

TYP03 Version 11.3 – What's New

Summary of the new features, changes and improvements

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TYPO3 Version 11.3 - What's New

Chapter Overview

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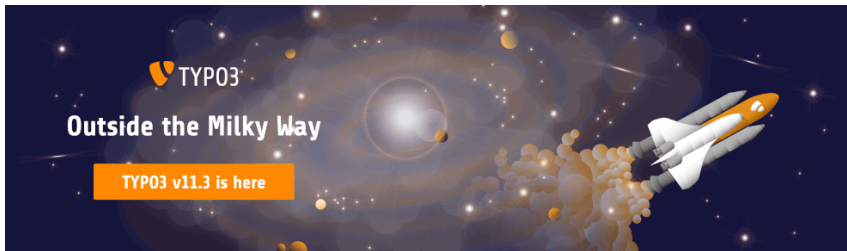
Introduction

The Facts

Introduction

TYP03 Version 11.3 - The Facts

- Release date: 13 July 2021
- Release type: Sprint Release



Introduction

Executive Summary

TYPO3 version 11.3 is the fourth sprint release on the way to the LTS-version (long-term support) in October 2021. This release includes a bunch of backend UX improvements and is now compatible with PHP version 8.0. User experience (UX) is about how users interact with a system or web interface.

In addition to PHP version 7.4, the TYPO3 Core is now also compatible with PHP version 8.0. Developers can leverage many new features, optimizations, and improvements of the programming language that powers TYPO3.

The next release on the roadmap is TYPO3 v11.4. Developers and contributors should be aware that this TYPO3 release (scheduled on 7 September 2021) will mark the **feature freeze** for the v11 cycle. Now is the best time to submit your code contributions to the TYPO3 Core if you want to see them in TYPO3 v11 LTS.

Introduction

System Requirements

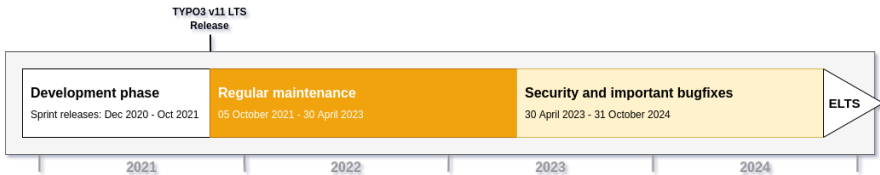
- PHP version 7.4 or 8.0
- PHP settings:
 - `memory_limit` \geq 256M
 - `max_execution_time` \geq 240s
 - `max_input_vars` \geq 1500
 - compilation option `--disable-ipv6` must not be used
- Most database servers supported by **Doctrine DBAL** also work with TYPO3. Tested DB engines are for example:



Introduction

Development, Support, and Maintenance Timeline

TYPO3 v11



Extended long-term support (ELTS)

The [TYPO3 GmbH](#) offers further support options for TYPO3 v11 LTS even after 31 October 2024 for up to two additional years.

Introduction

TYP03 v11 Release Dates

Planned release dates and their primary focus:

- v11.0 22/Dec/2020 New system requirements and breaking changes
- v11.1 23/Feb/2021 Multi-factor authentication
- v11.2 04/May/2021 Link sharing for TYP03 backend
- **v11.3 13/Jul/2021 UX improvements and PHP v8 support**
- v11.4 07/Sep/2021 Feature freeze
- v11.5 05/Oct/2021 LTS Release (long-term support)

<https://typo3.org/cms/roadmap>

<https://typo3.org/article/a-first-glimpse-of-typo3-v11>

Introduction

Composer-based Installation Method

- Installation using [PHP Composer](#) under Linux, macOS, and Windows 10:

```
$ cd /var/www/site/
```

```
$ composer create-project typo3/cms-base-distribution:^11 typo3v11
```

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

```
$ composer install
```

- The [Composer Helper](#) online tool makes package selection easy
- Further details are available in the [Installation and Upgrade Guide](#)
- **Using Composer is the recommended installation method!**

