

# EcoStruxure Building Operation

HotSOS Integration

SmartConnector

Installation & User Guide

04-20018-02-en  
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HotSOS Integration

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## Installation & User Guide

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# 1

## Functional Overview

The HotSOS SmartConnector extension enables communication between HotSOS and EcoStruxure Building Operation via EcoStruxure Web Services (EWS). HotSOS is a cloud-based guest service optimization solution that helps large hotels reduce guest incidents, optimize requests and maintenance scheduling. Each room in the associated hotel is represented in the EcoStruxure Building Operation model. Values associated with each room in the interface may be used to change values in the HotSOS system. These values include the status of various flags such as 'Do Not Disturb', 'Make Up Room', and 'Guest In Room'. The interface can fully represent items in the HotSOS system with data synchronization 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. Details of that 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 HotSOS Supported System

The SmartConnector has been tested and validated against the HotSOS API endpoint available at either of the following:





<https://ifc.int.hot-sos.net/API/Service.svc/soap>  
<https://ifc.hk.hot-sos.net/API/Service.svc/soap>

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

# 3 Installation

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

To deploy the HotSOS assembly copy the following files into the service installation directory. Normally this is found at “C:\Program Files (x86)\Schneider Electric\SmartConnector”

-  ISC.HotSOSConnector.dll
-  Mongoose.Process.Test.dll
-  NCrontab.Signed.dll
-  System.Web.Http.WebHost.dll

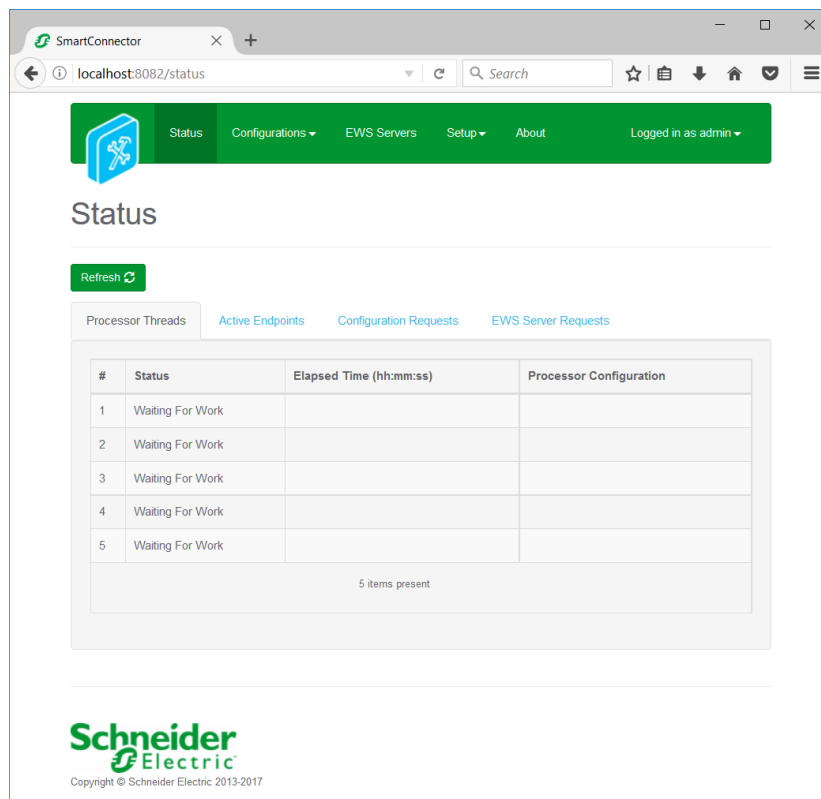


# 4 Configuration & Settings

## 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/>



The screenshot shows a web browser window with the URL `localhost:8082/status`. The page has a green navigation bar with a logo and menu items: Status, Configurations, EWS Servers, Setup, About, and Logged in as admin. Below the navigation bar is the title "Status" and a "Refresh" button. There are four tabs: "Processor Threads" (selected), "Active Endpoints", "Configuration Requests", and "EWS Server Requests". A table displays the status of five processor threads, all of which are "Waiting For Work".

