

QGIS Application - Bug report #277

Problem viewing PostGIS views of views

2006-09-20 02:23 AM - alexbond-quintessa-org -

Status: Closed	
Priority: Low	
Assignee: Gavin Macaulay -	
Category: Vectors	
Affected QGIS version:	Regression?: No
Operating System: Windows	Easy fix?: No
Pull Request or Patch supplied:	Resolution: fixed
Crashes QGIS or corrupts data:	Copied to github as #: 10336
Description	
<p>I seem to have hit an ongoing bug with [[PostGIS]] vector layers.</p> <p>When attempting to load a [[PostGIS]] vector layer (having hit 'add') that is constructed as a [[PostgreSQL]] table view using other table views in the same database, QGIS 0.8 preview 1 and 2 under Windows XP SP2 crashes out with no visible error message.</p> <p>Table views in the same database that are dependent on tables only load without a problem.</p> <p>Under version 0.7.4 of QGIS under Windows XP SP2 I also get a crash under the same circumstances, but with the same set of error messages as reported in ticket 261.</p> <p>I've tried various combinations of the problem, but the issue appears to be attempting to load a table view dependent on other table views (rather than specific use of aggregate functions for example)</p>	

History

#1 - 2006-09-21 02:38 AM - Gavin Macaulay -

What the definitions of the tables and view in question? I have tried various views of views but have had no problems.

Can you get a backtrace when qgis crashes when trying to load your view of a view. The would help pin down where it's going wrong.

Thanks

Gavin

#2 - 2006-09-22 09:17 AM - alexbond-quintessa-org -

Hi,

The SQL for onr of the views that fails is:

--

```
CREATE OR REPLACE VIEW p_v_geol_xyz_lff_top AS
SELECT p_v_geol.hole_id, p_v_geol.hole_nate, p_v_geol.hole_natn, max(p_v_geol.hole_gl - p_v_geol.geol_top) AS geol_z, p_v_geol.geol_geol,
p_v_geol.f_geometry_column, min(p_v_geol.id_geol) AS id_geol
FROM p_v_geol
WHERE p_v_geol.geol_geol = 'LFF'::text
GROUP BY p_v_geol.hole_id, p_v_geol.hole_nate, p_v_geol.hole_natn, p_v_geol.f_geometry_column, p_v_geol.geol_geol;
```

```
ALTER TABLE p_v_geol_xyz_lff_top OWNER TO llwradmin;
```

```
--
```

which is dependent on the view p_v_geol, which is defined using the following SQL (and can be loaded successfully in QGIS):

```
--
```

```
CREATE OR REPLACE VIEW p_v_geol AS
SELECT p_hole.hole_id, p_hole.hole_nate, p_hole.hole_natn, p_hole.hole_gl, p_hole.hole_fdep, "GEOL"."GEOL_TOP" AS geol_top,
"GEOL"."GEOL_BASE" AS geol_base, "GEOL"."GEOL_DESC" AS geol_desc, "GEOL"."GEOL_LEG" AS geol_leg, "GEOL"."GEOL_GEO1" AS
geol_geol, p_hole.f_geometry_column, "GEOL".id_geol
FROM p_hole p_hole, "GEOL" "GEOL"
WHERE p_hole.hole_id = "GEOL"."HOLE_ID";
```

```
ALTER TABLE p_v_geol OWNER TO llwradmin;
```

```
--
```

The f_geometry_column holds the [[PostGIS]] geometry data. "id_geol" is the int4 primary key. "p_hole" and "GEOL" are both tables. The definitions are:

```
--
```

```
CREATE TABLE "GEOL"
(
"HOLE_ID" text,
"GEOL_TOP" numeric(15,4),
"GEOL_BASE" numeric(15,4),
"GEOL_DESC" text,
"GEOL_LEG" text,
"GEOL_GEO1" text,
"GEOL_GEO2" text,
"GEOL_STAT" text,
"FILE_FSET" text,
id_geol int4 NOT NULL DEFAULT nextval("GEOL_id_geol_seq"::regclass),
CONSTRAINT primary_geol PRIMARY KEY (id_geol)
)
WITHOUT OIDS;
ALTER TABLE "GEOL" OWNER TO llwradmin;
```

```
--
```

