

## QGIS Application - Bug report #17869

### database check constraints on several fields can't be evaluated correctly on update in transaction mode

2018-01-16 02:34 PM - Regis Haubourg

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| <b>Status:</b> Closed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                      |
| <b>Priority:</b> Normal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                      |
| <b>Assignee:</b> Paul Blottiere                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                      |
| <b>Category:</b> Data Provider/PostGIS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                      |
| <b>Affected QGIS version:</b> 2.18.15                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Regression?:</b> No               |
| <b>Operating System:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Easy fix?:</b> No                 |
| <b>Pull Request or Patch supplied:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Resolution:</b> fixed/implemented |
| <b>Crashes QGIS or corrupts data:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Copied to github as #:</b> 25764  |
| <b>Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                      |
| <p>Hi all, still swimming in the depth of transaction groups :)</p> <p>When a database as check constraints on multiple fields, update operations in transaction groups are made separatly for each field, which in some cases will fail.</p> <p>Let's take for instance that table definition which constraint a mutual exclusion on two fk (one must be filled when the other must be NULL)</p> <pre>-- Table: ouvrage.bache  -- DROP TABLE ouvrage.bache;  CREATE TABLE ouvrage.bache (   id uuid NOT NULL DEFAULT uuid_generate_v4(), -- Identifiant unique. Lien vers la table ouvrepere   numero_postal character varying NOT NULL, -- N° postal de l'ouvrage   bp_id uuid, -- Lien vers la table des BP   br_id uuid, -- Lien vers la table des BR    CONSTRAINT bache_pkey PRIMARY KEY (id),    CONSTRAINT chk_ouvrage_lie_bache CHECK (     br_id IS NOT NULL AND bp_id IS NULL AND puits_id IS NULL AND be_id IS NULL   OR     br_id IS NULL AND bp_id IS NOT NULL AND puits_id IS NULL AND be_id IS NULL ) ) WITH (   OIDS=FALSE );  It</pre> <p>When trying to switch value in a QGIS form, two separate instructions are committed, and they will be rejected when doing only one update operation would work.</p> <pre>UPDATE "maj_plan"."bache" SET "br_id"=NULL WHERE "id"::text='423d899e-d698-4807-925c-11a37c90399e'</pre> |                                      |

raises

```
[ERREUR: la nouvelle ligne viole la contrainte de vérification « bache » de la relation « chk_ouvrage_lie_bache »
DÉTAIL : La ligne en question contient (423d899e-d698-4807-925c-11a37c90399e, BACHE1,
68df933f-b987-4010-9d71-bd0d6611e8b2, 7224ea6d-333f-4e06-b3e8-8603b202dc9e, 10, 5, 10, 10, f, 2018-01-11
00:00:00+01, ATOLCD, 2018-01-11 00:00:00+01, 2018-01-11 00:00:00+01, 2017, BACHE1 - ok, null, null, null, null)
CONTEXTE : instruction SQL « UPDATE ouvrage.bache SET numero_postal=NEW.numero_postal,
bache_position_id=NEW.bache_position_id::uuid,
bache_occupant_id=NEW.bache_occupant_id::uuid, largeur=NEW.largeur, profondeur=NEW.profondeur,
hauteur=NEW.hauteur,
hauteur_sous_bache=NEW.hauteur_sous_bache, avec_capot=NEW.avec_capot,
date_constat=NEW.date_constat,
responsable_constat=NEW.responsable_constat, date_derniere_visite=NEW.date_derniere_visite,
date_rehabilitation=NEW.date_rehabilitation,
annee_creation=NEW.annee_creation, commentaire=NEW.commentaire, bp_id=NEW.bp_id::uuid,
br_id=NEW.br_id::uuid,
puits_id=NEW.puits_id::uuid, be_id=NEW.be_id::uuid
WHERE id = OLD.id::uuid »
fonction PL/pgsql maj_plan.tf_bache(), ligne 24 » instruction SQL
```

when this works

```
UPDATE "maj_plan"."bache" SET "bp_id"= '195de05c-6e0c-471e-bacd-2e21eb683083'::uuid, "br_id"= NULL WHERE
"id"::text='423d899e-d698-4807-925c-11a37c90399e';
```

## Associated revisions

**Revision c1fac425 - 2018-01-29 08:17 AM - Paul Blottiere**

Update all attributes in a single transaction

Fixes #17869

**Revision 140b40bc - 2018-03-30 03:31 PM - Paul Blottiere**

Update all attributes in a single transaction

Fixes #17869

## History

**#1 - 2018-01-17 10:33 AM - Regis Haubourg**

We found another case where this behavior is not good. When database has a audit trigger log, each form update will generate as many transactions as changed fields. This adds weight a lot the audit log and makes it harder to query since it is not possible to associate a transaction with a user update action.

**#2 - 2018-01-17 08:38 PM - Jürgen Fischer**

- Assignee deleted (*Jürgen Fischer*)

**#3 - 2018-01-19 08:21 PM - Denis Rouzaud**

- Assignee set to *David Signer*

**#4 - 2018-01-20 10:33 PM - Regis Haubourg**

- Assignee changed from *David Signer* to *Paul Blottiere*

Hi Denis,

Paul already has a branch ready here [https://github.com/pblottiere/QGIS/tree/bugfix\\_transaction\\_constraints](https://github.com/pblottiere/QGIS/tree/bugfix_transaction_constraints)

Any feedback welcome.

**#5 - 2018-01-22 12:43 PM - Denis Rouzaud**

feel free to PR

**#6 - 2018-01-23 05:25 PM - Regis Haubourg**

and PR is here :) [<https://github.com/qgis/QGIS/pull/6142>]

**#7 - 2018-01-29 09:18 AM - Paul Blottiere**

- Status changed from *Open* to *Closed*

- % Done changed from *0* to *100*

Applied in changeset commit:qgis|c1fac42518440680f246250024107201446d8adc.

**#8 - 2018-02-21 09:51 PM - Giovanni Manghi**

- Resolution set to *fixed/implemented*