP P1 Dia	mmHg	P1_DIA	☑	☑	☑	IBP P1 Module
Patient Monitor	3	521	IBP P2 Sys	mmHg	P2_SYS	☑	☑	☑	IBP P2 Module
Patient Monitor	3	522	IBP P2 Mean	mmHg	P2_MEAN	☑	☑	☑	IBP P2 Module
Patient Monitor	3	523	IBP P2 Dia	mmHg	P2_DIA	☑	☑	☑	IBP P2 Module
Patient Monitor	3	524	IBP P3 Sys	mmHg	P3_SYS	☑	☑	☑	IBP P3 Module
Patient Monitor	3	525	IBP P3 Mean	mmHg	P3_MEAN	☑	☑	☑	IBP P3 Module
Patient Monitor	3	526	IBP P3 Dia	mmHg	P3_DIA	☑	☑	☑	IBP P3 Module
Patient Monitor	3	527	IBP P4 Sys	mmHg	P1_SYS	☑	☑	☑	IBP P4 Module
Patient Monitor	3	528	IBP P4 Mean	mmHg	P4_MEAN	☑	☑	☑	IBP P4 Module
Patient Monitor	3	529	IBP P4 Dia	mmHg	P4_DIA	☑	☑	☑	IBP P4 Module
Patient Monitor	4	221	CO2 INS	mmHg	CO2_FI	☑	☑	☑	Inspired
Patient Monitor	4	222	CO2 AWRR	rpm	CO2_RR	☑	☑	☑	Airway
Patient Monitor	4	220	CO2 CO2	mmHg	CO2_ET	☑	☑	☑	End of Tidal CO2
Patient Monitor	5	253	AG O2Et	mmHg	O2_ET	☑	☑	☑	End-Tidal O2
Patient Monitor	5	254	AG O2Fi	mmHg	O2_FI	☑	☑	☑	Inspired O2

Events / Logs: view information and logs regarding XFramework's services



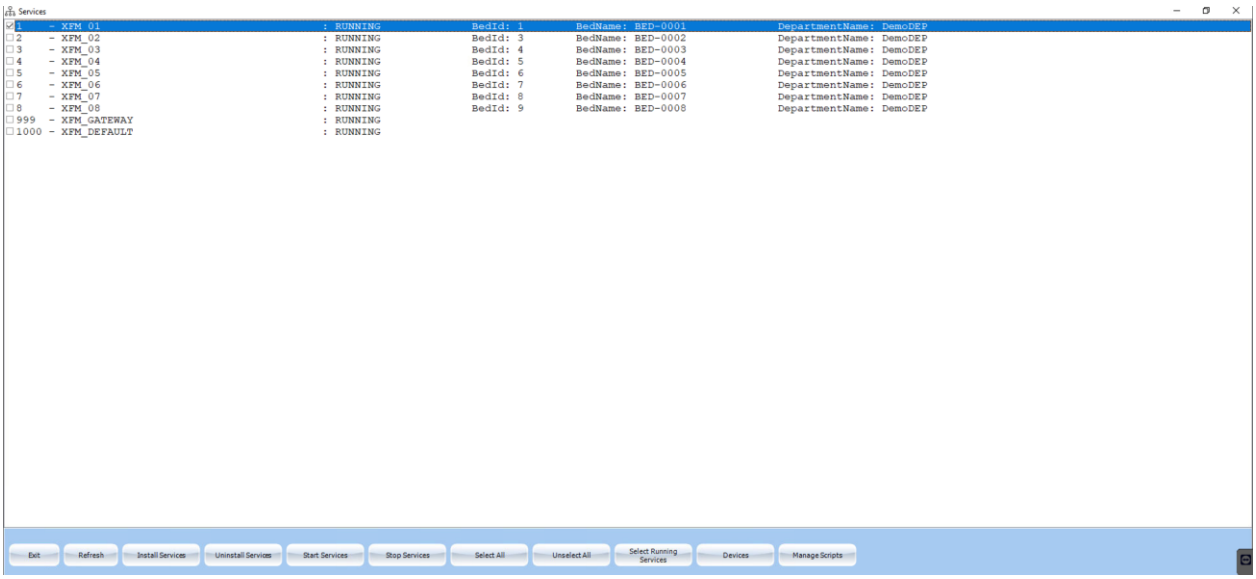


Manage Services: allows the user to configure the services in XFramework

About: displays information regarding the SmartLink product

3.3.5. Service management

All services installed in XFramework can be viewed by pressing “Manage Services” from the XFramework dashboard. Information and configuration options for each service will be displayed.



Exit: allows the user to exit the service management window

Refresh: allows the user to refresh the information regarding the services configured in XFramework

Install Services: allows the user to install the configured services

Uninstall Service: allows the user to uninstall the configured services

Start Services: allows the user to start the selected services

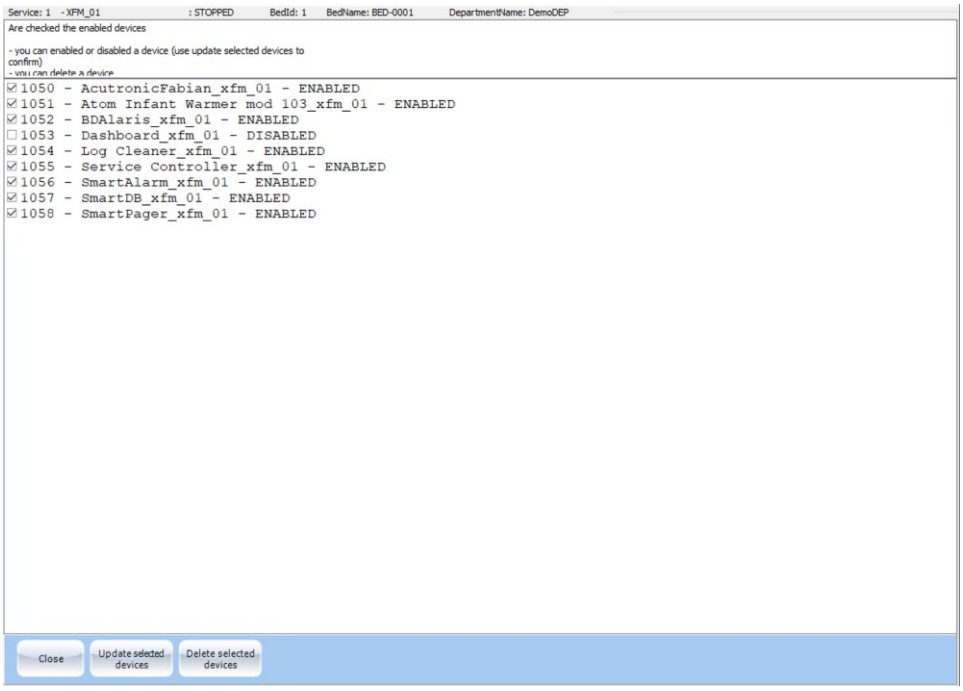
Stop: allows the user to stop the selected services

Select All: allows the user to select all services

Unselect services: allows the user to deselect all the services

Select Running Services: allows the user to select all the running services

Devices: allows the user to view and manage the adapters connected to the services



In the devices section, it is possible to view and manage the adapters connected to the selected service

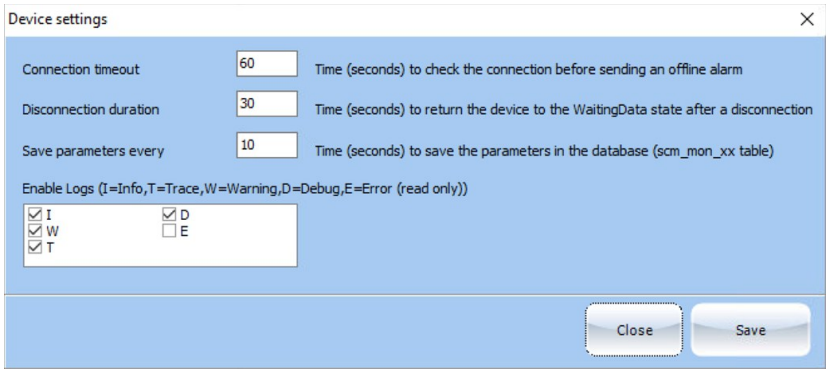
- ENABLED: the adapter has been installed and enabled for the selected service
- DISABLED: the adapter has been installed for the selected service, but is disabled

Close: allows the user to exit the Devices window

Update selected devices: allows the user to save the changes made for the adapters in the service

Delete selected devices: allows the user to delete an adapter from the service.

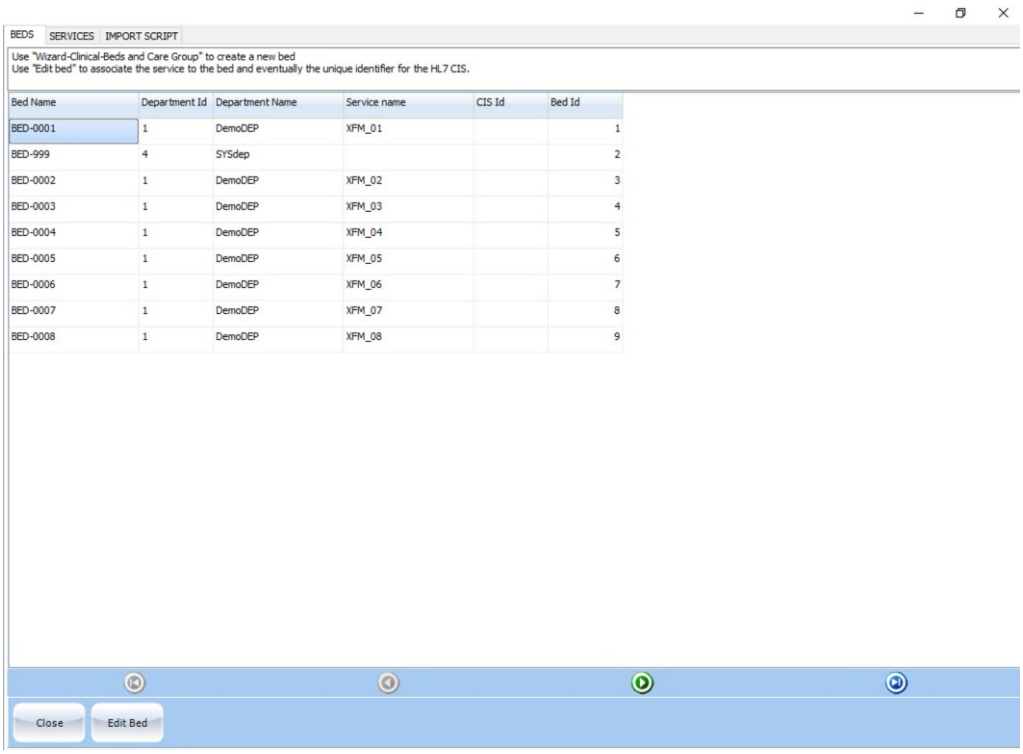
By double clicking an adapter, additional configuration options regarding the adapter will be displayed.



- Connection timeout: the amount of seconds to elapse before XFramework generates a disconnection alarm
    - This duration value shall be higher than the value of the last escalation action of the alarm group in which the monitor offline alarm is categorised.
    - This parameter is available for instruments which do not send disconnection alarms
- Disconnection duration: the amount of seconds to elapse before XFramework returns to the state of “Waiting Data” after generating a disconnection alarm
    - This parameter is available for instruments which do not send disconnection alarms
- Save parameters every: the amount of seconds to elapse before XFramework saves parameters received from the instrument
- Enable logs: allows the user to select which logs should be registered by XFramework (Error logs cannot be disabled)

Manage scripts: allows the user to create, delete and manage services, bind beds to services and load adapters to services

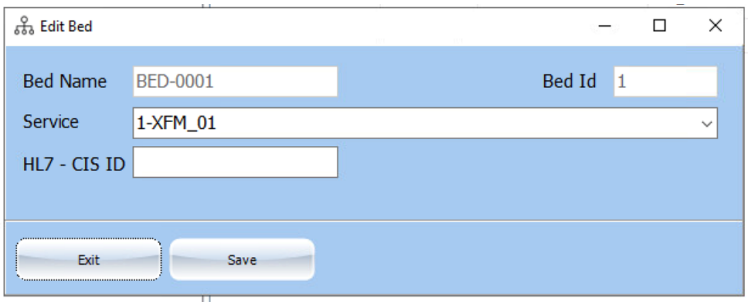
By pressing “manage scripts”, an overview of the beds managed in SmartLink will be shown.



Information regarding the binding of beds to the services can be found in the first page.

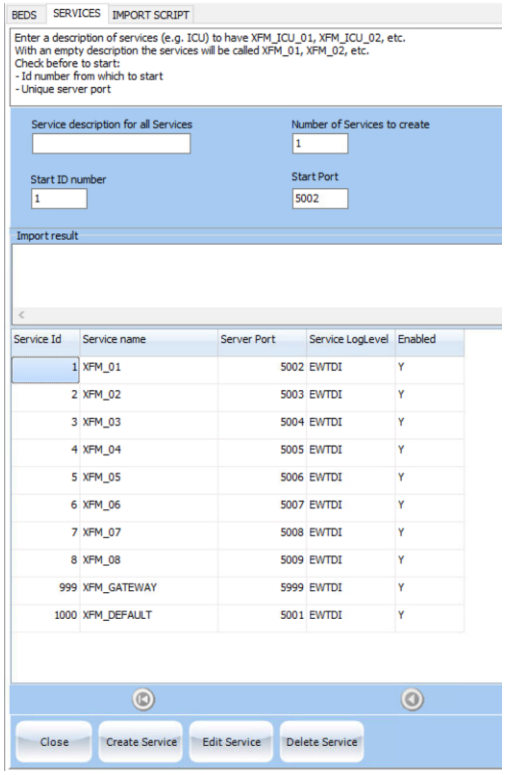
Close: allows the user to exit the “Manage Scripts” window

Edit Bed: allows the user to manage the configuration of the bed



From this window, it is possible to select to which bed a service should send information received from the instruments.

