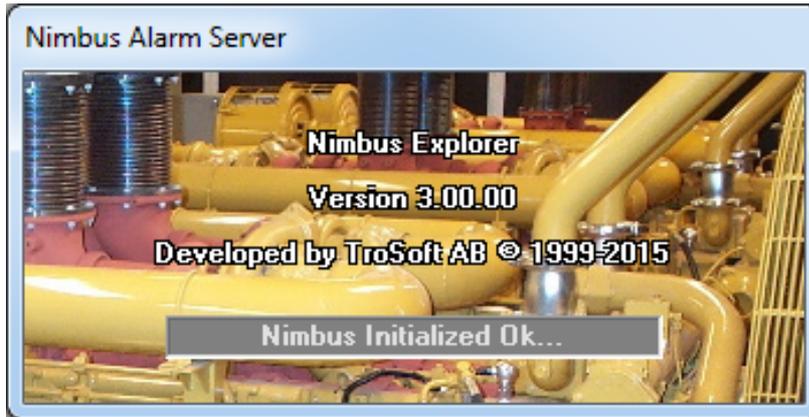


Installation guide

Nimbus Alarm Server



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Installation guide for Nimbus Alarm Server

1. Install Nimbus

Install Nimbus, see *Nimbus_Install_Instructions.pdf*, it has some important information.

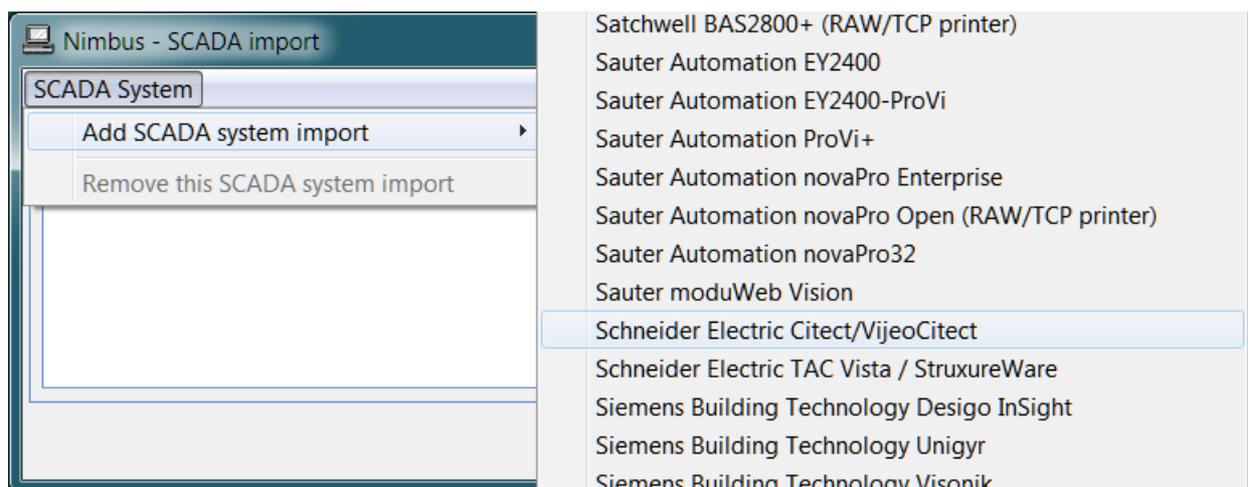
The Nimbus software is actually two programs:

- Nimbus Explorer* The configuration tool. It does not need to be started for the alarm routing to be active.
- Nimbus Alarm Server* The alarm server itself. It has no user interface, but will place an icon in the notify area (if not run as a service). The program will import alarm events from Citect using an *ASCII device* text file named *Nimbus.txt*.

