QGIS Application - Bug report #11400
merge features disregards type

2014-10-13 09:49 AM - Gavin Fleming

Status:	Closed			
Priority:	Normal			
Assignee:				
Category:	Digitising			
Affected QGIS version:	2.4.0		**Regression?:**	No
Operating System:			**Easy fix?:**	No
Pull Request or Patch supplied:			**Resolution:**	fixed/implemented
Crashes QGIS or corrupts data:	No		**Copied to github as #:**	19682

Description

When editing a LINESTRING, select connected strings and click the Merge Selected Features and the operation is thrown out since the merge attempts to create a MULTILINESTRING.

It should attempt to create a new feature of the same type (or merge into one of the existing features). If some lines are not actually touching then there should be a different error such as 'snap lines before attempting to merge SINGLEPART features'

Related issues:

Related to QGIS Application - Bug report # 11405: "merge selected features" b...	**Closed**	**2014-10-14**
Related to QGIS Application - Bug report # 13364: Weird behaviour after mergi...	**Closed**	**2015-09-15**

History

#1 - 2014-10-14 12:55 AM - Giovanni Manghi

- Status changed from Open to Feedback

- Category changed from Edit widget to Digitising

what data type? shapes? postgis?

it seems fine to me on 2.4 but on master I'm getting #11405 using postgis data.

#2 - 2014-10-14 06:08 AM - Gavin Fleming

- Status changed from Feedback to Closed

postgis

I've done some more testing in 2.4 and it is working in so perhaps the lines that caused the original error were not sharing endpoints.

#3 - 2014-10-14 06:25 AM - Giovanni Manghi

- Resolution set to invalid

#4 - 2014-11-12 10:13 AM - Gavin Fleming

- Status changed from Closed to Reopened

I **cannot** get LineStrings to merge in a layer with LineString geometry after digitising and snapping. The merge tool complains it would result in an incompatible geometry type. It is apparently trying to construct a MultiLinestring because the shared endpoints are not exactly the same. If it only does this

if the line endpoints are not exactly the same then it suggests that snapping is at fault?

I **can** get LineStrings to merge only if I split a line and then merge the resulting parts, demonstrating that while splitting leaves the resulting endpoints exactly the same, snapping does not. (This unfortunately has another effect #11629)

#5 - 2014-11-12 01:08 PM - Giovanni Manghi

- Resolution deleted (invalid)

- Status changed from Reopened to Feedback

Gavin Fleming wrote:

> *I **cannot** get LineStrings to merge in a layer with LineString geometry after digitising and snapping. The merge tool complains it would result in an incompatible geometry type. It is apparently trying to construct a MultiLinestring because the shared endpoints are not exactly the same. If it only does this if the line endpoints are not exactly the same then it suggests that snapping is at fault?*

I cannot confirm, at least in part, on QGIS 2.6 and master:

  - I imported a shapefiles into postgis with attention to have a LINESTRING table, activated snapping, created a new line and snapped the last node to the **last** node of an existing line, saved, and merged the two lines with no issue.

  - on the other hand if the last node of the new line is snapped **not** on the last node of an existing line then merging fails, and my gut feeling is that is right (I may be wrong), because you cannot draw/digitize a line **and** a dangle as one thing.

#6 - 2014-11-13 01:54 AM - Gavin Fleming

I digitised two lines, ensuring that they snapped and that the second line started at the end of the first line. See how the snap has not resulted in equal coordinates. Granted, in the last three decimal places but it is enough to cause the merge to fail.

    LINESTRING(17.08060206897540567 -22.55767896518500493, 17.08092911456730434 -22.55765710289882264, 17.08145870318813664 -22.55776894197441962, 17.08184032685599263 -22.55786277298669518)

    LINESTRING(17.08184032685599263 -22.55786277298669162, 17.08209343151344584 -22.55790242368775367, 17.08263860269920897 -22.5580250999264571, 17.08278665510170313 -22.55818775896348782, 17.08275566838831594 -22.55845900022283956)

#7 - 2014-11-13 02:26 AM - Giovanni Manghi

Gavin Fleming wrote:

> *I digitised two lines, ensuring that they snapped and that the second line started at the end of the first line. See how the snap has not resulted in equal coordinates. Granted, in the last three decimal places but it is enough to cause the merge to fail.*
>
> *[...]*

ok, but anyway I also tested (with PostGIS) and here (on both Linux and Windows, using postgis layers on local servers) works as expected.

#8 - 2014-11-13 12:20 PM - Giovanni Manghi

Gavin Fleming wrote:

> *I digitised two lines, ensuring that they snapped and that the second line started at the end of the first line. See how the snap has not resulted in equal coordinates. Granted, in the last three decimal places but it is enough to cause the merge to fail.*
>
> *[...]*

I cannot confirm also after checking as you the geometries, snapped nodes coordinate are identical.

LINESTRING
LINESTRING

#9 - 2015-05-10 05:15 AM - Giovanni Manghi
- Status changed from Feedback to Closed
- Resolution set to not reproducable

closing for lack of feedback.

#10 - 2015-08-03 06:04 AM - michele zanolli
- Status changed from Closed to Reopened

In version 2.10.1 (and trunk) I cannot merge two LINESTRING in one LINESTRING. QGIS attempts to create a MULTILINESTRING

Same result with shapefile or postgis layer. Follow these instructions to reproduce:

- split a single line on an existing vertex in two lines
- select those two lines and try to merge them again in a single line
- the result is a MULTILINESTRING in shapefile, or an error if the layer is a postgis LINESTRING

Can anyone confirm?
Thanks

As a temporary workaround, I am using succesfully the "Join multiple lines" plugin

#11 - 2015-08-03 06:25 AM - michele zanolli

I forgot... tested with Ubuntu 14.04 and Debian 8, compiled with GDAL 2.0.0

#12 - 2015-10-09 07:51 AM - Jürgen Fischer
- Status changed from Reopened to Feedback

Did this change with commit:ac3f390 (see also #13274)?

#13 - 2015-10-14 03:29 AM - michele zanolli

If features are Postgis layers, with primary key integer serial, the union does not work. Also splitting features throws an error when saving.

PostGIS error while adding features: ERROR: null value in column "ogc_fid" violates not-null constraint

#14 - 2015-10-15 12:24 AM - michele zanolli

I'm sorry, it was my error. Now it works well!
Thanks

#15 - 2015-10-15 12:29 AM - Paolo Cavallini

So, can this be closed?

#16 - 2015-10-15 12:49 AM - Jürgen Fischer

- Status changed from Feedback to Closed

- Resolution changed from not reproducable to fixed/implemented