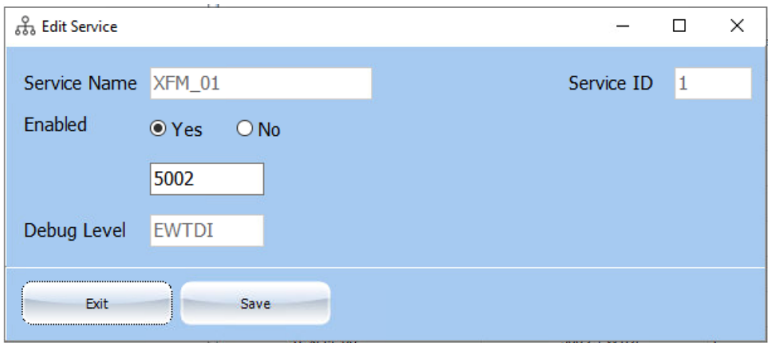
In the SERVICES section, it is possible to view all the services configured in XFramework.



Close: allows the user to exit the “Manage Scripts” window

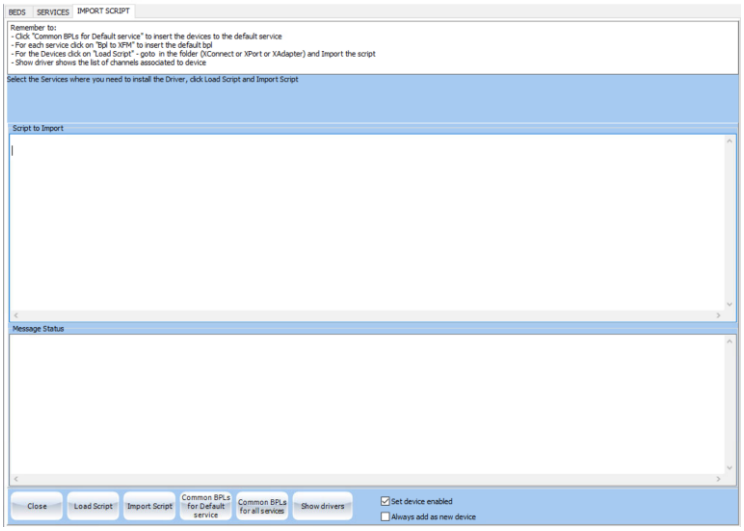
Create Service: allows the user to create new services for XFramework

Edit Service: allows the user to edit the configuration of the selected service



Delete Service: allows the user to delete the selected service

In the IMPORT SCRIPT section, it is possible to add new adapters to the selected service



Close: allows the user to exit the “Manage Scripts” windows

Load Script: allows the user to load the adapter for the instrument

Import Script: allows the user to bind the selected adapter to the selected service

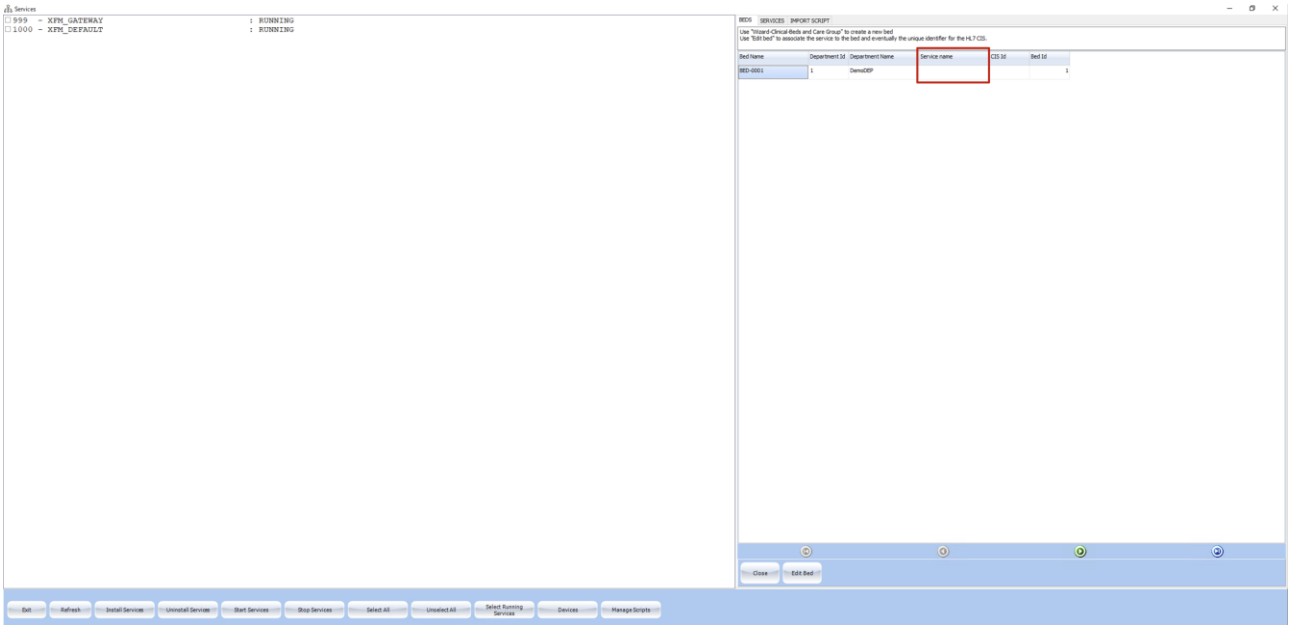
Common BPLs for Default service: allows the user to view and import common scripts for default services

Common BPLs for all services: allow the user to view and import common scripts for XFramework services

Show drivers: allows the user to view the configured adapter(s) for the selected service

3.4. Example: Creating an XFramework Service and Binding it to a Bed

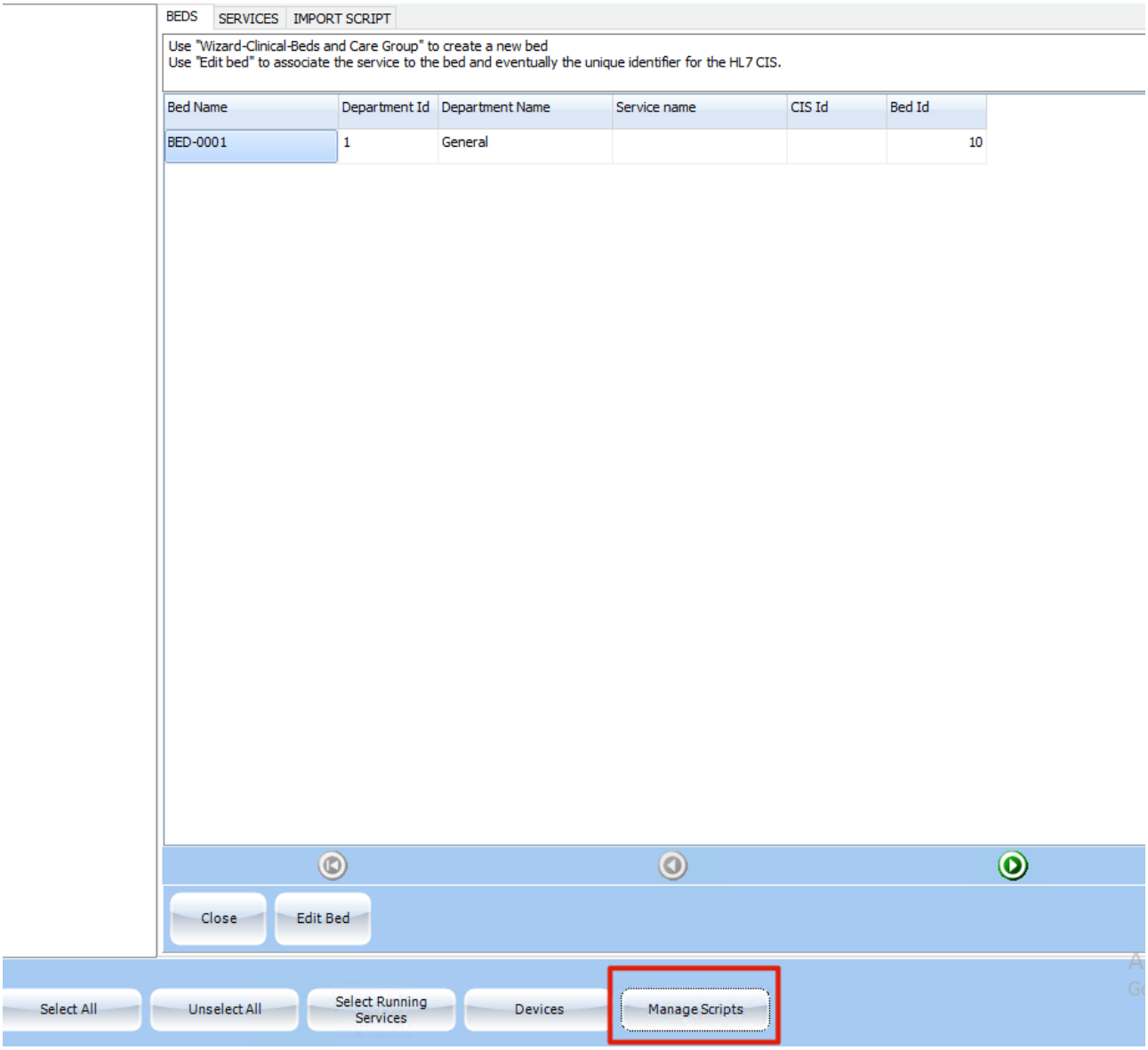
Communication with an instrument can be established after successfully binding the necessary XFramework adapter to the desired bed.



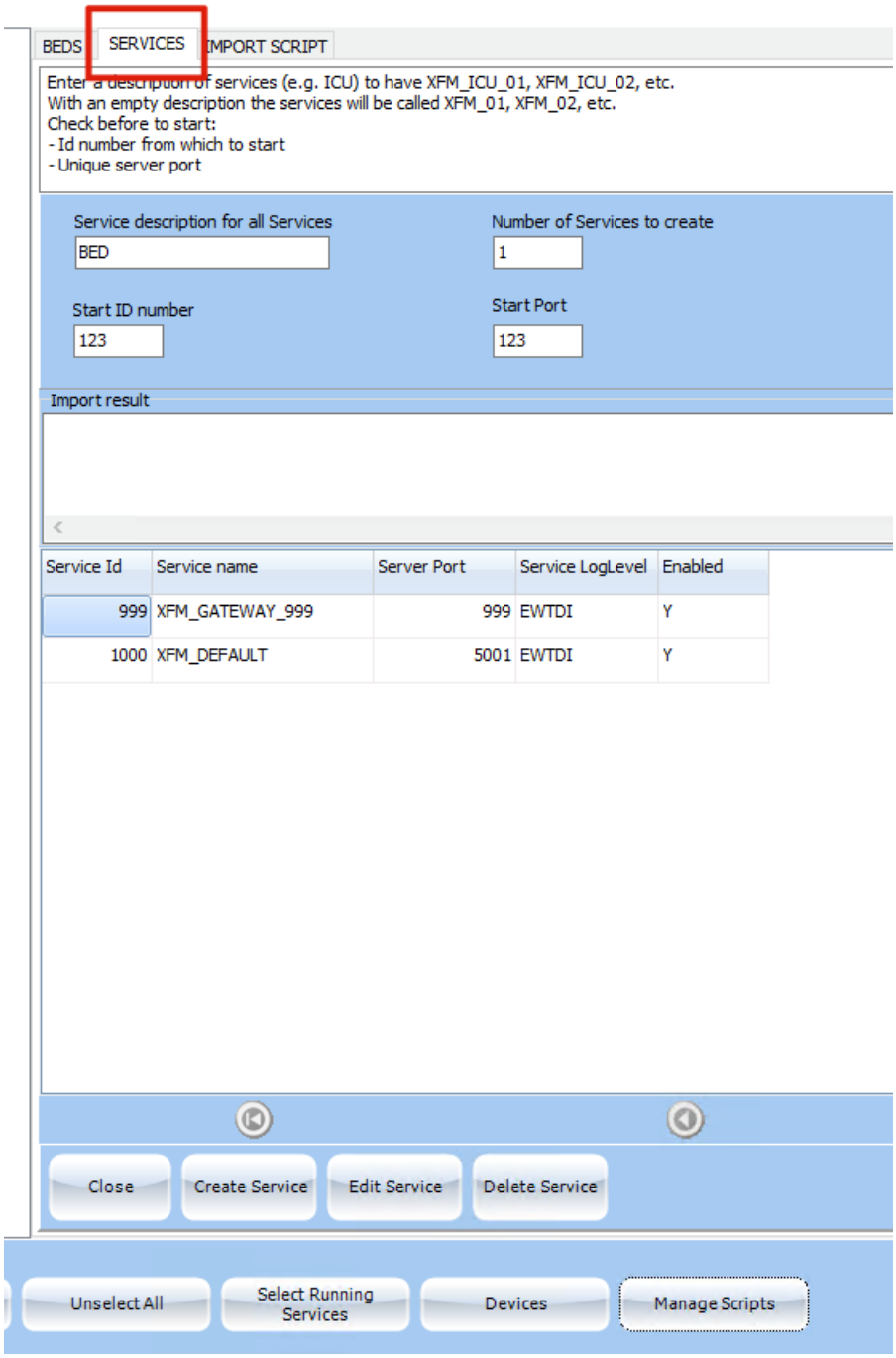
In the example above, a bed is registered in the system, but no XFramework service is bound to it yet

Note: beds are created via the SmartLink Web Application

To create a service, select “Manage Scripts”, a tab will appear.

