Introduction to Core Web Vitals & Audit Results

Google Core Web Vitals

Digital Loop

Presented by
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John Muñoz
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- Higher conversion rates
- Higher website traffic
- High quality insights
- More marketing efficiency
- Time and cost savings

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- E-Commerce
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Your Expert Team

At Digital Loop we have experts from different countries and regions from Germany, Turkey, Russia, South America to East Asia.

John Muñoz

Digital Analytics & MarTech

John is an experienced MarTech solution designer, business consultant and project lead with extensive experience in marketing technology & digital analytics.

Maximilian Bloch

Tech. SEO & Performance

Maximilian specializes in technical SEO and performance optimization. Search engine optimization is his passion for 10+ years. Previously in his career he was responsible for technical SEO as an inhouse SEO at Allianz Deutschland AG

Vladimir Stashevskiy

Digital Analytics & Tech. SEO

Vladimir is a business consultant in the areas of Web Analytics, MarTech & Tech SEO. He specializes in leveraging SMEs as well as Corporate businesses by implementing scalable Digital Analytics infrastructures and improving visibility

AGENDA

1. Introduction in Core Web Vitals (CWV)
2. Interactive part to assess the audience's knowledge in CWV
3. Improvement of CWV
    - Largest Contentful Paint (LCP)
        - Problem definition
        - Findings & solutions
    - Cumulative Layout Shift (CLS)
        - Problem definition
        - Findings & solutions
4. Other Issues/findings
5. Q/A Session

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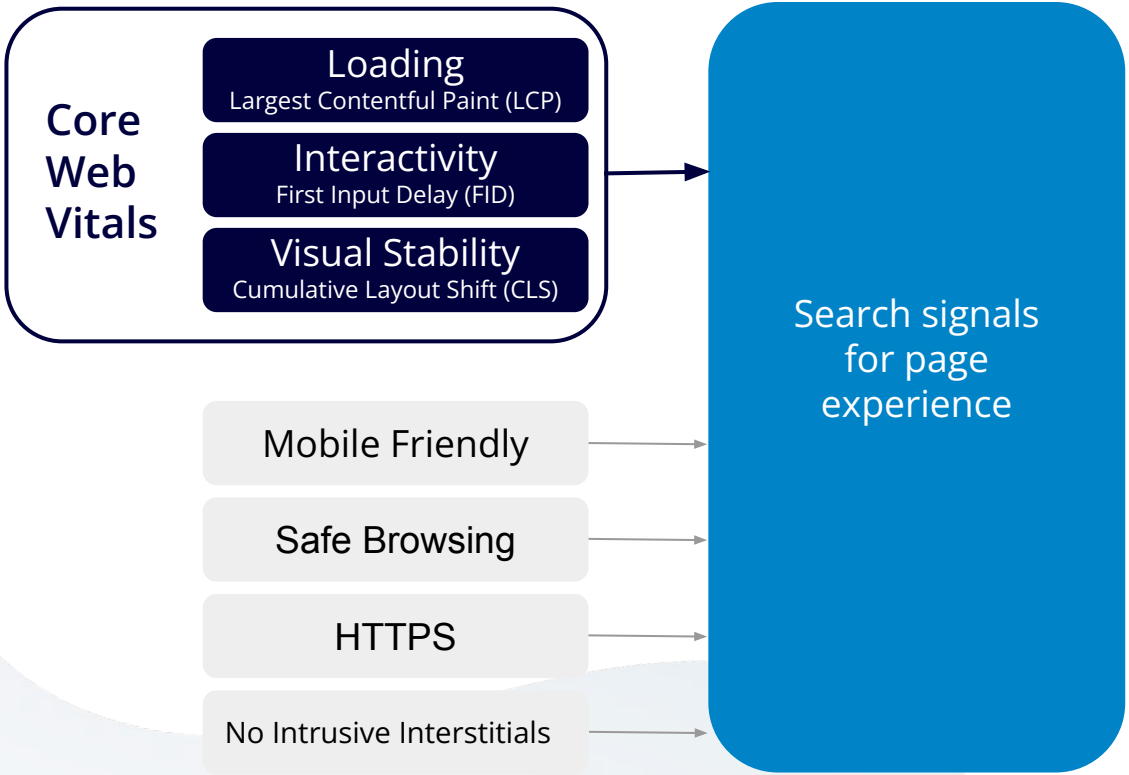
CORE WEB VITALS?

Core WebVitals



- Introduced in May 2020
- Starting rollout in the middle of the year
- Core WebVitals (CWV) are part of the Page Experience update

https://developers.google.com/search/blog/2020/05/evaluating-page-experience

Core WebVitals – 3 KPIs & 1 important Data set

(Loading)

LCP

Largest Contentful Paint

(Interactivity)

FID

First Input Delay

(Visual Stability)

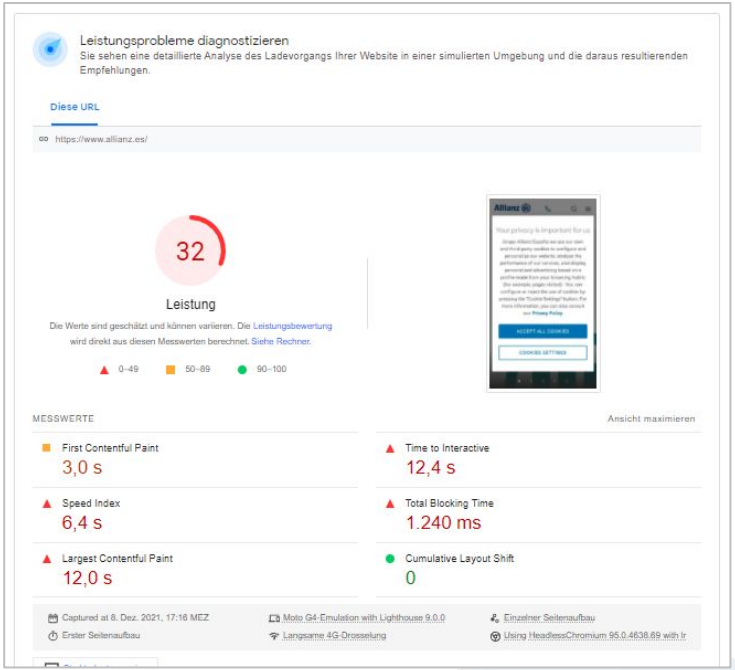
CLS

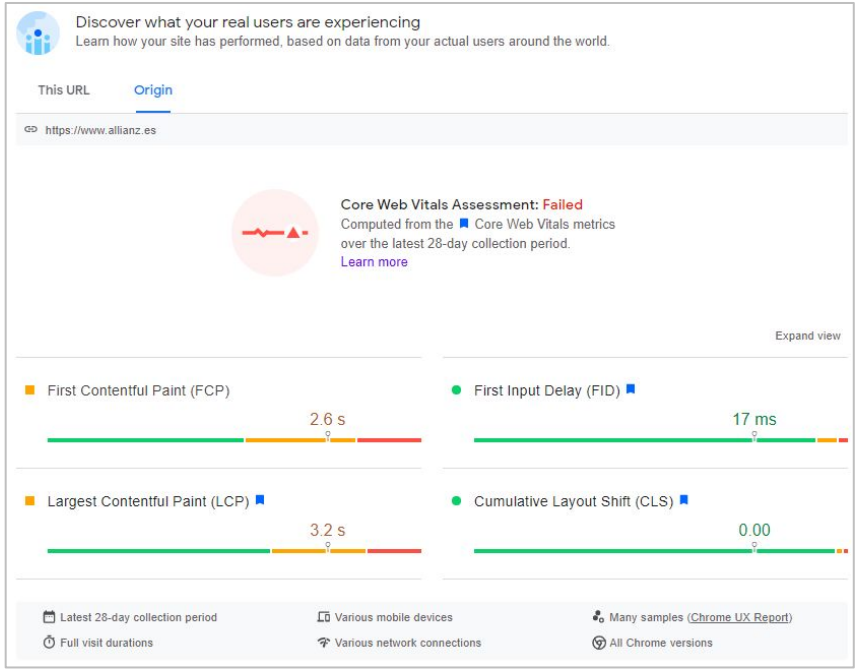
Cumulative Layout Shift

	Good	Poor	Percentile
Largest Contentful Paint	≤2500ms	>4000ms	75
First Input Delay	≤100ms	>300ms	75
Cumulative Layout Shift	≤0.1	>0.25	75

- 3 KPIs
- Need to pass all KPIs to pass CWV
  - On mobile and desktop
- **Lab-data**
  - Test conditions, synthetic
  - Just relevant for testing
- **Field-data**
  - Collected via Chrome
  - Represents your real user experience
  - Chrome UX report (CrUX)

