

QGIS Application - Bug report #19583

QGIS PostGIS Raster Driver BUG (example) with suggested fix (ALL VERSIONS OF QGIS)

2018-08-09 08:20 PM - al pischcz

Status:	Closed	
Priority:	High	
Assignee:		
Category:	Data Provider/PostGIS	
Affected QGIS version:	3.3(master)	Regression?: No
Operating System:		Easy fix?: Yes
Pull Request or Patch supplied:	No	Resolution: up/downstream
Crashes QGIS or corrupts data:	No	Copied to github as #: 27410
Description		
Attempting to load a raster from a postgis database using the Database Manager plugin with a schema creates an error when the table name uses mixed case or special characters. The reported error is "Cannot get GDAL Raster band:" in the GUI dialog. PostGIS/GRES recommends double quotes around "database"."SchemaName"."TableName_1" or "SchemaName"."TableName_1" if already connected to the database. It appears the code in https://github.com/varunsaraf/postgis_raster/blob/master/postgisrasterdataset.cpp (and perhaps elsewhere) does not double quote schema and table name. https://www.postgresql.org/docs/10/static/sql-syntax-lexical.html#SQL-SYNTAX-IDENTIFIERS. SCHEMA=rasterschema TABLE=test (WORKS) Table=Test_1 (FAILS), the name gets interpreted as test_1 and fails, if "test"."Test_1" raster load completes. WORKING EXAMPLE 2018-08-09 14:00:03.724 EDT [608908] LOG: statement: select st_bandmetadata(rast, band) from (select rast, generate_series(1, 1) band from (select rast from rasterschema.test where (true) AND st_numbands(rast)=1 limit 1) bar) foo FAILING EXAMPLE 2018-08-09 14:03:12.835 EDT [608908] LOG: statement: select st_bandmetadata(rast, band) from (select rast, generate_series(1, 1) band from (select rast from rasterschema.Test_1 where (true) AND st_numbands(rast)=1 limit 1) bar) foo 2018-08-09 14:03:12.835 EDT [608908] ERROR: relation "rasterchema.test_1" does not exist at character 105 Using the failing example from the command line with recommended quoting: db=# select st_bandmetadata(rast, band) from (select rast, generate_series(1, 1) band from (select rast from "rasterschema"."Test_1" where (true) AND st_numbands(rast)=1 limit 1) bar) foo; st_bandmetadata ----- (8BUI,0,f,) (1 row)		

Associated revisions

Revision f4d08eb9 - 2018-08-10 09:21 AM - Jürgen Fischer

dbmanager/postgis: quote identifiers in urls (fixes qgis portion of #19583)

History

#1 - 2018-08-09 09:45 PM - Jürgen Fischer

- Resolution set to up/downstream

This is a GDAL issue.

#2 - 2018-08-10 01:53 AM - Nyall Dawson

- Status changed from Open to Closed

#3 - 2018-08-10 09:04 AM - al pischcz

Hello, thank you for the review, do I need to submit this issue elsewhere?

The query from https://github.com/varunsaraf/postgis_raster/blob/master/postgisrasterdataset.cpp is not enclosing the schema and table name in "".

```
if (pszWhere == NULL) {
    osCommand.Printf("select st_bandmetadata(%s, band) from "
        "(select %s, generate_series(1, st_numbands(%s)) band from "
        "(select %s from %s.%s limit 1) bar) foo", pszColumn, pszColumn,
        pszColumn, pszColumn, pszSchema, pszTable);
}

else {
    osCommand.Printf("select st_bandmetadata(%s, band) from "
        "(select %s, generate_series(1, st_numbands(%s)) band from "
        "(select %s from %s.%s where %s limit 1) bar) foo", pszColumn,
        pszColumn, pszColumn, pszColumn, pszSchema, pszTable, pszWhere);
}
```

#4 - 2018-08-10 09:52 AM - Jürgen Fischer

al pischcz wrote:

Hello, thank you for the review, do I need to submit this issue elsewhere?

The query from https://github.com/varunsaraf/postgis_raster/blob/master/postgisrasterdataset.cpp is not enclosing the schema and table name in "".

Take a look at <https://github.com/osgeo/gdal/pull/837>