QGIS Application - Bug report #21270
QGIS crashes when createInstance() uses wrong constructor in a QgsProcessingAlgorithm subclass
2019-02-14 01:59 PM - Reino Ruusu

<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>Alessandro Pasotti</td>
</tr>
<tr>
<td>Category:</td>
<td>Processing/Core</td>
</tr>
<tr>
<td>Affected QGIS version: 3.5 (master)</td>
<td>Regression?: No</td>
</tr>
<tr>
<td>Operating System: Any</td>
<td>Easy fix?: No</td>
</tr>
<tr>
<td>Pull Request or Patch supplied:</td>
<td>Resolution: fixed/implemented</td>
</tr>
<tr>
<td>Crashes QGIS or corrupt data:</td>
<td>Copied to github as #: 29088</td>
</tr>
</tbody>
</table>

**Description**

QGIS makes a hard crash when the createInstance() method calls a non-existent constructor in a python processing script class (QgsProcessingAlgorithm).

This is an easy error to make after creating a new script from a template.

**Reproduction**

Steps:
- Create a new script in the Processing Toolbox using 'Create New Script from Template…'
- Rename class ExampleProcessingAlgorithm to anything else (such as MyProcessingAlgorithm). Leave reference to ExampleProcessingAlgorithm() in createInstance().
- Save template script
- Execute script by double-clicking it in Scripts/Example scripts/My script
- :( QGIS Crashed' dialog

**Result**

Crash ID: 4e33457d15a27ee43b8270be864ceb43b1208535

Stack Trace

QgsProcessingAlgorithm::setProvider :
QgsProcessingAlgorithm::create :
PyInit__core :
PyMethodDef_RawFastCallKeywords :
PyMethodDef_RawFastCallKeywords :
PyEval_EvalFrameDefault :
PyFunction_FastCallDict :
PyMethodDef_RawFastCallDict :
PyObject_Call :
PyInit_QtCore :
PyInit_QtCore :
PyInit_QtCore :
PyInit_QtCore :
PyInit_QtCore :
QMetaObject::activate :
QAbstractItemView::doubleClicked :
QTreeView::mouseDoubleClickEvent :
QWidget::event :
QFrame::event :
QAbstractItemView::viewportEvent :
QCoreApplicationPrivate::sendThroughObjectEventFilters :
QApplicationPrivate::notify_helper :
QApplication::notify :
QgsApplication::notify :
QCoreApplication::notifyInternal2 :

2022-01-10
QApplicationPrivate::sendMouseEvent:
QSizePolicy::QSizePolicy:
QSizePolicy::QSizePolicy:
QApplicationPrivate::notify_helper:
QApplication::notify:
QgsApplication::notify:
QCoreApplication::notifyInternal2:
QGuiApplicationPrivate::processMouseEvent:
QWindowSystemInterface::sendWindowSystemEvents:
QEventDispatcherWin32::processEvents:
CallWindowProcW:
DispatchMessageW:
QEventDispatcherWin32::processEvents:
qt_plugin_query_metadata:
QEventLoop::exec:
QCoreApplication::exec:
main:
BaseThreadInitThunk:
RtlUserThreadStart:

QGIS Info
QGIS Version: 3.4.4-Madeira
QGIS code revision: f6ddc62fdb
Compiled against Qt: 5.11.2
Running against Qt: 5.11.2
Compiled against GDAL: 2.4.0
Running against GDAL: 2.4.0

System Info
CPU Type: x86_64
Kernel Type: winnt
Kernel Version: 10.0.17134

Associated revisions
Revision 8db38af8b - 2019-02-18 03:21 PM - Alessandro Pasotti

Processing: fix crash in alg runner task with bad scripts

Fixes #21270

With test

History
#1 - 2019-02-16 10:54 AM - Giovanni Manghi
  - Priority changed from Normal to High

#2 - 2019-02-18 02:47 PM - Alessandro Pasotti
  - Assignee set to Alessandro Pasotti
  - Operating System changed from Windows 10 Pro - build 17134.523 to Any
  - Affected QGIS version changed from 3.4.4 to 3.5(master)

#3 - 2019-02-18 03:25 PM - Alessandro Pasotti
  - Status changed from Open to In Progress
  - Resolution set to fixed/implemented
  - Pull Request or Patch supplied changed from No to Yes
Btw, there are endless ways to crash QGIS from bad python code, we will never be able to prevent this to happen:
http://enki-editor.org/2014/08/23/Pyqt_mem_mgm.html

#4 - 2019-02-20 07:43 AM - Alessandro Pasotti

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

Applied in changeset commit:qgis|8db38afb86d54b4481b23216ae13ed9cbcd8789b.