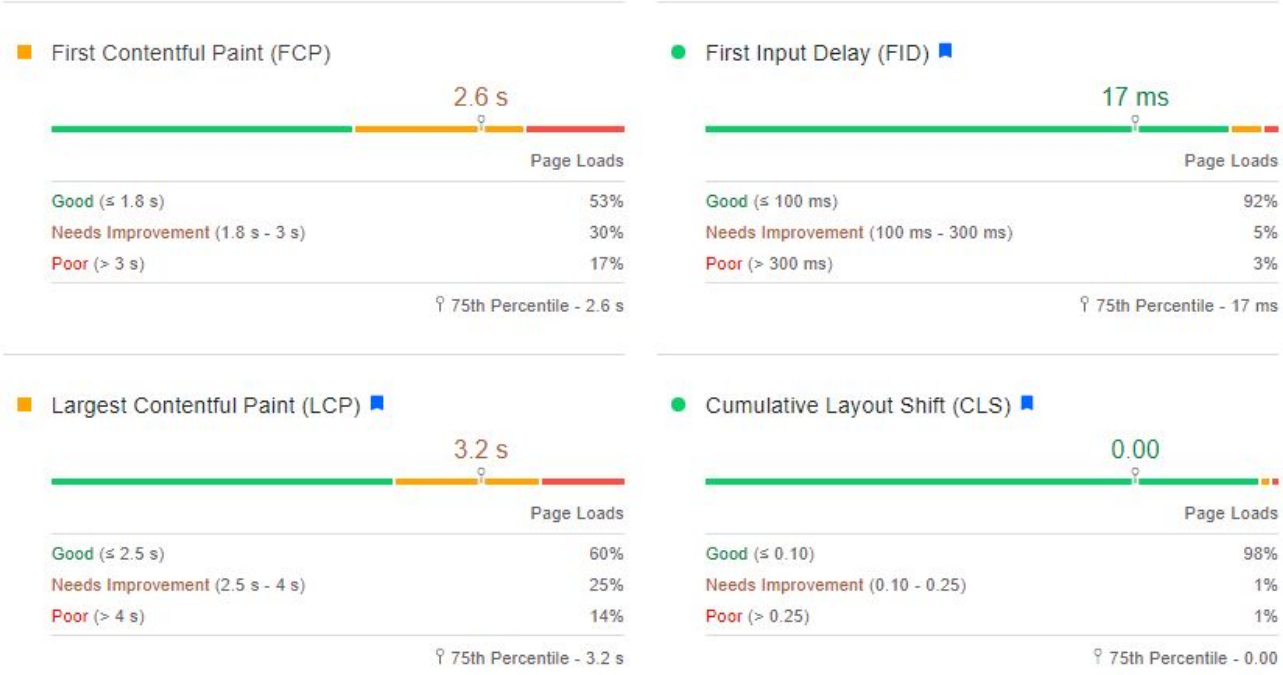
PageSpeed Insights - also splitted in two areas





- PageSpeed Insights come along with two areas – simulated (Lab-data) and real user experience (Field-data)
- Field-data are available for “this URL” and for the subdomain (origin)

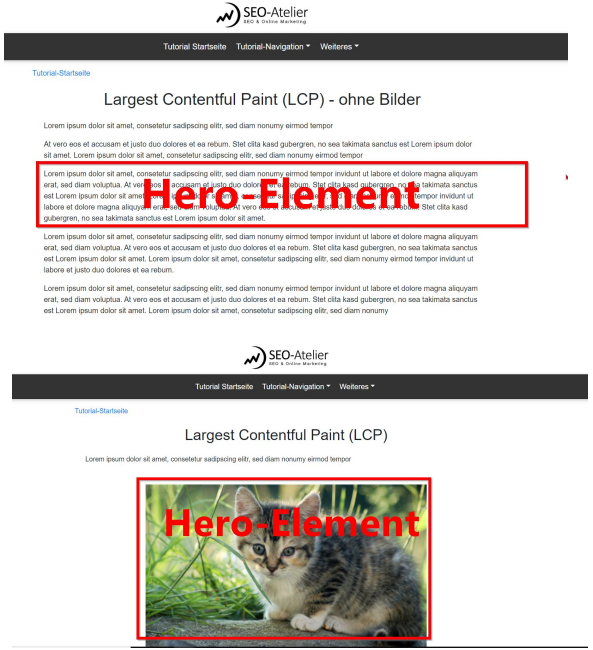
PageSpeed Insights shows our problem



- Focus on LCP – that is our problematic KPI
- All other KPIs are passed

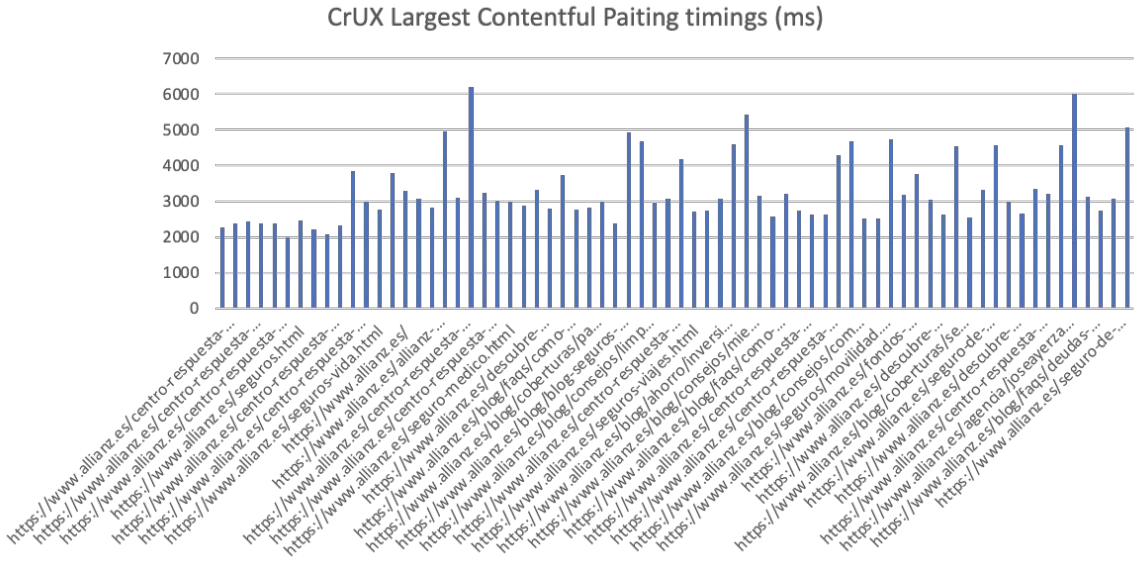
Google: *"To provide a good user experience, sites should strive to have Largest Contentful Paint of 2.5 seconds or less (...) a good threshold to measure is the 75th percentile of page loads, segmented across mobile and desktop devices."*

- Measures the **perceived load speed**
- When is the **largest DOM-element** (Hero-Element) in the **viewport visible**?
- As currently specified in the Largest Contentful Paint API, the types of elements considered for Largest Contentful Paint are:
  - Img (also background-img)
  - Video
  - Block-elements

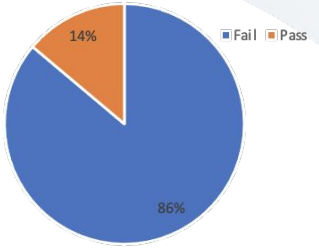


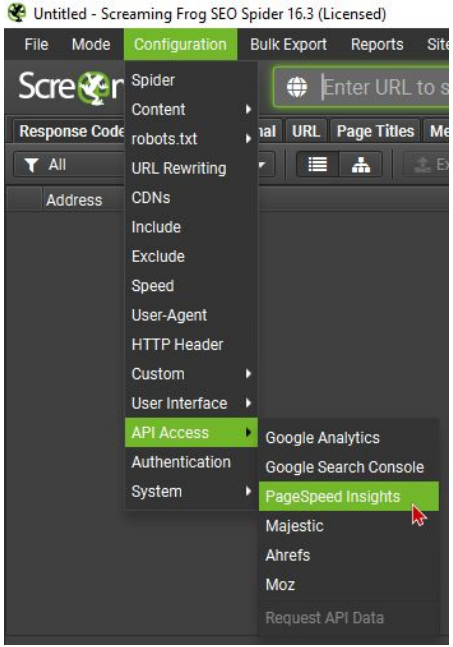
Analysis of LCP

What we did here...



CWV Pass/Fail



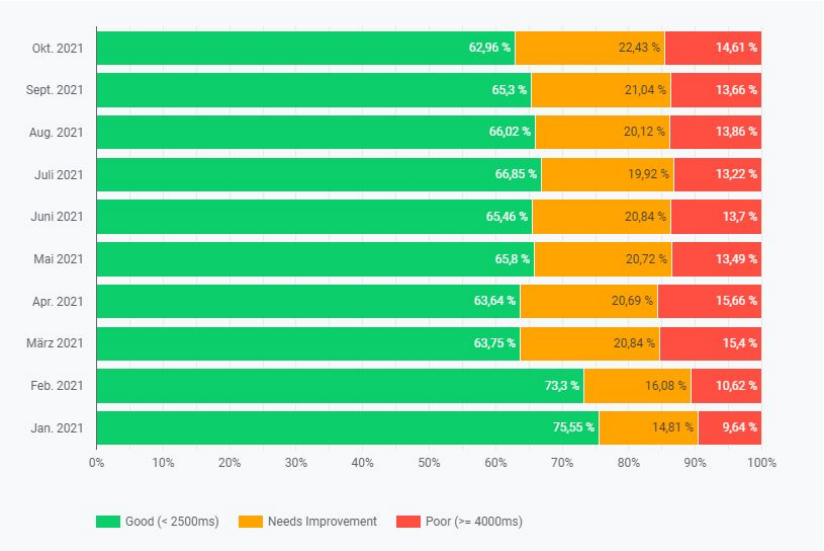


- Crawl all you pages with **PageSpeed-Insights-API connection**
- Analysed based on Lab- and Field-Data
- How to get an API-Key: https://developers.google.com/speed/docs/insights/v5/get-started#key

