TYPO3 12

TUGA 11/2022

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- Core Developer
- Extension Developer

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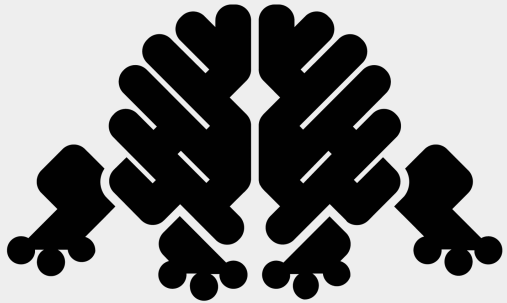

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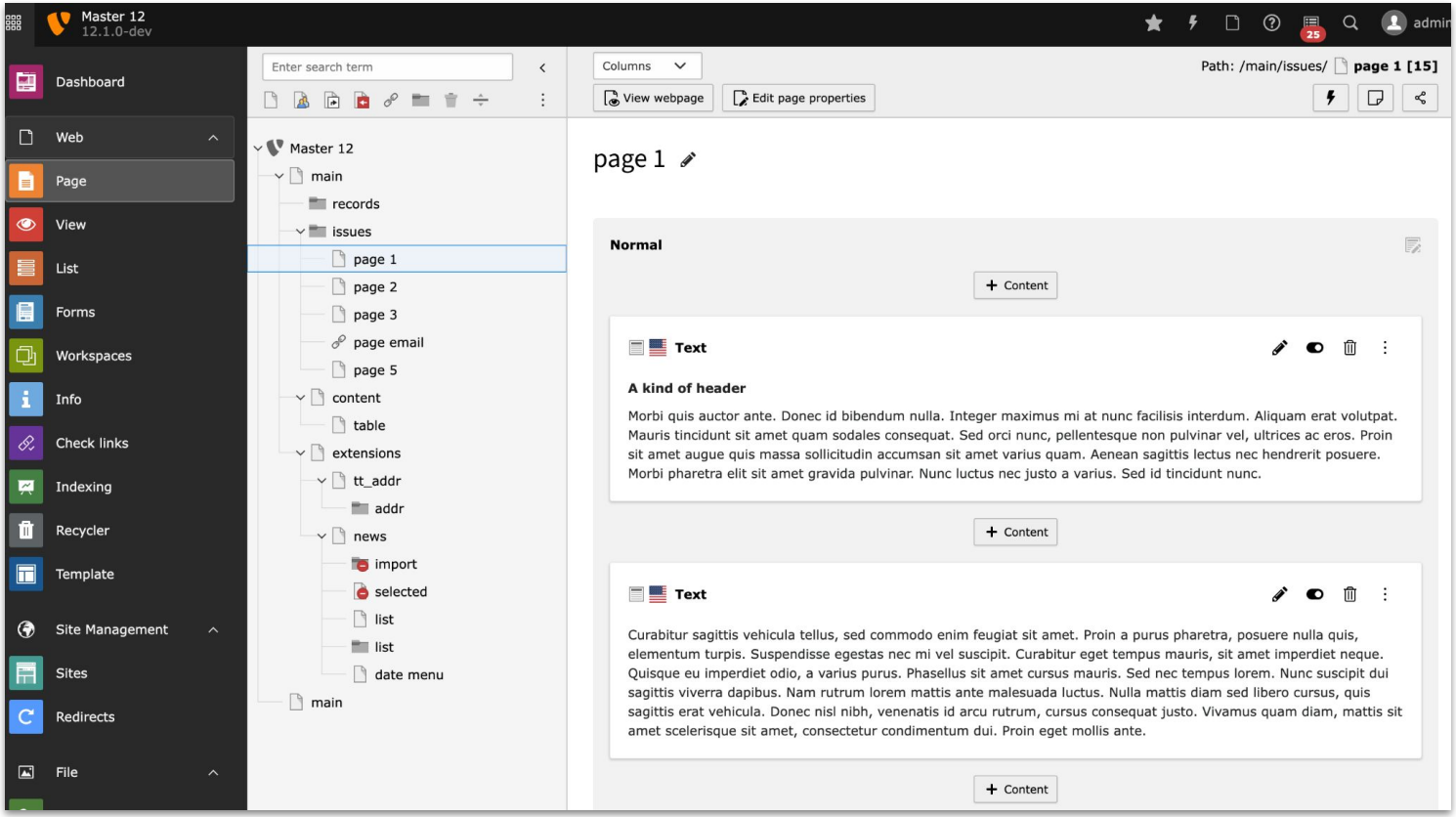


Improved backend (WIP)

