

EcoStruxure Building Operation

Infor Integration

SmartConnector

Installation & User Guide

04-20018-02-en
September 2024



Life Is On

Internal

Schneider
Electric

EcoStruxure Building Operation

Infor Integration

SmartConnector

Installation & User Guide

04-20018-02-en
September 2024

Life Is On

Internal

Schneider
Electric

Copyright © 2024 Schneider Electric. All rights reserved.

The Schneider Electric brand and any registered trademarks of Schneider Electric Industries SAS referred to in this guide are the sole property of Schneider Electric SA and its subsidiaries. They may not be used for any purpose without the owner's permission, given in writing. This guide and its content are protected, within the meaning of the French intellectual property code (Code de la propriété intellectuelle français, referred to hereafter as "the Code"), under the laws of copyright covering texts, drawings and models, as well as by trademark law. You agree not to reproduce, other than for your own personal, non-commercial use as defined in the Code, all or part of this guide on any medium whatsoever without Schneider Electric's permission, given in writing. You also agree not to establish any hypertext links to this guide or its content. Schneider Electric does not grant any right or license for the personal and non-commercial use of the guide or its content, except for a non-exclusive license to consult it on an "as is" basis, at your own risk. All other rights are reserved.

Trademarks and registered trademarks are the property of their respective owners.

Contents

- 1 Functional Overview 6
- 2 Restrictions & Limitations 7
 - 2.1 SmartConnector Service Version..... 7
 - 2.2 EWS Supported Systems 7
 - 2.3 Infor Supported System..... 7
- 3 Installation 8
- 4 Configuration & Settings..... 9
 - 4.1 Processor Configuration 9
 - 4.2 Adding the Custom Assembly to the Service 10
- 5 Revision History 17
- 6 References..... 18

1

Functional Overview

The Infor PMS system interface is a middleware application that enables communication between Infor 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 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 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 Infor Supported System





























The SmartConnector has been tested and validated against the Infor Interface Application Specification v4.0

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

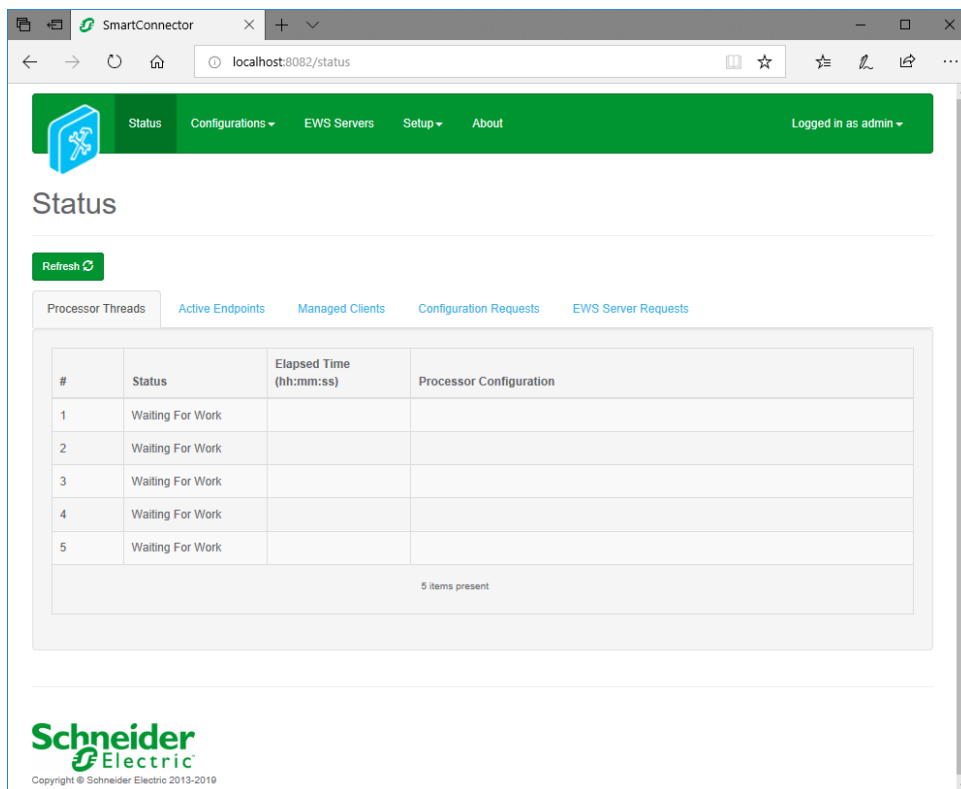
-  AMS.Profile.dll
-  BoDi.dll
-  BouncyCastle.Crypto.dll
-  Cucumber.Messages.dll
-  Gherkin.dll
-  Google.Protobuf.dll
-  ISC.FiasProtocol.dll
-  ISC.Infor.dll
-  ISC.PmsSql.dll
-  Microsoft.Rest.ClientRuntime.dll
-  Microsoft.SqlServer.ConnectionInfo.dll
-  Microsoft.SqlServer.Dmf.dll
-  Microsoft.SqlServer.Management.Sdk.Sfc.dll
-  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/>



