

QGIS Application - Bug report #1037

srs.db incompatible with GDAL >= 1.4.4

2008-04-12 06:04 AM - Maciej Sieczka -

Status:	Closed	
Priority:	Low	
Assignee:	nobody -	
Category:	Projection Support	
Affected QGIS version:		Regression?: No
Operating System:	All	Easy fix?: No
Pull Request or Patch supplied:		Resolution: fixed
Crashes QGIS or corrupts data:		Copied to github as #: 11097
Description		
<p>Since GDAL 1.4.4 there is a change r1,r2 that the scale factor k is treated as numeric instead of string variable. This results in a following proj4 string for eg. EPSG 2180 in GDAL > 1.4.2:</p> <pre>+proj=tmerc +lat_0=0 +lon_0=19 +k=0.9993 +x_0=500000 +y_0=-5300000 +ellps=GRS80 +units=m +no_defs</pre> <p>Whereas in QGIS srs.db, and GDAL =< 1.4.2 the same EPSG code is represented with a slightly different proj4 string:</p> <pre>+proj=tmerc +lat_0=0 +lon_0=19 +k=0.999300 +x_0=500000 +y_0=-5300000 +ellps=GRS80 +units=m +no_defs</pre> <p>The difference in the number of zeros in k factor makes QGIS fail to recognize the SRS, if QGIS runs against GDAL 1.4.4 or later. I verified that with the latest QGIS SVN trunk and GDAL 1.4.2, 1.4.4, 1.5.1.</p> <p>As can be seen in r1 any SRS that uses k is affected. According to the epsg file shipped with PROJ 4.5.0, this gives 1142 out of 6442 SRS definitions incompatible between QGIS and GDAL > 1.4.2 r3.</p> <p>r1http://trac.osgeo.org/gdal/changeset/12625 r2http://trac.osgeo.org/gdal/ticket/1970 r3<pre>grep '\\+k=[[:digit:]]*\\.[[:digit:]]*0 ' /usr/share/proj/epsg</pre></p>		

History

#1 - 2008-04-17 12:35 PM - Jürgen Fischer

see also #1035

#2 - 2008-05-25 06:51 PM - hamish -

see also bug #1079

#3 - 2008-05-25 07:27 PM - hamish -

the real problem is not the extra 00s, it is trying to do exact string matching from two different sources of data and expect the result to be the same.

Removing those 00s only fixes one symptom in a greater problem, and only temporarily.

Hamish

#4 - 2008-07-10 11:19 AM - Maciej Sieczka -

- *Resolution set to fixed*
- *Status changed from Open to Closed*

FWIW an updated srs.db has been submitted to SVN and is going to be included in 0.11. The srs.db is compatible with GDAL $\geq 1.4.4$. Although Hamish point is valid, this particular ticket belongs to a different subject. Please open a new ticket if necessary.

The script is available as an attachment in ticket #1035.

#5 - 2009-08-22 12:57 AM - Anonymous

Milestone Version 1.0.0 deleted