EcoStruxure Building Operation

Syllabus Plus Integration

SmartConnector

Installation & User Guide

04-20018-02-en
April 2024

Life Is On Schneider Electric

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1 Functional Overview

Integration between EcoStruxure Building Operation and Syllabus Plus, is developed to achieve energy efficiencies within the University's mechanical and electric systems by optimizing the run time and software control based on booking events occurring at different rooms. By using SmartConnector Extension to Integrate these 2 platforms, information from the Syllabus Plus database will be presented to an EWS Server for EWS Clients such as EcoStruxure Building Operation to consume.

Each room in the Syllabus Plus is represented in the EcoStruxure Building Operation model of the Syllabus Plus. Syllabus Plus attributes configured in the interface may be used to implement custom sequences. Values in each room will present information about the current activity in the room as well as room occupancy, time to next event, room capacity and some other information. A room can hold 1 to 5 activities at a time. Activity values indicate the name of the activity, as well as start and end time of the event, activity duration and some other relevant information about the activity.

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.

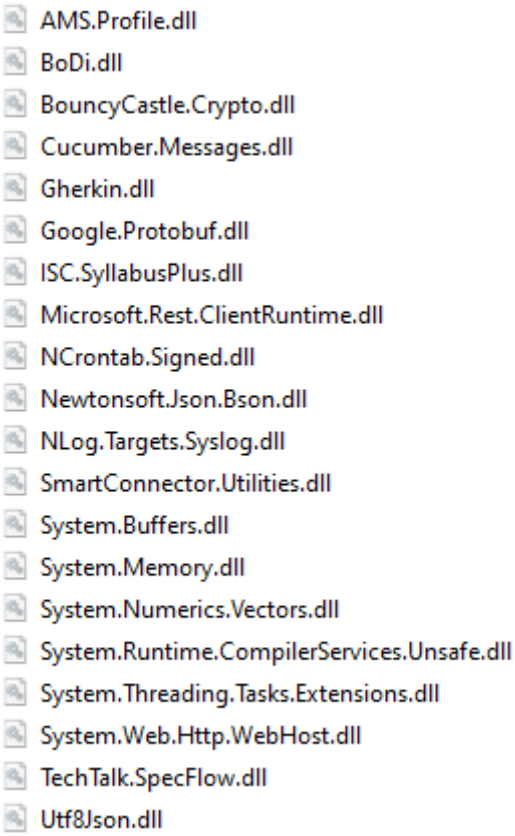
2.2 EWS Supported Systems

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

3 Installation

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

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

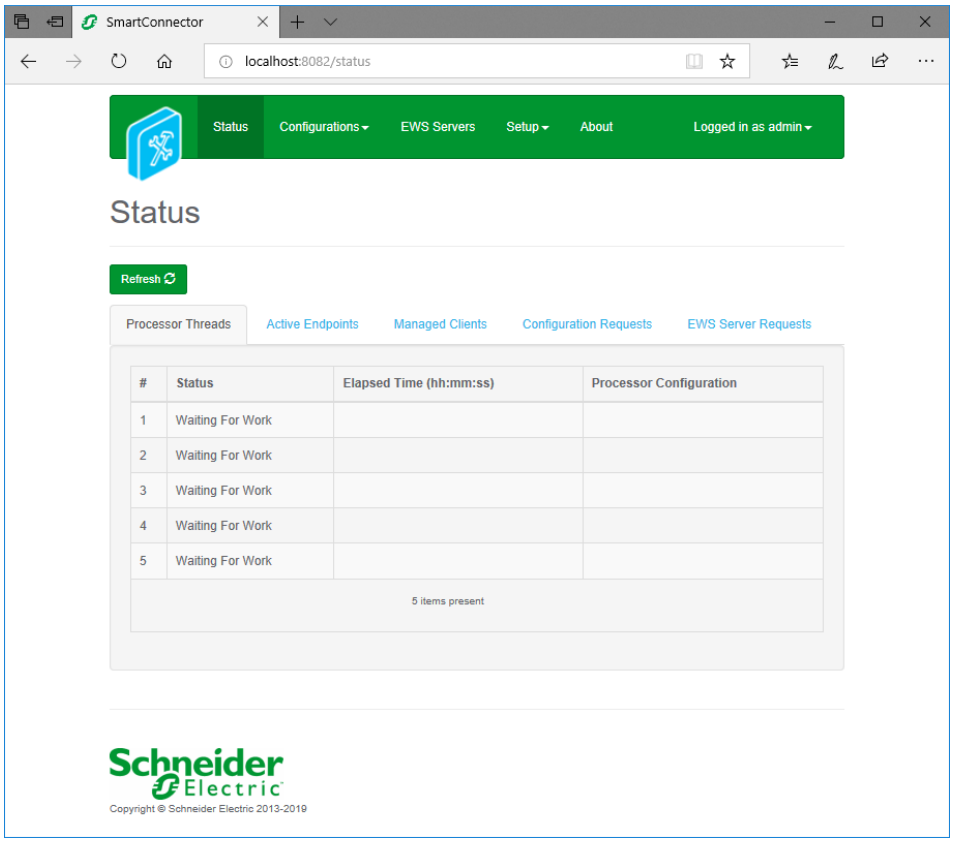


4 Configuration & Settings

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:

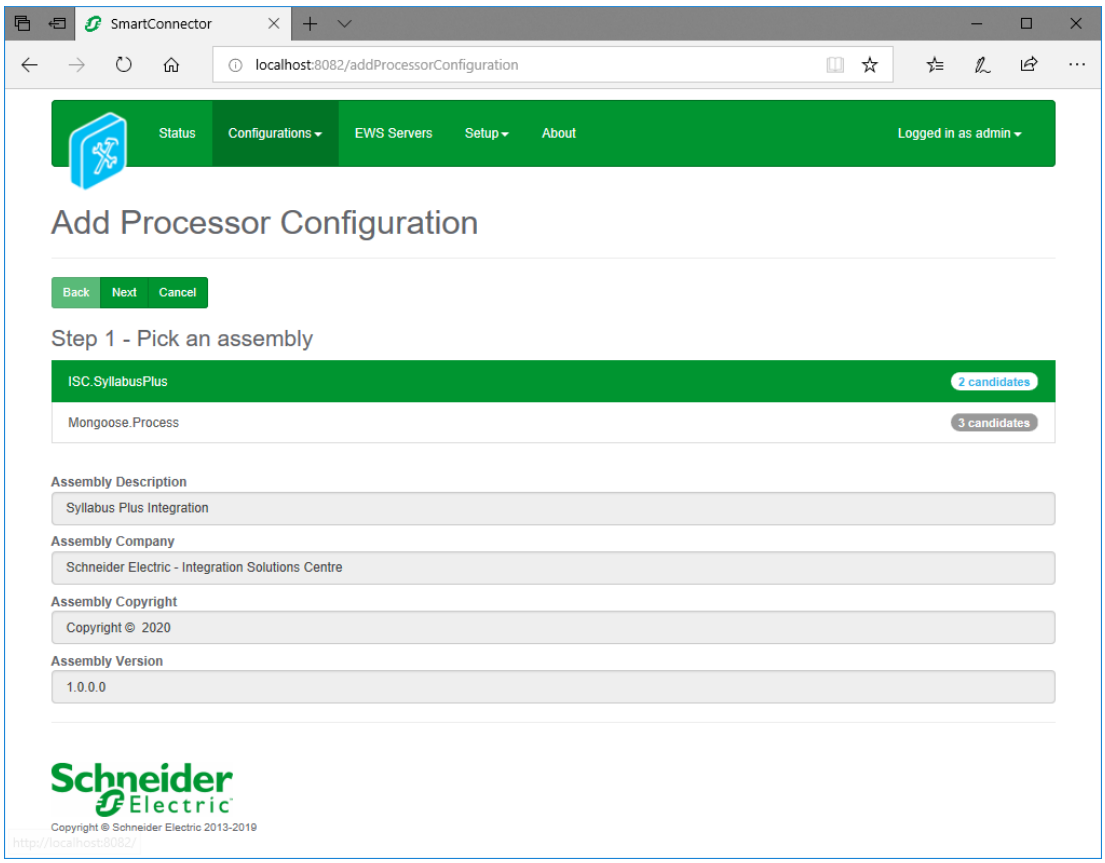
http://localhost:8082/



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.SylabusPlus (this will be highlighted green when selected)



