Core - Bug # 50231

Status:	Resolved	**Priority:**	Must have
Author:	Sven Tappert	**Category:**	Caching
Created:	2013-07-20	**Assigned To:**	
Updated:	2015-06-26	**Due date:**	

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

Subject:	Caching framework broken - cache expires after 1 hour (cf_cache_pagesection & cf_cache_rootline)

Description

The cache lifetimes (field "expires") in the tables "cf_cache_pagesection" & "cf_cache_rootline" are always set to the default of 3600 and disregards the TS config settings.

Therefore the cache of a page always expires after one hour. This disables the caching framework more or less and produces heavy server load. It seems the caching framework is broken in all current branches!

Example TS setup with cache lifetime of 7 days (page.config.x is set identically)

    config.cache_period = 604800
    config.cache_clearAtMidnight = 0

This results in incorrect "expires" values in tables "cf_cache_pagesection" and "cf_cache_rootline".

In issue #39295 there is a patch for the pagesection cache (in 6.x: TYPO3\CMS\Core\TypoScript\TemplateService.php about line 510).

I couldn't figure out yet where the rootline cache is set. The "expires" values in tables "cf_cache_hash" and "cf_cache_pages" are set correctly.

Related issues:			
related to Core - Task # 39295: Wrong expires date in cf_cache_pagesection		**Resolved**	**2012-07-26**

Associated revisions

Revision 60cbc695 - 2015-06-26 10:13 - Christian Kuhn

[BUGFIX] Increase lifetime of cache_rootline

The default lifetime of frontend related rootline cache is
only one hour, raising query load in production. This is
raised to 30 days now - same as cache_pagesection.
The rootline cache entries are tagged with pageId_* and
in cache group "pages", so the DataHandler automatically
drops those entries if pages are moved around or change.

Resolves: #50231
Releases: master, 6.2

Change-Id: I3839982058f8b78726c050d5a7da90c0f2588102

Reviewed-on: http://review.typo3.org/40659

Reviewed-by: Markus Klein <markus.klein@typo3.org>

Tested-by: Markus Klein <markus.klein@typo3.org>

Reviewed-by: Frederic Gaus <frederic.gaus@flagbit.de>

Tested-by: Frederic Gaus <frederic.gaus@flagbit.de>

Reviewed-by: Wouter Wolters <typo3@wouterwolters.nl>

Tested-by: Wouter Wolters <typo3@wouterwolters.nl>

Revision 0f4157bd - 2015-06-26 11:19 - Christian Kuhn

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Change-Id: I3839982058f8b78726c050d5a7da90c0f2588102

Reviewed-on: http://review.typo3.org/40666

Reviewed-by: Christian Kuhn <lolli@schwarzbu.ch>

Tested-by: Christian Kuhn <lolli@schwarzbu.ch>

Reviewed-by: Wouter Wolters <typo3@wouterwolters.nl>

Tested-by: Wouter Wolters <typo3@wouterwolters.nl>

History

#1 - 2013-07-25 06:54 - Sven Tappert

I created an extension that should fix the issue: https://typo3.org/extensions/repository/view/cf_lifetime_patch

Since the issue exists in all current branches, it includes different solutions for the 4.x and the 6.x branches of typo3.
Please let me know, if the patch doesn't work properly.

#2 - 2013-07-25 11:33 - Philipp Gampe

Would you mind to push a patch to gerrit?

#3 - 2013-07-25 15:13 - Sven Tappert

I will try, but I never pushed anything to gerrit. However, I would like to wait for some feedback from the cache developing team. One would probably
choose a slightly different solution when directly patching the core.

#4 - 2013-07-29 20:34 - Philipp Gampe
- Status changed from New to Needs Feedback

#5 - 2013-07-29 20:37 - Philipp Gampe

You can always configure all caches in AdditionalConfiguration.php as described in:

http://docs.typo3.org/typo3cms/CoreApiReference/CachingFramework/Configuration/Index.html

#6 - 2013-07-30 11:51 - Sven Tappert

Thank you Philipp, that's a very good hint!

However, it's not clear to me how one would simply change the global default cache lifetime or - alternatively - the individual cache lifetimes of the pagesection and rootline cache. Could you please post an example (4.x & 6.x)?

Isn't it such an essential topic, that it should be part of the "All Configuration" section in the Typo3 installer? I read a lot of posts & articles on Typo3 caching but none even mentioned that there is more about it than the TS configuration "cache_period".