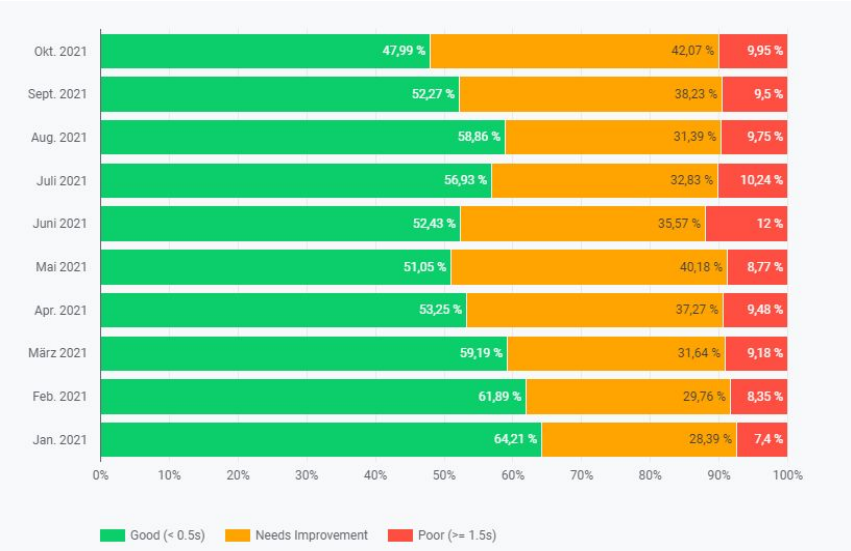
Trend since January

Datastudio with CrUX-Connector

LCP



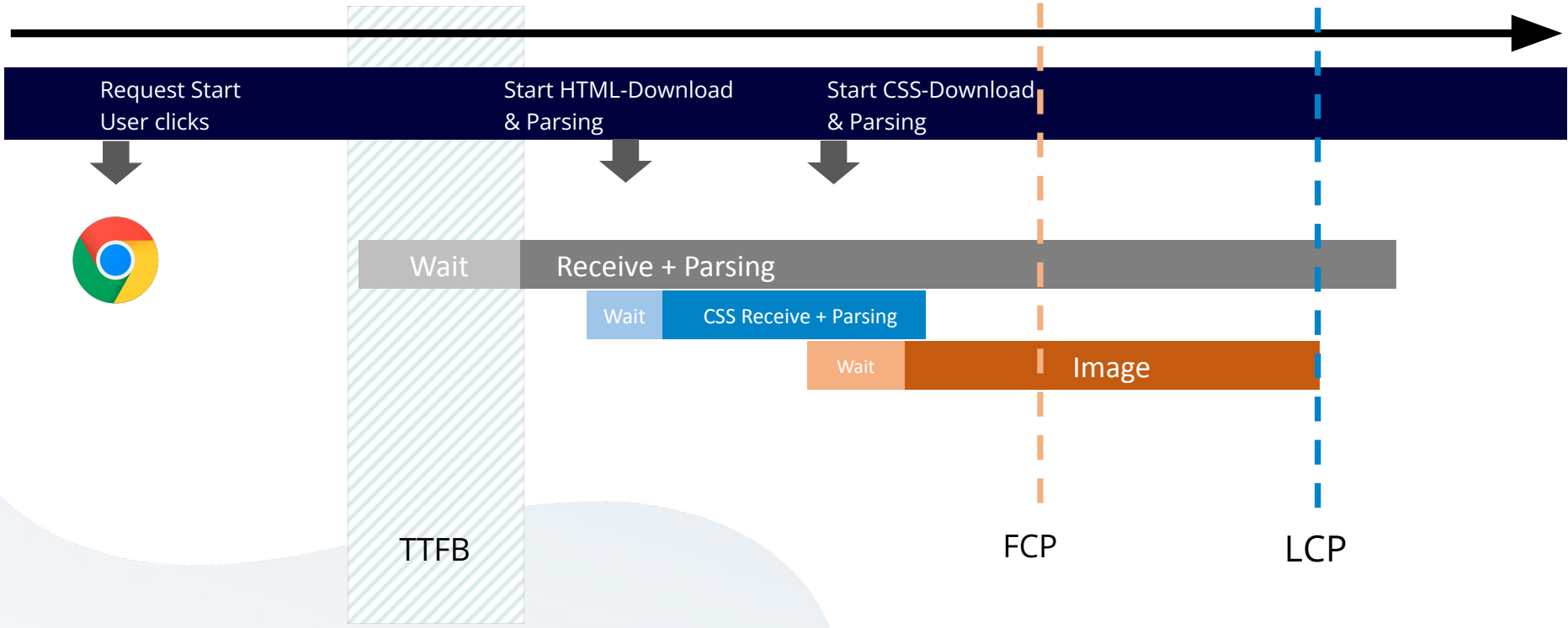
TTFB



- Deterioration of the LCP values over the months
- We see a correlation of both values
- TTFB is an issue

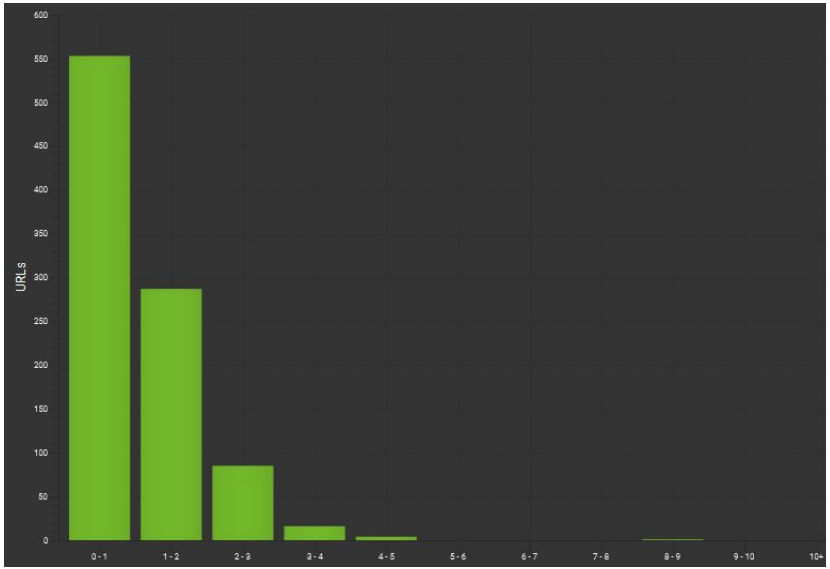
Why TTFB affects all other Timing

Simplified representation of the process in the browser



Outcome No. 1 – Option 1: CDN

- Your response times are often quiet high. You can see that in CrUX-data but also in crawl-data. We know that topic very good from AEM. This is related to dispatchers and publish frequence.
- ALL following timings are delayed by TTFB
- Affects: All Pages
- Triggers: LCP
- Impact: Medium

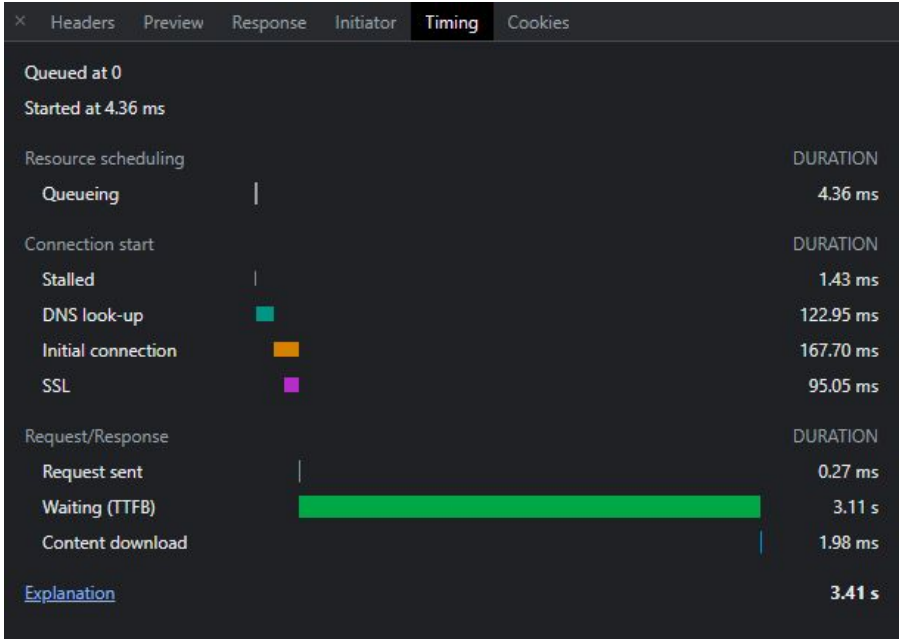


We recommend introducing Cloudflare. HTML caching should also be used here. The use of the stale-while-revalidate function should be reconsidered. **Cloudflare also enables SXG as a OneClick-solution.**

We need a closer look with the Devs for introducing a CDN (Time-based, Cache-Warmup, stale-while-revalidate, privacy)

Outcome No. 1 – Option 2 – Dispatcher Invalidation

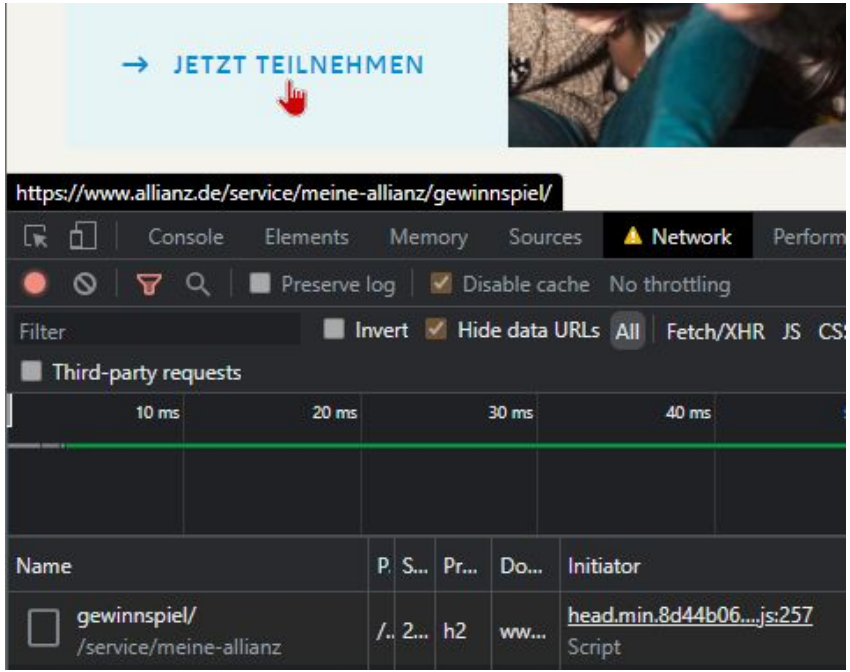
- Dispatcher invalidation
- Currently all site is flushed if publish one page or asset
- This can be changed to page-based-flushing
- Handling of XFs needs to be discussed
- AZD is switching to page-based-flushing



This option needs to be discussed with AZTech – but works for AZD. (They fix some smaller issues currently.)
But then, SXG is almost impossible.