Introduction

Classic Installation Method

- 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/11.3
$ tar xzf typo3_src-11.3.0.tar.gz
$ cd htdocs
$ ln -s ../typo3_src-11.3.0 typo3_src
$ ln -s typo3_src/index.php
$ ln -s typo3_src/typo3
$ touch FIRST_INSTALL
```

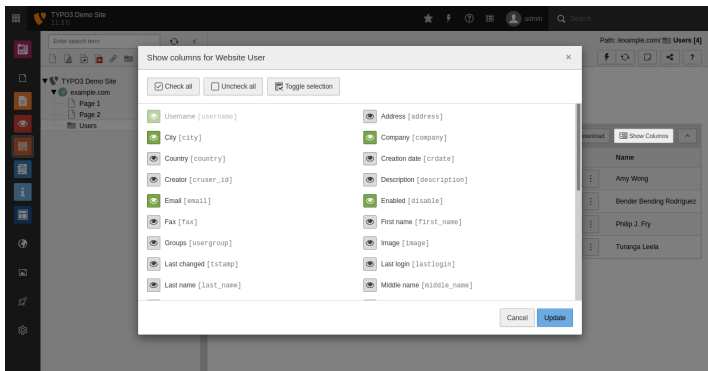
- See [Installation and Upgrade Guide](#) for details about Microsoft Windows systems

Chapter 1: Backend User Interface

Backend User Interface

List Module: Selectable Columns

Backend users can now show/hide columns for each table under **Web -> List** without the need to switch to the single table view.



Backend User Interface

List Module: Extended View

Secondary actions for each table under **Web -> List** are now available as a dropdown menu. This was previously known as the *extended table view*.

Page Content (1) > + New record Download Show Columns ^

Header [Localization] Localize to Description

Welcome Space Travellers English

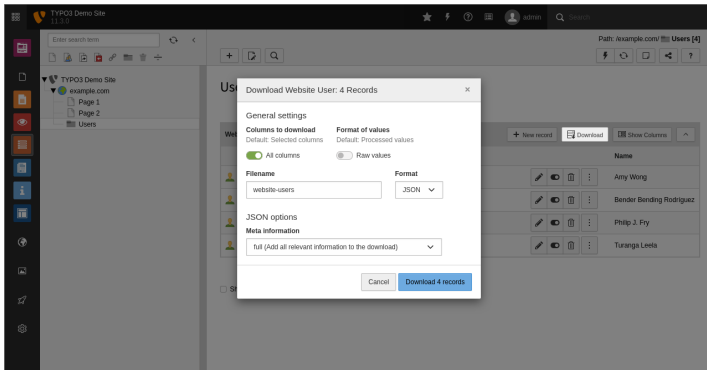
- View webpage
- Display information
- Re-position content element
- Display change history / Un-do
- Create new record after this record

Show clipboard

Backend User Interface

List Module: Download Data

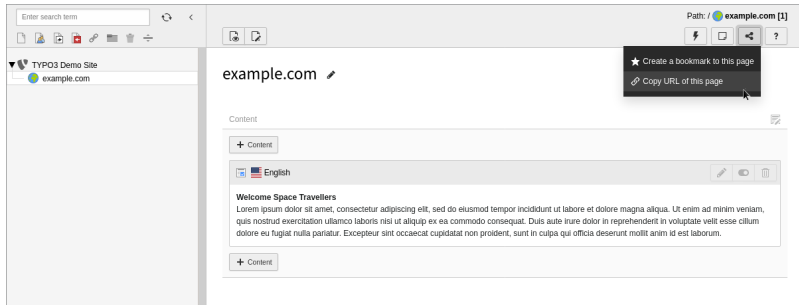
Backend users can now trigger download in CSV and JSON format through a single button in the table header of each table in **Web -> List**.



Backend User Interface

Sharing Backend Links

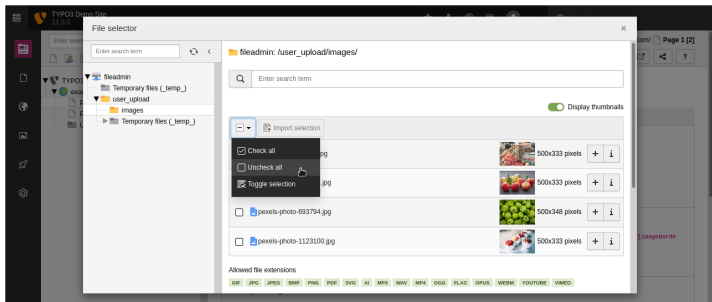
Sharing TYPO3 backend deeplinks is even easier now. Backend users can copy the URL of the page to their clipboard with two mouse clicks.



Backend User Interface

File Selector

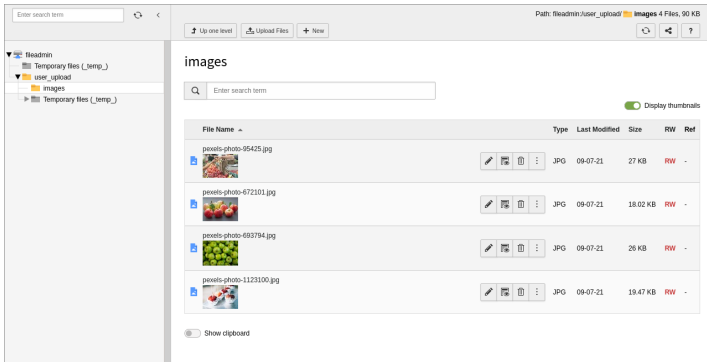
The File Selector (e.g. when selecting an image in the "Text and Media" content element) now features a checkbox on the left-hand side for each file. Backend users can check/uncheck/toggle elements easily.







Backend User Interface

Filelist Module

The Filelist backend module has an updated visual appearance that is more consistent with the List module.



The screenshot displays the TYPO3 Filelist Module interface. On the left is a sidebar with a file tree showing the path: fileadmin > user_upload > images. The main area shows the 'images' folder with a search bar and a table of files. The table has columns for File Name, Type, Last Modified, Size, RW, and Ref. Below the table is a 'Show clipboard' toggle.

File Name	Type	Last Modified	Size	RW	Ref
