

Revamp Transactional Email in Drupal Core

Lorenz Schori (drupal.org/u/znerol)
Klara Binon (drupal.org/u/klara-binon)

Drupal Camp Ruhr 2025

Outline

Who we are

Objectives

Mail Plugin in Drupal 10.2

Experimental Mailer Module in Drupal 11.3 (maybe)

Q&A and Discussion

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion



- ▶ Drupal user group Belgium www.drupal.be
- ▶ Drupal teamlead at VDAB, the Flemish public employment service. www.vdab.be

Wochenzeitung WOZ



- ▶ Swiss weekly newspaper, established in 1981
- ▶ Cooperative society owned by its staff
- ▶ www.woz.ch | @woz@troet.cafe

Core Conversation at Drupal Developer Days in Vienna, July 2023

- ▶ **Talk:** <https://ddd23.drupalcamp.at/revamp-transactional-email-drupal-core>
- ▶ **Recording:** <https://www.youtube.com/watch?v=nJuBsInz28c>
- ▶ **Slides:** <https://znerol.ch/files/2023-07-revamp-drupal-email.en.pdf>

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Drupal Camp Ghent 2024

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Presentation at DrupalCamp in Ghent, May 2024

► Talk:

<https://www.drupalcamp.be/en/drupalcamp-ghent-2024/session/symfony-mailer-core-road-ahead>

► Recording: <https://www.youtube.com/watch?v=n49KLmKtpxw>

► Slides:

<https://znerol.ch/files/2024-05-symfony-mailer-core/2024-05-symfony-mailer-core.en.pdf>

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Objectives for today

- ▶ Experimental Mail Plugin in Drupal 10.2
- ▶ Experimental Mailer Module in Drupal 11.3 (maybe)

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Symfony Mailer Component

- ▶ Successor of swiftmailer
`https://symfony.com/doc/current/mailer`
- ▶ Maintained in symfony source tree.
- ▶ Used by Drupal contrib modules `symfony_mailer`,
`symfony_mailer_lite`, `mailgroup_imap` **and** `postoffice`

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Symfony Mailer Dependency in Drupal 10.2

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

```
diff --git a/core/composer.json b/core/composer.json
index 47cf2763b3..99b4b860c6 100644
--- a/core/composer.json
+++ b/core/composer.json
@@ -23,6 +23,7 @@
     "symfony/event-dispatcher": "^6.3",
     "symfony/http-foundation": "^6.3",
     "symfony/http-kernel": "^6.3",
+    "symfony/mailer": "^6.3",
     "symfony/mime": "^6.3",
     "symfony/routing": "^6.3",
     "symfony/serializer": "^6.3",
```

Experimental Mail Plugin in Drupal 10.2

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

- ▶ Drop-in replacement for PHPMail plugin

Experimental Mail Plugin in Drupal 10.2 (configuration)

```
$config['system.mail']['interface'] = [
  'default' => 'symfony_mailer'
];
$config['system.mail']['mailer_dsn'] = [
  'scheme' => 'smtp',
  'host' => 'smtp.example.com',
  'port' => 25,
  'user' => 'user',
  'password' => 'pass',
  'options' => [],
];
```

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Experimental Mail Plugin in Drupal 10.2 (limitations)

- ▶ Doesn't support HTML mails
- ▶ Doesn't fire the mailer events
- ▶ Doesn't support custom transports

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

New mailer module in core

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Issue which introduced the new `mailer` module.

- ▶ Add symfony mailer transports to Dependency Injection Container
<https://drupal.org/i/3379794>
- ▶ Change record: Experimental Symfony Mailer Module
<https://drupal.org/node/3519253>

Scope of #3379794

- ▶ Mailer as service in DI container
- ▶ Still no (built-in) support for HTML mails
- ▶ Fires mailer events
- ▶ Supports third-party and custom transports
- ▶ Integrates with Symfony Messenger

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Experimental module process

Versions

Experimental modules and themes have separate stability from the Drupal core release that contains them. The current experimental modules and themes in core are:

Project	Stability
Field Layout	alpha
Mailer (Drupal 11.3)	alpha
Navigation	beta
Navigation Top Bar	alpha
Package manager	alpha

Experimental modules that do not [meet their followup requirements](#) may be removed from core at committer discretion. See the [release cycle overview](#) for current release cycle dates.

► Experimental module process

<https://drupal.org/node/2657056>

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Community effort

- ▶ [meeting] 2025-07-01 core mailer beta planning
<https://www.drupal.org/i/3534261>
- ▶ [meeting] 2025-07-29 core mailer beta planning
<https://www.drupal.org/i/3539315>
- ▶ [meeting] 2025-09-03 core mailer beta planning
<https://www.drupal.org/i/3544898>

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

How do we operate?

- ▶ Use meta issue as the backlog
<https://www.drupal.org/i/1803948>
- ▶ Use beta roadmap for planned / done issues
<https://www.drupal.org/i/3523592>
- ▶ Use requirements issue for discussions
<https://www.drupal.org/i/3534136>

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Where do we stand?

