TYP03 Version 9.5 - What's New

Summary of the new features, changes and improvements

Created by: Michael Schams



TYP03 Version 9.5 - What's New

TYP03 Version 9.5 = TYP03 v9 LTS

During a four weeks stabilization phase between the last intermediate version 9.4 and the new major version 9.5 (also known as "TYPO3 v9 LTS"), final elements of features were completed but nothing new was started.

This is to make sure that the LTS release is robust, stable and can power websites of all sizes and complexities, even those with thousands of pages.

Please see the TYPO3 v9 LTS slides for an overview of the changes in v9 LTS.



Introduction The Facts



TYP03 Version 9.5 - The Facts

■ Release date: 02 October 2018

Release type: LTS release (Long Term Support)





System Requirements

- PHP version 7.2 or higher
- PHP settings:
 - memory_limit >= 256M
 - max_execution_time >= 240s
 - max_input_vars >= 1500
 - compilation option --disable-ipv6 must not be used
- Most database servers supported by **Doctrine DBAL** also work with TYPO3. Tested DB engines are for example:





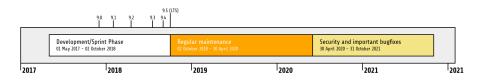








Development, Release and Maintenance Timeline



- TYPO3 version 9.5 is a LTS Release (Long Term Support)
- Regular maintenance and bugfixes until March 2020
- Security and critical bugfixes until October 2021

Extended Support

TYPO3 GmbH offers Extended Long Term Support (ELTS) for TYPO3 v9 LTS until October 2024.



TYP03 v9 Roadmap

Release dates and their primary focus:

```
12/Dec/2017
■ v9.0
                      Install Tool and Page Tree Refactoring,
                       Unified Page Translations
         30/Jan/2018
v9 1
                       Redirect Handling
        10/Apr/2018
■ v9.2
                       Site Handling
        12/Jun/2018
■ v9.3
                       SEO and URL Routing Preparations
        04/Sep/2018
■ v9.4
                       URL Routing for Pages
        02/0ct/2018
■ v9.5
                       LTS Preparation and Release
```

```
https://typo3.org/article/typo3-v9-roadmap/
https://typo3.org/cms/roadmap/
```



Installation

Official classic installation procedure under Linux/Mac OS X (DocumentRoot for example /var/www/site/htdocs):

```
$ cd /var/www/site
$ wget --content-disposition get.typo3.org/9.5
$ tar xzf typo3_src-9.5.0.tar.gz
$ cd htdocs
$ ln -s ../typo3_src-9.5.0 typo3_src
$ ln -s typo3_src/index.php
$ ln -s typo3_src/typo3
$ touch FIRST INSTALL
```

- Symbolic links under Microsoft Windows:
 - Use junction under Windows XP/2000
 - Use mklink under Windows Vista and Windows 7 and higher



Installation Using composer

Installation using composer under Linux, Mac OS X and Windows 10:

```
$ cd /var/www/site/
$ composer create-project typo3/cms-base-distribution typo3 ^9
```

Alternatively, create your custom composer. json file and run:

```
$ composer install
```

Further details and examples for composer.json files are available at: https://composer.typo3.org



Finalized Features



utf8mb4 on MySQL

- New TYPO3 instances use utf8mb4 on MySQL by default now
- This allows 4 byte unicode characters such as emojis
- Basic settings to use utf8mb4 in file LocalConfiguration.php:



Search Engine Optimization (SEO)

The following SEO features have been added since TYPO3 version 9.3:

- New Page Title API allows integrators and developers to influence what exactly is shown as the page title
- TYP03 can generate XML Sitemaps now, with the capability to render different sitemaps per site and language
- Canonical links to pages are automatically added to prevent ranking penalties due to duplicate content for example
- In multi-language TYPO3 sites, hreflang-tags are added automatically



Static Routes

- Static routes can be configured on a per site basis
- This allows integrators to have different robots.txt files for each site in a multi-site installation for example
- Routes can be configured as top level files or as path
- Configuration is possible in TYPO3 backend or directly in YAML
- Two options are currently supported:
 - deliver static text
 - resolve a TYPO3 URL
- Resolving of static routes is implemented as a PSR-15 middleware



Symfony ExpressionLanguage

- The Symfony ExpressionLanguage component has been implemented for TypoScript conditions (frontend and backend)
- Some examples:

```
[page["uid"] in 18..45]
# This condition matches, if current page uid is between 18 and 45
[END]
[not ("foo" matches "/bar/")]
# This condition matches, if "foo" does not match the regular expression '/bar/'
[END]
[request.getNormalizedParams().getHttpHost() == 'example.com']
# This condition matches, if current hostname is 'example.com'
[END]
```

Using old condition syntax triggers a deprecation message



Extbase Translation Handling

- Extbase now renders translated records the same way as TypoScript does
- The new behaviour is controlled by the feature switch:

- The new behaviour is the default in v9 LTS (the feature switch will be removed in v10)
- Learn more about how to query data using Extbase in the TYPO3 documentation



