





R2CP .NET

SOFTWARE RELEASE LETTER

Approved by			
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1. Introduction

This document describes the basic modules required to communicate with the components implementing the proprietary protocol R2CP (see IIS0061SPRO R2CP Ethernet Document Index):

- Smart Hub (Smart-HUB.Installer.exe).
 - Interconnects different nodes on the system
 - Filters and routes broadcast messages
 - Checks connectivity of nodes
 - Notifies to one node what nodes are connected/disconnected from the system
- Node communications (CommsModule.zip)
 - Establishes/closes a connection with the Smart Hub
 - Sends messages to the system
 - Manages processing responses from requested nodes.
 - Receives messages from the system
 - Executes actions when messages are received
 - Provides the R2CP message protocol to interface with the system
- File Manager (R2CPFileManager.Installer.exe)
 - Web service used to upload files to the server
- Log Service (LogService.Installer.exe, previously named as Log App)
 - Responsible to get logs from a local or remote system.

2. Release features

V1R0P0

- Log Service supports log messages through R2CP protocol from a local or remote system.
- Smart Hub supports snapshot functionality.
- File Manager supports backup/restore files functionality.

For previous released features refer to document IS1917RL CHALLENGE-X ATOMIUM.docx

V1R0P1

- Log Service: Selected exposure parameters are logged
- Smarthub: Application firewall inbound rule has been modified with scope networks: Domain, Private and Public
- Node Comms:
 - Add new CP errors in LoadRadDatabank message
 - Update default value seconds field in LogEvent message

V1R1P0

- Node Comms:
 - New Generator R2CP messages have been added: AEC Reference, Target LSB, RAD Post-Exposure, FL Post-Exposure, Reset exposure counters.
 - New Digital Inputs (KVM) messages.
- Smart-Hub: Isolated component from changes of Sedecal messages and Common Infrastructure libraries.

V1R2P0

- New messages for AEC calibration, PC inactivity and Fluoro studies.
- File Manager returns the version of any system installed package if requested.

V1R3P0

- Snapshot Cancel.
- Log trace: procedure and Study ID

V1R4P0

- Add columns in exposures csv file in log service component
- New methods to upload files in file manager component
- Add new communication messages

V1R5P0

- Communication messages removal

V1R6P0

- New messages for RFID encrypted, light and sound management
- Created different Communications packages for every R2CP protocol version.
See Changes introduced in the components for more information.

V1R7P0

- Add new communication messages
- Added support for R2CP Message versioning
- FileManager web service IP binding changed
- LogService: Log CPU and memory usage.

V1R8P0

- Added digital signature

- Node Comms: Included method to reset dosimeter or estimated dosimeter indistinctly

V1R2P1

- Added log traces on SmartHub software to analyze communication drops.

V1R9P0

- Add new communication messages
- Hide critical Rfid tag information in logs

3. Operating environment and compatibility

Smart Hub / Communication Interface

- .NET Framework 4.0
- WIN7/WIN10
- Smart Hub: Firewall ports 9000 and 445 are open as inbound rule.

Log app / File Manager


- .NET Framework 4.6
- WIN7/WIN10
- File Manager: Firewall ports 8099 and 80 are open as inbound rule.