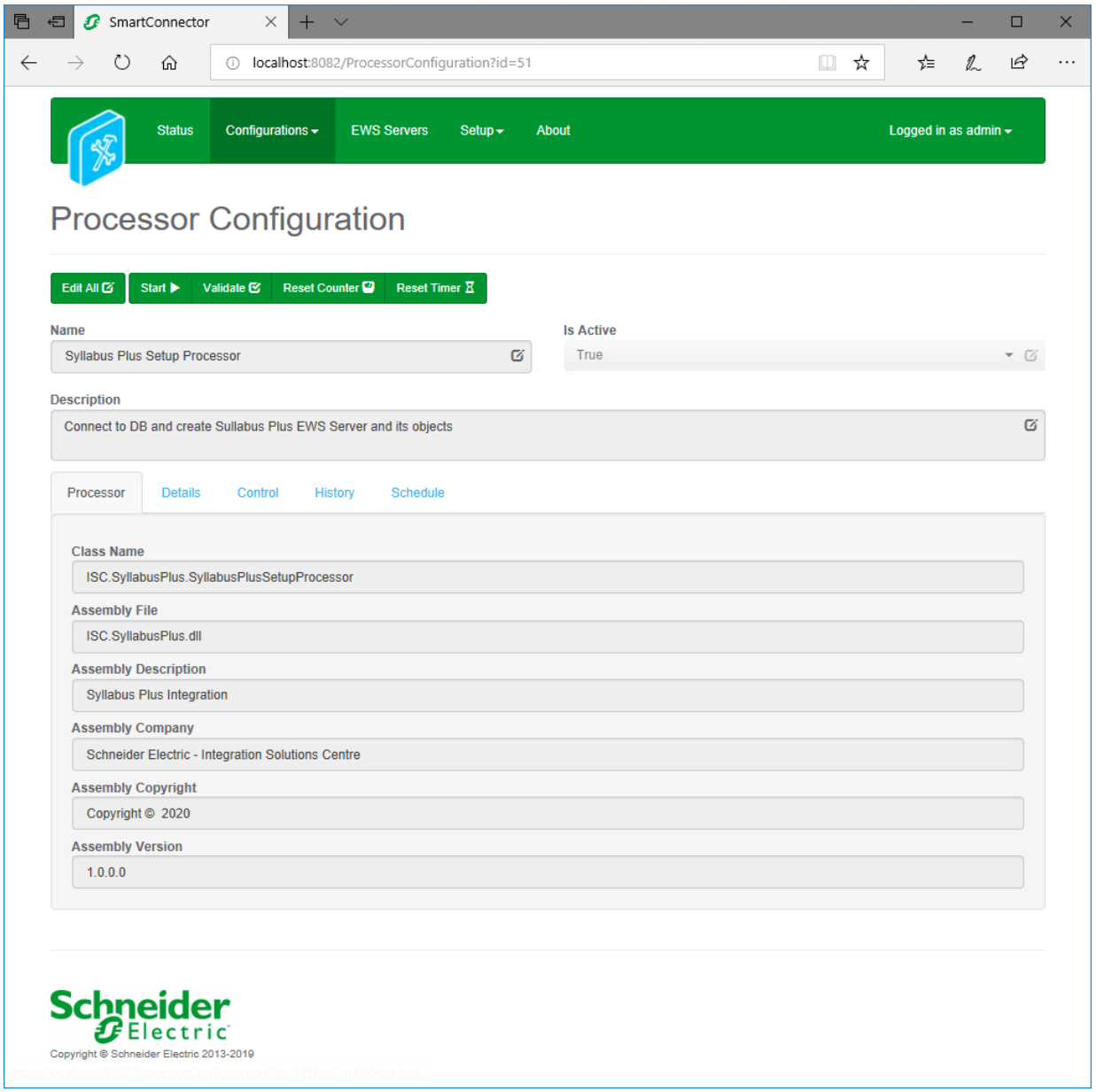
Select Next and proceed to Step 2 Choose a Class

Ensure the class ISC.SyllabusPlus.SyllabusPlusSetupProcessor 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.

