Core - Bug # 56150

Status:	Resolved	**Priority:**	Must have
Author:	Christian Reiter	**Category:**	File Abstraction Layer (FAL)
Created:	2014-02-20	**Assigned To:**	
Updated:	2014-03-14	**Due date:**	

TYPO3 Version:	6.1
PHP Version:	5.4
Complexity:	
Is Regression:	No
Sprint Focus:	

Subject:	Exception with "Hidden" sys_file_references when using levelmedia - RootlineUtility::enrichWithRelationFields ignores disable field

Description

Test scenario in TYPO3 6.2:

A Page (e.g. ID=15) has 2 sys_file_reference relations (pages.media)

Frontend output is via levelmedia, for instance
```
    file {
        import.data = levelfield:1, media
        treatIdAsReference = 1
        import.listNum = 0
        }
```

In 6.2 whichever reference is sorted to the top in the backend is output as expected so far.
(in 6.1 this does not work because sorting_foreign was ignored http://forge.typo3.org/issues/46383#change-204405) but that is fixed for 6.2 with https://review.typo3.org/#/c/26727/

Now the editor uses the "Light bulb" icon to hide the first reference.

Expected result: The second reference should be shown now.

Observed result: Exception thrown *"#1317178794: No fileusage (sys_file_reference) found for given UID"*

Reason:

  - levelmedia means the rootline is checked for the references.
  - They are put there by the function enrichWithRelationFields in \TYPO3\CMS\Core\Utility\RootlineUtility
  - This loads relations by generating a SQL query.
  - This query checks that record isn't deleted=1 and in 6.2 also orders by foreign_sortby (in 6.1 it doesn't)
  - However it does not check for disabled=1

This means that both sys_file_reference entries go into the "enriched" rootline data.

Then the import.listNum = 0 means that the first one is returned.

That one is hidden.

So when we get to TYPO3\CMS\Core\Resource\ResourceFactory::getFileReferenceObject the exception is thrown because only the hidden reference has arrived.

This is pretty confusing for editors as they are using seemingly harmless, legal operations in TYPO3 ("hiding") and this ends up killing entire page trees in the frontend. As when the rootline is checked of course all the pages below can be affected. A typical application of levelmedia is banners for a chapter and so this situation could "exceptionalize" an entire website chapter just due to hinding a banner.
This is hitting live projects with 6.1

In 6.2 they can solve that by resorting the references but in 6.1 they can't

It would be easy to change enrichWithRelationFields to respect $GLOBALS['TCA'][$table]['ctrl']['enablecolumns']['disabled'] in general or for sys_file_reference specifically.

However the comment in TYPO3\CMS\Frontend\Page\PageRepository::getRootLine says:
     NOTICE: This function only takes deleted pages into account! So hidden, starttime and endtime restricted pages are included
     no matter what.

So this seems to be necessary/desired behaviour?

Is it possible to make levelmedia in 6.1/6.2 "hidden-safe" without breaking that behaviour (e.g. by applying the hidden check only for sys_file_reference relations in enrichWithRelationFields)

Or could at least the exception "No fileusage (sys_file_reference) found for given UID" be replaced with a more graceful failure that allows the page to be rendered? Editors will then just scratch their heads why there is no image instead of going into panic.

This was all not a problem in 4.x because pages.media was just a comma separated list of values, there was no "hiding" of a relation from that, and no foreign sorting either. So checking hidden was indeed irrelevant for levelmedia in 4.x

Related issues:

related to Core - Bug # 46383: levelmedia ignores sorting of media records	**Resolved**	**2013-03-17**

Associated revisions

Revision 6227339c - 2014-03-14 21:34 - Christian Reiter

[BUGFIX] RootlineUtility does not consider disablefield

Make sure RootlineUtility::enrichWithRelationFields() respects
the setting of $TCA[$table]['ctrl']['enablecolumns']['disabled'] when
fetching foreign data for the rootline.

Otherwise hidden relations from sys_file_reference are added to the
rootline and cause exceptions in the frontend, instead of being ignored.

Resolves: #56150
Releases: 6.2, 6.1
Change-Id: I21917fec1407a10818058da8ea879b0bb39441a4
Reviewed-on: https://review.typo3.org/28277
Tested-by: Wouter Wolters
Reviewed-by: Alexander Opitz
Tested-by: Alexander Opitz
Reviewed-by: Anja Leichsenring
Tested-by: Anja Leichsenring

Revision d5160a91 - 2014-03-14 21:49 - Christian Reiter

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Change-Id: I21917fec1407a10818058da8ea879b0bb39441a4
Reviewed-on: https://review.typo3.org/28400
Reviewed-by: Anja Leichsenring
Tested-by: Anja Leichsenring

History

#1 - 2014-02-20 16:49 - Markus Klein

- Status changed from New to Accepted

- Priority changed from -- undefined -- to Must have

- Target version set to next-patchlevel

- TYPO3 Version changed from 6.2 to 6.1

Hi Christian,

thanks for this in-depth report!

