



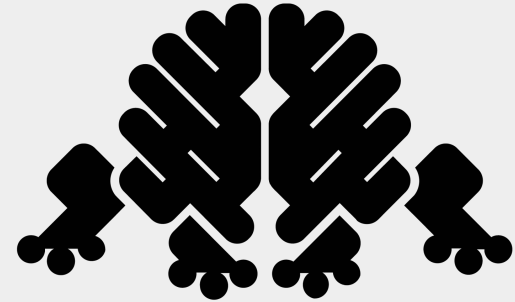
# TYPO3 12

TUGA 11/2022



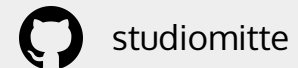
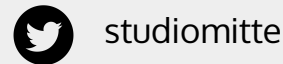
# Georg Ringer

- Core Developer
- Extension Developer



# STUDIO MITTE

[studiomitte.com](https://studiomitte.com)



The screenshot displays the TYPO3 CMS backend interface. On the left is a dark sidebar with navigation options: Dashboard, Web, Page (selected), View, List, Forms, Workspaces, Info, Check links, Indexing, Recycler, Template, Site Management, Sites, Redirects, and File. The main area is split into two panes. The left pane shows a file tree for 'Master 12' with folders like 'main', 'records', 'issues', 'content', 'extensions', 'tt\_addr', 'news', and 'import', and files like 'page 1', 'page 2', 'page 3', 'page 5', 'table', 'addr', 'list', and 'date menu'. The right pane shows the editor for 'page 1' with a title 'page 1' and a 'Normal' content type. The editor contains three text blocks, each with a '+ Content' button above and below it. The first block has a title 'A kind of header' and a paragraph of Lorem Ipsum text. The second block has a title 'Text' and a paragraph of Lorem Ipsum text. The third block has a title 'Text' and a paragraph of Lorem Ipsum text. The top of the interface shows the site name 'Master 12 12.1.0-dev', a search bar, and various utility icons.

## Improved backend (WIP)



# Facts

## Requirements

- **PHP 8.1+**
- MySQL 8, MariaDB 10.3+, PostgreSQL 10+
- symfony/\* ^6
- doctrine/dbal ^3
- ckeditor/ckeditor ^5
- composer ^2.4

## Releases

- 12.0.: 4. October
- 12.1.: 6. December
- 12.2.: 7. February
- 12.3.: 28. March
- **LTS 12.4.: 25. April**



# Breaking



# ... the usual suspects ...

## TYPO3

- Check rst files for 11/12
- Check deprecation log in 11.5
- Check Upgrade module in Install Tool
  - Extension Scanner
  - TCA Migrations
- Check deprecation hints of your IDE



```
$row = $queryBuilder
->select( ...selects: 'uid', 'l10n_parent', 's
->from( from: 'tx_news_domain_model_news')
->where(...$where)
->execute()
->fetch();
```

Inspection 'Deprecated' options > Inspection 'Deprecated' h problem. Click to edit insc

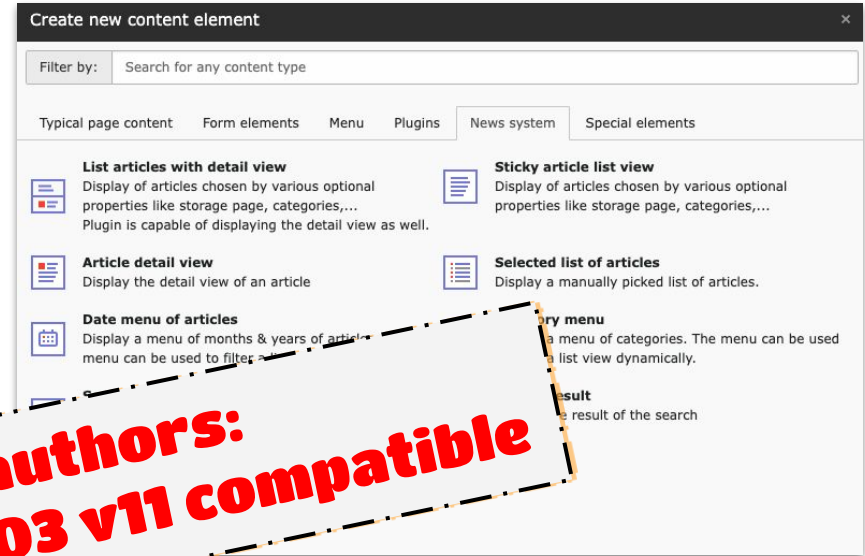
## PHP

- Migrate to PHP 8.0/**8.1** with your TYPO3 11.5 now to ease the pain
  - Docs  
[php.net/manual/en/migration80.incompatible.php](https://php.net/manual/en/migration80.incompatible.php)
- **BTW: EOL PHP 7.4 28.11.2022**



# Personal most important breakings I

- doctrine/dbal changes
- Removal of hooks
- TCA changes
- Return type of Extbase based actions
- [Todo ckeditor]
- Removal of switchable controller actions



