TYPO3 Version 11.0 – What's New

Summary of the new features, changes and improvements

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TYPO3

TYPO3 Version 11.0 – What's New

Chapter Overview

 TYPO3

Introduction

The Facts

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Introduction

TYPO3 Version 11.0 – The Facts

- Release date: 22 December 2020
- Release type: Sprint Release

Introduction

Executive Summary

TYPO3 version 11.0 is the first sprint release on the way to the LTS-version (long-term support) in 2021.

Since the main focus of version 11.0 is on clean-up tasks, it is not surprising that a large number of breaking changes have been introduced in this release.

This approach allows us to introduce new libraries, modern concepts, and streamline APIs at an early stage of the development to make sure that TYPO3 remains one of the best enterprise content management systems on the market.

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Introduction

System Requirements

- PHP version 7.4+
- PHP settings:
  - `memory_limit` >= 256M
  - `max_execution_time` >= 240s
  - `max_input_vars` >= 1500
  - compilation option `--disable-ipv6` must <u>not</u> be used
- Most database servers supported by **Doctrine DBAL** also work with TYPO3. Tested DB engines are for example:
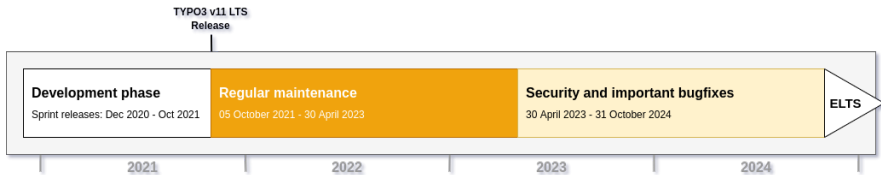
Introduction

Development, Support, and Maintenance Timeline

TYPO3 v11

TYPO3 v11 LTS
Release

Development phase	Regular maintenance	Security and important bugfixes	ELTS
Sprint releases: Dec 2020 - Oct 2021	05 October 2021 - 30 April 2023	30 April 2023 - 31 October 2024	

2021   2022   2023   2024

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.

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Introduction

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 TYPO3 Backend
- v11.3 13/Jul/2021   (*to be determined*)
- 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

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/11.0
$ tar xzf typo3_src-11.0.0.tar.gz
$ cd htdocs
$ ln -s ../typo3_src-11.0.0 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.

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Introduction

- Installation using PHP Composer under Linux, macOS, and Windows 10:

  ```
  $ cd /var/www/site/
  $ composer create-project typo3/cms-base-distribution typo3v11 ^11
  ```

- 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.

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Chapter 1:

Backend User Interface

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Backend User Interface

The TYPO3 backend now uses Bootstrap version 5.

The decision to use version 5 (which is still in development at the time of writing) puts TYPO3 at the forefront of modern content management systems from a UI perspective.

Backend users won't need to learn how to use a new user interface with Bootstrap 5. They might, however, notice a few minor usability changes in TYPO3 v11.0

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Backend User Interface

Resizable Text Area

The user setting "**Make text areas flexible**" has been removed and is no longer available for backend users. Text areas now always resize to the maximum height.

User Settings

Personal data	Password	Startup	Edit and Advanced functions

Enable Rich Text Editor (if available)

☑

removed →

Make Textareas flexible

☐

Maximal Height of flexible Textareas in Pixel

500

Max. Title Length

50

⋮

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Backend User Interface

System Notes

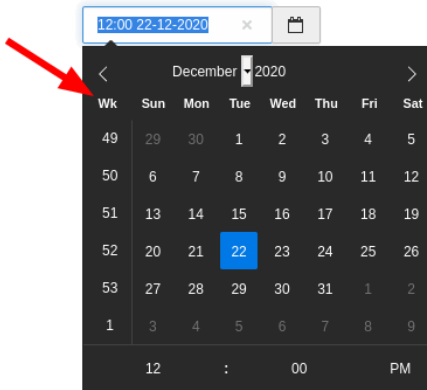A new button has been added to the top right of the Page, List, and Info module to add system notes directly.

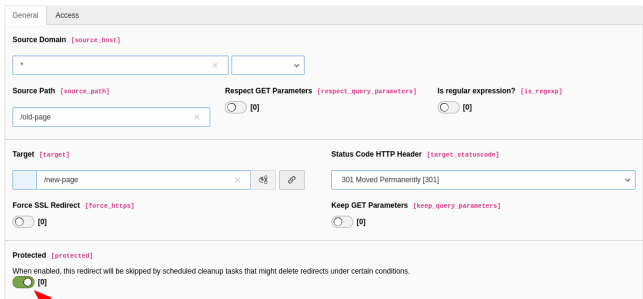**TYPO3**

Backend User Interface

The DateTimePicker now also shows week numbers in the calendar.

