

QGIS Application - Bug report #15741

PostGIS issue when using 'Merge selected features' tool (Geometry type does not match column type)

2016-10-22 12:21 AM - R. R.

Status:	Closed	
Priority:	High	
Assignee:	Luigi Pirelli	
Category:	Digitising	
Affected QGIS version:	2.18.11	Regression?: Yes
Operating System:		Easy fix?: No
Pull Request or Patch supplied:	Yes	Resolution:
Crashes QGIS or corrupts data:	No	Copied to github as #: 23663
Description		
The 'Merge selected features' tool is also available for non touching features. This may cause data loss when using PostGIS single geometry data types!		

Associated revisions

Revision 53d90b54 - 2017-06-12 03:48 PM - Luigi Pirelli

fix Postgis Merge selected features regression: port 2.18 fixes #15741

Revision 87116abd - 2017-06-12 04:09 PM - Luigi Pirelli

fix Postgis Merge selected features regression: port 3.0 fixes #15741

Revision e850c82c - 2017-06-12 06:07 PM - Alexander Bruy

Merge pull request #4604 from boundlessgeo/postgis_merge_features_port3_fix#15741

Fix Postgis Merge selected features regression (fix #15741)

Revision 57e122bb - 2017-06-12 06:45 PM - Alexander Bruy

Merge pull request #4594 from boundlessgeo/postgis_merge_features_fix#15741

Fix Postgis Merge selected features regression (fix #15741)

Revision d3d8f4dd - 2017-09-27 04:45 PM - Larry Shaffer

Merge pull request #5223 from boundlessgeo/geom_compatibility_check_release-2_18-fix15741

On behalf of Giovanni: Geom compatibility check release 2.18 fixes #15741 #16927

History

#1 - 2016-10-27 12:30 AM - R. R.

- File 15741_2.wmv added

#2 - 2016-10-27 11:10 AM - R. R.

- File 15741_3.mp4 added

- File 15741_4.mp4 added

Merging touching features also fails in some cases (see screencast 15741_3.mp4, 15741_4.mp4).

#3 - 2017-01-05 01:23 AM - Giovanni Manghi

- Crashes QGIS or corrupts data changed from No to Yes

- Category set to Digitising

- Priority changed from High to Severe/Regression

- Affected QGIS version changed from 2.16.3 to 2.18.2

Confirmed also on 2.18.2, and raising its priority as this was not an issue in the past, in fact trying such operation on 2.14.* it gives

Merge cancelled: The union operation would result in a geometry type that is not compatible with the current layer.

#4 - 2017-02-28 02:25 PM - Giovanni Manghi

- Target version set to Version 2.18

- Affected QGIS version changed from 2.18.2 to 2.18.4

2.18.4 also affected.

#5 - 2017-04-30 05:08 PM - Giovanni Manghi

- Regression? set to Yes

#6 - 2017-04-30 05:08 PM - Giovanni Manghi

- Priority changed from Severe/Regression to High

#7 - 2017-05-01 01:10 AM - Giovanni Manghi

- Easy fix? set to No

#8 - 2017-05-12 02:14 PM - Luigi Pirelli

studying the issue

#9 - 2017-05-15 12:32 PM - Luigi Pirelli

this issue would affect any provider due to:

https://github.com/qgis/QGIS/blob/release-2_18/src/app/qgisapp.cpp#L7177

delete is done before add feature and there is no way to specify a transaction (btw not all providers support transactions)

#10 - 2017-05-15 12:44 PM - Luigi Pirelli

my fault, if provider support transaction it can be managed with QgsTransaction

#11 - 2017-05-15 05:41 PM - Luigi Pirelli

the error is generated here:

https://qgis.org/api/2.18/qgsvectorlayereditbuffer_8cpp_source.html#l00520

e.g. the the update process is in two phases:

- 1) remove features to merge
- 2) add the new merged feature

because of https://qgis.org/api/2.18/qgsvectorlayereditbuffer_8cpp_source.html#l00520

and as specified in documentation, if some of the composed steps fail (delete success, and add fail), then we can recover only the last one (the add) during rollback because editingBuffer has already removed from the rollback cache the first step (delete)

