

Core - Bug # 64616

Status:	Resolved	Priority:	Should have
Author:	Philipp Gampe	Category:	Database API
Created:	2015-01-29	Assigned To:	
Updated:	2015-01-31	Due date:	
TYPO3 Version:	6.2		
PHP Version:	5.3		
Complexity:	hard		
Is Regression:	No		
Sprint Focus:	On Location Sprint		
Subject:	Compare Database does not remove 'NOT NULL'		
Description			
The compare database wizard does not detect if fields to not have the NOT NULL clause anymore (if they had such a clause previously).			
 MariaDB [dummy]> SHOW FIELDS FROM sys_file_processedfile;			
+-----+-----+-----+-----+-----+ Field Type Null Key Default Extra +-----+-----+-----+-----+-----+			
uid int(11) NO PRI NULL auto_increment			
pid int(11) NO MUL 0			
tstamp int(11) NO 0			
crdate int(11) NO 0			
cruser_id int(11) NO 0			
deleted tinyint(4) NO 0			
storage int(11) NO MUL 0			
original int(11) NO MUL 0			
identifier varchar(512) YES			
name tinytext YES NULL			
configuration text YES NULL			
context varchar(200) NO			
checksum varchar(255) NO			
is_processed varchar(200) NO			
extension varchar(255) NO			
mime_type varchar(255) NO			
sha1 tinytext YES NULL			
size int(11) NO 0			
width int(11) NO 0			
height int(11) NO 0			
originalfilesha1 char(40) YES			
task_type varchar(200) NO			
configurationsha1 char(40) YES			
+-----+-----+-----+-----+-----+			
 Notice the NO for NULL for the fields width and height. The corresponding SQL file (from core sysex):			
 CREATE TABLE sys_file_processedfile (uid int(11) NOT NULL auto_increment, tstamp int(11) DEFAULT '0' NOT NULL,			

```

crdate int(11) DEFAULT '0' NOT NULL,

storage int(11) DEFAULT '0' NOT NULL,
original int(11) DEFAULT '0' NOT NULL,
identifier varchar(512) DEFAULT '' NOT NULL,
name tinytext,
configuration text,
configurationsha1 char(40) DEFAULT '' NOT NULL,
originalfilesa1 char(40) DEFAULT '' NOT NULL,
task_type varchar(200) DEFAULT '' NOT NULL,
checksum varchar(255) DEFAULT '' NOT NULL,
width int(11) DEFAULT '0',
height int(11) DEFAULT '0',

PRIMARY KEY (uid),
KEY combined_1 (original,task_type,configurationsha1),
KEY identifier (storage,identifier(199))
);

```

Notice that it does not have a NOT NULL for the width and height fields.

The database compare does not detect this.

Related issues:

related to Core - Bug # 60514: Database analyzer does not parse TEXT null / n...	Closed	2014-07-24
related to Core - Task # 64697: Add Tests for NULL fields when comparing SQL ...	Resolved	2015-01-31
duplicated by Core - Bug # 63713: Check fields for NOT NULL by default in get...	Resolved	2014-12-09
duplicated by Core - Bug # 58019: FAL Indexer for broken files: Column 'width...	Rejected	2014-04-17

Associated revisions

Revision 47bdb4f8 - 2015-01-31 17:00 - Stephan Großberndt

[BUGFIX] Respect (NOT) NULL when comparing SQL field definitions

When comparing the database or updating extensions the definitions for NULL / NOT NULL in fields are now respected and updated.

Resolves: #64616

Releases: master, 6.2

Change-Id: I70c63339505b373023f24973313a2e673e8eaf86

Reviewed-on: <http://review.typo3.org/36400>

Tested-by: Ronny Vorpahl <vorpahl@artplan21.de>

Reviewed-by: Mateusz Wojtula <matw88@gmail.com>

Reviewed-by: Christian Kuhn <loli@schwarzbu.ch>

Tested-by: Christian Kuhn <loli@schwarzbu.ch>

Revision 2edb4ddd - 2015-01-31 17:01 - Stephan Großberndt

[BUGFIX] Respect (NOT) NULL when comparing SQL field definitions

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NULL / NOT NULL in fields are now respected and updated.

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Change-Id: I70c63339505b373023f24973313a2e673e8eaf86

Reviewed-on: <http://review.typo3.org/36525>

Reviewed-by: Christian Kuhn <lolli@schwarzbu.ch>

Tested-by: Christian Kuhn <lolli@schwarzbu.ch>

History

#1 - 2015-01-29 21:35 - Philipp Gampe

- Subject changed from Compare Database does remove 'NOT NULL' to Compare Database does not remove 'NOT NULL'

#2 - 2015-01-30 10:44 - Stephan Großberndt

I had that issue some time before too. I know its cause, the according parameter is not set when the function to check the fields is called. I did not know if this is on purpose so I did not file a bug report.

#3 - 2015-01-30 11:03 - Philipp Gampe

DBAL needs to xclass anyway?!? Therefore I suggest to improve the behavior for MySQL/MariaDB Databases and fix this for 95% of our users.

If you know the cause, please push a patch. Then we will at least be able to discuss this.

#4 - 2015-01-30 11:19 - Stephan Großberndt

The problem is in TYPO3\CMS\Install\Service\SqlSchemaMigrationService

```
/**
 * Compares two arrays with field information and returns information about fields that are MISSING and fields that have CHANGED.
 * FDsrc and FDcomp can be switched if you want the list of stuff to remove rather than update.
 *
 * @param array $FDsrc Field definitions, source (from getFieldDefinitions_fileContent())
 * @param array $FDcomp Field definitions, comparison. (from getFieldDefinitions_database())
 * @param string $onlyTableList Table names (in list) which is the ONLY one observed.
 * @param bool $ignoreNotNullWhenComparing If set, this function ignores NOT NULL statements of the SQL file field definition when
    comparing current field definition from database with field definition from SQL file. This way, NOT NULL statements will be executed when the
    field is initially created, but the SQL parser will never complain about missing NOT NULL statements afterwards.
 * @return array Returns an array with 1) all elements from $FDsrc that is not in $FDcomp (in key 'extra') and 2) all elements from $FDsrc
    that is different from the ones in $FDcomp
 */
public function getDatabaseExtra($FDsrc, $FDcomp, $onlyTableList = "", $ignoreNotNullWhenComparing = TRUE) {
```

Why would you have the SQL parser not complain about missing NOT NULL after creating the table?

Either all (?) calls to getDatabaseExtra have to contain \$ignoreNotNullWhenComparing = FALSE or the default signature for getDatabaseExtra should be changed to \$ignoreNotNullWhenComparing = FALSE.

#5 - 2015-01-30 11:23 - Gerrit Code Review

- Status changed from Accepted to Under Review

Patch set 1 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <http://review.typo3.org/36400>

#6 - 2015-01-31 16:14 - Gerrit Code Review

Patch set 2 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <http://review.typo3.org/36400>

#7 - 2015-01-31 16:25 - Gerrit Code Review

Patch set 3 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <http://review.typo3.org/36400>

#8 - 2015-01-31 17:01 - Gerrit Code Review

Patch set 1 for branch **TYPO3_6-2** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <http://review.typo3.org/36525>

#9 - 2015-01-31 17:30 - Stephan Großberndt

- Status changed from Under Review to Resolved

- % Done changed from 0 to 100

Applied in changeset commit:47bdb4f81566de9e12997d3c3c31694658baae65.