Activity Buffer
This property should be set to the number of activities that can be held in the EWS Model. Minimum and default value is 1, Maximum value is 5.

Sql Connection String
This property should be set to the full connection string required to access SQL database.

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

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 EcoStruxure ES or AS device as follows:

http://<IPADDRESS>:<PORT(8073)>/EcoStruxure/DataExchange

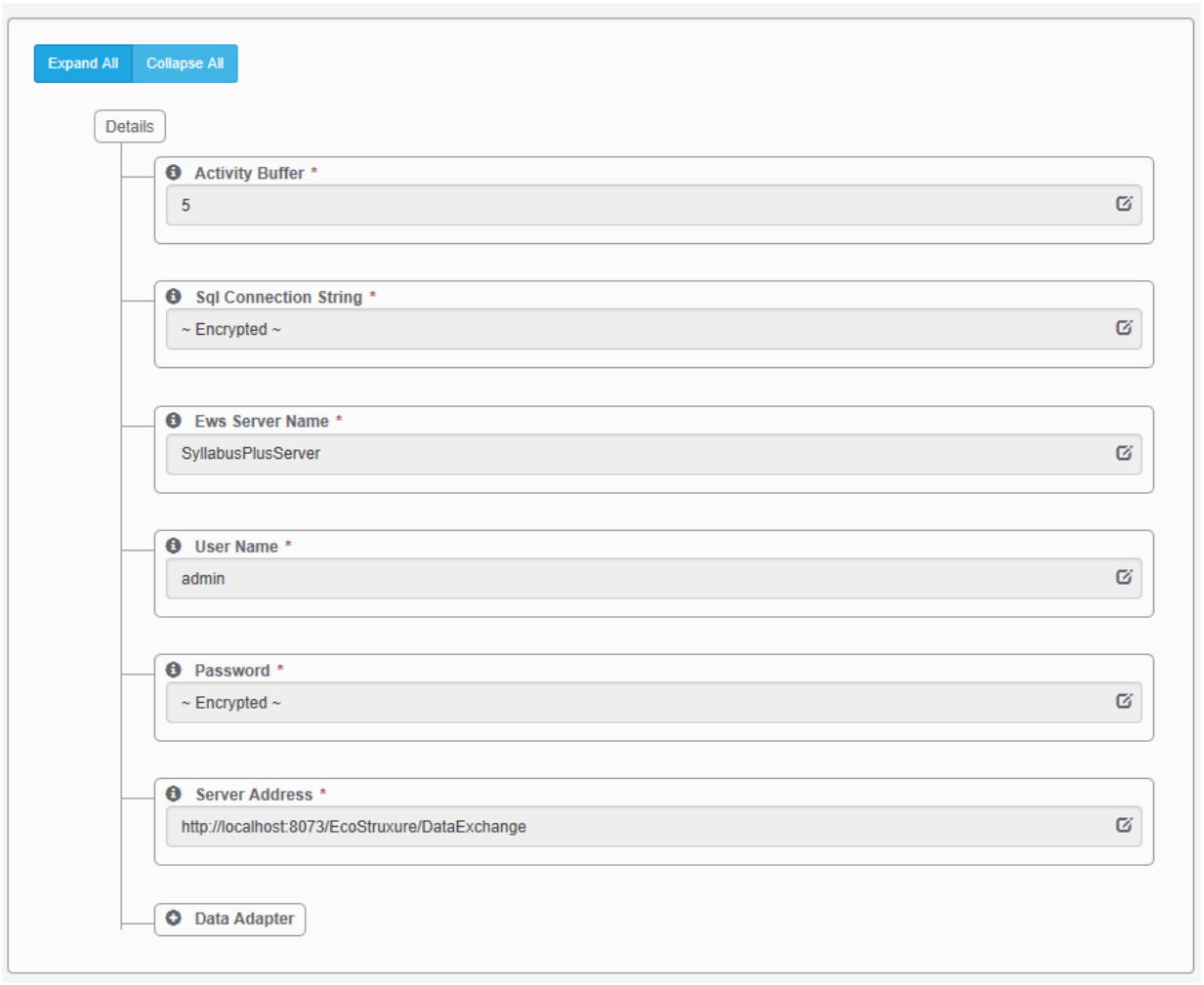
***Note that the address is case sensitive!**