The screenshot shows a web browser window with the URL `localhost:8082/status`. The page has a green header with a logo and navigation links: Status, Configurations, EWS Servers, Setup, and About. The user is logged in as admin. The main content area is titled "Status" and includes a "Refresh" button. Below this, there are tabs for "Processor Threads", "Active Endpoints", "Managed Clients", "Configuration Requests", and "EWS Server Requests". The "Processor Threads" tab is active, displaying a table with the following data:

#	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		

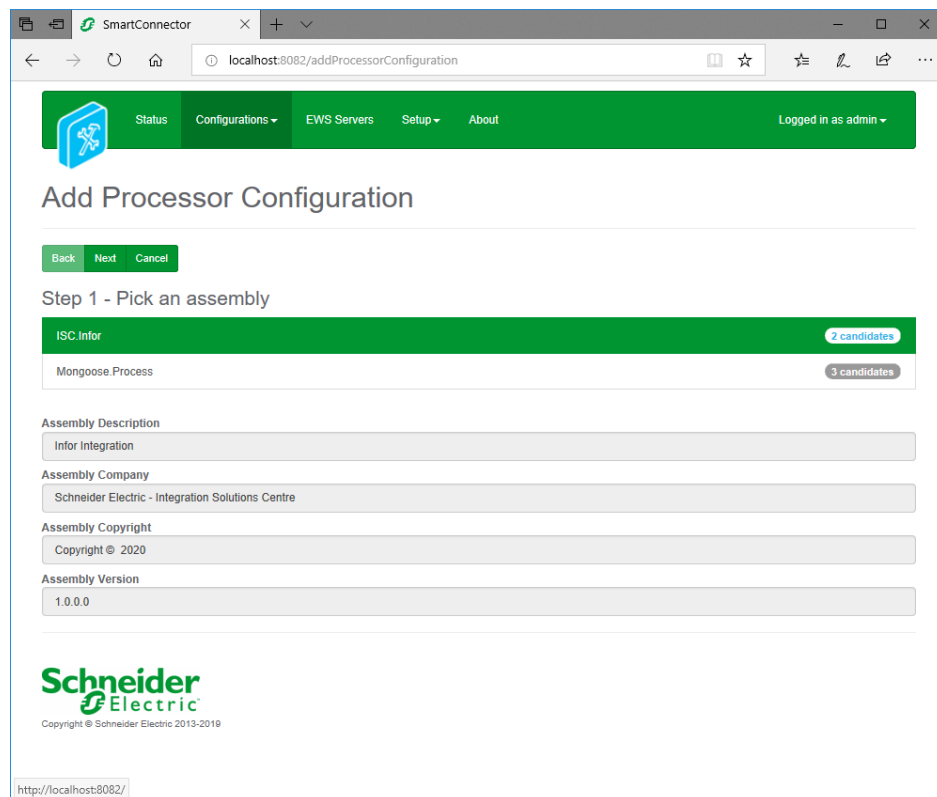
At the bottom of the page, the Schneider Electric logo is visible, along with the copyright notice: "Copyright © Schneider Electric 2013-2019".

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.Infor (this will be highlighted green when selected)



