

Core - Task # 54230

Epic # 55070 (Accepted): Workpackages

Epic # 54260 (Accepted): WP: FAL Missing Issues / Features / API

Story # 54268 (Resolved): As an TYPO3-Contributor I want to have a clean CodeBase in order maintain the product

Status:	Resolved	Priority:	Must have
Author:	Steffen Ritter	Category:	File Abstraction Layer (FAL)
Created:	2013-12-06	Assigned To:	Steffen Ritter
Updated:	2014-02-17	Due date:	2013-12-31
TYPO3 Version:	6.2		
PHP Version:			
Complexity:	medium		
Sprint Focus:			
Subject:	Refactor Driver API		
Description			
The Driver is a concept to just encapsulate the Filesystem access... It should not know about FileObject or FolderObjects... A filesystem only knows about its Identifiers. The connection to the FAL Object world happens in the ResourceStorage. Refactor the Driver to only act on Identifiers and define an Interface for that, replace all type-hints for abstract Driver to use the interface			
Related issues:			
related to Core - Bug # 57415: Local driver does not sanitize directory names...		Resolved	2014-03-28
related to Core - Task # 53770: ResourceStorage uses deprecated driver API		Resolved	2013-11-19
related to Core - Task # 55416: Accessing the root folder of a file mount is ...		Resolved	2014-01-29
precedes Core - Task # 54231: The Driver Registry should check for the implem...		Resolved	2014-01-01 2014-01-01

Associated revisions

Revision f83eddd5 - 2014-01-15 14:57 - Steffen Ritter

[!!!][TASK] Driver API has too many crosscutting concerns

The Driver within the FileAbstractionLayer is the actual abstraction of a concrete file-system meant to unify access to several kind of storage-systems the file data might reside in. For each way of storing files there has to be a driver.

Therefore a driver is solely a unique API to interact with an underlying storage system based upon its own identifier system.

Opposite to that, the AbstractDriver (defining our Interface) knows about its storage, file- and folder-objects as well as indexes. The methods within the current driver need to implement more FAL-internal logic than one would expect from what the driver is purposed to. As a result only a few drivers are existing by now. In addition it's nearly impossible to change FAL internals without touching every driver out there.

This change deals with these problems. In several steps the current driver API has been refactored to have less dependencies and only fulfills its original purpose: the abstraction of a file storage system.

The following things are considered:

1. Change every return value which has been an object to the identifier and adapt the ResourceStorage accordingly.
2. Change every method parameter being FileInterface, File, AbstractFile or Folder objects to a string: the identifier.
3. Get rid of the storage as a member variable, only the uid of the storage is needed at two places.
4. Remove all abstract methods from the AbstractDriver and put them in a newly created DriverInterface.
5. Exchange all references to AbstractDriver to the interface.
6. Remove unused methods, which came to light doing so.
7. Merge addFile/removeFile and *Raw since they do the same if no objects are in place.
8. Unify the creation of folder objects and how information is retrieved (analogue to files now).
9. Unify and simplify the methods for retrieving folder contents (files / folders).
10. Adapt the UnitTests of both classes to the changes.
This also leads to the removal of some tests which are superfluous with that change.
11. Make the DriverRegistry check the implementation of the newly created interface.
12. Unify the parameter names in the methods.

Releases: 6.2

Resolves: #54230

Resolves: #54231

Change-Id: I4a51572c6a10859e6fd5f12f6cb539950444992e

Reviewed-on: <https://review.typo3.org/26520>

Reviewed-by: Frans Saris

Tested-by: Frans Saris

Reviewed-by: Benjamin Mack

Tested-by: Benjamin Mack

Revision 84b6e61f - 2014-01-15 15:57 - Steffen Ritter

[TASK] Skip two tests in LocalDriverTests in PHP 5.3

For most tests in the LocalDriverTest vfsStream is used to emulate the filesystem. This needs PHP filesystem functions to use the stream wrappers.

For touch() this has been enabled with PHP 5.4. The reversal conclusion is, that this does not work with PHP 5.3 which causes failing tests there.

As a result if the PHP version is 5.3 we skip the two tests.

This is a follow-up to <https://review.typo3.org/#/c/26520/>

Resolves: #54230

Releases: 6.2

Change-Id: I4e92927e1d77f825bab8583318a944a8916051d5

Reviewed-on: <https://review.typo3.org/26845>

Reviewed-by: Steffen Ritter

Tested-by: Steffen Ritter

History

#1 - 2013-12-07 16:08 - Steffen Ritter

- Parent task set to #54268

#2 - 2013-12-20 15:56 - 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/26520>

#3 - 2013-12-20 16:15 - 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/26520>

#4 - 2013-12-20 17:49 - 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/26520>

#5 - 2013-12-21 19:02 - 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/26520>

#6 - 2013-12-22 10:24 - Steffen Ritter

- % Done changed from 0 to 70

#7 - 2014-01-05 16:35 - 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/26520>

#8 - 2014-01-05 20:29 - 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/26520>

#9 - 2014-01-09 15:34 - Gerrit Code Review

Patch set 7 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/26520>

#10 - 2014-01-09 23:02 - Gerrit Code Review

Patch set 8 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/26520>

#11 - 2014-01-14 12:42 - Gerrit Code Review

Patch set 9 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/26520>

#12 - 2014-01-15 10:01 - Gerrit Code Review

Patch set 10 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/26520>

#13 - 2014-01-15 14:09 - Gerrit Code Review

Patch set 11 for branch **master** of project **Packages/TYPO3.CMS** has been pushed to the review server.
It is available at <https://review.typo3.org/26520>

#14 - 2014-01-15 15:30 - Steffen Ritter

- *Status changed from Under Review to Resolved*
- *% Done changed from 70 to 100*

Applied in changeset commit:f83eddd5027b74d7f4d28a845521bff3b2dd603d.

#15 - 2014-01-15 15:40 - Gerrit Code Review

- *Status changed from Resolved 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/26845>

#16 - 2014-01-15 16:30 - Steffen Ritter

- *Status changed from Under Review to Resolved*

Applied in changeset commit:84b6e61fa61592f4d704846fa5292ab58773851d.

#17 - 2014-01-15 16:36 - Steffen Ritter

- % Done changed from 100 to 90

#18 - 2014-02-17 08:47 - Steffen Ritter

- % Done changed from 90 to 100