How to add Zenon 7.20 import to Nimbus

Zenon 7.20 is able to send alarm to Nimbus using a Generic Text File and a VBA script.



In your Zenon Supervisor, open the VBA Editor



In the VBA Editor, insert code as above. Mainly the code contains an Alarm object with events that triggers three functions (methods): zAlarm_AlarmComes, zAlarm_AlarmGoes and zAlarm_AlarmAcknowledged. These functions calls a function, Alarm2Nimbus, which writes the alarm event and its info to a text file. The Alarm object (zAlarm) must be created in the Project_Active function and destroyed in the Project_Inactive function.

You will find the code sections later in this document. Copy and paste the code to the appropriate places in your own VBA code or create a new VBA code.

Change the *sNimbusFile* variable to point to the folder where you wish the Alarm export file. In the example it points to the Nimbus 3 default project folder.

Start your Zenon project and create and alarm. Your will see the *sNimbusFile* file be created.

Now it's time to configure 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.

Vimbus Explorer 3.00.03 ß3 - <no name=""> / [no users]</no>										
File	File Setup Log									
\bigotimes		User Setup	N 🔁 🔊							
		Receiver Setup Route Profiles Setup								
		Receiver Type Setup								
		SCADA import Setup								
		Server Setup								
	✓	Toolbar								
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C\ProgramData\TroSoft\Nimbus Alarm Server 3\Project STOP 2016-02-23 16:59										

Select Setup -> SCADA import Setup.

🚇 Nimbus - SCADA import	Time cleared	Time activitation of the									
SCADA System											
Nimbus - SCADA import											
Generic File											
File to scan	Select/enter the file to import	le l									
Scan interval (msecs)	Look in: 📕 Project	▼ = 1									
	Name	Date modified	^								
	Receivers	2016-02-23 16:10									
	ReceiverTypes	2015-08-17 12:34									
	🗑 Nimbus_Server.ini	2016-02-23 16:10	=								
	Nimbus_Users.dat	2015-08-17 12:34									
	Zenon.txt	2016-02-23 16:11	-								
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	File name: Zenon.bt	Oper	<u></u>								
	Files of type: All (*.*)	▼ Canc	el L								
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Select SCADA System -> Add SCADA System Import -> Generic File

Now select the *Zenon.txt* file in the same directory as pointed by the *sNimbusFile*. If the file does not exist yet select another file in the same directory and change the path/name manually.

Obs! It is important not to leave the wrong file name there as Nimbus will try to delete the file when it starts up!

When you start *Nimbus Alarm Server* it will remove the file, because it contains only old alarm events.

Filter profile										
		Save	I	nport Export	Delete					
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d	Variable name	Value	Measuring unit	Text	User - full name					
	Energy_windfarm[24].Alarm	2 Windturbine Alarm (Level2)								
	Energy Hydro Process WaterLevelUpstream	937	m ü.M.	Water Level High Warning						
52	Energ 🔞 Nimbus Explorer 3.00.00 - <no name=""> / [no users]</no>				TEM N					
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	Energ 0134 2016-02-23 16:37:04 Pharma Process PrimaryReactor									
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	Energ 0136 2016-02-23 16:37:04 Energy Hydro Process WaterL	evelUpstream - Water	Level High Alarm	Area (11): 0						
	Energ popup			Category [t2]: 5 Name [t3]:						
:52	Energ 0137 2016-02-23 16:37 Energ 0138 2016-02-23 16:37 Nimbus Popup Message -	Energy_Hydr		Description [t4]: Water Level High Warning	STEM					
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	Cherry 013C 2016-02-23 16:37: t4: Water Level High W.	aming	ng	SCADA System Numb 36						
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6:52	Energ Multin 2010-02/23 10:37.14 Energy_Hydro_Process_WaterLeverupstream 100 kt Energy_Hydro_Process_WaterLeverDownstream									
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	Energ 0141 2016-02-23 16:37:16 Anins_body31	02-23 16:36:52 ACKEE								
	Energy 01432016-022318-37-16 Energy_winda K Ut Energy_Hydro_Process_WaterLevelUpstream									
5: 52	Energ 0144 2016-02-23 16:37:16 Energy_windia (2:5)				STEM V					
	Energ 0146 2016-02-23 16:37:16 Energy_windfa 44: W4	ater Level LOW Alarm								
5:52	Energ 0147 2016-02-23 16:37:16 Energy_windra				E STEM					
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	Energ C:\ProgramData\TroSoft\Nimbus Alarm Server 3\Project RUN (demo mode) 2016-02-23 [16:37									
	Energy_Hydro_Process_WaterLevelUpstream	865	m ü.M.	Water Level LOW Warning						
52	Energy_Hydro_Process_WaterLevelUpstream	861	m ü.M.	Water Level LOW Alarm	SYSTEM					
	Energy_Hydro_Process_WaterLevelUpstream	861	m ü.M.	Water Level LOW Warning						

Some alarms from the Zenon Demo Project as they appear using the Nimbus Popup form.

The VBA Code which does the job

```
Dim WithEvents zAlarm As Alarm
Private Sub Project_Active()
Set zAlarm = thisProject.Alarm
End Sub
Private Sub Project_Inactive()
Set zAlarm = Nothing
End Sub
Private Sub zAlarm_AlarmComes(ByVal obItem As IAlarmItem)
Alarm2Nimbus obItem, 1
End Sub
Private Sub zAlarm_AlarmGoes(ByVal obItem As IAlarmItem)
Alarm2Nimbus obItem, 0
End Sub
Private Sub zAlarm_AlarmAcknowledged(ByVal obItem As IAlarmItem)
Alarm2Nimbus obItem, 2
```

End Sub

```
Private Sub Alarm2Nimbus(ByVal obItem As IAlarmItem, iStatus As Integer)
  Dim sNimbusFile As String
 Dim sLine As String
 Dim iFileNumber As Integer
  .
  ' Should reflect same file name as entered in Nimbus Explorer ->
  ' Setup -> SCADA Import -> Generic File
  sNimbusFile = "C:\ProgramData\TroSoft\Nimbus Alarm Server 3\Project\Zenon.txt"
  On Error Resume Next
  iFileNumber = FreeFile
  Open sNimbusFile For Append As #iFileNumber
  If Err.Number = 0 Then
    sLine = CStr(iStatus) & "|"
    Select Case iStatus
      ' Goes
      Case 0:
       sLine = sLine & Format(obItem.Timegoes, "yyyy-mm-dd|Hh:Nn:Ss|")
      ' Comes
      Case 1:
       sLine = sLine & Format(obltem.Timecomes, "yyyy-mm-dd|Hh:Nn:Ss|")
      ' Acknowledged
      Case 2:
        sLine = sLine & Format(obItem.TimeAcknowledged, "yyyy-mm-dd|Hh:Nn:Ss|")
      Case Else
       sLine = sLine & Format(Now, "yyyy-mm-dd|Hh:Nn:Ss|")
    End Select
    sLine = sLine & obItem.Name & "|" & CStr(obItem.AlarmGroup) & "|"
    sLine = sLine & CStr(obltem.AlarmClass) & "|" & "" & "|" & obltem.Text & " "
    sLine = sLine & obItem.Usertext
    Print #iFileNumber, sLine
  End If
  Close #iFileNumber
  On Error GoTo 0
```

End Sub