Outcome No. 2 - TTFB

- The TTFB can be reduced even more. Currently you are not using the instant-page-script which is already implemented on AZD
- This script ensures that pages are already loaded when the mouse pointer hovers over links.
- Especially when navigating between pages, the effect is great. And this navigation also goes into the evaluation of the CWV.
- Affects: All Pages
- Triggers: LCP
- Impact: Medium

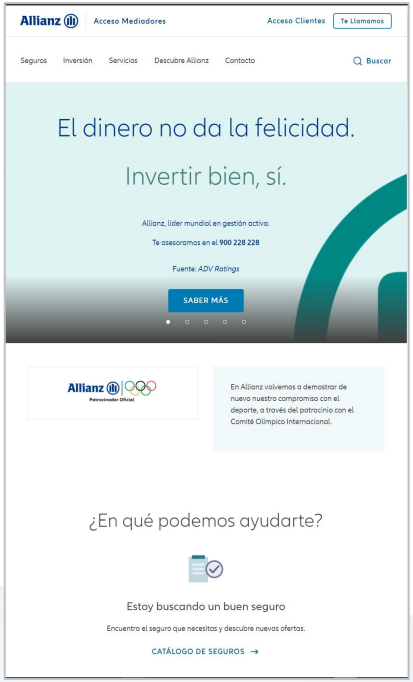


Chrome Demo

AZTech should take over the script for the websites of all OEs. The script can be found here and there is also a self-hosted-variant: https://instant.page/
The script is already tested and approved by AZDE.