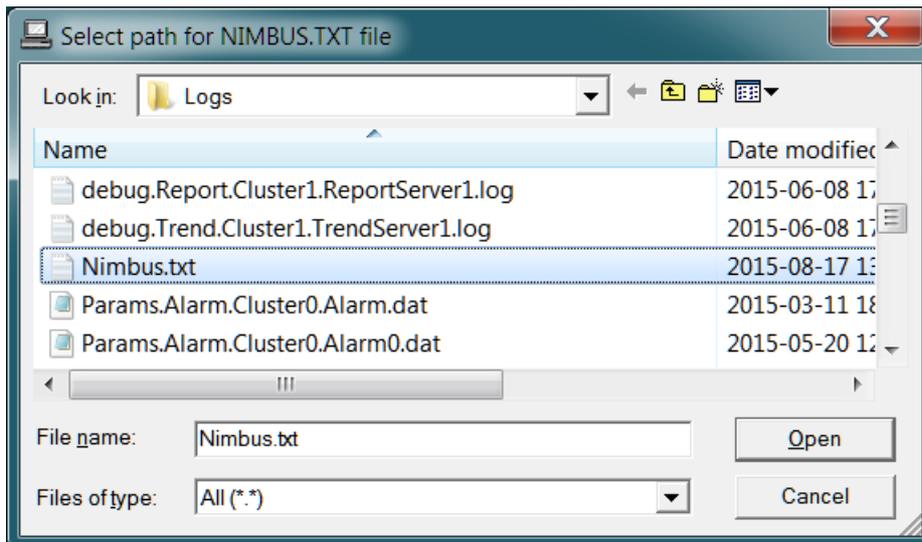
2. Configure Nimbus för import

Start *Nimbus Explorer*. Select language.

Select *Setup* -> *SCADA Import Setup*.



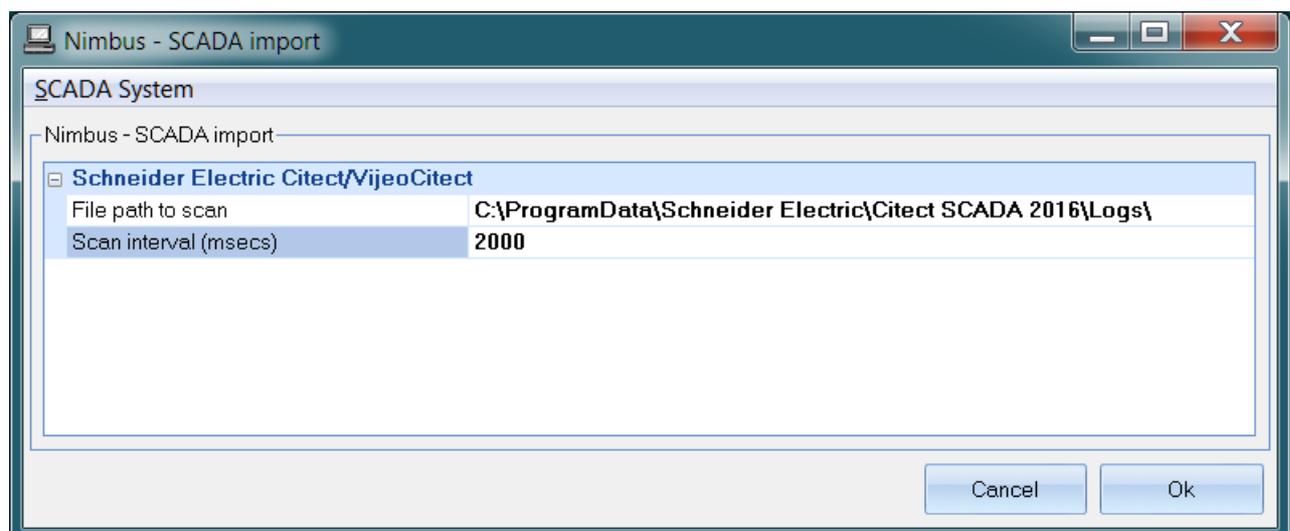
Select *SCADA System* -> *Add SCADA system import* -> *Schneider Electric Citect/VijeoCitect*.



Select the folder where *Nimbus Alarm Server* will find the alarm events file *Nimbus.txt* (which is created later on). In the example the path is:

C:\ProgramData\Schneider Electric\Citect SCADA 2016\Logs

You can select any file in the folder, *Nimbus Explorer* will only use the path anyway.



The *scan interval* determines how often *Nimbus* will search the file for new alarm events. *Nimbus* will use the file size and date/time stamp to find out if any new alarm events have been added to the file by *Citect*.

Because *Citect* mostly have locked the file it cannot be deleted by *Nimbus Alarm Server*. Sometimes it could take a while (up to 30 seconds) before *Citect* flushes the file and *Nimbus Alarm Server* detects the new alarm event.

Only the path should be entered here, *Nimbus Alarm Server* will automatically search for a file named *Nimbus.txt* and its previous names (*Nimbus.001*, *Nimbus.002* etc).

