

QGIS Application - Bug report #9772

QgsMapSettings::setDestinationCrs() does not achieve desired effect

2014-03-12 04:51 PM - Etienne Tourigny

Status: Closed	
Priority: Low	
Assignee: Martin Dobias	
Category: Map Canvas	
Affected QGIS version: master	Regression?: No
Operating System:	Easy fix?: No
Pull Request or Patch supplied:	Resolution: end of life
Crashes QGIS or corrupts data:	Copied to github as #: 18314

Description

since QgsMapSettings::mapRenderer() is deprecated, QgsMapRenderer::setDestinationCrs() should be replaced by QgsMapSettings::setDestinationCrs() , but it seems the implementation is not complete.

Calls to QgsMapSettings::setDestinationCrs() have no effect on the map settings and are not propagated to the project, but calling QgsMapRenderer::setDestinationCrs() works properly.

The following commands in the python console illustrate this:

```
iface.mapCanvas().mapSettings().destinationCrs().authid()
u'EPSG:4326'
crs=QgsCoordinateReferenceSystem('EPSG:3857')
crs.authid()
u'EPSG:3857'
iface.mapCanvas().mapSettings().setDestinationCrs(crs)
iface.mapCanvas().mapSettings().destinationCrs().authid()
u'EPSG:4326'
iface.mapCanvas().mapRenderer().setDestinationCrs(crs)
iface.mapCanvas().mapSettings().destinationCrs().authid()
u'EPSG:3857'
```

History

#1 - 2014-03-12 04:58 PM - Jürgen Fischer

- Status changed from Open to Closed

- Resolution set to invalid

Use QgsMapCanvas::setDestinationCrs() instead of QgsMapSettings::setDestinationCrs()

#2 - 2014-03-12 05:40 PM - Larry Shaffer

Jürgen Fischer wrote:

```
| Use QgsMapCanvas::setDestinationCrs() instead of QgsMapSettings::setDestinationCrs()
```

While that works, I don't think you should have to do that if you already have QgsMapSettings, which should be all you need to do a render (if I understand

its implementation).

I think there should probably be `QMapCanvas::setMapSettings(const QgsMapSettings& settings)` where one can just apply built-up or manipulated `QgsMapSettings`. If not, what is the purpose of the `QMapCanvas::mapSettings()` getter then?

I've outlined this in a [recent mailing list post](#).

Etienne, the reason the following doesn't work, is because a copy of the canvas's `QgsMapSettings` is being returned, i.e. no direct access:

```
iface.mapCanvas().mapSettings().setDestinationCrs(crs)
```

#3 - 2014-03-12 08:05 PM - Etienne Tourigny

- Status changed from Closed to Reopened

the situation is a bit confusing... the functions in deprecated class `QgsMapRenderer` have been replaced by equivalents in `QgsMapSettings` (as described by a post by Martin Dobias [1]). Why does not use the `mapSettings` everywhere?

and what is the use of `QgsMapSettings::setDestinationCrs()` if it has no effect? Might as well remove it...

there are also a few duplicate get/set functions between `QgsMapCanvas` and `QgsMapSettings` (e.g. `setCrsTransformEnabled`) which further add to the confusion.

I am going to insist on re-opening this bug because I think the API needs a bit of cleanup to remove duplicates and make it consistent.

[1] <http://osgeo-org.1560.x6.nabble.com/QGIS-Multi-threaded-Rendering-td5093928.html>

#4 - 2014-03-17 09:52 AM - Etienne Tourigny

- Assignee set to Martin Dobias

- Priority changed from Normal to Low

I now understand from an email by Martin [1] that `QgsMapSettings` should be used to query map settings, not set them.

It would be nice to have this documented in the `QgsMapSettings` or `QgsCanvas` documentation.

The documentation in `QgsMapCanvas::mapSettings` reads "Get access to properties used for map rendering" which could be a bit clearer, stating that it should be used for consulting only.

I overlooked that this member returns a `const&` - probably because pyqt lets you modify the returned object without complaining.

[1] <http://comments.gmane.org/gmane.comp.gis.qgis.devel/30592>

#5 - 2017-05-01 01:08 AM - Giovanni Manghi

- Regression? set to No

- Easy fix? set to No

#6 - 2019-03-09 04:04 PM - Giovanni Manghi

- Resolution changed from invalid to end of life

- Status changed from Reopened to Closed

End of life notice: QGIS 2.18 LTR

Source:

<http://blog.qgis.org/2019/03/09/end-of-life-notice-qgis-2-18-ltr/>