Further optimization requires different scenarios

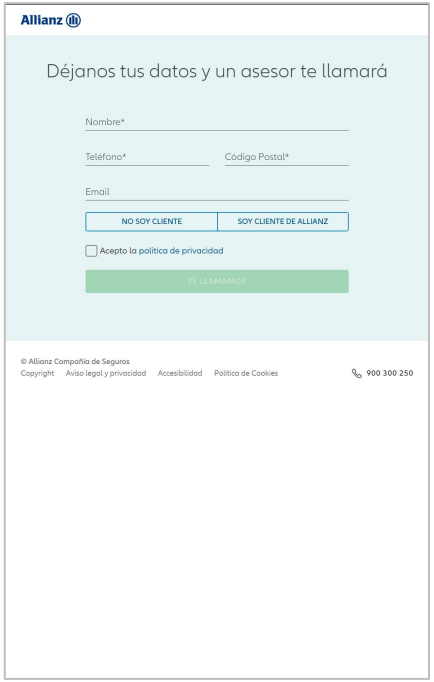
Carousel



Stage-Image

No Stage-Image

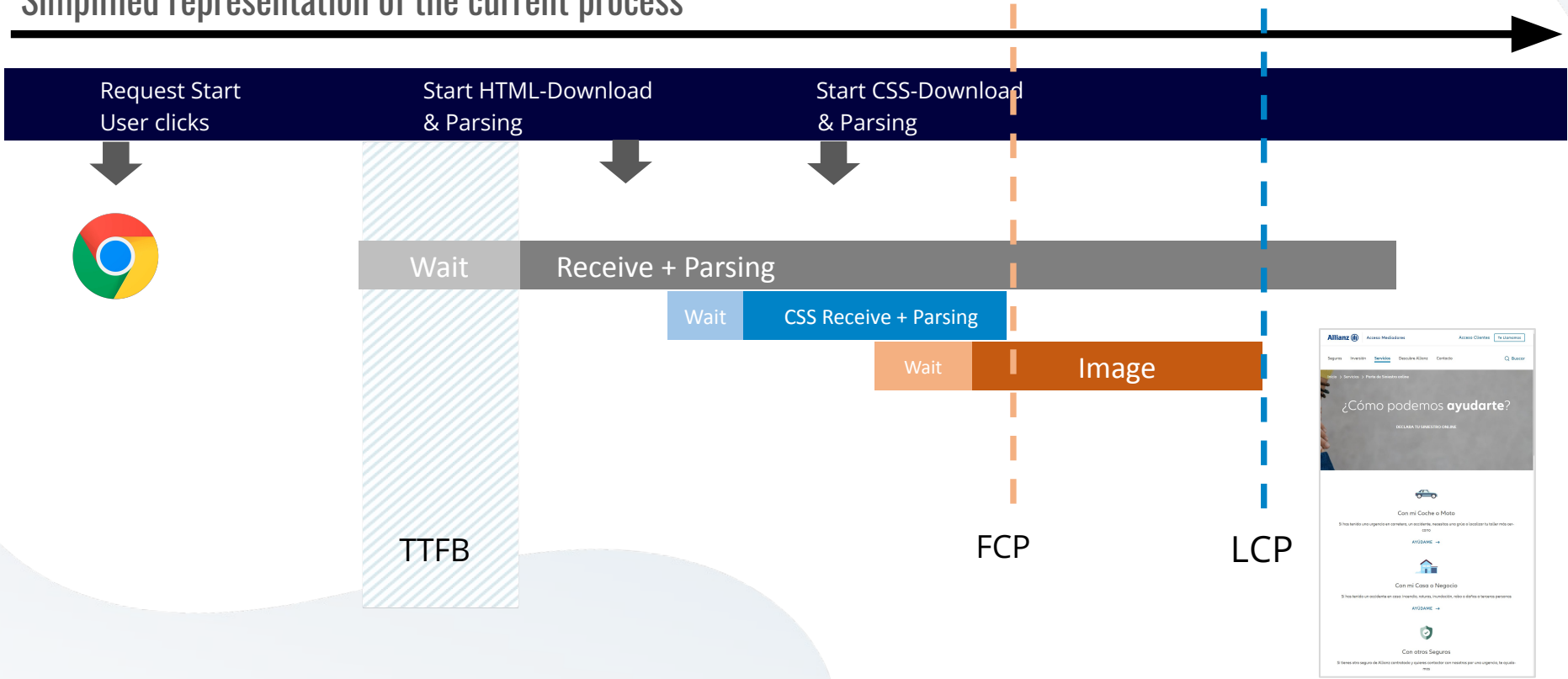
Applications



Pages with: Stage-Image

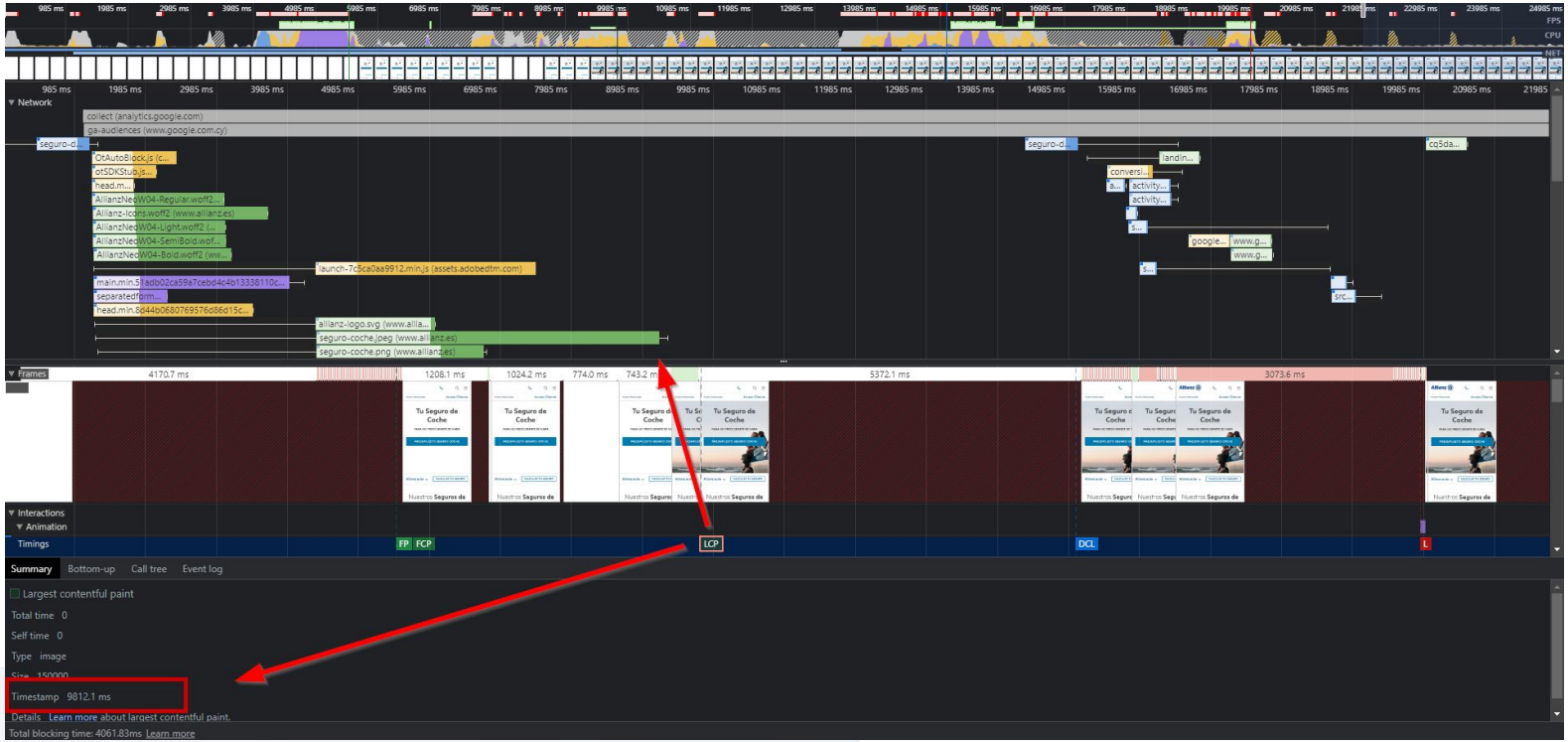
Pages with: Stage-Image

Simplified representation of the current process



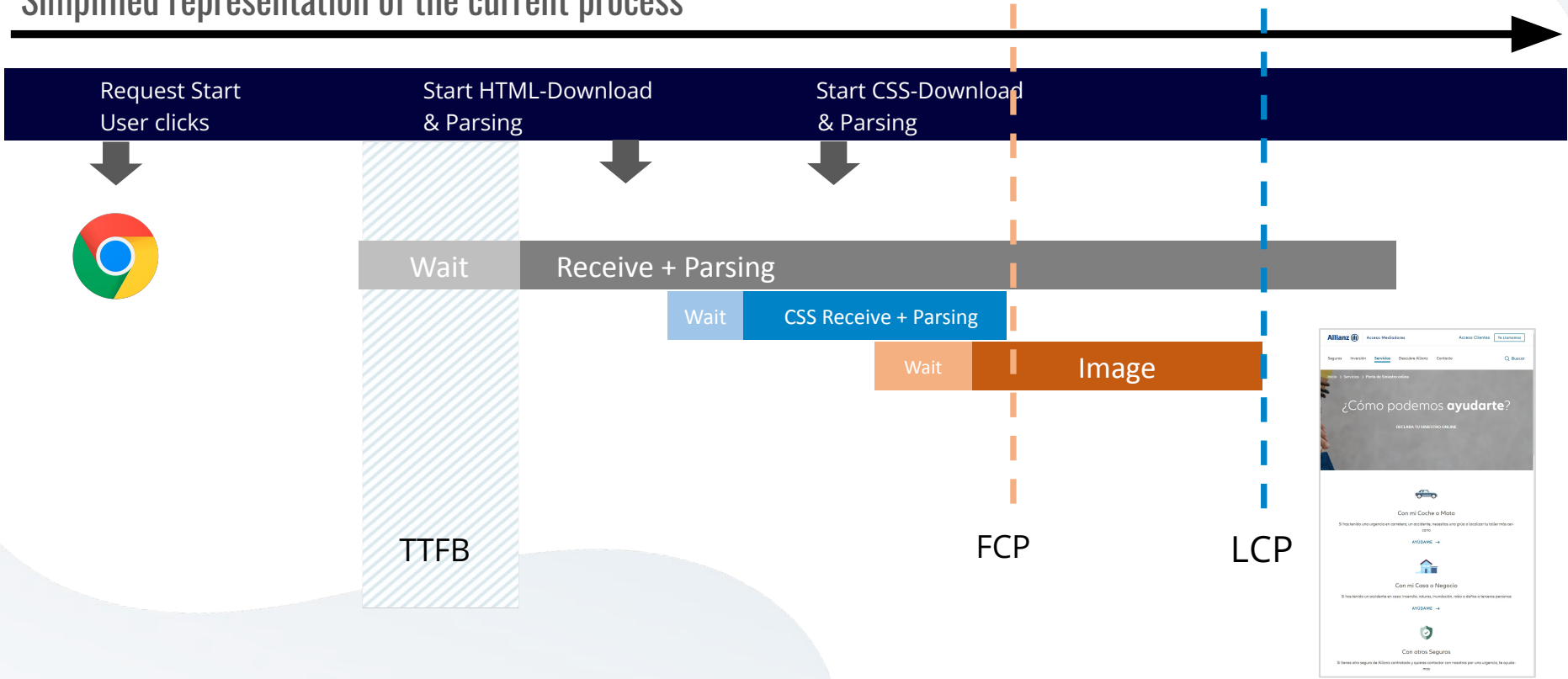
Pages with: Stage-Image

Current status in Chrome browser – LCP fires after image has loaded



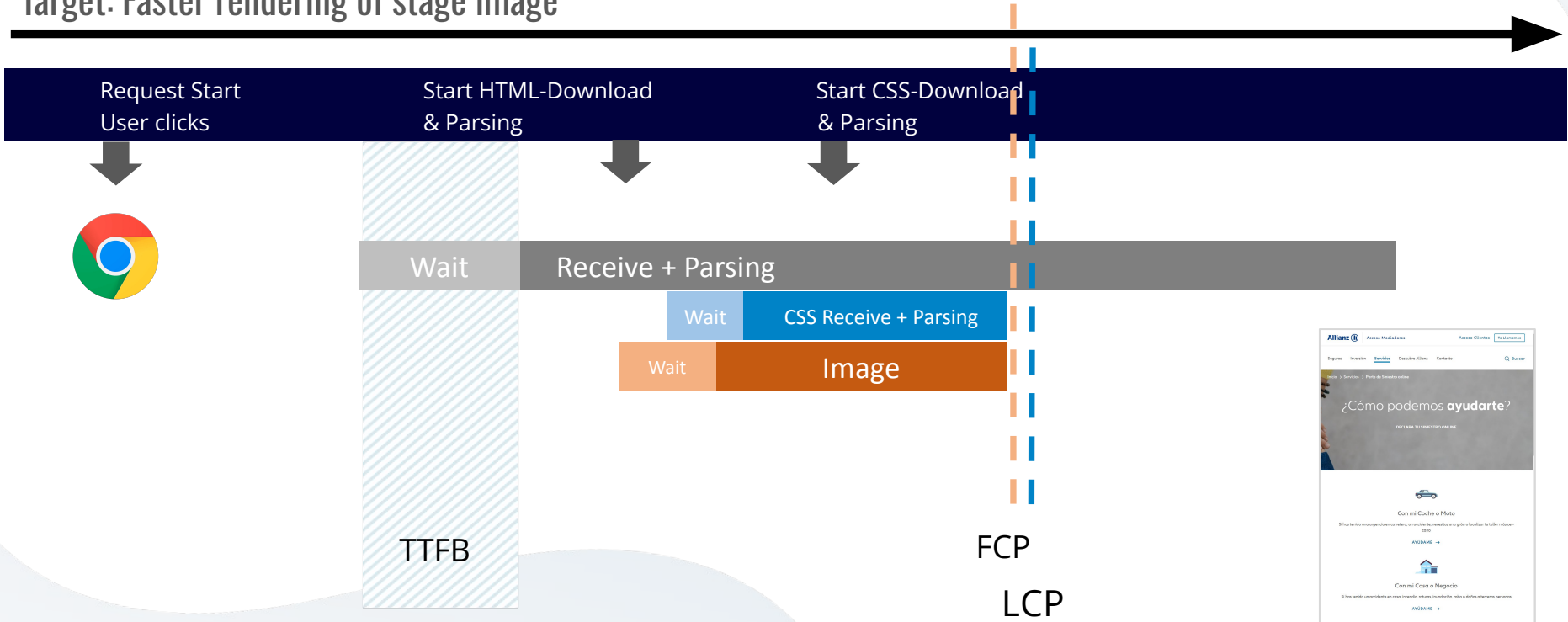
Pages with: Stage-Image

Simplified representation of the current process



Pages with: Stage-Image

Target: Faster rendering of stage image



A look at the source code of Allianz.de

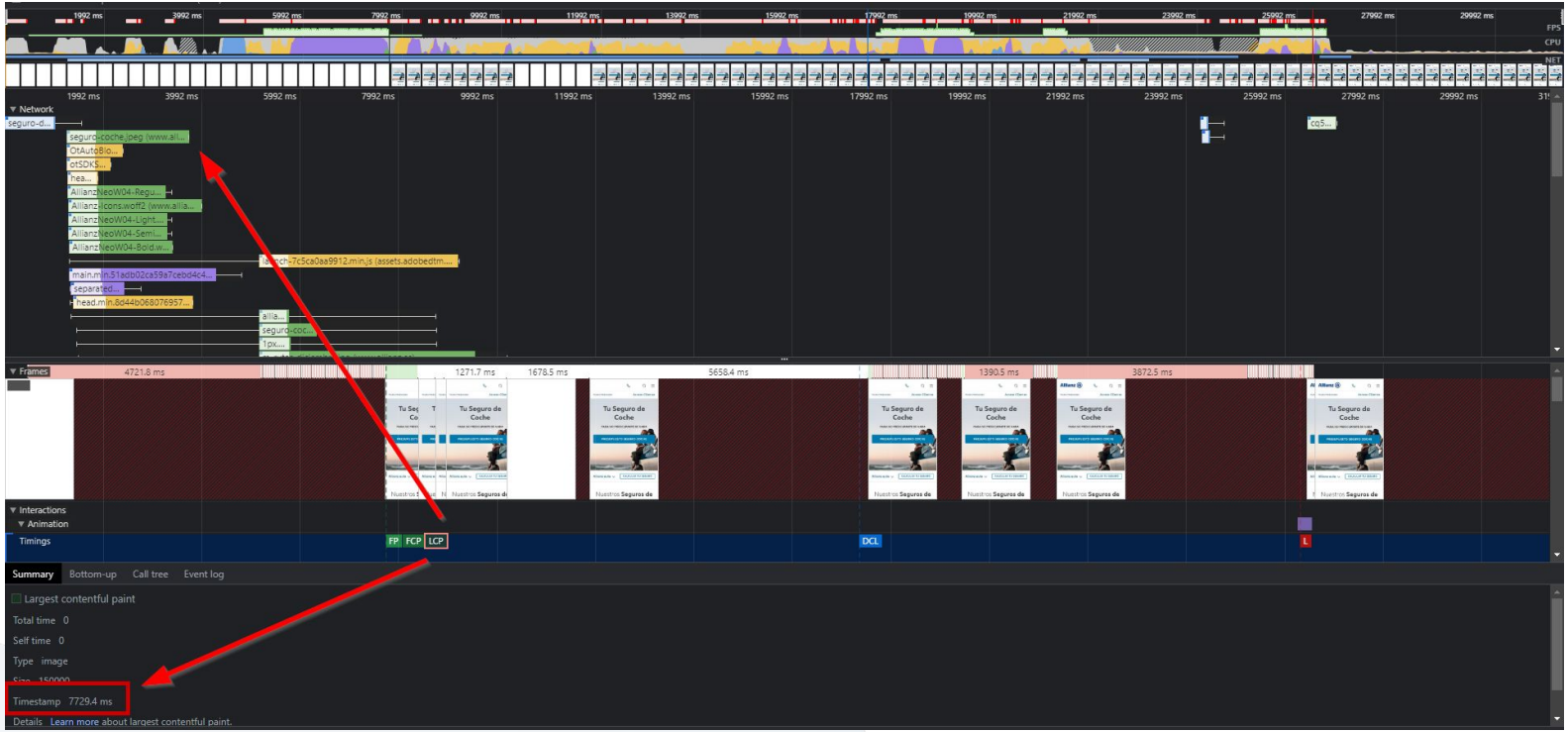
```
<link rel="preload" as="image" href="/content/onemarketing/azde/azd/de_DE/_jcr_content/root/stage/...1638795729353/paar-winter-schnee-spaziergang.jpeg"
  imagesrcset="https://www.allianz.de/_jcr_content/root/stage/stageimage/mobile.img.60.320.jpeg/1638795729353/paar-winter-schnee-spaziergang.jpeg 320w,
  (...)
  https://www.allianz.de/_jcr_content/root/stage/stageimage/mobile.img.60.3360.jpeg/1638795729353/paar-winter-schnee-spaziergang.jpeg 3360w"
  imagesizes="100vw" media="(max-width: 767px)">

<link rel="preload" as="image" href="https://www.allianz.de/_jcr_content/root/stage/...1638795655874/paar-winter-schnee-spaziergang.jpeg"