3. Registration

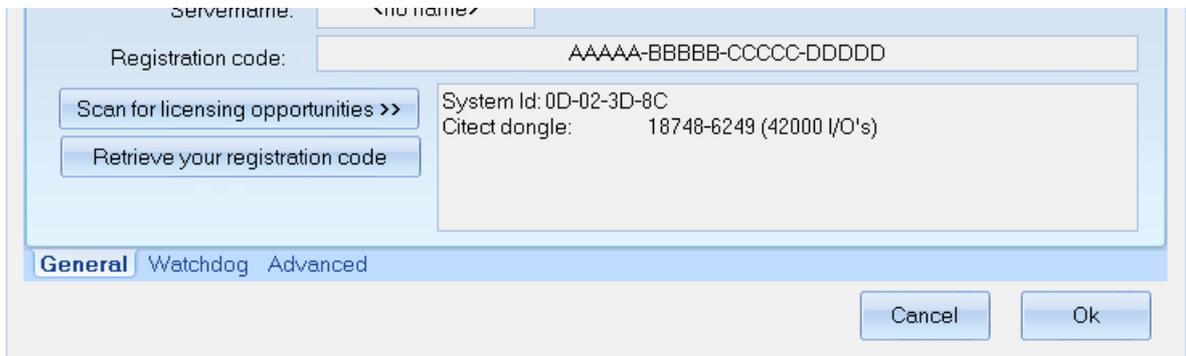
Nimbus Alarm Server will run for 30 minutes without a valid license. It then has to be restarted. You will

need either a *Nimbus* dongle or a valid registrationcode associated to the Citect dongle to be able to run with no limits.

You could also get a software license registrationcode which allows *Nimbus Alarm Server* to run without dongle.

Please contact TroSoft AB at nimbus@automatisera.nu for more information.

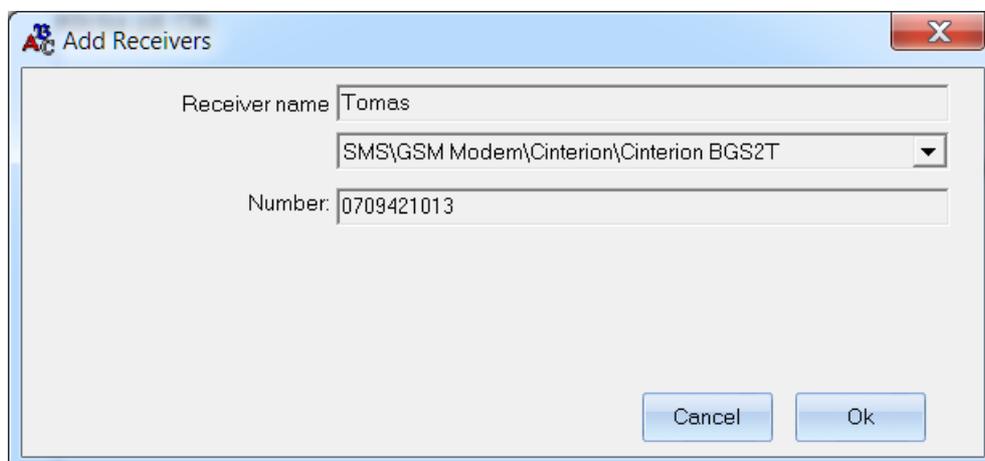
You will find license information in *Setup-> Server Setup -> Scan for licensing opportunities*.



If you already have ordered a Nimbus license, you should have been provided with a separate document describing how to get your registrationcode from our license server.

4. Create and Alarm Receiver

Select *Setup - Receiver Setup*.

