



niagara⁴

Somfy RTS Integration for Tridium Niagara 4 Technical Guide

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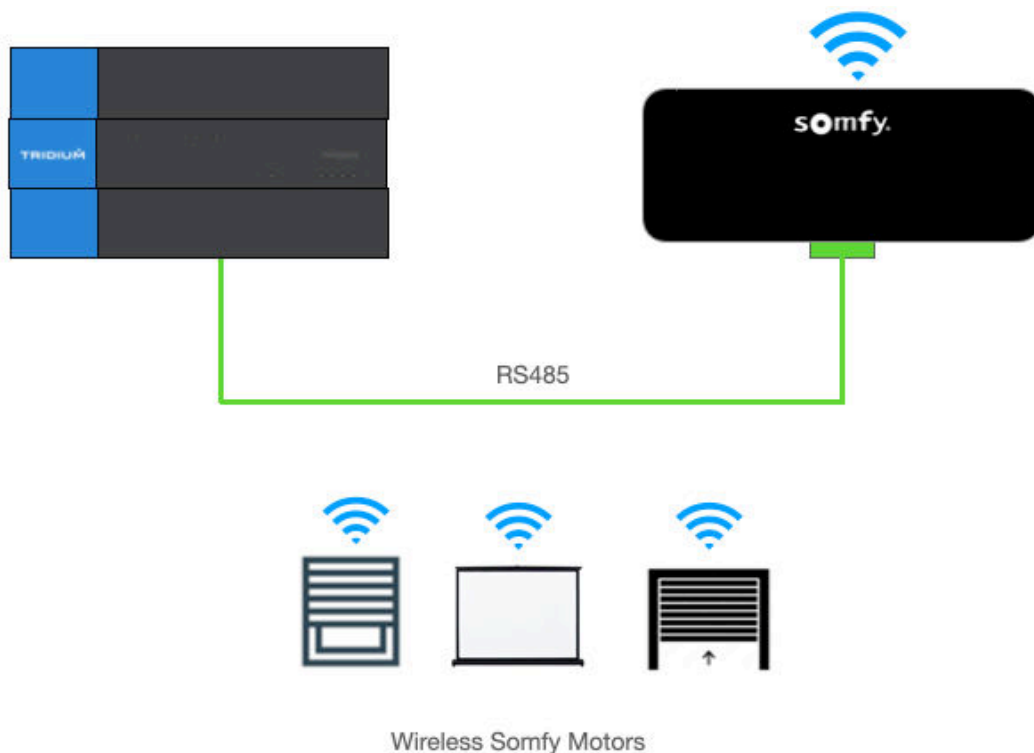
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INTRODUCTION

The Somfy integration driver is designed to provide an easy integration interface to an Somfy Wireless Devices. .

The driver supports a single or multiple RTS Transmitters (providing they are configured with unique Node ID). RTS Transmitters can be discovered and have a fixed number of wireless channels (e.g. 4 wireless channels) within them. Once connected each channel can be commanded from Niagara 4.

The driver can support connectivity to a single or multiple RTS Transmitters, providing they have unique IDs and the channel groups are configured correctly.



LICENSING & SOFTWARE MAINTENANCE

The Somfy driver is licensed based on the number of RTS Channels being used across all transmitters.

You will need to provide your Niagara 4 Host ID as part of your driver license purchase.

Once the license has been generated you can re-import your niagara license files from the Platform > License Manager providing you have an internet connection, alternatively you can be emailed a copy of the new license files.

The driver includes a software maintenance feature. Every new purchase of the driver will support the current release of Niagara 4 and the next release of Niagara 4, any subsequent upgrades will require a software maintenance license to be purchased.

As an example the current release of Niagara 4 is N4.13, a new driver purchase will cover you for N4.13 and a future upgrade to N4.14. Any further upgrades, for example to N4.15 or above, will require a software maintenance license to be updated. The software maintenance license would then cover you for the now current release of Niagara 4 and the next future release. You can upgrade from any previous release in a single step with a one off software maintenance purchase (N4.14 > N4.16).

Ensure the target Host License Manager is up to date with a Tyrrell.license and Tyrrell.certifcate containing the required license features.

