

## Core - Bug # 46271

<b>Status:</b>	Resolved	<b>Priority:</b>	Should have
<b>Author:</b>	Gerald Buttinger	<b>Category:</b>	
<b>Created:</b>	2013-03-14	<b>Assigned To:</b>	
<b>Updated:</b>	2015-07-22	<b>Due date:</b>	
<b>TYPO3 Version:</b>	7		
<b>PHP Version:</b>			
<b>Complexity:</b>			
<b>Is Regression:</b>	No		
<b>Sprint Focus:</b>			
<b>Subject:</b>	DB-error with postgreSQL		
<b>Description</b>			
using "news" with DBAL and postgreSQL results in the following DB-error, when editing the news-plugin-content-element:			
TYPO3\CMS\Core\Database\DatabaseConnection::exec_SELECTquery ERROR ERROR: function find_in_set(unknown, bigint) does not exist LINE 1: ...id" FROM "tx_news_domain_model_category" WHERE FIND_IN_SE... ^ HINT: No function matches the given name and argument types. You might need to add explicit type casts.			
lastBuiltQuery: SELECT "uid" FROM "tx_news_domain_model_category" WHERE FIND_IN_SET('0', "parentcategory") != 0 OR "parentcategory" = "			
debug_backtrace: TYPO3\CMS\Backend\Controller\EditDocumentController->main#59 // TYPO3\CMS\Backend\Controller\EditDocumentController->makeEditForm#627 // TYPO3\CMS\Backend\Form\FormEngine->getMainFields#832 // TYPO3\CMS\Backend\Form\FormEngine->getSingleField#786 // TYPO3\CMS\Backend\Form\FormEngine->getSingleField_SW#1092 // TYPO3\CMS\Backend\Form\FormEngine->getSingleField_typeFlex#1207 // TYPO3\CMS\Backend\Form\FormEngine->getSingleField_typeFlex_draw#2682 // TYPO3\CMS\Backend\Form\FormEngine->getSingleField_SW#2964 // TYPO3\CMS\Backend\Form\FormEngine->getSingleField_typeSelect#1192 // TYPO3\CMS\Backend\Form\Element\TreeElement->renderField#1740 // TYPO3\CMS\Core\Tree\TableConfiguration\DatabaseTreeDataProvider->initializeTreeData#87 // TYPO3\CMS\Core\Tree\TableConfiguration\DatabaseTreeDataProvider->getChildrenOf#288 // TYPO3\CMS\Core\Tree\TableConfiguration\DatabaseTreeDataProvider->getRelatedRecords#313 // TYPO3\CMS\Core\Tree\TableConfiguration\DatabaseTreeDataProvider->getChildrenUidsFromParentRelation#340 // TYPO3\CMS\Core\Tree\TableConfiguration\DatabaseTreeDataProvider->listFieldQuery#376 // TYPO3\CMS\Core\Database\DatabaseConnection->exec_SELECTgetRows#427 // TYPO3\CMS\Core\Database\DatabaseConnection->debug#284			
<b>Related issues:</b>			
related to Core - Bug # 67172: AdoDB error on editing a page		<b>Resolved</b>	<b>2015-05-27</b>
related to Core - Bug # 67155: Invalid SQL Query for sys_categories		<b>Resolved</b>	<b>2015-05-26</b>

### Associated revisions

Revision 14f04a6a - 2015-07-22 18:50 - Morton Jonuschat

[BUGFIX] dbal: Cast field to CHAR for FIND\_IN\_SET()

Implement explicit casting of fields to a character representation.  
Most DBMS are stricter in regard to data type checking and emit an error when trying to use FIND\_IN\_SET() on non-text field types.

On the DBAL side of things the DBMS specifics are used to define that an explicit cast is required for FIND\_IN\_SET() so that a query including the CAST statement gets generated.

A PostgreSQL Specific has been added to enable the explicit casting in conjunction with DBAL. To avoid checking repeatedly if a DBMS has defined specific requirements a NullSpecific has been implemented that gets used as a default.

In the DatabaseTreeDataProvider the listFieldQuery() function has been changed to use an explicit CAST instead of relying on the implicit cast done by MySQL when comparing it to an empty string.

The SqlParser has been extended with the support for CAST.

Resolves: #67155

Resolves: #67172

Resolves: #46271

Releases: master, 6.2

Change-Id: Ic77d1700e0fb4e3723c90b34e131dafb456038e0

Reviewed-on: <http://review.typo3.org/39779>

Reviewed-by: Andreas Fernandez <[typo3@scripting-base.de](mailto:typo3@scripting-base.de)>

Tested-by: Andreas Fernandez <[typo3@scripting-base.de](mailto:typo3@scripting-base.de)>

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Tested-by: Markus Klein <[markus.klein@typo3.org](mailto:markus.klein@typo3.org)>

#### **Revision a780e46a - 2015-07-22 20:23 - Morton Jonuschat**

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Tested-by: Andreas Fernandez <typo3@scripting-base.de>  
Reviewed-by: Markus Klein <markus.klein@typo3.org>  
Tested-by: Markus Klein <markus.klein@typo3.org>  
Reviewed-on: <http://review.typo3.org/41842>

## History

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### #1 - 2013-03-15 07:00 - Georg Ringer

- Status changed from New to Accepted

### #2 - 2013-03-15 10:34 - Xavier Perseguers

The error shows something interesting:

```
ERROR ERROR: function find_in_set(unknown, bigint) does not exist
```

So the `find_in_set('0', "parentcategory")` seems to tell us that column `parentcategory` is a `bigint`, is it true? If so, why are you using a `find_in_set` for a numerical column?

