EcoStruxure Building Operation

Hilton OnQ Integration SmartConnector

Installation & User Guide

04-20018-02-en September 2024







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Functional Overview

The Hilton OnQ PMS system interface is a middleware application that enables communication between Hilton OnQ applications with EcoStruxure Building Operation via EcoStruxure Web Services (EWS). Each room in the PMS is represented in the EcoStruxure Building Operation model of the PMS. PMS attributes configured in the interface may be used to implement custom sequences. A multi-state value indicates the number of persons checked into a room as well as information for the guest name, language and expected departure date. The interface can fully represent items in the PMS system with data synchronisation between the two systems. This ensures the SmartConnector database is maintained and kept up to date without any user intervention.

The processor leverages the SmartConnector Service framework and details of the application (release history, installation notes etc.) are available separately and are not covered in this manual.

The SmartConnector application is licensed on a single server basis but may also be configured to connect to both Automation Server (AS-P) devices as well as Enterprise Servers (ES).

2 Restrictions & Limitations

2.1 SmartConnector Service Version

The processors have been configured to operate with the SmartConnector version 2.5, use with any other version of the SmartConnector framework is not supported.

2.2 EWS Supported Systems

The processors can support EcoStruxure systems operating with the EcoStruxure Web Services (EWS) protocol v1.1 and v1.2.

2.3 Hilton OnQ Supported System

The SmartConnector has been tested and validated against the OnQ Interface Application Specification v2.12

Other versions may cause issues and are not supported. Please check with your supplier.

Installation

Please refer to the SmartConnector Installation and Configuration Guide.pdf for guidance on SmartConnector installation.

To deploy the OnQ assembly copy the below files into the service installation directory. Normally "C:\Program Files (x86)\Schneider Electric\SmartConnector"

- Cucumber.Messages.dll
- 🚳 Gherkin.dll
- Google.Protobuf.dll
- ISC.FiasProtocol.dll
- 🗟 ISC.OnQ.dll
- ISC.PmsSql.dll
- Microsoft.Rest.ClientRuntime.dll
- Microsoft.SqlServer.ConnectionInfo.dll
- Microsoft.SqlServer.Dmf.dll
- Microsoft.SqlServer.Management.Sdk.Sfc.dll
- Microsoft.SqlServer.ServiceBrokerEnum.dll
- Microsoft.SqlServer.Smo.dll
- Microsoft.SqlServer.SqlEnum.dll
- NCrontab.Signed.dll
- Newtonsoft.Json.Bson.dll
- NLog.Targets.Syslog.dll
- SmartConnector.Utilities.dll
- System.Buffers.dll
- System.Memory.dll
- System.Numerics.Vectors.dll
- System.Runtime.CompilerServices.Unsafe.dll
- System.Threading.Tasks.Extensions.dll
- System.Web.Http.WebHost.dll
- TechTalk.SpecFlow.dll
- Utf8Json.dll

4 Configuration & Settings

4.1 Processor Configuration

With a default installation of SmartConnector, the configuration pages for the server can be reached at the following address on the server the service has been installed on:

http://localhost:8082/

SmartC	onne	ctor	× +							-		×
i) loc	alho	st :8082/statu:	s			C Q Sec	ırch	☆ 自	ŧ	Â	◙	Ξ
	3	Status	s Configurat	ions -	EWS Servers	Setup v	About	Logged in	ı as adr	min -		
S	tat	tus										
	efresh	a										
		ssor Threads	Astive Foder	inte	Configuration Day	weete EM						
P	roces	sor Inreads	Active Endpo	ints	Configuration Rec	uests EV	/S Server Requests					
	#	Status		Elapse	d Time (hh:mm:ss)	Processor Con	figuration				
	1	Waiting For V	Vork									
	2	Waiting For V	Vork									
	3	Waiting For V	Vork									
	4	Waiting For V	Vork									
	5	Waiting For V	Vork									
					5 items presen							
S	ch	moid	0 K									
3	ų	Elect	ric									
		Schneider Elect										

4.2 Adding the Custom Assembly to the Service

Switch to the Configurations tab and select Add New +



At the Add Configuration window, Step 1 – Pick an assembly, select the reference to ISC.OnQ (this will be highlighted green when selected)

martConnector × +		-	
localhost:8082/addProcessorConfiguration	▼ C Q. Search	☆自∔命	C
Status Configurations • EWS Servers Setup • Abou		Logged in as admin -	
Add Processor Configuration			
Back Next Cancel			
Step 1 - Pick an assembly			
ISC.OnQ		2 candidates	L
Mongoose.Process		3 candidates	1
Assembly Description Ora Integration Assembly Company Schreider Electric - Integration Solutions Centre			
Assembly Copyright			
Copyright © 2017			
Assembly Version			
1.0.0.0			
Schneider Electric Copyright © Schneider Electric 2013-2017			

Select Next and proceed to Step 2 Choose a Class

Ensure the class ISC.OnQInterfaceProcessor is selected first

ISC.OnQ.InterfaceProcessor

Select Next and proceed to Step 3 Name Configuration

Enter a meaningful name and description for the Processor which will enable you to identify this process in the configuration window later.