  imagesrcset="https://www.allianz.de/_jcr_content/root/stage/stageimage.img.60.320.jpeg/1638795655874/paar-winter-schnee-spaziergang.jpeg 320w,
  (...)
  https://www.allianz.de/_jcr_content/root/stage/stageimage.img.60.3360.jpeg/1638795655874/paar-winter-schnee-spaziergang.jpeg 3360w"
  imagesizes="100vw" media="(min-width: 768px)">
```

- There is the option to enrich a rel=preload with „imagesrcset“ and „imagesizes“ to preload responsive images: https://web.dev/preload-responsive-images/
- Using two of them in combination with „media“ you can handle the current picture-tag and srcset-scenario

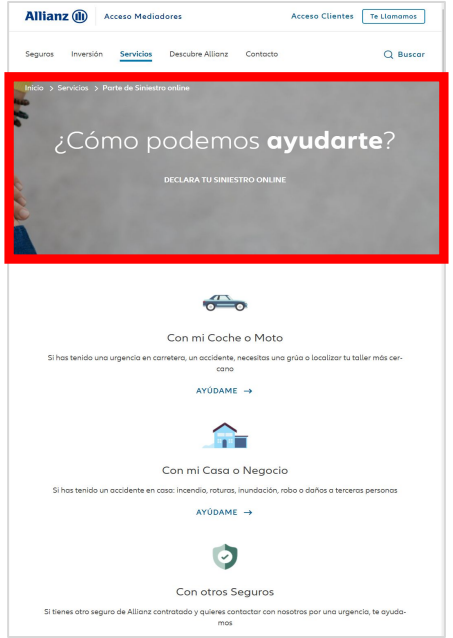
Pages with: Stage-Image

Implementation via local overrides - LCP improved by 2 seconds by introducing preload



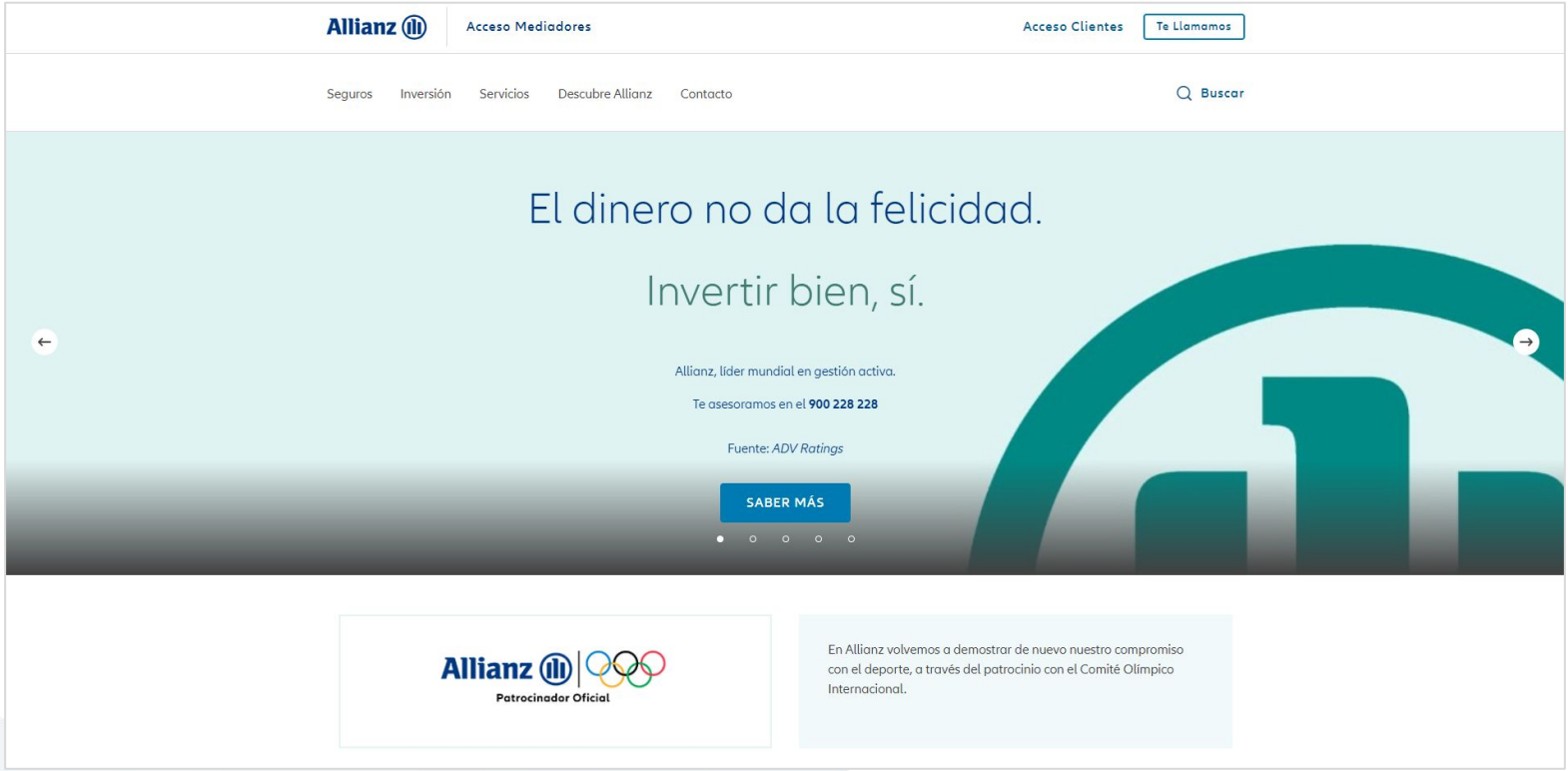
Outcome No. 3 – Loading Order & Preload

- The loading order is currently not perfect.
  The stage-image is triggered by the img-tag in the html.
  But until the parser arrives there, it has to download and execute i.e. synchronous scripts above. The download of the image can be done before.
- Affects: Stage-Image-Pages
- Triggers: LCP
- Impact: Very High



All necessary steps are already done. AZD created already an investigation to figure out the perfect interaction between the picture-tag and srcset-attributes. Contribution is already created.

