How to add Siemens Desigo CC import to Nimbus

Desigo CC is able to send alarm events as emails to Nimbus using the *Remote Notifications (RENO)* functionality in Desigo CC. This document describes how to setup *Desigo CC* to send emails to Nimbus and how to configure Nimbus to receive and parse them using the built-in *SMTP* (*Simple Mail Transfer Protocol*) server.

Prerequisites

Desigo CC license option for *Remote Notifications (RENO), CCA-OP-RENO* Nimbus Alarm Server v.3.00.07 or later with a valid license

Configuring the Email Service

The following procedures describe how to configure the management system to send and receive remote notifications by email to Nimbus.

Technical Notes

Always make sure that the email protocol are enabled (Enabled check box selected). If it is disabled (Enabled check box deselected), the system will not alert you with any specific error message.

Configuring the SMTP Protocol

- ⇒ System Manager is in Engineering mode.
 ⇒ The Mail object (email service) is available in System Browser.
- 1. In System Browser, select Management View.
- 2. Select Project > Management System > Servers > Main Server > Mail.
- 3. Click the RENO Configurator tab.
 - ⇒ The RENO Configurator workspace displays in the Primary pane.
- 4. Open the SMTP Protocol expander.

⇒ The corresponding configuration workspace displays.

- 5. Select Enabled. NOTE: If you don't enable this protocol (that is, if you deselect the check box), the management system will not be able to send remote notifications by email.
- 6. Specify the following settings:
 - Domain name: . (dot)
 - SMTP host name: The SMTP Server Name/IP should be the IP-address (or DNS name) to the server running Nimbus Alarm Server.*
 - Port: Port number may be changed. If changed from the default port 25 also parameter SpecificPortForSMTP_DesigoCC in Nimbus_Server.ini must be enabled (semicolon removed) and changed to reflect same number. Ensure the selected port number will pass through any firewalls. Port 25 is the default SMTP port and sometimes there are services running in a default Windows installation using this port number.
 - Security type: None
 - Sender name: The *Sender Name* will by default be inserted in the *Nimbus Area field* [t1] and can be used for filtering.
 - Password: n/a
 - Confirm password: n/a

- 8. In the RENO Configurator toolbar, click Save.
 - ⇒ The System Manager status bar indicates that the data was successfully saved.

System Manager								
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Licenses (Licenses)								
Mail [Mail]								
ReportManager [Report Manager]								
SM5 [SM5]								
SystemSettings (System Settings)								

Example of the SMTP Protocol configuration.

Configuration the Address book

The Desigo CC address book contains a list of contacts (called recipients) which the system use for sending out remote notifications to Nimbus.

Adding a contact in the address book

- 1. In System Browser, select Application View.
- 2. Select Applications > Address Book.
 - ⇒ The address book user interface displays in the Primary pane.
- 3. In the Address Book toolbar, click Add recipient.

⇒ A new row appears in the Address Book.

4. Select the new row.

⇒ The contact details fields are available for editing.

- 5. Enter the Full name and Short name, e.g. Nimbus.
- 6. Select your local Language different from the default (English (United States)), e.g. sv-SE.
- 7. To assign the contact to a group of recipients, select the group from the list and click *Add*. (Repeat this step for all the groups to which the contact belongs).

NOTE: To create a new group and assign the contact to it, enter the new group name and then click *Add*. To change the name of an existing group, select it, enter the new name and click *Update*.

- 8. Enter the following information for the E-Mail 1 device: e.g. nimbus@cc.com
- 9. Select the Preferred device to: E-Mail 1 device
- 10.In the *Address Book* toolbar, click Save.
- ⇒ The contact details appear in the Address Book.

Example of the Address book.

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alication View	AddressBo	ook (Address Book)	- Nimbus		
	90 Y 8 8	Search			9.7
v Name (Description)	0	Full Name	Groups	Preferred Device Failback Device	▼ Details
rual navigation	•••	Nimbus	Nimbus	nimbus@cc.com	▼ General
ication/View [Applications]	0				Full name: Nimbus
AddressBook (Address Book)	Б				Short name: Nimbus
srephics [Grephics] .ogics [Logics]					Languaget sv-SE
LogViewer [Log Viewer] RemoteNotifications [Remote Notifications]					♥ Groups
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renus (rienas)					Nerrbus
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					E-Mail 1: nimbus@cc.com
					E-Mail 2:
					E-Mail 3:
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					Preferred device: [5-Mail 1:
					Fallback device: None

Configuring Remote Notifications

The following procedures describe how to configure remote notifications to Nimbus.