4. Installation instructions

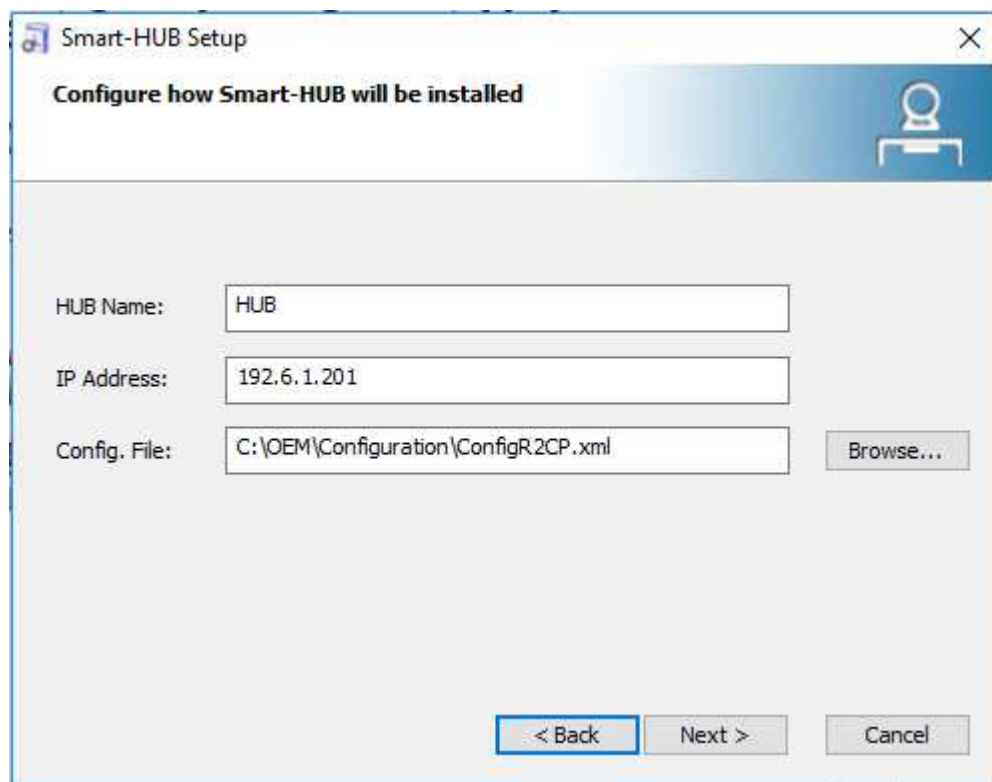
Smart Hub

During the installation you will be requested to enter:

- Node name (leave HUB default value)
- IP where the service will be attending requests. The rest of the R2CP nodes should be connected to this IP address to be available for communicating with other nodes.
- Path to the configuration file:

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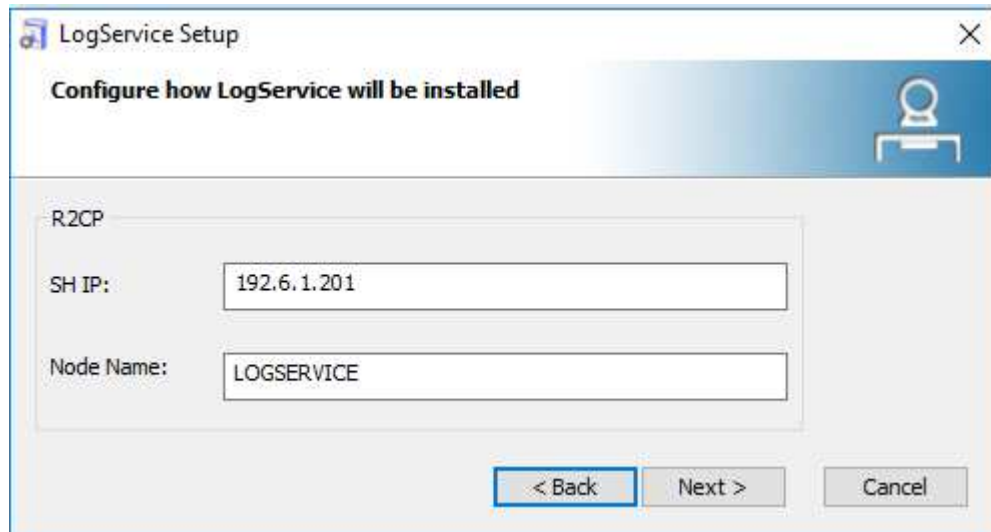
- This file has to be available for all nodes connected.
- This file is normally located on the same PC where the Smart Hub runs, otherwise it should be set as `http://ip_address/Configuration/ConfigR2CP.xml`



Log Service

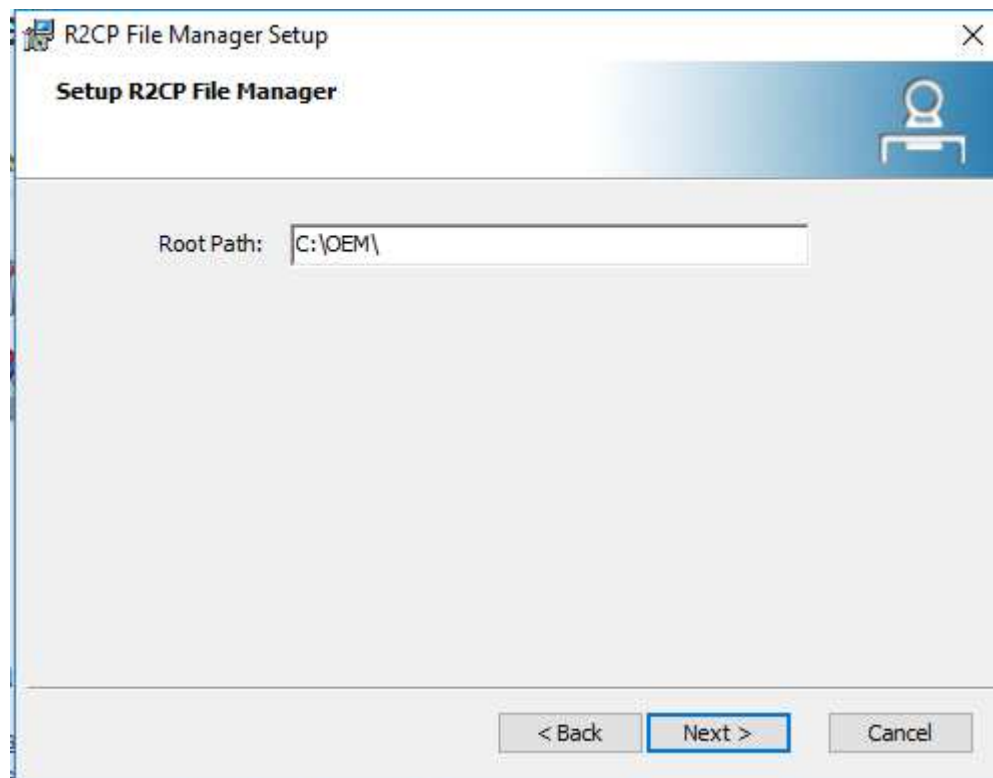
During the installation you Will be requested for:

- The Smart Hub IP Address (as mentioned in the previous point)
- The name given to the R2CP Log Service node.



