

# QGIS Application - Feature request #3586

## use authid instead of proj.4 strings

2011-03-09 12:57 PM - Jürgen Fischer

<b>Status:</b> Closed	
<b>Priority:</b> Low	
<b>Assignee:</b> Jürgen Fischer	
<b>Category:</b> Projection Support	
<b>Pull Request or Patch supplied:</b>	<b>Resolution:</b> fixed
<b>Easy fix?:</b> No	<b>Copied to github as #:</b> 13646
<b>Description</b>	
<p>Currently we try to use the proj.4 strings to store references to coordinate systems (eg. for the default project crs). Unfortunately the proj.4 string isn't unique in our database:</p> <pre>sqlite&gt; select count(*),parameters from tbl_srs group by parameters order by count(*) desc limit 10; 54 +proj=longlat +ellps=intl +no_defs 27 +proj=longlat +ellps=GRS80 +towgs84=0,0,0,0,0,0 +no_defs 21 +proj=longlat +ellps=clrk80 +no_defs 17 +proj=longlat +ellps=bessel +no_defs 15 +proj=longlat +ellps=clrk66 +no_defs 13 +proj=longlat +a=6378249.2 +b=6356515 +no_defs 11 +proj=longlat +ellps=WGS84 +towgs84=0,0,0,0,0,0 +no_defs 9 +proj=longlat +ellps=GRS80 +no_defs 9 +proj=longlat +ellps=krass +no_defs 9 +proj=tmerc +lat_0=0 +lon_0=105 +k=1 +x_0=500000 +y_0=0 +ellps=krass +units=m +no_defs sqlite&gt; select auth_name,auth_id,description,parameters from tbl_srs where parameters='+proj=longlat +ellps=WGS84 +towgs84=0,0,0,0,0,0 +no_defs' limit 1; EPSG 4148 Hartebeesthoek94 +proj=longlat +ellps=WGS84 +towgs84=0,0,0,0,0,0 +no_defs</pre>	
<p>So selecting 'EPSG:4326' as default CRS results in 'EPSG:4148 - Hartebeesthoek94' - which obviously is irritating.</p>	
<p>The attached patch switches to the use of authid instead of proj.4 strings. Any objections to commit it for 1.7?</p>	

### History

#### #1 - 2011-03-09 11:56 PM - Marco Hugentobler

Looks good to me. +1 for commit.

Marco

#### #2 - 2011-03-10 01:46 AM - Borys Jurgiel

I've slightly modified your patch:

1. Also save the authid to QSettings, not only read ;- ) (qgsoptions.cpp 642 and 646)
2. Use *layerDefaultCrs* Qsettings key instead of misleading *defaultCrs*. As the patch breaks this setting anyway, I take a opportunity to clean up a bit. (qgsoptions.cpp 191 and 642; qgisapp.cpp 361)

By the way. Seems it works not only with epsg ids. Is the note in api doc out of date?

<http://doc.qgis.org/head/classQgsCoordinateReferenceSystem.html#5789a11684af1415ffc74d7ce9ab91f0>

### #3 - 2011-03-10 02:08 AM - Jürgen Fischer

Replying to [comment:2 borysiasty]:

1. Also save the authid to QSettings, not only read ;- ) (qgsoptions.cpp 642 and 646)

if you insist ;)

By the way. Seems it works not only with epsg ids. Is the note in api doc out of date?

<http://doc.qgis.org/head/classQgsCoordinateReferenceSystem.html#5789a11684af1415ffc74d7ce9ab91f0>

Oh, yes. That note was probably already there, when we added the auth\_name column to tbl\_srs...

### #4 - 2011-03-10 11:48 AM - Jürgen Fischer

- Resolution set to fixed

- Status changed from Open to Closed

applied in commit:4c7b539c (SVN r15420).

### #5 - 2011-03-10 03:16 PM - Borys Jurgiel

- Status changed from Closed to Feedback

- Resolution deleted (fixed)

But what with project files? Both authid and proj string are saved.

JEF, could you please confirm that authid is higher priority and hopefully close the ticket again?

### #6 - 2011-03-10 03:34 PM - Jürgen Fischer

- Status changed from Feedback to Closed

- Resolution set to fixed

Replying to [comment:5 borysiasty]:

But what with project files? Both authid and proj string are saved.

JEF, could you please confirm that authid is higher priority and hopefully close the ticket again?

looks like it. order is authid, epsg, proj.4 and as last resort a CRS initialized with all the values from the node. Otherwise we should have hit the 'Hartebeesthoek94' problem earlier...

## Files

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crs.diff	13.3 KB	2011-03-09	Jürgen Fischer
crs-borys.diff	14 KB	2011-03-10	Borys Jurgiel