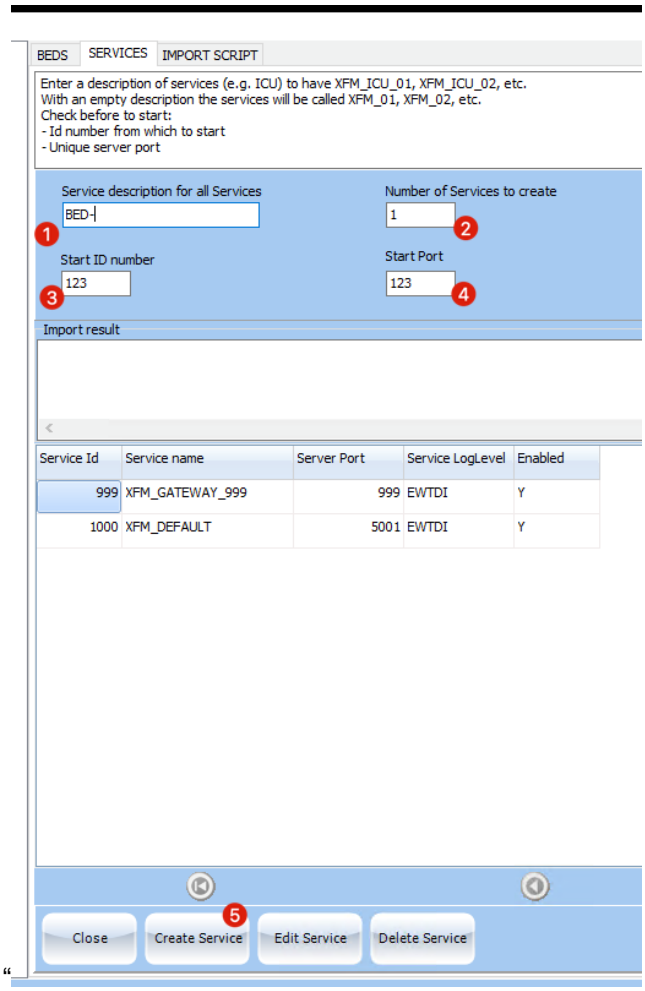


From the tab, select the “services” panel

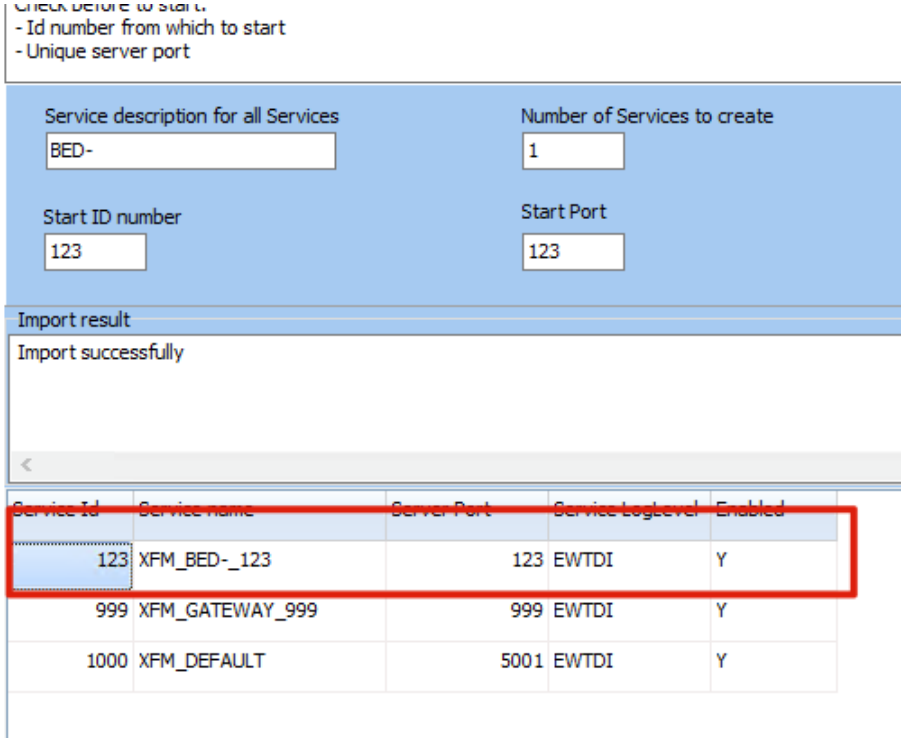

BEDS
SERVICES
IMPORT SCRIPT
Enter a description of services (e.g. ICU) to have XFM_ICU_01, XFM_ICU_02, etc.
With an empty description the services will be called XFM_01, XFM_02, etc.
Check before to start:
- Id number from which to start
- Unique server port
Service description for all Services
BED
Number of Services to create
1
Start ID number
123
Start Port
123
Import result
Service Id
Service name
Server Port
Service LogLevel
Enabled
999
XFM_GATEWAY_999
999
EWTDI
Y
1000
XFM_DEFAULT
5001
EWTDI
Y
Close
Create Service
Edit Service
Delete Service
Unselect All
Select Running Services
Devices
Manage Scripts

To create a service (or multiple services), you will need to specify the description used for services, the amount of services to create, the start number for ID creation and start number for port creation.

After doing so, select “Create Service”.

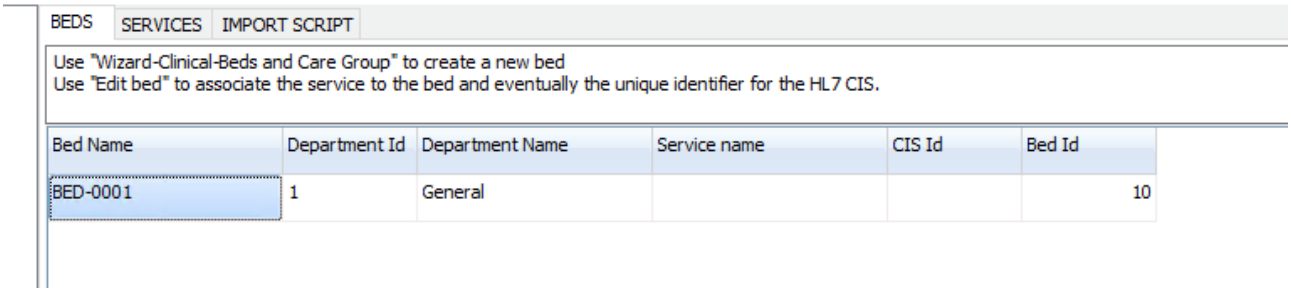


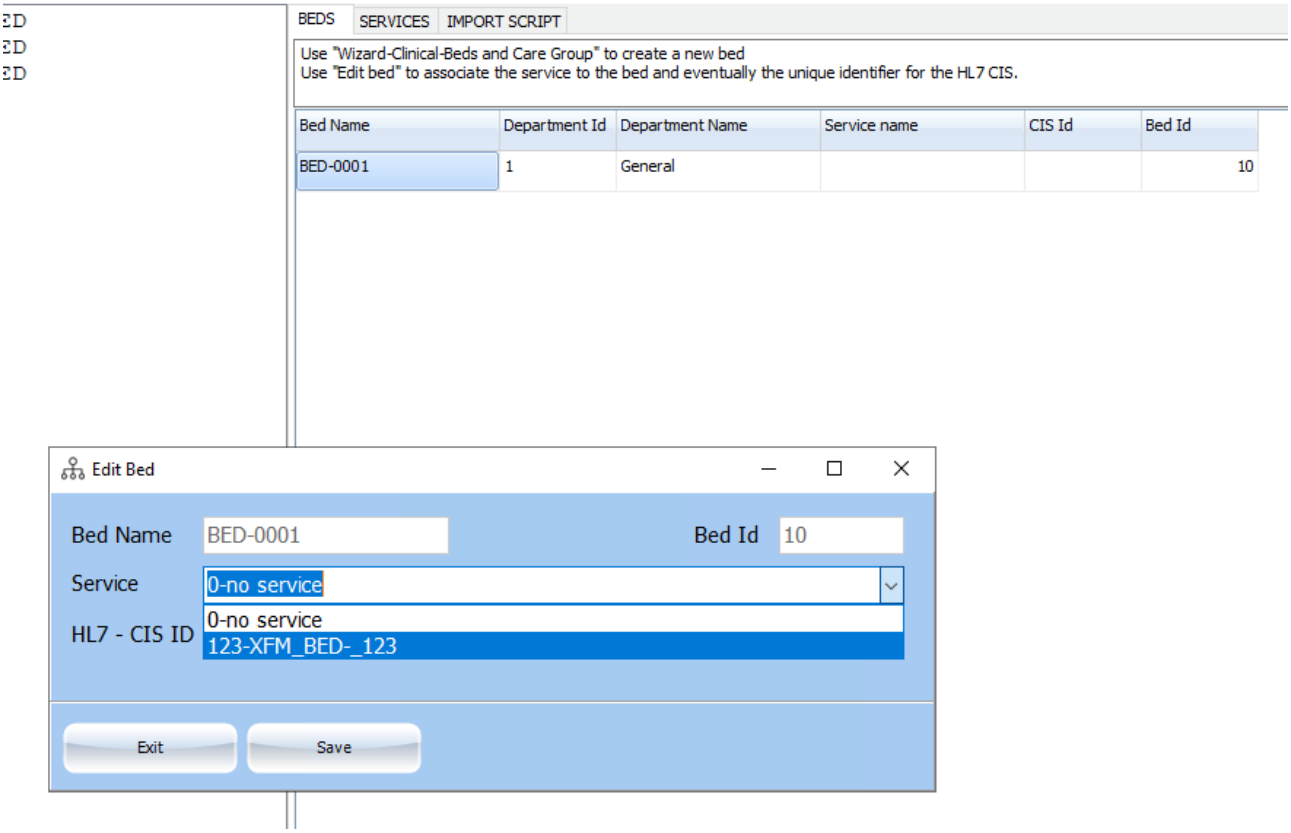
If successful, the new service will be visible among the existing services.





From the beds panel, bind the XFM services to the selected bed, by double clicking the bed of interest and selecting the service that will be associated to it

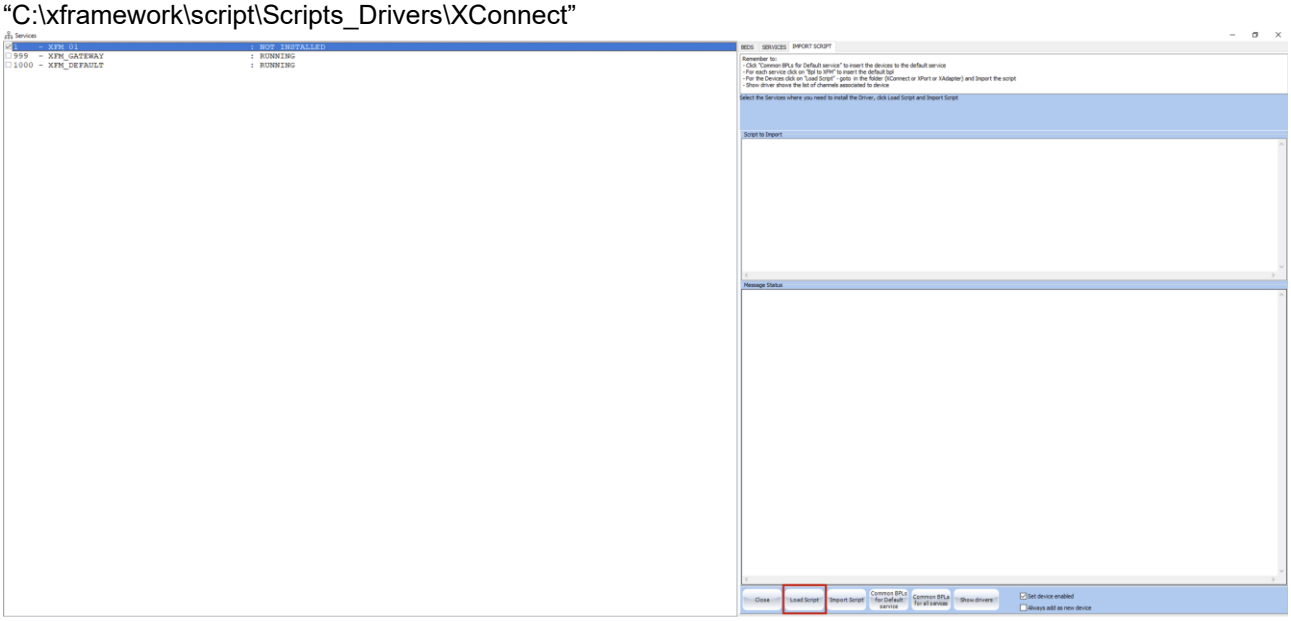




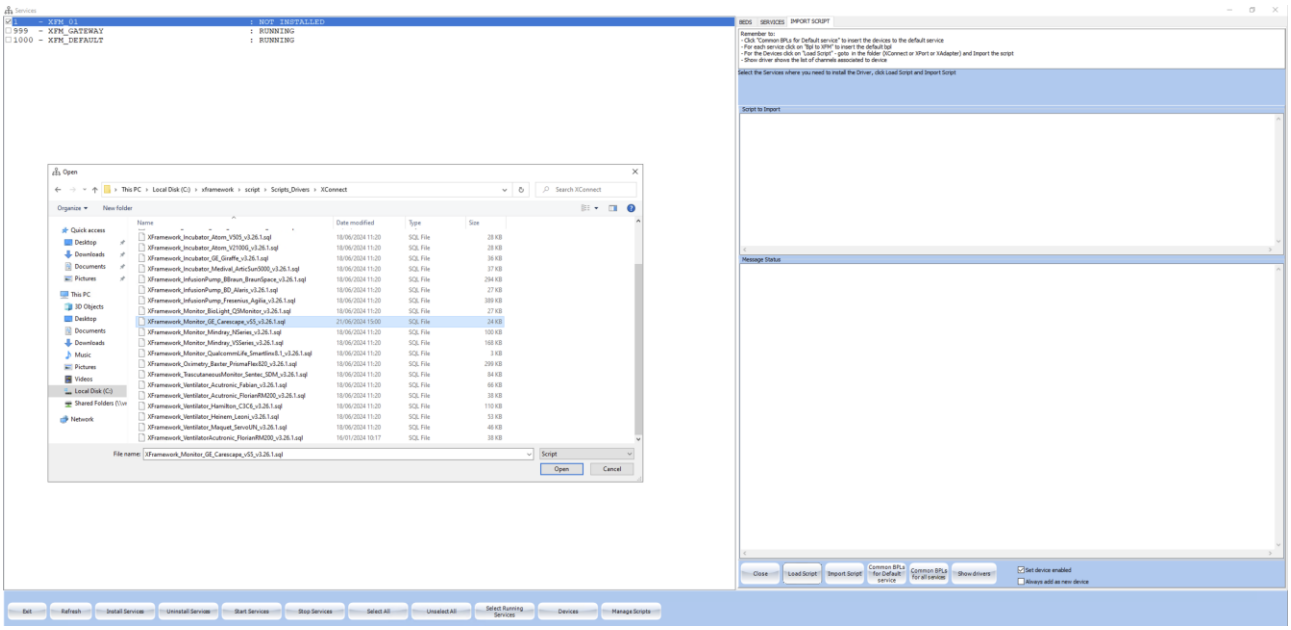
After doing so, move to the “IMPORT SCRIPT” section, select the newly created service and select “Load Script”

