

QGIS Application - Bug report #15226

Primary key issue when copying a table by Drag&Drop

2016-07-06 11:00 AM - R. R.

Status:	Closed	
Priority:	Severe/Regression	
Assignee:	Sandro Santilli	
Category:	DB Manager	
Affected QGIS version:	2.16.3	Regression?: No
Operating System:		Easy fix?: No
Pull Request or Patch supplied:		Resolution: fixed/implemented
Crashes QGIS or corrupts data:		Copied to github as #: 23163
Description		
<p>When copying a table (PostGIS) in the 'DB Manager' by D&D, the name of the primary key is placed in quotes (e.g. "gid"). As a result, there is a <i>"gid"</i> and a <i>gid</i> column in the new table.</p>		

Associated revisions

Revision 5abdfcb8 - 2016-10-14 09:59 AM - Sandro Santilli

Fix PostgreSQL import of layers with multi-column or quoted-column keys

Fixes #15226 (drag & drop of postgresql views)

Includes test

Revision 1ce09b84 - 2016-10-14 10:10 AM - Sandro Santilli

Fix PostgreSQL import of layers with multi-column or quoted-column keys

Fixes #15226 (drag & drop of postgresql views)

Includes test

Revision c8b1b18c - 2016-10-14 10:12 AM - Sandro Santilli

Fix PostgreSQL import of layers with multi-column or quoted-column keys

Fixes #15226 (drag & drop of postgresql views)

Includes test

Revision ada9348e - 2016-10-14 10:43 AM - Sandro Santilli

Fix PostgreSQL import of layers with multi-column or quoted-column keys

Fixes #15226 (drag & drop of postgresql views)

Includes test

History

#1 - 2016-07-07 08:17 AM - R. R.

- File 15226.png added

#2 - 2016-07-07 11:53 AM - R. R.

The background shows the input table (see 15226.png).

More D&D issues:

#6798 (when copying a table by d&d from one schema to another the serial property is lost in the pk)

#14712 (DB-Manager DEFAULT value d&d issue)

#3 - 2016-10-12 08:10 AM - Sandro Santilli

Reinhard can you help me reproduce the issue ? Where should I drag the table from ? Where should I drag it to ? Which versions did you test ? Can you provide SQL to initialize such example test table ?

#4 - 2016-10-12 08:15 AM - Sandro Santilli

- Status changed from Open to Feedback

- Assignee set to Sandro Santilli

I've tried dragging the qgis_test.base_table_good table (part of testsuite in qgis_test database) into a new schema and it worked fine with 2.16 branch (2.16.3), 2.14 branch (2.14.7) and master_2 branch (2.17).

#5 - 2016-10-12 09:18 AM - R. R.

- File 15226_screencast.wmv added

Hi Sandro, I've uploaded a screencast. Unfortunately, I've no idea how to reproduce this issue.

#6 - 2016-10-12 11:58 AM - Sandro Santilli

Interesting, can you inspect the two tables (the one which works and the one which doesn't) with the "psql" command-line database tool ? Can it be the "gid" field is really encoded differently ? Or, can you reproduce after dumping and reloading that table ? Can you spot any other difference between the two tables ? Does it always happen on that table, no matter the order in which you copy them ?

#7 - 2016-10-12 12:14 PM - R. R.

- File 15226_screencast_2.mp4 added

- File qgis_test.backup added

Here comes a sample database. Please let me know if this is helpful for locating the issue.

#8 - 2016-10-13 01:12 AM - Sandro Santilli

- Affected QGIS version changed from master to 2.16.3

- Target version set to Version 2.18

- Status changed from Feedback to In Progress

Yes, I can reproduce with the table you provided. And not with other tables. I'm on it.

2.14.7 is not affected, 2.16.3 and 2.17 are.

#9 - 2016-10-13 01:55 AM - Sandro Santilli

Views are affected, while real table aren't (or so it looks).

The bug was introduced by the commit fixing #13710 (commit:daa6510970e9afbc4d41d28e0c94b4f238eb372d)

\\cc Jurgen

#10 - 2016-10-13 02:01 AM - Sandro Santilli

Jurgen, once again this issue is about properly defining semantic for some fields.

In this case is the "keyColumn()" return from QgsDatasourceUri.

Is that supposed to contain quoted or unquoted names ?

#11 - 2016-10-13 02:11 AM - Jürgen Fischer

Sandro Santilli wrote:

*Jurgen, once again this issue is about properly defining semantic for some fields.
In this case is the "keyColumn()" return from QgsDatasourceUri.
Is that supposed to contain quoted or unquoted names ?*

the postgres provider handles quoted and unquoted content from keyColumn() - dbmanager should do too.

#12 - 2016-10-13 02:28 AM - Sandro Santilli

On further research, I found that we get quoted identifiers in the url when the primary key type is a FidMap. This happens for multi-column keys or for non-integer keys. In both these cases, even with QGIS 2.14, we get quoted attributes in the QgsDatasourceUri keyColumn() return.

In all these cases, the DBManager drag & drop operation results in a target table having quotes in the key column names.
Even in QGIS 2.14.

I'll see how DBManager should deal with quotes, but given the above I guess the only sane way to deal with quotes would be knowing if the quotes were added or were part of the actual field name, so somehow the "FidMap" nature should be exposed.

or we should **always** quote the columns ?

BTW, I'm not sure it's DBManager or the provider's "CreateEmptyLayer" being responsible of parsing the URL.
Will keep looking.

#13 - 2016-10-13 02:53 AM - Sandro Santilli

I confirm it should be createEmptyTable, within the Postgres provider, to interpret the URI.

Hopefully the semantic of that "key" parameter of the URI will only be needed from within the provider

#14 - 2016-10-13 08:11 AM - Sandro Santilli

So with PR <https://github.com/qgis/QGIS/pull/3599> I've made PostgreSQL layer importer (createEmptyLayer) support quoted identifiers in Datasource URI -- for backward compatibility with projects created #13710 was fixed (that ticket lacks a target version) -- and I've reverted the commit which did add quoted identifiers in Datasource URI as they do seem redundant and inconsistent (I did test that #13710 isn't back).

In its current state, the code in the PR not only fixes this bug but also adds support for Drag&Dropp'ing tables with multi-column keys (including those with mixed-cased-column names)

#15 - 2016-10-13 08:15 AM - Sandro Santilli

- % Done changed from 0 to 90

#16 - 2016-10-13 12:37 PM - R. R.

Sandro, it's great to see this bug fixed.

Sandro Santilli wrote:

| Views are affected, while real table aren't (or so it looks).

As seen in screencast '15226_screencast.wmv' copying tables by D&D may also fail. Is there anything else to do?

#17 - 2016-10-14 01:00 AM - Sandro Santilli

- Status changed from In Progress to Closed

Fixed in changeset commit:"5abdfcb8064f3b3a848358afb95723b932dd3b05".

#18 - 2016-10-14 01:01 AM - Sandro Santilli

To the best of my knowledge copying tables by D&D also succeeds now. If you can test, the working code is in master_2 branch, since commit:dd85796bae24842da078ad2a3e90f451839db993 - reopen if you still see a problem with Drag&Drop and primary key.

#19 - 2016-10-14 01:02 AM - Sandro Santilli

- Resolution set to fixed/implemented

- % Done changed from 90 to 100

Files

15226.png	53.3 KB	2016-07-07	R. R.
15226_screencast.wmv	920 KB	2016-10-12	R. R.
15226_screencast_2.mp4	700 KB	2016-10-12	R. R.
qgis_test.backup	10 KB	2016-10-12	R. R.