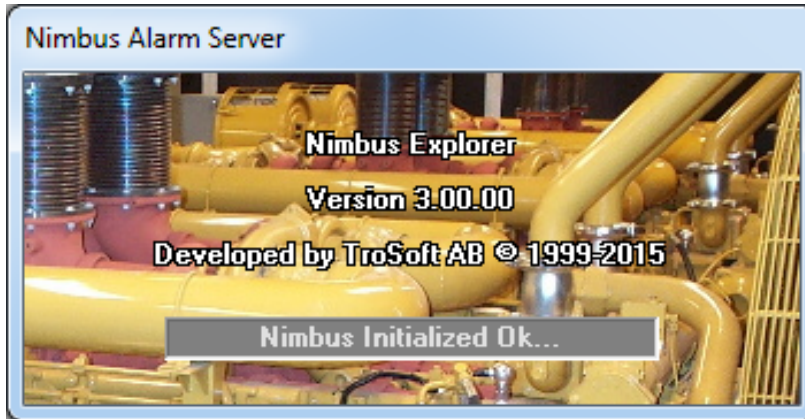# *Installation guide*

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.*
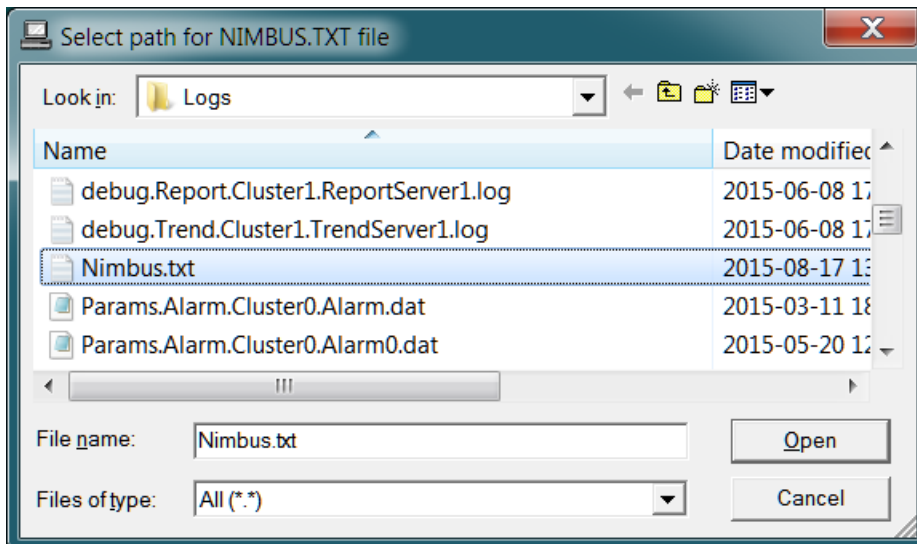
2.   Configure Nimbus för import

