

QGIS Application - Feature request #12101

Try user-selected GDAL/OGR driver first when loading a layer

2015-01-30 03:58 PM - Larry Shaffer

Status:	Open	Resolution: Copied to github as #: 20296
Priority:	Normal	
Assignee:		
Category:	Data Provider	
Pull Request or Patch supplied:	No	
Easy fix?:	No	
Description		
<p>QGIS always relies upon the GDAL/OGR driver selection when loading a file, e.g. as is coded in the OGR provider. In that code, no specific driver is set when asking GDAL/OGR to open a data source. Then QGIS has a reference to what GDAL/OGR driver was chosen:</p> <pre>"OGR opened using Driver " + QString(OGR_Dr_GetName(ogrDriver))</pre> <p>But... a user has no run-time control over <i>which</i> driver should be tried first.</p> <p>The listing of available drivers, used to generate the drop-down menus in QGIS for adding a layer, e.g. Add Vector Layer dialog, and the order in which GDAL/OGR drivers prioritize opening files are <i>mutually exclusive</i>. Essentially, as in the Add Vector Layer dialog, the found GDAL/OGR drivers are merely used for registering available file extension filters for the Open File dialogs. However, the listing ostensibly indicates to the user that they are <i>selecting</i> the driver to use to open a particular file, which is not the case. This causes user confusion.</p> <p>Example: FileGDB and OpenFileGDB can both open files with .gdb extension, but if your .gdb file is version 9.x, FileGDB will attempt to load the file first (and fail, because that version is unsupported), regardless of whether the user actually <i>selected</i> OpenFileGDB in the dialog to presumably open the file with. Only removing the FileGDB plugin or using OGR_SKIP prior to launching QGIS will help fix the issue, and allow OpenFileGDB to try opening the file. The user has no clue that a completely different driver is actually being used.</p> <p>Conversely, there is no user pre-selection of driver when doing drag-drop or selection within the browser panel for adding a file. Those file loads are purely extension-based and QGIS relies upon GDAL/OGR driver selection process for those as well. QGIS does have a GUI means of managing this issue for GDAL (in Options -> GDAL), but there is no twin dialog for OGR, yet. See Issue #10313.</p> <p>QGIS can be updated to try loading a GDAL/OGR layer using a specific provider, regardless of how many registered drivers can open the same file. This can be overcome at the C-API level, when calling GDAL/OGR to open a file/directory, by explicitly telling it what driver to use.</p> <pre>OGRSFDriverH ogrDriver = OGRGetDriverByName("FileGDB"); ogrDataSource = OGROpen(TO8F(mFilePath), true, &ogrDriver);</pre> <p>Seems to me, the process can be refined to:</p> <ul style="list-style-type: none">- Try specific driver, if it is indicated by user (like when using the Add Vector Layer dialog)- If specific driver failed to open file, drop back to current behavior of having GDAL/OGR auto-select driver		
Related issues:		
Related to QGIS Application - Feature request # 10313: List of available OGR ...		Open 2014-05-20

History

#1 - 2017-05-01 12:47 AM - Giovanni Manghi

- Easy fix? set to No

