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 0x0000000000000001 in ?? ()
#1 0x000000007fffffff42d42 in QgsSymbolV2::mapUnitScale (this=0x7fff5c019040) at /home/alex/devel/cpp/qgis/src/core/symbology-ng/qgssymbolv2.cpp:274
#2 0x000000007fffffff52c8b8 in QgsMarkerSymbolV2::renderPoint (this=0x7fff5c019040, point=..., f=0x7fff63dfdb0, context=..., layerId=-1, selected=false) at /home/alex/devel/cpp/qgis/src/core/symbology-ng/qgssymbolv2.cpp:1251
#3 0x000000007fffffff52c929b 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 0x000000007fffffff5a3602 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 0x000000007fffffff5a3598 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 0x000000007fffffff582b74e 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 0x000000007fffffff5829119 in QgsVectorLayerRenderer::drawRendererV2 (this=0x2fd9780, fit=...) at /home/alex/devel/cpp/qgis/src/core/qgsvectorlayerrenderer.cpp:312
#8 0x000000007fffffff58289aa in QgsVectorLayerRenderer::render (this=0x2fd9780) at /home/alex/devel/cpp/qgis/src/core/qgsvectorlayerrenderer.cpp:249
#9 0x000000007fffffff57038d4 in QgsMapRendererCustomPainterJob::doRender (this=0x13e66d0) at /home/alex/devel/cpp/qgis/src/core/qgsmaprenderercustompainterjob.cpp:251
#10 0x000000007fffffff5703d81 in QgsMapRendererCustomPainterJob::staticRender (self=0x13e66d0) at /home/alex/devel/cpp/qgis/src/core/qgsmaprenderercustompainterjob.cpp:214
#11 0x000000007fffffff5705aeb in QtConcurrent::StoredFunctorCall1\<void, void (*)\>(QgsMapRendererCustomPainterJob\*)\, QgsMapRendererCustomPainterJob\*>\::runFunctor (this=0x2fd7320) at /usr/include/qt4/QtCore/qtconcurrentstoredfunctioncall.h:277
#12 0x000000007fffffff5703f5a in QtConcurrent::RunFunctionTask\<void\>::run (this=0x2fd7320) at /usr/include/qt4/QtCore/qtconcurrentrunfuncbase.h:134
#13 0x000000007fffffff54d3b80 in QThreadPoolThread::run (this=0x3346ce0) at concurrent/qthreadpool.cpp:108
#14 0x000000007fffffff4be1701 in QThreadPoolPrivate::start (arg=0x3346ce0) at thread/qthread_unix.cpp:349
#15 0x000000007fffffff5ed00a0 in start_thread (arg=0x7fff63df700) at pthread_create.c:309
#16 0x000000007fffffff4204d in clone () at /sysdeps/unix/sysv/linux/x86_64/clone.S:111
```

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...

Associated revisions
Revision 03eed110 - 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>
<th>Size</th>
<th>Date</th>
<th>Author</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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