Start *Nimbus Explorer*. Select language.
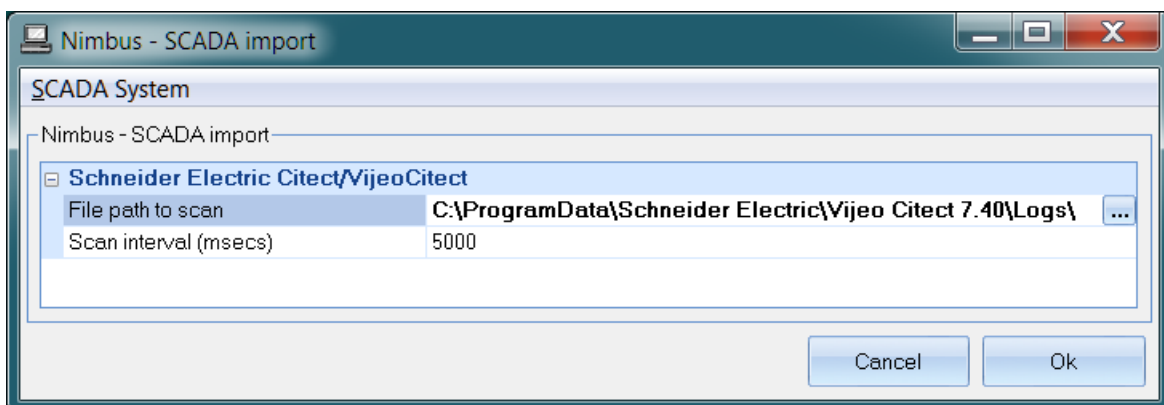
Select *Setup -> SCADA Import Setup.*
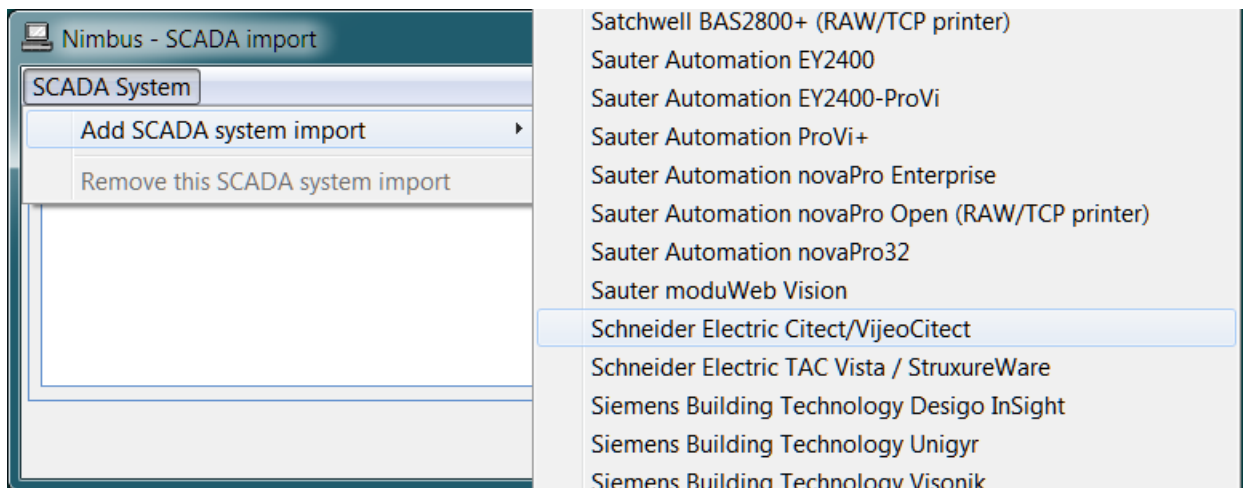
Select *SCADA System -> Add SCADA system import -> Schneider Electric Citect/VijeoCitect.*

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\Vijeo Citect 7.40\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).
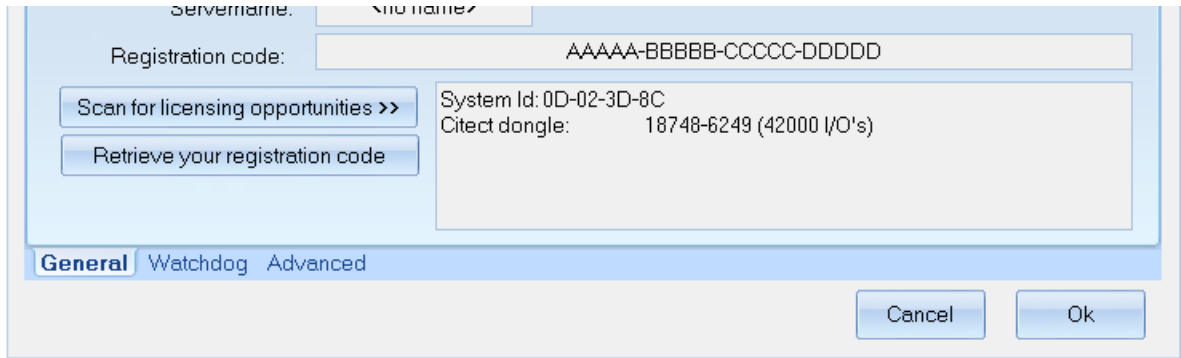
3.   Registration

