

## QGIS Application - Bug report #6110

### KML export is generating decimal separators depending on system locale

2012-07-27 01:40 PM - Rodrigo Hjort

<b>Status:</b> Closed	
<b>Priority:</b> Normal	
<b>Assignee:</b>	
<b>Category:</b> Vectors	
<b>Affected QGIS version:</b> master	<b>Regression?:</b> No
<b>Operating System:</b>	<b>Easy fix?:</b> No
<b>Pull Request or Patch supplied:</b> No	<b>Resolution:</b> worksforme
<b>Crashes QGIS or corrupts data:</b> No	<b>Copied to github as #:</b> 15452
<b>Description</b>	
<p>I'm using Quantum GIS on Linux with <b>locales set to pt-BR</b> (Brazilian Portuguese).</p> <p>When I <b>export to KML</b>, it produces coordinates using "," decimal separator (according to pt-BR regionalization rules):</p> <pre>&lt;MultiGeometry&gt;&lt;Polygon&gt;&lt;outerBoundaryIs&gt;&lt;LinearRing&gt;&lt;coordinates&gt;-51,09189516,0,01566702 -51,091517879999998,0,01681002 -51,090230267830101,0,01554286575332 -51,089511609343091,0,014835625502677 -51,089524844693898,0,014785154452175 -51,089621934159901,0,014414918150888 -51,089695920000004,0,01413396 -51,090616079999997,0,01472103 -51,091445940477001,0,015334783410788 -51,09189516,0,01566702&lt;/coordinates&gt;&lt;/LinearRing&gt;&lt;/outerBoundaryIs&gt;&lt;/Polygon&gt;&lt;/MultiGeometry&gt;</pre> <p>When I call Quantum GIS setting locales to en-US (i.e., by issuing "LC_ALL=C qgis"), proper values are set on KML file (by using "." and not ",", as decimal separators):</p> <pre>&lt;MultiGeometry&gt;&lt;Polygon&gt;&lt;outerBoundaryIs&gt;&lt;LinearRing&gt;&lt;coordinates&gt;-51.09189516,0.01566702 -51.091517879999998,0.01681002 -51.090230267830101,0.01554286575332 -51.089511609343091,0.014835625502677 -51.089524844693898,0.014785154452175 -51.089621934159901,0.014414918150888 -51.089695919999997,0.01413396 -51.090616079999997,0.01472103 -51.091445940477001,0.015334783410789 -51.09189516,0.01566702&lt;/coordinates&gt;&lt;/LinearRing&gt;&lt;/outerBoundaryIs&gt;&lt;/Polygon&gt;&lt;/MultiGeometry&gt;</pre> <p>In order to generate KML files, current system locale should be ignored.</p>	
<b>Related issues:</b>	
Related to QGIS Application - Bug report # 8332: QGIS uses comma as decimal s...	<b>Closed</b> <b>2013-07-20</b>

#### History

##### #1 - 2012-07-27 02:07 PM - Giovanni Manghi

- Category set to Vectors
- Status changed from Open to Feedback
- Priority changed from Severe/Regression to Normal

Tickets are tagged as blockers only if are regressions. Is this a regression since 1.7.4 (are you using 1.8, right)?

Did you tested make the conversion using the ogr2ogr cli tool? I'm not sure QGIS uses it to do this particular conversion, but if the issue surface also with ogr2ogr it may be not a qgis issue.

##### #2 - 2012-07-27 02:22 PM - Rodrigo Hjort

Giovanni Manghi wrote:

*Tickets are tagged as blockers only if are regressions. Is this a regression since 1.7.4 (are you using 1.8, right?)?*

I don't know. Yes, I'm on **1.8.0**.

*Did you tested make the conversion using the ogr2ogr cli tool? I'm not sure QGIS uses it to do this particular conversion, but if the issue surface also with ogr2ogr it may be not a qgis issue.*

I've just tested **ogr2ogr** as you suggested. It generates proper KML files regardless the locales I set. All instructions below give binarily the same KML files:

```
ogr2ogr -f KML censo-ap1.kml 16SEE250GC_SIR.shp
LC_ALL=C ogr2ogr -f KML censo-ap2.kml 16SEE250GC_SIR.shp
LC_ALL=pt_BR.UTF-8 ogr2ogr -f KML censo-ap3.kml 16SEE250GC_SIR.shp
```

### #3 - 2012-07-28 01:38 AM - Giovanni Manghi

- Target version set to Version 2.0.0
- Status changed from Feedback to Open

then is a qgis issue.

*I've just tested **ogr2ogr** as you suggested. It generates proper KML files regardless the locales I set. All instructions below give binarily the same KML files:*

```
ogr2ogr -f KML censo-ap1.kml 16SEE250GC_SIR.shp
LC_ALL=C ogr2ogr -f KML censo-ap2.kml 16SEE250GC_SIR.shp
LC_ALL=pt_BR.UTF-8 ogr2ogr -f KML censo-ap3.kml 16SEE250GC_SIR.shp
```

### #4 - 2012-07-28 02:51 AM - Jürgen Fischer

Rodrigo Hjort wrote:

*I don't know. Yes, I'm on **1.8.0**.*

Not reproducable here. What's your platform and GDAL version?

