

## TYPO3 Core - Bug #93484

### TYPO3 Workspace, Preview module raising exception for versioned plugin records

2021-02-10 18:28 - Gabriel Kaufmann / Typoworx NewMedia

<b>Status:</b>	Closed	<b>Start date:</b>	2021-02-10
<b>Priority:</b>	Should have	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	100%
<b>Category:</b>	Workspaces	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>		<b>Complexity:</b>	
<b>TYPO3 Version:</b>	9	<b>Is Regression:</b>	
<b>PHP Version:</b>	7.2	<b>Sprint Focus:</b>	
<b>Tags:</b>			

#### Description

I noticed a very strange error. We had to migrate a TYPO3 instance to TYPO3 v9 which was previously was using TYPO3 Workspaces.

Our customer noticed an Exception trying to use the "Page Preview" Module in a draft workspace on a page which contains a plugin with (workspace ready) plugin records.

The exception aims that the workspace versioning function for some reason tries to access a "uid\_local" field which does not exist on the given record! After hours of debugging I noticed that this is caused by \$source of type TYPO3\CMS\Extbase\Persistence\Generic\Qom\Join given to TYPO3\CMS\Extbase\Persistence\Generic\Storage\Typo3DbBackend::overlayLanguageAndWorkspace. For some reason the original core function is not able to build a valid query and simply returns the original rows (even through there still is some kind of logic which seems to try catch this case).

I was able to create a patch which seems to work fine so far. I'm XClassing around Typo3DbBackend and before calling the parent::overlayLanguageAndWorkspace I'm checking if the given \$source is a Join!

If this is the case I'm breaking down the whole thing by re-creating a new \$source of type Selector (simple query without join) giving this one to the original function. I think the rest is validly handled by the workspace-versioned model/record itself. So far I was not able to find side-effects of breaking of the Join into a simple "Select" Query for the table without the join (in my case it was for sys-category).

...

```
<?php
namespace Sit\SitConfigGeneric\Core\Persistence\Generic\Storage;

use TYPO3\CMS\Extbase\Persistence\QueryInterface;
use TYPO3\CMS\Extbase\Persistence\Generic\Mapper\DataMapper;
use TYPO3\CMS\Extbase\Persistence\Generic\Qom\Join;
use TYPO3\CMS\Extbase\Persistence\Generic\Qom\SourceInterface;
use TYPO3\CMS\Extbase\Persistence\Generic\Qom\QueryObjectModelFactory;

/** * Class Typo3DbBackend * @package TYPOworx\CorePatches\Core * * @author Gabriel Kaufmann <info@typoworx.com>
*/
class Typo3DbBackend extends \TYPO3\CMS\Extbase\Persistence\Generic\Storage\Typo3DbBackend {
/** * Performs workspace and language overlay on the given row array. The language and workspace id is automatically
 * detected (depending on FE or BE context). You can also explicitly set the language/workspace id. * * @param
 * SourceInterface|\TYPO3\CMS\Extbase\Persistence\Generic\Qom\Join $source The source (selector or join) * @param array
 * $rows * @param QueryInterface $query * @param int|null $workspaceUid * @return array * @throws
 * \TYPO3\CMS\Core\Context\Exception\AspectNotFoundException * @throws \Throwable
 */
protected function overlayLanguageAndWorkspace(SourceInterface $source, array $rows, QueryInterface $query, int
 * $workspaceUid = null): array {
try {
/** * For unknown reason the TYPO3 Core dev's didn't expect * that some join-types would skew the
 * ::overlayLanguageAndWorkspace, * because it mistakenly uses the right table, but fields that belong to * the Join'ed
 * relation :sic:
 */
}
```

```

if($source instanceof Join)    {
/*
$sourceModel = '\\' . ltrim( get_class($source), '\\');

$refactoredSource = $this->objectManager->get (
    $sourceModel,
    $this->getTableNameFromModel ($query->getType ()),
    $query->getType ()
);
*/

$qob = $this->objectManager->get (QueryObjectModelFactory::class);
    $refactoredSource = $qob->selector ($this->getTableNameFromModel ($query->getType ())
, $query->getType ());
    }
    else
    {
        $refactoredSource = $source;
    }
}
{
    throw $e;
}
}

$workspaceRows = parent::overlayLanguageAndWorkspace($refactoredSource, $rows, $query, $workspaceU
id);

return $workspaceRows;
}
catch (\Throwable $e)

/**
 * @param $model
 * @return string|null
 * @throws \TYPO3\CMS\Extbase\Persistence\Generic\Exception
 */
protected function getTableNameFromModel($model) :? string
{
    if(is_object($model))
    {
        $model = get_class($model);
    }

$model = '\\' . ltrim($model, '\\');
    $dataMapper = $this->objectManager->get (DataMapper::class);

return $dataMapper->getDataMap ($model)->getTableName ();
}
}
...