Technical Notes

 \Rightarrow To avoid an invalid or inconsistent configuration, before setting up remote notifications, check that the scope you want to use contains the objects needed for remote notifications, namely: email service, the Address Book, and remote notifications.

 \Rightarrow If you don't activate a remote notification (Active check box deselected), you can save the remote notification, but it will be not enabled during normal operation.

⇒ If you leave the subject empty for an email message, a message box informs you that this data is missing and you cannot save.

 \Rightarrow This RENO message must be manually configured in already delivered Desigo CC installations. All SSP EU Zone North project templates have been updated with a Nimbus RENO entry effective from 1st of October 2016.

Configuring a Remote Notification for Nimbus

You can create a new remote notification only in the Remote Notifications folder.

- ⇒ System Manager is in Engineering mode.
- ⇒ You previously configured the required remote notification service and recipients.
- 1. In System Browser, select Application View.
- 2. Select Applications > Remote Notifications.
- 3. In the Primary pane, click the *RENO Configurator* tab.

⇒ The RENO Configurator interface displays.

- 4. Open the *General Settings* expander and specify the following parameters:
 - Active. Selecting this check box means the remote notification is enabled (that is, it will start when it is triggered). Deselect this check box if you want to configure a remote notification but without using it yet.
 - Priority: 0
 - Starting mode: Auto
 - Delay: 0

- Multiple starting: Yes
- Can be stopped: No
- Stop on alarm ending: Yes
- Points state: All

Example of the General Settings

 General Settings 					
Active:	2		Priority:		÷
Starting mode:	Auto	7	Delay:		÷.
Multiple starting:	Yes		Can be stopped:	No	2
Stop on alarm ending:	Yes		Points state:	Al	

- 5. Open the *Recipients* expander, then open the *Address Book* section inside that expander.
- 6. To choose the first-level recipient group(s) for the message, do the following:
 - a. In the *Address Book* area, filter by *Groups*, and use the search field if needed to find the groups you want.
 - b. Drag-and-drop the group(s) you want to add from the *Address Book* area to the *Recipient/Members* list on the left.
 - c. Select Groups, and filter the address book to narrow your search.
- 7. For each recipient group, you can optionally define escalation rules. To define the escalation rules for a recipient group, do the following:
 - a. Select the group in the *Recipient/Members* list on the left.
 - b. In the *Escalation Rules* area on the top right, enter a *Timeout* and a *response Threshold* for that group. This sets the number or percentage of group members that need to reply within the specified time for that first-level group to be considered successfully notified.
 - c. To specify additional escalation recipients, to whom the message will be sent if the group doesn't reach its threshold:
 - In the Address Book, filter by People, and use the search field if needed to narrow down your choices.

Example of Recipient Settings

Construction of the Constr						
 Recipients 						
Recipient	Members	 Escalation Rules 				
Nimbus	1	Threshold:		0 🎄 People	Timeout	30 🌲
		Escalation threshold:				
		Escalation Recipient	Groups	Timeout		
		▼ Address Book				
		Filter: Groups			Search	٩ 🖬
		Group	Members			
		Nimbus	Nimbus			
		-Aidel Remove				

- 8. To compose the notification message, open the Message Tailoring expander, and specify the following parameters:
 - Language: Must correspond with the default language of the project, check Desigo CC SMC.
 - Device: E-Mail
 - Subject: Alarm
 - Body: (must be configured in the following way)
 Enter the texts of *Date, Category* etc. manually and drag-and-drop the tags from the *Message Tags* list.

⇒ Important! The Body must look like the screenshot below!

Body: Date: <Date/Time Complete> Category: <Event Category> Desc: <Event Location Limited> Tag: <Event Source Limited> Status: <Event Source State>

Example of Message Tailoring

Additional sectors							
 Recipier 	Registerts						
· Message	Message Talaning						
Language	មារូបវីរាម	Device E-Mail					
Subject:	Aam	▼ Message Tags					
Body	Drite: Ostu/Tee Couplete Grappin, Gew Cangon, e Teg Crawf Societ Lande Teg Crawf Societ Lande Brute: Ever Societ State	- Odar/Time Complete Odar/Time Long-be Objective II Anname Officient I dont Anna Officient II Anname Officient I dont Anna Officient II Anname Officient I dont Anna Officient I dont Anname Officient I dont Anna Officient I dont Anname Officient I dont Anname Officient I dont Anname Officient I dont Anname					

9. To configure the alarms (events) that will trigger the remote notification, open the *Triggers expander*. Then open the Events expander and specify the alarms that will trigger the remote notification.