File Manager

During the installation you will be requested to enter the path to the configuration folder (C:\OEM) by default.



5. Changes introduced in the components

V1R0P0

Functionality list:

Component	Functionality
Smart Hub	Supports of Snapshot R2CP event message
	Smart Hub Service Monitor allows service monitoring, start and stop from other network PC
	Smart Hub Service Monitor UI enhancements
Comms Dll	Upgrade to IIS0061SPRO R2CP Ethernet Document Index Rev A
Log Service	Supports log messages through R2CP protocol from a local or remote system. Log event send by other devices of the room, exposures and system messages are logged.
File Manager	Upload text and binary files to temporary folder functionality has been added
	Restore files from temporary folder functionality has been added
	Support .jpeg files with proper compression saving
	Configuration parameters have been reduced to one single parameter named "Configuration folder"
	Firewall ports 80 and 8099 are open by the installer

Table 1 Functionality list

Solved bug list:

BUGID	Component	Description
NA	Comms DII	No exception is thrown when the configuration is not available, the status of the configuration load is returned instead.

Table 1 Solved bug list

Previous versions

Refer to document IS1917RL CHALLENGE-X ATOMIUM.docx

V1R0P1

Functionality list:

Component	Functionality
Smart Hub	N.A.
Comms DII	Add new CP errors in LoadRadDatabank message
Log Service	Selected exposure parameters are logged
File Manager	N.A.

Solved bug list:

BUGID	Component	Description
NA	Comms DII	LogEventMessage base time referenced to UTC
		LogEventMessage. If seconds message field is set to 0 => Date property value is set to PC DateTime.UtcNow

V1R1P0

Functionality list:

Component	Functionality
Smart Hub	Removed Sedecal Messages lib reference.
	Removed Sedecal.Common.Infrastructure lib reference.
Comms DII	New Generator R2CP messages have been added: AEC Reference, Target LSB, RAD Post-Exposure, FL Post-Exposure, Reset exposure counters.
	Moved CAN Common messages to a new message library.
	LoadFluoroDataBankEVENT message and LoadFluoroDataBankSET message include Target LSB property.
	R2CP Messages containing AECChamber property have been modified: AECChamber property includes a new field named IsExternalReferenceCalculation that indicates if AEC reference

	calculation is computed internally or if it comes from an external device. If it is external, then a new property named AEC Reference property is used. If not AECDensity and AECCorrectionFactor are applied instead.
	Decoder factories have been removed. There is one decoder factory for every message type.
	Added new unit tests for Generator and Positioner R2CP messages.
Log Service	N.A.
File Manager	Calibration files are included together with the rest of backup files.

Solved bug list:

BUGID	Component	Description
NA	Comms Dll	Message properties that share the same byte are firstly initialized to avoid wrong property values.

V1R2P0

Functionality list:

Component	Functionality
Smart Hub	Removed "Sedecal.Common.Enums" reference.
	Logs folder is removed on component install/upgrade, so it is created from scratch when application is launched for the first time.

Comms Dll	Allow to unsubscribe from all messages for a concrete subscriber. Removes all decoders for this comms channel.
	New messages for AEC calibration.
	New messages for manage PC inactivity.
Log Service	N.A.
File Manager	Returns the version of any system installed package given the package name on the web request.

Solved bug list:

BUGID	Component	Description
NA	Comms Dll	Adjust to closest Renard number the Max mAs and mA from RADParameterRangesEVENTMessage.
NA	Log Service	Exposures.csv log file post-exposure values are filled with empty data when there is not post-exposure information available.
		Log rotation after upgrade
NA	File Manager	Remove Positioner and Generator existing temporary folders from previous Restore operation, prior to starting a new Restore to avoid inconsistent data restoration.
		Fix Internet Information Service configuration corruption.

