

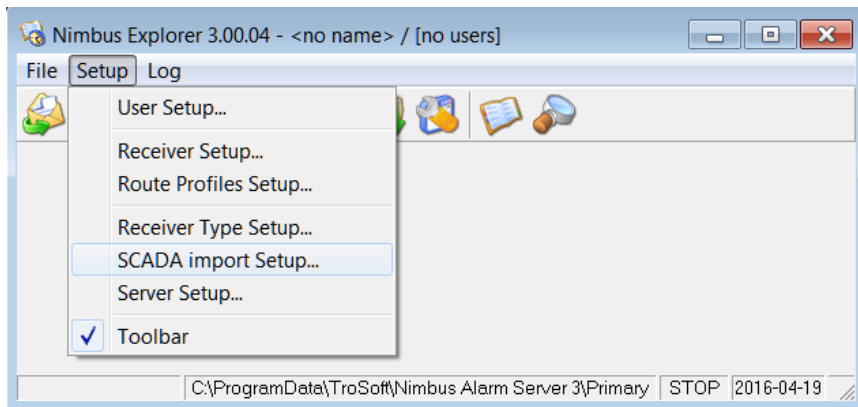
How to add SAIA Visi.Plus to Nimbus

SAIA Visi.Plus can send alarm events as TCP socket events to Nimbus using the *Alarm Manager*. This document describes how to setup SAIA Visi.Plus to send alarm events and how to configure Nimbus to receive and parse them using the built-in TCP socket server.

First of all install *Nimbus Alarm Server* (see separate instructions)

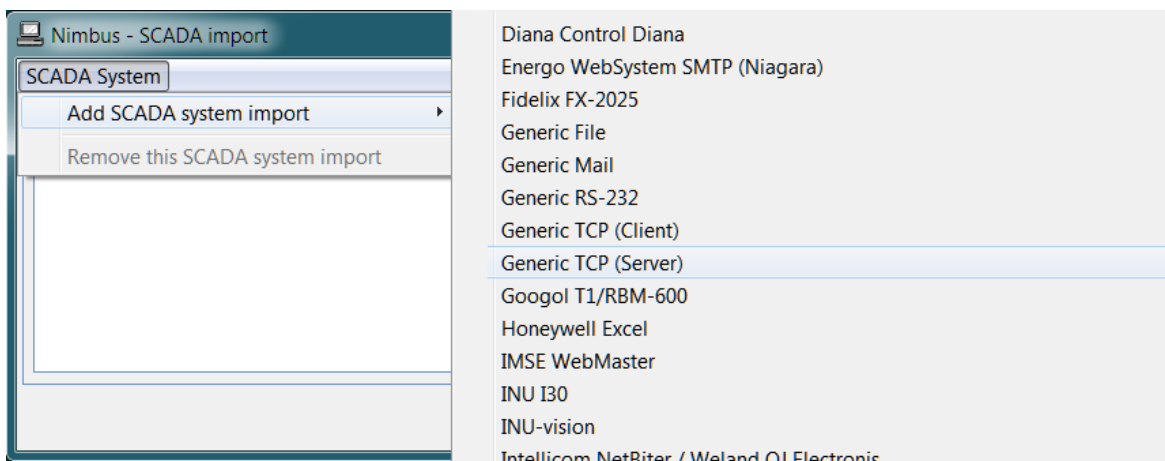
Add SAIA Visi.Plus SCADA import to Nimbus

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.



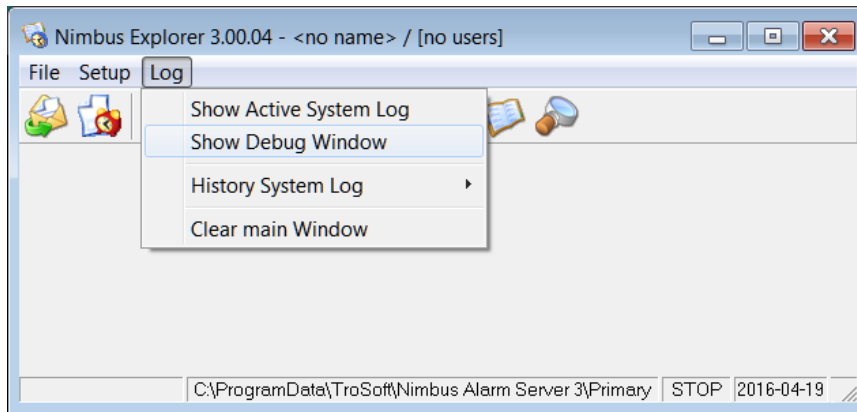
Select *Setup* -> *SCADA import Setup*.

