# EcoStruxure Building Operation

## UoD Booking System

## Integration SmartConnector

### Installation & User Guide

04-20018-02-en
June 2024


Life Is On | Schneider Electric

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# Contents

# 1 Functional Overview

The UoD Booking System interface is a middleware application that enables communication between UoD Room Booking API service with EcoStruxure Building Operation via EcoStruxure Web Services (EWS). Each room in the UoD Booking System is represented in the EcoStruxure Building Operation model of the UoD Booking System. The interface can fully represent items in the Room Booking API 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 UoD Booking System Supported System

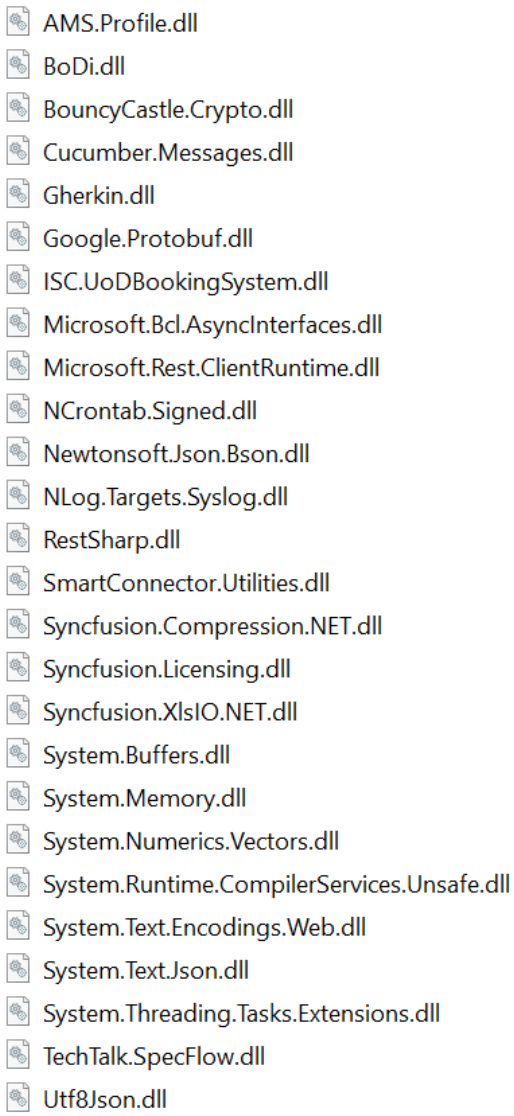
The SmartConnector has been tested and validated against the UoD Booking System API.

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 UoD Booking System assembly copy the following files into the service installation directory. Normally “C:\Program Files (x86)\Schneider Electric\SmartConnector”