### #5 - 2012-07-28 03:52 AM - Even Rouault

```
LC_ALL=C ogr2ogr -f KML censo-ap2.kml 16SEE250GC_SIR.shp
LC_ALL=pt_BR.UTF-8 ogr2ogr -f KML censo-ap3.kml 16SEE250GC_SIR.shp@
```

Setting LC\_ALL isn't sufficient, as by default GDAL utilities will not call setlocale(), so it will not be taken into account.

So you should try : "ogr2ogr -f KML censo-ap3.kml 16SEE250GC\_SIR.shp --locale pt\_BR.UTF-8"

With recent GDAL versions (1.9 at least, perhaps older too), the code that exports the coordinates for KML, GML, WKT will replace the comma by decimal point.

Note: there might be still issues with decimal points and non-C locale in other parts of GDAL/OGR however. Export of real values in DBF for example is known to be broken with non-C locale ( <http://trac.osgeo.org/gdal/ticket/4713> )

Note 2: I've just discovered that a bug in proj 4.7 hides some locale related problems, because it installs the C locale temporarily, but fails to restore the original locale properly. This has been fixed in proj 4.8 that restores properly the original locale, and now some locale related problems surface again

**#6 - 2012-07-31 01:45 AM - Giovanni Manghi**

- Status changed from Open to Feedback

**#7 - 2013-07-13 03:39 AM - Jürgen Fischer**

- Resolution set to worksforme

- Status changed from Feedback to Closed

closed for the lack of feedback.

**#8 - 2014-05-28 02:29 AM - François-Xavier Thomas**

- File test\_polygons.zip added

- Status changed from Closed to Reopened

- Target version changed from Version 2.0.0 to Version 2.2

I'm facing the exact same issue with QGIS 2.2 under Ubuntu 12.04. locale output on my system :

```
LANG=fr_FR.UTF-8
LANGUAGE=
LC_CTYPE=fr_FR.UTF-8
LC_NUMERIC="fr_FR.UTF-8"
LC_TIME="fr_FR.UTF-8"
LC_COLLATE="fr_FR.UTF-8"
LC_MONETARY="fr_FR.UTF-8"
LC_MESSAGES="fr_FR.UTF-8"
LC_PAPER="fr_FR.UTF-8"
LC_NAME="fr_FR.UTF-8"
LC_ADDRESS="fr_FR.UTF-8"
LC_TELEPHONE="fr_FR.UTF-8"
LC_MEASUREMENT="fr_FR.UTF-8"
LC_IDENTIFICATION="fr_FR.UTF-8"
LC_ALL=
```

Attached is a sample shapefile created from QGIS under the system locale, and its KML conversion from :

- QGIS using the system locale
- QGIS started using the LC\_NUMERIC="C" /usr/bin/qgis command
- The ogr2ogr command from GDAL

Both GDAL and QGIS under the C locale output a valid KML file, but QGIS using the system locale does not and uses comma as decimal separators.

Additionally, for some reason which might be related, QGIS is unable to display the shapefile (not the KML file!) if opened under the system locale, but displays it perfectly well under the C locale. As far as I can tell, even though it was created under a french locale, the shapefile is valid, i.e. GDAL can open it under any locale.

*(It's the first time I'm around here, so forgive me if I shouldn't have reopened the ticket but created a new one instead)*

**#9 - 2014-06-28 07:36 AM - Jürgen Fischer**

- Target version changed from Version 2.2 to Future Release - Lower Priority

**#10 - 2014-09-20 01:07 PM - Andrey Isakov**

Same issue for me under Debian testing.

QGIS 2.4.0-Chugiak

Compiled against GDAL/OGR 1.10.1 Running against GDAL/OGR 1.10.1

```
andrey@crt-s1:~$ locale
LANG=en_US.UTF-8
LANGUAGE=
LC_CTYPE="en_US.UTF-8"
LC_NUMERIC=ru_RU.utf8
LC_TIME=ru_RU.utf8
LC_COLLATE="en_US.UTF-8"
LC_MONETARY=ru_RU.utf8
LC_MESSAGES="en_US.UTF-8"
LC_PAPER=ru_RU.utf8
LC_NAME="en_US.UTF-8"
LC_ADDRESS="en_US.UTF-8"
LC_TELEPHONE="en_US.UTF-8"
LC_MEASUREMENT=ru_RU.utf8
LC_IDENTIFICATION="en_US.UTF-8"
LC_ALL=
```

Related issue #8332

**#11 - 2016-02-25 05:01 AM - Jürgen Fischer**

- Status changed from Reopened to Feedback

Andrey Isakov wrote:

```
| Same issue for me under Debian testing.
| QGIS 2.4.0-Chugiak
| Compiled against GDAL/OGR 1.10.1 Running against GDAL/OGR 1.10.1
| [...]
| Related issue #8332
```

odd, still doesn't happen for me. fr\_Fr, lv\_LV, de\_DE - all fine on unstable using GDAL/OGR 1.11.3.

**#12 - 2016-04-09 11:41 AM - Giovanni Manghi**

- Status changed from Feedback to Closed

| odd, still doesn't happen for me. fr\_Fr, lv\_LV, de\_DE - all fine on unstable using GDAL/OGR 1.11.3.

closing for lack of feedback. Please reopen if necessary.

## Files

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test_polygons.zip	3.47 KB	2014-05-28	François-Xavier Thomas
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