TYPO3 Version 11.1 – What’s New

Summary of the new features, changes and improvements

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Chapter Overview

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Introduction

TYPO3 Version 11.1 – The Facts

- Release date: 23 February 2021
- Release type: Sprint Release
Introduction

Executive Summary

We are pleased to announce TYPO3 version 11.1, with multi-factor authentication built into the TYPO3 Core and some great usability improvements of the backend user interface.

Perfectly in time and equipped with all features as promised, TYPO3 version 11.1 marks another milestone on our route towards the LTS (long-term support) release later this year.

The system requirements for this release remain the same as for v11.0. The same applies to our support and maintenance promise.
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 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

**TYPO3 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 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/11.1
  $ tar xzf typo3_src-11.1.0.tar.gz
  $ cd htdocs
  $ ln -s ../typo3_src-11.1.0 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.
Installation Using Composer

- 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**.
Chapter 1: Backend User Interface
Backend User Interface

Multi-factor Authentication

If activated, backend users can now add a second authentication factor to their login process (for example a time-based one-time password).

[Diagram of TYPO3 backend interface with multi-factor authentication setup]
Backend User Interface

Filelist: Folder Tree

The file list (backend module "Filelist") received a visual overhaul and now uses the same lightweight SVG solution as the page tree does.
Backend User Interface

Resizable Navigation Component

Backend users can now resize the navigation area such as the pagetree component and file list. The icon to collapse/re-open has been moved inside the area.
Backend User Interface

Reset Backend User Filter

The module "Backend Users" features a button to reset the user filter now.

Backend User Listing

<table>
<thead>
<tr>
<th>Username</th>
<th>Admin</th>
<th>Status</th>
<th>Login</th>
<th>User group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal users only</td>
<td>Active only</td>
<td>Never logged in</td>
<td>Editors</td>
</tr>
<tr>
<td>Filter</td>
<td>Reset</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Username / Real Name</th>
<th>Last login</th>
</tr>
</thead>
<tbody>
<tr>
<td>barney Barney Rubble</td>
<td>Never</td>
</tr>
<tr>
<td>betty Betty Rubble</td>
<td>Never</td>
</tr>
<tr>
<td>fred Fred Flinstone</td>
<td>Never</td>
</tr>
</tbody>
</table>

3 Users
Backend User Interface

Backend Module Menus

Following the ARIA Best Practices 1.1, backend users can now navigate through the main module and the help menu by using the keyboard. This is ideal for users of screen readers or other assistive technology.
Chapter 2:
Changes for Integrators and Developers
Changes for Integrators and Developers

Multi-factor Authentication (1)

- TYPO3 v11.1 features **multi-factor authentication**.
- The TYPO3 Core includes two MFA providers by default:
  - Time-based one-time password (TOTP)
  - Recovery codes (*fallback provider*)
Changes for Integrators and Developers

Multi-factor Authentication (2)

- Additional providers can be added as TYPO3 extensions.
- Providers also feature a locking functionality (e.g. if OTP was entered wrongly multiple times).
- The following global configuration controls if MFA is required:
  \$GLOBALS[’TYPO3_CONF_VARS’][’BE’][’requireMFA’]
  - 0: MFA is optional (default)
  - 1: MFA is required for all users
  - 2: MFA is required for non-admin users only
  - 3: MFA is required for admin users only
Multi-factor Authentication (3)

- TSconfig can be used to disable the MFA field for backend users:
  ```
  setup.fields.mfaProviders.disabled = 1
  ```

- It is possible to restrict the available providers for some users or groups (see "Access Rights/List"), or by TSconfig:
  ```
  auth.mfa.disableProviders := addToList(totp)
  ```

- The following global configuration can be used to recommend a provider:
  ```
  $GLOBALS['TYPO3_CONF_VARS']['BE']['recommendedMfaProvider']
  ```

- Integrators can overwrite the global configuration by TSconfig:
  ```
  auth.mfa.recommendedProvider = totp
  ```
Changes for Integrators and Developers

Multi-factor Authentication (4)

- **The MFA API is still experimental and subject to change.**
- Extension developers are encouraged to review the PHP classes in: typo3/sysext/core/Classes/Authentication/Mfa/
- Some initial demo extensions for example:
  - mfa_yubikey
  - mfa_hotp
  - mfa_webauthn (planned to be implemented in the TYPO3 Core in v11 LTS)
- Read more about the current API in the changelog.
- We need your feedback! Please join the Slack channel #mfa-in-core and share your experience and requirements with us.
Changes for Integrators and Developers