Select Finish and proceed to the Configuration screen.

SmartConnector X +		-		
localhost:8082/ProcessorConfiguration?id=3 Rev 80% C Q Search	☆自	↓ 俞	◙	1
Status Configurations - EWS Servers Setup - About	Logged in as	admin -		
Processor Configuration				
Edit All 🗭 Start 🕨 Validate 🕑 Reset Counter 🖨 Reset Timer 🖫 📫				
Name Is Active				
OnQ Interface Processor Drue True		- 0		
Description				
Create connection with PMS to request and receive data. Send heartbeat and Update last connection time.		Ø		
Processor Details Control History Schedule Class Name ISC.OnQ.InterfaceProcessor				
Assembly File				
ISC.OnQ.dll				
Assembly Description				
OnQ Integration				
Assembly Company				
Schneider Electric - Integration Solutions Centre				
Assembly Copyright				
Copyright © 2017				
Assembly Version				
1.0.0.0				
Schneider				
General Contraction of the second sec				
Copyright © Schneider Electric 2013-2017				_

In the configuration window select the Details Tab, you will then be presented with the screen to enter the configuration information. Much of the configuration has default options however they should be checked and validated for the installation. Edit the applicable fields as follows.

IP Address and Port Number

These properties should be set to Server's IP Address and Port Number respectively to establish connection with OnQ server.

Restart Communication Time

This property is to set the amount of time (in minutes) that the service will wait to reset the connection after the last message received during a Data Swap.

Read Write Time Out

This property is to set amount of time (in milliseconds) that Read and Write operations block waiting for Data.

Heartbeat Mins

This property is to set the interval (in minutes) between Heartbeat messages.

Cache Message Expiry Duration Minutes

This property is to set the duration of a message held in Cache before it expires.

Cache Write Sleep Time

This property is to set the time interval (in milliseconds) that Cache waits before processing the next message.

PMS Connection Retry Interval

This property is to set the time interval (in seconds) between connection retries to PMS.

In the configuration window select the Control Tab, you will then be presented with several options to define the Processor's default behavior. It is recommended to set the following;

Runs On Start – Yes (To enable the Processor to automatically start with the machine) Runs On Schedule – Yes (Although this processor should never terminate, attaching a short cycling schedule will ensure that if it stops unexpectedly, it will attempt to auto restart on the schedule.) Manually Startable – Yes (To allow a user to start through the configuration window

Manually Stoppable - Yes

The Save Button allows the process configuration to be saved to the database.



A complete configuration will appear as follows:

Port Number *	
5040	
Restart Communication Time * 5	
Ip Address *	
127.0.0.1	
Read Write Time Out *	
2000	
Heartbeat Mins *	
Cache Message Expiry Duration Minutes *	
30	
Cache Write Sleep Time *	
1	
Pms Connection Retry Interval *	

Follow the same procedure to configure the second Processor.

Ensure the class ISC.OnQServerManagerProcessor is selected

ISC.OnQ.ServerManagerProcessor

Select Next and proceed to Step 3 Name Configuration

Enter a meaningful name and description for the Processor which will enable you to identify this process in the configuration window later.

Select Finish and proceed to the Configuration screen.

SmartConnector	× +										-		>
(i) localhost:8082/Pr	ocessorConfigur	ation?id=4				80% C	Q , Search		☆□自	Ŧ	Â	♥	
Status	Configurations -	EWS Servers	Setup v	About			Window Snip		Logged	in as adn	nin v		
Processor	Configura	ation											
Edit All 🗹 Start 🕨 🕚	Validate 🗹 🛛 Reset Coun	iter 🧐 🛛 Reset Timer	X										
Name					_	Is Active							
OnQ Server Manager Pr	ocessor				Ø	True					- 0		
Description													
Create, configure and st	tart the Server. Process	booking messages									Ø		
Class Name ISC.OnQ.ServerMan Assembly File ISC.OnQ.dll	agerProcessor												
Assembly Description													
OnQ Integration													
Assembly Company													
Schneider Electric -	Integration Solutions C	entre											
Assembly Copyright													
Copyright © 2017													
Assembly Version													
1.0.0.0													
Schneide	er												

In the configuration window select the Details Tab, you will then be presented with the screen to enter the configuration information. Much of the configuration has default options however they should be checked and validated for the installation. Edit the applicable fields as follows.