Site Configuration in TypoScript

Site configuration can be accessed via getText property in TypoScript:

```
page.10 = TEXT
page.10.data = site:base
page.10.wrap = The base URL is: |

page.20 = TEXT
page.20.data = site:customConfigKey.nested.value
page.20.wrap = The nested value is: |
```



Deprecated/Removed Functions



Deprecated Options and Functions (1)

- Second argument to backend and eID controller actions has been marked deprecated (controllers should create a response object implementing Psr\Http\Message\ResponseInterface)
- TypoScript cObject FILE is error-prone and has been marked deprecated
- Extbase misuses the @internal annotation and therefore this annotation has been marked deprecated without a replacement
- Annotation @flushesCaches has been marked deprecated



Deprecated Options and Functions (2)

- The following classes have been marked deprecated: TYPO3\CMS\Recordlist\Controller\ElementBrowserFramesetController TYPO3\CMS\Backend\Module\BaseScriptClass
- Class TYPO3\CMS\Taskcenter\Controller\TaskModuleController no longer inherits TYPO3\CMS\Backend\Module\BaseScriptClass

TYPO3\CMS\Backend\Module\AbstractFunctionModule

- Single task classes should no longer expect to have an instance of the TaskModuleController set as \$GLOBALS['SOBE']
- The visibility of the following method has been changed from public to protected: TYPO3\CMS\Backend\Controller\BackendController->render()



Deprecated Options and Functions (3)

The following configuration options have been marked deprecated:

```
config.tx_extbase.objectsplugin.tx_%plugin%.objects
```

 The following hooks have been marked deprecated (PSR-15 middleware concept offers better implementation options)

```
$GLOBALS ... ['tslib/class.tslib_fe.php']['tslib_fe-PostProc']
$GLOBALS ... ['tslib/class.tslib_fe.php']['connectToDB']
$GLOBALS ... ['tslib/class.tslib_fe.php']['initFEuser']
$GLOBALS ... ['tslib/index_ts.php']['preBeUser']
$GLOBALS ... ['tslib/index_ts.php']['postBeUser']
$GLOBALS ... ['tslib/class.tslib_fe.php']['checkAlternativeIdMethods-PostProc']
$GLOBALS ... ['tslib/index_ts.php']['preprocessRequest']
```



Deprecated Options and Functions (4)

- The following TCA properties on type="user" config types have been deprecated and should not be used anymore:
 - userFunc
 - parameters
 - noTableWrapping
- Some methods in the following class have been marked deprecated TYPO3\CMS\Backend\FrontendBackendUserAuthentication
 - checkBackendAccessSettingsFromInitPhp()
 - extPageReadAccess()
 - extGetTreeList()
 - extGetLL()



Site configuration

- Site configuration in YAML file resides directly in the root now
- Previously used key "site" became obsolete and triggers a deprecation message when used
- Migration:
 - Edit file config.yaml, remove key "site" and move configuration up one level, or:
 - Save site configuration via the backend module



Changed Visibilities

- The visibility of several properties and methods have been changed from public to protected in classes:
 - TYPO3\CMS\Filelist\Controller\FileListController
 - TYPO3\CMS\Frontend\Controller\TypoScriptFrontendController
 - TYPO3\CMS\Impexp\Controller\ImportExportController
 - TYPO3\CMS\Recordlist\Controller\AbstractLinkBrowserController
 - TYPO3\CMS\Recordlist\Controller\ElementBrowserController
 - TYPO3\CMS\Recordlist\Controller\RecordListController
 - TYPO3\CMS\Reports\Controller\ReportController
 - TYPO3\CMS\RteCKEditor\Controller\BrowseLinksController
 - TYPO3\CMS\Setup\Controller\SetupModuleController
 - TYPO3\CMS\Taskcenter\Controller\TaskModuleController



Preparations for TYP03 v10

- In preparation for a refactoring of module Web → Template in TYPO3 v10, some classes have been updated and a number of properties and methods marked deprecated.
 - TYP03\CMS\Tstemplate\Controller*
- lacktriangle Same for module lacktriangle **Info**
 - TYPO3\CMS\Info\Controller*
 - TYPO3\CMS\Linkvalidator\Report*



Sources and Authors

Chapter 6: Sources and Authors



Sources and Authors

Sources

TYPO3 News:

■ https://typo3.org/project/news/

Release Infos:

- https://get.typo3.org/release-notes/9.x/TYPO3_CMS_9.5.0
- INSTALL.md and ChangeLog
- typo3/sysext/core/Documentation/Changelog/9.5/*

TYP03 Bug-/Issuetracker:

■ https://forge.typo3.org/projects/typo3cms-core

TYP03 and Fluid Git Repositories:

- https://git.typo3.org/Packages/TYPO3.CMS.git
- https://github.com/TYP03/Fluid



Sources and Authors

TYPO3 CMS What's New Team:

Pierrick Caillon, Richard Haeser, Jigal van Hemert Henrietta Kucsovan, Sinisa Mitrovic, Michael Schams and Roberto Torresani

https://typo3.org/help/documentation/whats-new/

Licensed under Creative Commons BY-NC-SA 3.0