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Backend User Interface

Cleanup Redirects

If enabled and configured, TYPO3 removes redirects (for example redirects older than a specific number of days). To mark certain redirects and prevent their deletion, a "protected" switch has been added.

Backend User Interface

Backend users can now delete pages with sub-pages in the page tree (recursive page deletion). In previous TYPO3 versions, users had to explicitly enable this function which is now always enabled.

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Backend User Interface

- The context menus are now accessible via keyboard.
- For example:
    - **Shift+F10** opens the context menu.
    - **Arrow keys**, **Home**, and **End** to navigate through the menu.
    - **Enter**, **Space** actives items or opens submenus.
- This change follows the best practices as described in WAI-ARIA Authoring Practices 1.1 by the W3C.

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Chapter 2:

Changes for Integrators and Developers

Changes for Integrators and Developers

Form Framework

- Since TYPO3 v10, integrators and developers can use Fluid-based emails in the *EmailFinisher*.
- Therefore, the StandaloneView has now been marked as deprecated, along with the configuration option `templatePathAndFilename`.

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Changes for Integrators and Developers

Remote Extension Repositories

- The Extension Manager now uses an **Extension Remotes API**.
- Previously, alternatives to the TYPO3 Extension Repository (TER) were stored in a database table.
- It possible to define new remotes, disable registered remotes, or change the default remote.
- A custom remote configuration can be configured in file `Configuration/Services.yaml` for example:

```
extension.remote.myremote:
  class: 'TYPO3\CMS\Extensionmanager\Remote\TerExtensionRemote'
  arguments:
    $identifier: 'myremote'
    $options:
      remoteBase: 'https://example.com/'
  tags:
    - name: 'extension.remote'
      default: true
```

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Changes for Integrators and Developers

SelectCheckBox Groups

- The new TCA setting `expandAll` can be used to expand grouped checkboxes by default. The setting needs to be placed in

  `['config']['appearance']`
- For example:

```
'select_checkbox' => [
  'label' => 'Select your dinner',
  'config' => [
    'type' => 'select',
    'renderType' => 'selectCheckBox',
    'appearance' => [ 'expandAll' => true ],
    'items' => [
      ['group 1', '--div--'],
      ['Pizza', 1],
      ['Pasta', 2],
      ['group 2', '--div--'],
      ['Salad', 3],
      ['Ice cream', 4]
    ]
  ]
]
```

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Changes for Integrators and Developers

CKEditor Plugin "Placeholder"

- A new CKEditor plugin is now available: "Editor Placeholder"
- It displays a placeholder text when the editor content is empty
- TCA configuration example:

```
'bodytext' => [
  'label' => 'LLL:EXT:core/Resources/Private/Language/ ...',
  'config' => [
    'placeholder' => 'This is a placeholder',
    'type' => 'text',
    'enableRichtext' => true
  ]
]
```

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Changes for Integrators and Developers

Configuration Backend Module (`EXT:lowlevel`)

- The backend module "**Configuration**" can now be customized
- Developers can add their own configurations and disable existing configurations

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Changes for Integrators and Developers

New Datetime-Picker: "flatpickr"

- New datetime picker has been introduced to the TYPO3 backend:
  "flatpickr" is "lean", lightweight, and doesn't depend on any libraries.
- This change has several implications, most of which affect developers:
  - Initializing all datetime pickers at once triggers a deprecation warning:
    `DateTimePicker.initialize()`.
  - Option to add/subtract a date or time range in the FormEngine has been
    removed.

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Changes for Integrators and Developers

Recursive Page Deletion

- As recursive page deletion is now always enabled and can't be disabled, the following implications affect integrators and developers:
- The following TSconfig settings have been removed:
    - `setup.default.recursiveDelete`
    - `setup.override.recursiveDelete`
    - `setup.fields.recursiveDelete.disabled`
- On a PHP level, the following property has been removed:
    - `DataHandler->deleteTree`
- The following backend user setting has been removed:
    - `uc['recursiveDelete']`

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Changes for Integrators and Developers

TypoScript Option `addQueryString.method`

- The TypoScript option `addQueryString.method` has been removed.
- This has the following implications:
    - `UriBuilder->setAddQueryStringMethod()` now triggers a deprecation notice.
    - `ContentObjectRenderer->getQueryArguments()` with more than one argument has no effect anymore.
- Additionally, using the argument `addQueryStringMethod` in the following ViewHelpers triggers a deprecation notice:
    - `<f:form>`
    - `<f:link.action>`
    - `<f:link.page>`
    - `<f:link.typolink>`
    - `<f:uri.action>`
    - `<f:uri.page>`
    - `<f:uri.typolink>`

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Changes for Integrators and Developers

Workspaces

- Several changes have been made to the "Workspaces" functionality:
    - The underlying code received several updates and improvements.
    - Some conceptual issues have been addressed.
    - Several bugs have been fixed.

