

TYPO3 Core - Task #86353

Epic # 83968 (Closed): PSR-11 Initiative

Deprecate CacheManager usage in ext_localconf.php

2018-09-21 21:47 - Benjamin Franzke

Status: Closed	Start date: 2018-09-21
Priority: Should have	Due date:
Assignee:	% Done: 100%
Category: System/Bootstrap/Configuration	Estimated time: 0.00 hour
Target version:	Complexity:
TYPO3 Version: 9	Sprint Focus:
PHP Version:	
Tags:	
Description CacheManager has a design problem: The CacheManager is used to create the core_cache. That core_cache is used to read the (possibly) cached CacheManager configuration, which is then used to configure the already-in-use CacheManager. That means the initialization sequence currently is like: <pre>new CacheManager(!\$failsafe) setInitialCacheConfiguration() loadExtLocalconf() setFinalCachingFrameworkConfiguration()</pre> Between initial creation of the CacheManager and setFinalCachingFrameworkConfiguration() the CacheManager is in a limbo state, as it may already be used to create a cache although the final configuration (which may be configured in ext_localconf.php) for that cache has not been set. The final configuration (for that created cache) will then be ignored, as the cache has already been created. In v10 the sequence should be changed to: <pre>\$coreCache = createCoreCache() loadExtLocalconf new CacheManager(!\$failsafe, \$cachingConfiguration, \$coreCache);</pre> We should delay CacheManager until ext_localconf.php has been loaded (maybe also after baseTca loading) in v10. Therefore GeneralUtility::makeInstance(CacheManager::class) usage in ext_localconf.php needs to be deprecated.	
Related issues: Related to TYPO3 Core - Task #87245: Drop support for deprecated CacheManager... Closed 2018-12-20	

Associated revisions

Revision ad847e9b - 2018-09-28 12:31 - Benjamin Franzke

[TASK] Do not create caches during ext_localconf.php phase

CacheManager has a design problem:

The CacheManager is used to create the core_cache. That core_cache is used to read the (possibly) cached CacheManager configuration, which is then used to configure the already-being-used CacheManager.

That means the initialization sequence currently is like:

```
new CacheManager(!$failsafe) | setInitialCacheConfiguration() |  
loadExtLocalconf() | setFinalCachingFrameworkConfiguration()
```

Between initial creation of the CacheManager and setFinalCachingFrameworkConfiguration() the CacheManager is in a limbo state, as it may already be used to create a cache although the final configuration (which may be configured in ext_localconf.php) for that cache has not been set. The final configuration (for that created cache)

will then be ignored, as the cache has already been created.

This is not a theoretical problem, but is actually happening in core for two caches (introduced due to patches in the v9 development phase, more on those later).

In v10 we want to change the sequence to the following:

```
$coreCache = createCoreCache() | loadExtLocalconf |  
new CacheManager(!$failsafe, $cachingConfiguration, $coreCache);
```

We want to delay CacheManager until ext_localconf.php has been loaded (maybe also after baseTca loading) in v10.

Therefore GeneralUtility::makeInstance(CacheManager::class) usage in ext_localconf.php is deprecated now.

Note: The core cache cannot be modified in ext_localconf.php - that was always the case and wouldn't make sense (as that cache is used to actually load the cached ext_localconf.php)

Two caches are actually loaded too early during ext_localconf.php loading currently. We fix these as a drive-by: * extbase_reflection: the extbase Object\Container is instantiated in EXT:extbase/ext_localconf.php. The Object\Container then instantiates the ReflectionService in its constructor which itself creates the extbase_reflection using the CacheManager (all of that during ext_localconf.php loading).

This is actually a regression introduced in

<https://review.typo3.org/54381>

We change the Container to load the reflection cache on demand. * assets: * IconRegistry uses the 'assets' cache and loads cached backend icons during object construction.

This cache was introduced in <https://review.typo3.org/c/54020/>

using the core cache, and was later changed to 'assets' in

<https://review.typo3.org/54061> * PageRenderer loads cached requireJS configuration from 'assets'

```
We inject assetsCache to these services from Bootstrap for now. We'll  
only be able to properly refactor this, when dropping support for  
ext_localconf.php altogether.
```

We also adapt the ExtensionManagementUtility to retrieve the coreCache as parameter, instead of statically. Although these methods are marked @internal, we keep them for 9LTS to not break extensions (using this regardless of being @internal, e.g. helhum/typo3-console) shortly before the release.

Change-Id: I22935dae3acb6e8de14fa98a6b88f3477a3ea313

Releases: master

Resolves: #86353

Resolves: #86371

Resolves: #86372

Reviewed-on: <https://review.typo3.org/58371>

Tested-by: TYPO3com <no-reply@typo3.com>

Reviewed-by: Susanne Moog <susanne.moog@typo3.org>

Tested-by: Susanne Moog <susanne.moog@typo3.org>

Reviewed-by: Frank Naegler <frank.naegler@typo3.org>

Tested-by: Frank Naegler <frank.naegler@typo3.org>

Revision 91dfd3d4 - 2019-01-15 12:49 - Benjamin Franzke

[!!!][TASK] Drop support for deprecated cache usage in ext_localconf

The initialization of the CacheManager has a design problem:

The **CacheManager** is used to create the core_cache. That core_cache is used to read the (possibly) cached **CacheManager** configuration (from ext_localconf.php), which is then used to (re)configure the already-being-used **CacheManager** after ext_localconf.php has been loaded. That means an extension can create a cache while it has not been configured by a second extension. That behaviour was deprecated in v9 and can therefore be dropped now.

We now create the core cache (and because of requirements in core currently also the 'assets' cache) during early bootstrap (independently from the CacheManager) and inject these early caches into the CacheManager instance later on. The CacheManager instance is now created during late bootstrap.

Looking forward to a Dependency Injection (DI) container, this change will allow to move the CacheManager creation from bootstrap code into the DI service providers (which will allow the CacheManager to be instantiated on demand)

Releases: master
Resolves: #87245
Related: #86353
Change-Id: I984beabdbbd550c191de347fdc19166283452a88
Reviewed-on: <https://review.typo3.org/59231>
Tested-by: TYPO3com <noreply@typo3.com>
Reviewed-by: Benni Mack <benni@typo3.org>
Tested-by: Benni Mack <benni@typo3.org>
Reviewed-by: Wouter Wolters <typo3@wouterwolters.nl>
Reviewed-by: Christian Kuhn <lolli@schwarzbu.ch>
Tested-by: Christian Kuhn <lolli@schwarzbu.ch>
Reviewed-by: Georg Ringer <georg.ringer@gmail.com>
Tested-by: Georg Ringer <georg.ringer@gmail.com>

History

#1 - 2018-09-21 21:51 - 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/58371>

#2 - 2018-09-25 15:16 - 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/58371>

#3 - 2018-09-25 15:26 - 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/58371>

#4 - 2018-09-25 16:35 - 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/58371>

#5 - 2018-09-27 18:37 - 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/58371>

#6 - 2018-09-27 19:45 - 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/58371>

#7 - 2018-09-28 13:00 - Benjamin Franzke

- Status changed from Under Review to Resolved

- % Done changed from 0 to 100

Applied in changeset [ad847e9b273f6117645b0fc51964401b174a4d2e](https://review.typo3.org/58371).

#8 - 2018-10-02 10:28 - Benni Mack

- Status changed from Resolved to Closed

#9 - 2018-12-20 17:18 - Benjamin Franzke

- Related to Task #87245: Drop support for deprecated CacheManager cache creation during ext_localconf.php loading added

#10 - 2019-07-08 14:05 - Benjamin Franzke

- Parent task set to #83968