Any questions or queries in relation to this item should be sent to sales@tyrrellproducts.com

Somfy License Packs:

Product Code	Description
	Somfy Base Pack For 4x RTS Channels
	Somfy Upgrade Pack For 4x RTS Channels
	Somfy Upgrade Pack For 8x RTS Channels
	Somfy Upgrade Pack For 16x RTS Channels
	Somfy Driver Maintenance - Niagara Version Upgrade

DRIVER INSTALLATION

The Somfy driver supports Niagara 4.10 and above.

NOTE:

If your installation is running an older version of the Niagara software then it must be upgraded to meet the above requirements to run this driver.

Any future updates to the Somfy driver will be available for the long term maintenance release and above. All other releases will become legacy and unsupported.

Niagara 4 Installation:

You will need the version specific JAR files for your Niagara 4 installation. These can be downloaded from the Customer Portal or alternatively contact the support team (support@tyrrellproducts.com).

To install the driver copy the below JARS to the following directory

- ▶ somfy-rt.jar
- ▶ somfy-wb.jar

c:\niagara\niagara 4.x.xx\modules

Once the files have been put into the correct directory close your workbench, and relaunch. Any running Stations on the local machine will have to be re-started to make use of the Somfy driver.

The Somfy driver is now ready to use in a local station or to commission / update a Niagara controller. To install the driver on a Niagara controller use the Commissioning Wizard on the platform of the target device.

PRE REQUISITES

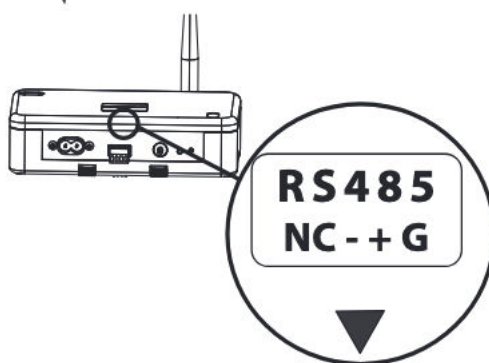
Before proceeding you should ensure the following:

- ▶ Somfy RTS Transmitters are configured with a unique Local Node ID.
- ▶ All wireless devices are fully configured in their correct channels (max 16).

RS485 CABLE

The Somfy RTS Interface provides a terminal block RS485 connection. The specification of the cable from a Niagara controller is as follows:

Tridium Controller RS485	Somfy RS485 Interface
	NC
B	-
A	+
S	G




The maximum cable length is 1000m. If a long network is being used it is recommended to terminate the RS485 with 120 Ohm Resistor.




















DRIVER CONFIGURATION

Connect to the Niagara station where you intend to configure the Somfy driver.

Expand **Config > Drivers** container and add a new **Somfy** driver.

Navigate to the **AX Property Sheet** view of the driver to configure the connection to the RTS module.

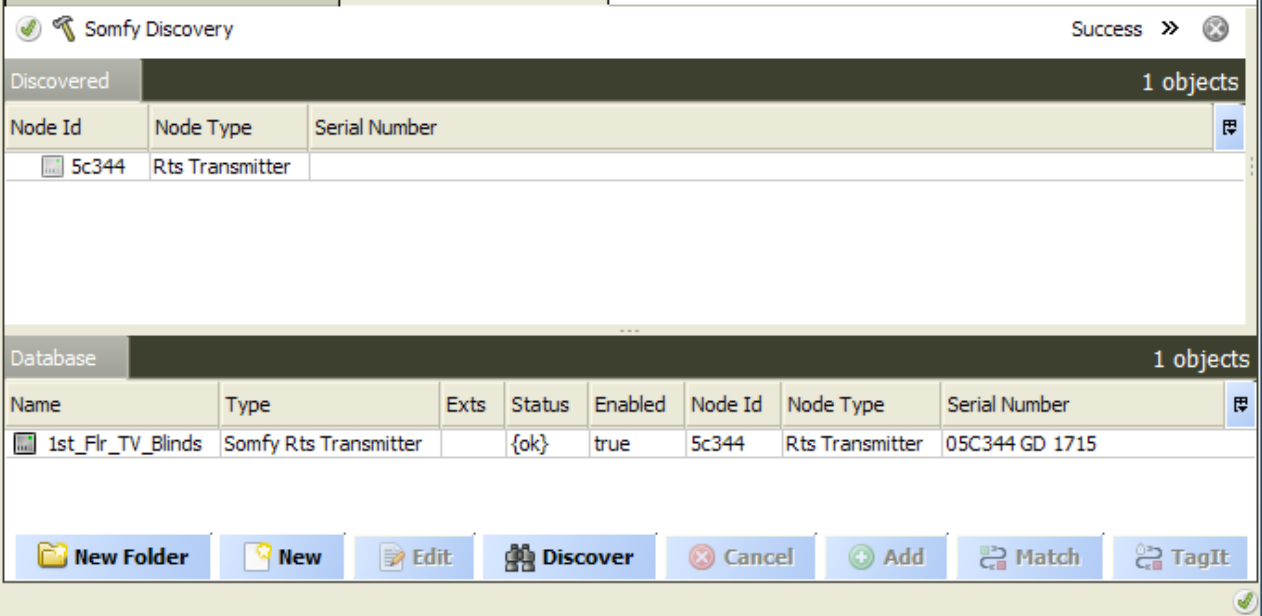
 SomfyNetwork (Somfy Network)