V1R3P0**Functionality list:**

Component	Functionality
Smart Hub	Snapshot Cancel

V1R4P0**Functionality list:**

Component	Functionality
Smart Hub	N.A.
Comms DII	<p>Add new messages (GET, SET or EVENT):</p> <ul style="list-style-type: none">• Procedure• Procedure status• Tomography databank• Tomography status• Tomography detector acquisition• Current fluoro params• Current fluoro abc, high dose and lockin• Lockin frame reached• Lockin databank• Generator status• Current fluoro mA• Current rad params• Current aec fields• Assign dynamic sequence databank

- Load dynamic sequence databank
- Dynamic sequence status
- Load fluoro databank
- Change Fluoro abc, high dose and lockin
- Assign image subtraction databank
- Load image subtraction databank
- Injector
- Tube power limit
- Load rad databank
- AEC Fields
- Tomography test
- Tomosynthesis
- Battery monitor
- Image receptor status
- Position post exposure
- R2CP protocol version
- Fluoro ABC Update time
- Current detector, grid line and ion chamber rotation

It is possible to configure specific timeout for each message

Allow different priorities for the messages. The messages with higher priority are sended first. CommsInhibit message is high priority

Add attributes in configr2cp.xml file to know what node is dosimeter and estimated dosimeter

Included Identification status for check Permissions of Rfid in RfidTagEventMessage

Log service	Add columns Procedure Info and Estimated dose in exposures csv file
File Manager	fluoro_calibration.xml has been included in global and generator setup restore operation
	Included method to upload files in Calibration folder by string FEATURE: Included new methods to upload files in any folder at c:\OEM
	edap_calibration.xml is included in global restore operation

Solved bug list:

BUGID	Component	Description
	Comms DII	Fixed bugs found in properties of messages: CurrentFLParamsEVENTMessage, CurrentFluoroKVpEVENTMessage, CurrentFluoromAEVENTMessage, CurrentFluoroMsEVENTMessage, RADParameterRangesEVENTMessage, FluoroPostExposureEVENTMessage
NA	Smart Hub	Snapshot functionality: If C:\OEM\Temp folder does not exist then it is created before moving zip files to it

V1R5P0

Functionality list:

Component	Functionality
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Smart Hub	N.A.
Comms Dll	Messages removed (GET, SET or EVENT): <ul style="list-style-type: none">• R2CP protocol version• Fluoro ABC Update time• Current detector, grid line and ion chamber rotation
Log service	N.A
File Manager	fluoro_calibration.xml is not included in global and generator setup restore operation

V1R6P0

Functionality list:

Component	Functionality
Smart Hub	N.A.
Comms Dll	Add new messages (GET, SET or EVENT): <ul style="list-style-type: none">• RFID encrypted• Light and sound management Created different Communications packages for every R2CP protocol version: <ul style="list-style-type: none">• 5.2.0: IIS0008SPRO R2CP.ETH RevE• 5.3.0: IIS0100SPRO R2CP.ETH RevA• 5.4.0: IIS0100SPRO R2CP.ETH RevB• 5.5.0

	<ul style="list-style-type: none">• 6.0.0: IIS0100SPRO R2CP.ETH RevE
Log service	N.A
File Manager	N.A

V1R7P0

Functionality list:

Component	Functionality
Smart Hub	Added support for R2CP Message versioning
Comms DII	Added new messages (GET, SET or EVENT): <ul style="list-style-type: none">• Detector alignment with tube• Image receptor axis rotation• Battery monitor for UPS• Scale type (R20, R10 or Linear)• Range databank• New messages to show patient information• Message to indicate which handswitch has been pressed• Messages for nodes send their component versions• Protocol version
Log service	<ul style="list-style-type: none">• Log topmost CPU and memory consuming processes when System CPU and memory performance is high• Added support for R2CP Message versioning
File Manager	<ul style="list-style-type: none">• IP binding changed to 192.6.1.201 instead of All Available• Added restore RFID data functionality

Solved bug list:

BUGID	Component	Description
NA	Log Service	Connect to SmartHub has been fixed to avoid null exception
3759	Comms Dll	Saving of ConfigR2CP.xml has been fixed to support all possible dosimeter and EDOSE/EDAP configuration combinations
NA		CommManager: Connect has been fixed to avoid null exception.
NA		Various message properties update and fixing

V1R7P1

Solved bug list:

BUGID	Component	Description
4417	Log Service	Dose and Estimated dose: Only last measure of a given type is logged

V1R8P0

Functionality list:

Component	Functionality
Smart Hub	<ul style="list-style-type: none">Added digital signature to .dlls, .exe and installer
Comms Dll	<ul style="list-style-type: none">Added digital signature to .dlls

	<ul style="list-style-type: none">• Included method to reset dosimeter or estimated dosimeter indistinctly• Property IsServiceOnlyExposureDeadmanActivated has been added to message ExposureSwitchesActivationTypeEVENTMessage
Log Service	<ul style="list-style-type: none">• Added digital signature to .dlls, .exe and installer
File Manager	<ul style="list-style-type: none">• Added digital signature to .dll and installer

V1R2P1

No new features, functionalities or bug solved.

V1R9P0

Functionality list:

Component	Functionality
Smart Hub	N.A
Comms Dll	<ul style="list-style-type: none">• Added new messages (GET, SET or EVENT):<ul style="list-style-type: none">○ QbyPPS change request○ HV Tank Temperature• Included new property in Rfid ciphered messages, to get tag id cyphered as string• Hide critical Rfid tag information in logs
Log Service	N.A

File Manager	N.A
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Solved bug list:

BUGID	Component	Description
NA	Comms Dll	Removed validation for ConfigR2CP.xml with .xsd file, to avoid validation errors due to structure changes in this file.