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:



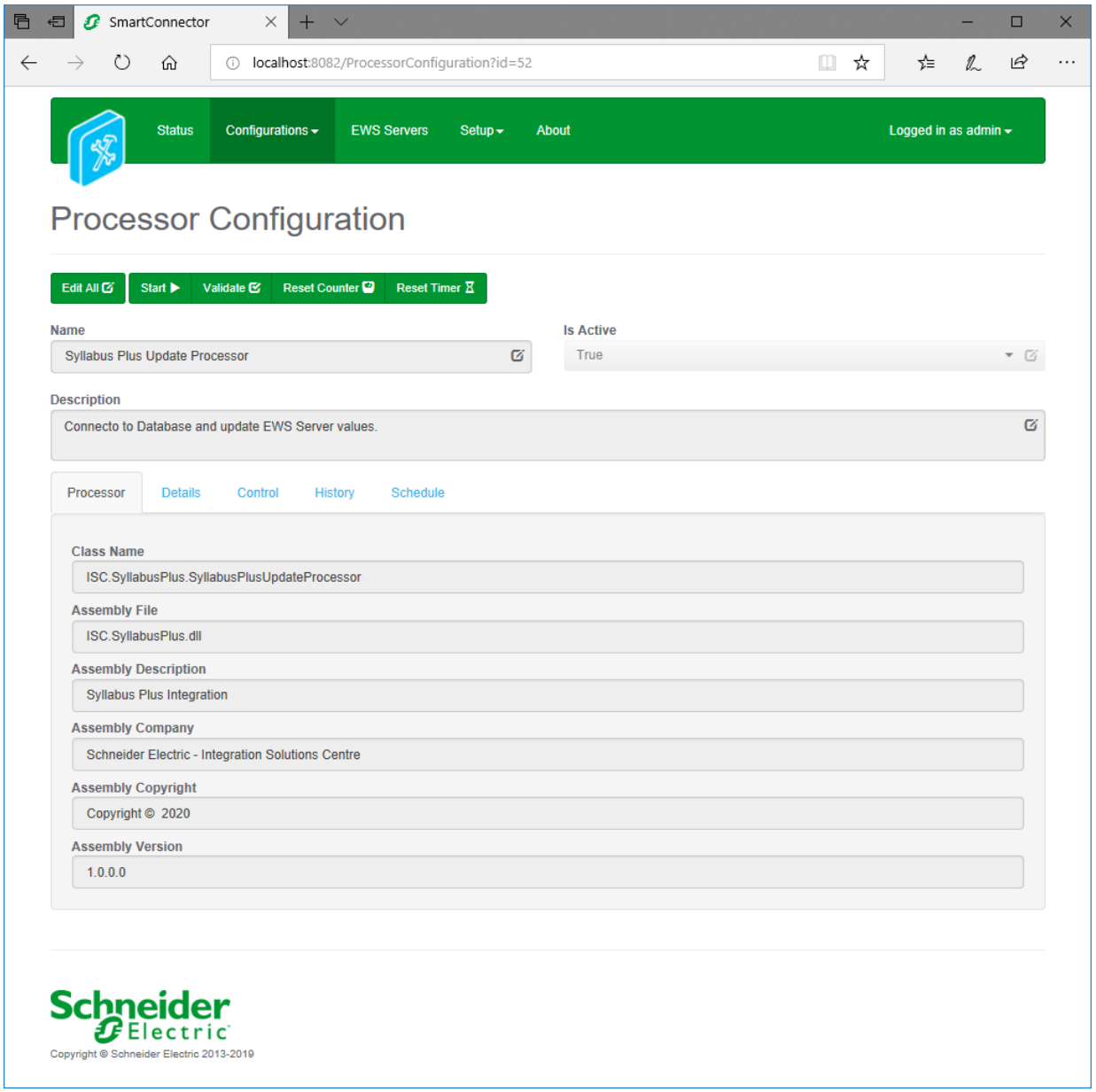
Follow the same procedure to configure the second Processor.