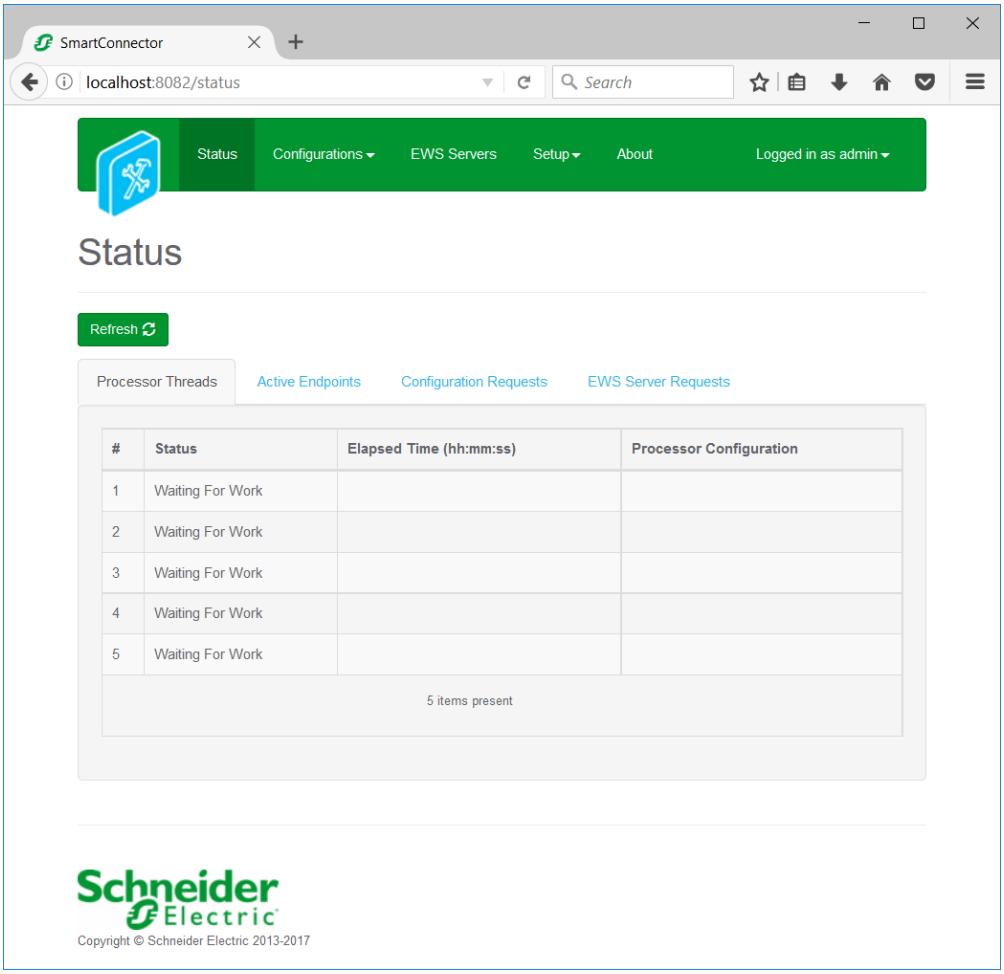


# 4 Configuration & Settings

## 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:

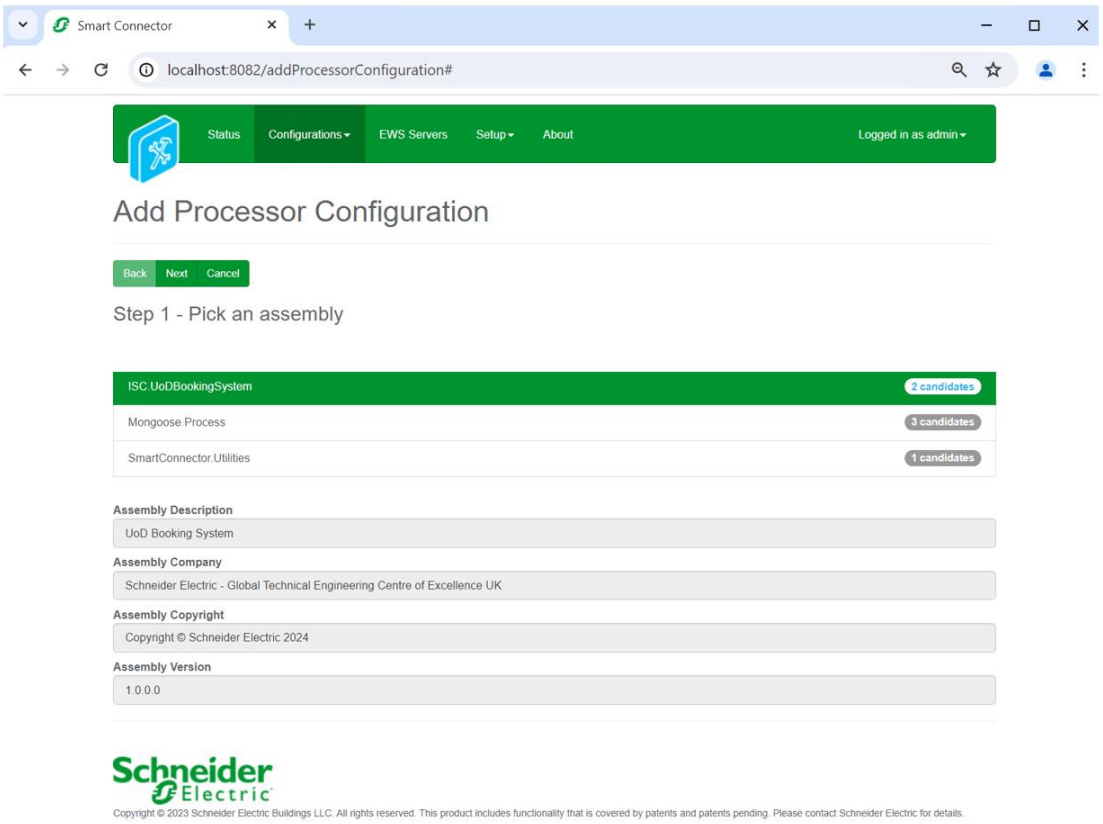
http://localhost:8082/



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



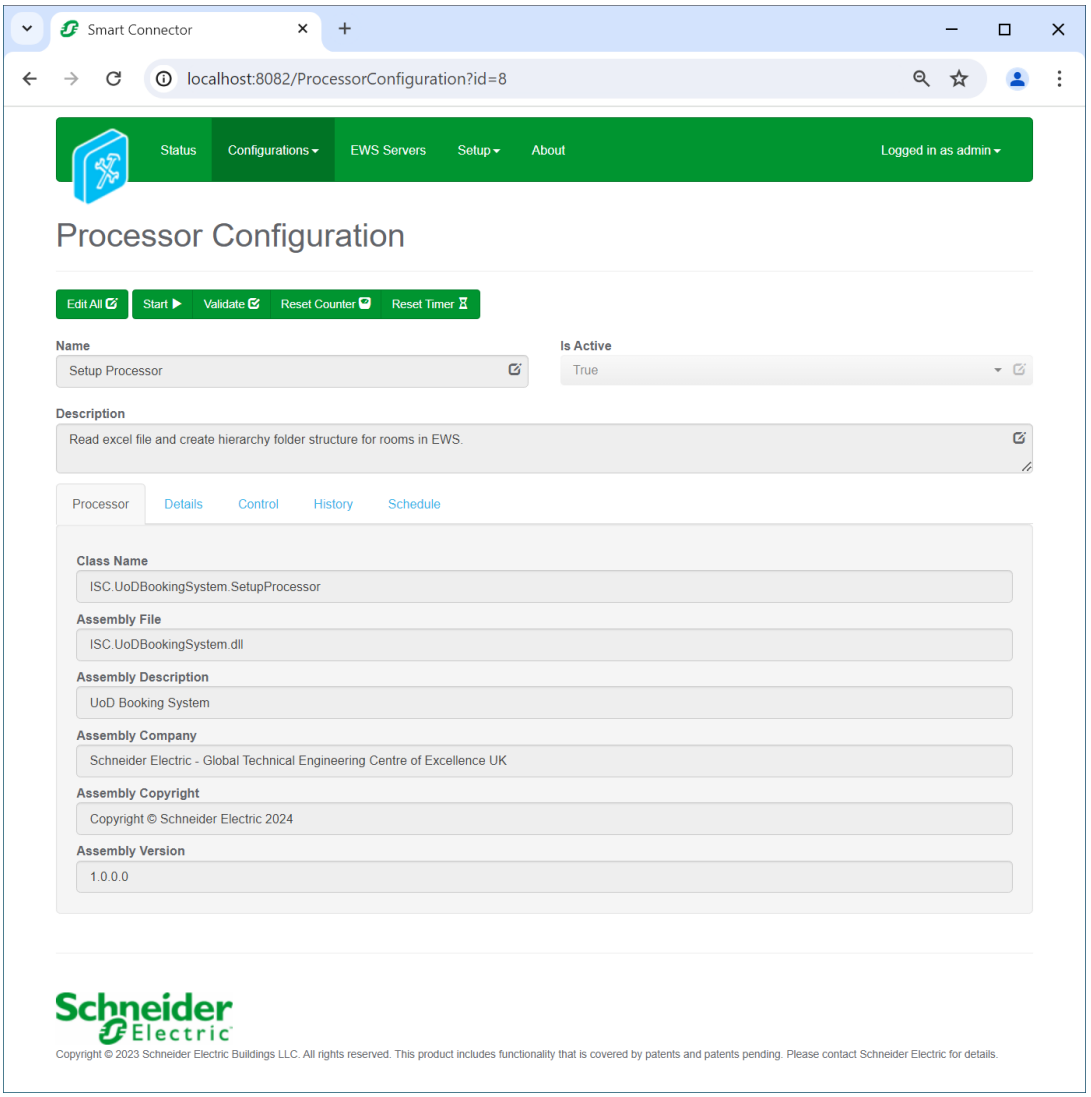

Select Next and proceed to Step 2 Choose a Class

Ensure the class ISC.UoDBookingSystem.SetupProcessor is selected first


