COMPASS for Pressure (or Flow)

Read and Write to/from a Text File (Report Field Macro)

* Auto-increment calibration report number

20 February 2014 (revised 13 April 2016)

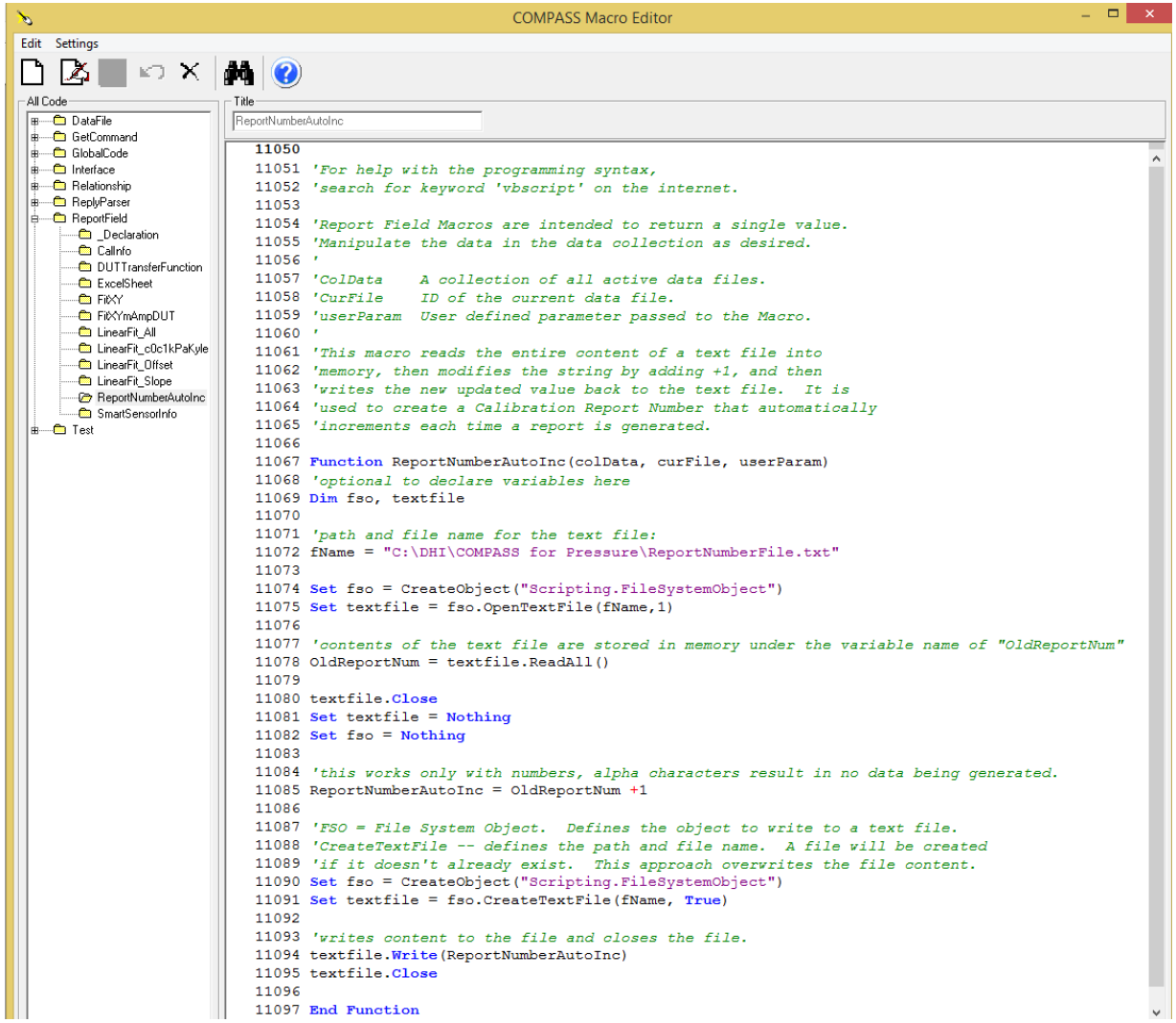
- Reads the entire contents of a text file into memory
- Modifies the content
- Writes the new content back to the text file, overwriting the existing data
- Used as a Report Field Macro

This macro is intended to create a calibration report number that auto-increments. The text file is to keep record of the last used report number.