6. Software summary table

Refer to document “IS1917RL CHALLENGE-X ATOMIUM.docx” for Previous versions. For each of those major modules, the component versions are:

	V1R0P0 ¹	V1R0P1	V1R1P0	V1R2P0	V1R3P0	V1R4P0	V1R5P0	V1R6P0	V1R7P0	V1R7P1	V1R8P0	V1R2P1
Communication Package	2.2.940	2.2.946	3.0.978	3.0.1008	3.0.1015	4.0.1050	3.0.1043	5.0.1084	7.1.1	7.1.1	9.0.1150	3.0.1008
SmartHub Service Package	1.2.0.972	1.2.0.982	1.3.0.1009	1.4.0.1020	1.5.0.1026	1.7.0.1045	1.6.0.1037	1.6.0.1037	1.9.0.1073	1.9.0.1073	1.10.0.1078	1.4.4.1
R2CP File Manager web service	1.2.0.152	1.2.0.152	1.2.0.153	1.3.0.157	1.3.0.157	1.5.0.162	1.4.0.160	1.4.0.160	1.7.0.170	1.7.0.170	1.8.0.173	1.3.0.157

¹ This software package was numbered as V7R0P3 in RevA. That version is related to a ChallengeX release. Since this documentation was splitted, and these modules can run in different systems, we redefine veresioning as such as V7R0P3 becomes V1R0P0



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Versión: V1R9P0

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Log Service	1.1.0.150	1.1.0.190	1.2.0.227	1.3.0.284	1.4.0.293	1.5.0.307	1.5.0.307	1.5.0.307	1.7.0.331	1.7.1.1	1.10.0.336	1.3.0.284
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	V1R9P0
Communication Package	9.1.0.1173
SmartHub Service Package	1.10.0.1078
R2CP File Manager web service	1.8.0.173
Log Service	1.10.0.336

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Node Comms DLLs

	V1R0P0 ²	V1R0P1	V1R1P0	V1R2P0 V1R2P1	V1R3P0	V1R4P0	V1R5P0	V1R6P0	V1R7P0	V1R8P0
Communication Package	2.2.940	2.2.946	3.0.978	3.0.1008	3.0.1015	4.0.1050	3.0.1043	5.0.1084	7.1.1	9.0.1150
Sedecal.Atomium.Comms.Channel	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9
Sedecal.Atomium.Comms.GPIO.DecoderFactories	2.0.49	2.0.49	N.A	N.A	NA	NA	NA	NA	NA	NA
Sedecal.Atomium.Comms.GPIO	2.1.28	2.1.28	2.1.33	2.1.39	2.1.39	2.1.41	2.1.41	2.1.43	2.1.50	2.1.55
Sedecal.Atomium.Comms.GPIO.Messages	2.0.83	2.0.85	2.1.86	2.1.93	2.1.94	2.1.99	2.1.99	2.1.106	2.1.109	2.1.110

² This software package was numbered as V7R0P3 in RevA. That version is related to a ChallengeX release. Since this documentation was splitted, and these modules can run in different systems, we redefine veresioning as such as V7R0P3 becomes V1R0P0




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Sedecal.Atomium.Comms.GPIO.Mess ages.Base.dll	1.0.40	1.0.40	1.1.45	1.1.48	1.1.49	1.1.59	1.1.55	1.1.65	1.1.71	1.1.72
Sedecal.Atomium.Comms.GPIO.Mess ages.BatteryMonitor.dll	NA	NA	NA	NA	NA	NA	NA	1.0.2	1.0.3	1.0.3
Sedecal.Atomium.Comms.GPIO.Mess ages.CANCommon.dll	N.A	N.A	1.0.2	1.0.3	1.0.4	1.0.4	1.0.4	1.0.9	1.0.11	1.0.12
Sedecal.Atomium.Comms.GPIO.Mess ages.DynamicSystemsInterface.dll	NA	NA	NA	NA	NA	NA	NA	1.0.9	1.0.10	1.0.10
Sedecal.Atomium.Comms.GPIO.Mess ages.Generator.dll	1.1.26	1.1.26	1.1.32	1.1.40	1.1.41	1.1.52	1.1.49	1.1.58	1.1.66	1.1.69
Sedecal.Atomium.Comms.GPIO.Mess ages.ImageSystemATS.dll	NA	NA	NA	NA	NA	NA	NA	1.0.9	1.0.10	1.0.10
Sedecal.Atomium.Comms.GPIO.Mess ages.ImageSystemUniversal.dll	NA	NA	NA	NA	NA	NA	NA	1.0.15	1.0.23	1.0.23
Sedecal.Atomium.Comms.GPIO.Mess ages.Network.dll	1.0.22	1.0.22	1.1.24	1.1.25	1.1.27	1.1.29	1.1.28	1.1.32	1.1.32	1.1.32

