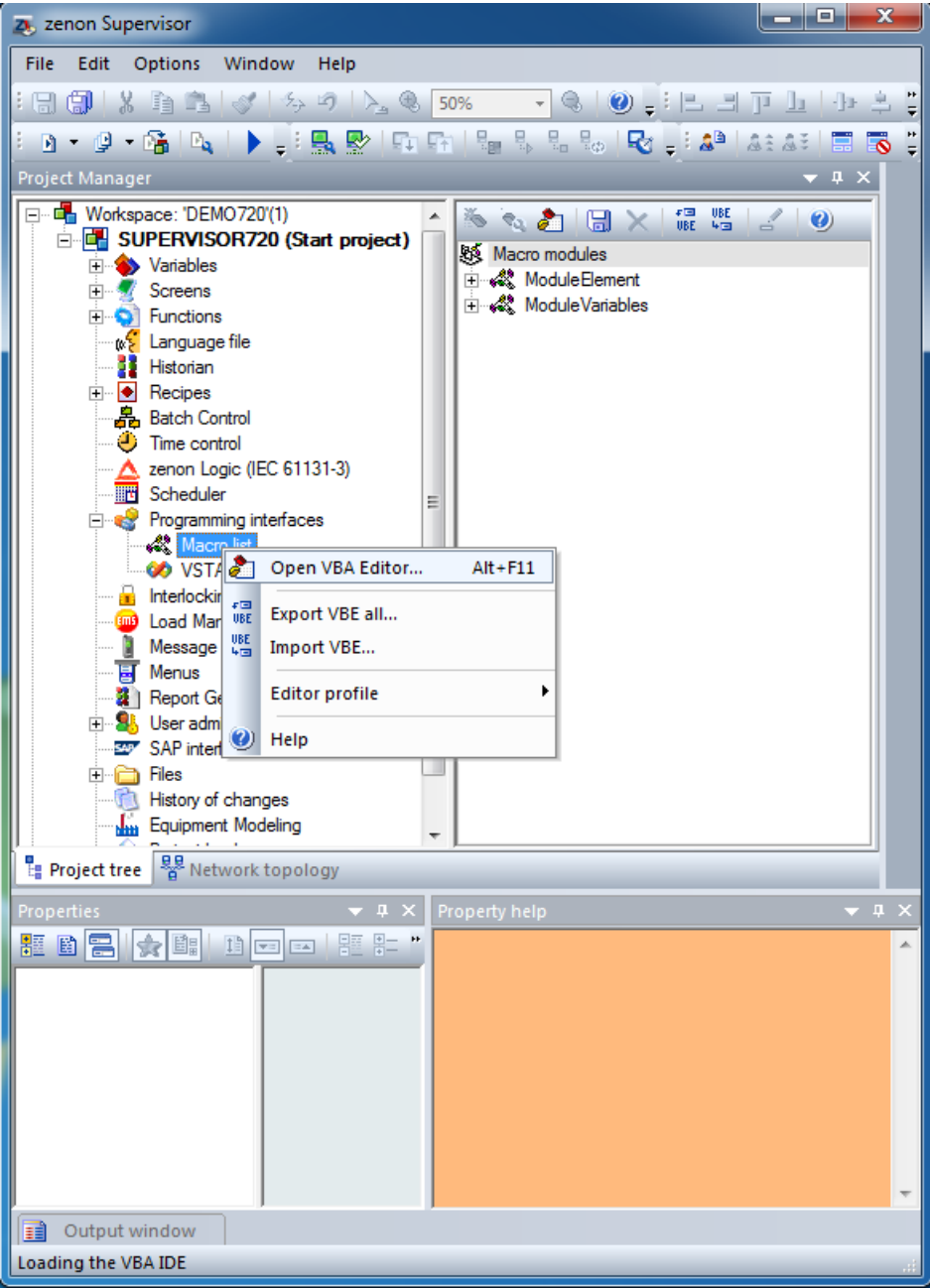# How to add Zenon 7.20 import to Nimbus

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.