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.

**Excel File Path**
This property is required to read and create the Site hierarchy in the EWS server.

**Root Folder**
This property is a friendly name for the root folder which will be created in the EWS server and it is required.

**Expand EWS Configuration field**

**Ews User Name**
This property is required to allow the EWS server connection to be authenticated.

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

**Ews Server Address**
This property 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(56892)>/EcoStruxure/DataExchange

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

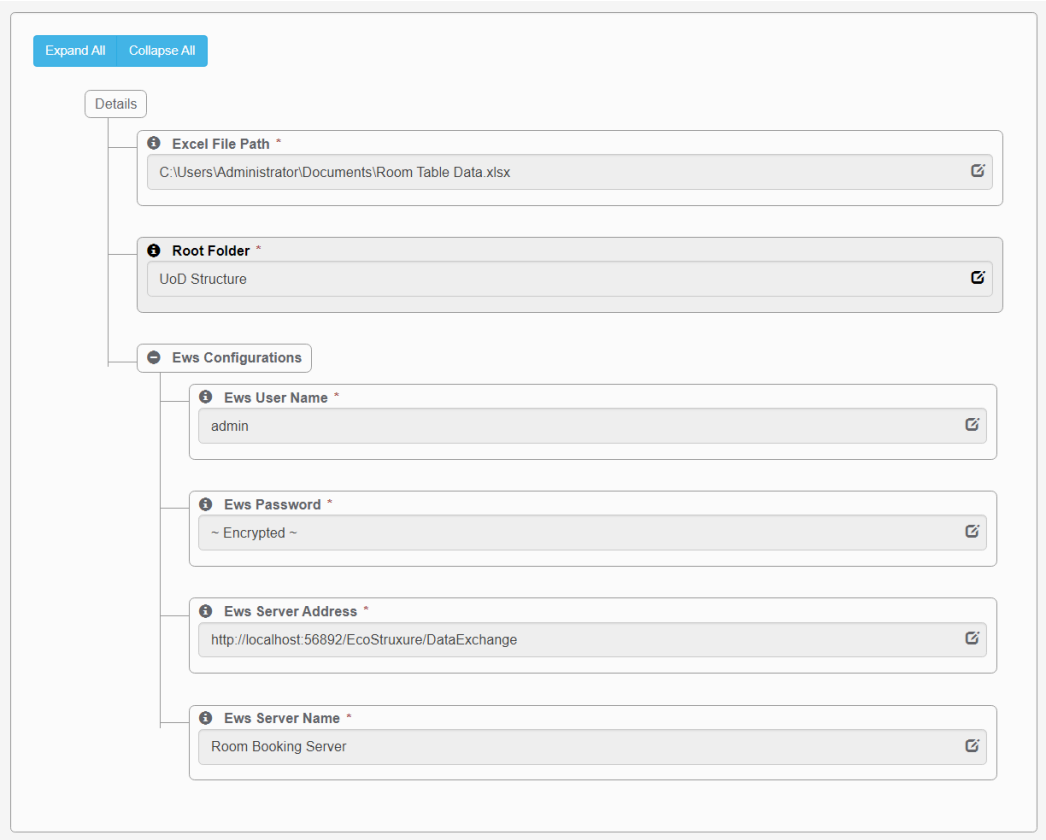
**Ews Server Name**
This property is just a friendly text name field to allow you to easily identify the specific Endpoint you are configuring.