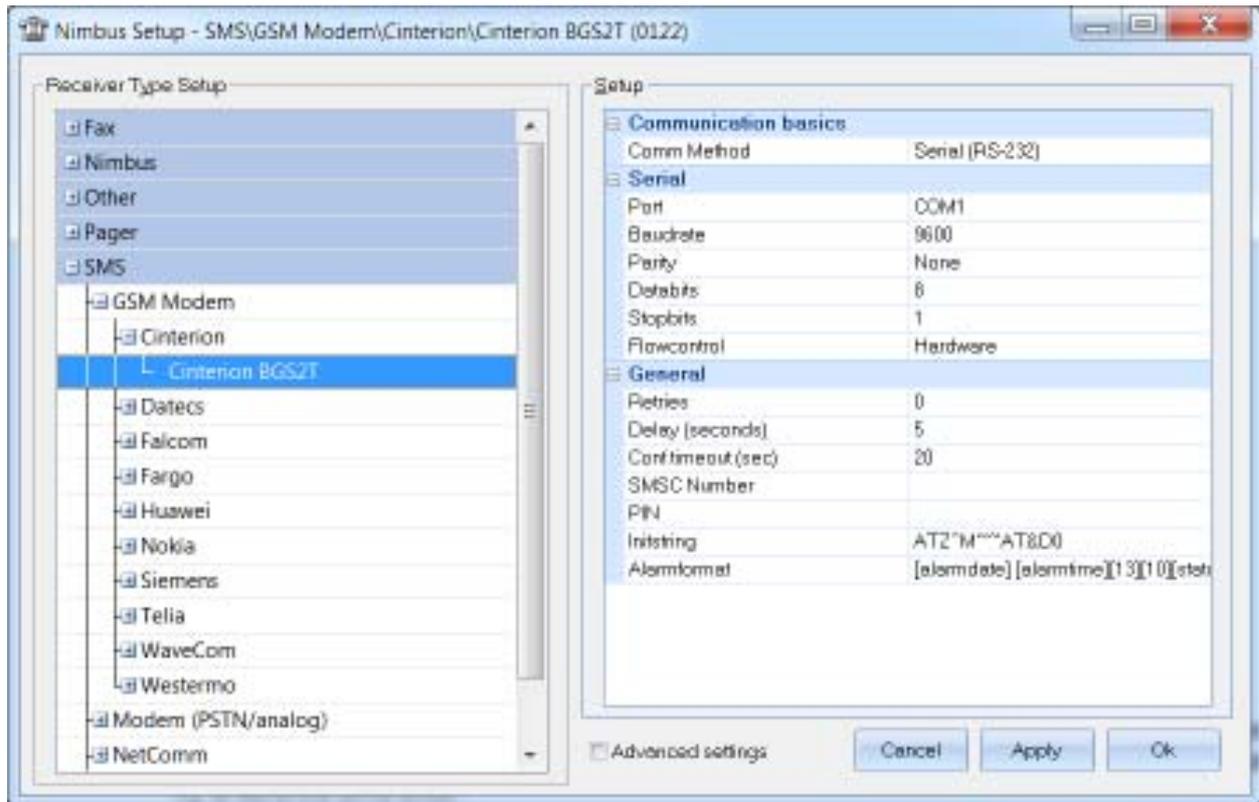


Select *Add*, name the receiver, select what type it is and finally enter the number or other needed information. In the above example *Tomas* will receive a SMS using a *Cinterion BGS2T* modem (*SMS\GSM Modem\Cinterion\Cinterion BGS2T*).

Select *Ok*.

5. Receiver Type setup

Select *Setup -> Receiver Type Setup -> SMS -> GSM Modem -> Cinterion -> Cinterion BGS2T*



Select the COM-port number. Increase the *Retries* parameter when you are sure the modem is working properly to avoid unnecessary delays during testing. It is by default set to 0, which means *Nimbus Alarm Server* only will try to send the SMS once. Always remove the PIN-code from the SIM-card. Always leave the SMSC-number field empty.

Select *Ok*.

6. Run Nimbus Alarm Server

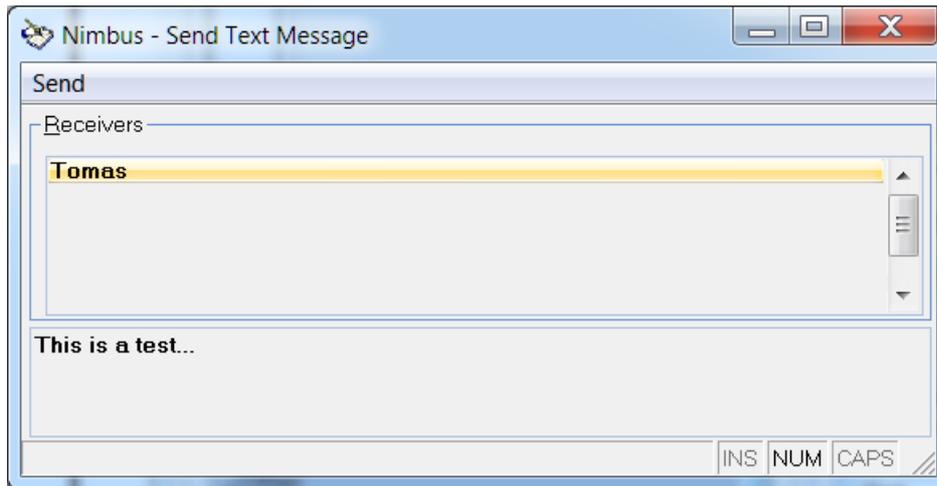
Run *Nimbus Alarm Server* using the *File - Startup Nimbus Alarm Server* menu selection. If no licensing is provided, there will be a messagebox asking you to attach the dongle.