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Sedecal.Atomium.Comms.GPIO.Mess ages.Positioner.dll	1.0.24	1.0.25	1.0.32	1.0.34	1.0.36	1.0.40	1.0.39	1.0.46	1.0.50	1.0.50
Sedecal.Atomium.Comms.GPIO.Mess ages.System.dll	1.0.18	1.0.18	1.0.24	1.0.27	1.0.27	1.0.31	1.0.29	1.0.32	1.0.35	1.0.36
Sedecal.Atomium.Comms.Configuratio n	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.16	1.1.16	1.1.17	1.1.20	1.1.20
Sedecal.Atomium.Comms.Decoder.dll	N.A	N.A	1.0.0	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3
Sedecal.Atomium.Comms.Entities	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.13	1.1.13	1.1.13	1.1.17	1.1.17
Sedecal.Atomium.Comms.LogManage r	1.0.17	1.0.17	1.0.18	1.0.18	1.0.19	1.0.20	1.0.19	1.0.20	1.0.20	1.0.20
Sedecal.GenericMessages.Controller	1.1.19	1.1.19	1.1.20	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26
Sedecal.Common.Enums.dll	1.0.19	1.0.20	1.0.22	1.0.25	1.0.25	1.0.33	1.0.33	1.0.37	1.0.42	1.0.42
Log4net.dll	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15
Microsoft.Practices.Unity.dll	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2

Table 3 Node Comms dlls

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Communication Package	9.1.0.1173
Sedecal.Atomium.Comms.Channel	1.1.9
Sedecal.Atomium.Comms.GPIO	2.1.55
Sedecal.Atomium.Comms.GPIO.Messages	2.1.112
Sedecal.Atomium.Comms.GPIO.Messages.Base.dll	1.1.74
Sedecal.Atomium.Comms.GPIO.Messages.BatteryMonitor.dll	1.0.3
Sedecal.Atomium.Comms.GPIO.Messages.CANCommon.dll	1.0.12
Sedecal.Atomium.Comms.GPIO.Messages.DynamicSystemsInterface.dll	1.0.10

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Sedecal.Atomium.Comms.GPIO.Messages.Generator.dll	1.1.80
Sedecal.Atomium.Comms.GPIO.Messages.ImageSystemATS.dll	1.0.10
Sedecal.Atomium.Comms.GPIO.Messages.ImageSystemUniversal.dll	1.0.24
Sedecal.Atomium.Comms.GPIO.Messages.Network.dll	1.1.32
Sedecal.Atomium.Comms.GPIO.Messages.Positioner.dll	1.0.50
Sedecal.Atomium.Comms.GPIO.Messages.System.dll	1.0.36
Sedecal.Atomium.Comms.Configuration	1.1.21
Sedecal.Atomium.Comms.Decoder.dll	1.0.3
Sedecal.Atomium.Comms.Entities	1.1.17
Sedecal.Atomium.Comms.LogManager	1.0.20

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Sedecal.GenericMessages.Controller	1.1.26
Sedecal.Common.Enums.dll	1.0.43
Log4net.dll	1.2.15
Microsoft.Practices.Unity.dll	2.1.505.2

Table 3 Node Comms dlls

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Smart Hub

	V1R0P0	V1R0P1	V1R1P0	V1R2P0	V1R3P0	V1R4P0	V1R5P0	V1R6P0	V1R7P0	V1R8P0 V1R9P0
SmartHub Service Package	1.2.0.972	1.2.0.982	1.3.0.1009	1.4.0.1020	1.5.0.1026	1.7.0.1045	1.6.0.1037	1.6.0.1037	1.9.0.1073	1.10.0.1078
Log4net	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15
Sedecal.Atomium.Comms .GPIO.Messages.dll	2.0.83	2.0.85	N.A	N.A	NA	NA	NA	NA	NA	NA
Sedecal.Atomium.Comms .GPIO.Messages.Base.dll	1.0.40	1.0.40	1.1.45	1.1.48	1.1.49	1.1.59	1.1.54	1.1.54	1.1.71	1.1.72
Sedecal.Atomium.Comms .GPIO.Messages.CANCommon.dll	N.A	N.A	1.0.2	1.0.3	1.0.4	1.0.4	1.0.4	1.0.4	1.0.11	1.0.12
Sedecal.Atomium.Comms .GPIO.Messages.Network.dll	1.0.22	1.0.22	1.1.24	1.1.25	1.1.27	1.1.29	1.1.28	1.1.28	1.1.32	1.1.32
Sedecal.Atomium.Comms .SmartHUB.Communication.dll	1.1.5	1.1.5	1.1.6	1.1.6	1.1.6	1.1.6	1.1.6	1.1.6	1.1.6	1.1.6