- Further planned updates are for example:
    - Stabilizing existing functionality.
    - Update the documentation.
    - improve the user experience.
    - Introduce new features.

- Read more about the initiative in the article:
  "Workspaces – One of TYPO3's Most Underused Features".

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Chapter 3:

Changes for Integrators

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Changes for Integrators

Breaking Changes

Integrators be advised: In TYPO3 v10, some PHP code, TSconfig, TypoScript options and conditions, etc. were marked as deprecated.

In accordance to TYPO3's Deprecation Policy, these components have changed or were removed in TYPO3 v11.0.

Enable the deprecation log, carefully test your code and configuration, and review the log to determine possible issues. Use the built-in Extension Scanner to get a full report of extension incompatibilities.

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Changes for Integrators

Extension Manager

- The Extension Manager now features an *all versions* view that shows detailed information about extensions.
- The following database table is not used anymore and was removed:
  - `tx_extensionmanager_domain_model_repository`

- The (undocumented) support for extension-in-extension installations has been removed. TYPO3 now ignores the following directory:
  - `EXT:my_extension/Initialisation/Extensions/`

- As we have phased out the proprietary format `.t3x` in favor of `.zip` files, the option to upload `.t3x` files has been removed.

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Changes for Integrators

Resizable Text Area

- As the user setting **"Make text areas flexible"** has been removed, the following User TSconfig settings are obsolete:
    - `setup.default.resizeTextareas_Flexible`
    - `setup.override.resizeTextareas_Flexible`
    - `setup.fields.resizeTextareas_Flexible.disabled`
- TYPO3 integrators should update the TypoScript code and remove these settings, if they exist.

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Changes for Integrators

Clean-up Redirects

- A new CLI command can delete redirects that match certain criteria:
    - Age of records in days
    - Domain(s), comma-separated
    - Hit count
    - Status code(s), comma-separated
    - Path pattern
- The command can also run as a Scheduler task.
- Redirects can be marked as "protected" to prevent their deletion.
- For example:

    ```
    vendor/bin/typo3 redirects:cleanup --age 90 --path "/foobar%"
    ```

    (this deletes all redirects that start with /foobar and are older than 90 days)

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Changes for Integrators

TypoScript Condition: `pagelayout`

- New TypoScript condition to check for the backend layout of a page is now available in the frontend and backend.

- For example:

```
# Using backend_layout records
[tree.pagelayout == 2]
  page.1 = TEXT
  page.1.value = Layout 2
[END]

# Using TSconfig provider of backend layouts
[tree.pagelayout == "pagets__Home"]
  page.1 = TEXT
  page.1.value = Layout Home
[END]
```

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Changes for Integrators

IP-Lock for Backend Users

- TYPO3 v11 still supports to lock a backend user session to an IP address or IP address range by using the following option: `$TYPO3_CONF_VARS[BE][lockIP]`

- In previous TYPO3 versions, administrators were able to overwrite this configuration for *specific* backend users if required.

- This user-specific configuration, along with the following database field and the TCA definition, have been removed: `be_users.disableIPlock`

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Changes for Integrators

Admin Panel

- The Admin Panel offers a list of frontend user groups to choose from to render the page under this context.
- This list now only contains **enabled** user groups (hidden/disabled groups are not listed anymore).
- This change was made to ensure consistency for the authentication process.

Changes for Integrators

Content Object TEMPLATE

- The cObject TEMPLATE has been removed.
- The following related the PHP class has been removed:
  TYPO3\CMS\Frontend\ContentObject\TemplateContentObject.
- The content object was used to render marker-based templates.
- The successor FLUIDTEMPLATE acts as a replacement for marker-based templates today.

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Changes for Integrators

Backend URLs (1)

- Backend URLs have changed in TYPO3 v11:
  OLD: /typo3/index.php?route=%2Frecord%2Fedit&token=...
  NEW: /typo3/record/edit?token=...
- This is in preparation for "speaking URLs" and deep-linking in the TYPO3 backend.
- To access the TYPO3 backend, the web server configuration now requires a rewrite rule.
- In previous TYPO3 versions, the backend was explicitly excluded from any URL rewriting logic.
- When accessing the Install Tool, a silent update takes care of adjusting the configuration file for Apache and Microsoft IIS, if possible.

