QGIS Application - Bug report #14025
Crash when loading project with custom renderer for vector layers
2015-12-22 06:26 AM - Alexander Bruy

<table>
<thead>
<tr>
<th>Status:</th>
<th>Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority:</td>
<td>High</td>
</tr>
<tr>
<td>Assignee:</td>
<td>Martin Dobias</td>
</tr>
<tr>
<td>Category:</td>
<td>Python plugins</td>
</tr>
<tr>
<td>Affected QGIS version:</td>
<td>master</td>
</tr>
<tr>
<td>Operating System:</td>
<td>all</td>
</tr>
<tr>
<td>Pull Request or Patch supplied:</td>
<td>No</td>
</tr>
<tr>
<td>Copied to github as #:</td>
<td>22038</td>
</tr>
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**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

```c
#0  0x0000000000000000 in ?? ()  
#1  0x0000007fff5426d2d in QgsSymbolV2::mapUnitScale (this=0x7fff5c019040) at  
    /home/alex/devel/cpp/qgis/src/core/symbology-ng/qgssymbolv2.cpp:274  
#2  0x0000007fff542cbb8 in QgsMarkerSymbolV2::renderPoint (this=0x7fff5c019040, poin...  
    /home/alex/devel/cpp/qgis/src/core/symbology-ng/qgssymbolv2.cpp:1251  
#3  0x0000007fff542929b 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  0x0000007fff54a3602 in QgsFeatureRendererV2::renderFeatureWithSymbol (this=0xa8bbf0, feature=...,  
    symbol=0x7fff5c019040, context=..., layer=-1, selected=false,  
    drawVertexMarker=false) at  
    /home/alex/devel/cpp/qgis/src/core/symbology-ng/qgsrendererv2.cpp:283  
#5  0x0000007fff543598 in QgsFeatureRendererV2::renderFeature (this=0xa8bbf0, feature=..., context=..., layer=-1,  
    selected=false, drawVertexMarker=false) at  
    /home/alex/devel/cpp/qgis/src/core/qgsrendererv2.cpp:277  
#6  0x0000007fff582b74e 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  0x0000007fff5829119 in QgsVectorLayerRenderer::drawRendererV2 (this=0x2fd9780, fit=...) at  
    /home/alex/devel/cpp/qgis/src/core/qgsvectorlayerrenderrenderer.cpp:312  
#8  0x0000007fff582989a in QgsVectorLayerRenderer::render (this=0x2fd9780) at  
    /home/alex/devel/cpp/qgis/src/core/qgsvectorlayerrenderrenderer.cpp:249  
#9  0x0000007fff57030c4 in QgsMapRendererCustomPainterJob::doRender (this=0x13e6bd0) at  
    /home/alex/devel/cpp/qgis/src/core/qgsmaprenderercustompainterjob.cpp:251  
#10 0x0000007fff5702d81 in QgsMapRendererCustomPainterJob::staticRender (self=0x13e6bd0) at  
    /home/alex/devel/cpp/qgis/src/core/qgsmaprenderercustompainterjob.cpp:214  
#11 0x0000007fff5705aeb in QtConcurrent::StoredFunctorCall1<void, void (*)(QgsMapRendererCustomPainterJob*),  
    QgsMapRendererCustomPainterJob*>::runFunctor (  
    this=0x2fd7320) at /usr/include/qt4/QtCore/qtconcurrentstoredfunctioncall.h:277  
#12 0x0000007fff57035a5 in QtConcurrent::RunFunctionTask<void>::run() (this=0x2fd7320) at  
    /usr/include/qt4/QtCore/qtconcurrentrunbase.h:134  
#13 0x0000007fff4bd38b0 in QThreadPoolThread::run (this=0x346ceac0) at concurrent/qthreadpool.cpp:108  
#14 0x0000007fff4b6800f in QThreadPrivate::start (arg=0x346ceac0) at thread/qthread_unix.cpp:349  
#15 0x0000007f660a0a in start_thread (arg=0x7fff63fff700) at pthread_create.c:309  
#16 0x0000007ffeee40240d in clone() at /sysdeps/unix/sysv/linux/x86_64/clone.S:111
```

2021-05-08
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**

<table>
<thead>
<tr>
<th>renderertest.tar.bz2</th>
<th>4.12 KB</th>
<th>2015-12-22</th>
<th>Alexander Bruy</th>
</tr>
</thead>
<tbody>
<tr>
<td>mytestrenderer.py</td>
<td>3.22 KB</td>
<td>2016-01-25</td>
<td>Martin Dobias</td>
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