Backend Routes

- Backend routes can now be restricted to HTTP methods. (e.g. GET, POST, PUT, DELETE)
- The optional property "methods" can be set in the files:
  - Configuration/Backend/Routes.php
  - Configuration/Backend/Ajax.php
- For example:

```php
return [
    'my_route' => [
        'path' => '/benni/my-route',
        'methods' => ['POST'],
        'target' => MyVendor\MyPackage\Controller\MyRouteController::class . '::submitAction'
    ]
];
```
- No restriction applies if no property is set.
Changes for Integrators and Developers

Console Command List (1)

■ The TYPO3 command line utility does not instantiate all available console commands anymore when a user executes `typo3 list`.
■ This prevents the CLI tool from slowing down or breaking the command list (e.g. if a command is not instantiable).
■ TYPO3 integrators benefit from a faster and more robust command list.
Changes for Integrators and Developers

Console Command List (2)

- Two new properties have been added to the \texttt{console.command} dependency injection tag (to used in the Services.yaml file):
  - \texttt{description}
  - \texttt{hidden}

- The description must be set next to the command name:

  \begin{verbatim}
  services:
    My\Namespace\Command\ExampleCommand:
      tags:
        - name: 'console.command'
          command: 'my:example'
          description: 'An example command that demonstrates some stuff'
          hidden: false
  \end{verbatim}

- Extension authors should use this method instead of setting description through \texttt{$this->setDescription()}.
Changes for Integrators and Developers

Content Element Wizard

■ New "new content element" wizard now supports an icon overlay for each wizard element.
■ Useful for custom content elements that use the same iconIdentifier multiple times.
■ For example (TSconfig):

```foraml
mod.wizards.newContentElement.wizardItems {
    common.elements {
        my_element {
            iconIdentifier = content-my-icon
            iconOverlay = content-my-icon-overlay
            title = LLL:EXT:my_extension/Resources/Private/Language/ContentTypes.xlf:title
            description = LLL:EXT:my_extension/Resources/Private/Language/ContentTypes.xlf:description
            tt_content_defValues {
                CType = my_element
            }
        }
    }
}
```
Changes for Integrators and Developers

FlexForm Data Processor

- A new data processor has been introduced:
  TYPO3\CMS\Frontend\DataProcessing\FlexFormProcessor
- This makes FlexForms available in Fluid templates.
- For example (TypoScript):

```plaintext
10 = TYPO3\CMS\Frontend\DataProcessing\FlexFormProcessor
10 {
    fieldName = my_flexform_field
    as = myOutputVariable
}
```
Chapter 3:
Extbase and Fluid
The ViewHelper `<f:link.typolink ...>` features a new argument `textWrap` which wraps the link title.

For example:

```
<f:link.typolink parameter="123" textWrap="<span>|</span>" />
```

**Output:**

```
<a href="page-123">My page title</a>
```

**Note: don’t forget to escape quotes:**

```
<f:link.typolink parameter="123" textWrap="<span class="small">|</span>" />
```

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Chapter 4: Deprecated/Removed Functions
 Deprecated/Removed Functions

T3Editor

- The T3Editor has been refactored into a custom HTML element:
  `<typo3-t3editor-codemirror>`

- This element features a new JavaScript module:
  `TYPO3\CMS\T3editor\Element\CodeMirrorElement`

- Using the CSS class "t3editor" is now deprecated:
  `<textarea class="t3editor"> ... </textarea>`
SortableJS

- The JavaScript library SortableJS has been renamed to sortablejs.
- This change was required due to the import of TypeScript declarations of SortableJS.
- The previous name Sortable has been declared deprecated.
- Extension developers are advised to use the library with its new name.
Deprecated/Removed Functions

jQuery in Tooltips

- Passing jQuery objects to the methods `show()` and `hide()` of the module `TYPO3/CMS/Backend/Tooltip` has been marked as deprecated.
- This results in a deprecation warning in the browser’s console.
- Migration options: Pass a single `HTMLElement` or a `NodeList` to the functions.
Chapter 5: Sources and Authors
Sources and Authors

Sources

**TYPO3 News:**
- [https://typo3.org/project/news/](https://typo3.org/project/news/)

**Release Infos:**
- [https://get.typo3.org/release-notes/11.x/TYPO3_CMS_11.1.0](https://get.typo3.org/release-notes/11.x/TYPO3_CMS_11.1.0)
- [TYPO3 v11 ChangeLog](https://typo3.org/typo3conf/installation/changelog/)
- [typo3/sysext/core/Documentation/Changelog/11.1/*](https://typo3.org/typo3conf/installation/changelog/)

**TYPO3 Bug-/Issuetracker:**

**TYPO3 and Fluid Git Repositories:**
- [https://git.typo3.org/Packages/TYPO3.CMS.git](https://git.typo3.org/Packages/TYPO3.CMS.git)
- [https://github.com/TYPO3/Fluid](https://github.com/TYPO3/Fluid)
Sources and Authors

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

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