#7 - 2013-07-30 12:55 - Philipp Gampe

```
 1  'SYS' => array(
 2     'caching' => array(
 3       'cache_pages' => array(
 4         'backend' => 'TYPO3\CMS\Core\Cache\Backend\Typo3DatabaseBackend',
 5         'options' => array(
 6           'defaultLifetime' => 3600, // lifetime in seconds
 7         ),
 8       ),
 9     ),
10   ),
```

You can find all options in:

http://docs.typo3.org/typo3cms/CoreApiReference/CachingFramework/FrontendsBackends/Index.html#caching-backend-options

Nevertheless, the default lifetime can be overridden by a concrete lifetime while a cache entry is set. The frontend should do this based on the TS configuration.

The rootline cache cannot be effected by the TS setting as it is used before the TS is know (chicken-egg problem). I am not sure about the pagesection cache. AFAIK the TS setting is only for the page cache.

#8 - 2013-07-30 14:18 - Sven Tappert

Thank you a lot, that's the solution - but it is really quite hidden!

And the default behaviour is not nice, since a pagesection_cache with a short lifetime makes the config value for the page_cache almost useless, while administrators might wrongly assume to have complete control over the caching with the TS setup.

I will modify the "cf_lifetime_patch" extension to set the config values directly.
Would be great if it was at least in the installers "all configuration" or it would respect the TS setup in the future.

Philipp Gampe wrote:

> *AFAIK the TS setting is only for the page cache.*

[...]

Nevertheless, the default lifetime can be overridden by a concrete lifetime while a cache entry is set. The frontend should do this based on the TS configuration.

Yes, that would be perfect, but the TS setup doesn't seem to be available upon cache creation. As far as I know even the final lifetime of the page cache has to be set in a second run, after the TS for the current page is rendered completely. Maybe this is a possible solution to other caches as well, to make them configurable via TS setup?

#9 - 2013-07-30 14:34 - Philipp Gampe

If a page is in page cache, it is fetched from cache, even if the page_section cache already cycled out.

We could set the page section cache from TS, but I prefer configuring caches globally.

#10 - 2013-07-30 14:47 - Sven Tappert

Philipp Gampe wrote:

> *If a page is in page cache, it is fetched from cache, even if the page_section cache already cycled out.*

No, definitely not. That is probably what should happen, but please try it - after the pagesection cache expires (after 1 hour) the page is not fetched from cache!

#11 - 2013-07-30 15:52 - Philipp Gampe

Hm, someone needs to take a look at the code.

#12 - 2013-08-23 15:37 - Harald no-lastname-given

Dear Sirs!

I am glad I found this report here. Maybe ones mentioned my problem is related to it.

http://forge.typo3.org/issues/51116

I've also thought about a bug in the cache lifetime. Now your post encouraged me.

Thank you very much

Harald

#13 - 2013-08-27 01:49 - Sven Tappert

Hi Harald, your issue is related but it's a seperate problem. Generating non-cached pages might take really a LONG time on typo3 6.x, especially when the TS setup grows.

However, you could try the patch extension "cf_lifetime_patch" to prevent the regeneration of already cached pages.

#14 - 2014-02-02 20:32 - Andreas Wolf

- Is Regression set to No

For cache_pagesection there is a patch pending in Gerrit (see #39295), for cache_rootline no such patch has been created, but that would be easy.

#15 - 2014-06-02 17:08 - Alexander Opitz

As the mentioned issues #51116 and #39295 are already resolved.

Is something left to do here or can this issue be closed?

#16 - 2014-06-15 00:42 - Sven Tappert

I have to do some testing. I'm not sure if the other issues were based on the same cause.

#17 - 2014-06-15 01:00 - Sven Tappert

No, it's NOT fixed in 6.1.9. It's because the default values for:

    $GLOBALS['TYPO3_CONF_VARS']['SYS']['caching']['cacheConfigurations']['cache_rootline']['options']['defaultLifetime']

and

    $GLOBALS['TYPO3_CONF_VARS']['SYS']['caching']['cacheConfigurations']['cache_rootline']

are not set correctly. They have to be set to \TYPO3\CMS\Core\Cache\Backend\AbstractBackend::UNLIMITED_LIFETIME; (i.e. 0).

So the FE cache still expires after 1 hour :-(

#18 - 2014-06-16 08:53 - Alexander Opitz

- Status changed from Needs Feedback to New

#19 - 2015-06-25 23:54 - 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/40659

#20 - 2015-06-26 10:30 - Christian Kuhn

- Status changed from Under Review to Resolved

- % Done changed from 0 to 100

Applied in changeset commit:60cbc695a94d802ab76f4191b551fe5df9ea0d7e.

#21 - 2015-06-26 11:01 - 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/40666

#22 - 2015-06-26 11:30 - Christian Kuhn

- Status changed from Under Review to Resolved

Applied in changeset commit:0f4157bd59699aad87a19d3f41c694568fd423a9.