Select Next and proceed to Step 2 Choose a Class

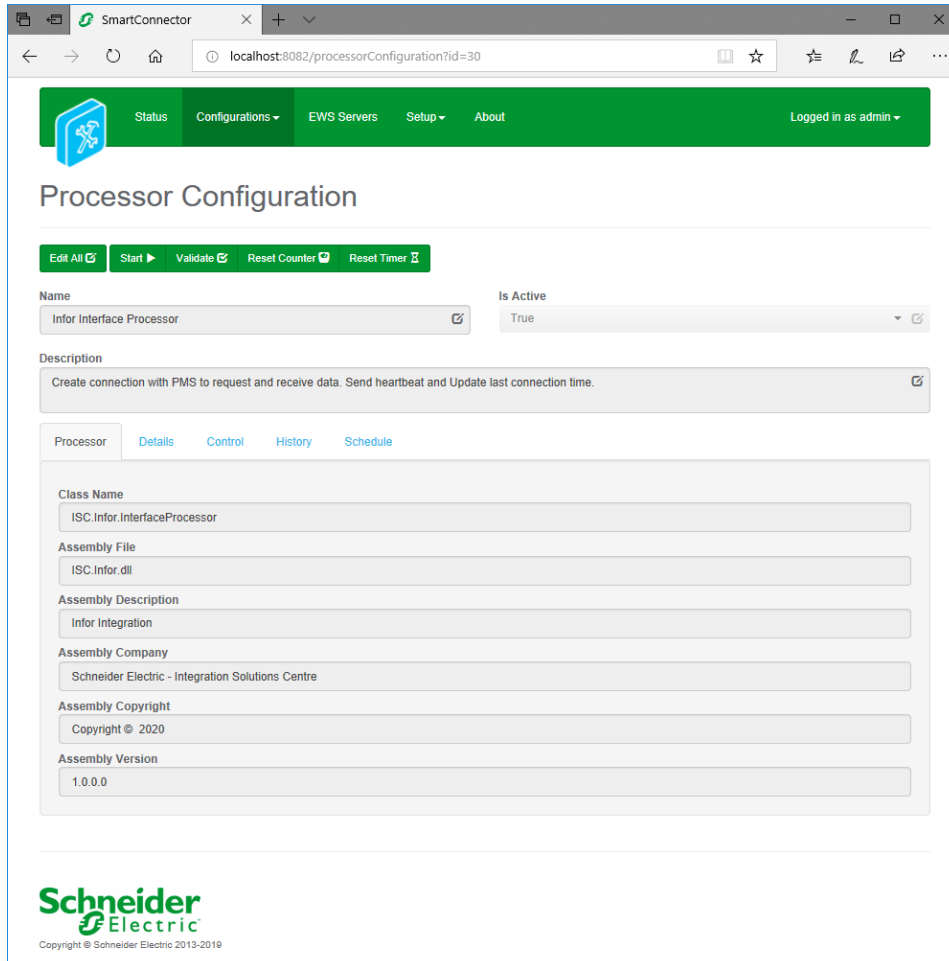
Ensure the class ISC.Infor.InterfaceProcessor is selected first

ISC.Infor.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.



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 Infor server.

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.)

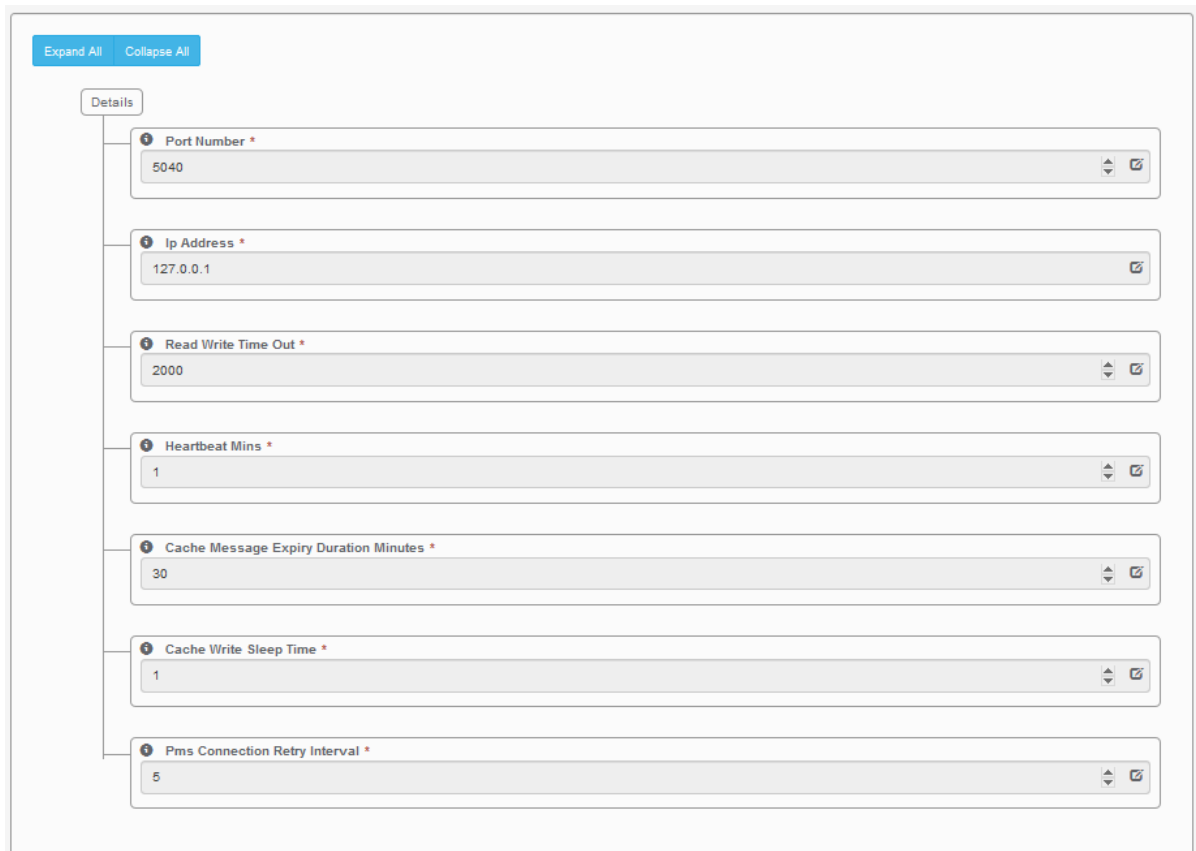
Manually Startable – Yes (To allow a user to start through the configuration window)

