Crash when loading project with custom renderer for vector layers

2015-12-22 06:26 AM - Alexander Bruy

Description

I have custom renderer for vector layers, and can save project including information about this custom renderer. But when I try to open saved project QGIS crashes. Here is backtrace

```
#0  0x000000000000001fff in ?? ()
#1  0x0000000000007ff54f264d2 in QgsSymbolV2::mapUnitScale (this=0x7fff5c019040) at
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgssymbolv2.cpp:274
#2  0x0000000000007ff54f2cb38 in QgsMarkerSymbolV2::renderPoint (this=0x7fff5c019040, point=..., f=0x7fff63dfdb0, context=..., layerIndex=-1, selected=false)
   at /home/alex/devel/cpp/qgis/src/core/symbology-ng/qgssymbolv2.cpp:1251
#3  0x0000000000007ff54f29279 in QgsSymbolV2::renderFeature (this=0x7fff5c019040, feature=..., context=..., layer=-1, selected=false, drawVertexMarker=false, currentVertexMarkerType=1, currentVertexMarkerSize=3) at
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgssymbolv2.cpp:718
#4  0x0000000000007ff54a36262 in QgsFeatureRendererV2::renderFeatureWithSymbol (this=0ixa8bbf0, feature=..., symbol=0x7fff5c019040, context=..., layer=-1, selected=false, drawVertexMarker=false) at
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:283
#5  0x0000000000007ff54a35998 in QgsFeatureRendererV2::renderFeature (this=0xa8bbf0, feature=..., context=..., layer=-1, selected=false, drawVertexMarker=false) at
/home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:277
#6  0x0000000000007ff54f2b74e in sipQgsFeatureRendererV2::renderFeature (this=0xa8bbf0, a0=..., a1=..., a2=-1, a3=false, a4=false) at
/home/alex/devel/cpp/qgis/build/python/core/sip_corepart1.cpp:37671
#7  0x0000000000007ff5829119 in QgsVectorLayerRenderer::drawRendererV2 (this=0x2fd9780, fit=...) at
/home/alex/devel/cpp/qgis/src/core/qgsvectorlayerrenderer.cpp:312
#8  0x0000000000007ff582b99a in QgsVectorLayerRenderer::render (this=0x2fd9780) at
/home/alex/devel/cpp/qgis/src/core/qgsvectorlayerrenderer.cpp:249
#9  0x0000000000007ff57030c4 in QgsMapRendererCustomPainterJob::doRender (this=0x13e6bd0) at
/home/alex/devel/cpp/qgis/src/core/qgsmaprenderercustompainterjob.cpp:251
#10 0x0000000000007ff5702d81 in QgsMapRendererCustomPainterJob::staticRender (self=0x13e6bd0) at
/home/alex/devel/cpp/qgis/src/core/qgsmaprenderercustompainterjob.cpp:214
#11 0x0000000000007ff5705ae9 in QtConcurrent::StoredFunctorCall1<void, void (*)(QgsMapRendererCustomPainterJob*), QgsMapRendererCustomPainterJob*>::runFunctor (this=0x2fd3720) at /usr/include/qt4/QtCore/qtconcurrentstoredfunctioncall.h:277
```

Copied to github as #: 22038
Test plugin with custom renderer for point layers attached.

Seems there are some issues with interaction between Python bindings and C++ core code.

**Related issues:**
- Related to QGIS Application - Bug report # 13973: Crash when switching from c...
  - Closed 2015-12-10

**Associated revisions**
- Revision 83eed110 - 2016-01-25 06:16 PM - Martin Dobias
  - Improve renderer class documentation (refs #14025)

**History**
- #1 - 2015-12-22 07:03 AM - Alessandro Pasotti
  - Assignee set to Martin Dobias

  Not sure, but this could be the problem:

  ```
  src/core/symbology-ng/qgssinglesymbolrendererv2.cpp:458

  QgsSymbolV2List symbols = const_cast<QgsFeatureRendererV2 *>( renderer )->symbols( context );
  ```

  the about to be cloned object is a sip object.

- #2 - 2016-01-25 08:28 AM - Martin Dobias
  - Resolution set to invalid
  - Status changed from Open to Closed
  - File mytestrenderer.py added

  The real issue was that symbols returned by the test renderer have not been initialized before being used in symbolForFeature().

  Attached (fixed and simplified) version works fine for me - closing as invalid. I have some ideas how the situation could be improved in QGIS 3 so that custom renderer implementations are less crash-prone...

**Files**

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<th>File</th>
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<td>4.12 KB</td>
<td>2015-12-22</td>
<td>Alexander Bruy</td>
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<td>mytestrenderer.py</td>
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