```

I'm not perfectly shure - but I think it makes sense to apply the same patch around `::doLanguageAndWorkspaceOverlay` as well.

Please discuss if it makes sense to apply this to the original core-class. I know workspaces in TYPO3 v9 and upwards are still unstable! But may be this will help to "harden" this feature a little bit more.

#### Related issues:

Related to TYPO3 Core - Bug #94140: PHP Warning appears when preview in works...

New

2021-05-14

#### Associated revisions

Revision **d608b64c** - 2021-04-30 10:30 - Benni Mack

[BUGFIX] Resolve WS overlays in Extbase JOIN queries properly

When having JOINS in SQL selects, which typically happens when a MM property is resolved via Extbase's ORM, `versionOL()` threw an SQL error because `versionOL()` also queried "uid\_local" which did not exist in e.g. `sys_category`.

This change splits up the massive "overlayLanguageAndWorkspace()" method into smaller chunks and takes a different route when doing workspace overlays for JOINS. By re-fetching the main tables' record, all known fields can be identified via array\_key\_intersect() and then chunked together again with the JOINed information via array\_replace().

The added tests show that the assertion for MM relations now work (if the fix is not applied, the included tests fail due to a SQL error in tests), but deliver a wrong result, which will be fixed with <https://review.typo3.org/c/Packages/TYPO3.CMS/+68913>

Resolves: #81208  
Resolves: #93484  
Releases: master, 10.4  
Change-Id: laba70be0cf5b7a36ab13380940286628ac976f9a  
Reviewed-on: <https://review.typo3.org/c/Packages/TYPO3.CMS/+68915>  
Tested-by: Oliver Bartsch <[bo@cedev.de](mailto:bo@cedev.de)>  
Tested-by: core-ci <[typo3@b13.com](mailto:typo3@b13.com)>  
Tested-by: Nikita Hovratov <[nikita.h@live.de](mailto:nikita.h@live.de)>  
Tested-by: Benni Mack <[benni@typo3.org](mailto:benni@typo3.org)>  
Reviewed-by: Oliver Bartsch <[bo@cedev.de](mailto:bo@cedev.de)>  
Reviewed-by: Christian Kuhn <[lolli@schwarzbu.ch](mailto:lolli@schwarzbu.ch)>  
Reviewed-by: Ralf Merz <[mail@merzilla.de](mailto:mail@merzilla.de)>  
Reviewed-by: Benni Mack <[benni@typo3.org](mailto:benni@typo3.org)>

### Revision 325176b3 - 2021-04-30 10:32 - Benni Mack

[BUGFIX] Resolve WS overlays in Extbase JOIN queries properly

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Tested-by: Nikita Hovratov <[nikita.h@live.de](mailto:nikita.h@live.de)>  
Tested-by: Benni Mack <[benni@typo3.org](mailto:benni@typo3.org)>  
Reviewed-by: Benni Mack <[benni@typo3.org](mailto:benni@typo3.org)>

## History

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### #1 - 2021-02-10 20:20 - Benni Mack

Sounds reasonable. Care to create a patch for this?

### #2 - 2021-02-11 10:36 - Gabriel Kaufmann / Typoworx NewMedia

Benni Mack wrote in [#note-1](#):

Sounds reasonable. Care to create a patch for this?

Thanks for the positive Feedback. I've attached the patch. It was a little bit more tricky than my XClass solution. I had to do some minor refactoring. But the good news I think it would have made sense anyway as some code-logic was redundant in ::doLanguageAndWorkspaceOverlay and ::overlayLanguageAndWorkspace anyway.

I decided to implement this logic in the upper method ::getObjectDataByQuery calling either the method ::doLanguageAndWorkspaceOverlay or ::overlayLanguageAndWorkspace giving the rewritten SourceInterface \$source to it. Another reason for this way solving it was that I would had to

refactor ::doLanguageAndWorkspaceOverlay taking QueryInterface instead of QuerySettingsInterface. And I'm not a friend of breaking such things if not really avoidable.

A side note to keep in mind:

The `$query->getSource()` method is marked removed for Extbase7. How can this be sensfully replaced to keep this working? I was missing any kind of code-hint near the deprecation message which could help to migrate it for Extbase7.

Any feedback welcome.

### #3 - 2021-02-11 10:37 - Gabriel Kaufmann / Typoworx NewMedia

- File `Typo3DbBackend.php.patch` added

Patch file didn't upload with my previous update. So trying again.

Feedback for my refactoring suggestion is welcome. I hope it will help to improve TYPO3 and Workspace feature.