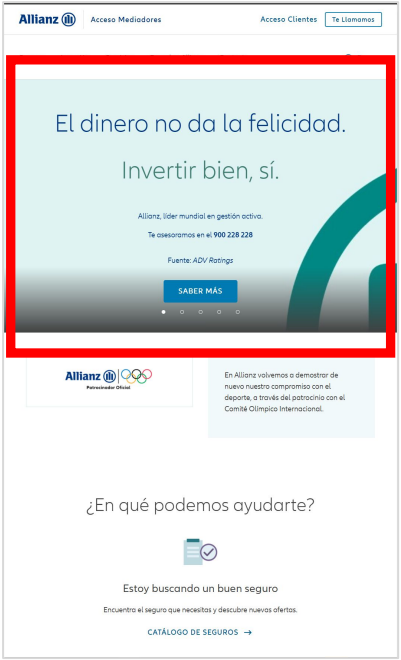
Pages with: Carousel



Pages with: Carousel

```
/1632308582487/allianz-protocolo-emergencia-lapalma.jp
onent-id="root/parsys/stage_carousel_copy/stage-carous
 class="c-image__img c-image--lazy c-image--loaded">
```

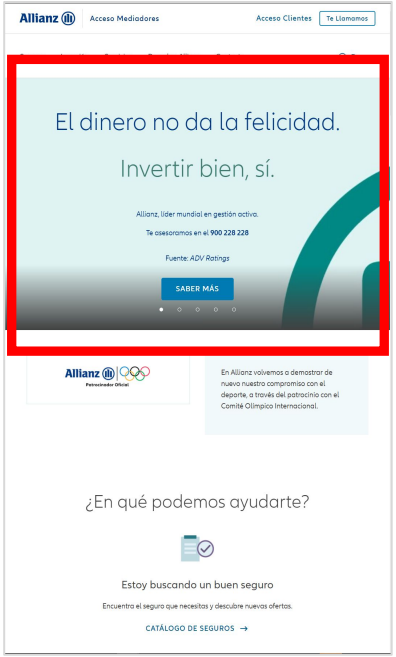
Name	P...	Status	Protocol	Domain	Initiator
allianz-soluciones-inversion2.jpeg /_jcr_content/root/parsys/stage_carousel_copy/stage-carous...	/...	200	h2	www.allia...	main.min.554071c....js:93821 Script



- Carousel-Images are currently loaded lazy. Images **above the fold** shouldn´t be loaded via LazyLoading in general. Above the fold, LazyLoading leads to a latency because JS has to be executed before.
- Switching off LazyLoading should improve loading but for further improvement, a combination with preload of the first image would be better.

Outcome No. 4 – LL & Preload of Carousels

- Carousel-Images are currently loaded lazy. Images **above the fold** shouldn't be loaded via LazyLoading in general.
  Above the fold, LazyLoading leads to a latency because JS has to be executed before.
- Affects: Pages with carousels on top
- Triggers: LCP
- Impact: Low (we could find the carousel just on one page – but the homepage)



It must be clarified how many of the other OEs are using the carousel. Afterwards we can discuss with AZTech if LazyLoading can be switched off here and if this leads to loading by img-tag. Furthermore, we must discuss the preloading of the first image.

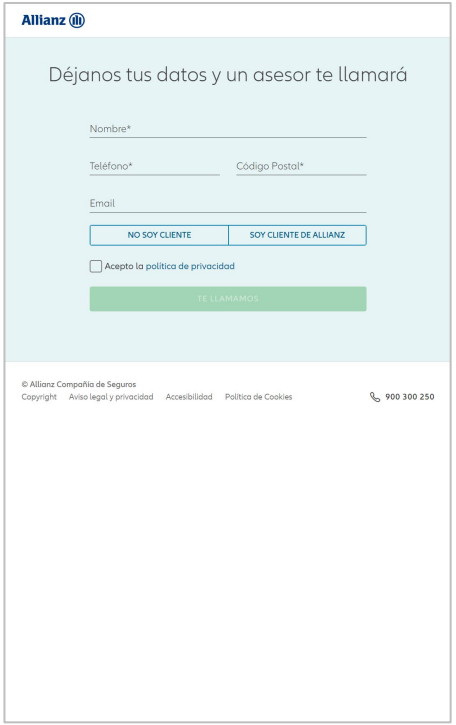
Pages: without a stage-image & Applications

During the analysis, we found another special circumstance, which affects most of the pages without stage-images.

LCP is triggered by the **largest** element. But in case of not having big stage-images, the cookie-banner is that element.

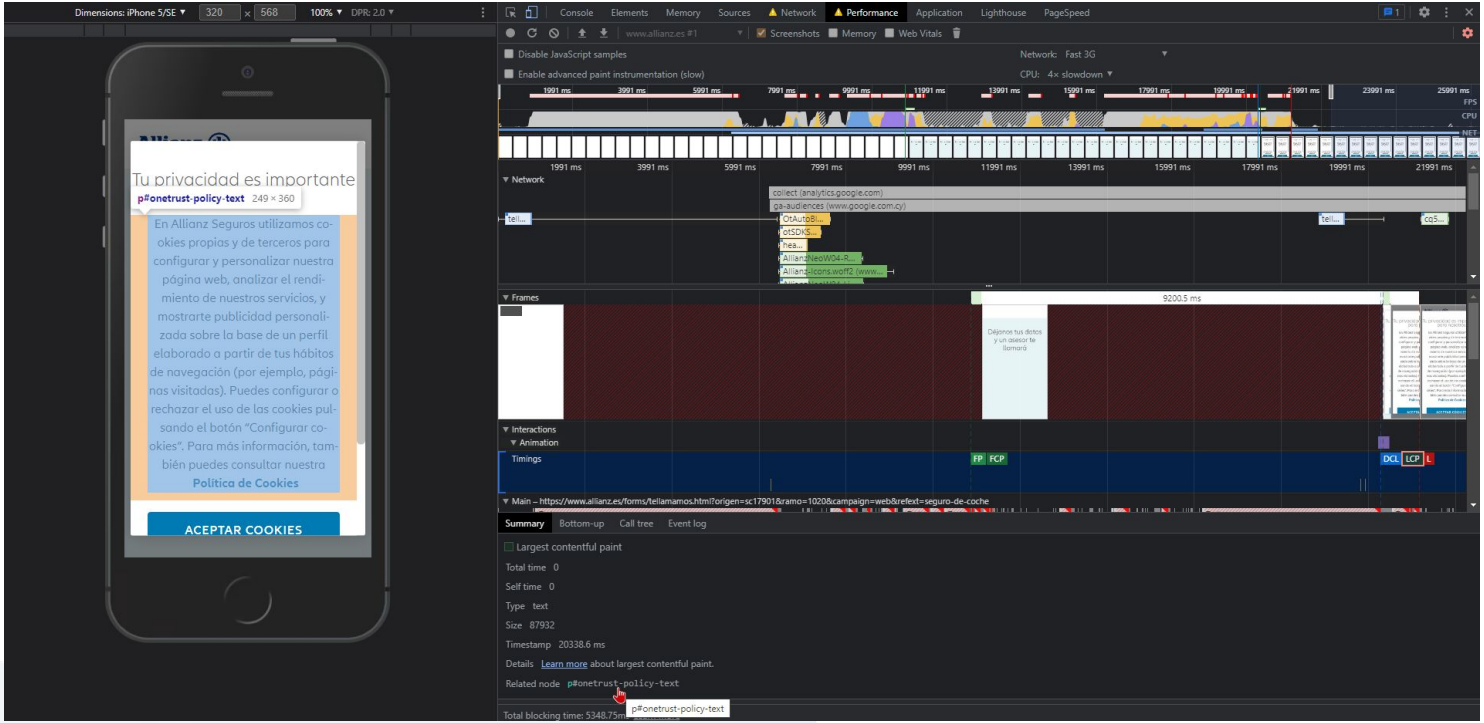
The cookie banner appears very late (after DOM ready) and this leads to a very delayed LCP-signal.

This phenomenon can usually only be found on mobile devices, since the cookie banner takes up more space in relative terms.



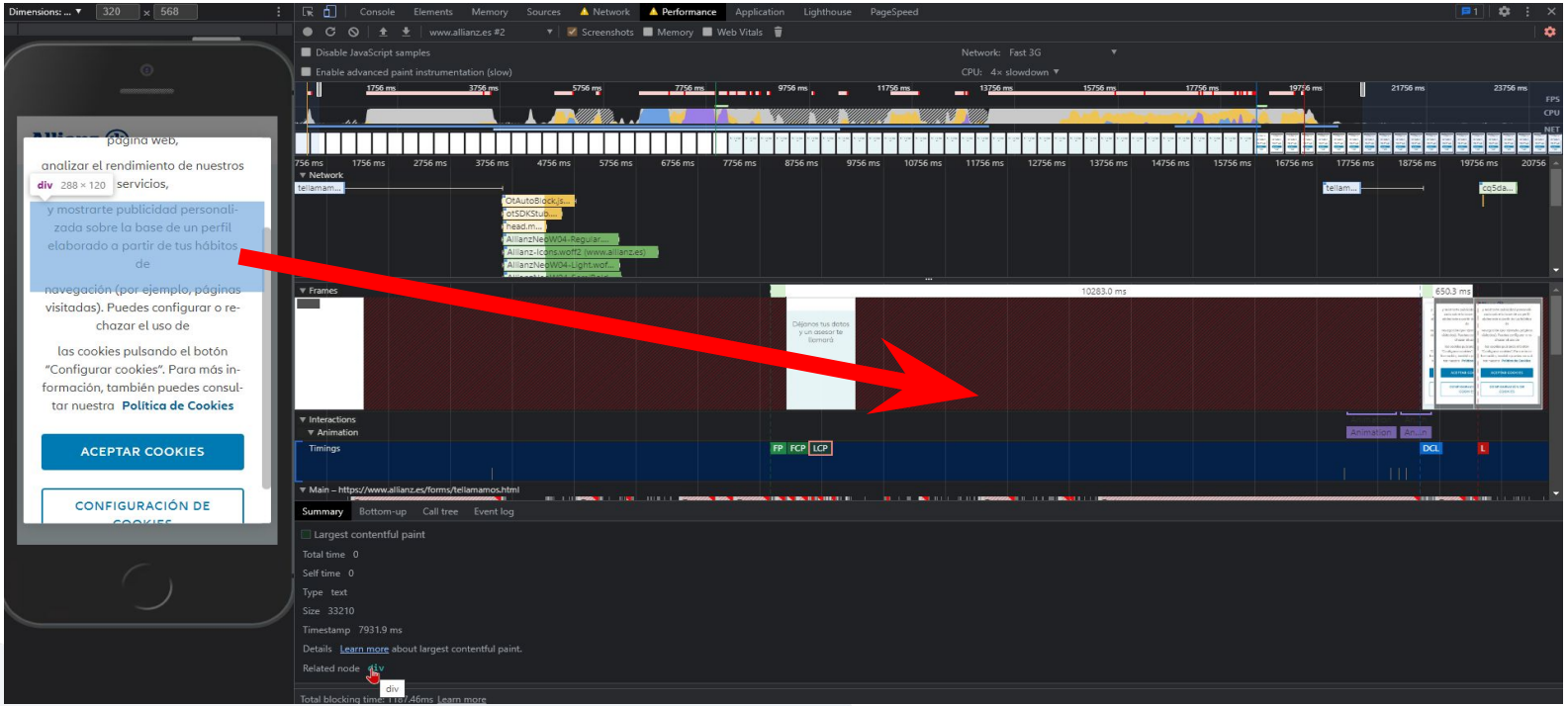
Pages: without a stage-image & Applications

Chrome shows the delayed firing of LCP due to Onetrust cookie banner.



