

## TYPO3 Core - Task #63857

Epic # 63846 (Closed): Refactoring of form element classes

### Remove dependency to \$this->formEngine->requiredElements

2014-12-14 22:35 - Frank Naegler

<b>Status:</b>	Closed	<b>Start date:</b>	2014-12-14
<b>Priority:</b>	Should have	<b>Due date:</b>	
<b>Assignee:</b>		<b>% Done:</b>	100%
<b>Category:</b>	Backend API	<b>Estimated time:</b>	0.00 hour
<b>Target version:</b>	7.1 (Cleanup)	<b>Complexity:</b>	
<b>TYPO3 Version:</b>	7	<b>Sprint Focus:</b>	
<b>PHP Version:</b>			
<b>Tags:</b>			
<b>Description</b>			

#### Associated revisions

##### Revision 212b9dbf - 2015-02-28 17:24 - Christian Kuhn

[!!!][TASK] Improve FormEngine and sub classes separation

This patch improves the separation of FormEngine and its sub classes. Currently, all sub classes like single element and wizard classes get an instance of the parent object to call various methods and properties on them. This is very hard to refactor and the mesh of call trees must be simplified to ease further refactoring and improve maintainability of code.

This patch follows a divide & conquer approach:

- Methods only used by sub elements are moved to AbstractFormElement
- Properties FormEngine "knows" that are needed by element classes are given down in a data array during element instantiation to have a clear definition of what element classes know.
- Methods used by both FormEngine and sub classes that do not need an instance of FormEngine are moved to a static helper for now to reduce the amount of code in FormEngine and to mark certain areas as stateless.
- Class instances are not created on a global level anymore but created only in the scope where they are used
- Class instances injected by outer code are created internally for enabling the using code to be moved around.

All in all, this patch is mostly a preparation of defining a fully separated structure with defined concerns for every sub class.

Most methods are moved around "as is" without changing functionality. The only area that is refactored codewise is renderWizards().

There is still a nasty circular dependency between FormEngine, FlexFormElement and InlineElement. This is not resolved by the patch, but the surrounding code is now separated enough that this structure could be refactored to a tree. This may follow with other patches.

This patch evolved on catharsis in branch formengine with 53 single patches. Details can be looked up there, all single patches are prefixed with [FormEngine].

<https://github.com/lolli42/TYPO3.CMS-Catharsis/tree/formengine>

Change-Id: I332ad51f5e94c09555480099e3a8a0257bed378f

Releases: master

Resolves: #65357

Resolves: #63848

Resolves: #63849

Resolves: #63851

Resolves: #63853  
Resolves: #63855  
Resolves: #63857  
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Resolves: #63890  
Resolves: #63892  
Reviewed-on: <http://review.typo3.org/37265>  
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Tested-by: Anja Leichsenring <[leichsenring@ab-softlab.de](mailto:leichsenring@ab-softlab.de)>  
Reviewed-by: Wouter Wolters <[typo3@wouterwolters.nl](mailto:typo3@wouterwolters.nl)>  
Reviewed-by: Benjamin Mack <[benni@typo3.org](mailto:benni@typo3.org)>  
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## History

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### #1 - 2014-12-23 19:45 - Mathias Schreiber

- Target version changed from 7.0 to 7.1 (Cleanup)

### #2 - 2015-02-26 14:41 - 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/37265>

### #3 - 2015-02-26 14:44 - 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 <http://review.typo3.org/37265>

### #4 - 2015-02-27 12:00 - 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 <http://review.typo3.org/37265>

### #5 - 2015-02-28 13:20 - 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 <http://review.typo3.org/37265>

### #6 - 2015-02-28 14:55 - 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 <http://review.typo3.org/37265>

### #7 - 2015-02-28 17:30 - Christian Kuhn

- Status changed from Under Review to Resolved

- % Done changed from 0 to 100

Applied in changeset [212b9dbfc490f2f7bc8a88fef176f51ffc63f733](https://review.typo3.org/37265/changeset/212b9dbfc490f2f7bc8a88fef176f51ffc63f733).

### #8 - 2017-10-19 21:02 - Riccardo De Contardi

- Status changed from Resolved to Closed