

Stages of a problem

1. Problem definition
2. Analysis \leftarrow (interactive)
3. Solution

Analysis

- ▶ find out more information
 - ▶ What are we working with?
 - ▶ What is the cause of this problem?
 - ▶ What can be done about this?
 - ▶ etc.

In the context of this talk:

- What would **you** do in this scenario?

Preowned: Solution

- ▶ scrape websites
`curl 'https://www.momoxfashion.com/query' | grep -Po 'href="\K/[^\"]+(?=".+item-link)'`
- ▶ compare to local list of items I already looked at
- ▶ only show new ones

Automatic Login: Analysis

search for tools → browser extensions can do this

- ▶ Password manager
- ▶ Standalone

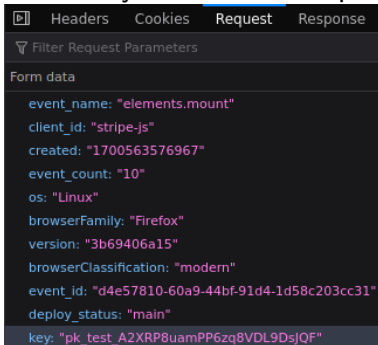
Payments: Analysis - Heroku

- ▶ Search for the error → You're not using live keys
- ▶ Check env vars on Heroku → prod env vars look good

STRIPE_PUBLIC_KEY	pk_live_
STRIPE_SECRET_KEY	sk_live_

Payments: Analysis - Double check

- ▶ Check key sent on live request → Uses testing keys!



Payments: Solution

Don't promote in Heroku pipeline.

The screenshot displays a Heroku pipeline with two environments: STAGING and PRODUCTION. The STAGING environment is active and shows a deployment of 'jobdirecto-staging' by 'Wilfredoo/Jobdirecto' on the 'develop' branch, deployed on Nov 19 at 5:56 PM. The PRODUCTION environment shows a deployment of 'jobdirecto' by 'Wilfredoo/Jobdirecto' on the 'master' branch, deployed on Nov 19 at 5:55 PM. Both environments have a button to 'Open app'. The STAGING environment also has a button that says 'No changes to promote'.

Environment	App Name	Deployed By	Branch	Deployed At	Action
STAGING	jobdirecto-staging	Wilfredoo/Jobdirecto	develop	Nov 19 at 5:56 PM	No changes to promote, Open app
PRODUCTION	jobdirecto	Wilfredoo/Jobdirecto	master	Nov 19 at 5:55 PM	Open app

Changelog: Problem

- ▶ Current: Changelog for one year worth of commits is needed
- ▶ Desired: Changelog in the specified format exists

[Player] Subtitles stick to bottom of Player #JIRA-813

Changelog: Analysis - git log

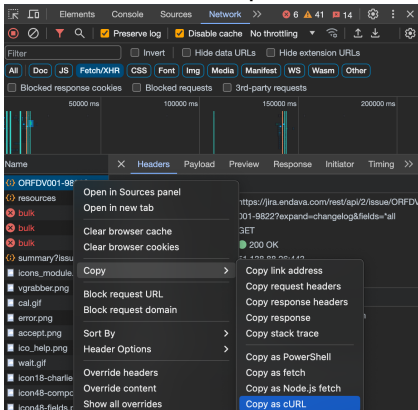
- ▶ Are there Jira ticket ids in the commits? → Yes, mostly
- ▶ Are there change descriptions in the commits? → No

Changelog: Analysis - Jira

- ▶ Does Jira have a list of changes? → Maybe, not really
- ▶ Does Jira have a change description? → Yes

Changelog: Analysis - Getting data from Jira

- ▶ Official API? → Yes
- ▶ Imitate browser requests? → Yes



Changelog: Solution

- ▶ parse commits for Jira ids
- ▶ fetch title and tags from Jira

Alternative to avoid this in the future:
Conventional commits

Mail signups: Problem

- ▶ Current: You have a CRM and are receiving signups for courses via structured email, manually entered into CRM
- ▶ Desired: Getting contact info into the CRM should be less tedious

Mail signups: Analysis - What are we working with?

