

# QGIS Application - Bug report #15715

## Segmentation fault on exit when using a QgsMapTool

2016-10-17 03:53 AM - Uros Bernik

<b>Status:</b> Closed	
<b>Priority:</b> High	
<b>Assignee:</b>	
<b>Category:</b> Python plugins	
<b>Affected QGIS version:</b> 2.16.3	<b>Regression?:</b> No
<b>Operating System:</b> Ubuntu	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b> No	<b>Resolution:</b> invalid
<b>Crashes QGIS or corrupts data:</b> No	<b>Copied to github as #:</b> 23638

### Description

When using pyqgis in a custom application, there is a Segmentation fault crash upon exiting the application after `app.exitQgis()` call when the program exists. It appears on exit as soon as during lifetime of the application a `QgsMapToolPan` (as in example) is created. During application lifetime itself, there are no problems.

### History

#### #1 - 2016-10-19 09:10 PM - Martin Dobias

- Resolution set to invalid
- Status changed from Open to Closed

It looks like your "gui" variable with canvas and a map tool still lives when QGIS libs have been already uninitialized. That means when cleaning up the "gui" variable you get the crash. A simple fix should be to delete "gui" before calling `exitQgis()`. Or just put all handling of "gui" variable into a function, so it gets out of scope before `exitQgis()`:

```
def run_app(app):
    gui = GUI()
    gui.show()
    app.exec_()

qgsapp.initQgis()
run_app(qgsapp)
qgsapp.exitQgis()
```

#### #2 - 2016-10-24 11:55 PM - Uros Bernik

Yes, i've seen this suggested: <http://gis.stackexchange.com/questions/206523/segmentation-fault-upon-exit-of-qgis-map-canvas>

The error still occurs, even with the aux function implementation, the problematic line is the creation of a pan tool, more precisely, if a pan tool instance is stored into a gui instance variable.

If it's just created in the constructor then set as the current tool, there is no segfault on exit:

```
self._map.setMapTool(QgsMapToolPan(self._map))
```

For the moment, im unsetting the GUI instance variable at window close, which also works.

### #3 - 2016-10-25 12:00 AM - Uros Bernik

Ah, yes, I have an idea why. If an object belonging to the canvas is referenced somewhere "outside" of qgis context as well, it is probably not properly destroyed, when exitQgis is called, hence the segfault.

#### Files

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qgis-bug.py	1.27 KB	2016-10-17	Uros Bernik
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