#	Status	Elapsed Time (hh:mm:ss)	Processor Configuration
1	Waiting For Work		
2	Waiting For Work		
3	Waiting For Work		
4	Waiting For Work		
5	Waiting For Work		

5 items present

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## 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.HotSOSConnector (this will be highlighted green when selected)

The screenshot shows a web application interface for adding a processor configuration. At the top, there is a navigation bar with tabs for "Status", "Configurations", "EWS Servers", "Setup", and "About". The "Configurations" tab is active. Below the navigation bar, the title "Add Processor Configuration" is displayed. A progress bar shows "Step 1 - Pick an assembly". Below this, there are two options: "ISC.HotSOSConnector" (highlighted in green) and "Mongoose Process". Below the options, there are several fields for assembly details: "Assembly Description" (Connector to allow integration between Hot SOS and Struxeware), "Assembly Company" (Schneider Electric), "Assembly Copyright" (Copyright © ISC 2019), and "Assembly Version" (2.0.0.1). At the bottom, there is the Schneider Electric logo and copyright information.

Select Next and proceed to Step 2 Choose a Class

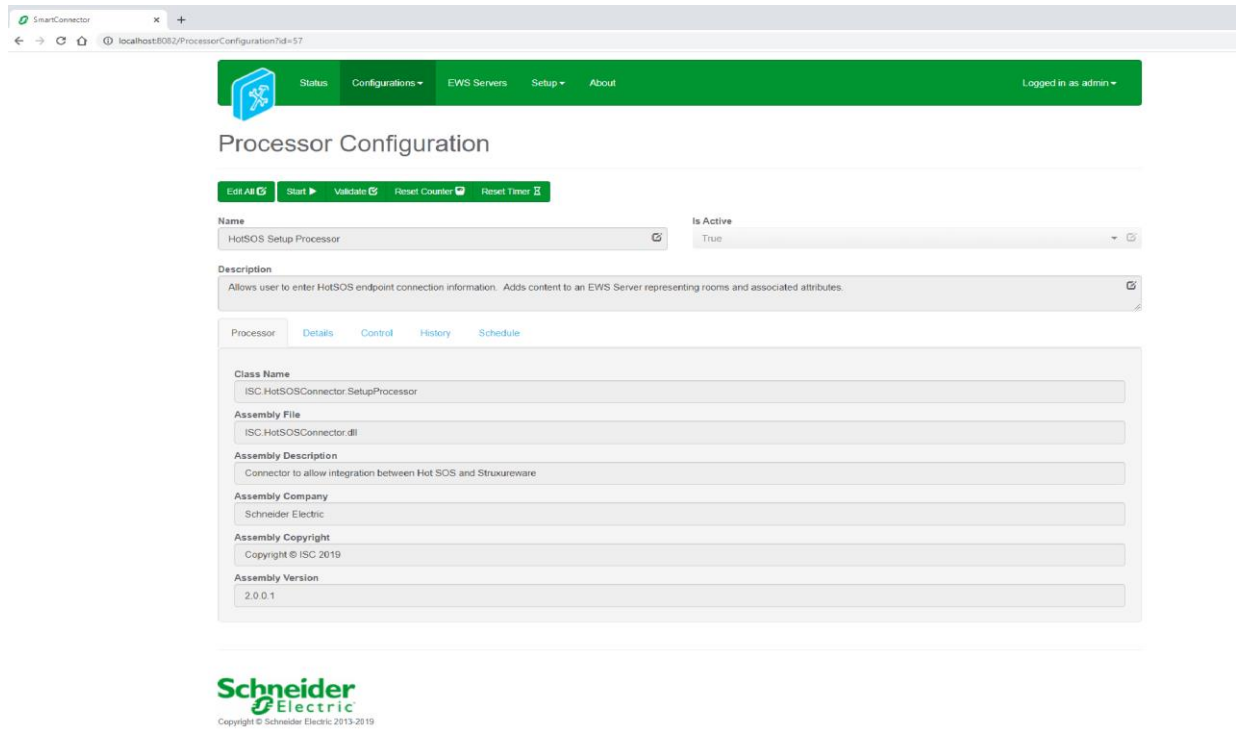
Ensure the class ISC.HotSOSConnector.SetupProcessor is selected first

ISC.HotSOSConnector.SetupProcessor

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.



