

QGIS Application - Bug report #20872

QGIS 3.5 not loading or saving multi-dimensional arrays properly from PostGIS layers

2018-12-23 01:41 AM - Cory Albrecht

Status:	Reopened	
Priority:	High	
Assignee:	Julien Cabieces	
Category:	Editing	
Affected QGIS version:	3.7(master)	Regression?: Yes
Operating System:	Windows	Easy fix?: No
Pull Request or Patch applied:	Yes	Resolution:
Crashes QGIS or corrupts data:	No	Copied to github as #: 28691

Description

I have map layers stored in PostgreSQL where a field contains two dimensional arrays of values.

Alternate History=# select name,full\_name,alternate\_name from "Balance of Power"."timeline-countries" where full\_name is not null and alternate\_name is not null;

name	full_name	alternate_name
-----	-----	-----
New Spain	{{en,"Viceroyalty of New Spain"}}	{{es,"Virreinato de la Nueva España"},{es,"Nueva España"}}
Mexico	{{es,"Imperio Mexicano"},{en,"Mexican Empire"}}	{{es,"Imperio Mexicano"}}
Mexico	{{es,"Estados Unidos Mexicanos"},{en,"United Mexican States"}}	{{es,"Estados Unidos Mexicanos"}}
Mexico	{{es,"Estados Unidos Mexicanos"},{en,"United Mexican States"}}	{{es,"Estados Unidos Mexicanos"}}
Alta California	{{es,"República de Alta California"},{en,"Republic of Alta California"}}	{{en,"Upper California"}}
New Spain	{{en,"Viceroyalty of New Spain"}}	{{es,"Virreinato de la Nueva España"},{es,"Nueva España"}}
...		

In QGIS 2.18.x those arrays appeared in Feature Attributes dialog in the PostgreSQL text format for specifying arrays, using curly braces as seen in the psql output fragment above, and you could add to the arrays by entering new items in that format.

But in 3.5 that is no longer the case. Instead, only a bit of the text is shown in the text widget of the dialog.

<https://i.ibb.co/FxC1jkg/image.png>

Further, when you try to update that field with as value like

{{en,"Cape Colony"}}

it gets saved in the database as

{{{en,"Cape Colony\"}}}

Associated revisions

Revision 0753b144 - 2019-02-22 09:12 AM - Julien Cabieces

fixes #20872 : Manage postgres multidimensionnal array

#### Revision 1957cf53 - 2019-03-11 09:56 PM - Julien Cabieces

fixes #20872 : Manage postgres multidimensionnal array

#### Revision 2dbaa18f - 2019-03-11 09:58 PM - Julien Cabieces

fixes #20872 : Manage postgres multidimensionnal array

## History

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### #1 - 2018-12-23 01:49 AM - Cory Albrecht

On loading the layer, the Qt messages windows displays lines like the following;

```
2018-12-22T19:48:10  WARNING  Cannot find separator: },{"es","Nueva España"}
2018-12-22T19:48:10  WARNING  Error parsing array: {es,"Virreinato de la Nueva España"},{"es","Nueva España"}
2018-12-22T19:48:10  WARNING  Cannot find separator: }
2018-12-22T19:48:10  WARNING  Error parsing array: {en,"Viceroyalty of New Spain"}
```

### #2 - 2018-12-23 07:17 PM - Cory Albrecht

I just tried 3.4.2 and the issue is there, too.

### #3 - 2018-12-23 08:19 PM - Cory Albrecht

Here is what the feature attributes dialog looks like in 2,18.25 for the same feature object.

<https://i.ibb.co/JdnWm4c/Screenshot-from-2018-12-23-14-14-27.png>

### #4 - 2019-01-17 04:02 AM - Cory Albrecht

Ping.