If you run *Nimbus* as service, you should start it using the *Service Control Manager (SCM)*

Select *Ok*.

7. Try a message

Ensure the new receiver is working properly using *File - Text Message*.

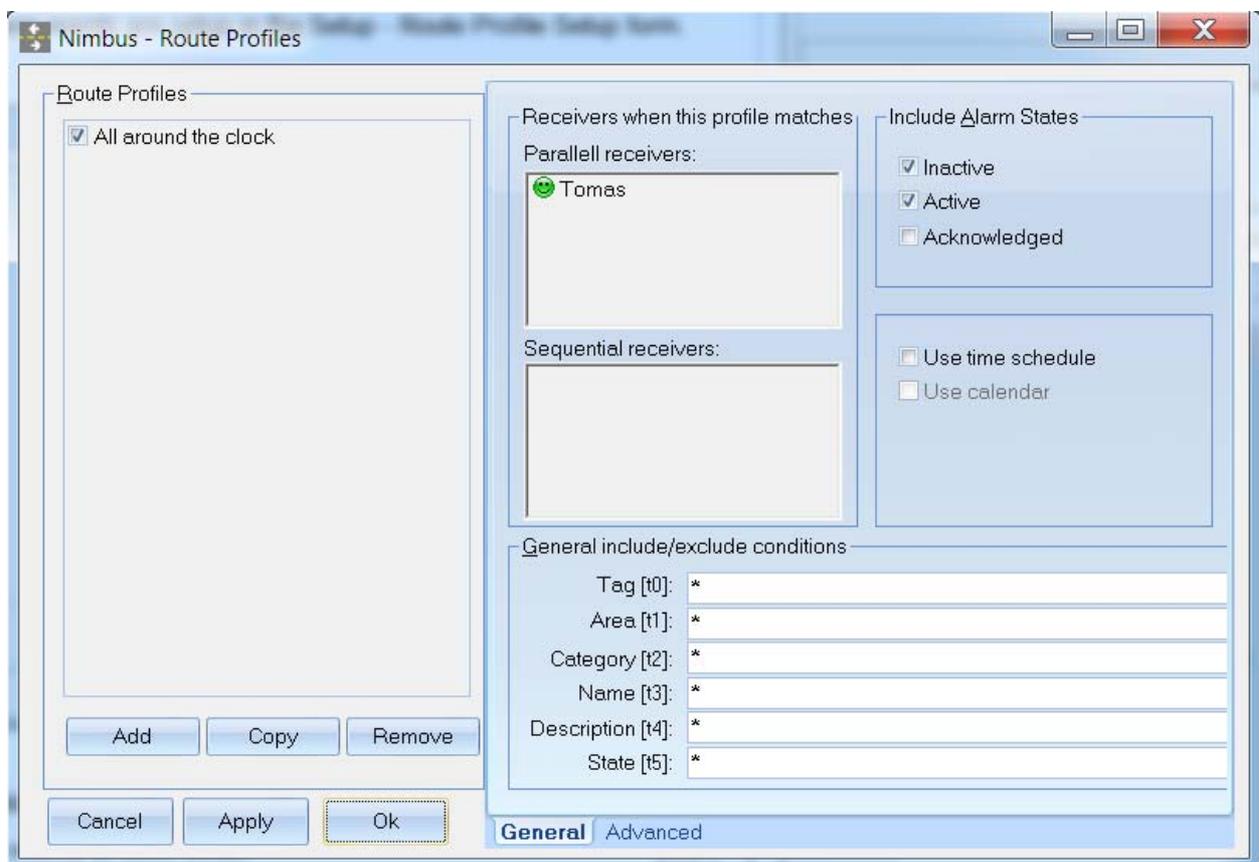


Select receiver, write some text in the text field and select *Send*.

The message is transferred from *Nimbus Explorer* to *Nimbus Alarm Server* and will be sent within a couple of seconds.

8. Forwarding alarm events

The rules for who will receive specific alarm events are created in the *Setup - Route Profile Setup* form.



