

TYPO3 Core - Bug #91217

hmac-error due to different sorting in config

2020-04-28 03:18 - David Bruchmann

Status:	Closed	Start date:	2020-04-28
Priority:	Should have	Due date:	
Assignee:		% Done:	0%
Category:	Backend User Interface	Estimated time:	0.00 hour
Target version:		Complexity:	easy
TYPO3 Version:	9	Is Regression:	
PHP Version:	7.2	Sprint Focus:	
Tags:	hmac, hash, backend, ajax		

Description

I have a case where I have the same array-keys and the same values but different sorting in the config-array.
Array original is this:

```
"config":{
  ....
  "appearance":{
    ....
    "enabledControls":{
      "info":true,
      "new":true,
      "dragdrop":true,
      "sort":true,
      "hide":true,
      "delete":true,
      "localize":true,
      "0":"info",
      "1":"new",
      "2":"dragdrop",
      "3":"sort",
      "4":"hide",
      "5":"delete",
      "6":"localize"
    }
  }
  ....
}
```

and after ajax-call on server-side its sorted like this:

```
"config":{
  ....
  "appearance":{
    ....
    "enabledControls":{
      "0":"info",
      "1":"new",
      "2":"dragdrop",
      "3":"sort",
      "4":"hide",
      "5":"delete",
      "6":"localize",
      "info":true,
      "new":true,
      "dragdrop":true,
      "sort":true,
    }
  }
  ....
}
```

```

        "hide":true,
        "delete":true,
        "localize":true
    }
    ....
}
....
}

```

Therefore the hash-comparison fails and the form can't be used.

Attached extension adds a field in table news for content-elements. It can be found in tab "Extra". Clicking on one of both buttons is triggering the error.

Changing the method TYPO3\CMS\Backend\Form\Container\InlineControlContainer::render() from:

```

$this->inlineData['config'][$nameObject] = [
    'table' => $foreign_table,
    'md5' => md5($nameObject)
];
$this->inlineData['config'][$nameObject . '-' . $foreign_table] = [
    'min' => $config['minitems'],
    'max' => $config['maxitems'],
    'sortable' => $config['appearance']['useSortable'],
    'top' => [
        'table' => $top['table'],
        'uid' => $top['uid']
    ],
    'context' => [
        'config' => $config,
        'hmac' => GeneralUtility::hmac(json_encode($config), 'InlineContext'),
    ],
];

```

to this:

```

$this->inlineData['config'][$nameObject] = [
    'table' => $foreign_table,
    'md5' => md5($nameObject)
];
$configAltered = $config;
if (isset($configAltered['appearance']['enabledControls'])) {
    $enabledControls = $configAltered['appearance']['enabledControls'];
    $tmpIntVals = [];
    $tmpStrVals = [];
    foreach ($enabledControls as $key => $enabledControl) {
        if (MathUtility::canBeInterpretedAsInteger($key)) {
            $tmpIntVals[$key] = $enabledControl;
        } else {
            $tmpStrVals[$key] = $enabledControl;
        }
    }
    $configAltered['appearance']['enabledControls'] = array_merge($tmpIntVals, $tmpStrVals);
};
}
$this->inlineData['config'][$nameObject . '-' . $foreign_table] = [
    'min' => $configAltered['minitems'],
    'max' => $configAltered['maxitems'],
    'sortable' => $configAltered['appearance']['useSortable'],
    'top' => [
        'table' => $top['table'],
        'uid' => $top['uid']
    ],
    'context' => [
        'config' => $configAltered,
        'hmac' => GeneralUtility::hmac(json_encode($configAltered), 'InlineContext'),
    ],
];

```

```
];
```

... is sorting the concerned array in advance and the hashes are the same on client and server.
The code is neither nice, nor does it take other array-parts in consideration as I primarily wanted to test if the calculated hashes are the same then.
Nevertheless together with the extension the fault can be reproduced and the code can serve as base for a solution.

BTW: the field in the extension is bidirectional and shows IRRE-functionality combined with select-dropdown.

Related issues:

Related to TYPO3 Core - Bug #88094: Opening inline elements fails	Closed	2019-04-05
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History

#1 - 2020-04-28 03:23 - David Bruchmann

- Description updated

#2 - 2020-04-28 03:55 - David Bruchmann

Question is if the values with integer-keys are redundant and could be removed completely?

If the integer-keys are NOT regarded as redundant, another question is if the array had to be sorted each time before creating or comparing the hashes.

In my case the sorting worked, question is if it's on every system sorted in the same kind.

As Operating System I used Windows 10 to discover and fix the bug.

#3 - 2020-04-28 08:28 - Andreas Fernandez

Could be related to [#88094](#)

#4 - 2020-04-28 08:28 - Andreas Fernandez

- Related to Bug #88094: Opening inline elements fails added

#5 - 2020-04-28 09:12 - Andreas Fernandez

Well, your TCA is not written as documented here: <https://docs.typo3.org/m/typo3/reference-tca/master/en-us/ColumnsConfig/Type/Inline.html>

```
enabledControls (array)
Associative array with the keys 'info', 'new', 'dragdrop', 'sort', 'hide', 'delete', 'localize'. If the accord
ant values are set to a boolean value (true or false), the control is shown or hidden in the header of each re
cord.
```

#6 - 2020-04-28 09:19 - 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 <https://review.typo3.org/c/Packages/TYPO3.CMS/+64334>

#7 - 2020-04-28 09:20 - 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 <https://review.typo3.org/c/Packages/TYPO3.CMS/+64334>

#8 - 2020-04-28 10:23 - Andreas Fernandez

- Status changed from Under Review to Needs Feedback

Can you please tell us which TYPO3 version you are using exactly? The related issue [#88094](#) should solve your issue and is included in 9.5.15.

#9 - 2020-04-29 00:52 - David Bruchmann

[Andreas Otto](#) †, thanks a lot about the hint concerning the new TYPO3 Version on Snap.
I updated to 9.5.16 and it's working well.

The issue can be closed.

#10 - 2020-04-29 21:47 - Riccardo De Contardi

- Status changed from Needs Feedback to Closed

@David Bruchmann thank you for your reply, closing it.

If you think that this is the wrong decision or experience the issue again, please reopen it or ping me on Slack and I'll do.

Thank you

Files

wdb_news_snapin.zip	66.4 KB	2020-04-28	David Bruchmann
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