### #4 - 2021-02-15 17:53 - 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/+67924>

### #5 - 2021-02-15 17:54 - 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/+67924>

### #6 - 2021-02-15 18:28 - 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/c/Packages/TYPO3.CMS/+67924>

### #7 - 2021-02-15 18:30 - Nikita Hovratov

Hi, I took the freedom to push your patch to the review system. I would still need some help with the failing tests as I don't know how to debug functional tests.

### #8 - 2021-02-16 09:17 - 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 <https://review.typo3.org/c/Packages/TYPO3.CMS/+67924>

### #9 - 2021-02-27 08:45 - 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 <https://review.typo3.org/c/Packages/TYPO3.CMS/+67924>

### #10 - 2021-02-27 09:11 - 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 <https://review.typo3.org/c/Packages/TYPO3.CMS/+67924>

### #11 - 2021-03-01 07:47 - Gabriel Kaufmann / Typoworx NewMedia

Nikita Hovratov wrote in [#note-7](#):

Hi, I took the freedom to push your patch to the review system. I would still need some help with the failing tests as I don't know how to debug functional tests.

Sorry didn't have the spare time yet to review this yet. I'll keep it in mind in hope being able to look after this as soon as possible.

### #12 - 2021-03-12 10:49 - Gabriel Kaufmann / Typoworx NewMedia

Nikita Hovratov wrote in [#note-7](#):

Hi, I took the freedom to push your patch to the review system. I would still need some help with the failing tests as I don't know how to debug functional tests.

I found a sponsor for working on the patch and getting the unit-tests "happy". The company [www.sit.nrw](http://www.sit.nrw) - one of my current clients, will sponsor me working on the patch to make it ready for core-integration.

@Nikita Hovratov

For the core unit tests do they simply rely on this instructions?

<https://docs.typo3.org/m/typo3/reference-coreapi/master/en-us/Testing/CoreTesting.html>

Or is there something special to consider for local testing the tests which didn't pass yet?

**#13 - 2021-03-13 11:24 - Nikita Hovratov**

Hi Gabriel,

actually the tests are working now! After investing some more time I found another solution, which doesn't break the tests.

It's really simple in fact: Just remove the additional columns from the join query by comparing the tca.

Now we are only waiting for approval. I would love you to review the patch.

Regarding the tests: Yes, this is basically how local testing works. Functional tests however require a lot of resources (setting up complete frontend, database, etc.).

**#14 - 2021-03-18 14:55 - Gabriel Kaufmann / Typoworx NewMedia**

Nikita Hovratov wrote in [#note-13](#):

Hi Gabriel,

actually the tests are working now!

Thanks for investigating! Great news - that sounds like I've would have done it nearly the same.

**#15 - 2021-04-29 17:00 - 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/+68915>

**#16 - 2021-04-30 08:20 - 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/c/Packages/TYPO3.CMS/+68915>

**#17 - 2021-04-30 09:15 - Gerrit Code Review**

Patch set 1 for branch **10.4** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <https://review.typo3.org/c/Packages/TYPO3.CMS/+68935>

**#18 - 2021-04-30 09:21 - Gerrit Code Review**

Patch set 2 for branch **10.4** of project **Packages/TYPO3.CMS** has been pushed to the review server.

It is available at <https://review.typo3.org/c/Packages/TYPO3.CMS/+68935>

**#19 - 2021-04-30 09:36 - 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 <https://review.typo3.org/c/Packages/TYPO3.CMS/+68915>

**#20 - 2021-04-30 10:35 - Benni Mack**

- Status changed from *Under Review* to *Resolved*

- % Done changed from 0 to 100

Applied in changeset [d608b64cf4fe25161ec6de75d81f8ebf562f0184](https://review.typo3.org/c/Packages/TYPO3.CMS/+68915).

**#21 - 2021-05-11 16:00 - Benni Mack**

- Status changed from *Resolved* to *Closed*

**#22 - 2021-05-14 11:12 - Nikita Hovratov**

- Related to Bug #94140: PHP Warning appears when preview in workspace and item of mm relation is disabled added

**#23 - 2021-06-21 08:11 - Gabriel Kaufmann / Typoworx NewMedia**

Thanks for solving and using my provided patch.

Can I somewhere see for which TYPO3 Versions and Release-Version the patch is applied? I've been using a Polyfill using XClass in the meantime and want to disable it for newer TYPO3-Releases which already provide the final solution from this ticket.

Thanks in advice.

## Files

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Auswahl_006.jpg	76 KB	2021-02-10	Gabriel Kaufmann / Typoworx NewMedia
Typo3DbBackend.php.patch	5.45 KB	2021-02-11	Gabriel Kaufmann / Typoworx NewMedia