#12 - 2017-05-15 05:41 PM - Luigi Pirelli

in this use case no use of QgsTransaction or QgsTransactionGroup is used

#13 - 2017-05-16 09:12 AM - Luigi Pirelli

- Assignee set to Luigi Pirelli

#14 - 2017-05-16 11:28 AM - Luigi Pirelli

[asked in dev list](#) what would be a better solution... especially asked to MarcoH about his commit

#15 - 2017-05-16 12:48 PM - Luigi Pirelli

reverting (solution 1) does not generate more test regressions (btw coverage in this area is poor)

tested and solution 1 fix the problem. Waiting for community comments to pack PR if solution 1 is accepted

#16 - 2017-05-16 01:11 PM - Luigi Pirelli

the issue affect qgis3 too

#17 - 2017-05-16 01:34 PM - Luigi Pirelli

solution 1 works for 3.x

#18 - 2017-05-19 03:24 PM - Luigi Pirelli

without any answer in list... I'll implement solution 1). Preparing PR

#19 - 2017-05-19 03:48 PM - Luigi Pirelli

- Pull Request or Patch supplied changed from No to Yes

preparing PR for 3.X

#20 - 2017-06-12 06:07 PM - Luigi Pirelli

- % Done changed from 0 to 100
- Status changed from Open to Closed

Applied in changeset commit:qgis|87116abd72ac52be042c3bff195a3cc931b035e6.

#21 - 2017-06-13 10:32 AM - Luigi Pirelli

Luigi Pirelli wrote:

| Applied in changeset commit:qgis|87116abd72ac52be042c3bff195a3cc931b035e6.

fix applied also to 3.0 e850c82cb01b0ae66d7d3c1f7781fd677ba2ec1f

#22 - 2017-08-10 11:18 AM - Giovanni Manghi

- Crashes QGIS or corrupts data changed from Yes to No
- Status changed from Closed to Open
- Affected QGIS version changed from 2.18.4 to 2.18.11

This is **not** completely fixed yet.

The good new is that it seems that the data loss is fixed BUT when trying to merge two geometries in a layer that does not support MULTI geometries do NOT immediately stop the operation as it happens in 2.14. There a dialog shows with the message "Merge cancelled: The union operation would result in a geometry type that is not compatible with the current layer."

Now the user is not warned, the operation seemingly is ok, but then on save edits QGIS throws an error. If the user meanwhile did more legit digitizing operations he/she has to discard everything, possibly losing a lot of work.

#23 - 2017-08-10 09:08 PM - Peteris Bruns

The same behavior in dev version (revision 313ec55) as described in #16974(using the same attached test data). Difference only in error message:

Errors: SUCCESS: 4 feature(s) deleted.
ERROR: 2 feature(s) not added.

Provider errors:

OGR error creating feature -2: failed to prepare SQL: INSERT INTO bug_examples ("geom", "name") VALUES (?, ?)
OGR error creating feature -3: failed to prepare SQL: INSERT INTO bug_examples ("geom", "name") VALUES (?, ?)

#24 - 2017-08-21 11:24 AM - Luigi Pirelli

I've to take it again... generally speaking there are two step editing

step1... all edits are in vector editbuffer, thyat does not have any relation with the real data provider. But there are checks about provider capabilities.
step2... changes are saved => the data provider start to play a role

Giovanni Manghi wrote:

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Now the user is not warned, the operation seemingly is ok, but then on save edits QGIS throws an error. If the user meanwhile did more legit digitizing operations he/she has to discard everything, possibly losing a lot of work.

your request is to remove this last action from the editbuffer?

regards

#25 - 2017-08-21 05:14 PM - Giovanni Manghi

your request is to remove this last action from the editbuffer?

clarified in a chat session.

#26 - 2017-09-21 06:54 PM - Giovanni Manghi

<https://github.com/qgis/QGIS/pull/5223> seems to have addressed the issue. Thanks!

#27 - 2017-09-27 04:44 PM - Anonymous

- Status changed from Open to Closed

Applied in changeset commit:qgis|d3d8f4dd437f132cd6f73831d845f6b7286e2d30.

Files			
15741.mp4	2.19 MB	2016-10-21	R. R.
15741_2.wmv	754 KB	2016-10-26	R. R.
15741_3.mp4	3.15 MB	2016-10-27	R. R.
15741_4.mp4	2.24 MB	2016-10-27	R. R.