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.*
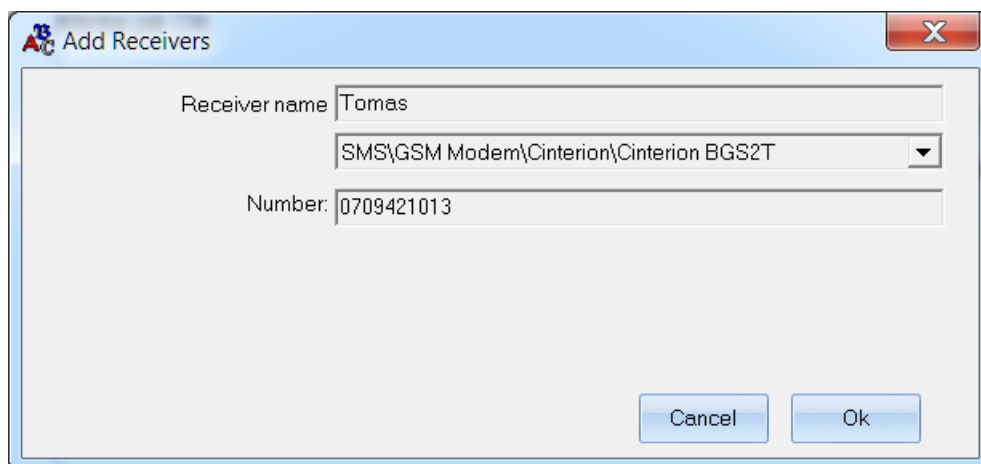

If you already have ordered a Nimbus license, you should have been provided with a separate document describing how to get your registrationcode from our license server.

