

QGIS Application - Bug report #15223

PostgreSQL provider broken under Qt5

2016-07-05 04:06 PM - Nyal Dawson

Status: Closed	
Priority: Severe/Regression	
Assignee:	
Category: Unknown	
Affected QGIS version: master	Regression?: No
Operating System:	Easy fix?: No
Pull Request or Patch supplied:	Resolution:
Crashes QGIS or corrupts data:	Copied to github as #: 23160
Description	
<p>The PostgreSQL provider is broken under Qt5 builds- it is impossible to select a single feature and the attribute table shows all repeating features.</p> <p>I've tracked this down to QgsPostgresSharedData::lookupFid. Basically, what is happening is that the QMap<QVariant, QgsFeatureId> lookup does not work under Qt5, and in the block:</p> <pre>QMap<QVariant, QgsFeatureId>::const_iterator it = mKeyToFid.constFind(v); if (it != mKeyToFid.constEnd()){ return it.value(); }</pre> <p>it will never be constEnd, even when the key is NOT present in the map, it will instead just return the first item in the map. I believe this is due to a broken < operator for QVariant of list types under qt5.</p> <p>Marking this as a blocker, but not for 2.16</p>	

Associated revisions

Revision 46f7c644 - 2016-08-11 05:10 PM - Martin Dobias

Fix postgres pkey map in Qt5 (fixes #15223)

Switching from QVariant to QVariantList solves the underlying Qt issue:

- comparison of QVariantList objects works fine
- comparison of QVariantList objects wrapped in QVariant does not work

The extra wrapping of QVariantList into another QVariant seems unnecessary anyway, so we may as well save a tiny bit of memory and cpu

Revision 1cb48ddd - 2016-08-15 11:58 AM - Denis Rouzaud

Merge pull request #3384 from wonder-sk/fix-postgres-qt5

Fix postgres pkey map in Qt5 (fixes #15223)

History

#1 - 2016-08-11 01:48 AM - Denis Rouzaud

Found this: <http://stackoverflow.com/questions/19703835/qvariant-comparison-with-own-types-working>

Is that the difference pointed in Qt doc:

Qt4:

In the case of custom types, their equalness operators are not called. Instead the values' addresses are compared.

<http://doc.qt.io/qt-4.8/qvariant.html#operator-eq-eq>

Qt5:

Warning: To make this function work with a custom type registered with `qRegisterMetaType()`, its comparison operator must be registered using `QMetaType::registerComparators()`.

<http://doc.qt.io/qt-5/qvariant.html#operator-eq-eq>

Is this the solution: registering the comparator for `QgsFeatureId`?

<http://doc.qt.io/qt-5/qmetatype.html#registerComparators>

#2 - 2016-08-11 03:55 AM - Nyal Dawson

I don't think it's that - the key is a `QVariantList` (not a `QgsFeatureId`), and it's only for the list-based variant lookup that the map is broken.

#3 - 2016-08-15 02:58 AM - Denis Rouzaud

- Status changed from Open to Closed

Fixed in changeset commit:"1cb48ddd65a98f8b17d880edbf4dd90d62fe7a91".

#4 - 2017-09-22 09:55 AM - Jürgen Fischer

- Category set to Unknown