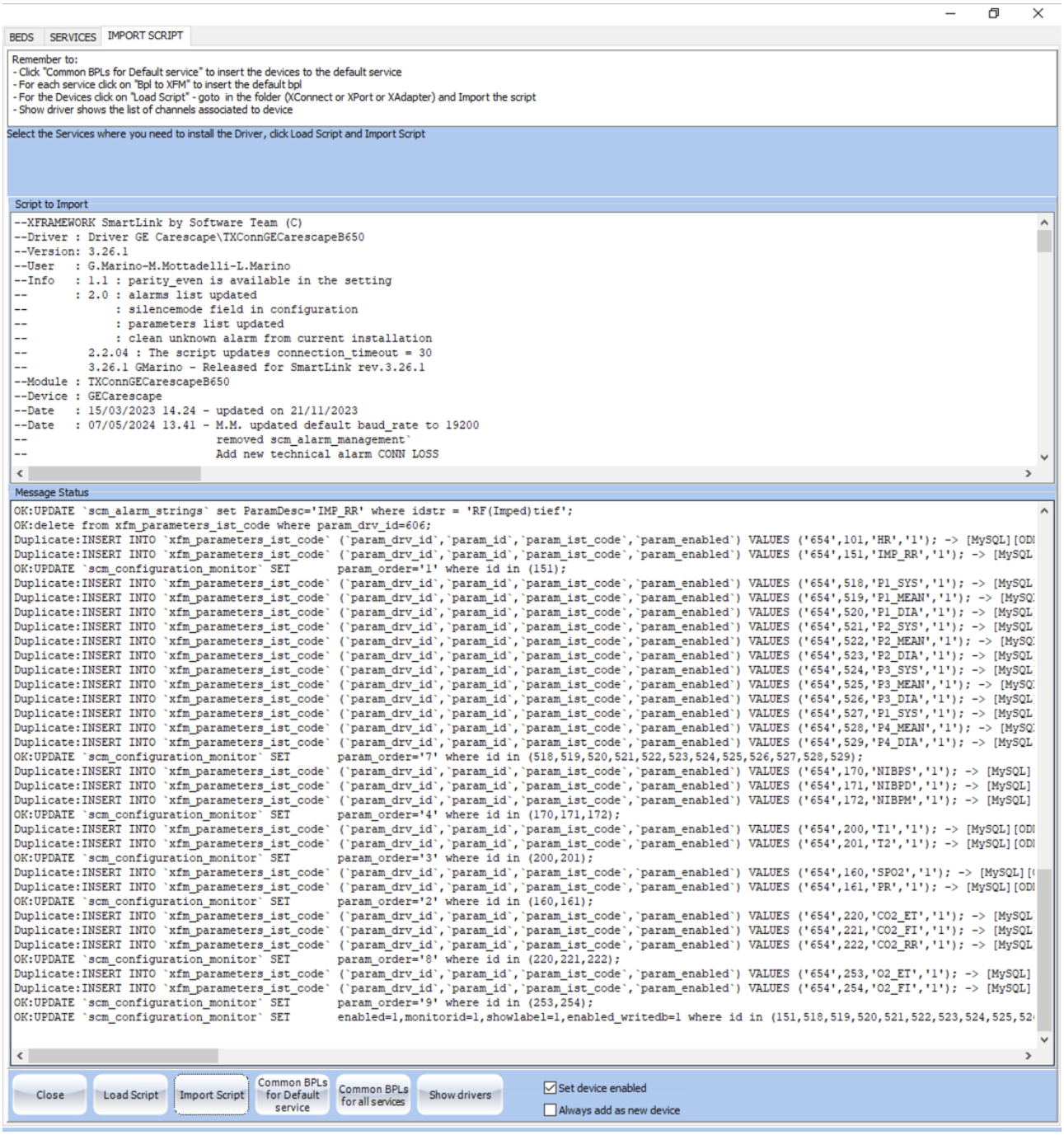
Adapters are located in the following location:

"C:\xframework\script\Scripts_Drivers\XConnect"

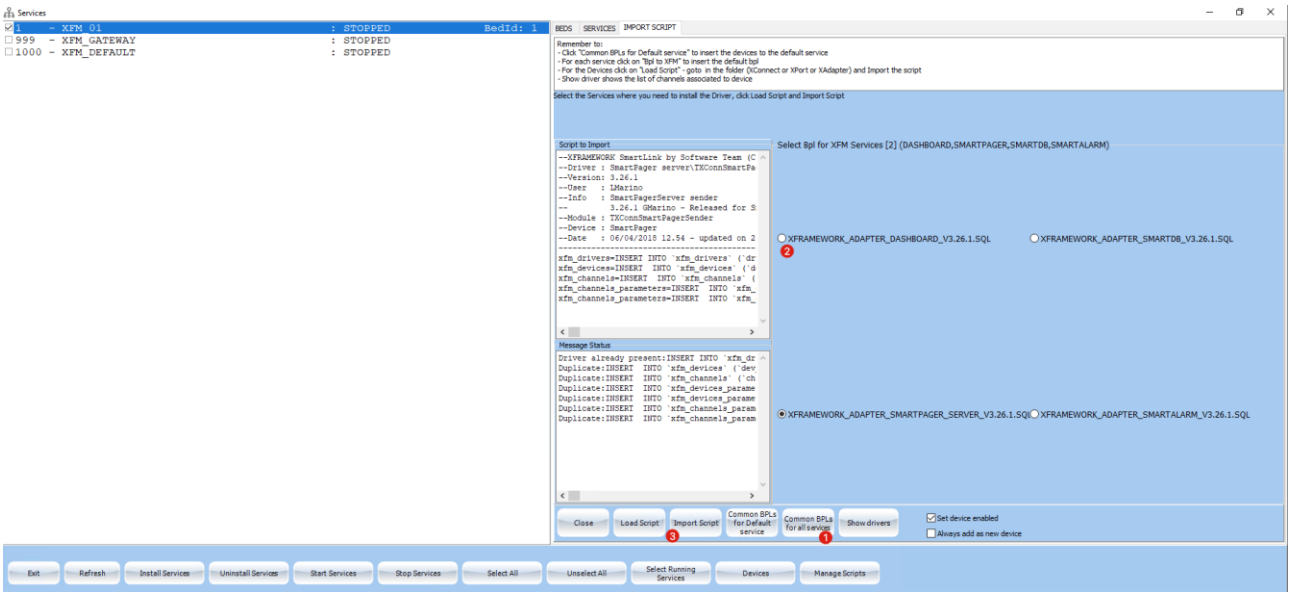


After loading the desired adapter, select "Import Script"



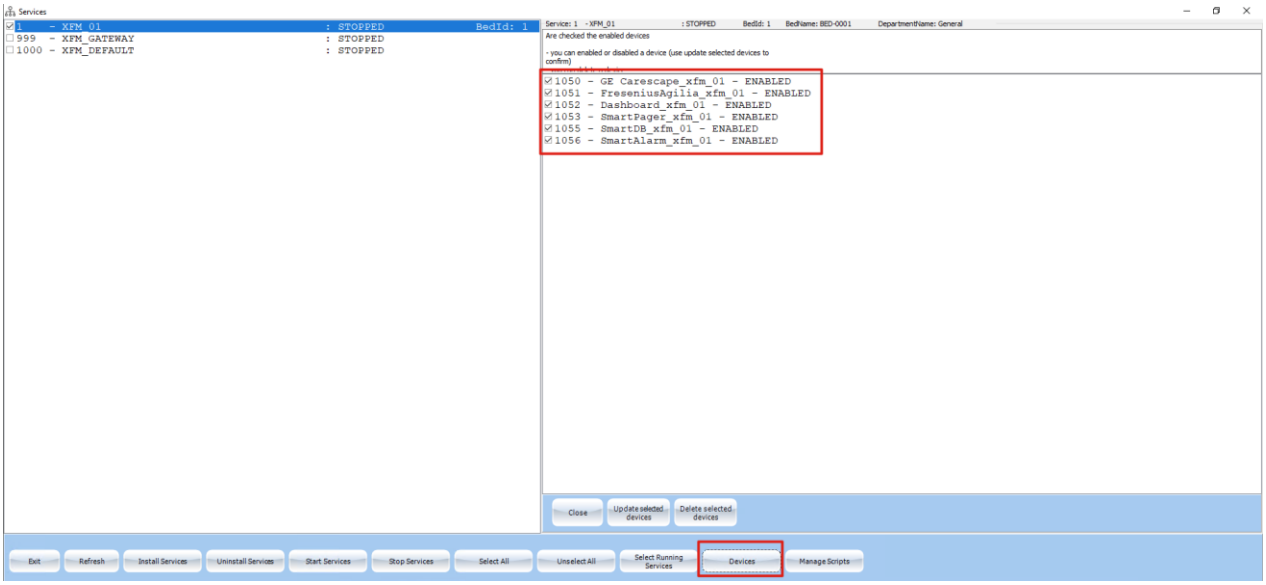

BEDS
SERVICES
IMPORT SCRIPT
Remember to:
- Click "Common BPLs for Default service" to insert the devices to the default service
- For each service click on "Bpl to XFM" to insert the default bpl
- For the Devices click on "Load Script" - goto in the folder (XConnect or XPort or XAdapter) and Import the script
- Show driver shows the list of channels associated to device
Select the Services where you need to install the Driver, click Load Script and Import Script
Script to Import
--XFRAMEWORK SmartLink by Software Team (C)
--Driver : Driver GE Carescape\TXConnGECarescapeB650
--Version: 3.26.1
--User : G.Marino-M.Mottadelli-L.Marino
--Info : 1.1 : parity_even is available in the setting
-- : 2.0 : alarms list updated
-- : silencemode field in configuration
-- : parameters list updated
-- : clean unknown alarm from current installation
-- 2.2.04 : The script updates connection_timeout = 30
-- 3.26.1 GMarino - Released for SmartLink rev.3.26.1
--Module : TXConnGECarescapeB650
--Device : GECarescape
--Date : 15/03/2023 14.24 - updated on 21/11/2023
--Date : 07/05/2024 13.41 - M.M. updated default baud_rate to 19200
-- removed scm_alarm_management`
-- Add new technical alarm CONN LOSS
Message Status
OK:UPDATE `scm_alarm_strings` set ParamDesc='IMP_RR' where idstr = 'RF(Imped)tief';
OK:delete from xfm_parameters_ist_code where param_drv_id=606;
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',101,'HR','1'); -> [MySQL][ODI
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',151,'IMP_RR','1'); -> [MySQL
OK:UPDATE `scm_configuration_monitor` SET param_order='1' where id in (151);
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',518,'P1_SYS','1'); -> [MySQL
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',519,'P1_MEAN','1'); -> [MySQ
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',520,'P1_DIA','1'); -> [MySQL
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',521,'P2_SYS','1'); -> [MySQL
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',522,'P2_MEAN','1'); -> [MySQ
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',523,'P2_DIA','1'); -> [MySQL
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',524,'P3_SYS','1'); -> [MySQL
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',525,'P3_MEAN','1'); -> [MySQ
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',526,'P3_DIA','1'); -> [MySQL
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',527,'P1_SYS','1'); -> [MySQL
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',528,'P4_MEAN','1'); -> [MySQ
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',529,'P4_DIA','1'); -> [MySQL
OK:UPDATE `scm_configuration_monitor` SET param_order='7' where id in (518,519,520,521,522,523,524,525,526,527,528,529);
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',170,'NIBPS','1'); -> [MySQL]
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',171,'NIBPD','1'); -> [MySQL]
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',172,'NIBPM','1'); -> [MySQL]
OK:UPDATE `scm_configuration_monitor` SET param_order='4' where id in (170,171,172);
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',200,'T1','1'); -> [MySQL][ODI
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',201,'T2','1'); -> [MySQL][ODI
OK:UPDATE `scm_configuration_monitor` SET param_order='3' where id in (200,201);
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',160,'SPO2','1'); -> [MySQL][(
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',161,'PR','1'); -> [MySQL][ODI
OK:UPDATE `scm_configuration_monitor` SET param_order='2' where id in (160,161);
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',220,'CO2_ET','1'); -> [MySQL
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',221,'CO2_FI','1'); -> [MySQL
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',222,'CO2_RR','1'); -> [MySQL
OK:UPDATE `scm_configuration_monitor` SET param_order='8' where id in (220,221,222);
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',253,'O2_ET','1'); -> [MySQL]
Duplicate:INSERT INTO `xfm_parameters_ist_code` (`param_drv_id`,`param_id`,`param_ist_code`,`param_enabled`) VALUES ('654',254,'O2_FI','1'); -> [MySQL]
OK:UPDATE `scm_configuration_monitor` SET param_order='9' where id in (253,254);
OK:UPDATE `scm_configuration_monitor` SET enabled=1,monitorid=1,showlabel=1,enabled_writedb=1 where id in (151,518,519,520,521,522,523,524,525,52
Close
Load Script
Import Script
Common BPLs for Default service
Common BPLs for all services
Show drivers
Set device enabled
Always add as new device