4.   Create and Alarm Receiver
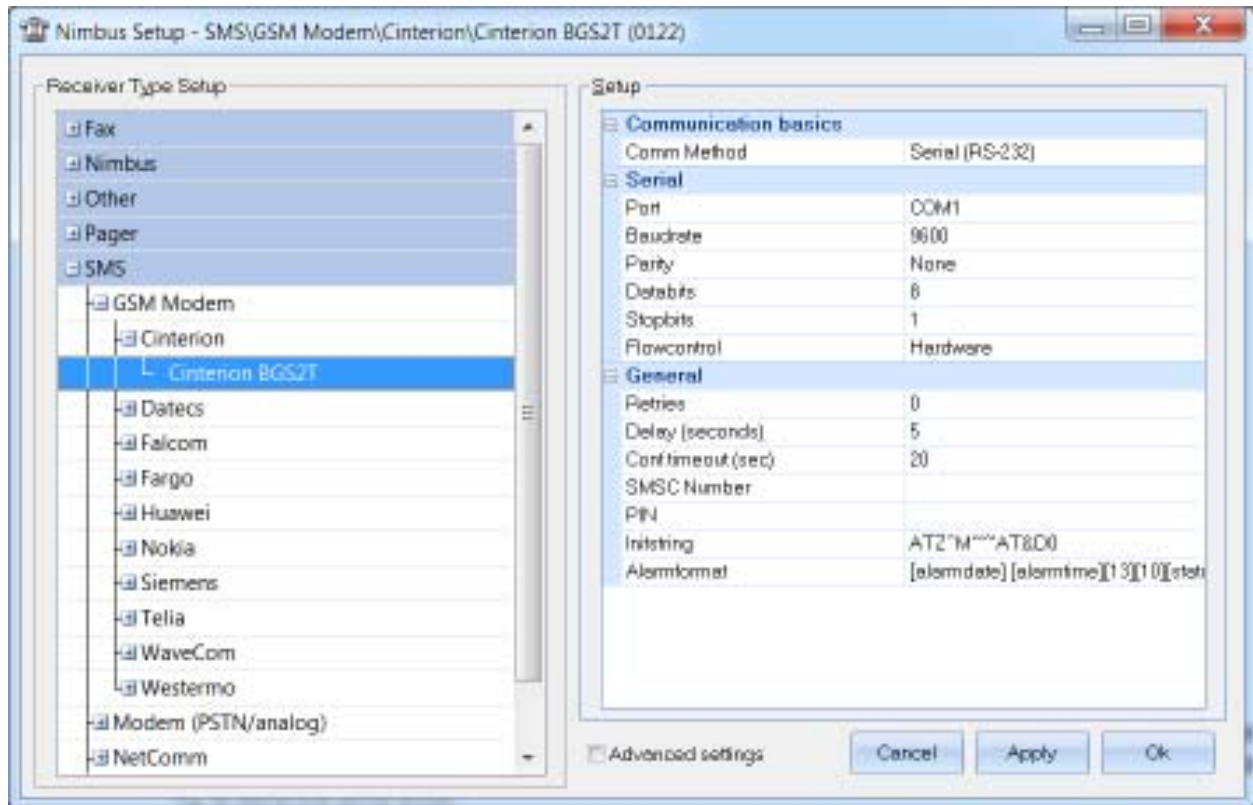
Select *Setup - Receiver Setup*.

Select *Add*, name the receiver, select what type it is and finally enter the number or other needed informa-tion. 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 uneccessary 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.
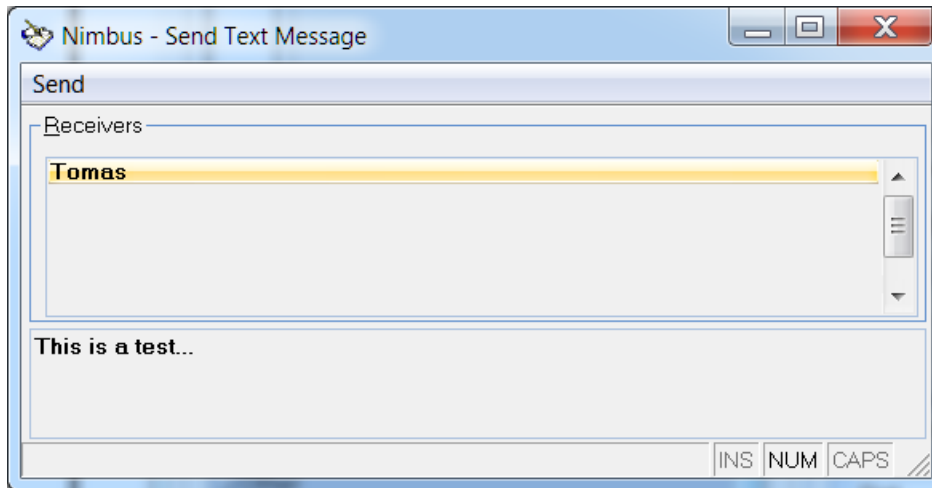
If you run Nimbus as service, you should start it using the *Service Control Manager (SCM)*