If not, or anyway, the `find_in_set()` is not part of PostgreSQL and has normally been created when you run the script `EXT:dbal/res/postgresql/postgresql-compatibility.sql`. You may have to have a look at its definition, adjust it or overload it for your environment with different types.

HTH

### #3 - 2013-03-16 18:51 - Gerald Buttinger

the column `"parentcategory"` of table `"tx_news_domain_model_category"` is indeed `"bigint"` on postgres and `"int(11)"` on mysql. so i also don't understand, why `"find_in_set"` is used here. wouldn't `"WHERE parentcategory != 0"` have the same result here?

i have run the `"postgresql-compatibility.sql"` script, but it only creates a `"find_in_set(text, text)"` function, which wants a text and not `bigint` as second parameter. sure, one could create a `"find_in_set(text, bigint)"` variant, but imho that would not make sense.

also, i've just realized, that the second WHERE-part (`OR "parentcategory" = "`) also fails on postgres, since the field is `bigint` and not a string.

### #4 - 2013-03-19 16:14 - Gerald Buttinger

i've dug a little deeper now. the culprit select statement is created in this function:

```
TYPO3\CMS\Core\Tree\TableConfiguration\DatabaseTreeDataProvider->listFieldQuery
```

...which looks like this:

```

protected function listFieldQuery($fieldName, $queryId) {
    $records = $GLOBALS['TYPO3_DB']->exec_SELECTgetRows('uid', $this->getTableName(),
$GLOBALS['TYPO3_DB']->listQuery($fieldName, intval($queryId), $this->getTableName()) . (intval($queryId) == 0 ? ' OR ' . $fieldName . ' =
\'\' : ''));
    $uidArray = array();
    foreach ($records as $record) {
        $uidArray[] = $record['uid'];
    }
    return $uidArray;
}

```

the function makes the select statement, even if the targetted field is not a string-field, and thus cannot contain a "list".

i've now modified the function to first check the field type, and if it is "int", make a "int=int" where-clause:

```

protected function listFieldQuery($fieldName, $queryId) {
    $uidArray = array();
    $arrFieldTypes = $GLOBALS['TYPO3_DB']->cache_fieldType;
    if ($arrFieldTypes[$this->getTableName()][$fieldName]['type'] == 'int') {
        $records = $GLOBALS['TYPO3_DB']->exec_SELECTgetRows('uid', $this->getTableName(), $fieldName . '=' . $queryId);
    }
    else {
        $records = $GLOBALS['TYPO3_DB']->exec_SELECTgetRows('uid', $this->getTableName(),
$GLOBALS['TYPO3_DB']->listQuery($fieldName, intval($queryId), $this->getTableName()) . (intval($queryId) == 0 ? ' OR ' . $fieldName . ' =
\'\' : ''));
    }
    if (is_array($records)) {
        foreach ($records as $record) {
            $uidArray[] = $record['uid'];
        }
    }
    return $uidArray;
}

```

this fixes the problem for me, but i don't know if it's the "right" solution.

also, since the problem seems to lie with the typo3-core, and not especially with the "news"-extension, maybe this bug should be assigned to the core-project.

what do you typo3-gurus think?

#### #5 - 2013-03-20 06:12 - Georg Ringer

- Project changed from news extension to Extbase MVC Framework

#### #6 - 2013-03-20 23:14 - Anja Leichsenring

- Project changed from Extbase MVC Framework to Core

Sorry to tell you this, but this is not an Extbase issue, but for the Core or maybe dbal. So I move the ticket again.

**#7 - 2015-01-15 13:11 - Mathias Schreiber**

- *Status changed from Accepted to Resolved*
- *Is Regression set to No*

Check out sysext/dbal/res/postgresql/ to supply the functions necessary

**#8 - 2015-05-28 14:10 - alexis nicolas**

Fix issue #67172. Thank you very much Gerald!

**#9 - 2015-05-28 14:41 - Mathias Schreiber**

- *Status changed from Resolved to New*
- *TYPO3 Version changed from 6.0 to 7*

re-opened because it was closed during the FIND\_IN\_SET on postgres madness

**#10 - 2015-05-28 23:07 - Gerrit Code Review**

- *Status changed from New 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/39779>

**#11 - 2015-05-29 08:51 - 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/39779>

**#12 - 2015-06-08 09:14 - 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/39779>

**#13 - 2015-06-08 09:19 - Gerrit Code Review**

Patch set 4 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.  
It is available at <http://review.typo3.org/39779>

**#14 - 2015-06-09 18:41 - Gerrit Code Review**

Patch set 5 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <http://review.typo3.org/39779>

**#15 - 2015-06-17 23:19 - Gerrit Code Review**

Patch set 6 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <http://review.typo3.org/39779>

**#16 - 2015-07-17 10:33 - Gerrit Code Review**

Patch set 7 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <http://review.typo3.org/39779>

**#17 - 2015-07-22 19:00 - Morton Jonuschat**

- *Status changed from Under Review to Resolved*
- *% Done changed from 0 to 100*

Applied in changeset commit:14f04a6a526ce654c86e7e62bcf4cb09cfca6eb2.

**#18 - 2015-07-22 20:06 - Gerrit Code Review**

- *Status changed from Resolved to Under 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/41842>

**#19 - 2015-07-22 20:29 - Morton Jonuschat**

- *Status changed from Under Review to Resolved*

Applied in changeset commit:a780e46ad709bcf5df9253182c620cec8c748bc4.