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.

### **CSV File Location**

Enter the path to a csv file that lists the rooms of interest. This is typically all (or a subset of) the rooms defined in the HotSOS system.

- Representations of these rooms will be created in EWS automatically when you run the setup processor. Refer to the screenshot below for a simple example of the CSV format.
- Troubleshooting note: when the setup processor runs, it will match room information in this CSV file against content stored in the Smart Connector processor value called HotSOS. If the processor value already contains a reference to a given room, it will not be added or modified when the setup processor runs.
  - This can be useful information when setting up a test system, or when creating a new EWS server instance, or when troubleshooting.

```

Example Hotel
Room/Eq
Code,Room/Eq Name,Type,PMS Room,Occupancy,Room Category,Owner,Active
1,Room1001,Test,1,Yes,"2-Bedroom Home",Unit,Yes
2,Room1002,Test,2,No,"1-Bedroom Home",Unit,Yes
3,Room1003,Test,3,No,"2-Bedroom Home",Unit,Yes
4,Room1004,Test,4,No,"2-Bedroom Home",Unit,Yes
5,Room1005,Test,5,No,"2-Bedroom Home",Unit,Yes
6,Room1006,Test,6,No,"2-Bedroom Home",Unit,Yes
7,Room1007,Test,7,No,"2-Bedroom Home",Unit,Yes
8,Room1008,Test,8,No,"2-Bedroom Home",Unit,Yes
9,Room1009,Test,9,Yes,"2-Bedroom Home",Unit,Yes
10,Room1010,Test,10,Yes,"2-Bedroom Home",Unit,Yes
11,Room1011,Test,11,No,"2-Bedroom Home",Unit,Yes
12,Room1012,Test,12,No,"2-Bedroom Home",Unit,Yes
13,Room1013,Test,13,No,"2-Bedroom Home",Unit,Yes
14,Room1014,Test,14,No,"2-Bedroom Home",Unit,Yes
15,Room1015,Test,15,No,"2-Bedroom Home",Unit,Yes
16,Room1016,Test,16,No,"2-Bedroom Home",Unit,Yes
17,Room1017,Test,17,No,"2-Bedroom Home",Unit,Yes
18,Room1018,Test,18,No,"2-Bedroom Home",Unit,Yes
19,Room1019,Test,19,No,"2-Bedroom Home",Unit,Yes
20,Room1020,Test,20,No,"2-Bedroom Home",Unit,Yes
21,Room2001,Test,2001,No,"2-Bedroom Home",Unit,Yes
22,Room2002,Test,2002,No,"2-Bedroom Home",Unit,Yes
23,Room2003,Test,2003,No,"2-Bedroom Home",Unit,Yes

```

### **EWS Address**

This property should be set to the full address required to access the EWS Server being hosted. This is typically set to something like the following:

[http://<IPADDRESS>:<PORT\(8094\)>/EcoStruxure/DataExchange](http://<IPADDRESS>:<PORT(8094)>/EcoStruxure/DataExchange)

**\*Note that the address is case sensitive!**

### **SOAP API URL**

This property is set to the HotSOS API endpoint to which the Smart Connector processor will connect.

### **SOAP API User**

This value is required to allow the HotSOS endpoint connection to be authenticated.

### **SOAP API Password**

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

### **HotSOS Issue User ID**

The user ID associated with the HotSOS account.

### **Server Name**

This property is just a friendly text name field to allow you to easily identify the specific EWS endpoint you are configuring. It will be shown as the Name value on the EWS Servers view of the Smart Connector web interface.