**For extension authors:  
Easy to be TYPO3 v11 compatible**

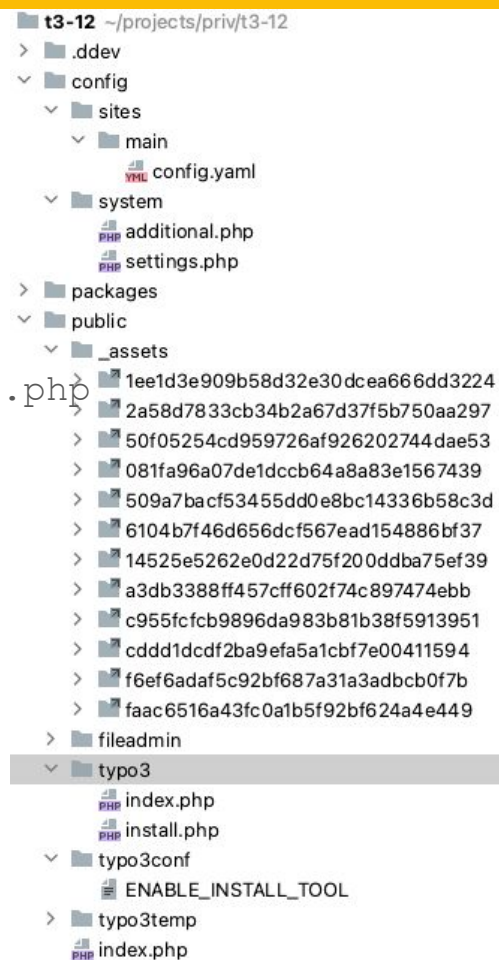


# Changed structure

- typo3conf/  
LocalConfiguration.php → config/system/settings.php  
AdditionalConfiguration.php → config/system/additional.php
- typo3/sysextnext → vendor/typo3/
- packages/\* → vendor/\*
- typo3conf/ext/\* → vendor/\*
- EXT:\*/Resources/Public → public/\_assets/<hash>

```
in v11: composer require typo3/cms-composer-installers:4.0.x@dev
```

→ [b13.com/core-insights/typo3-and-composer-weve-come-a-long-way](https://b13.com/core-insights/typo3-and-composer-weve-come-a-long-way)





# Features



# Personal picked Features I

- Lots of new events
- `SlidingWindowPagination` to replace `EXT:numbered_pagination`
- Automatic inclusion of `page TSconfig` of extensions `Configuration/page.tsconfig`
- Registration via service configuration
  - `ContentObjects`
  - `Linkvalidator` link types
  - ...
- Simplified `EXT:backend` `ModuleTemplate` API



# Personal picked Features II

- Add SiteLanguageProcessor
  - New TCA types: folder, password, link, email, number, datetime, color
  - Live search with keyboard navigation
  - Password policies
  - Respect attribute approved in XLF files
  - Improved TypoScript Template Analyzer
  - Native JSON DB type
- + lots of other cool features!



# Upcoming EXT:reactions

This feature adds the possibility to send incoming webhooks to a TYPO3 instance.

With the new backend module, it is possible to configure the reactions triggered by any webhook.

A webhook is defined as an authorized POST request to the backend.

The core will provide a simple default reaction that can create records triggered and enriched by data from the caller.



# Services, Events, yaml, ...

- This is how PHP applications are configured in 2022
- Makes it easier for new TYPO3 devs
- Makes it easier for TYPO3 devs to switch to other stacks
- Just stop ranting ;)

```
TYPO3\CMS\Beuser\Controller\PermissionController:  
tags: ['backend.controller']
```

```
# Register all available content objects  
TYPO3\CMS\Frontend\ContentObject\TextContentObject:  
tags:  
- name: frontend.contentobject  
  identifier: 'TEXT'
```

```
TYPO3\CMS\Backend\Search\LiveSearch\PageRecordProvider:  
tags:  
- { name: 'livesearch.provider', priority: 60 }
```

```
TYPO3\CMS\Frontend\Aspect\FileMetadataOverlayAspect:  
tags:  
- name: event.listener  
  identifier: 'typo3-frontend/overlay'  
  method: 'languageAndWorkspaceOverlay'
```



# PHP 8.1



# Constructor promotion (PHP 8.0)

Before

```
class CustomerDTO
{
    public string $name;

    public string $email;

    public DateTimeImmutable $birth_date;

    public function __construct(
        string $name,
        string $email,
        DateTimeImmutable $birth_date
    ) {
        $this->name = $name;
        $this->email = $email;
        $this->birth_date = $birth_date;
    }
}
```

After

```
class CustomerDTO
{
    public function __construct(
        public string $name,
        public string $email,
        public DateTimeImmutable $birth_date,
    ) {}
}
```



# Readonly properties (PHP 8.1)

```
class PostData {  
    public function __construct(  
        public readonly string $title,  
        public readonly DateTimeImmutable $date,  
    ) {}  
}
```





# Enums (PHP 8.1)

```
enum Status
{
    case DRAFT;
    case PUBLISHED;
    case ARCHIVED;
}
```

```
class BlogPost
{
    public function __construct(
        public Status $status,
    ) {}
}
```



# Resources

- [stitcher.io](https://stitcher.io)
- [php.watch/versions](https://php.watch/versions)
- [www.youtube.com/@phpannotated](https://www.youtube.com/@phpannotated)
- [blog.jetbrains.com/phpstorm/tag/php-8-2/](https://blog.jetbrains.com/phpstorm/tag/php-8-2/)



... and now?



# ... and now?

## Extension Development

- Compatibility for PHP 8.x
- [optionally drop support for PHP 7.4 and use features of PHP 8.x]
- You can start now with checking your extension against TYPO3 12.

### **No breaking changes expected anymore**

- Support of TYPO3 11.5 + 12.x is possible
- Push early & public → you will get additional tests & PR for free

## Site development

- Checkout v12 for new features & breaking changes
- Adopt your base site package
- Adopt your build pipeline
- Check for versions of extensions you need, e.g.
  - [extensions.typo3.org/?tx\\_solr%5Bfilter%5D%5B0%5D=typo3%3A12+LTS](https://extensions.typo3.org/?tx_solr%5Bfilter%5D%5B0%5D=typo3%3A12+LTS) → 55 extensions
  - GitHub repositories, e.g. EXT:news with branch “11-12”
  - Report issues



Q & A