You will need to have Nimbus Alarm Server release 2.00.23 or later (this example is from *Nimbus release 3.00.04*).



Select *SCADA System* -> *Add SCADA system import* -> *Generic TCP (Server)*.

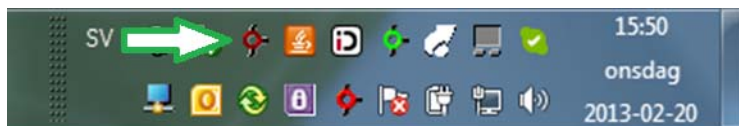
That's it. Restart *Nimbus Alarm Server* if it was already running. The Nimbus Server has a built-in TCP socket.



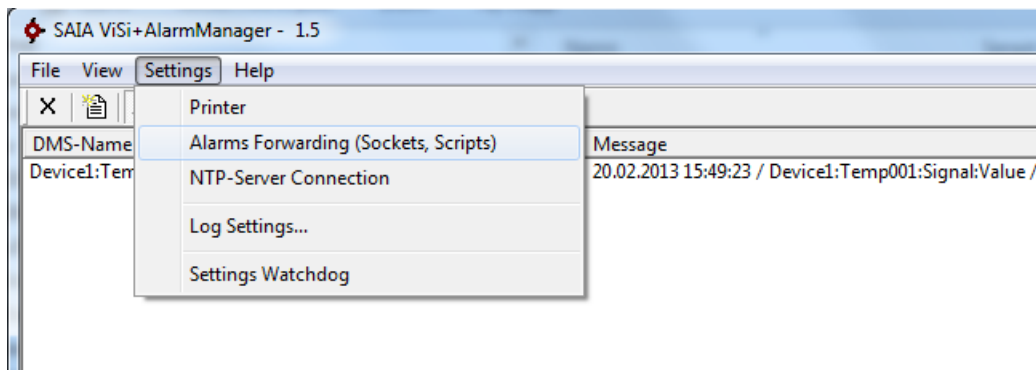
Open the debug window for future use and begin configure Visi.Plus.

Configure SAIA Visi.Plus alarm export to TCP socket

Start the *AlmMng.exe* program in your *Visi.Plus BIN*-folder.



Open the program using mouse right-click on the icon in the *Notify* area.



Select *Settings* -> *Alarms Forwarding (Sockets, Scripts)*

The screenshot shows the 'Settings Alarms Forwarding' dialog box. The 'Socket Settings' section is highlighted with a red box, showing IP 1: 127.0.0.1 and Port 1: 15000. The 'Alarm Format Settings' section is also highlighted with a red box, showing the format string: #Z(1:0:2)|#Y-#m-#d|#H:#M:#S|#N||#P||#T[10]. Other sections include 'External Alarm Receiver Program', 'Send Options', 'Send Watch Dog Test String', and 'Send Status String'.

Enter the IP-address to the server where Nimbus is installed. In this case *Nimbus Alarm Server* is installed on the same server as *Visi.Plus*, hence the localhost *127.0.0.1* address. The port number should be *15000*, as it is the default port used by Nimbus. It can be changed in the *Nimbus SCADA Import settings*.

If not both programs are located on the same server, ensure any firewall rules (also the internal firewall) allow communication using this port.

Check the *Send Options* needed (in the above example we only want *Priority 1* and *2* alarms)

The *Alarm Format Settings* format-string should look like:

`#Z(1:0:2)|#Y-#m-#d|#H:#M:#S|#N||#P||#T[10]`

Ensure you have exactly the same number of pipe characters etc. This format will be parsed by Nimbus like this:

```
[t0] Tag          DMS-name (#N)          Lejonet Plan 1:AS101:ÅSKSKYDD:LARM:Value
[t1] Area         (not used)
[t2] Category    Alarm Priority (#P)    1
[t3] Name        (not used)
[t4] Description Alarm text (#T)        Åskskydd utlöst
[t5] State       (not used)
```