Changes for Integrators

Backend URLs (2)

- If a manual adjustment of the web server configuration is required (e.g. in customized setups):
  Previous configuration:

  ```
  RewriteRule ^(?:typo3/|fileadmin/|typo3conf/|typo3temp/|uploads/) - [L]
  ```

  New configuration:

  ```
  RewriteRule ^(?:fileadmin/|typo3conf/|typo3temp/|uploads/) - [L]
  RewriteCond %{REQUEST_FILENAME} !-f
  RewriteCond %{REQUEST_FILENAME} !-d
  RewriteCond %{REQUEST_FILENAME} !-l
  RewriteCond %{REQUEST_URI} ^/typo3/.*$
  RewriteRule ^typo3/(.*)$ %{ENV:CWD}typo3/index.php [QSA,L]
  ```

- See change log for more details.

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Changes for Integrators

Miscellaneous

- As TYPO3 now always uses the Fluid-based page module, the feature toggle to switch between different implementations has been removed.
- All functionality of the system extension `EXT:about` have been migrated into the main backend extensionm and the extension removed.
- The following system-wide setting has been removed to harden the security (it is now deemed as activated):
  `$GLOBALS['TYPO3_CONF_VARS']['BE']['lockBeUserToDBmounts']`
- The following TSconfig setting has been removed:
  `mod.web_layout.disableAdvanced`

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Chapter 4:

Changes for Developers

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Changes for Developers

Breaking Changes

Developers be advised: In TYPO3 v10, some PHP classes, interfaces, class aliases, properties, methods, constants, global options and variables, etc. were marked as deprecated. This possibly also includes changed visibilities (e.g. from "`public`" to "`protected`").

In accordance to TYPO3's Deprecation Policy, these components have changed or were removed in TYPO3 v11.0.

See change log for a complete list of removed functionality.

Enable the deprecation log, carefully test your code, and review the log to locate possible issues. Use the built-in Extension Scanner to get a full report of extension incompatibilities.

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Changes for Developers

DateTimeAspect

- The `DateTimeAspect` returns the timestamp as an integer now.
- For example:

```
use TYPO3\CMS\Core\Context\Context;
use TYPO3\CMS\Core\Utility\GeneralUtility;
...
$context = GeneralUtility::makeInstance(Context::class);
$timestamp = $context->getPropertyFromAspect('date', 'timestamp');
```

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Changes for Developers

Email Validation

- Developers can use the following method to validate email addresses:
  `TYPO3\CMS\Core\Utility\GeneralUtility::validEmail()`
- Since TYPO3 v11.0, it is possible to configure the validators and to implement custom solutions.
- For example:

```
$GLOBALS['TYPO3_CONF_VARS']['MAIL']['validators'] = [
  \Egulias\EmailValidator\Validation\RFCValidation::class,
  \Egulias\EmailValidator\Validation\DNSCheckValidation::class
];
```

- The following default validators are available:
  - `\Egulias\EmailValidator\Validation\RFCValidation` (used by default)
  - `\Egulias\EmailValidator\Validation\DNSCheckValidation`
  - `\Egulias\EmailValidator\Validation\SpoofCheckValidation`
  - `\Egulias\EmailValidator\Validation\NoRFCWarningsValidation`

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Changes for Developers

Page Language Detection

- Translated page records (based on the fallback handling in the Site Configuration) are now available at a much earlier stage.
- This change was implemented to address a conceptual issue when accessing translated page records.
- As a consequence, TypoScript conditions based on the page record possibly return different results now.
- See change log for further details and migration options.

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Changes for Developers

Frontend User Groups

- The frontend user groups are now resolved in an earlier state of the frontend request.
- This allows PSR-15 middlewares to properly work with these user groups.
- The functionality has been moved from TSFE into middleware, which decouples the user authentication from the TSFE object.
- Developers of custom authentication services are encouraged to re-test their code in TYPO3 v11.

Changes for Developers

- The following methods and properties of the class
  `TYPO3\CMS\Frontend\Controller\TypoScriptFrontendController`
  have been removed:
  - `setJS()`
  - `additionalJavaScript`
  - `additionalCSS`
  - `JSCode`
  - `inlineJS`
- A better approach to add JavaScript and CSS snippets is to use the
  AssetCollector API for example.

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Changes for Developers

Backend ViewHelpers

- A new optional attribute `defaultValues` was added to the following backend ViewHelpers:
    - `be:uri.newRecord`
    - `be:link.newRecord`
- The argument can be used to prefill fields with default values.
- For example:

```
<be:link.newRecord table="tt_content" pid="17" returnUrl="foo/bar"
  defaultValues="{tt_content: {header: 'value'}}">
  New record
</be:link.newRecord>
```

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Changes for Developers

Session Storage Wrapper

- A new wrapper class has been introduced to store data temporarily during a session life time: `TYPO3\CMS\Core\Storage\BrowserSession`
- The following API methods are available:
    - `get(key)`
    To fetch the data based on a given key.
    - `set(key, value)`
    To set/override a key with arbitrary content.
    - `isset(key)`
    To check if a key is in use.
    - `unset(key)`
    To remove a key from the storage.
    - `clear()`
    To empty the storage and clear all data.
    - `unsetByPrefix(prefix)`
    To clear all data that have keys that start with a specific prefix.