After loading the adapter, import the common BPLs

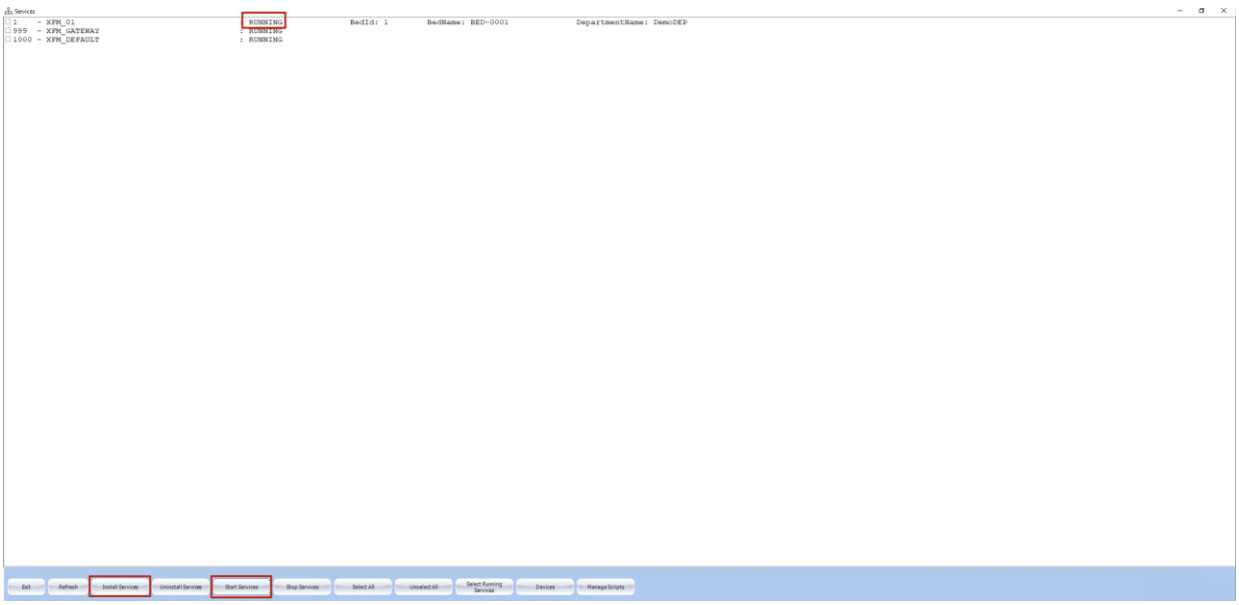


Note: All 4 BPLs present in the common BPL list shall be imported to establish communication.

To check if the adapter has been loaded successfully, select the bed of interest and select “Devices”, the adapter should show up in the devices panel

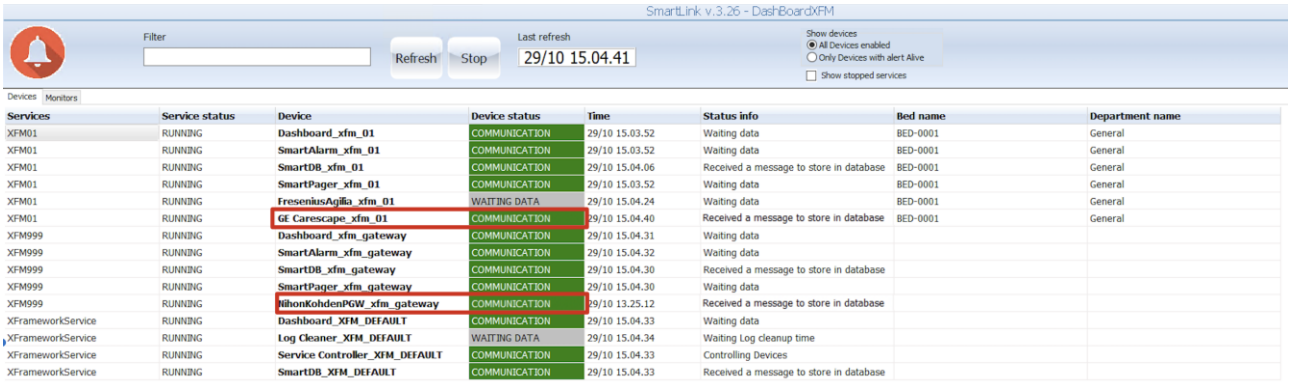


Finally, install the XFramework services and start it



Make sure the device/channel parameters are configured correctly to establish the communication with the instrument.

If the configuration is successful, the device status will turn green, indicating that “COMMUNICATION” is established.



Services	Service status	Device	Device status	Time	Status info	Bed name	Department name
XFM01	RUNNING	Dashboard_xfm_01	COMMUNICATION	29/10 15.03.52	Waiting data	BED-0001	General
XFM01	RUNNING	SmartAlarm_xfm_01	COMMUNICATION	29/10 15.03.52	Waiting data	BED-0001	General
XFM01	RUNNING	SmartDB_xfm_01	COMMUNICATION	29/10 15.04.06	Received a message to store in database	BED-0001	General
XFM01	RUNNING	SmartPager_xfm_01	COMMUNICATION	29/10 15.03.52	Waiting data	BED-0001	General
XFM01	RUNNING	FreseniusAgilia_xfm_01	WAITING DATA	29/10 15.04.24	Waiting data	BED-0001	General
XFM01	RUNNING	GE Carescape_xfm_01	COMMUNICATION	29/10 15.04.40	Received a message to store in database	BED-0001	General
XFM999	RUNNING	Dashboard_xfm_gateway	COMMUNICATION	29/10 15.04.31	Waiting data		
XFM999	RUNNING	SmartAlarm_xfm_gateway	COMMUNICATION	29/10 15.04.32	Waiting data		
XFM999	RUNNING	SmartDB_xfm_gateway	COMMUNICATION	29/10 15.04.30	Received a message to store in database		
XFM999	RUNNING	SmartPager_xfm_gateway	COMMUNICATION	29/10 15.04.30	Waiting data		
XFM999	RUNNING	NihonKohdenPGW_xfm_gateway	COMMUNICATION	29/10 13.25.12	Received a message to store in database		
XFrameworkService	RUNNING	Dashboard_XFM_DEFAULT	COMMUNICATION	29/10 15.04.33	Waiting data		
XFrameworkService	RUNNING	Log Cleaner_XFM_DEFAULT	WAITING DATA	29/10 15.04.34	Waiting Log cleanup time		
XFrameworkService	RUNNING	Service Controller_XFM_DEFAULT	COMMUNICATION	29/10 15.04.33	Controlling Devices		
XFrameworkService	RUNNING	SmartDB_XFM_DEFAULT	COMMUNICATION	29/10 15.04.33	Received a message to store in database		

Instruments which are not communicating with the server will indicate their status as “WAITING DATA”

Devices | Monitors

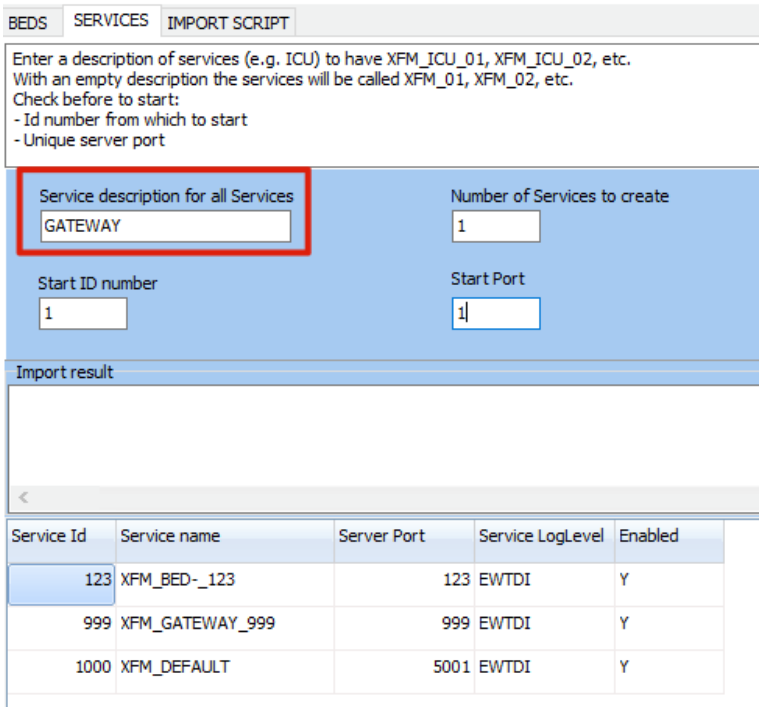
Services	Service status	Device	Device status	Time	Status info	Bed name	Department name
XFM01	RUNNING	Dashboard_xfm_01	COMMUNICATION	29/10 15.08.56	Waiting data	BED-0001	General
XFM01	RUNNING	SmartAlarm_xfm_01	COMMUNICATION	29/10 15.08.56	Waiting data	BED-0001	General
XFM01	RUNNING	SmartDB_xfm_01	COMMUNICATION	29/10 15.09.13	Received a message to store in database	BED-0001	General
XFM01	RUNNING	SmartPager_xfm_01	COMMUNICATION	29/10 15.08.56	Waiting data	BED-0001	General
XFM01	RUNNING	FreseniusAgilia_xfm_01	WAITING DATA	29/10 15.09.33	Waiting data	BED-0001	General
XFM01	RUNNING	GE Carescape_xfm_01	WAITING DATA	29/10 15.09.38	Waiting data reception	BED-0001	General
XFM999	RUNNING	Dashboard_xfm_gateway	COMMUNICATION	29/10 15.09.35	Waiting data		
XFM999	RUNNING	SmartAlarm_xfm_gateway	COMMUNICATION	29/10 15.09.36	Waiting data		
XFM999	RUNNING	SmartDB_xfm_gateway	COMMUNICATION	29/10 15.08.40	Received a message to store in database		
XFM999	RUNNING	SmartPager_xfm_gateway	COMMUNICATION	29/10 15.09.34	Waiting data		
XFM999	RUNNING	NihonKohdenPGW_xfm_gateway	COMMUNICATION	29/10 15.08.40	Client connected 127.0.0.1		
XFrameworkService	RUNNING	Dashboard_XFM_DEFAULT	COMMUNICATION	29/10 15.09.37	Waiting data		
XFrameworkService	RUNNING	Log Cleaner_XFM_DEFAULT	WAITING DATA	29/10 15.09.38	Waiting Log cleanup time		
XFrameworkService	RUNNING	Service Controller_XFM_DEFAULT	COMMUNICATION	29/10 15.09.37	Controlling Devices		
XFrameworkService	RUNNING	SmartDB_XFM_DEFAULT	COMMUNICATION	29/10 15.09.37	Received a message to store in database		

3.5. Example: Creating a Gateway Service

Gateway adapters retrieve bed information from the alarms generated by the data source(s) and automatically generate new beds if they do not already exist. As such, it is not required to bind a gateway service to any bed in XFramework.

The procedure to create a Gateway service is the same as described in section 3.3.6, with the following differences

1. Service description shall contain the word “GATEWAY” in it
2. It is not necessary to bind any bed to the created service

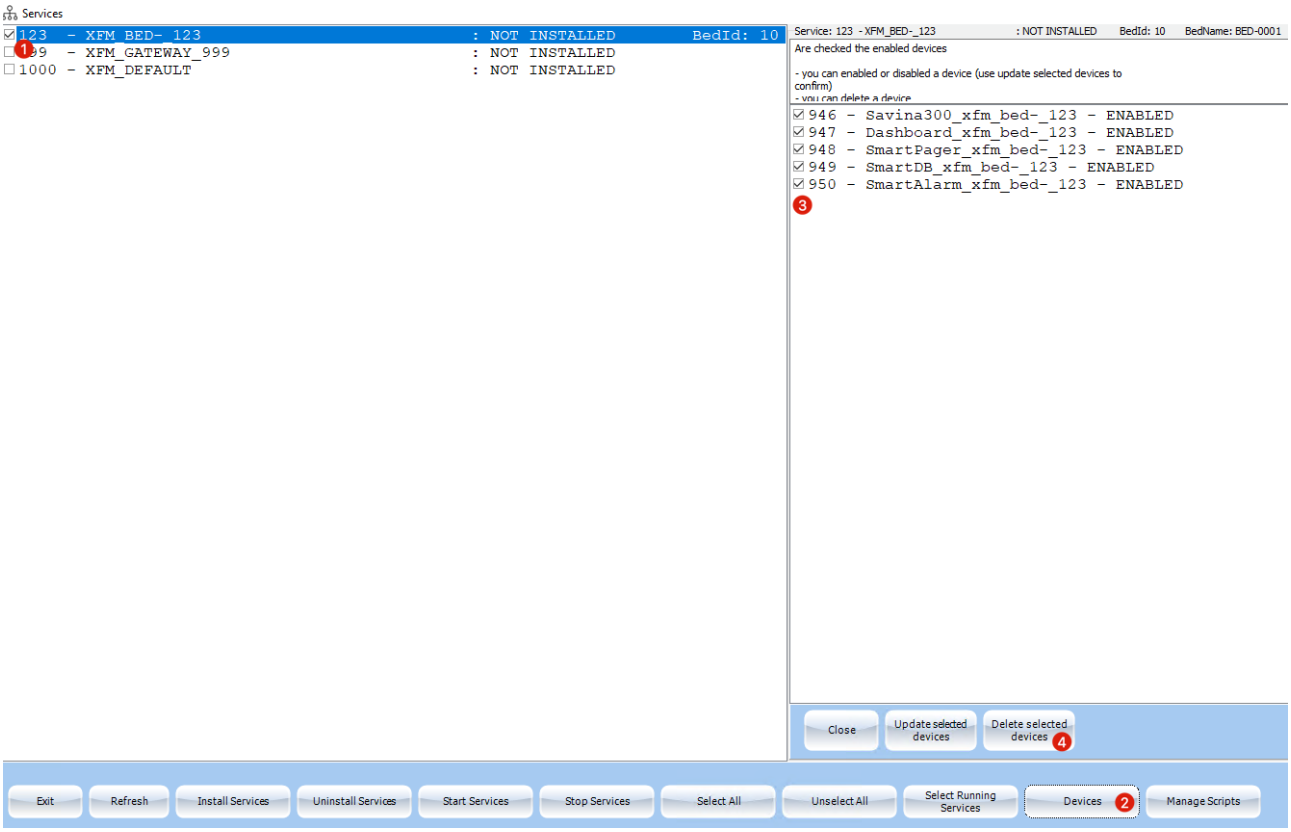


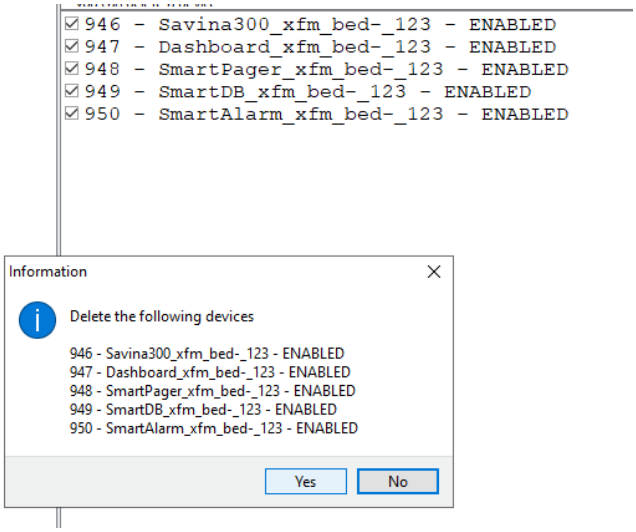
3.6. Removing Bindings to Edit Bed Names