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Sedecal.Atomium.Comms. Configuration.dll	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.16	1.1.15	1.1.15	1.1.20	1.1.20
Sedecal.Atomium.Comms .Decoder.dll	N.A	N.A	1.0.0	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3
Sedecal.Atomium.Comms .Entities.dll	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.13	1.1.13	1.1.13	1.1.17	1.1.17
Sedecal.Atomium.Comms .SmartHUB.Contracts.dll	1.0.2	1.0.2	1.0.2	1.0.2	1.0.2	1.0.2	1.0.2	1.0.2	1.0.2	1.0.2
Sedecal.Atomium.Comms .SmartHUB.dll	1.0.22	1.0.22	1.0.24	1.0.24	1.0.26	1.0.27	1.0.27	1.0.27	1.0.29	1.0.29
Sedecal.Atomium.Comms .LogManager.dll	1.0.17	1.0.17	1.0.18	1.0.18	1.0.19	1.0.20	1.0.19	1.0.19	1.0.20	1.0.20
Sedecal.Common.Enums.dll	1.0.19	1.0.20	1.0.22	N.A	NA	NA	NA	NA	NA	NA
Sedecal.Common.Infrastructure.dll	2.0.204	2.0.207	N.A	N.A	NA	NA	NA	NA	NA	NA
SmartHub Service	1.2.0.972	1.2.0.982	1.3.0.1009	1.4.0.1020	1.5.0.1026	1.7.1045	1.6.0.1037	1.6.0.1037	1.9.0.1073	1.10.0.1078

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Table 4 SmartHub Versions

	V1R2P1
SmartHub Service Package	1.4.4.1
Log4net	1.2.15
Sedecal.Atomium.Comms .GPIO.Messages.dll	N.A
Sedecal.Atomium.Comms .GPIO.Messages.Base.dll	1.1.48
Sedecal.Atomium.Comms .GPIO.Messages.CANCommon.dll	1.0.3
Sedecal.Atomium.Comms .GPIO.Messages.Network.dll	1.1.25
Sedecal.Atomium.Comms .SmartHUB.Communication.dll	1.1.8
Sedecal.Atomium.Comms.	1.1.11

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Configuration.dll	
Sedecal.Atomium.Comms .Decoder.dll	1.0.3
Sedecal.Atomium.Comms .Entities.dll	1.1.11
Sedecal.Atomium.Comms .SmarHUB.Contracts.dll	1.0.2
Sedecal.Atomium.Comms .SmarHUB.dll	1.0.24
Sedecal.Atomium.Comms .LogManager.dll	1.0.18
Sedecal.Common.Enums.dll	N.A
Sedecal.Common.Infrastructure.dll	N.A
SmartHub Service	1.4.4.1

Table 4 SmartHub Versions

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File Manager


	V1R0P0	V1R0P1	V1R1P0	V1R2P0 V1R2P1	V1R3P0	V1R4P0	V1R5P0	V1R6P0	V1R7P0	V1R8P0 V1R9P0
R2CP File Manager web service	1.2.0.152	1.2.0.152	1.2.0.153	1.3.0.157	1.3.0.157	1.5.0.162	1.4.0.160	1.4.0.160	1.7.0.170	1.8.0.173
Sedecal.WebService.ConfigFileManager.dll	1.1.17	1.1.17	1.1.18	1.1.21	1.1.21	1.1.25	1.1.24	1.1.24	1.1.30	1.1.32

Table 5 File Manager

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**R2CP .NET****Versión: V1R9P0****Doc N°: IS2400RL Rev. L****Software Release Letter****Date: 25/11/2021****Log Service**

	V1R0P0	V1R0P1	V1R1P0	V1R2P0 V1R2P1	V1R3P0	V1R4P0	V1R5P0	V1R6P0	V1R7P0	V1R7P1	V1R8P0 V1R9P0
Log Service	1.1.0.150	1.1.0.190	1.2.0.227	1.3.0.284	1.4.0.293	1.5.0.307	1.5.0.307	1.5.0.307	1.7.0.331	1.7.1.1	1.10.0.336
CommonServiceLocator.dll	2.0.1	N.A.	N.A.	N.A	NA	NA	NA	NA	NA	NA	NA
log4net.dll	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15	1.2.15
LogAppBusinessLogic.dll	1.0.29	N.A.	N.A.	N.A	NA	NA	NA	NA	NA	NA	NA
Sedecal.LogServiceBusinessLogic	N.A.	1.0.35	1.0.37	1.0.38	1.0.46	1.0.47	1.0.47	1.0.47	1.0.56	1.0.57	1.0.57
LogService.exe	1.1.0.150	1.1.0.190	1.2.0.227	1.3.0.284	1.4.0.293	1.5.0.307	1.5.0.307	1.5.0.307	1.7.1.1	1.7.1.1	1.10.0.336
Microsoft.Practices.Unity.dll	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2	2.1.505.2
NHibernate.dll	4.1.1.4000	4.1.1.4000	4.1.1.4000	4.1.1.4000	4.1.1.4000	4.1.1.4000	4.1.1.4000	4.1.1.4000	4.1.1.4000	4.1.1.4000	4.1.1.4000
Sedecal.Atomium.Comms.Channel.dll	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9	1.1.9
Sedecal.Atomium.Comms.Configuration.dll	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.15	1.1.15	1.1.15	1.1.20	1.1.20	1.1.20
Sedecal.Atomium.Comms.Entities.dll	1.1.11	1.1.11	1.1.11	1.1.11	1.1.11	1.1.13	1.1.13	1.1.13	1.1.17	1.1.17	1.1.17

