

## QGIS Application - Bug report #15223

### PostgreSQL provider broken under Qt5

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

|  |                   |                                     |
|--|-------------------|-------------------------------------|
| <b>Status:</b>   | Closed            |                                     |
| <b>Priority:</b>   | Severe/Regression |                                     |
| <b>Assignee:</b>   |                   |                                     |
| <b>Category:</b>   | Unknown           |                                     |
| <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>   |                   | <b>Resolution:</b>                  |
| <b>Crashes QGIS or corrupts data:</b>  |                   | <b>Copied to github as #:</b> 23160 |
| <b>Description</b>   |                   |                                     |
| <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&lt;QVariant, QgsFeatureId&gt; lookup does not work under Qt5, and in the block:</p> <pre>QMap&lt;QVariant, QgsFeatureId&gt;::const_iterator it = mKeyToFid.constFind( v );</pre> <pre>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 &lt; 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