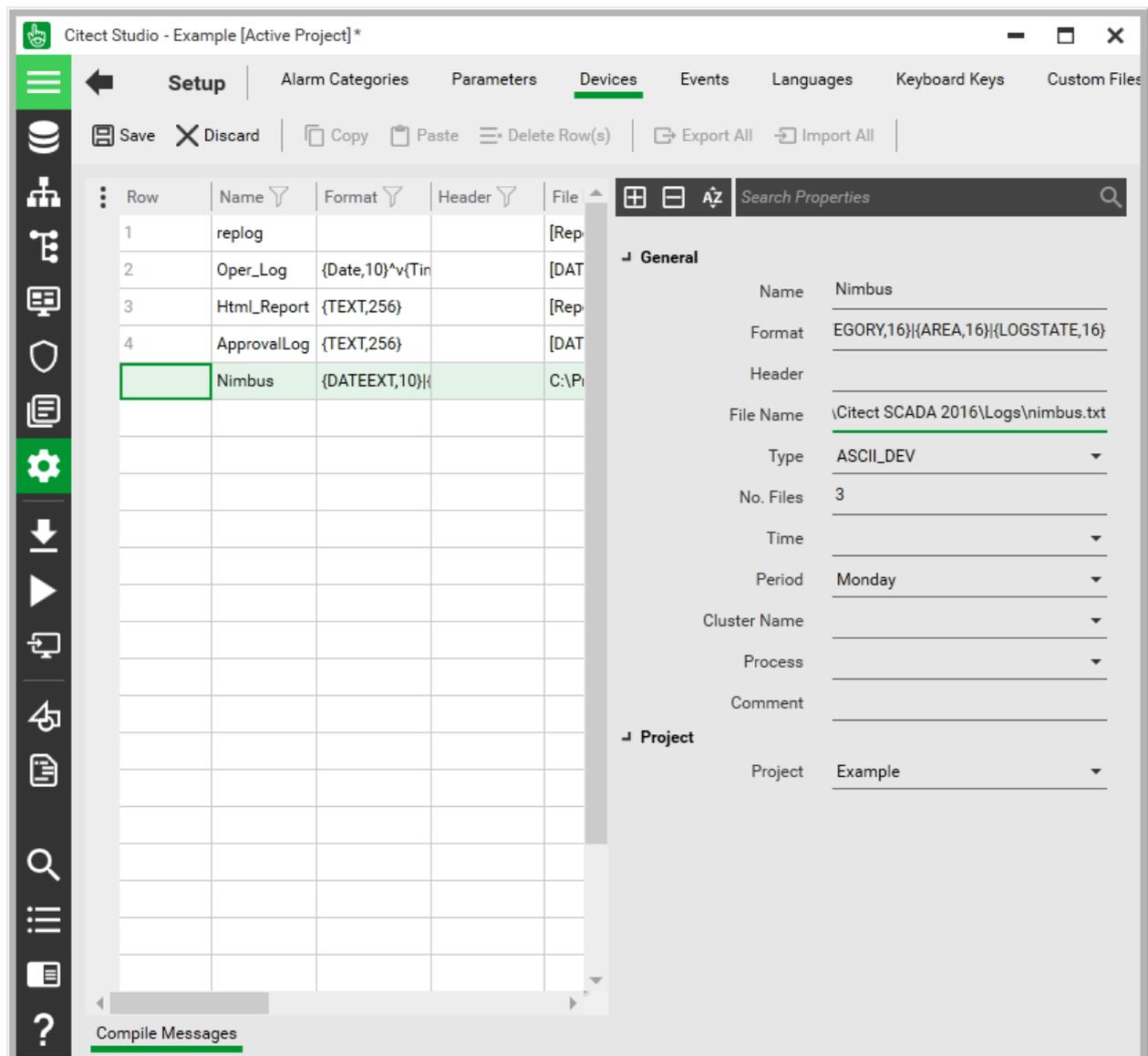
Select *Add* and name the profile. Right-click in the *Parallel Receivers* listbox and add a receiver. Select

Ok. This profile will now forward all alarm events to *Tomas*.

9. Configure your SCADA for alarm export

Now it is time to configure the Citect alarm export.

Run *Citect Explorer*. Choose *System - Devices*. Create the device to be used for alarm events export. It is an *ASCII_DEV*:



File Name should point to the same folder selected in *SCADA Import*, ex *C:\ProgramData\Schneider Electric\Citect SCADA 2016\Logs\Nimbus.txt*.