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Sedecal.Atomium.Comms.Decoder	N.A.	N.A.	0.0.0	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3	1.0.3
Sedecal.Atomium.Comms.GPIO. DecoderFactories.dll	2.0.49	2.0.49	N.A.	N.A	NA	NA	NA	NA	NA	NA	NA
Sedecal.Atomium.Comms.GPIO.dll	2.1.28	2.1.28	2.1.33	2.1.39	2.1.39	2.1.41	2.1.41	2.1.41	2.1.50	2.1.50	2.1.54
Sedecal.Atomium.Comms.GPIO. Messages.Base.dll	1.0.40	1.0.41	1.1.45	1.1.48	1.1.49	2.1.41	2.1.41	2.1.41	1.1.71	1.1.71	1.1.72
Sedecal.Atomium.Comms.GPIO.Messages .CANCommon.dll	N.A.	N.A.	1.0.2	1.0.3	1.0.4	1.0.4	1.0.4	1.0.4	1.0.11	1.0.11	1.0.12
Sedecal.Atomium.Comms.GPIO.Messages .dll	2.0.84	2.0.85	2.1.86	2.1.93	2.1.94	2.1.99	2.1.99	2.1.99	2.1.109	2.1.109	2.1.110
Sedecal.Atomium.Comms.GPIO.Messages .Generator.dll	1.1.26	1.1.28	1.1.32	1.1.40	1.1.41	1.1.46	1.1.46	1.1.46	1.1.66	1.1.66	1.1.69
Sedecal.Atomium.Comms.GPIO.Messages .Network.dll	1.0.22	1.0.22	1.1.24	1.1.25	1.1.27	1.1.28	1.1.28	1.1.28	1.1.32	1.1.32	1.1.32
Sedecal.Atomium.Comms.GPIO.Messages	1.0.24	1.0.26	1.0.32	1.0.34	1.0.36	1.0.39	1.0.39	1.0.39	1.0.49	1.0.49	1.0.50

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.Positioner.dll											
Sedecal.Atomium.Comms.GPIO.Messages .System.dll	1.0.18	1.0.18	1.0.24	1.0.27	1.0.27	1.0.29	1.0.29	1.0.29	1.0.35	1.0.35	1.0.36
Sedecal.Atomium.Comms.LogManager.dll	1.0.17	1.0.17	1.0.18	1.0.18	1.0.19	1.0.19	1.0.19	1.0.19	1.0.20	1.0.20	1.0.20
Sedecal.Common.Enums.dll	1.0.19	1.0.21	1.0.22	1.0.25	1.0.25	1.0.33	1.0.33	1.0.33	1.0.42	1.0.42	1.0.42
Sedecal.Common.Infrastructure.dll	2.0.205	2.0.208	2.0.214	2.0.231	2.0.236	2.0.244	2.0.244	2.0.244	2.0.263	2.0.263	2.0.271
Sedecal.Console.Data.Infrastructure.dll	1.0.86	1.0.95	1.0.102	1.0.110	1.0.110	1.0.111	1.0.111	1.0.111	1.0.116	1.0.116	1.0.116
Sedecal.GenericMessages.Controller.dll	1.1.19	1.1.19	1.1.20	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26	1.1.26
System.Data.SQLite.dll	1.0.108	1.0.109	1.0.109	1.0.109	1.0.109	1.0.109	1.0.109	1.0.109	1.0.109	1.0.109	1.0.109
Unity.Abstractions.dll	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0	3.0.0
Unity.Container.dll	5.5.0	5.5.0	5.5.0	5.5.0	5.5.0	5.5.0	5.5.0	5.5.0	5.5.0	5.5.0	5.5.0

Table 6 Log Service

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7. Known bugs

Not known bugs. Refer to document IS1917RL CHALLENGE-X ATOMIUM.docx for previous known bugs.

8. Revision history

- Rev A:
 - 21/01/2019 Document created
 - 21/01/2019 Document created by splitting IS1917RL CHALLENGE-X ATOMIUM.docx in different components and including changes for release V1R0P0.
- Rev B:
 - 14/06/2019. This software package was numbered as V7R0P3 in RevA. That version is related to a ChallengeX release. Since this documentation was splitted, and these modules can run in different systems, we redefine veresioning as such as V7R0P3 becomes V1R0P0
 - 14/06/2019. Document modified to Phoenix packet software documentation V1R2P0
- Rev C:
 - 17/07/2019. Changes in File Manager and SmartHUB.
- Rev D: 03/02/2020. Minor changes, bug fixing and refactors.
- Rev E: 10/03/2020. Snapshot cancel
- REV F: 29/09/2020. Change in file manager, log service and comms dll
- REV G: 16/12/2020. Minor changes in file manager and comms dll
- REV H: 17/02/2021 Changes in comms dll
- REV I: 22/06/2021 Changes in all components
- REV J: 11/10/2021 Digital signature in all components
- REV K: 23/11/2021 Log traces on SmartHub sw.
- REV L: 25/11/2021 Changes in comms dll