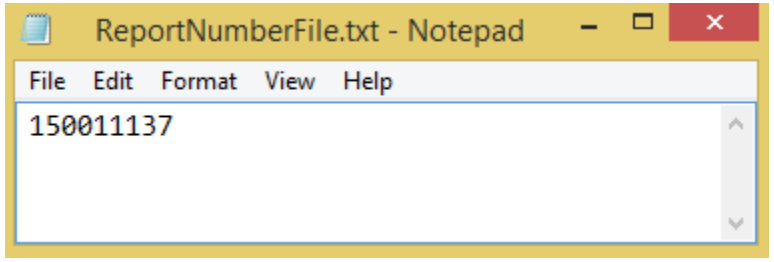
1. In COMPASS for Pressure (or Flow) open the COMPASS Macro Editor by the [Tools], <COMPASS Macro Editor> menu
2. Select the "ReportField" folder then click the blank white piece of paper to create a new ReportField macro.
3. Delete the four lines in the macro from **Function** to **End Function**.
4. Copy all of the text of the macro below and paste into the new macro below any existing comments (green text starting with an apostrophe). Note that [Ctrl] + [v] is used to paste in the macro editor (mouse clicks don't work.)
5. Type or paste the function name "ReportNumberAutoInc" as the Title of the macro (without the quotes).
6. Save the macro by clicking the save icon
7. Below the macro text below is an image of what the macro will look like in the macro editor.

Continue to page 3 below the image of the macro

```
'************************************************
'This macro reads the entire content of a text file into
'memory, then modifies the string by adding +1, and then
'writes the new updated value back to the text file.  It is
'used to create a Calibration Report Number that automatically
'increments each time a report is generated.
'************************************************

Function ReportNumberAutoInc(colData, curFile, userParam)
'optional to declare variables here
Dim fso, textfile

'path and file name for the text file:
fName = "C:\DHI\COMPASS for Pressure\ReportNumberFile.txt"

Set fso = CreateObject("Scripting.FileSystemObject")
Set textfile = fso.OpenTextFile(fName,1)

'contents of the text file are stored in memory under the variable name of "OldReportNum"
OldReportNum = textfile.ReadAll()

textfile.Close
Set textfile = Nothing
Set fso = Nothing

'this works only with numbers, alpha characters result in no data being generated.
ReportNumberAutoInc = OldReportNum +1

'FSO = File System Object.  Defines the object to write to a text file.
'CreateTextFile -- defines the path and file name.  A file will be created
'if it doesn't already exist.  This approach overwrites the file content.
Set fso = CreateObject("Scripting.FileSystemObject")
Set textfile = fso.CreateTextFile(fName, True)

'writes content to the file and closes the file.
textfile.Write(ReportNumberAutoInc)
textfile.Close

End Function
```



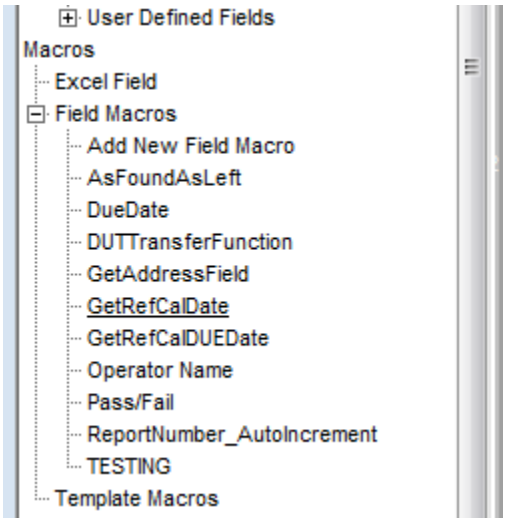
8. The source text file must be created and saved in a known location. Here's an image of an example file named "ReportNumberFile.txt" that starts with cal report number 150011137. The first report generated with it will be number 150011138. It is saved in the root COMPASS folder as C:\DHI\COMPASS for Pressure\ReportNumberFile.txt



If a different folder or file name is used, the macro code must be modified with the file name and path.

```
Function ReportNumberAutoInc(colData, curFile, userParam)
'optional to declare variables here
Dim fso, textfile

'path and file name for the text file:
fName = "C:\DHI\COMPASS for Pressure\ReportNumberFile.txt"

Set fso = CreateObject("Scripting.FileSystemObject")
Set textfile = fso.OpenTextFile(fName,1)
```

9. From the Report Editor, the “ReportNumber_AutoIncrement” report field macro is available to insert into a template. If you do not see it, close the Report Editor and COMPASS. When opened again the list will be refreshed and you should see it.



10. Insert the dynamic data link into a report template by double-clicking the link on the left. The link will be inserted at the cursor.
11. Generate a report.