QGIS Application - Bug report #19441
Layers with 80+ rule-based symbology do not render

2018-07-18 08:37 AM - Basil Eric Rabi

Status:	Closed		
Priority:	Normal		
Assignee:	Alessandro Pasotti		
Category:	Symbology		
Affected QGIS version:	3.3(master)	**Regression?:**	No
Operating System:		**Easy fix?:**	No
Pull Request or Patch supplied:	Yes	**Resolution:**	fixed/implemented
Crashes QGIS or corrupts data:	No	**Copied to github as #:**	27269

Description

When a layer has less than 81 rule-based symbology, it renders without issues.
When a layer has reached more than 80 rule-based symbology, the layer is not rendered in the canvas.

This is tested in both master (fedora 28) and 3.2.0 (windows).

Associated revisions

Revision 3ea67af6 - 2018-08-14 04:33 PM - Alessandro Pasotti

[bugfix] Create a b-tree expr when rule based renderer has more than 50 rules

Fixes #19441 Layers with 80+ rule-based symbology do not render

History

#1 - 2018-07-18 10:17 AM - Giovanni Manghi

- Category changed from GUI to Symbology

#2 - 2018-07-18 10:17 AM - Giovanni Manghi

- Status changed from Open to Feedback

Did it works as expected on 2.18?

#3 - 2018-07-18 05:28 PM - Basil Eric Rabi

- Status changed from Feedback to Open

In 2.18, layer is not rendered when the rules are 82 and above.

#4 - 2018-08-14 06:06 AM - Igor Evdokimov

I have layer with +4000 rule-based symbology. (Need this to make selection with line hatch).
QGis 3.2 terminates without any message and any dump starting at 800-900 rules. Windows7 x64.
When layer has less rules - all works fine.

#5 - 2018-08-14 10:35 AM - Alessandro Pasotti

- Assignee set to Alessandro Pasotti

#6 - 2018-08-14 02:35 PM - Alessandro Pasotti

Doing some progresses here, (with some help from Even) we've identified the source of the issue which is in sqlite library limits.

See https://github.com/oniony/TMSU/wiki/Troubleshooting for the error "parser stack overflow" (bison related)

There is another error when the tree depth is too high: "Expression tree is too large (maximum depth 1000)" according to https://www.sqlite.org/limits.html, "The maximum number of bytes in the text of an SQL statement is limited to SQLITE_MAX_SQL_LENGTH which defaults to 1000000"

Unfortunately the solution doesn't seem to be trivial.

#7 - 2018-08-14 05:13 PM - Alessandro Pasotti

- Status changed from Open to In Progress

- Pull Request or Patch supplied changed from No to Yes

PR https://github.com/qgis/QGIS/pull/7612

#8 - 2018-08-15 02:36 AM - Basil Eric Rabi

Just tested the patch. It works great! Thank you.

#9 - 2018-08-17 02:05 PM - Anonymous

- Status changed from In Progress to Closed

- % Done changed from 0 to 100

Applied in changeset commit:qgis|3ea67af6e2a0590c64eac79d446465b8605cee54.

#10 - 2018-08-19 11:04 AM - Giovanni Manghi

- Resolution set to fixed/implemented

#11 - 2018-08-21 04:39 AM - Igor Evdokimov

Tested the patch also. It works now, but not great for my task. Very slow.
I have >4000 categories. With category-based symbology all works fine.

But we need to make hatched selection of polygons. Even standard hatches/line pattern
(diagonal, cross, etc.) will be enough, but not simple "color fill", as it is now in QGis.
So I had to implement this with rule-based symbology using <is_selected()> function
on map features. With this workaround on ~60 rules all works fine also, but on 4000 - very slow.

So I think I have to write feature request to make full-featured instrument
of "selection pattern" tuning (as it is in style editor, for example).

Files

DH.qgz	18.4 KB	2018-07-18	Basil Eric Rabi
sample.gpkg	1.22 MB	2018-07-18	Basil Eric Rabi