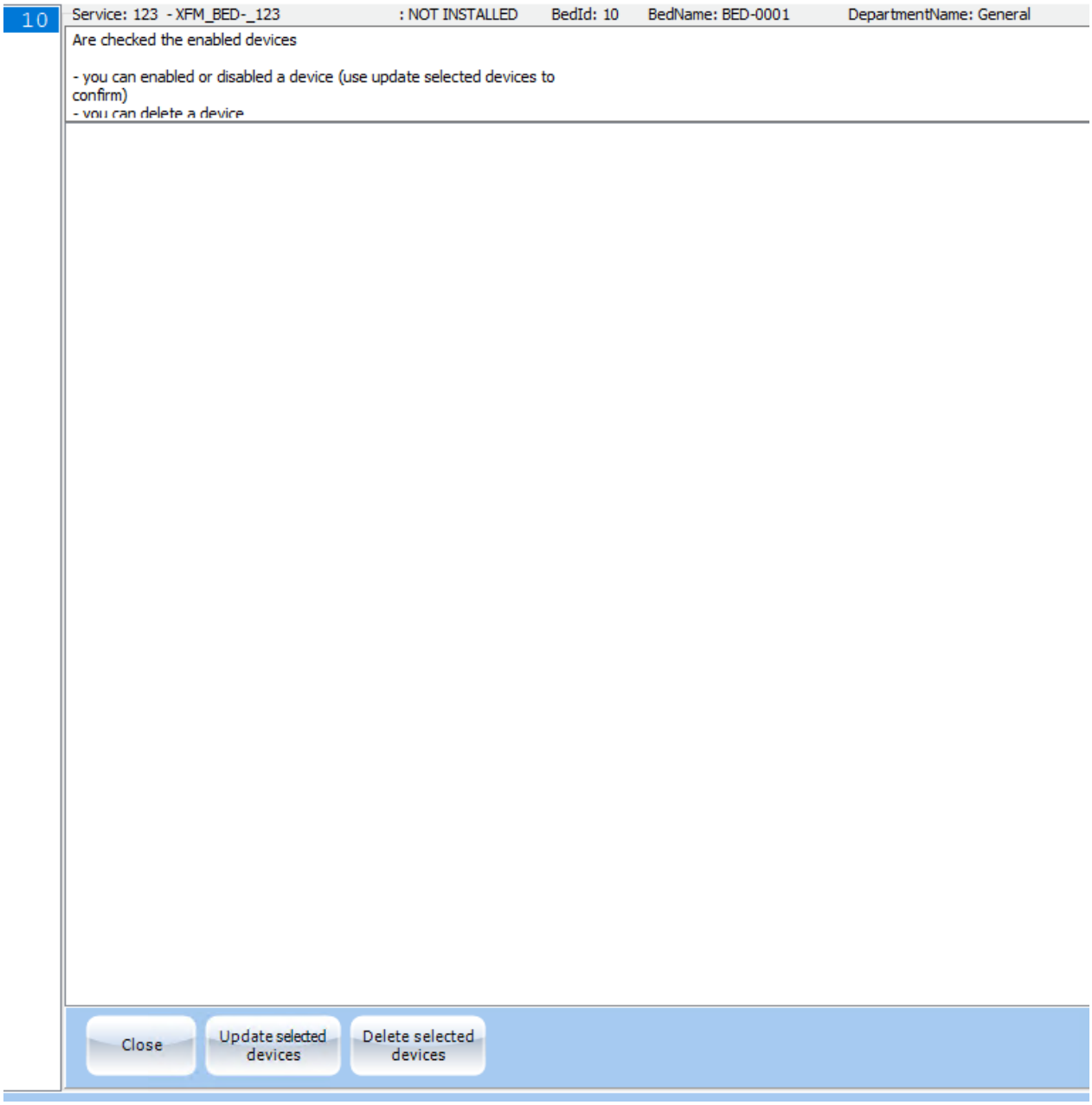
Once a bed is bound to a service, it is not possible to rename it, unless it is unbound from its service.

To unbind a bed from the service, select the bed to be unbound and open the “Devices tab”.

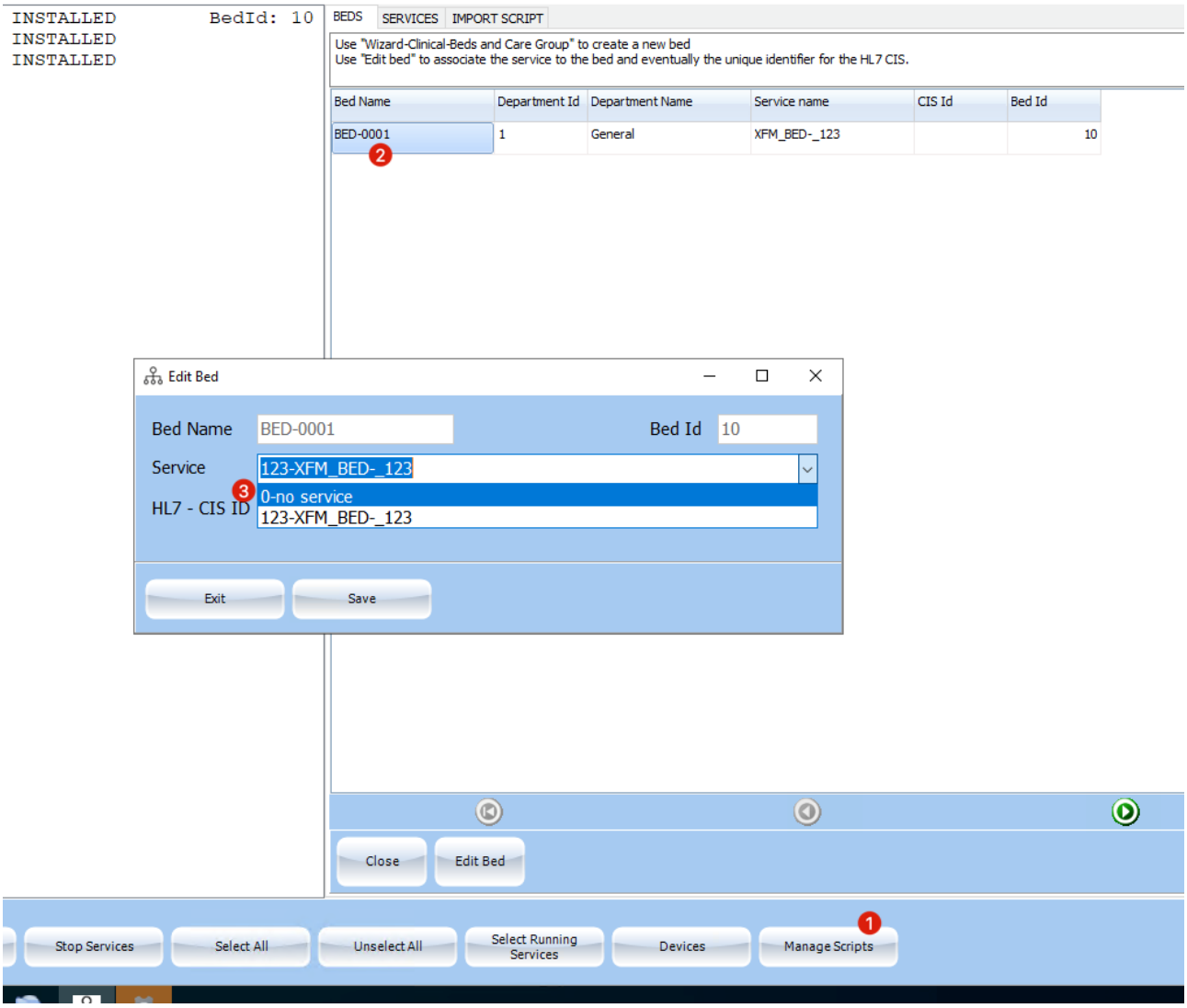
After doing so, check all the boxes in the device list and press “Delete selected devices”.




946 - Savina300_xfm_bed-_123 - ENABLED
947 - Dashboard_xfm_bed-_123 - ENABLED
948 - SmartPager_xfm_bed-_123 - ENABLED
949 - SmartDB_xfm_bed-_123 - ENABLED
950 - SmartAlarm_xfm_bed-_123 - ENABLED
Information
Delete the following devices
946 - Savina300_xfm_bed-_123 - ENABLED
947 - Dashboard_xfm_bed-_123 - ENABLED
948 - SmartPager_xfm_bed-_123 - ENABLED
949 - SmartDB_xfm_bed-_123 - ENABLED
950 - SmartAlarm_xfm_bed-_123 - ENABLED
Yes
No


10
Service: 123 - XFM_BED-_123
: NOT INSTALLED
BedId: 10
BedName: BED-0001
DepartmentName: General
Are checked the enabled devices
- you can enabled or disabled a device (use update selected devices to confirm)
- you can delete a device
Close
Update selected devices
Delete selected devices

After deleting all the devices in the service, select “Manage Scripts”, double click on the bed and set the service to “0-no service”

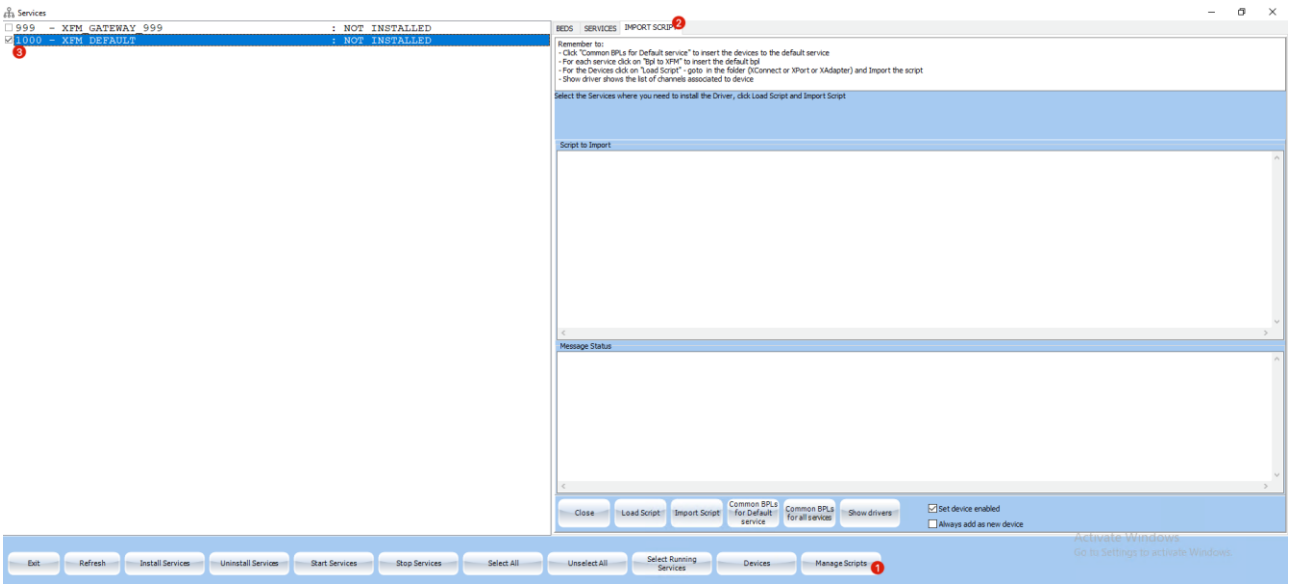


After doing so, you will be able to edit the bed name.