Yes, the foreign_sortby was introduced by me, but not backported, as it might be a breaking change.

I fully agree that the exception, which is ok IMO, must be caught and must not break the FE.

The general question, whether getRootLine() should all enable fields has a lot of consequences probably, that's why I've to hand this over to people
with more in-depth knowledge about this area in the Core.

Since this is also a problem for 6.1 live sites, as you wrote above, I'm setting the version to 6.1 for this ticket.

Regards Markus

#2 - 2014-02-21 14:39 - Christian Reiter

For live 6.1 sites I've just made a quixk and dirty xclass fix. It just backports the enrichWithRelationFields from current 6.2 (importing the solution for
#46383 to 6.1) and adds disableClause.

This delivers correct behaviour for a 6.1 site affected by the bug.

  - sorting OK
  - All references hidden - no exception, behaviour as if no refs
  - one reference hidden, one visible - visible one picked by listNum=0 regardless of sorting

Question -

is RootlineUtility only used in the Frontend or also called from the Backend?

If it's also used from the BE I'd check the TYPO3_MODE as "hidden" should not be "invisible" in the backend.

#3 - 2014-02-25 18:47 - Markus Klein

I fear it is also used in BE. But I'm not sure.

#4 - 2014-02-26 18:08 - Frans Saris

- Assigned To deleted (Frans Saris)

#5 - 2014-02-26 20:50 - Christian Reiter

Hi Markus,

In TYPO3\CMS\Core\Utility\RootlineUtility::__construct there is a check for the $GLOBALS['TSFE']->sys_page object for the page context, maybe by checking for this in enrichWithRelationFields we could avoid side effects when the RootlineUtility is used for something else than rendering a frontend page?

#6 - 2014-03-04 15:31 - Markus Klein

If TS is parsed in BE (like for extbase) I guess the sys_page is present as well.

#7 - 2014-03-06 15:56 - Christian Reiter

So then I guess the information that is available within the scope of that function is possibly not sufficient to be sure that everything is safe.

I see two possibilities right now,
1.
   - add some kind of parameter that says "I explicitly want to enrich a rootline for FE rendering" - although I don't really like the concept of adding such parameters
      - perhaps from *TYPO3\CMS\Frontend\ContentObject\ContentObjectRenderer::rootLineValue* which is called to make the rootline for levelmedia
      - reason: Comment for this function says **"@todo Define visibility"**
         - so someone seems to be aware that this function returns a rootline with undefined treatment of visibility?
      - This function "_rootLineValue_" is used <u>exclusively</u> from *TYPO3\CMS\Frontend\ContentObject\ContentObjectRenderer::getData*
         - That one again has **"@todo Define visibility"** in the comment
         - *getData* is basically just a big switch construct which treats the different TS functions like leveltitle,levelmedia,leveluid,levelfield etc...
            so it is pretty much limiting things to a Typoscript Frontend context where we would want the change to be effective
      - Also since this is basically the cObj class, it should be frontend, or at least simulation of frontend?
2.
   - Just change it and test a lot... ;)

I've had no problem with the Xclass solution that adds the visibility/disablefield check so far on a live project but of course that is ony one site.

#8 - 2014-03-06 20:20 - Markus Klein

@todo Define visibility

refers to the protection of the method itself. This was added when all the function got access modified. Back then it was not known which function are protected or not, so all of them got public.

It will take years to finally make those protected, which are actually used only internally and we never know, if such a function has been used by an extension.

You'll find these todos everywhere in Core.

I propose to simply add it for now to have a solution in Gerrit. Then it can be tested and can be part of the next beta version, before backporting it to 6.1.

Can you push a patch?

#9 - 2014-03-07 00:16 - Christian Reiter

Ok thanks for the explanation on "visibility" :)

I found the "Contribution Walkthrough Tutorial" on wiki.typo3.org, I'll digest that and proceed.

#10 - 2014-03-11 22:08 - 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 https://review.typo3.org/28277

#11 - 2014-03-12 00:02 - 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/28277

#12 - 2014-03-13 21:38 - 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 https://review.typo3.org/28277

#13 - 2014-03-14 21:35 - Gerrit Code Review

Patch set 1 for branch **TYPO3_6-1** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at https://review.typo3.org/28400

#14 - 2014-03-14 22:30 - Christian Reiter

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

Applied in changeset commit:d5160a91eea9f150dc9a42a1a7e55c7c18e8de1c.