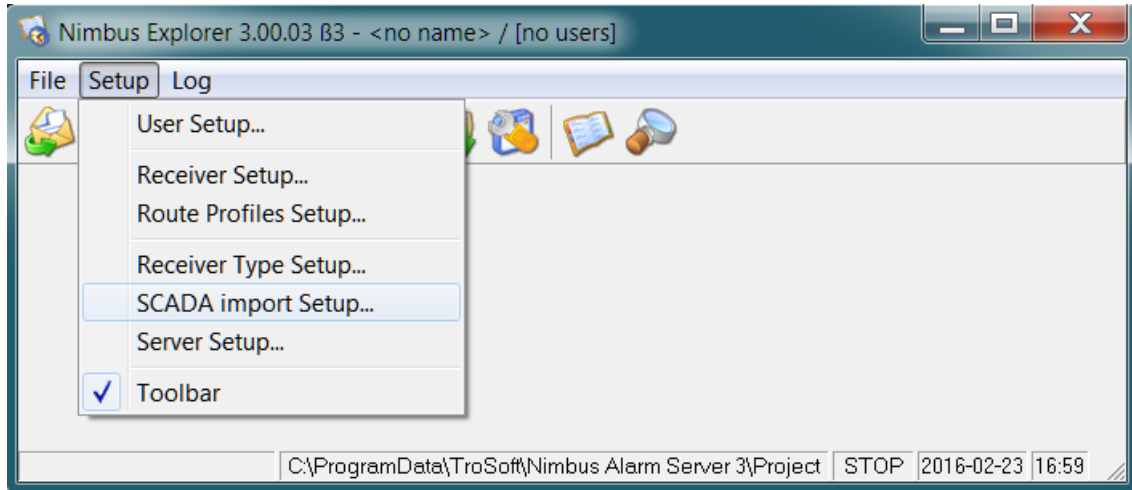You will find the code sections later in this document. Copy and paste the code to the appropriate places in your own VBA code or create a new VBA code.

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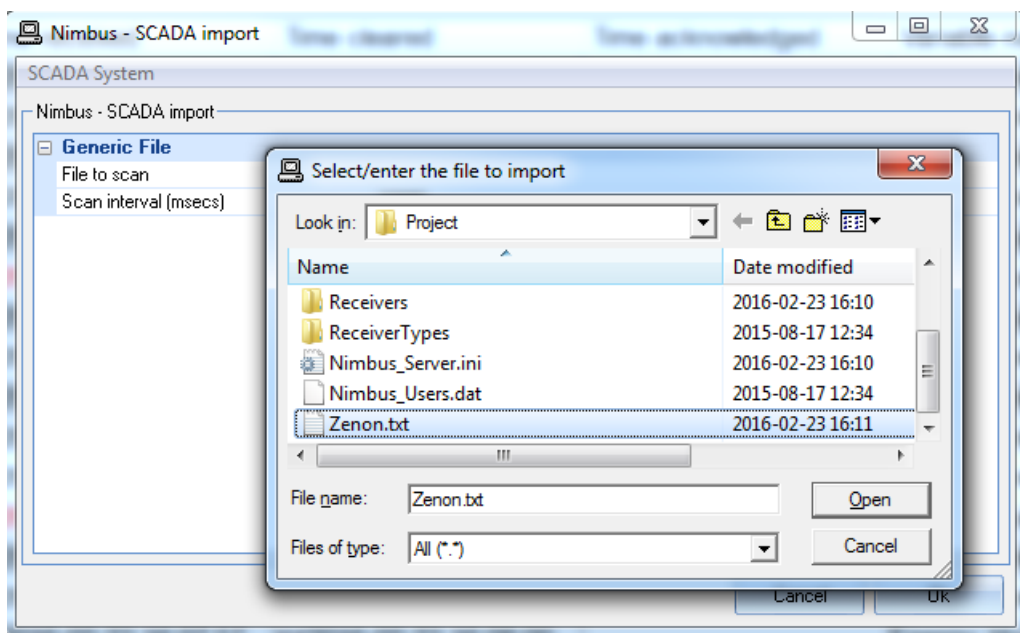
Start your *Zenon* project and create and alarm. Your will see the *sNimbusFile* file be created.

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.

Select *Setup -> SCADA import Setup.*

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.

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
```

```vba
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(obItem.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(obItem.AlarmClass) & "|" & "" & "|" & obItem.Text & " "
    sLine = sLine & obItem.Usertext

    Print #iFileNumber, sLine

  End If

  Close #iFileNumber

  On Error GoTo 0

End Sub
```