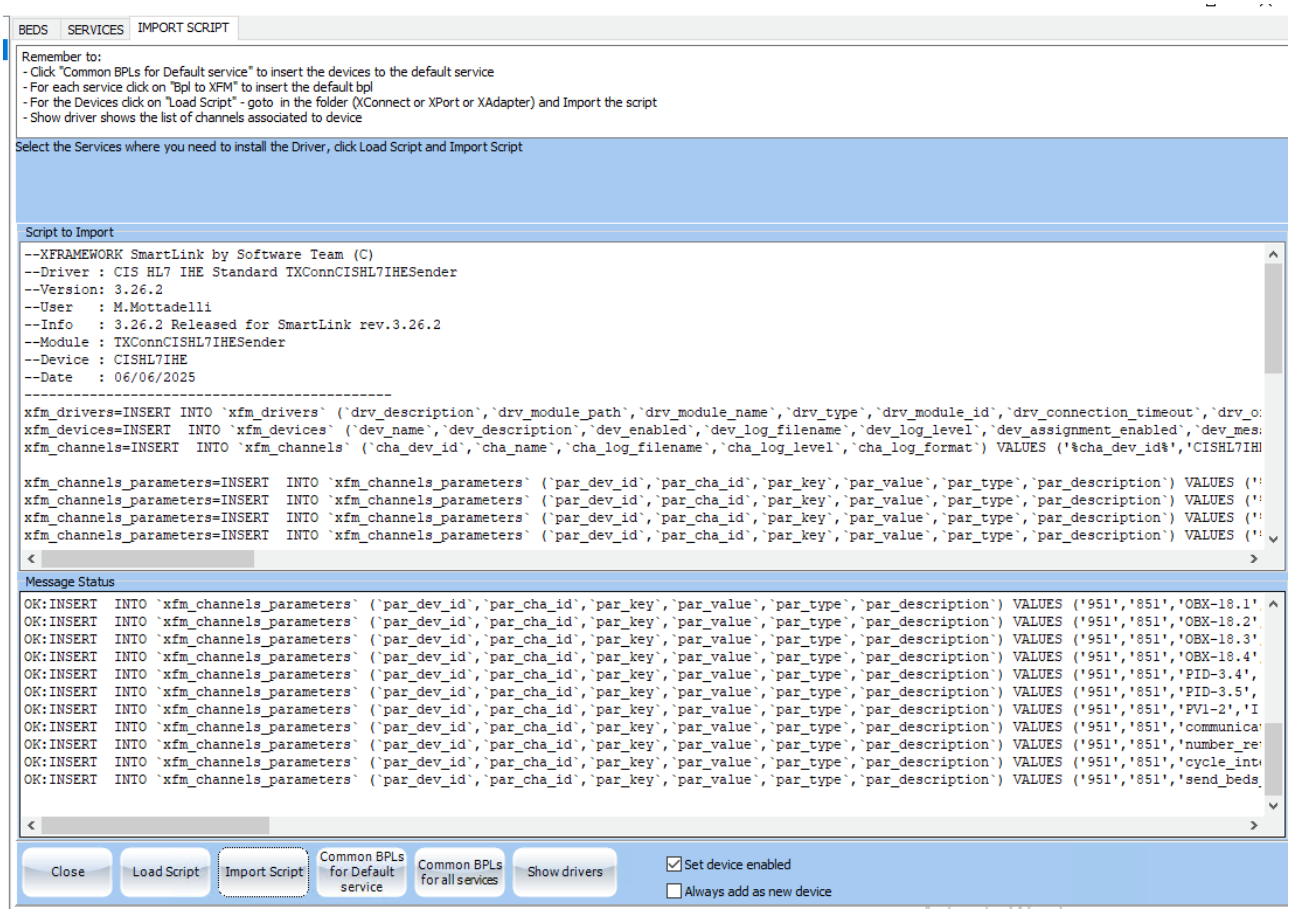
3.7. Configuring CIS IHE HL7 Adapter for Data Exportation

To configure the CIS IHE HL7 Adapter, you will need to import the CIS IHE HL7 driver into the Default Service.

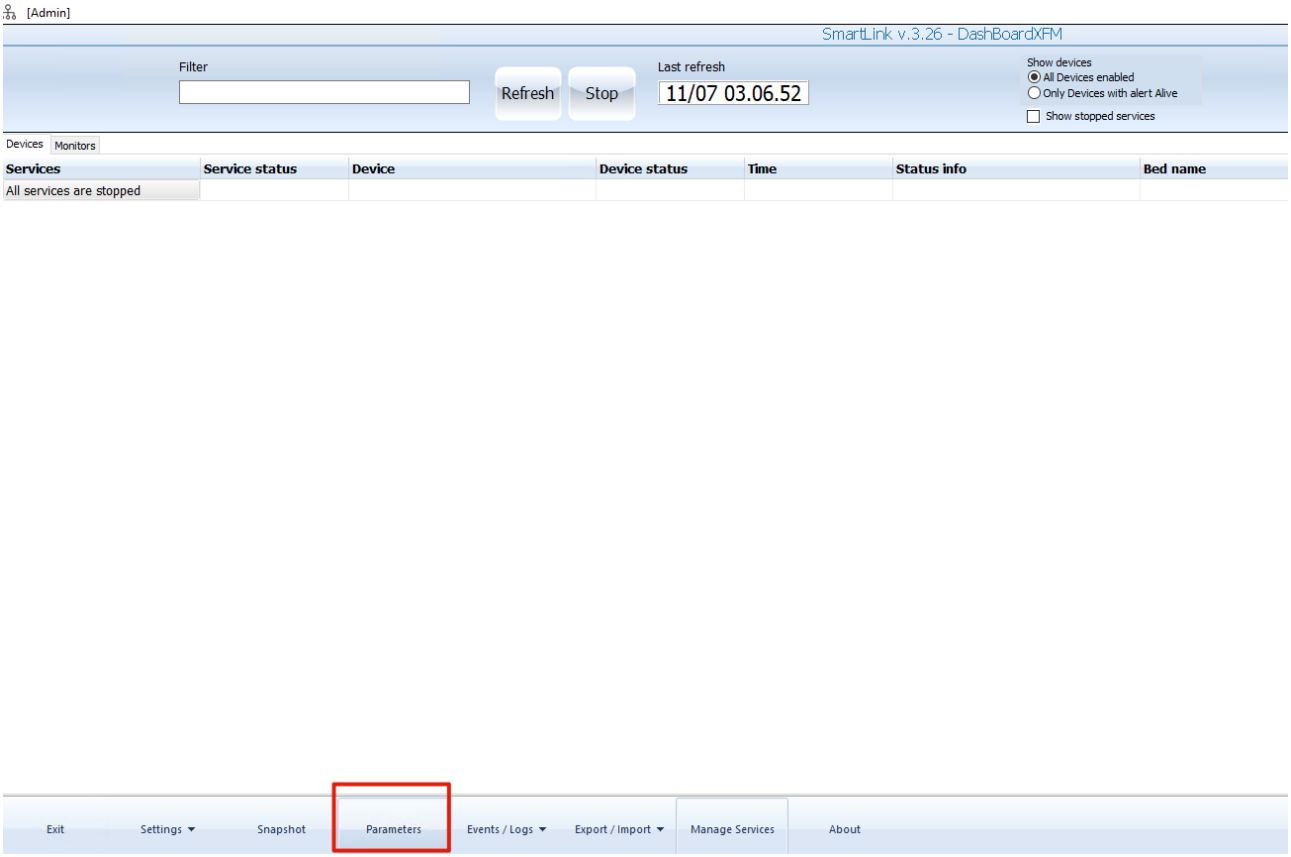
To do so, select “Manage Scripts” - Import Script - check “XFM_DEFAULT”



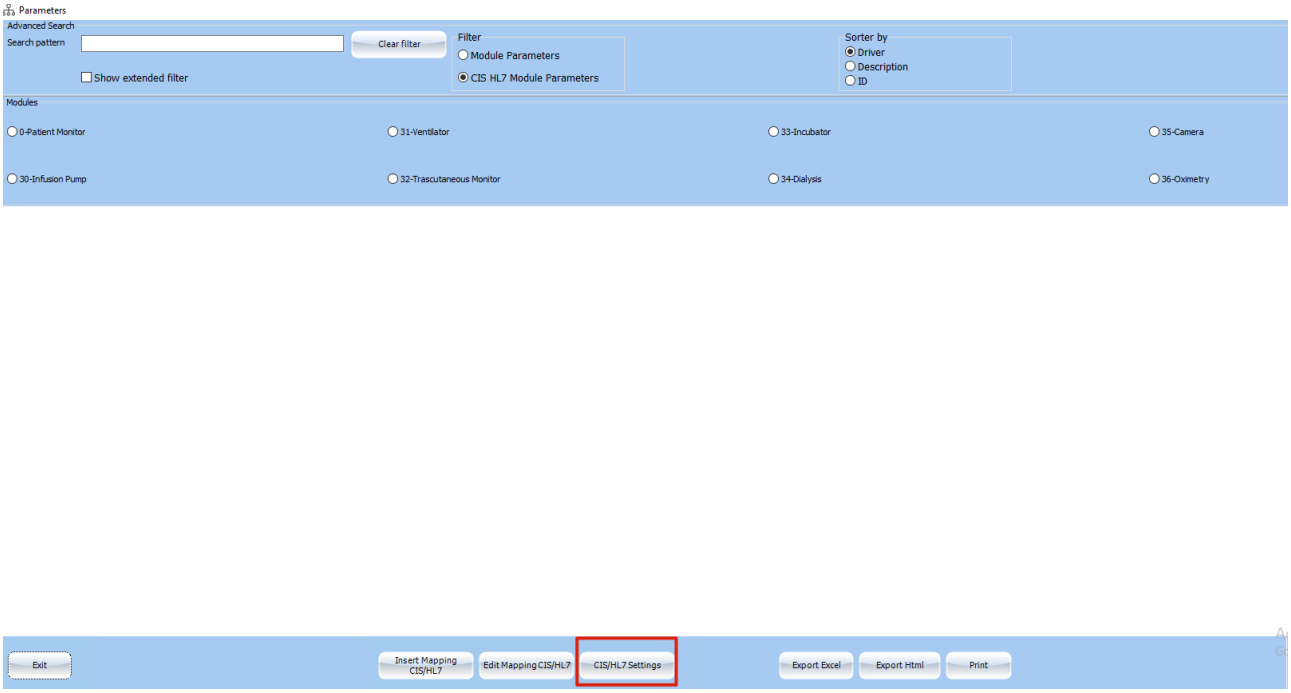
Then, import “XFramework_CIS_IHE_HL7_v3.26.3.sql”, located in “C\xframework\script\Scripts_Drivers\CIS\”



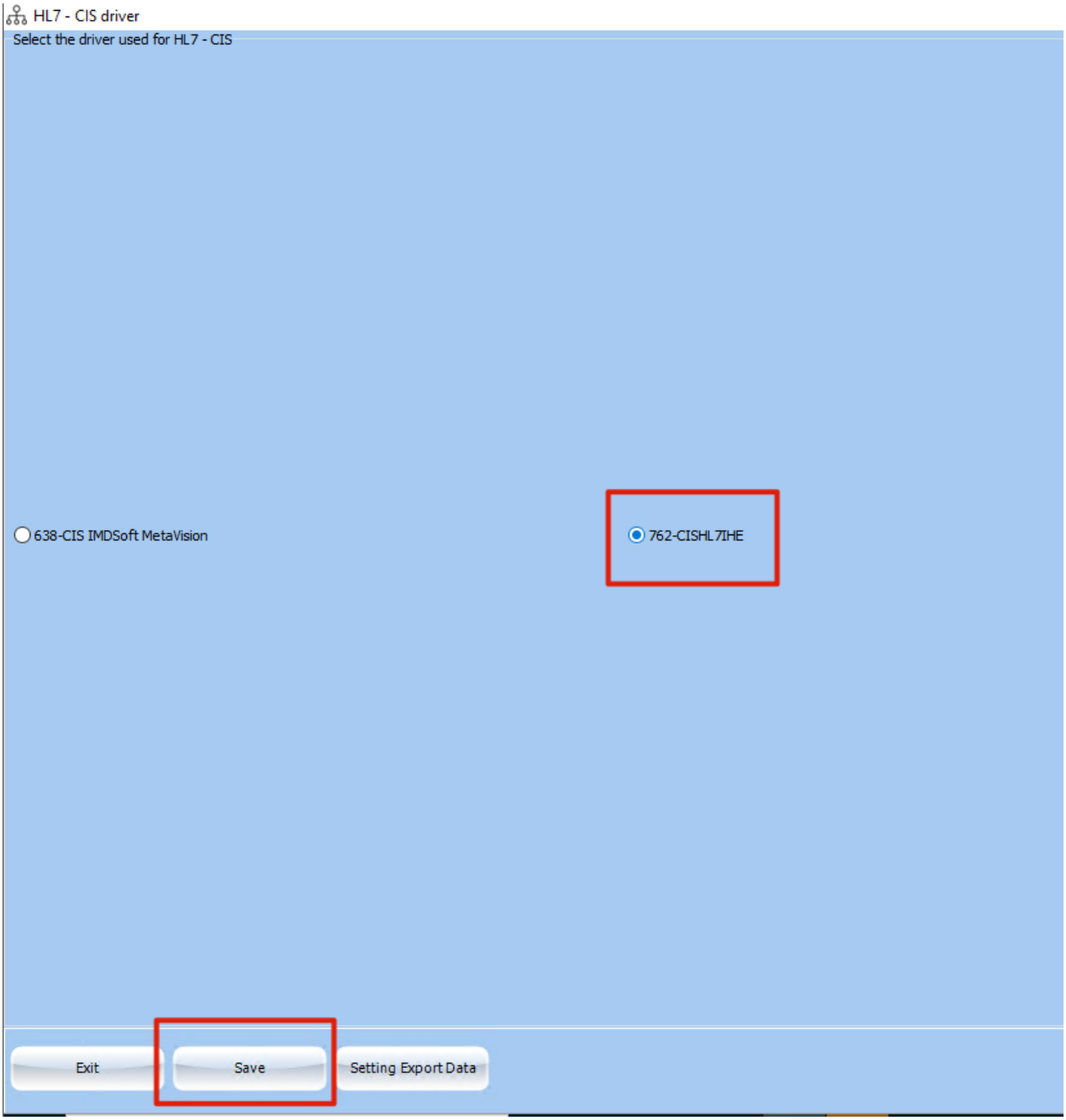
After doing so, in the main XFramework menu, select “Parameters”