Here also the file name *Nimbus.txt* must be appended.

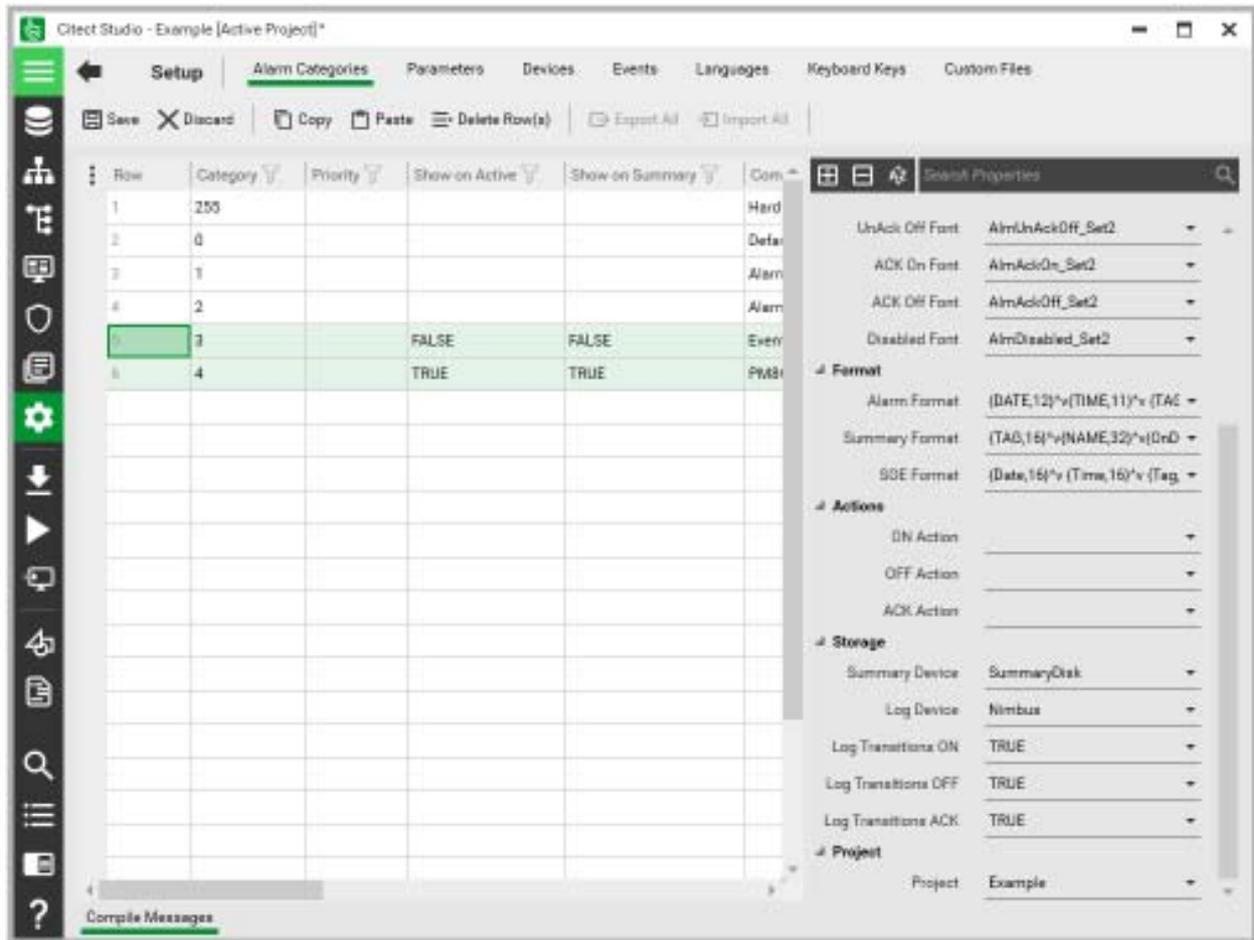
It is important the *Format* field is set to this:

{DATEEXT,10}{TIME,8}{TAG,80}{NAME,80}{DESC,128}{CATEGORY,16}{AREA,16}{LOGSTATE,16}

Most common problems is that the *File Name* points to the wrong folder or that *Format* is incorrect.

10. Select Categories in Citect

Now when the device is created it has to be entered in *Alarms-Alarm Categories* for all categories that should be exported.