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 – No
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:



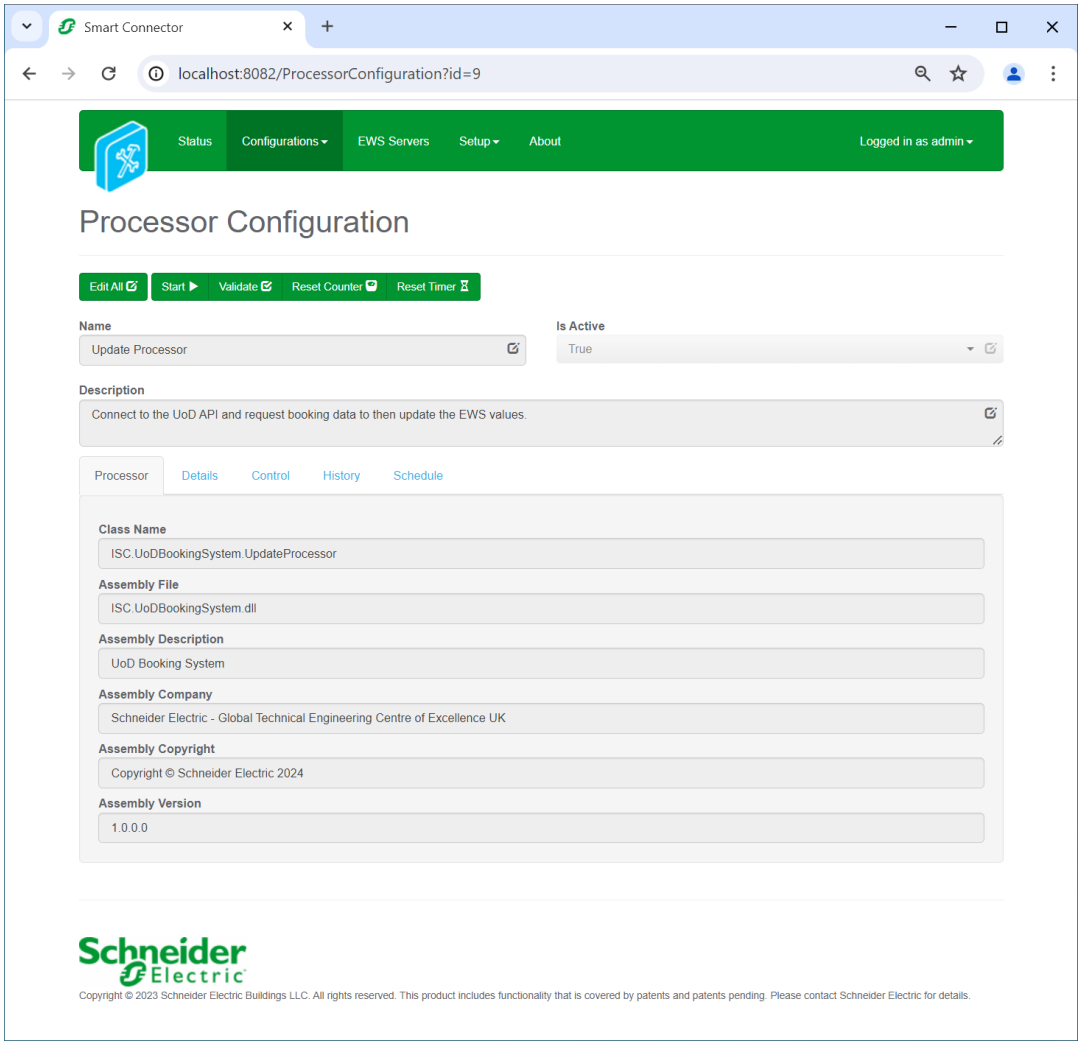

Follow the same procedure to configure the second Processor.