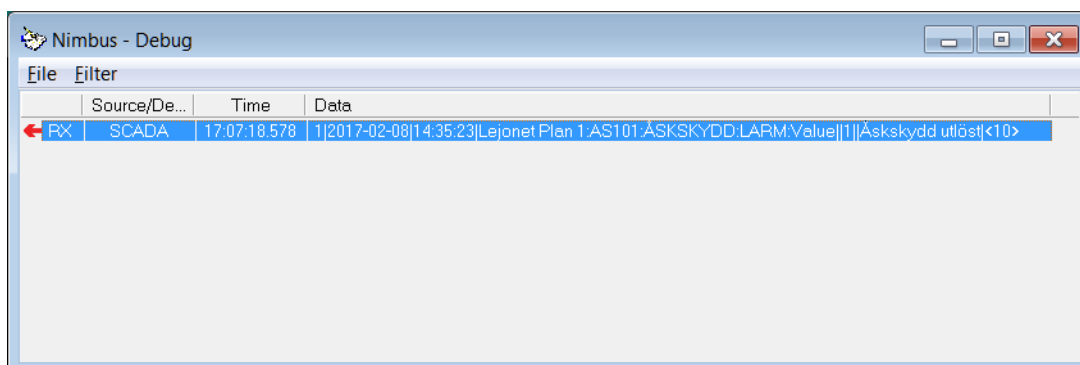
The unused fields could of course also be set to some format value, however ensure not to change the number of pipe '|' characters.

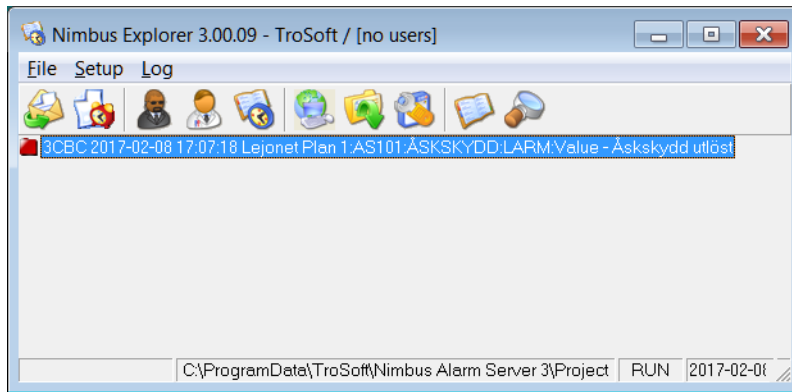
Here are the format values in *Visi.Plus*:

#d	Day	#N	DMS-Name	#u	Username
#m	Month	#-20N	DMS-Name - pad to 20 chars (fill blanks from behind)	#10u	Username (10 chars)
#y	Year (YY)			#T	Alarm text
#Y	Year (YYYY)	#+20N	DMS-Name - pad to 20 chars (insert blanks ahead)	#C	Comment
#H	Hours			#E	External text (with LF)
#M	Minutes	#-10n	DMS-Name - limit to 10 chars (cut chars ahead)	#E	External text (with CRLF)
#S	Seconds	#+10n	DMS-Name - limit to 10 chars (cut chars from behind)	#P	Alarm priority
				#R	Alarm group
				#s	Speech output alarm
#X	Time		#Z(New:Done:Quit)		Current alarm state (digital)
#t	TimeFLT (HH:MM)		#v		Current value (analog)
#x	Date		#5.2v		Current value (analog, 5 numbers, 2 comma)
#c	Date Time		#z(On:Off)		Current value (digital)
			#VNAME		DMS-value (same level)
			#V^NAME		DMS-value (higher level)

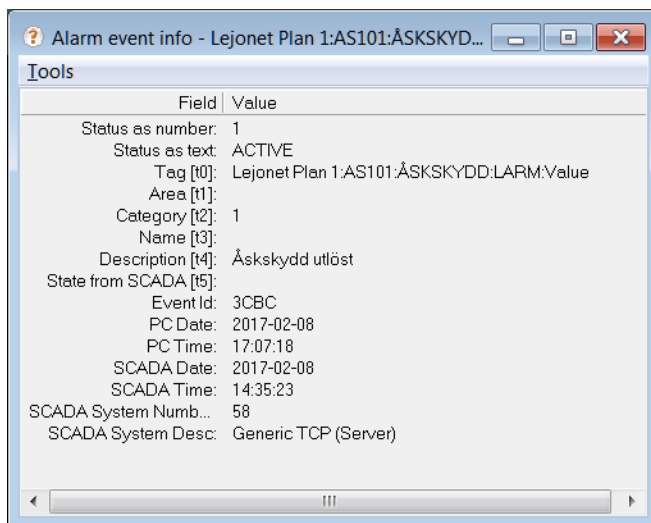
Now press the *Test* button and ensure the *Debug window* in Nimbus shows some data.

Click *Ok* and try to set an alarm in *Visi.Plus* and ensure it arrives in *Nimbus Explorer*:





Double click the alarm event to see some details.



If you get some text as above then all is fine.

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