### **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.

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:

The screenshot shows a configuration window with the following fields and values:

- Csv File Location \***: C:\RoomInformation\HotSOS\rooms.csv
- Ews Address \***: http://localhost:8094/EcoStruxure/DataExchange
- Soap Api Uri \***: https://fc.hk.hot-sos.net/API/Service.svc/soap
- Soap Api User \***: example\_soap\_api\_user
- Soap Api Password \***: - Encrypted -
- Hot Sos Issue User Id \***: Example Hot SOS User ID
- Server Name \***: HotSos
- User Name \***: admin
- Password \***: - Encrypted -

Follow the same procedure to configure the second Processor.

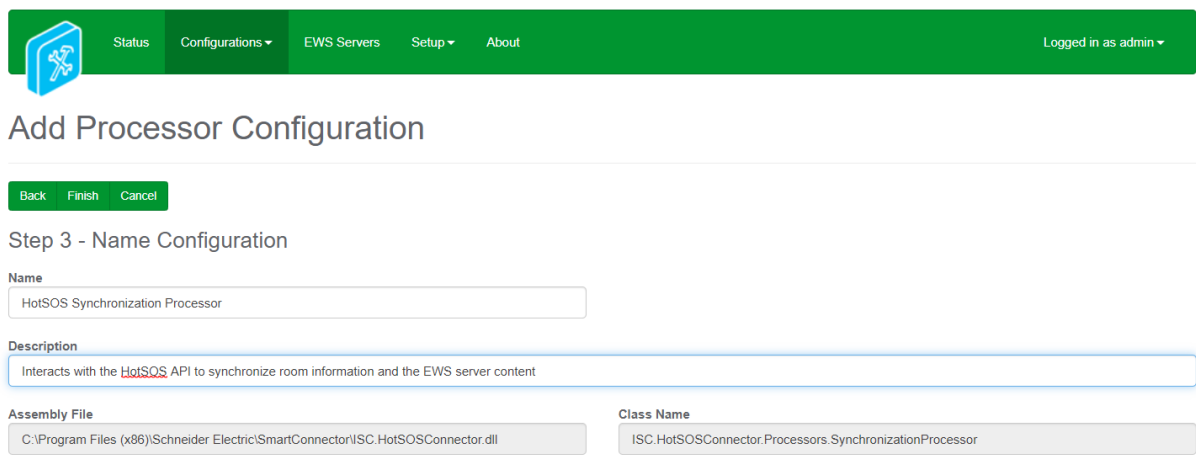
Ensure the class `ISC.HotSOSConnector.Processors.SynchronizationProcessor` is selected

ISC.HotSOSConnector.Processors.SynchronizationProcessor

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.



Back Finish Cancel

Step 3 - Name Configuration

Name  
HotSOS Synchronization Processor

Description  
Interacts with the [HotSOS](#) API to synchronize room information and the EWS server content

Assembly File  
C:\Program Files (x86)\Schneider Electric\SmartConnector\ISC.HotSOSConnector.dll

Class Name  
ISC.HotSOSConnector.Processors.SynchronizationProcessor

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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.

### **EWS Address**

This property should be set to the full address required to access the EWS Server being hosted. This is typically set to something like the following:

[http://<IPADDRESS>:<PORT\(8094\)>/EcoStruxure/DataExchange](http://<IPADDRESS>:<PORT(8094)>/EcoStruxure/DataExchange)

**\*Note that the address is case sensitive!**

### **HotSOS User ID**

The user ID associated with the HotSOS account.

### **Is Wait Enabled Prior To Requests**

This property determines if the processor is allowed to automatically wait prior to sending requests if it determines that the API limit has been reached in the previous run. This can typically be set to True.

- This feature helps the connector to stay within limits associated with the HotSOS API.
- Background information: There is typically a limit – sometimes specified in terms of requests per minute – associated with any given HotSOS API endpoint. The details of this limit are typically related to the HotSOS license in effect, and determining these limits are out of the scope of this document. Please contact your HotSOS administrator for more details on this part.

### **Is Throttling Enabled**

This setting determines if the processor is allowed to examine the current time and the expected request window end time to estimate how many requests it is allowed to make in the current run. This should typically be set to True.

### **Room Operation Type**

This value determines how the processor retrieves room information from the HotSOS API. This should be set to *Room Collection* which typically results in fewer requests compared to the other options.

