

## Core - Bug # 63666

Bug # 63692 (Accepted): Memory consumption while bulk inserting

<b>Status:</b>	Resolved	<b>Priority:</b>	Must have
<b>Author:</b>	Stephan Großberndt	<b>Category:</b>	Performance
<b>Created:</b>	2014-12-08	<b>Assigned To:</b>	
<b>Updated:</b>	2014-12-16	<b>Due date:</b>	
<b>TYPO3 Version:</b>	6.2		
<b>PHP Version:</b>			
<b>Complexity:</b>	easy		
<b>Is Regression:</b>	No		
<b>Sprint Focus:</b>			
<b>Subject:</b>	High memory consumption in BackendUtility->getTCAtypes while bulk inserting		
<b>Description</b>			
<p>DataHandler-&gt;fillInFieldArray calls     \$types_fieldConfig = BackendUtility::getTCAtypes(\$table, \$currentRecord); for each record to insert. In each call the type of the current record is checked and the complete types configuration is parsed again.</p> <pre>static public function getTCAtypes(\$table, \$rec, \$useFieldNameAsKey = 0) {     if (\$GLOBALS['TCA'][\$table]) {         // Get type value:         \$fieldValue = self::getTCATypeValue(\$table, \$rec);         // Get typesConf         \$typesConf = \$GLOBALS['TCA'][\$table]['types'][\$fieldValue];         // Get fields list and traverse it         \$fieldList = explode(',', \$typesConf['showitem']);         \$altFieldList = array();         // Traverse fields in types config and parse the configuration into a nice array:         foreach (\$fieldList as \$k =&gt; \$v) {             [...]         }         if (\$useFieldNameAsKey) {             \$fieldList = \$altFieldList;         }         // Return array:         return \$fieldList;     } }</pre> <p>A new static cache using tablename, type and parameter as key improves performance and memory consumption:</p> <pre>static public function getTCAtypes(\$table, \$rec, \$useFieldNameAsKey = 0) {     static \$tcaTableTypeConf_cache = array();      if (\$GLOBALS['TCA'][\$table]) {         // Get type value:         \$fieldValue = self::getTCATypeValue(\$table, \$rec);          if (\$tcaTableTypeConf_cache[\$table . 'type' . \$fieldValue . 'fnk' . \$useFieldNameAsKey]) {             return \$tcaTableTypeConf_cache[\$table . 'type' . \$fieldValue . 'fnk' . \$useFieldNameAsKey];         }     } }</pre>			

```

// Get typesConf
$typesConf = $GLOBALS['TCA'][$table]['types'][$fieldValue];
// Get fields list and traverse it
$fieldList = explode(',', $typesConf['showitem']);
$altFieldList = array();
// Traverse fields in types config and parse the configuration into a nice array:
foreach ($fieldList as $k => $v) {
    [...]
}
if ($useFieldNameAsKey) {
    $fieldList = $altFieldList;
}

$tcaTableTypeConf_cache[$table . 'type' . $fieldValue . 'fnk' . $useFieldNameAsKey] = $fieldList;
// Return array:
return $fieldList;
}

```

For bulk insert of 6500 typeless (only type '1') records:

- 465000 calls less
- 3.3 seconds faster
- memory usage of explode()-Function down from 128MB to 58MB

## Associated revisions

**Revision e0467960 - 2014-12-16 18:13 - Stephan Großberndt**

[BUGFIX] Better caching of TCA for bulk inserts

Introduces a runtime cache for the TCA types configuration. This improves performance for bulk inserts since getTCAtypes is called for each record of each table and the available types during a call do not change.

Resolves: #63666

Releases: master, 6.2

Change-Id: Ia58352f1bae1e1eb57b87e5db0f1ad84e34ae37e

Reviewed-on: <http://review.typo3.org/35185>

Reviewed-by: Alexander Opitz <[opitz.alexander@gmail.com](mailto:opitz.alexander@gmail.com)>

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Reviewed-by: Christian Kuhn <[lolli@schwarzbu.ch](mailto:lolli@schwarzbu.ch)>

Tested-by: Christian Kuhn <[lolli@schwarzbu.ch](mailto:lolli@schwarzbu.ch)>

**Revision 87ec9a59 - 2014-12-16 19:48 - Stephan Großberndt**

[BUGFIX] Better caching of TCA for bulk inserts

Introduces a runtime cache for the TCA types configuration. This improves performance for bulk inserts since getTCAtypes is called for each record of each table and the available types during a call do not

change.

Resolves: #63666

Releases: master, 6.2

Change-Id: Ia58352f1bae1e1eb57b87e5db0f1ad84e34ae37e

Reviewed-on: <http://review.typo3.org/35521>

Reviewed-by: Christian Kuhn <[lolli@schwarzbu.ch](mailto:lolli@schwarzbu.ch)>

Tested-by: Christian Kuhn <[lolli@schwarzbu.ch](mailto:lolli@schwarzbu.ch)>

## History

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### #1 - 2014-12-09 07:03 - Philipp Gampe

- Parent task set to #63692

### #2 - 2014-12-09 12:37 - Gerrit Code Review

- Status changed from New to Under 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/35185>

### #3 - 2014-12-09 13:02 - 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/35185>

### #4 - 2014-12-09 13:25 - 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/35185>

### #5 - 2014-12-09 13:29 - 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/35185>

### #6 - 2014-12-11 21:32 - 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/35185>

### #7 - 2014-12-16 01:23 - Gerrit Code Review

Patch set 8 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <http://review.typo3.org/35185>

### #8 - 2014-12-16 08:20 - Gerrit Code Review

Patch set 9 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <http://review.typo3.org/35185>

**#9 - 2014-12-16 18:17 - 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/35521>

**#10 - 2014-12-16 18:30 - Stephan Großberndt**

- *Status changed from Under Review to Resolved*

- *% Done changed from 0 to 100*

Applied in changeset commit:e0467960abe3e269c8bbc38135ff0c7245c2b5b3.