Manually Stoppable - Yes

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



A complete configuration will appear as follows:



Expand All Collapse All

Details

Port Number *
5040

Ip Address *
127.0.0.1

Read Write Time Out *
2000

Heartbeat Mins *
1

Cache Message Expiry Duration Minutes *
30

Cache Write Sleep Time *
1

Pms Connection Retry Interval *
5

Follow the same procedure to configure the second Processor.

Ensure the class ISC.Infor.ServerManagerProcessor is selected

ISC.Infor.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

localhost:8082/processorConfiguration?id=32

Status Configurations EWS Servers Setup About Logged in as admin

Processor Configuration

Edit All Start Validate Reset Counter Reset Timer

Name: Infor Server Manager Processor Is Active: True

Description: Create, configure and start the Server. Process booking messages.

Processor Details Control History Schedule

Class Name: ISC.Infor.ServerManagerProcessor

Assembly File: ISC.Infor.dll

Assembly Description: Infor Integration

Assembly Company: Schneider Electric - Integration Solutions Centre

Assembly Copyright: Copyright © 2020

Assembly Version: 1.0.0.0

Schneider Electric
Copyright © Schneider Electric 2013-2019

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](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.

Guest Vip Status

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.



A complete configuration will appear as follows:

Expand All Collapse All

Details

User Name *
admin

Password *
~ Encrypted ~

Server Address *
http://localhost:8091/EcoStruxure/DataExchange

Server Name *
Infor Server

Checkout Time *
12:00:00

Room Text *
Room

Occupied *
Occupancy Status

Departure Date *
Departure Date

Guest Name *
Guest Name

Guest Language *
Guest Language

Guest Vip Status *
Guest VIP Status

Folder Text *
Folder for Room

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

EcoStruxure[®]
Building Operation

← + ↻ 🗑️ 📄 📄 🗑️ ↻ 🖨️ ?

← → KEjd-SBO-2 ▶ Infor PMS Server ▶ Infor Server ▶ Room401 ▶

System Tree [Filter] [Refresh]

- ▶ Infor PMS Server
 - ▶ Infor Server
 - ▶ **Room401**
 - ▶ RoomDD
 - ▶ RoomGL
 - ▶ RoomGN
 - ▶ RoomGV
 - ▶ RoomOCC
 - ▶ Room501
 - ▶ RoomDD
 - ▶ RoomGL
 - ▶ RoomGN
 - ▶ RoomGV
 - ▶ RoomOCC
 - ▶ Room502
 - ▶ Room503
 - ▶ Room505
 - ▶ Room506
 - ▶ Room507
 - ▶ Room508
 - ▶ Room509
 - ▶ Room510

Room401 [Close]

List View Properties





























🗑️ + 📄 📄 🗑️ ☆ 🖨️

Name	Description
▶ RoomDD	Departure Date
▶ RoomGL	Guest Language
▶ RoomGN	Guest Name
▶ RoomGV	Guest VIP Status
▶ RoomOCC	Occupancy Status

5 Revision History

Version	Assembly File Details	Date
1.0.0.6	ISC.FiasProtocol.dll	1 st October 2024
1.0.0.6	ISC.Infor.dll	1 st October 2024
1.0.0.6	ISC.PmsSql.dll	1 st October 2024

Assembly files required:

-  AMS.Profile.dll
-  BoDi.dll
-  BouncyCastle.Crypto.dll
-  Cucumber.Messages.dll
-  Gherkin.dll
-  Google.Protobuf.dll
-  ISC.FiasProtocol.dll
-  ISC.Infor.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

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)

Schneider Electric

www.schneider-electric.com/buildings

© 2024 Schneider Electric. All rights reserved.

04-20018-02-en

September 2024