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Changes for Developers

"Redirect" Middleware Position

- The "Redirect" middleware has a new default position in the middleware stack.

- TYPO3 now executes `cms-redirects/redirecthandler` **before** `cms-frontend/base-redirect-resolver`

  ```
  ...
  typo3/cms-redirects/redirecthandler
  typo3/cms-frontend/base-redirect-resolver
  ...
  ```

- The change of the order was a feature toggle in TYPO3 v10.

- Developers are adviced to check the position of their custom developed middlewares.

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Changes for Developers

Session Handling

- The session handling in the TYPO3 Core has been significantly restructured.
- It is not part of the user authentication objects anymore, but has been moved into dedicated classes:
    - TYPO3\CMS\Core\Session\UserSession
    - TYPO3\CMS\Core\Session\UserSessionManager
- This change leads to a centralized handling of sessions.
- The UserSessionManager should be used as a factory to create new sessions for various use-cases.
- See TYPO3 documentation for further details.

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Changes for Developers

Cookies set in the PSR-7 Response

- TYPO3 now attaches cookie information for the user session information in a PSR-15 middleware by default.
- Previously, cookies were added using PHP's native functions `header()` and `setcookie()`.
- The new logic allows developers to attach the cookies to a PSR-7 response object by using `$GLOBALS[BE_USER]->appendCookieToResponse()`.

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Changes for Developers

PSR-7 Responses in ContentObjects (1)

- PSR-7 standardized request objects have been added to frontend ContentObjects.
- Any kind of custom cObject using PHP code can now access the PSR-7 Request object to fetch information about the current request.
- This method should be used instead of superglobal variables such as `$_GET`, `$_POST`, `$_SERVER`, or TYPO3's API methods `GeneralUtility::_GP()` and `GeneralUtility::getIndpEnv()`.

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Changes for Developers

PSR-7 Responses in ContentObjects (2)

- Example how to access the PSR-7 Request object in a custom cObject:

TypoScript

```
page.10 = USER
page.10.userFunc = Vendor\FooBar\Frontend\MyClass->test
```

PHP code

```php
<?php
namespace Vendor\FooBar\Frontend;
class MyClass
{
  public function test(string $content, array $config, ServerRequestInterface $request)
  {
    $myValue = $request->getQueryParams()['myGetParameter'];
    $normalizedParams = $request->getAttribute('normalizedParams');
    // ...
  }
}
```

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Changes for Developers

Class PageRenderer

- TYPO3's PageRendererclass now always renders the full HTML page, instead of header/footer separately.
- As a consequence, the following constants are now protected:
    - PageRenderer::PART_COMPLETE
    - PageRenderer::PART_HEADER
    - PageRenderer::PART_FOOTER
- PageRenderer->render() does not accept any method arguments anymore.
- Extensions should use custom hooks to process or manipulate header or footer parts.

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Changes for Developers

Shortcut API

- The Shortcut API has been reworked to support Symfony routing to resolve internal endpoints, e.g. backend modules.
- This is in preparation for "speaking URLs" in the TYPO3 backend
  (BE users will be able to share links to specific functions/pages, for example)
- Developers are adviced to review the following change logs if they use the Shortcut API:
    - 93093: Rework Shortcut PHP API
    - 92132: Deprecate Shortcut PHP API
    - 93060: Shortcut title must be set by controllers
    - 93093: Deprecate method name in Shortcut PHP API

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Chapter 5:

Extbase and Fluid

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Extbase and Fluid

PSR-7 Responses

- Extbase now creates a PSR-7-compatible response object and passes it back through the request handling stack.
- The following interfaces/classes are not used anymore and were removed:
    - TYPO3\CMS\Extbase\Mvc\ResponseInterface
    - TYPO3\CMS\Extbase\Mvc\Response
- If a controller action should return custom data instead of the default view, a PSR-7-compatible response object can be returned:

```
public function listAction()
{
  // do your action stuff
  return new \TYPO3\CMS\Core\Http\HtmlResponse($this->view->render());
}
```

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Extbase and Fluid

RegularExpression Validator

- Custom error messages can be returned by using the new option
  errorMessage of the RegularExpressionValidator:

```
class MyModel extends \TYPO3\CMS\Extbase\DomainObject\AbstractEntity
{
  /**
   * @var string
   * @TYPO3\CMS\Extbase\Annotation\Validate(
   *    "RegularExpression",
   *    options={
   *       "regularExpression": '/^S0[0-9]$/',
   *       "errorMessage": 'LLL:EXT:my_ext/path/to/xlf:translation.key'
   *    }
   * )
   */
  protected $customField;
}
```