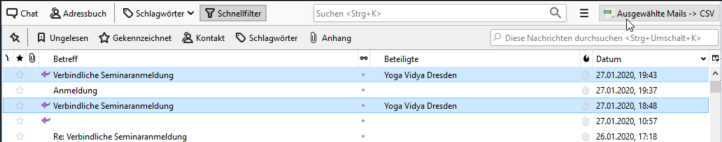
- ▶ Mail client? → Outlook (non cloud version), normal SMTP/IMAP
- ▶ CRM? → Obscure paid closed-source

Mail signups: Analysis - Connectivity

- ▶ Does either have an API? → No
- ▶ Do the CRM has a way to import data? → Yes, CSV
- ▶ Is there a mail client that I can hook into → Thunderbird with chrome extensions

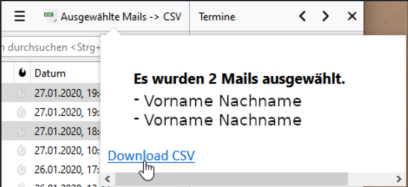
Mail signups: Solution

Gewünschte Mails mit Strg Klick markieren



Betreff	Beteiligte	Datum
Verbindliche Seminaranmeldung	Yoga Vidya Dresden	27.01.2020, 19:43
Anmeldung	Yoga Vidya Dresden	27.01.2020, 19:37
Verbindliche Seminaranmeldung	Yoga Vidya Dresden	27.01.2020, 18:48
		27.01.2020, 10:57
Re: Verbindliche Seminaranmeldung		26.01.2020, 17:18

Auf **Download CSV** klicken



Es wurden 2 Mails ausgewählt.

- Vorname Nachname
- Vorname Nachname

[Download CSV](#)

Subtitles: Problem

- ▶ Current: In your symfony app you have this error when writing a subtitle file.
- ▶ Desired: Should work.

```
Could not import files: RuntimeException:  
Could not write the "subtitles/1234.ttml" key content  
in vendor/../Gaufrette/FileSystem.php:106
```

Subtitles: Analysis - Masked error

- ▶ go into the given file and trace back the error

```
try {  
    $this->service->putObject($options);  
  
    if (is_resource($content)) {  
        return Util\Size::fromResource($content);  
    }  
  
    return Util\Size::fromContent($content);  
} catch (\Exception $e) {  
    return false;  
}
```

InvalidArgumentException: While validating the input provided for the PutObject operation: ContentType must be string. Found bool(false)

Subtitles: Analysis - Setting the ContentType

- trace back to where the ContentType is set

```
11     protected function getContentType($filename)
12     {
13         $ext = pathinfo($filename, \PATHINFO_EXTENSION);
14         $mimeType = $this->mimeType->getMimeType($ext);
15
16         return ['contentType' => current($mimeType)];
17     }
18 }
```

NORMAL vendor/sonata-project/media-bundle/src/Metadata/AmazonMetadataBuilder.php

`$this->mimeType` is `Symfony\MimeTypes`,
which does not support `ttml`

Why did this work before?

Subtitles: Analysis - Bundle update

- find out if media-bundle was recently updated

Look at commits touching media-bundle:

```
git log -L65,65:composer.json
```

```
ORFDV001-9033 Sonata Media Bundle Updated
```

```
diff --git a/composer.json b/composer.json
```

```
--- a/composer.json
```

```
+++ b/composer.json
```


```
@@ -65,4 +65,4 @@
```

```
-     "sonata-project/media-bundle": "^3.25",
```

```
+     "sonata-project/media-bundle": "^3.38.1",
```

Subtitles: Analysis - Check prev implementation

- check the implementation in the previous version

```
3.25.0 ▾ SonataMediaBundle / src / Metadata / AmazonMetadataBuilder.php   
  
protected function getContentType($filename)  
{  
    $extension = pathinfo($filename, PATHINFO_EXTENSION);  
    $contentType = Psr7\mimetype_from_extension($extension);  
  
    return ['contentType' => $contentType];  
}
```

Implementation has changed!

Subtitles: Solution

- ▶ Add ttl support into `Symfony\MimeTypes`

Slowdown: Problem

- ▶ Current: Your computer slows down to the point of being unusable
- ▶ Desired: Operates normally

reboot → slows down again after a few hours to a few days

Slowdown: Analysis - Eliminating possibilities

- ▶ check CPU/Memory usage → All normal
- ▶ Is CPU overheating? → No
- ▶ Power management? → No
- ▶ read out sensors → Look normal
- ▶ Any patterns? → Not that I see
- ▶ AC? → Tested different power supplies

For ideas:

- ▶ Search for the problem
- ▶ Ask ChatGPT

Slowdown: Analysis - CPU frequency

- ▶ What's the CPU frequency? → Hardware minimum
- ▶ Is it adjustable → Yes, but will be overwritten

Slowdown: Solution

Replace the battery, which was dropping voltage, which freaked out the CPU

Foundation

Deep understanding of these will aid your problems solving ability

- ▶ Your programming language & framework
- ▶ Your OS
- ▶ Internet stack: HTTP, TCP, IP, DNS & friends
- ▶ Shell scripting