Ensure the class ISC.UoDBookingSystem.UpdateProcessor is selected


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.

**Base Url**
This property is required to access the Booking System API.

**Api Request**
This property is required to make the request to the Booking System API.

**Api Key**
This property is required to allow the Booking System API connection to be authenticated.

**Root Folder**
This property is a friendly name for the root folder which will be created in the EWS server and it is required.

**Expand EWS Configuration field**

**Ews User Name**
This property is required to allow the EWS server connection to be authenticated.

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

**Ews Server Address**
This property 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(56892)>/EcoStruxure/DataExchange

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

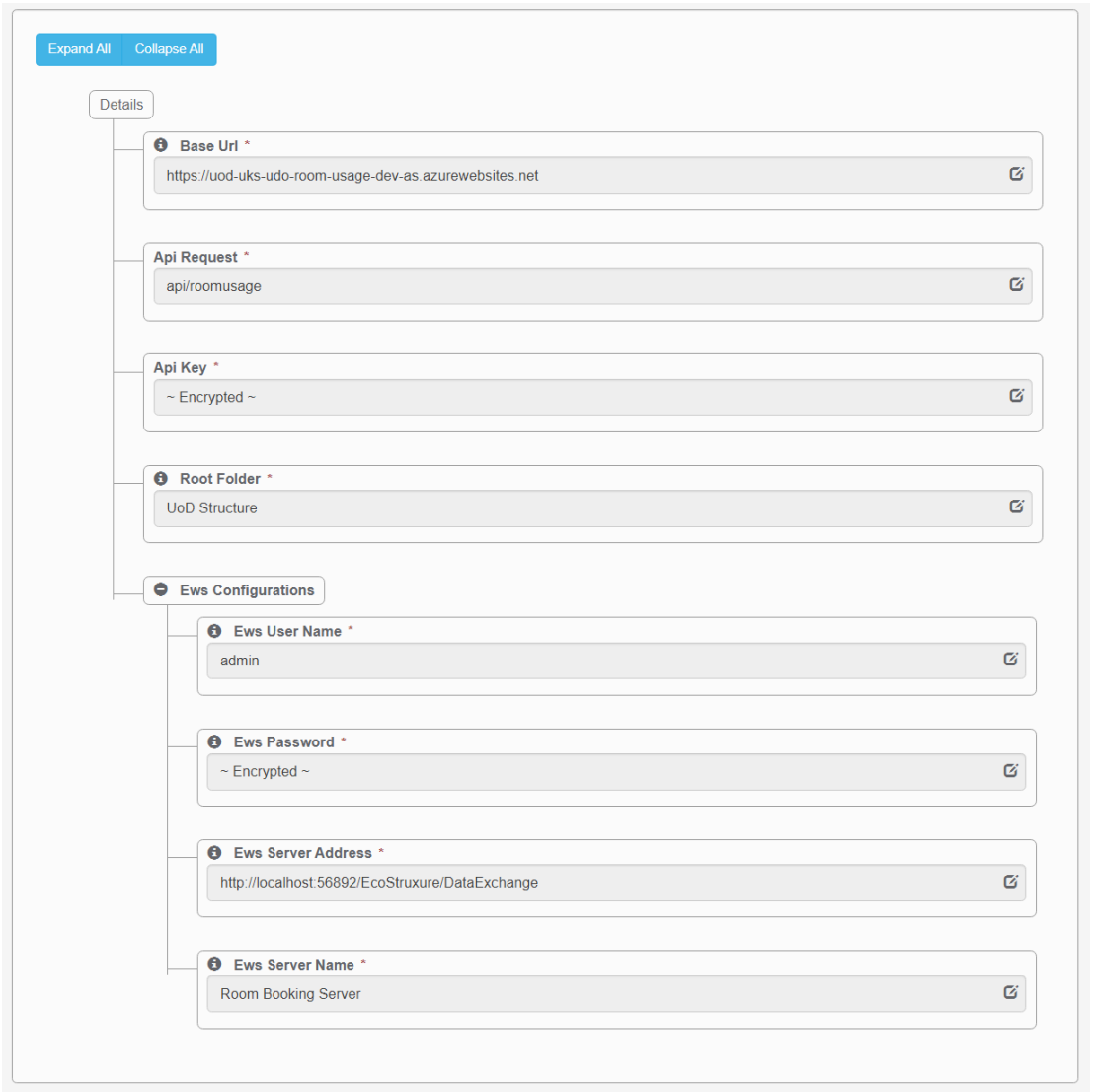
**Ews Server Name**
This property is just a friendly text name field to allow you to easily identify the specific Endpoint you are configuring.