and

```
--
```

```
CREATE TABLE p_hole
(
hole_id text NOT NULL,
hole_type text,
hole_nate numeric(15,4),
hole_natn numeric(15,4),
hole_gl numeric(15,4),
hole_fdep numeric(15,4),
hole_star date,
hole_log text,
hole_lgdt text,
hole_rem text,
hole_etrv numeric(15,4),
```

```

hole_ntrv numeric(15,4),
hole_ltrv numeric(15,4),
hole_left text,
hole_locx numeric(15,4),
hole_locy numeric(15,4),
hole_locz numeric(15,4),
hole_endd date,
hole_bacd text,
hole_crew text,
hole_ornt numeric(15,4),
hole_incl numeric(15,4),
hole_flmd text,
hole_cbit text,
hole_ckby text,
hole_ckdt text,
hole_exc text,
hole_shor text,
hole_stab text,
hole_diml numeric(15,4),
hole_dimw numeric(15,4),
hole_locm text,
hole_loca text,
hole_clst text,
file_fset text,
cust_project text,
cust_contr_bore_name text,
cust_contr text,
cust_contr_rep_no text,
cust_sjo_no text,
cust_sitx text,
cust_sity text,
cust_sitz text,
id serial NOT NULL,
f_geometry_column geometry,
CONSTRAINT p_hole_primary PRIMARY KEY (id),
CONSTRAINT enforce_dims_f_geometry_column CHECK (ndims(f_geometry_column) = 2),
CONSTRAINT enforce_geotype_f_geometry_column CHECK (geometrytype(f_geometry_column) = 'POINT'::text OR f_geometry_column IS NULL),
CONSTRAINT enforce_srid_f_geometry_column CHECK (srid(f_geometry_column) = 4)
}
WITHOUT OIDS;
ALTER TABLE p_hole OWNER TO llwradmin;
-

```

If I try to create a simple view of p_v_geol called p_v_geol_test using the following SQL, then p_v_geol_test also causes QGIS to crash for version 0.7.4 and 0.8 Preview 2, i.e. it doesn't look like it is any of the aggregate functions I'm using.

```

--
CREATE OR REPLACE VIEW p_v_geol_test AS
SELECT * FROM p_v_geol;

ALTER TABLE p_v_geol_test OWNER TO llwradmin;
--

```

Does this help?

Thanks

#3 - 2006-09-25 04:36 AM - alexbond-quintessa-org -

For completeness I've compiled QGIS 0.8 P2 under Linux (Mandriva 2006 Official) with the same effect - this time I get something useful out of it re: the crash.

...

ERROR: Failed to find the column that .public.p_hole refers to.

Search for the underlying table.column for view column .public.p_hole failed: exceeded maximum iteration limit (100).

Relation . doesn't exist in the pg_class table. This shouldn't happen and is odd.

qgis: qgspostgresprovider.cpp:1158: QString [[QgsPostgresProvider]]::chooseViewColumn(conststd::map<QString, [[QgsPostgresProvider]]::SRC, std::less<QString>, std::allocator<std::pair<const QString, [[QgsPostgresProvider]]::SRC> > >): Assertion @0' failed.

Aborted (core dumped)

When looking at the core dump in gdb I get the following as I go up the trace:

Core was generated by @qgis'.

Program terminated with signal 6, Aborted.

warning: svr4_current_sos: Can't read pathname for load map: Input/output error

#0 0xffffe410 in +kernel_vsyscall ()

(gdb) up

#3905 0xb652aef1 in raise () from /lib/tls/libc.so.6

(gdb) up

#3906 0xb652c83b in abort () from /lib/tls/libc.so.6

(gdb) up

#3907 0xb6524045 in +assert_fail () from /lib/tls/libc.so.6

(gdb) up

#3908 0xb5e5f9d2 in [[QgsPostgresProvider]]::chooseViewColumn (this=0x81cfa0, cols=@0x6) at qgspostgresprovider.cpp:1158