Ensure the class ISC.SyllabusPlus.SyllabusPlusUpdateProcessor 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.

Sql Connection String
This property should be set to the full connection string required to access SQL database.

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

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 an EcoStruxure ES or AS device as follows:

http://<IPADDRESS>:<PORT(8073)>/EcoStruxure/DataExchange

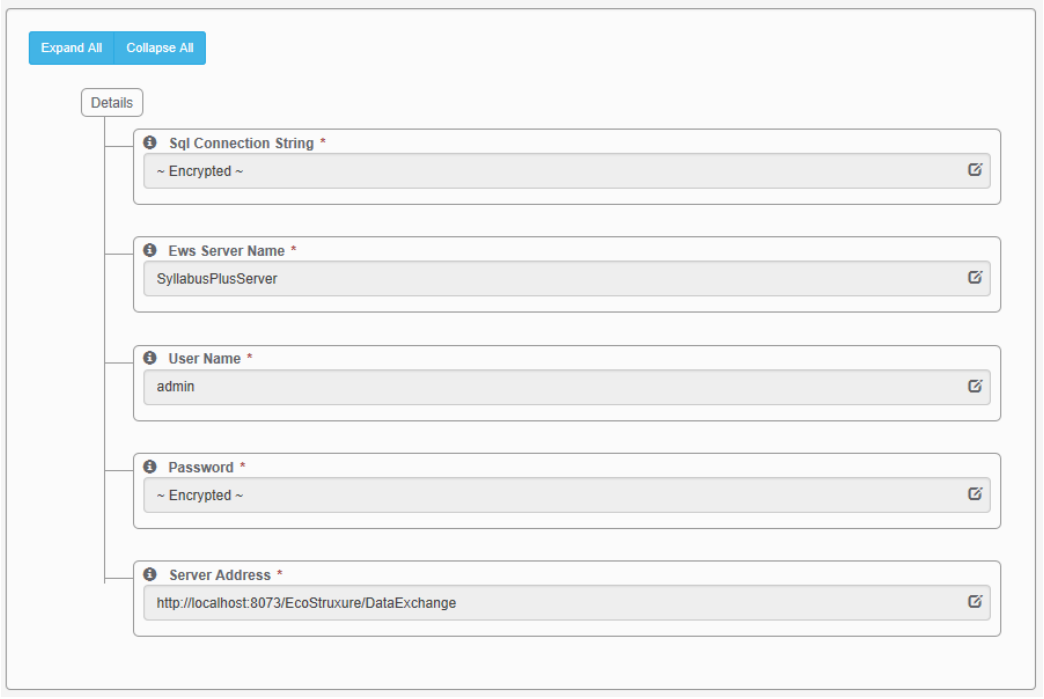
***Note that the address is case sensitive!**

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;