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;

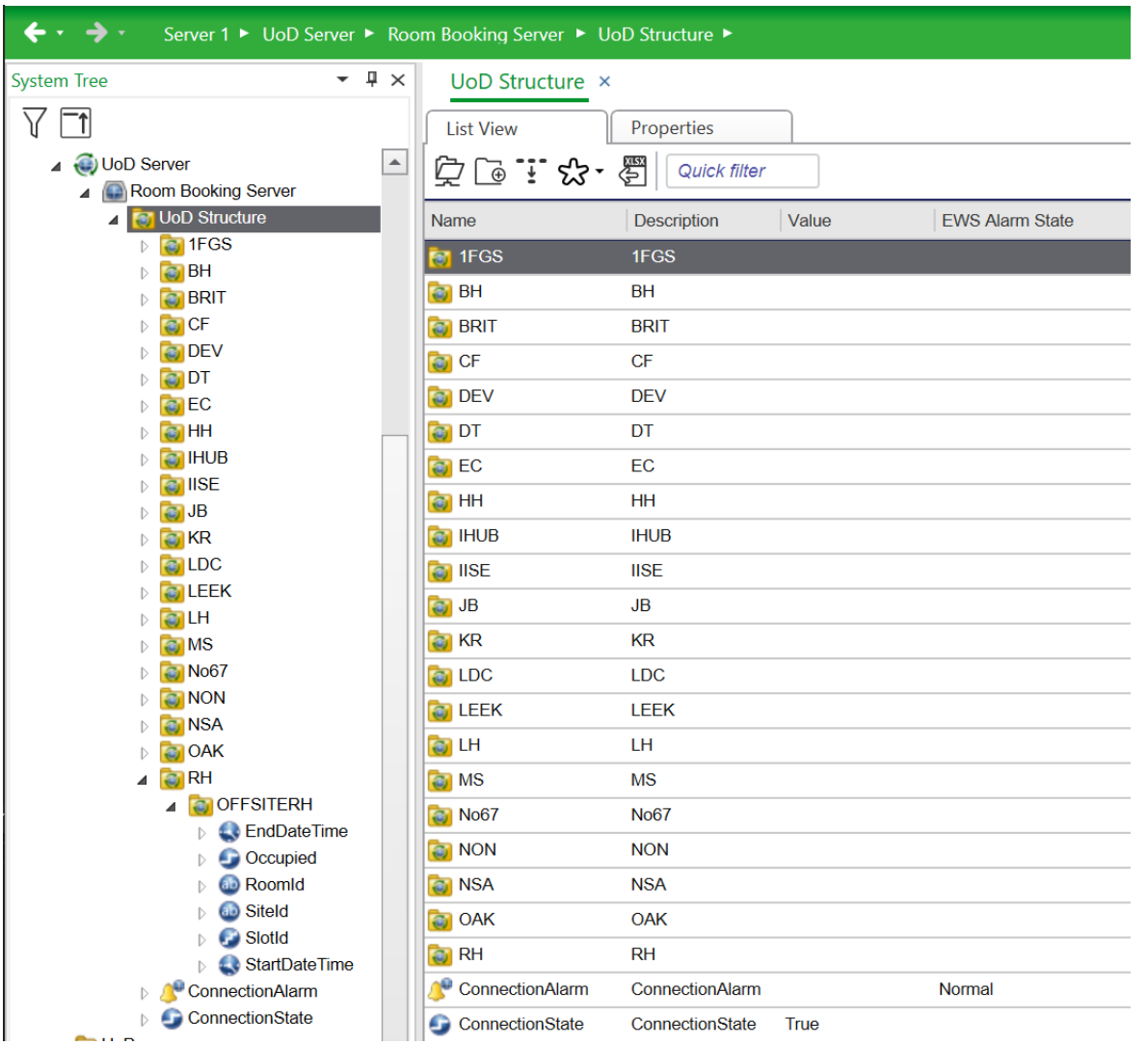
Runs On Start – Yes (To enable the Processor to automatically start with the machine)
Runs On Schedule – Yes (Define a schedule that determines how often data will be requested from the Booking System to updated the EWS server with the latest values)
Manually Startable – Yes (To allow a user to start through the configuration window
Manually Stoppable - Yes

