QGIS Application - Bug report #20104 GDAL data provider cache is not cleared after triggerRepaint

2018-10-14 03:34 PM - Radek Pasiok

Status: Closed
Priority: Normal
Assignee: Even Rouault
Category: Data Provider
Affected QGIS version:3.3(master)

Operating System: Observed on Windows 7 and Ubuntu 18

Pull Request or Patch supplied:

Crashes QGIS or corrupts data:

Regression?: No Easy fix?: No

Resolution:

Copied to github as #: 27926

Description

While porting Serval plugin [1] to QGIS 3.2 I have discovered that after a raster datasource is modified and triggerRepaint() is called [2] the provider cache is not cleared properly. As a consequence, map canvas will display old and new raster cells values at different zoom levels.

When the provider cache is not used, i.e. when QgsGdalProvider::getCachedGdalHandles would be set to only return false, then canvas properly display new cell values at all zoom levels.

Steps to reproduce:

- 1. Add a raster to QGIS project, for example band1_byte_ct_epsg4326.tif from QGIS test data.
- 2. In the Python console run:

rlyr = iface.activeLayer()

rdp = rlyr.dataProvider()

dtype = rdp.dataType(1)

rdp.setEditable(True)

rblock = QgsRasterBlock(dtype, 1, 1)

rblock.setValue(0, 0, 255)

rdp.writeBlock(rblock, 1, 0, 0)

rdp.setEditable(False)

rlyr.triggerRepaint()

- 3. Zoom in and out a bit to left upper raster corner to see different values of the first cell at different zoom levels.
- [1] https://github.com/erpas/serval/tree/QGIS_3_port
- $\hbox{[2] $\underline{$https://github.com/erpas/serval/blob/a7ebbaf7653715ebdcaf7b59ee9d069ce895a91b/serval.py\#L366}$\\$

Associated revisions

Revision e7d15b64 - 2018-10-14 05:50 PM - Even Rouault

[GDAL provider] Make sure that setEditable(true) invalides cached GDAL handles to get proper refresh (fixes #20104)

Revision d5e57d31 - 2018-10-15 11:10 AM - Even Rouault

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[GDAL provider] Make sure that setEditable(true) invalides cached GDAL handles to get proper refresh (fixes #20104)

History

#1 - 2018-10-14 05:51 PM - Even Rouault

- Status changed from Open to In Progress

https://github.com/qgis/QGIS/pull/8186/

#2 - 2018-10-15 11:09 AM - Even Rouault

- % Done changed from 0 to 100
- Status changed from In Progress to Closed

Applied in changes et commit: qgis|e7d15b64951da2d7efba0d32e40cb294aefcd9db.

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