- ▶ No actionable plan yet
- ▶ Conversation continues
- ▶ Various vertical prototypes

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

What are the challenges?

- ▶ Scope
- ▶ Planning vs. Prototyping
- ▶ Decisions

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

What is helping?

- ▶ User Stories
- ▶ High Quality Feedback

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Things we tried - SDC

- ▶ Define each email as an SDC
(No issue link)

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Things we tried - entity handler

- Email as entity handler (maybe later)

<https://www.drupal.org/i/3529014>

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Things we tried - config entity

- Email as config entity and plugin (problems with recipes)

<https://www.drupal.org/i/3536575>

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Things we tried - yaml plugin + controller

- Email as YAML plugin and controller (questionable DX)

<https://www.drupal.org/i/3539651>

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

What could be next - yaml plugin traditional

- Email as YAML plugin no controller

<https://www.drupal.org/i/3539651>

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

What could be next - builder pattern on call site

```
$result = $this->emailManager->getBuilder()  
->id('action.send_email')  
->to($recipient)  
->langcode($langcode)  
->param('context', $this->configuration)  
->send();
```

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

What could be next - email.html.twig

- ▶ An email.html.twig template
- ▶ Works like entity templates (e.g. media.html.twig)
- ▶ Every email param available as twig variable
- ▶ A contents slot with all the fields rendered by the controller/plugin

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

How to migrate from XYZ

- ▶ Honestly: No idea yet.
- ▶ Let's concentrate on the new API first.

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Questions/Discussion

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

Wrap-up

- ▶ Help with the requirements discussion:
<https://www.drupal.org/i/3534136>
- ▶ Subscribe to the meta issue:
<https://www.drupal.org/i/1803948>
- ▶ Contact us: @znerol@drupal.community @Klara@drupal.community

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Who we are

Objectives

Mail Plugin in
Drupal 10.2

Experimental
Mailer Module in
Drupal 11.3
(maybe)

Q&A and
Discussion

- ▶ **Symfony Messenger docs:**

`https://symfony.com/doc/current/messenger`

- ▶ **Blog serie by previousnext:** `https:`

`//www.previousnext.com.au/blog/symfony-messenger/
post-1-introducing-symfony-messenger`

- ▶ **DrupalCon Barcelona talk by @lussoluca:**

`https://www.slideshare.net/slideshow/
leveraging-the-command-pattern-enhancing-drupal-with-symfony-me.
272017631`

How to #3379794

^ Example modules

- | | | |
|--------------------------|---|--|
| ☐ | Mailer Event Subscriber Example | ✓ Demonstrates how to use event subscribers to act on emails |
| ☐ | Mailer Form Example | ✓ An example form to send mails via the mailer module |
| ☐ | Mailer Transport Decorator Example | ✓ Demonstrates how to decorate the core transport in order to dispatch mails dynamically to alternative transports |
| ☐ | Mailer Transport Factory Example | ✓ Demonstrates how to register third-party and custom transports |
| ☐ | Mailer Transport Info Example | ✓ Demonstrates how to extract info about registered transport factories |

- ▶ Sandbox with examples:

<https://www.drupal.org/sandbox/znerol/3397645>

Building mails

```
use Symfony\Component\Mime\Email;

$email = new Email();
$email->subject('Test message')
    ->from('test@localhost.localdomain')
    ->text('Hello test runner!');
```

Send mails

```
use Symfony\Component\Mailer\MailerInterface;

$mailer = $container->get(MailerInterface::class)
$mailer->send($email->to('admin@localhost.localdomain'));
```

Subscribe to MessageEvent

```
public function onMessage(MessageEvent $event) {  
    $message = $event->getMessage();  
    if ($message instanceof Email) {  
        $message->addCc(  
            'additional-cc@example.com',  
            'Another Copy <another-cc@example.com>'  
        );  
        $this->logger->info('Added additional cc to message');  
    }  
}
```

Subscribe to SentMessageEvent

```
public function onSendMessage(SentMessageEvent $event) {  
    $message = $event->getMessage();  
    $this->logger->info('Successfully sent message (@id)', [  
        '@id' => $message->getMessageId(),  
    ]);  
}
```

Subscribe to FailedMessageEvent

Revamp
Transactional
Email in Drupal
Core

Lorenz Schori
(znerol) and Klara
Binon

Backup slides

```
public function onFailedMessage(FailedMessageEvent $event) {  
    $this->logger->error($event->getError());  
}
```

Register third-party transports

```
composer require symfony/google-mailer
```

```
services:
  mailer.transport_factory.gmail:
    parent: mailer.transport_factory.abstract
    class:
      Symfony\Component\Mailer\Bridge\Google\Transport\GmailTransportFactory
    tags:
      - { name: mailer.transport_factory }
```

Custom transports and much more

- ▶ Runtime selection among multiple transports
- ▶ High availability (fallback) and load balancing (roundrobin)

After #3379794

- ▶ Capture mails in tests: <https://drupal.org/i/3397420>
- ▶ Integrate with theming layer (twig templates, HTML mail)
- ▶ Transport configuration in the admin interface (and hopefully later in the installer)