- Previous releases of the HotSOS Smart Connector Extension used the *Individual Rooms* option, which requires one request per room.
- Using *Room Collection* is more likely to fall within the bounds of the HotSOS API request limit.
- Room Collection requests can retrieve up to 20 rooms in a single request. This constraint is applied by the HotSOS API, not by the Smart Connector extension.

### **Server Name**

This property is just a friendly text name field to allow you to easily identify the specific EWS endpoint you are configuring. It will be shown as the Name value on the EWS Servers view of the Smart Connector web interface.

### **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.

### **Advanced – Enable Retry Previously Deferred Requests**

This advanced feature should be set to True in most cases and is provided only for ease of troubleshooting.

- This setting provides a means of disabling the retry request feature of the HotSOS Synchronization Processor.
- The retry request feature gives highest priority to requests that had to be postponed in a previous run due to the HotSOS API request limit.
- Only set this to False when trying to create a troubleshooting scenario in which no requests deferred from a previous run are allowed.

### **Advanced – Enable Track API Limit For Service Orders**

This advanced feature should be set to False in most cases and is provided only for ease of troubleshooting. When this is set to True, the processor will log messages to Smart Connector log files under the trace log category when it encounters an API limit for Service Order requests.

### **Advanced – Maximum Seconds Before Abandoning Set Room Requests**

This advanced feature can be left at its default value in most cases. This value (expressed in seconds) determines the expiry time for *set room* request that are candidates to be retried. After this time window expires, the previously deferred *set room* request will no longer be retried.

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.



A complete configuration will look similar to the following:



Expand All Collapse All

Details

**Ews Address \***  
http://localhost:8094/EcoStruxure/DataExchange

**Hot Sos User ID \***  
Enter Numeric HotSOS User ID Here

**Is Wait Enabled Prior To Requests \***  
True

**Is Throttling Enabled \***  
True

**Room Operation Type \***  
Room Collection

**Server Name \***  
HotSos

**Ews User Name \***  
admin

**Ews Password \***  
~ Encrypted ~

Advanced

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

System Tree

- Room ID
- Service Status Room
- Status Room
- Room1002
  - Service Order
  - DND**
  - External App Uri
  - Guest In Room
  - Make Up Room
  - Occupied Room
  - Room ID
  - Service Status Room
  - Status Room
- Room1003
- Room1004
- Room1005

DND x

Basic References

General Information

Status Information

EWS Id HotSOS/Hotel/Room1002/DND

EWS Type boolean

Value True

EWS Writeable Read/Write

EWS State Good

## **Additional notes on the Setup Processor's CSV file**

This section gives additional information on the CSV file used by the Setup Processor. An example of this file is shown in the **CSV File Location** section above.

As mentioned earlier, much of the content of this CSV file can be obtained from the HotSOS application itself. Refer to the **CSV File Location** section above for an example of how to obtain this information from HotSOS, and for a screenshot of an example CSV file.

The setup processor skips the first four lines of the CSV file. It then reads each line and matches the left-most value (shown in the screenshot above under the "Code" column) to existing items in the Smart Connector's **HotSOS** processor value. More specifically, it uses the RoomID value of each room in the processor value. You can view this processor value in the Smart Connector web interface under Setup > Processor Values.





Rooms in the CSV file that do not match an existing room entry in the processor value are treated as additions to the EWS server. These rooms are added to the EWS server automatically by the setup processor.

The CSV file is most important during initial setup and installation of the HotSOS Smart Connector extension. After the rooms are established in the EWS server and tracked in the HotSOS processor value, further modifications to the CSV file are not typically required.

# 5 Revision History

<b>Version</b>	<b>Assembly File Details</b>	<b>Date</b>
1.1.0.2257	ISC.HotSOSConnector.dll	20 <sup>th</sup> Nov 2024

### **Assembly files required:**

-  ISC.HotSOSConnector.dll
-  Mongoose.Process.Test.dll
-  NCrontab.Signed.dll
-  System.Web.Http.WebHost.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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