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

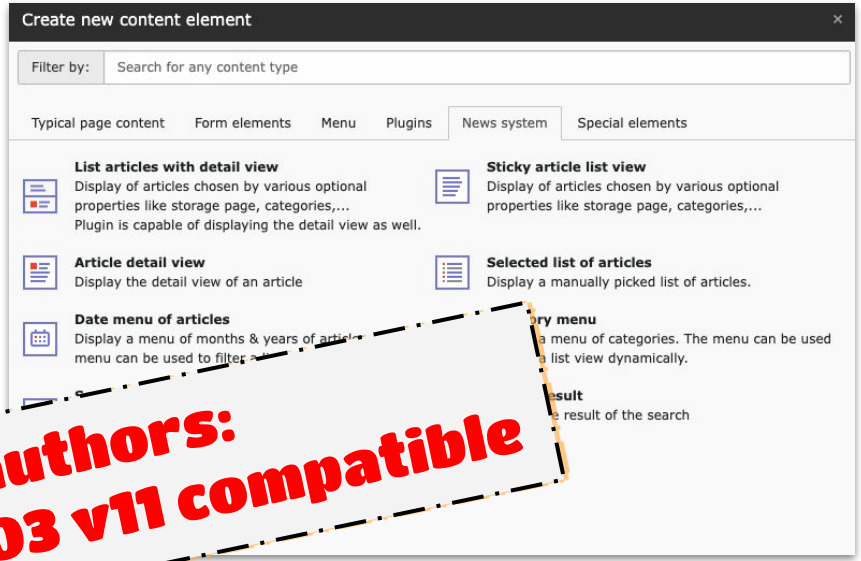
PHP

- 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

- **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

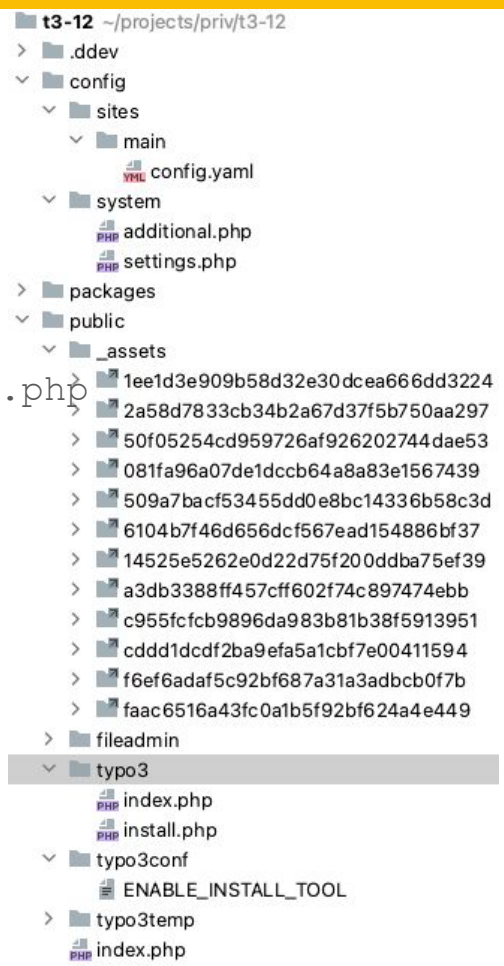
- typo3conf/
  LocalConfiguration.php → config/system/settings.php
  AdditionalConfiguration.php → config/system/additional.php

- typo3/sysext → 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



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 ;)

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

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

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

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

PHP 8.1

Constructor promotion (PHP 8.0)

Before

```php
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

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

Readonly properties (PHP 8.1)

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

Enums (PHP 8.1)

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

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

Resources

- stitcher.io
- php.watch/versions
- www.youtube.com/@phpannotated
- blog.jetbrains.com/phpstorm/tag/php-8-2/

... and now?

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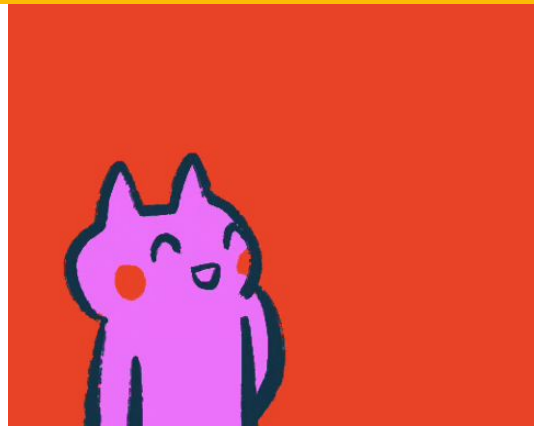

Extension Development

- 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 → 55 extensions
  - GitHub repositories, e.g. EXT:news with branch "11-12"
  - Report issues

Q & A