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Extbase and Fluid

- Fluid "widgets" and all widget functionality have been removed.
- The technology violates the design pattern "separation of concern" and caused problems in regards to using PSR-7 request objects in Extbase.
- Impact of this change:
    - Fluid templates that use an existing widget will no longer work.
    - Custom widgets will no longer work and have to be replaced.
- Developers can use the Pagination API instead of `<f:paginate...>` for example.
- See change log for further details.

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Extbase and Fluid

ActionController

- Several properties and methods of the class
  `TYPO3\CMS\Extbase\Mvc\Controller\ActionController`
  have been marked as internal.
- Although these properties and methods remain operational, developers
  are adviced to review if custom developed extension are affected.
- Internal properties and methods will possibly be removed without
  deprecation notification in TYPO3 v12 or later.
- See change log for a list of affected properties and methods.

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Extbase and Fluid

- The following class has been introduced to forward a request to another controller action: `TYPO3\CMS\Extbase\Http\ForwardResponse`
- This is a PSR-7 compatible way to return a response object.
- The old method has been marked as deprecated:
  `ActionController::forward()`

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Extbase and Fluid

- Code example:

```php
<?php

use Psr\Http\Message\ResponseInterface;
use TYPO3\CMS\Extbase\Mvc\Controller\ActionController;
use TYPO3\CMS\Extbase\Http\ForwardResponse;

class FooController extends ActionController
{
  public function listAction(): ResponseInterface
  {
    // do something
    return new ForwardResponse('show');
  }

  public function showAction(): ResponseInterface
  {
    // do something
  }
}
```

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Extbase and Fluid

- The aim to fully comply with PSR-7 affects the data types that controller actions may return.
- Return values can be either nothing (`void`), `null`, a string, or an object.
- Actions should now return an instance of `Psr\Http\Message\ResponseInterface`.
- Everything else triggers a warning in the deprecation log.
- Code example (after migration):

```
public function listAction(): ResponseInterface
{
  $items = $this->itemRepository->findAll();
  $this->view->assign('items', $items);
  return $this->htmlResponse();
}
```

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Extbase and Fluid

Dependency Injection (1)

- Property Dependency Injection by using `@Extbase\Inject`
  has been marked as deprecated.
- Migration options:
    - **Constructor Injection**
      Allows for extension compatibility with multiple TYPO3 versions.
    - **Setter Injection**
      Similar pros and cons as constructor dependency injection.
    - **Core Property Injection**
      Requires configuration of services in the file `Services.yaml`.

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Extbase and Fluid

- The previously deprecated option to use dependency injection for non-public properties has been removed.
- The code example below shows a working solution (note the `public` visibility!)

```
class Foo
{
  /**
   * @var Service
   * @TYPO3\CMS\Extbase\Annotation\Inject
   */
  public $service;
}
```

TYPO3

Extbase and Fluid

- Registering plugins/modules require fully-qualified class names and no vendor name as the extension name (first argument).
- This was marked as deprecated in TYPO3 v10 and is now mandatory.
- This applies to `ExtensionUtility::configurePlugin()` and `ExtensionUtility::registerModule()`.
- For example:

```
\TYPO3\CMS\Extbase\Utility\ExtensionUtility::configurePlugin(
  'Form',
  'Formframework',
  [
    \TYPO3\CMS\Form\Controller\FormFrontendController::class => 'render, perform'
  ],
  [
    \TYPO3\CMS\Form\Controller\FormFrontendController::class => 'perform'
  ],
  \TYPO3\CMS\Extbase\Utility\ExtensionUtility::PLUGIN_TYPE_CONTENT_ELEMENT
);
```

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Extbase and Fluid

- The method `canProcessRequest()` of the following class has been removed: `TYPO3\CMS\Extbase\Mvc\Controller\ActionController`

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Chapter 6:

Deprecated/Removed Functions

TYPO3

Deprecated/Removed Functions

Constants `TYPO3_MODE` **and** `TYPO3_REQUESTTYPE`

- The following global constants have been marked as deprecated:
    - `TYPO3_MODE`
    - `TYPO3_REQUESTTYPE`
    - `TYPO3_REQUESTTYPE_FE`
    - `TYPO3_REQUESTTYPE_BE`
    - `TYPO3_REQUESTTYPE_CLI`
    - `TYPO3_REQUESTTYPE_AJAX`
    - `TYPO3_REQUESTTYPE_INSTALL`

- Extension developers are highly encouraged to drop the usage of these constants and prepare their extensions for TYPO3 v11.