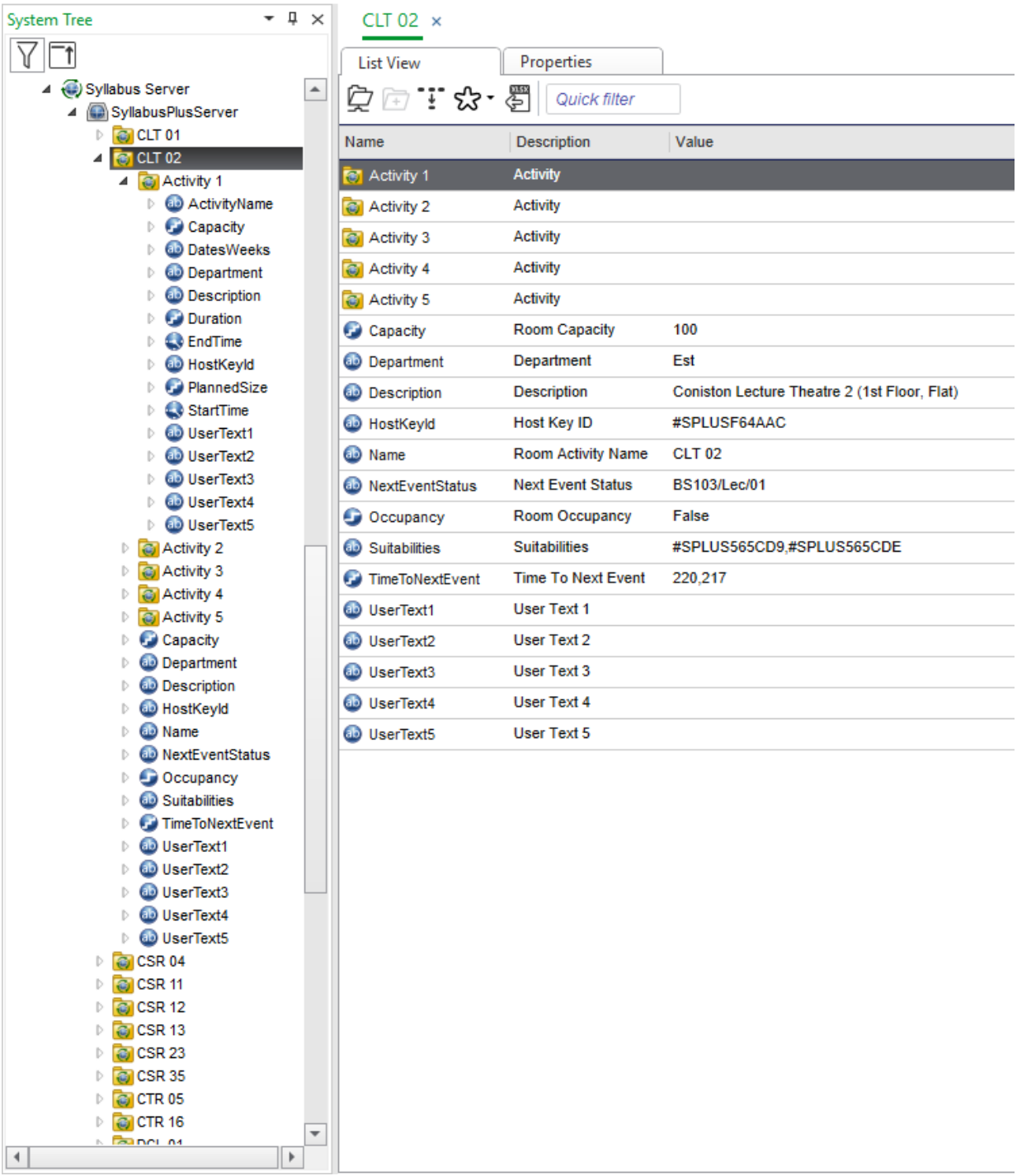
Runs On Start – Yes (To enable the Processor to automatically start with the machine)
Runs On Schedule – Yes (Attach a short cycling schedule to update EWS server values.)
Manually Startable – Yes (To allow a user to start through the configuration window
Manually Stoppable - Yes

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

A complete configuration will appear as follows:



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
1.0.0.1631	ISC.SyllabusPlus.dll	23rd Apr 2024

Assembly files required:

- AMS.Profile.dll
- BoDi.dll
- BouncyCastle.Crypto.dll
- Cucumber.Messages.dll
- Gherkin.dll
- Google.Protobuf.dll
- ISC.SyllabusPlus.dll
- Microsoft.Rest.ClientRuntime.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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