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.
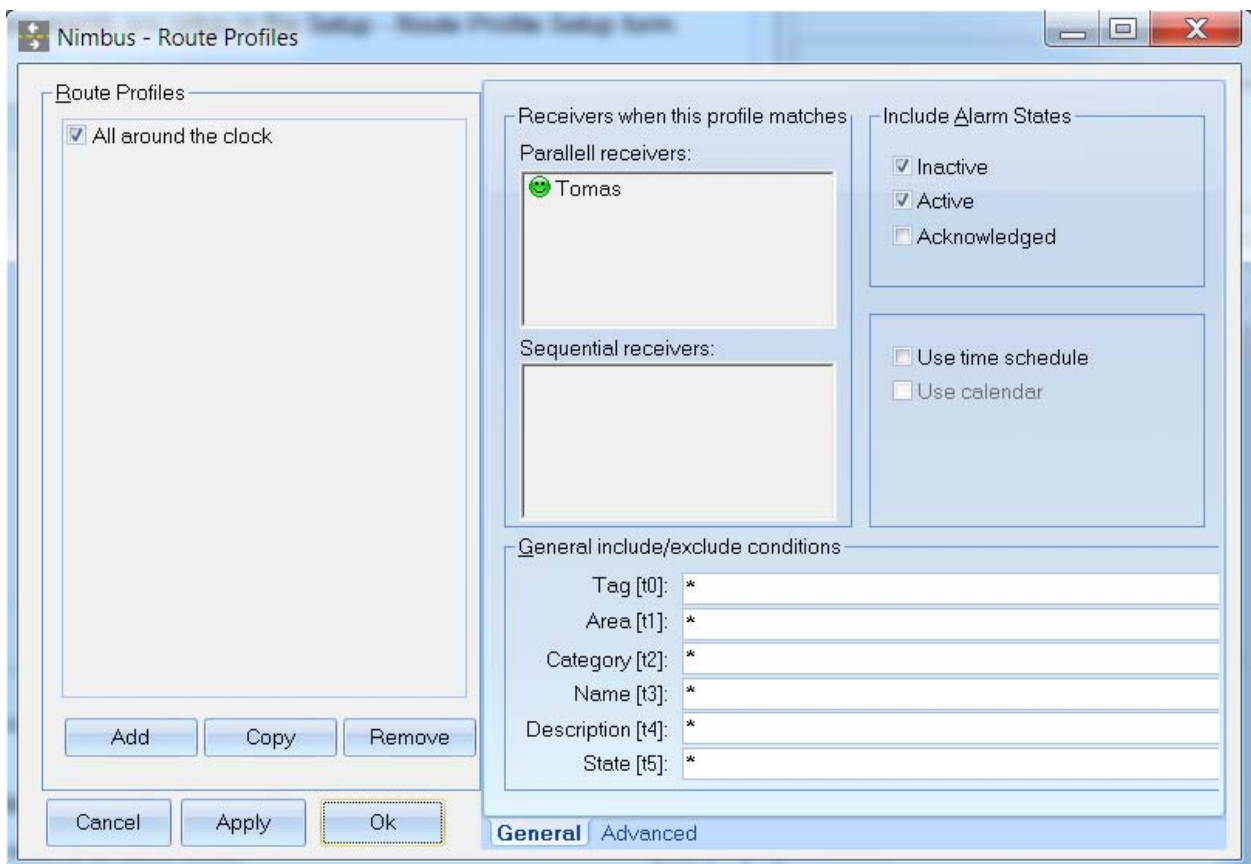
Select *Add* and name the profile. Right-click in the *Parallell Receivers* listbox and add a receiver. Select
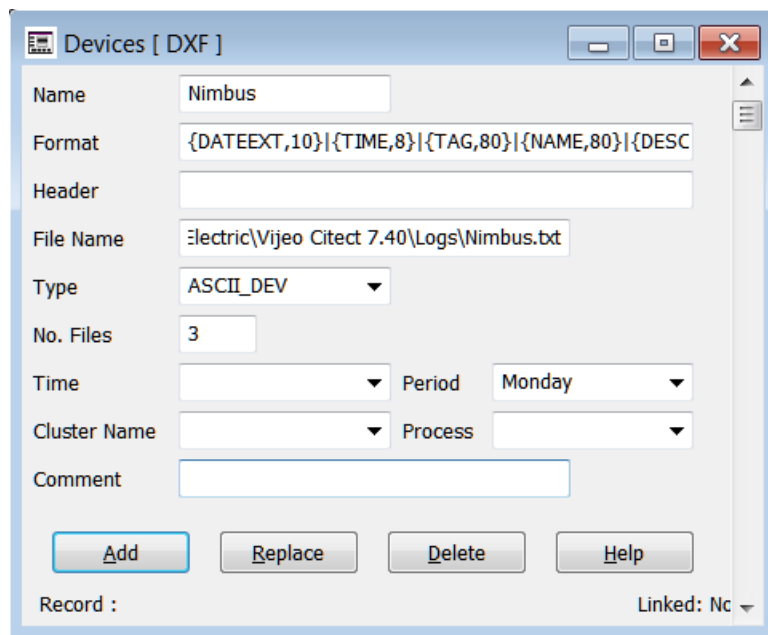
Ok. This profile will now forward all alarm events to *Tomas.*

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\Vijeo Citect 7.40\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, altough 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.