	Status	{fault}
	Enabled	<input checked="" type="radio"/> true
	Fault Cause	Driver Not Licensed
	Health	Fail [null]
	Alarm Source Info	Alarm Source Info
	Monitor	Ping Monitor
	Tuning Policies	Tuning Policy Map
	Serial Port	COM1
	Serial Config	Somfy Comm Config
	Fault Cause	Comm error: parent in fault
	Port Name	none
	Baud Rate	Baud4800
	Data Bits	Data Bits8
	Stop Bits	Stop Bit1
	Parity	Odd
	Flow Control Mode	{none}
	Receive Timeout	0 ms [0 - 20000]
	Inter Message Delay	00000h 00m 00.000s [0 ms - 1 second]
	Local Node Id	ffff42 Radix=16 [ffff00 - fffffe]

Configure the COM Port to the target RS485 port (e.g. COM1 / RS485-1 etc). The baud rate other communication parameters are fixed and not adjustable.

Somfy Device Manager

Once the communications has been configured navigate to the Device Manager view and press the Discover button. All connected RTS Transmitters will be discovered and then can be added to the Somfy Network.



The screenshot shows the 'Somfy Discovery' window. At the top right, it says 'Success' with a green checkmark and a close button. Below this, there are two main sections: 'Discovered' and 'Database', each with a '1 objects' count.

Discovered Section:

Node Id	Node Type	Serial Number
5c344	Rts Transmitter	

Database Section:

Name	Type	Exts	Status	Enabled	Node Id	Node Type	Serial Number
1st_Flr_TV_Blinds	Somfy Rts Transmitter		{ok}	true	5c344	Rts Transmitter	05C344 GD 1715

At the bottom, there is a toolbar with the following buttons: 'New Folder', 'New', 'Edit', 'Discover', 'Cancel', 'Add', 'Match', and 'TagIt'.

RTS CHANNELS

Once the RTS Transmitter has been added, navigate to the AX Property Sheet view of the device.

From the Somfy Palette add a SomfyRTSChannel Component from the palette to the RTS Channels slot of the Somfy Transmitter.

1st_Flr_Guest_Bedroom (Somfy Rts Channel)		
Status	{ok}	
Fault Cause		
Channel Number	5	[1 - 16]
Equipment Type	Garage Door Opener ▼	
Channel Address	d3404	Radix=16 [0 - fffffff]
Us Not Ce Mode	<input checked="" type="radio"/> true	
Tilting Not Rolling Mode	<input type="radio"/> false	
Modulis Mode	<input checked="" type="radio"/> true	
Us Tilt Frame Count	5	[4 - 255]
Ce Tilt Frame Count	2	[2 - 13]
Dim Frame Count	5	[4 - 255]
Modulis Amplitude	1	[1 - 127]

The Somfy RTS Channel needs to be configured with:

- Channel Number
- Equipment Type

The channel number should match that of the channel that is programmed in the RTS System.

The equipment types support:

- Venetian Blinds
- Roller Blind
- Awning
- Garage Door Opener
- Curtain
- Lighting
- Roller Shutter
- Projection Screen
- Gate Opener
- Multi Applications

Each RTS Channel then supports several Actions that can be linked into your Station:

- Up
- Down
- Tilt More
- Tilt Less
- Dim More
- Dim Less
- My (Custom Setting)
- Set or Delete My (Custom Setting)
- Send Stop
- Activate Sun
- Deactivate Sun
- Short Prog
- Open Programming Mode

REVISION HISTORY

REVISION	DESCRIPTION
1.0	Draft Release For Approval