Example of Triggers settings

 General Settings 							
Recipients							
 Message Tailoring 	Message Tailoring						
▼ Triggers							
▼ Events							
				Add Delete			
Scope	Category	Discipline Subdiscipline	Type Subtype				
A1	= Evolucion	= All	= All	â			
~		= All	= All				
All	- Fault	= AII	= All				
		= All	= All				
All	= Low	= All	= All				
		= All	- All				
All	= Medium	= All	- All				
		= All	= All				

10. To save the remote notification, In the RENO Configurator toolbar, click Save templates as.

11.In the Save Object As dialog box, do the following

- a. Select the location in the tree (under *Applications > Remote Notifications*) where you want to save this remote notification.
- b. Type the Name and Description of the remote notification.
- c. Click OK.
- The new remote notification object appears in System Browser. If you selected the Active check box, it is also enabled (you can also enable/disable it from the Contextual pane). NOTE: An error message displays if you try to save an email remote notification message and the email subject line is missing.

How to add a the Desigo CC import to Nimbus

Start *Nimbus Explorer* (right click and '*Run as Administrator*') from the start button menu shortcut. Actually Nimbus Explorer should always be run as *Administrator* by selecting this option in the shortcut.

🦓 N	₩ Nimbus Explorer 3.00.04 - <no name=""> / [no users]</no>							
File	Setup Log							
	User Set	up) 🕙	P				
-	Receive	r Setup						
	Route P	rofiles Setup						
	Receive	r Type Setup						
	SCADA	import Setup						
	Server S	etup						
	✓ Toolbar							
		C:\ProgramData\TroS	oft\Nimbus	Alarm Server 3\F	Primary 🛛	STOP 2016-04	I-19 //	

Select Setup -> SCADA import.

You will need to have Nimbus Alarm Server release 3.00.07 or later.

SCADA System	Sauter Automation novaPro32 Sauter moduWeb Vision
Add SCADA system import	Schneider Electric Citect/VijeoCitect
Remove this SCADA system import	Schneider Electric TAC Vista / StruxureWare Schneider Electric Xenta
	Siemens Building Technology Desigo CC
	Siemens Building Technology Desigo InSight
	Siemens Building Technology Unigyr
	Siemens Building Technology Visonik
	Siemens WinCC
	Swegon Gold / Nestor
	Trend 96x Supervisor (RAW/TCP printer)

Select SCADA System -> Add SCADA system import -> Siemens Building Technology Desigo CC.

That's it. Restart *Nimbus Alarm Server* if it was already running. The Nimbus Server has a built-in SMTP server and there is no need to pass through any Exchange server etc (at least if both the Desigo CC software and Nimbus are located at the same network)

🔞 Nimbus E	xplorer 3.00.04 - <no name=""> / [no users]</no>	
File Setup	Log	
	Show Active System Log Show Debug Window History System Log Clear main Window	
	C:\ProgramData\TroSoft\Nimbus Alarm Server 3\Primary	STOP 2016-04-19

Show the debug window and try to send an alarm from Desigo CC.