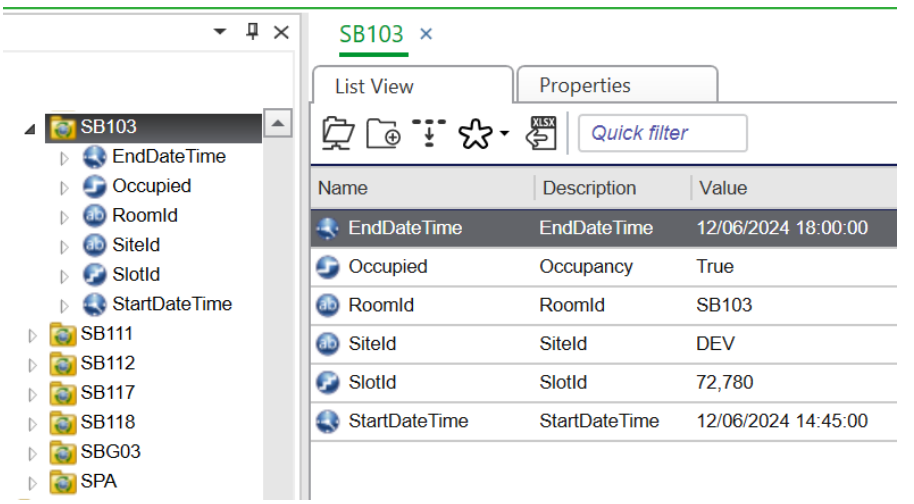
The Save Button allows the process configuration to be saved to the database.


A complete configuration will appear as follows:


Expand All
Collapse All
Details
Base Url *
https://uod-uks-udo-room-usage-dev-as.azurewebsites.net
Api Request *
api/roomusage
Api Key *
~ Encrypted ~
Root Folder *
UoD Structure
Ews Configurations
Ews User Name *
admin
Ews Password *
~ Encrypted ~
Ews Server Address *
http://localhost:56892/EcoStruxure/DataExchange
Ews Server Name *
Room Booking Server

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 |
|---|---|---|
| 1.1.0.1793 | ISC.UoDBookingSystem.dll | 12th June 2024 |

**Assembly files required:**

- AMS.Profile.dll
- BoDi.dll
- BouncyCastle.Crypto.dll
- Cucumber.Messages.dll
- Gherkin.dll
- Google.Protobuf.dll
- ISC.UoDBookingSystem.dll
- Microsoft.Bcl.AsyncInterfaces.dll
- Microsoft.Rest.ClientRuntime.dll
- NCrontab.Signed.dll
- Newtonsoft.Json.Bson.dll
- NLog.Targets.Syslog.dll
- RestSharp.dll
- SmartConnector.Utilities.dll
- Syncfusion.Compression.NET.dll
- Syncfusion.Licensing.dll
- Syncfusion.XlsIO.NET.dll
- System.Buffers.dll
- System.Memory.dll
- System.Numerics.Vectors.dll
- System.Runtime.CompilerServices.Unsafe.dll
- System.Text.Encodings.Web.dll
- System.Text.Json.dll
- System.Threading.Tasks.Extensions.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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