/home/alexbond/SysAdmin/qgis_Release-0_8-preview-2/src/providers/postgres/qgspostgresprovider.cpp:1158:37251:beg:0xb5e5f9d2

(gdb) up

#3909 0xb5e62240 in [[QgsPostgresProvider]]::getPrimaryKey (this=0x81cfa0) at qgspostgresprovider.cpp:991

(gdb) up

#3910 0xb5e6e23a in [[QgsPostgresProvider]] (this=0x81cfa0, uri=@0x8257d50) at qgspostgresprovider.cpp:288

(gdb) up

#3911 0xb5e6f3cd in classFactory (uri=0x8257d50) at qgspostgresprovider.cpp:2835

(gdb) up

#3912 0xb7bae223 in [[QgsProviderRegistry]]::getProvider (this=0x81080f0, providerKey=@0xbfc74824, dataSource=@0x8257d50) at

qgsproviderregistry.cpp:358

/home/alexbond/SysAdmin/qgis_Release-0_8-preview-2/src/core/qgsproviderregistry.cpp:358:10412:beg:0xb7bae223

(gdb) up

#3913 0xb7d9a105 in [[QgsVectorLayer]]::setDataProvider (this=0x8257d20, provider=@0xbfc74824) at qgsvectorlayer.cpp:2207

/home/alexbond/SysAdmin/qgis_Release-0_8-preview-2/src/gui/qgsvectorlayer.cpp:2207:60956:beg:0xb7d9a105

(gdb) up

#10 0xb7d9f3b9 in [[QgsVectorLayer]] (this=0x8257d20, vectorLayerPath=@0xbfc74818, baseName=@0xbfc74820, providerKey=@0xbfc74824) at

qgsvectorlayer.cpp:124

(gdb) up

#3914 0xb7c6b1a2 in [[QgisApp]]::addDatabaseLayer (this=0x80931c0) at qgisapp.cpp:1907

/home/alexbond/SysAdmin/qgis_Release-0_8-preview-2/src/gui/qgisapp.cpp:1907:73536:beg:0xb7c6b1a2

(gdb) up

#3915 0xb7dd8c9f in [[QgisApp]::qt_metacall (this=0x80931c0, _c=QMetaObject::InvokeMetaMethod, _id=7, _a=0xbfc74e1c) at qgisapp.moc.cpp:210 /home/alexbond/SysAdmin/qgis_Release-0_8-preview-2/src/gui/qgisapp.moc.cpp:210:8251:beg:0xb7dd8c9f

(gdb) up

the remainder of the messages relate to the QT4 gui only

#4 - 2006-09-27 02:12 AM - Gavin Macaulay -

Partial fix in SVN commit:e642476c (SVN r5878). Qgis should now load and display data in the above series of tables/views.

However, there is another problem, in that qgis currently doesn't cope with renamed view columns (ie, using the AS statement). I'll try to fix that in the coming days.

#5 - 2006-10-14 01:51 AM - Gavin Macaulay -

- Resolution set to fixed

- Status changed from Open to Closed

Fixed in svn commit:c12cae23 (SVN r5958).

Two other bugs are also fixed:

1. Tables that contain capital letters in their name or column names now load into qgis.
2. Views that rename their column (using AS) now also load into qgis.

#6 - 2006-10-14 02:41 AM - Gavin Macaulay -

- Resolution deleted (fixed)

- Status changed from Closed to Feedback

Not quite fixed - I've reverted the sql changes in svn commit:75b68177 (SVN r5960) as the change made things worse when the database had more than one view in it. Needs some more thinking...

#7 - 2006-12-15 04:41 PM - Gavin Macaulay -

Partial fix in commit:e0249e3c (SVN r6267)

It needs some more testing and enhancement, but should work in most cases. I am committing this so that I can check it out on other computers and test, and also so that other users can test it. I am especially interested in cases where it doesn't work as expected, along with the definition of the views and tables in question.

#8 - 2006-12-15 08:21 PM - anonymous -

- Resolution set to fixed

- Status changed from Feedback to Closed

Fixed even better in commit:0f834076 (SVN r6268).

#9 - 2009-08-22 12:46 AM - Anonymous

Milestone Version 0.8 deleted