 pexels-photo-95425.jpg	JPG	09-07-21	27 KB	RW	-
 pexels-photo-672101.jpg	JPG	09-07-21	18.02 KB	RW	-
 pexels-photo-693794.jpg	JPG	09-07-21	26 KB	RW	-
 pexels-photo-1123100.jpg	JPG	09-07-21	19.47 KB	RW	-

Backend User Interface

Redirects

The statistics tab of the "Redirects" module (**Site Management -> Redirects**) now includes the date/time when the redirect was created.

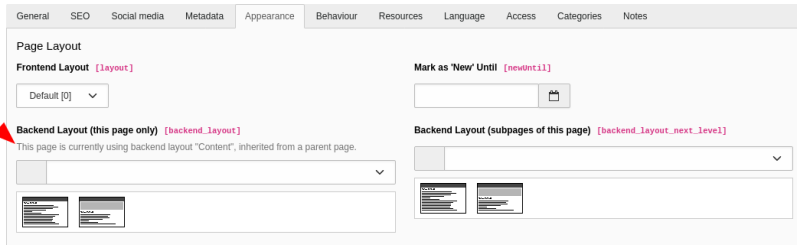
General	Statistics	Access
Hit Counter [disable_hitcount] <input type="checkbox"/> Enabled [0]		
Count [hitcount] <input type="text" value="4261"/>		
Last Hit On [lasthiton] <input type="text" value="13-07-21 08:44"/>		
Created At [createdon] <input type="text" value="24-06-21 08:42"/>		



Backend User Interface

Backend Layouts

A hint is shown in the page properties, if a page inherits the backend layout from a parent page.



General SEO Social media Metadata Appearance Behaviour Resources Language Access Categories Notes

Page Layout

Frontend Layout [layout]

Default [0] ▾

Mark as 'New' Until [newUntil1]

Backend Layout (this page only) [backend_layout]

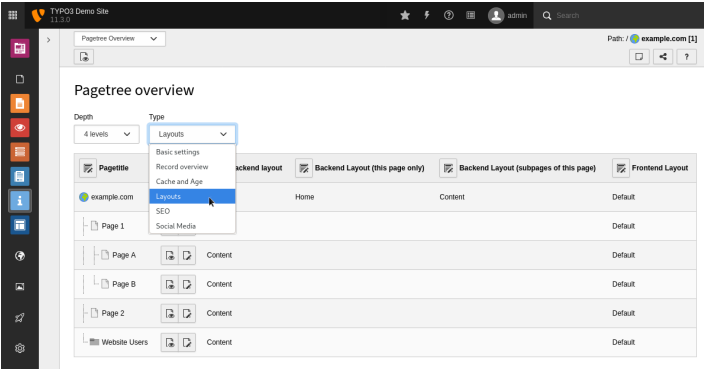
This page is currently using backend layout "Content", inherited from a parent page.

Backend Layout (subpages of this page) [backend_layout_next_level]

Backend User Interface

Web -> Info Module

The **Web -> Info** module now contains a new Pagetree overview type that lists the backend layouts used on each page.



The screenshot displays the TYPO3 Backend User Interface for a demo site. The main content area is titled "Pagetree overview" and features a table listing various pages and their associated backend layouts. A dropdown menu is open over the "Layouts" column, showing options like "Basic settings", "Record overview", "Cache and Age", "Layouts", "SEO", and "Social Media".

Depth	Type	Backend layout	Backend Layout (this page only)	Backend Layout (subpages of this page)	Frontend Layout
example.com	Layouts	Home	Content	Default	Default
Page 1	Social Media				Default
Page A	Content				Default
Page B	Content				Default
Page 2	Content				Default
Website Users	Content				Default

Chapter 2: Changes for Integrators and Developers

Changes for Integrators and Developers

List Module: Selectable Columns

- Backend users can now show/hide columns for each table without the need to switch to the single table view
- Integrators can disable the "column selector" for specific tables or for all tables by applying User TSconfig:

```
# disable the column selector for the table "tt_content"  
mod.web_list.table.tt_content.displayColumnSelector = 0
```

```
# disable the column selector for all tables in general  
mod.web_list.displayColumnSelector = 0
```

Changes for Integrators and Developers

Sharing Backend Links

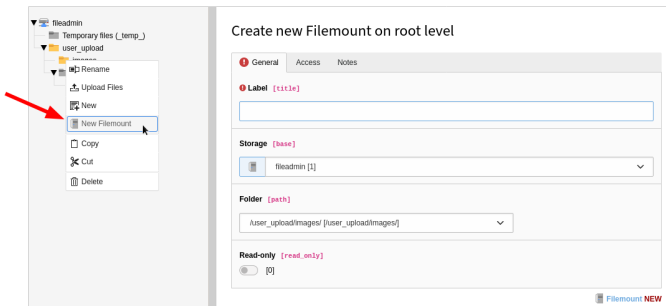
- A new constant `SHAREABLE_URL` is available in the `UriBuilder`
- Developers can generate deep links (URLs) of pages in the backend using this constant
- For example:

```
$uri = $uriBuilder->buildUriFromRoute(  
    $routeName, $arguments, UriBuilder::SHAREABLE_URL  
);
```

Changes for Integrators and Developers

Create Filemount

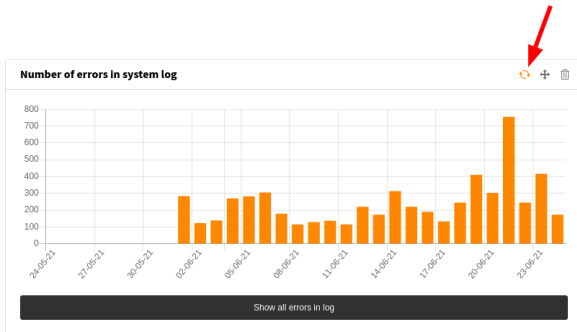
- TYPO3 administrators can now create filemounts through a new option in the context menu
- For example in the Filelist backend module:



Changes for Integrators and Developers

Refresh Dashboard Widgets (1)

- If implemented, backend users can refresh dashboard widgets:



Changes for Integrators and Developers

Refresh Dashboard Widgets (2)

- Set the configuration option `refreshAvailable` to `true`
- Example YAML configuration:

```
dashboard.widget.foobarWidget:  
  class: 'TYPO3\CMS\Dashboard\Widgets\RssWidget'  
  arguments:  
    $view: '@dashboard.views.widget'  
    $cache: '@cache.dashboard.rss'  
    $options:  
      rssFile: 'https://example.com/rss'  
      lifeTime: 3600  
      refreshAvailable: true  
  tags:  
    ...
```

Changes for Integrators and Developers

FileDumpController

- The FileDumpController accepts two new parameters:
 - dl: force the download of a file
 - fn: download the file with an alternative file name
- See the [changelog](#) for further details and a code example
- A new *File-ViewHelper* can be used to leverage the function (see chapter "Extbase and Fluid" for further details)

Changes for Integrators and Developers

Password Reset

- Since TYPO3 v10 LTS, the following global configuration disables the password reset functionality for backend users:

```
$GLOBALS['TYPO3_CONF_VARS']['BE']['passwordReset'] = false
```

- Changes in TYPO3 v11.3:
 - The configuration only affects the login screen
 - Administrators can still execute a password reset for users through the backend
 - Administrators can still execute the respective CLI command
- A new User TSconfig option disables the function in the backend:

```
options.passwordReset = 0
```

Changes for Integrators and Developers

PSR-3 Logging Messages and Context

- To fully adhere to the [PSR-3 specification](#), the TYPO3 Core now uses placeholders when executing logging messages:

```
$this->logger->alert(  
    'Text text text {placeholder} text text.',  
    ['placeholder' => $variable]  
);
```

- We encourage extension developers to review their code and follow the specification
- **Do not** implement logging this way:

```
$this->logger->alert('Text text text ' . $variable . ' text text.');
```

Changes for Integrators and Developers

Deactivate Aspect Ratios

- Setting the key "disabled" in the TCA deactivates a specific aspect ratio:

```
$GLOBALS['TCA']['tt_content']['types']['textmedia']['columnsOverrides']['assets']['config']  
  ['overrideChildTca']['columns']['crop']['config'] = [  
    'cropVariants' => [  
      'default' => [  
        'allowedAspectRatios' => [  
          '4:3' => [  
            'disabled' => true  
          ]  
        ]  
      ]  
    ]  
  ]  
];
```

Changes for Integrators and Developers

XML Sitemap

- A new TYPOScript configuration `excludePagesRecursive` has been added to exclude parts of the page tree from the Sitemap
- The option accepts a comma-separated list of page IDs
- For example:

```
plugin.tx_seo {
    config {
        xmlSitemap {
            sitemaps {
                pages {
                    config {
                        # exclude pages recursively
                        excludePagesRecursive = 2,3
                    }
                }
            }
        }
    }
}
```

Changes for Integrators and Developers

TCA: t3editor

- A new TCA option `readOnly` has been added to the "t3editor" render type to prevent users from editing the content
- TCA code example:

```
'config' => [  
    'type' => 'text',  
    'renderType' => 't3editor',  
    'format' => 'html',  
    'readOnly' => true  
]
```


Changes for Integrators and Developers

Symfony Mailer

- Integrators can now configure the Symfony Mailer using DSN:

```
[MAIL] [transport] = 'dsn'
```

- This makes it possible to use any 3rd-party mail transport provider such as Amazon SES, Gmail, MailChimp, and many more
- Configuration example (Amazon SES):

```
[MAIL] [dsn] = 'ses+api://ACCESS_KEY:SECRET_KEY@default'
```

- Dependencies must be to be installed using Composer
- See [Symfony documentation](#) for further details about available providers

Changes for Integrators and Developers

PageLayoutController (1)

- The PageLayoutController now contains the new method `getModuleTemplate()`
- This gives developers more options to manipulate the page module when using the `drawHeaderHook` and `drawFooterHook`
- The new method can be used to retrieve the corresponding `ModuleTemplate` instance as the example code on the next page shows

Changes for Integrators and Developers

PageLayoutController (2)

- Example: add a button to the modules' button bar

```
public function drawHeaderHook(array $parameters, PageLayoutController
    $parentObject)
{
    $moduleTemplate = $parentObject->getModuleTemplate();
    $icon = $moduleTemplate->getIconFactory()->getIcon(
        'actions-link', Icon::SIZE_SMALL
    );
    $buttonBar = $moduleTemplate->getDocHeaderComponent()->getButtonBar();
    $linkButton = $buttonBar
        ->makeLinkButton()
        ->setHref('/typo3/some/url')
        ->setTitle('My custom button')
        ->setClasses('custom-link-class')
        ->setIcon($icon);
    $buttonBar->addButton($linkButton);
}
```

Changes for Integrators and Developers

Event Listener

- Event listeners do not require the tag "event" in the file `Services.yaml` anymore
- TYPO3 automatically detects events based on the type hint in the method signature by using reflection
- The last line in the following example is not required anymore:

```
TYPO3\CMS\Backend\Security\CategoryPermissionsAspect:  
  tags:  
    - name: event.listener  
      identifier: 'backend-user-permissions'  
      method: 'addUserPermissionsToCategoryTreeData'  
      event: TYPO3\CMS\Core\Tree\Event\ModifyTreeDataEvent
```

Chapter 3: Extbase and Fluid

Extbase and Fluid

New File-ViewHelper

- A new ViewHelper has been implemented:

```
TYPO3\CMS\Fluid\ViewHelpers\Link\FileViewHelper
```

- The ViewHelper lets extension authors create links to both public and non-public files easily
- For example:

```
<f:link.file file="{file}" download="true"  
  filename="alternative-name.jpg">Download</f:link.file>
```

- The argument `file` accepts a `File` object, a `FileReference`, or a `ProcessedFile`
- An alternative download file name can be specified using the argument `filename`

Extbase and Fluid

PSR-7 Request/Response (1)

- To follow unified standards and state-of-the-art technologies for extension developers, Extbase should feature a clean request/response handling in accordance to the [PSR-7 standard](#)
- Therefore, the class `TYPO3\CMS\Extbase\Mvc\Request` now implements the `PSR-7 ServerRequestInterface`
- This lets developers access request-related information from the core
- The interface is, for example, available within Extbase controllers:
`$this->request`
- See the [changelog](#) for further details

Extbase and Fluid

PSR-7 Request/Response (2)

- Extbase actions **must** return a `ResponseInterface` in the future
- Extensions are affected if:
 - They throw a `StopActionException`
 - They use the method `redirect()`
 - They use the method `redirectToUri()`
- Migration example:

```
// Code before:
```

```
public function fooAction()
{
    $this->redirect('otherAction');
}
```

```
// Code after:
```

```
public function fooAction(): ResponseInterface
{
    return $this->redirect('otherAction');
}
```


Extbase and Fluid

PSR-7 Request/Response (3)

- As part of this change, the following class has been streamlined:
TYPO3\CMS\Extbase\Mvc\Request
- Methods marked as **deprecated**:
 - `getBaseUri()`
(possible migration: `$baseUri = $normalizedParams->getSiteUrl()`)
 - `getRequestUri()`
(possible migration: `$requestUrl = $normalizedParams->getRequestUrl()`)
 - `setDispatched()` and `isDispatched()`
(see [changelog](#) for migration options)

Extbase and Fluid

PSR-7 Request/Response (4)

- Since the method `setMethod()` has been removed, the following exception is no longer available:

```
\TYPO3\CMS\Extbase\Mvc\Exception\InvalidRequestMethodException
```

- Also, the following class has been marked as **deprecated**:

```
\TYPO3\CMS\Extbase\Mvc\Web\ReferringRequest
```

Extbase and Fluid

Custom Error Messages for Validation Results

- A new method `addErrorForProperty()` allows developers to add custom error messages
- This applies to properties of Extbase models
- Example in a validator class:

```
public function isValid(): void
{
    // validation
    $this->addErrorForProperty(
        'object.property.name',
        $this->translateErrorMessage(
            'validator.errormessage',
            'myextension'
        ),
        1626134400 // timestamp
    );
}
```

Extbase and Fluid

Parameter Type Evaluation

- Extbase's *legacy* type detection of arguments has been marked as **deprecated**
- Developers should use PHP's type hints in argument lists
- Example (**old** code):

```
/**  
 * @param \MyVendor\MyExtension\MyModel $item  
 */  
public function myAction($item);
```

new code:

```
public function myAction(\MyVendor\MyExtension\MyModel $item);
```

Chapter 4: Deprecated/Removed Functions

Deprecated/Removed Functions

Database Table `sys_language`

- Using the database table `sys_language` has been classified as **deprecated**
- Site languages used in site configurations are now independent of any `sys_language` record
- Developers are advised to read the available languages and associated information from the site configuration
- For example, use the new TCA type `language` instead of `foreign_table => sys_language` (see [#57082](#) for details)

Deprecated/Removed Functions

HTTP Utility

- To properly follow the [PSR-7 standard](#), the following methods from the HTTP Utility have been marked as **deprecated**:
 - `redirect()`
 - `setResponseCode()`
 - `setResponseCodeAndExit()`
- See the [changelog](#) for further details and migration options

Deprecated/Removed Functions

ViewHelper Deprecations

- The following ViewHelpers have been marked as **deprecated**:

TYPO3\CMS\Fluid\ViewHelpers\BaseViewHelper

TYPO3\CMS\Fluid\ViewHelpers\Be\ContainerViewHelper

TYPO3\CMS\Backend\ViewHelpers\ModuleLayoutViewHelper

TYPO3\CMS\Backend\ViewHelpers\ModuleLayout\MenuViewHelper

TYPO3\CMS\Backend\ViewHelpers\ModuleLayout\MenuItemViewHelper

TYPO3\CMS\Backend\ViewHelpers\ModuleLayout\Button\LinkButtonViewHelper

TYPO3\CMS\Backend\ViewHelpers\ModuleLayout\Button\ShortcutButtonViewHelp

Deprecated/Removed Functions

`getPublicUrl()` on FAL Objects

- When accessing `getPublicUrl()` on a FAL object, the relative path could be retrieved by setting the following variable:
`$relativeToCurrentScript = true`
- As this is not required anymore (see further details in the [changelog](#)), this has been marked as **deprecated**
- Accessing `isRelativeToCurrentScript()` on the `GeneratePublicUrlForResourceEvent` is also marked as **deprecated**
- TYPO3's [Extension Scanner](#) detects the usage of these cases

Deprecated/Removed Functions

Method `arrayDiffAssocRecursive()`

- The behavior of the following method has changed:
`TYPO3\CMS\Core\Utility\ArrayUtility::arrayDiffAssocRecursive()`
- The function now mimics the behavior of the PHP function `array_diff_assoc()` as the name suggests
- This needs to be enabled by setting the third parameter to `true` for backwards-compatibility (`$useArrayDiffAssocBehavior`)
- Developers who require the behavior of the PHP function `array_diff_key()` should use the new method `arrayDiffKeyRecursive()` of the same class

Deprecated/Removed Functions

Miscellaneous (1)

- The following two options have been removed from TYPO3's default configuration:
 - BE/loginSecurityLevel
 - FE/loginSecurityLevel
- The following container entry has been marked as **deprecated**:
TYPO3\CMS\Core\Localization\LanguageService
- The following class has been marked as **deprecated**:
TYPO3\CMS\Core\Service\AbstractService
- The following method has been marked as **deprecated**:
BackendUtility::viewOnClick()

Deprecated/Removed Functions

Miscellaneous (2)

- The following methods of the `GeneralUtility` class have been marked as **deprecated**:
 - `rmFromList()`
 - `stdAuthCode()`
 - `compileSelectedGetVarsFromArray()`
- The callback function of the method `run()` (1st argument) of the following interface has been marked as **deprecated**:
`TYPO3\CMS\Core\ApplicationInterface->run($execute)`
- The popular inline JavaScript functions `goToModule()` has been marked as **deprecated**

Chapter 5: Miscellaneous

Miscellaneous

Language Support

- The TYPO3 backend now supports two additional languages:
 - [Shona \(Bantu\)](#) (ISO 639-1 code: `sn`)
 - [Welsh](#) (ISO 639-1 code: `cy`)
- This change enables us to:
 - Fetch translated labels for these languages from translation.typo3.org and [CrowdIn](#)
 - Switch the backend interface to these languages
 - Use these languages in a site configuration
 - Create translation files (e.g. `<code>.loca1lang.xlf`)

Miscellaneous

Login Throttling

- TYPO3 now limits backend and frontend logins using the Symfony library "[Rate Limiter](#)"
- A PSR-15 middleware now uses the rate limit to block further authentication attempts if too many failed logins from the same IP address were detected
- This approach replaces the old solution that was not a state-of-the-art implementation from a security perspective
- See the [changelog](#) for configuration options, default values, and further details

Chapter 6: Sources and Authors

Sources and Authors

Sources

TYPO3 News:

- <https://typo3.org/project/news/>

Release Infos:

- https://get.typo3.org/release-notes/11.x/TYPO3\CMS_11.3.0
- [TYPO3 v11 Changelog](#)
- `typo3/sysexst/core/Documentation/Changelog/11.3/*`

TYPO3 Bug-/Issuetracker:

- <https://forge.typo3.org/projects/typo3cms-core>

TYPO3 and Fluid Git Repositories:

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

Sources and Authors

TYPO3 CMS What's New Slides and Translations:

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

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

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