🤣 Nin	nbus - Debug		
<u>F</u> ile <u>F</u>	ilter		
	Source/De	Time	Data
→ TX	SCADA	21:03:03	220 trosoft.se Nimbus Mail server ready (your IP is 127.0.0.1:53678)<13><10>
🗲 RX	SCADA	21:03:03	MAIL FROM: <sremoindal@desigo.cc><13><10></sremoindal@desigo.cc>
🔿 TX	SCADA	21:03:03	250 OK<13><10>
🗲 RX	SCADA	21:03:03	RCPT TO: <magnusson.jens@siemens.com><13><10></magnusson.jens@siemens.com>
🔿 TX	SCADA	21:03:03	250 OK<13><10>
🗲 RX	SCADA	21:03:04	RSET<13><10>
🔿 TX	SCADA	21:03:04	250 trosoft.se<13><10>
🗲 RX	SCADA	21:03:04	RSET<13><10>
→ TX	SCADA	21:03:04	250 trosoft.se<13><10>
← RX	SCADA	21:03:04	MAIL FROM: <sremoindal@desigo.cc><13><10></sremoindal@desigo.cc>
→ TX	SCADA	21:03:04	250 OK<13><10>
← RX	SCADA	21:03:04	RCPT_TO: <magnusson.jens@siemens.com><13><10></magnusson.jens@siemens.com>
	SCADA	21:03:04	250 OK<13><10>
← HX	SCADA	21:03:04	DATAKI3>XIU> 254 Oktober - Microsoft and With BODI External Control States
	SCADA	21:03:04	354 Start mail input; end with <crlf>.<crlf><13><10></crlf></crlf>
	SCADA	21:03:04	From: sremoindal@desigo.cc<13><10>
	SCADA	21.03.04	To: meanuscan ione@ciomane.com/13//10/
	SCADA	21.03.04	Subject -21 ITE-82B2TCE-b02-z12x10x
	SCADA	21.03.04	
E BX	SCADA	21:03:04	Content-Type: multinart/mixed:<13><10>
E BX	SCADA	21:03:04	<9> houndary="= NextPart 000 0006 01CAB9EA E6640E80"<13><10>
€ BX	SCADA	21:03:04	<13><10>This is a multi-part message in MIME format <13><10>
€ BX	SCADA	21:03:04	<13><10>
€ RX	SCADA	21:03:04	Content-Type: text/plain:<13><10>
🗲 RX	SCADA	21:03:04	format=flowed;<13><10>
🗲 RX	SCADA	21:03:04	charset="utf-8";<13><10>
🗲 RX	SCADA	21:03:04	reply-type=original<13><10>
🗲 RX	SCADA	21:03:04	Content-Transfer-Encoding: 7bit<13><10>
🗲 RX	SCADA	21:03:04	<13><10>Date:2016-09-20 14:58:57<10>
🗲 RX	SCADA	21:03:04	Category:Medel<10>
🗲 RX	SCADA	21:03:04	Desc:Ventilation.TA/FA-3 (GT11)<10>
🗲 RX	SCADA	21:03:04	Tag:TA3-GT13<10>
🗲 RX	SCADA	21:03:04	Status:H<195><182>g gr<195><164>ns (18,9)<13><10>
← RX	SCADA	21:03:04	
← RX	SCADA	21:03:04	Meddelande-ID: -(54758766-<13><10>
E RX	SCADA	21:03:04	=_NextPart_UUU_0006_01CAB9FA.E6640E80-<13><10>
E HX	SCADA	21:03:04	
	SCADA	21:03:04	250 UK(13)(10) OUT (13) (10)
- HX	SCADA	21:03:04	221 traceft on Service Classing, x12x10x
	SCADA	21.03.04	

If you get some text as above then all is fine (this example could differ somewhat from your results)

The result should also show up in Nimbus Explorer like this

🔞 Nimbus Explorer 3.00.076	Nimbus Explorer 3.00.07B2 - Desigo / [no users]						
File Setup Log							
🍛 🔥 💩 🦗	الم الآي الآي الآي الآي الآي الآي الآي الآي						
a 0029 2016-09-21 21:03:16 TA3	0029 2016-09-21 21:03:16 TA3-GT13 - Ventilation.TA/FA-3 (GT11)						
	? Alarm event info - TA3-GT13	1					
	Tools						
	Field	Value					
	Status as number:	1					
C:\F	Status as text:	ACTIVE					
	i ag [tU]:	TA3-GT13					
	Area [t1]: Catagory [t2]:	sremoindal@desigo.cc					
	Name [t3]:	Medel					
	Description [t4]:	Ventilation.TA/FA-3 (GT11)					
	State from SCADA [t5]:	Hög gräns (18,9)					
	Event Id:	0029					
	PC Date:	2016-09-21					
	PC Time:	21:03:16					
	SCADA Date:	2016-09-20					
	SCADA Sustem Number	14:58:57					
	SCADA System Number:	Siemens Building Technology Design	200				
	JUNDA Bystelli Dest.	olemens building recimology Design					

Double-click the event in *Nimbus Explorer* to view all properties in the alarm event.

As you notice above the profile filtering for Category is not numeric, it will be set to the *Event Category Message Tag*, ex '*Medel*'

Now create *Receivers* and *Alarm Route Profiles* as usually.