User Name

This property is required to allow the EWS server connection to be authenticated.

Password

As above, this is the password related to the user credentials.

Server Address

This property is should be set to the full address required to access the EWS Server being hosted. This is normally in the case of a StruxureWare ES or AS device as follows:

http://<IPADDRESS>:<PORT(8093)>/EcoStruxure/DataExchange

*Note that the address is case sensitive!

Server Name

This property is just a friendly text name field to allow you to easily identify the specific Endpoint you are configuring.

Checkout Time

This property is just a default Date Time field to allow you to specify a checkout Time of your preference.

Room Text

This property is just a friendly text name field to allow you to identify the specific property you are configuring.

Occupied

This property is just a friendly text name field to allow you to identify the specific property you are configuring.

Departure Date

This property is just a friendly text name field to allow you to identify the specific property you are configuring.

Guest Name

This property is just a friendly text name field to allow you to identify the specific property you are configuring.

Guest Language

This property is just a friendly text name field to allow you to identify the specific property you are configuring.

Folder Text

This property is just a friendly text name field to allow you to identify the specific property you are configuring.

In the configuration window select the Control Tab, you will then be presented with several options to define the Processor's default behavior. It is recommended to set the following:

Runs On Start – Yes (To enable the Processor to automatically start with the machine)

Runs On Schedule – Yes (Define a schedule that determines how often the server is updated with messages received from the PMS – Suggested value would be 15 seconds)

Manually Startable – Yes (To allow a user to start through the configuration window

Manually Stoppable - Yes

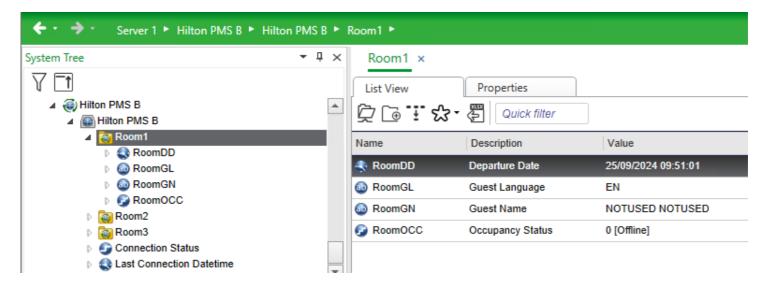
The Save Button allows the process configuration to be saved to the database.

Save 🛓

A complete configuration will appear as follows:

O User Name *	
admin	
Password *	
~ Encrypted ~	
Server Address *	
http://localhost.8093/EcoStruxure/DataExchange	
Server Name *	
New Server	
Checkout Time *	
12:00:00	
Room Text *	
Room	
Occupied *	
Occupancy Status	
Departure Date *	
Departure Date	
Guest Name *	
Guest Name	
O Guest Language *	
Guest Language	
Folder Text *	
Folder for Room	

Once the SmartConnector EWS Server Interface has been hosted in EcoStruxure Building Operation, rooms will be displayed as follows:



5 Revision History

Version	Assembly File Details	Date
1.0.2.29	ISC.FiasProtocol.dll	25 th September 2024
1.0.2.29	ISC.OnQ.dll	25 th September 2024
1.0.2.29	ISC.PmsSql.dll	25 th September 2024

Assembly files required:

- Cucumber.Messages.dll
- 🚳 Gherkin.dll
- Google.Protobuf.dll
- SC.FiasProtocol.dll
- SC.OnQ.dll
- SC.PmsSql.dll
- Microsoft.Rest.ClientRuntime.dll
- Microsoft.SqlServer.ConnectionInfo.dll
- Microsoft.SqlServer.Dmf.dll
- Microsoft.SqlServer.Management.Sdk.Sfc.dll
- Microsoft.SqlServer.ServiceBrokerEnum.dll
- Microsoft.SqlServer.Smo.dll
- Microsoft.SqlServer.SqlEnum.dll
- NCrontab.Signed.dll
- Newtonsoft.Json.Bson.dll
- NLog.Targets.Syslog.dll
- SmartConnector.Utilities.dll
- System.Buffers.dll
- System.Memory.dll
- System.Numerics.Vectors.dll
- System.Runtime.CompilerServices.Unsafe.dll
- System.Threading.Tasks.Extensions.dll
- System.Web.Http.WebHost.dll
- TechTalk.SpecFlow.dll
- Utf8Json.dll

6 References

SmartConnector Installation and Configuration Guide.pdf (TDS-M-INSTALLCONFIG-US.BU.N.EN.12.2017.2.30.CC)

SmartConnector Version 2.2 Release Notes.pdf (TDS-M-RELEASENOTES-US.BU.N.EN.12.2017.2.30.CC)

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04-20018-02-en September 2024