

QGIS Application - Bug report #21191

QGIS Buffer (native:buffer) Buffering a valid GeoPackage Pointlayer (with dissolve all option) returns invalid Geopackage Polygonlayer (where it should be Multipolygon)

2019-02-06 10:48 PM - Andre Sch.

Status:	Closed	
Priority:	High	
Assignee:	Nyall Dawson	
Category:	Processing/QGIS	
Affected QGIS version:	3.4.4	Regression?: No
Operating System:		Easy fix?: No
Pull Request or Patch supplied:		Resolution:
Crashes QGIS or corrupts data:		Copied to github as #: 29009
Description		
<p>When buffering ('DISSOLVE':True) a valid GeoPackage Pointlayer and choosing a distance small enough for the resulting bufferlayer to have multiple parts, the resulting GeoPackage Layer (saved in the same GeoPackage) will be of Geometry Type Polygon (where it should be Multipolygon).</p> <p>Problems with the resulting Layer</p> <ul style="list-style-type: none">- The Layer (or parts of it) are dissappearing when zooming in- The Layer cannot be used for e.g. spatial selections etc.- qgis:checkvalidity (with GEOS) shows the whole layer as invalid- DBManager (or copying the Geometry) shows Geometry Type Polygon (NOT Multipolygon) despite having multiple parts but only one row in the Attribute Table <p>Executing the fix geometry tool ("native:fixgeometries") and saving the result in the same GeoPackage results in a perfectly fine (Multipolygon)-layer.</p> <p>From the history window:</p> <pre>processing.run("native:buffer", {'INPUT':'C:/data/bufferbug.gpkg layername=inputpoints','DISTANCE':200,'SEGMENTS':5,'END_CAP_STYLE':0,'JOIN_STYLE':0,'MITER_LIMIT':2,'DISSOLVE':True,'OUTPUT':'ogr:dbname=\\C:/data/bufferbug.gpkg\\ table=\\\"buffer_200m\\\" (geom) sql='})</pre> <pre>processing.run("qgis:checkvalidity", {'INPUT_LAYER':'C:/data/bufferbug.gpkg layername=buffer_200m','METHOD':2,'VALID_OUTPUT':'memory:','INVALID_OUTPUT':'memory:','ERROR_OUTPUT':'memory:'})</pre> <p>To reproduce the bug:</p> <ul style="list-style-type: none">- buffer the <i>inputpoints</i> layer in the attached GeoPackage with 200 Meters (with everything dissolved - see processing.run from above) (The Geopackage also includes...- the invalid Bufferresult (<i>buffer_200m</i>)- the repaired (by using "native:fixgeometries") and now valid layer (<i>repariert</i>)		

Associated revisions

Revision f22f182b - 2019-02-08 09:53 AM - Nyall Dawson

[processing] Buffer algorithm should always export multipolygon layers

We can never predict when a buffer will create a multipolygon output (e.g. for negative buffer sizes), so ALWAYS export multipolygons

Revision f4866402 - 2019-02-11 07:27 PM - Nyll Dawson

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Fixes #21191

(cherry picked from commit f22f182bcfd7b7f5b5d8f782f3df08ee9d705115)

History

#1 - 2019-02-07 12:15 PM - Giovanni Manghi

- Operating System deleted (Windows 7, 64 bit)

Confirmed also on Linux.

#2 - 2019-02-07 12:22 PM - Giovanni Manghi

- Priority changed from Normal to High

Tagging as high as the results are invalid.

#3 - 2019-02-07 11:37 PM - Nyll Dawson

- Assignee set to Nyll Dawson

#4 - 2019-02-08 07:28 AM - Nyll Dawson

- Status changed from Open to In Progress

#5 - 2019-02-08 09:52 AM - Nyll Dawson

- % Done changed from 0 to 100

- Status changed from In Progress to Closed

Applied in changeset commit:qgis|f22f182bcfd7b7f5b5d8f782f3df08ee9d705115.

Files

bufferbug.gpkg	136 KB	2019-02-06	Andre Sch.
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