### #5 - 2019-01-17 11:26 AM - Giovanni Manghi

- Priority changed from Normal to High
- Regression? changed from No to Yes

### #6 - 2019-01-30 02:25 PM - Julien Cabieces

- Assignee set to Julien Cabieces

### #7 - 2019-01-31 03:56 PM - Julien Cabieces

- Pull Request or Patch supplied changed from No to Yes

Proposed PR : <https://github.com/qgis/QGIS/pull/9048>

#8 - 2019-03-03 06:49 PM - Cory Albrecht

Still happening in 3.45, 3.60 and 3.7

#9 - 2019-03-03 06:49 PM - Giovanni Manghi

- Affected QGIS version changed from 3.5(master) to 3.7(master)

#10 - 2019-03-04 02:02 PM - Julien Cabieces

Still happening in 3.45, 3.60 and 3.7

Proposed PR isn't accepted yep.

#11 - 2019-03-05 09:35 AM - Julien Cabieces

- Status changed from Open to Closed
- % Done changed from 0 to 100

Applied in changeset commit:qgis|0753b144b92763b18021f1d706a1cf184323b1aa.

#12 - 2019-03-19 12:15 AM - Cory Albrecht

Julien Cabieces wrote:

Applied in changeset commit:qgis|0753b144b92763b18021f1d706a1cf184323b1aa.

When will this be in a nightly? I just tried 3.7 and it's not there yet.

#13 - 2019-03-20 08:46 AM - Julien Cabieces

- File scr\_table.png added
- File scr\_rqst.png added
- File scr\_form.png added

Here is some screenshots with current master

```
test_qgis=# select * from my_table;
id | arrays |
---+-----+
 3 | {{en},{fr},{titi}} | 01010000A0E61
 1 | {{{en,"tutu titi"},{fr,"hello bobbo"}}} | 01010000A0E61
 2 | {{en,"tutu henru"},{fr,"hello coucou titi foo"},{tata,"test1 test2 test3"}} | 01010000A0E61
(3 lignes)
```

my\_table :: Total des entités: 3, filtrées: 3,

	id	arrays
1	1	{ {en,"tutu tito"},{fr,"hello bobbo"}} }
2	2	{en,"tutu henru"}, {fr,"hello coucou titi foo"}, {tata,"test1 test2 test3"}
3	3	{en}, {fr}, {titi}

id	<input type="text" value="2"/>	2			
	Valeur				
		{en,"tutu henru"}			
		{fr,"hello coucou titi foo"}			
arrays		{tata,"test1 test2 test3"}			

Does it look like what you're seeing on your version of QGIS?

Could you please check the QGIS version once launched in the help > About dialog.

**#14 - 2019-03-21 04:12 PM - Cory Albrecht**

Julien Cabieces wrote:

*Does it look like what you're seeing on your version of QGIS?*

I did not use the new list widget, just the plain old text widget, as shown in my screencaps.

Any text representation that the psql command-line client uses to either show the results of a query, or how one might type in the command by hand as a raw SQL, one should be able to simply copy-paste back and forth between a terminal and QGIS in either the Feature Attribute form's plain text widget or in the Attribute Table columns.

That way all possible PostGIS data types have some kind of minimal support, and special widgets can wait until somebody has the inclination and time to write them.

*Could you please check the QGIS version once launched in the help > About dialog.*

Whatever was in the PPA <https://ggis.org/ubuntu-nightly> Monday afternoon and evening, but I reverted to 3.6. I will check whatever is in the PPA once I get home from work.

**#15 - 2019-03-22 08:40 AM - Julien Cabieces**

- Status changed from Closed to Reopened

I see, there is an additionnal issue when we use the plain text display (the list widget is working by the way).

I reopen the ticket, and I'll try to find a way to correct this.

#16 - 2019-03-22 10:34 AM - Julien Cabieces

Proposed PR : <https://github.com/qgis/QGIS/pull/9610>

Be aware that there is still a problem to deal with integer and float array in plain text.

Files			
scr_rqst.png	15.5 KB	2019-03-20	Julien Cabieces
scr_form.png	10 KB	2019-03-20	Julien Cabieces
scr_table.png	22.9 KB	2019-03-20	Julien Cabieces