QGIS Application - Bug report #18798 Polygon Shapefile loaded as Multipolygon

2018-04-24 04:28 PM - Peter Gipper

Status:	Rejected			
Priority:	High			
Assignee:				
Category:	Geometry			
Affected QGIS versio	n: 3.0.0	R	egression?:	No
Operating System:	Windows 7	Ea	asy fix?:	No
Pull Request or Patch	nstupplied:	R	esolution:	wontfix
Crashes QGIS or corru pts data:		C	opied to github as #:	26684
Description				

If a polygon shapefile is loaded in QGIS 3, the geometries are of type MULTIPOLYGON whereas in older Versions of QGIS (2.14, 2.18) they are correctly loaded as type POLYGON.

(Strangely, a shapefile that is created as type POLYGON with including Z Values option checked is not loaded as MULTI*.)

History

#1 - 2018-10-10 05:43 PM - Gabriele Monfardini

Loading a shapefile to postgis using DB Manager a polygon shapefile is imported as multipolygon even if the option "Create single part geometries instead of multi part" is checked.

Having a quick look at the code in qgspostgresprovider.cpp in createEmptyLayer I cannot find where this option is checked.

QGIS: 3.2.3 PostGIS: 2.5 PostgreSQL: 10.5

#2 - 2018-10-10 05:49 PM - Giovanni Manghi

Gabriele Monfardini wrote:

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QGIS: 3.2.3 PostGIS: 2.5 PostgreSQL: 10.5

that option name in DB Manager always has been misleading and SHOULD really be changed. DB Manager by default always imports vectors in "MULTI" tables regardless of the input. With that option active you can have a NOT MULTI input imported into a NOT MULTI table, if you use that option and your input is MULTI you'll get an error.

#3 - 2018-10-10 10:27 PM - Nyall Dawson

- Resolution set to wontfix

- Status changed from Open to Rejected

This change is by design - shapefiles don't have a definition of single/multi geometries (unless they are point layers), so we upgrade all shapefiles polygons/lines to multi type for consistency (as qgis has strict geometry typing).

#4 - 2018-10-11 12:14 PM - Gabriele Monfardini

- File griglia.zip added

Giovanni Manghi wrote:

that option name in DB Manager always has been misleading and SHOULD really be changed. DB Manager by default always imports vectors in "MULTI" tables regardless of the input. With that option active you can have a NOT MULTI input imported into a NOT MULTI table, if you use that option and your input is MULTI you'll get an error.

Probably I need to add a little more background details.

The fact is that if you are importing a NOT MULTI shapefile in a new table, and you check the option in DB Manager you expect that resulting table will be NOT MULTI.

I know that shapefiles are always multi and it's ok for me to fail if there are multi parts, but in my case there are not. One would expect a behaviour similar to shp2pgsql -S switch, i.e. will create a single geometry field and will fail if there are multi geometry features.

Moreover, this is a regression from 2.18.14.

In 2.18.14 a Polygon shapefile with no multi geometry will be imported in a new table which geometry field is of type geometry (Polygon, srid) or geometry (MultiPolygon, srid) depending on whether the "Create single part geometries instead of multi part" checkbox is checked or not.

Uploading a simple shapefile to reproduce the problem.

QGIS 2.18.14 (Windows 10 64bit) PostgreSQL/PostGIS: 10/2.4 srid chosen: 3003 Results: if che checkbox is checked, geometry field of the table is geometry(Polygon,3003) else is geometry(MultiPolygon,3003)

QGIS 3.2.3 (Windows 10 64bit, Ubuntu 18.04 64bit) PostgreSQL/PostGIS: 10/2.4 - the same as before srid chosen: 3003 Results: geometry field of the table is geometry(MultiPolygon,3003) if the checkbox is checked or not

#5 - 2018-10-11 12:36 PM - Giovanni Manghi

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that is what the option does. What the option does NOT is converting MULTI geometries to fit NOT MULTI table after the import. But the name of the option makes people believe is the latter, not the former.

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Fully agree on this.

Even if it is probably not an high priority issue, I think current behaviour is a regression w.r.t. 2.18. Is it possible to leave this issue open?

#7 - 2018-10-11 02:42 PM - Giovanni Manghi

Even if it is probably not an high priority issue, I think current behaviour is a regression w.r.t. 2.18. Is it possible to leave this issue open?

is not a regression, in QGIS 3 changed the way the shapefiles are interpreted... now they are always loaded as MULTI, so they will be always imported as MULTI, at least using QGIS DB manager (and possibly other QGIS tools).

#8 - 2018-10-11 03:29 PM - Gabriele Monfardini

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IMHO, from user perspective, it is something that worked before, but it is not working as usual anymore.

And, in fact, I'm commenting this issue on behalf of some of my colleagues, who are used to import single part shapefiles but in 3.2.3 doing the same actions in the same UI, the behaviour is different.

Since current behaviour is deemed to be correct, probably it would be better to specify that the option is ignored in case of import in a new table

Files

griglia.zip

894 Bytes

2018-10-11

Gabriele Monfardini