- See change log for migration options.

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Deprecated/Removed Functions

Database-related Changes

- The following two database fields were removed from various tables:
    - t3ver_tstamp
    - t3ver_count

- The following database table is not used anymore and was removed:
    - tx_extensionmanager_domain_model_repository

TYPO3

Deprecated/Removed Functions

HTML tags `<style>` **and** `<link>`

- The HTML tags `<style>` and `<link>` do not use the attribute `type` by default anymore.
- This change applies to the TYPO3 backend and frontend output.
- If required, the attribute can be re-added by using TypoScript options or by Fluid AssetCollector attributes.

Deprecated/Removed Functions

Session Handling

- Requesting the frontend by using the following GET parameter does not have an effect anymore: FE_SESSION_KEY
  (an existing session will not be picked up)

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Deprecated/Removed Functions

Frontend Usergroup Retrieval

- The code to retrieve usergroups when frontend users log-in has been streamlined.
- It is now consistent with the mechanism in for backend users.
- The following methods and properties have been removed:

  TYPO3\CMS\Core\Authentication\AuthenticationService
  - ->getGroups()
  - ->getSubGroups()
  - ->db_groups

- The following methods have been marked as internal or removed:

  TYPO3\CMS\Core\Authentication\FrontendUserAuthentication
  - ->TSdataArray
  - ->userTS
  - ->userTSUpdated
  - ->userData_change

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Deprecated/Removed Functions

Backend Shortcuts and Bookmarks

- The following methods related to the shortcut/bookmark handling in the TYPO3 backend have been marked as deprecated:

  - `TYPO3\CMS\Backend\Template\ModuleTemplate->makeShortcutIcon()`
  - `TYPO3\CMS\Backend\Template\ModuleTemplate->makeShortcutUrl()`
  - `TYPO3\CMS\Backend\Template\Components\Buttons\Action\ShortcutButton->getSetVariables()`
  - `TYPO3\CMS\Backend\Template\Components\Buttons\Action\ShortcutButton->getGetVariables()`
  - `TYPO3\CMS\Backend\Template\Components\Buttons\Action\ShortcutButton->setGetVariables()`
  - `TYPO3\CMS\Backend\Template\Components\Buttons\Action\ShortcutButton->setSetVariables()`
  - `TYPO3\CMS\Backend\Template\Components\Buttons\Action\ShortcutButton->setModuleName()`
  - `TYPO3\CMS\Backend\Template\Components\Buttons\Action\ShortcutButton->getModuleName()`

- The following Fluid ViewHelper has been marked as deprecated:
  - `f:be.buttons.shortcut`

- Additionally, the argument `getVars` of the following ViewHelper has been marked as deprecated:
  - `be:moduleLayout.button.shortcutButton`

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Deprecated/Removed Functions

Class `AbstractUserAuthentication`

- The following changes are related to the class
  `TYPO3\CMS\Core\Authentication\AbstractUserAuthentication`
- Removed public properties and methods:
    - `AbstractUserAuthentication->auth_timeout_field`
    - `AbstractUserAuthentication->loginFailure`
    - `AbstractUserAuthentication->forceSetCookie`
    - `AbstractUserAuthentication->svConfig`
    - `AbstractUserAuthentication->warningEmail`
    - `AbstractUserAuthentication->warningPeriod`
    - `AbstractUserAuthentication->warningMax`
    - `AbstractUserAuthentication->checkLogFailures()`
- As part of the session handling restructure, these methods have been marked as deprecated:
    - `AbstractUserAuthentication->createSessionId()`
    - `AbstractUserAuthentication->fetchUserSession()`

Deprecated/Removed Functions

Workspaces

- Several internal changes have been made to the Workspaces.
- Developers who built extensions that use Workspace-functionality are adviced to review the changes and test their custom code.
- Changes are for example (but not limited to):
    - The "New Placeholder" records have been removed (92791).
    - The "Move Placeholders" have been removed (92497).
    - The "swapping mode" of elements has been removed (92206).
    - The `_ORIG_pid` field has a new meaning (92598).
- The following two methods have been marked as deprecated:
    - TYPO3\CMS\Core\Domain\Repository\PageRepository->fixVersioningPid()
    - TYPO3\CMS\Backend\Utility\BackendUtility::fixVersioningPid()

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Deprecated/Removed Functions

Miscellaneous (1)

- The User TSconfig option `lockToIP` has been removed.
- The function "**lock to domain**" has been removed for frontend/backend users and groups.
- The following Workspaces-related classes and interfaces have been removed:
    - `TYPO3\CMS\Workspaces\ColumnDataProviderInterface`
    - `TYPO3\CMS\Workspaces\Service\AdditionalColumnService`
    - `TYPO3\CMS\Workspaces\Service\AdditionalResourceService`
- The property `sendNoCacheHeaders` has been removed from the following class:

  `TYPO3\CMS\Authentication\AbstractUserAuthentication`

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Deprecated/Removed Functions

Miscellaneous (2)

- The following methods of the `ReferenceIndex` class have been marked as deprecated:
    - `ReferenceIndex->enableRuntimeCache()`
    - `ReferenceIndex->disableRuntimeCache()`
- The following methods of the `BackendUserAuthentication` class have been removed:
    - `BackendUserAuthentication->groupList`
    - `BackendUserAuthentication->includeGroupArray`
- The method `GeneralUtility::uniqueList()` has been marked as deprecated (use the new method `StringUtility::uniqueList()` instead)

TYPO3

Deprecated/Removed Functions

Miscellaneous (3)

- Calling `BackendUtility::wrapClickMenuOnIcon()` with more than four arguments will trigger a deprecation warning now.
- The following methods have been marked as deprecated:
    - `GeneralUtility::hideIfNotTranslated()`
    - `GeneralUtility::hideIfDefaultLanguage()`

  Use the following BitSet-based PHP class instead:

  `TYPO3\CMS\Core\Type\Bitmask\PageTranslationVisibility`

- The following hooks have been marked as deprecated:
    - `['recordlist/Modules/Recordlist/index.php']['drawHeaderHook']`
    - `['recordlist/Modules/Recordlist/index.php']['drawFooterHook']`

  Use the following PSR-14 event instead:

  `TYPO3\CMS\Recordlist\Event\RenderAdditionalContentToRecordListEvent`

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Chapter 7:

Miscellaneous

TYPO3

Miscellaneous

X-Redirect-By Header

- On redirects, TYPO3 now sends an additional HTTP header to indicate which of the following page types triggered the redirect:
    - Shortcut
    - Mountpoint pages (where applicable)
    - Link to external URL

- If enabled in the global configuration, the page ID is added to the output (should only be enabled for debugging purposes):

    ```
    # See: $GLOBALS['TYPO3_CONF_VARS']['FE']['exposeRedirectInformation']

    # exposeRedirectInformation is disabled:
    X-Redirect-By: TYPO3 External URL
    # exposeRedirectInformation is enabled:
    X-Redirect-By: TYPO3 External URL at page with ID 456
    ```

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Miscellaneous

Link Validator (1)

- The Scheduler task to generate email report about broken links has been significantly reworked and improved and many ways:
    - Fluid-based emails are now used
    - Task configuration extended
    - Email contains more detailed reports
    - Code refactoring
- Additionally, a PSR-14 event has been introduced to let developers manipulate the link analyser result.
- See change log for further details.

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Miscellaneous

Link Validator (2)

- The LinkValidator supports several link types such as `db`, `file`, `external`, etc.
- The type `linkhandler`has been outdated for a long time, and consequently removed now.
- It's unlikely that this change requires a migration.
- However, integrators should check and remove the `linkhandler` type from the page TSconfig if it exists:

  `mod.linkvalidator.linktypes = db,file,external,linkhandler`

- Also, the following configuration should not be used anymore:

  `mod.linkvalidator.linkhandler.reportHiddenRecords = 0`

Miscellaneous

Security

- To enhance the security, TYPO3 v11 does not expose the same cookie for HTTP and HTTPS connections, if the instance is in the HTTPS context.
    - If the site runs on HTTPS: the cookie is only exposed via HTTPS.
    - If the site runs on HTTP: the cookie is available via HTTP and HTTPS.

  As part of this change, the following global configuration has been removed: `$TYPO3_CONF_VARS[SYS][cookieSecure]`

- TYPO3 removes all session data on frontend user logout
  (this may affect installations that rely on keeping the session, e.g. for cart functionality)

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Miscellaneous

Miscellaneous

- TYPO3 v11.0 features jQuery version 3.5.x.
- "Indexed Search" does not log user-specific details in the search statistics for privacy reasons anymore.
- "Indexed Search" does not provide hooks for the "Crawler" extension anymore (EXT:crawler).

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Chapter 8:

Sources and Authors

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Sources and Authors

Sources

TYPO3 News:
- https://typo3.org/project/news/

Release Infos:
- https://get.typo3.org/release-notes/11.x/TYPO3_CMS_11.0.0
- TYPO3 v11 ChangeLog
- typo3/sysext/core/Documentation/Changelog/11.0/*

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

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Sources and Authors

TYPO3 CMS What's New Team:

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Sinisa Mitrovic, Michael Schams, and Roberto Torresani

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

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