This means that the the *Nimbus* device must be selected in the *Log Device* combobox and the *Log Transitions ON/OFF/ACK* must be set to *TRUE*. Citect will now export all alarm events in this category to the ASCII device (text file) *Nimbus.txt*. *Nimbus Alarm Server* will import the alarm events from the text file.

Finished! Compile and try it out. Create an alarm event, it should appear in *Nimbus Explorer*.

Tip1: If you want to use use multiple *Log Devices*, simply create a *Group* containing the *Log Devices* and use the *Group* name instead of the *Log Device* name.

Tip2: Create a test alarm button that toggles a disk device digital point associated with a digital alarm tag. This eases things up when you do some future testing of the alarm sending.

11. Support

Installation problems? Please contact nimbus@automatisera.nu.

12. Common questions

- 1. How to find out the Dongle ID or System Id needed for the registration ?**
Install *Nimbus Alarm Server* and start *Nimbus Explorer*. Select *Setup-Server Setup* and click *Scan for licensing opportunities*. Alternatively you can run the application:
www.automatisera.nu/download/DongleID.exe
- 2. Alarm events never comes in to Nimbus ?**
Probably wrong path in *Nimbus Explorer - SCADA import* or in *Citect Devices*. The path should contain the path only but in *Citect devices* the filename must be appended. The file must be named *Nimbus.TXT*.
- 3. Alarm comes into Nimbus but some fields seems to be misformed or short ?**
The format is not correct entered in *Citect Devices*.
- 4. The modem does not hangup when the message is transferred, hence following transfers will fail.**
The init string is not correct. Add *&D2*, ex *AT&F^M~~~~ATS0=0&D2* in the receiver type settings.
In the file *Nimbus_Server.INI* there is a *SoftOnHook* parameter which may be used if the cable is not full, ex *DTR* is missing. *Nimbus Alarm Server* usually toggle *DTR* to hangup.
- 5. The modem echoes characters but cannot be initiallised.**
Common problem with *US Robotics*. Lower the baudrate to 19200 bps.
- 6. A HTML document was never created, although this was the intention.**
Probably wrong path to the template in the receiver type settings, or wrong path to the destination HTML file.
- 7. SMS cannot be sent - the message 'SMSC does not answer' appears**
A sender id that is not numeric is provided, check the receiver type settings. Some *SMSC* does not allow non-numeric sender id's.
- 8. We would like to send SMS from a pump station where there are no physical phone connection.**
Use a *GSM* modem, ex *Siemens TC35i*.
- 9. We would like to send alarm events to some computers attached to our LAN.**
Use *Nimbus Alarm Receiver*, alternatively send the alarm events to your mail server using *SMTP*.
- 10. How do we send alarm events to a network printer ? We also don't want a complete paper to be feed each time an alarm is written.**
Use the receiver type *Network Printer*. Alternatively the *LPD TCP/IP* printer may be used if the printer is located directly on the LAN. The *LPD TCP/IP receiver* type does not require that the computer is logged in to the domain.
None of the printer receiver types in *Nimbus Alarm Server* issue a formfeed.
- 11. We have an old NEC CP62 which prints in colors and we like to have different colors depending of the event type, ex red for active events and green for inactive.**
Use the conditional formatting types that is available, ex. *Setup - Receiver Type Setup - Printer*. Add *{active?[27]r1}{inactive?[27]r2}{acked?[27]r6}* before the format description.
- 12. We have a customer with an own pager system. Is there any way to send alarm events there ?**
Please contact us. In many cases the existing protocols in *Nimbus Alarm Server* may be used.
- 13. Some forms disappeared or the project folder is wrong.**
Nimbus Explorer always store the previous form location and the project folder pointer in the registry.
Run *Nimbus Explorer* using:

NimExplorer /CleanUp

This will clear all Nimbus settings in the registry.

14. The user have forgotten the password

You may remove all users by simply delete (or rename) the *Nimbus_Users.DAT* file in the project folder. Receivers and other settings are not affected. When *Nimbus Explorer* is started next time a new (empty) file is created.

When the file does not exist, *Nimbus Explorer* suggest you should create a receiver.

To avoid login etc, remove all users or just do not create any user the first time you use *Nimbus Explorer*. It will only suggest you create a user the first time it is started.

15. Recommendations when installing a GSM-modem

Do not use cash cards because there is no way to automatically check the account.

Install the SIM-card in a cellphone, and remove any PIN. Try to send a SMS. Install the SIM-card in the GSM-modem.

You should generally never enter the SMSC number.