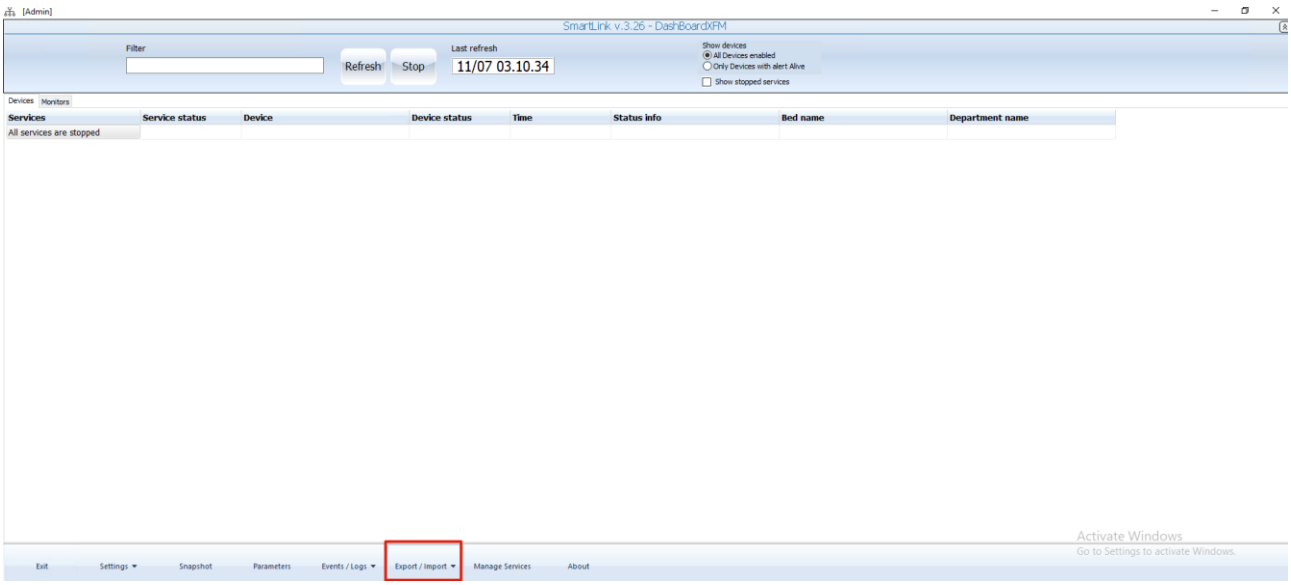
From the “Parameters menu, select ”CIS/HL7 settings”

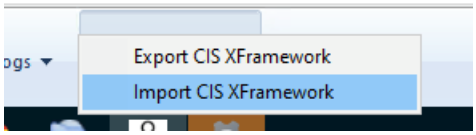


In this page, ensure that CISHL7IHE option is selected, then press “Save”

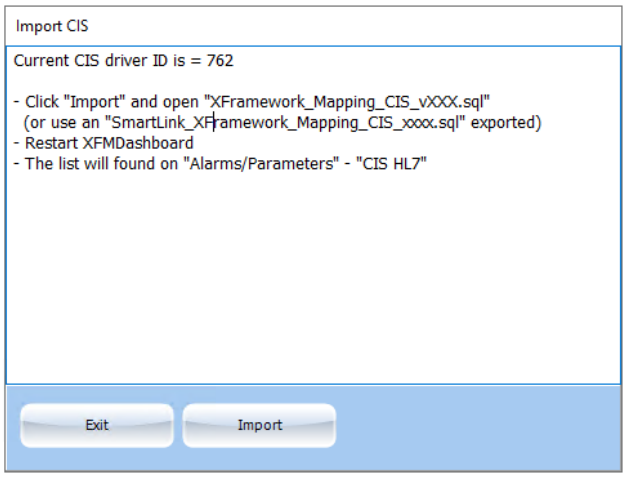

HL7 - CIS driver
Select the driver used for HL7 - CIS
638-CIS IMDSoft MetaVision
762-CISHL7IHE
Exit
Save
Setting Export Data

To import the default mapping provided by Software Team, select “Export / Import” from the main menu of XFramework, then select “Import CIS XFramework”



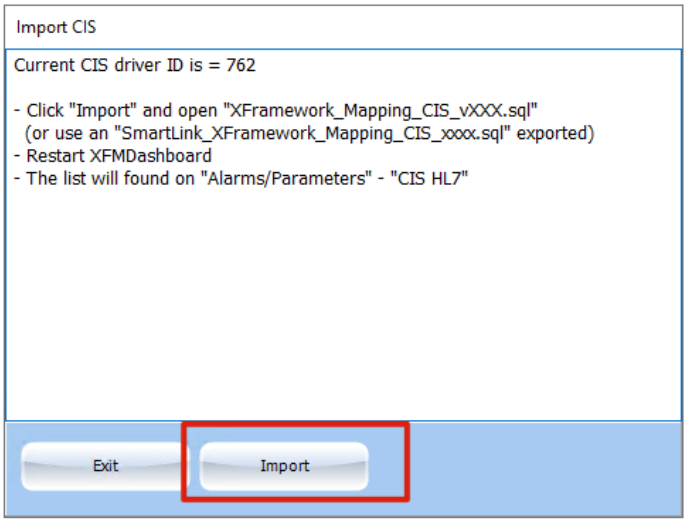


A message will display the driver ID in which you are importing the mapping data.



In this example, "driver ID is = 762 refers to the" previously selected driver

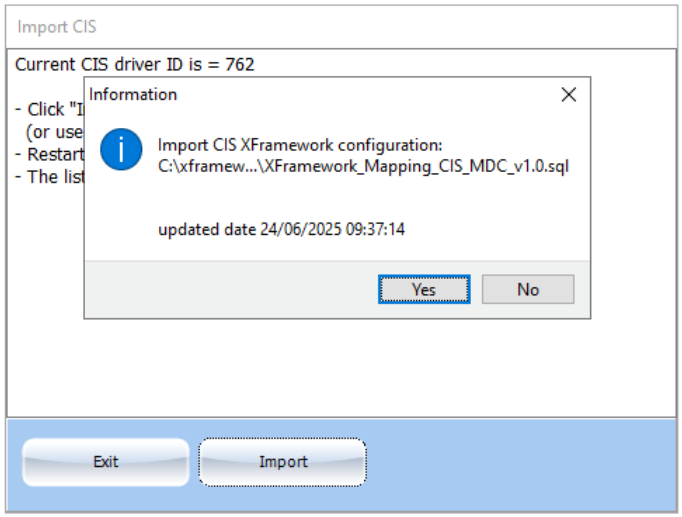
After selecting "Import", you will be prompted to select the mapping file



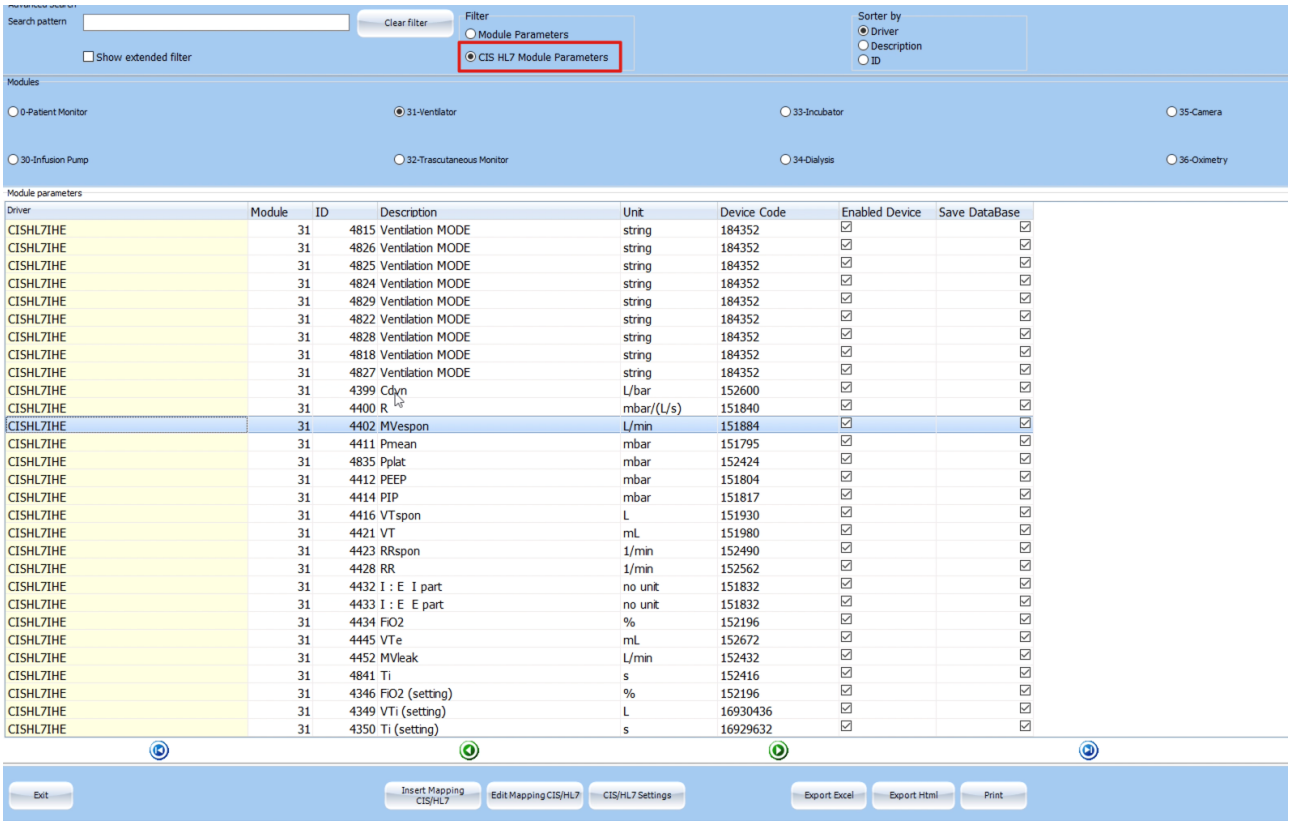
A window will automatically open in the following path:

"C\xframework\script\Scripts_Drivers\CIS"

From there open the "Mapping_CIS" folder and select the mapping file of the desired driver. You will be prompted to import the file. Select "Yes".

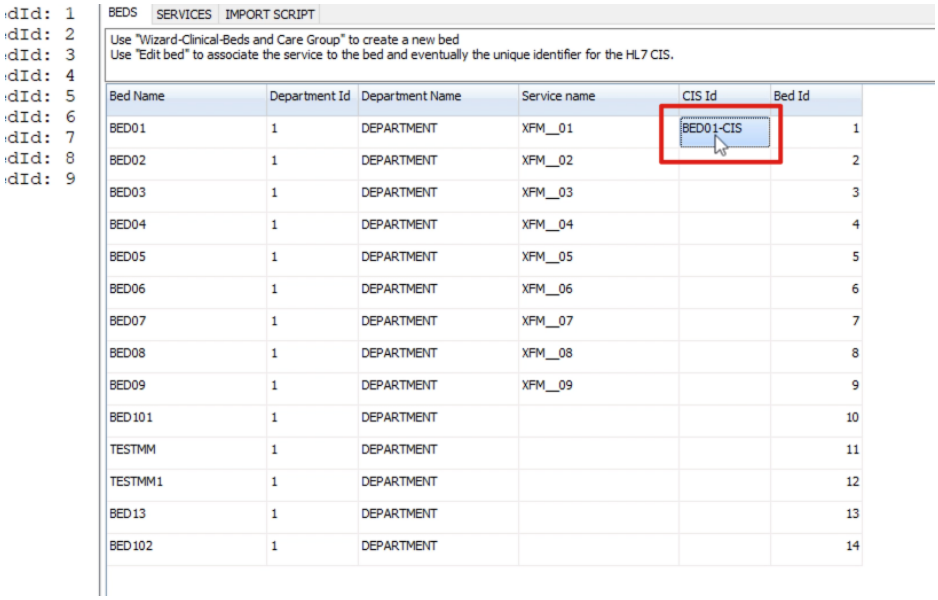


If done correctly, you will see the default mapping under the “Parameters” page, in the “CIS/HL7 Module Parameters” section



Driver	Module	ID	Description	Unit	Device Code	Enabled Device	Save DataBase
CISHL7IHE	31	4815	Ventilation MODE	string	184352	☑	☑
CISHL7IHE	31	4826	Ventilation MODE	string	184352	☑	☑
CISHL7IHE	31	4825	Ventilation MODE	string	184352	☑	☑
CISHL7IHE	31	4824	Ventilation MODE	string	184352	☑	☑
CISHL7IHE	31	4829	Ventilation MODE	string	184352	☑	☑
CISHL7IHE	31	4822	Ventilation MODE	string	184352	☑	☑
CISHL7IHE	31	4828	Ventilation MODE	string	184352	☑	☑
CISHL7IHE	31	4818	Ventilation MODE	string	184352	☑	☑
CISHL7IHE	31	4827	Ventilation MODE	string	184352	☑	☑
CISHL7IHE	31	4399	Cdyn	L/bar	152600	☑	☑
CISHL7IHE	31	4400	R	mbar/(L/s)	151840	☑	☑
CISHL7IHE	31	4402	MVespon	L/min	151884	☑	☑
CISHL7IHE	31	4411	Pmean	mbar	151795	☑	☑
CISHL7IHE	31	4835	Pplat	mbar	152424	☑	☑
CISHL7IHE	31	4412	PEEP	mbar	151804	☑	☑
CISHL7IHE	31	4414	PIP	mbar	151817	☑	☑
CISHL7IHE	31	4416	VTspon	L	151930	☑	☑
CISHL7IHE	31	4421	VT	mL	151980	☑	☑
CISHL7IHE	31	4423	RRspon	1/min	152490	☑	☑
CISHL7IHE	31	4428	RR	1/min	152562	☑	☑
CISHL7IHE	31	4432	I : E I part	no unit	151832	☑	☑
CISHL7IHE	31	4433	I : E E part	no unit	151832	☑	☑
CISHL7IHE	31	4434	FiO2	%	152196	☑	☑
CISHL7IHE	31	4445	VTe	mL	152672	☑	☑
CISHL7IHE	31	4452	MVleak	L/min	152432	☑	☑
CISHL7IHE	31	4841	Ti	s	152416	☑	☑
CISHL7IHE	31	4346	FiO2 (setting)	%	152196	☑	☑
CISHL7IHE	31	4349	VTi (setting)	L	16930436	☑	☑
CISHL7IHE	31	4350	Ti (setting)	s	16929632	☑	☑

In XFramework -> Manage Scripts, beds of which data will be exported need to be configured with a CIS ID.



Note: if CIS ID for the bed is not present, data will not be exported.

After doing so, adjust the adapter's configuration in the "Channel settings" section