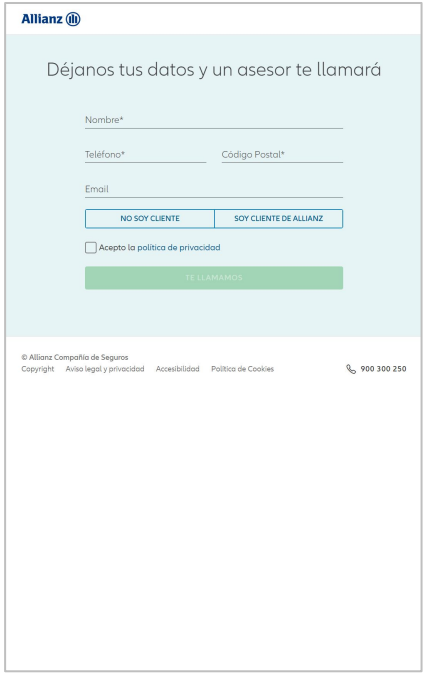
Pages: without a stage-image & Applications

Implementation of „divided“ p-tags: Cookie banner does not trigger LCP anymore.



Outcome No. 5 – p-tags at Onetrust banner

- Currently, on pages without big stage images, the Onetrust banner triggers the LCP-event.
- This can be prevented either by adding big headlines or images above the fold. But this means a lot of editorial work.
- Another way is to adjusting the cookie banner.
- In the analysis we did a local test and implemented a cookie-banner with 4 p-tags instead of one. We also tried to style the new banner in a way that there is almost no difference to the current. Both worked great.
- Affects: Probably most of the pages without stage-image
- Triggers: LCP
- Impact: High

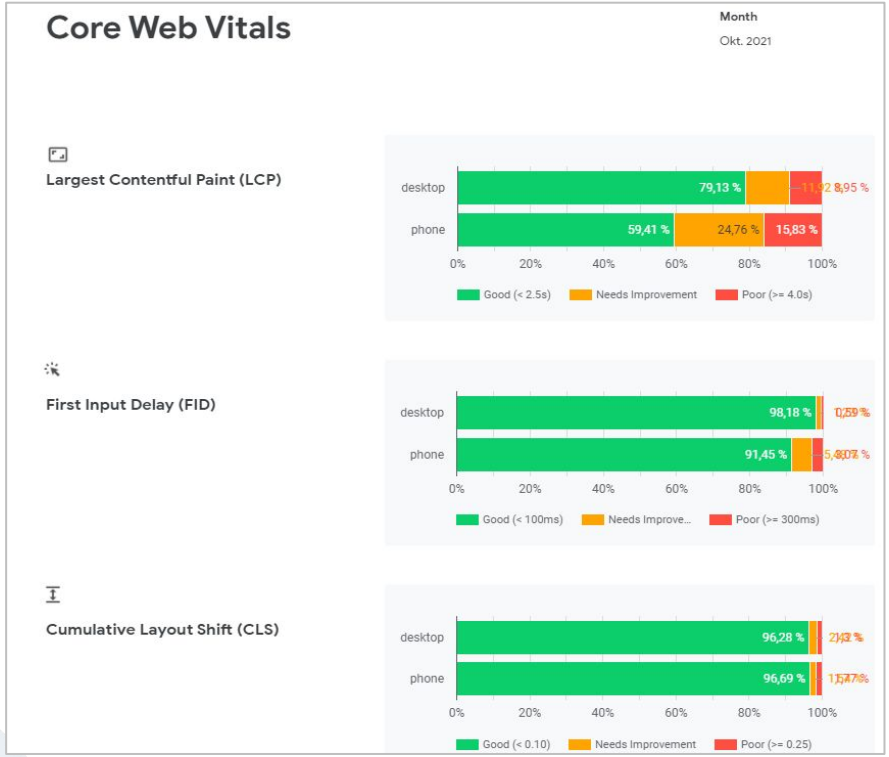


Split the current p-tag in onetrust cookie-banner in 4 p-tags. Style it in a way, that there is as less difference as possible to the current cookie-banner.

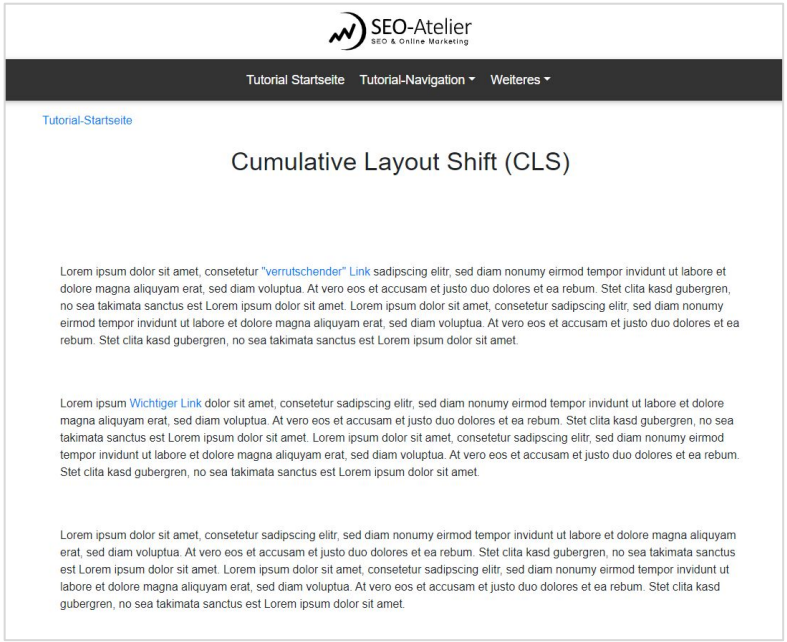
All done?

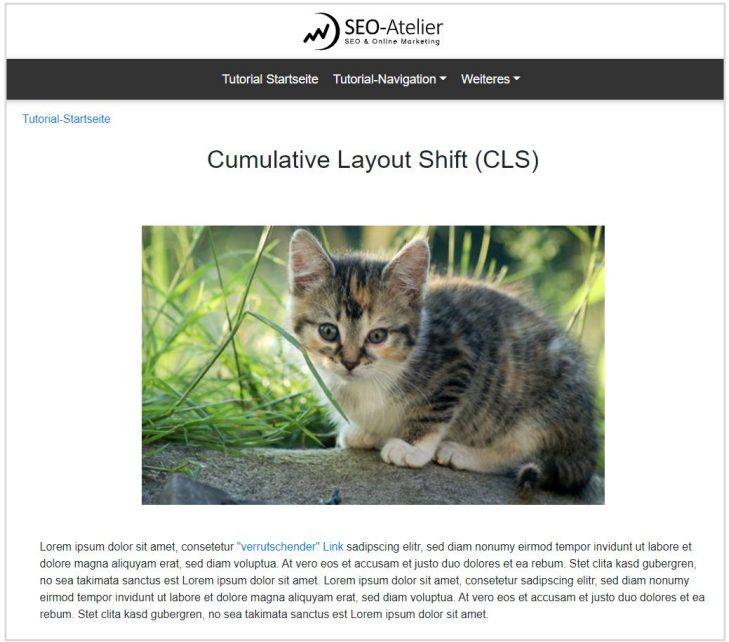
We strongly believe that you will pass the Core WebVitals with these implementations.

But hold on... What about that CLS?



What is this?



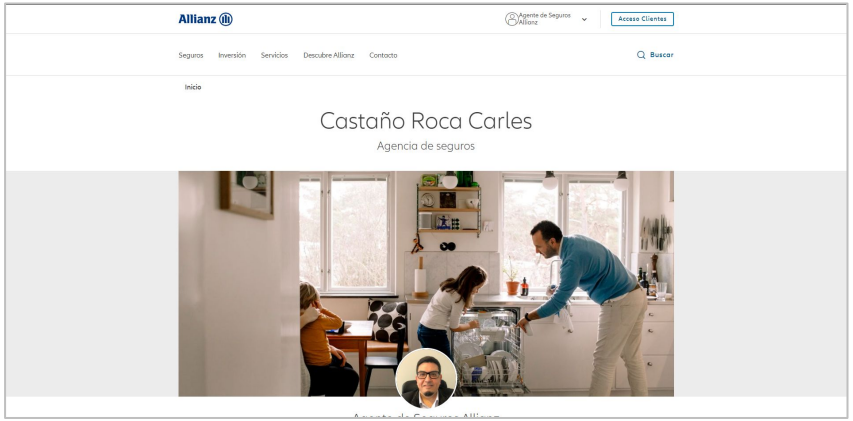


https://tutorial.seo-atelier.com/beispiele/cls/

"Cumulative Layout Shift (CLS) is an important, user-centric metric for measuring visual stability because it helps quantify how often users experience unexpected layout shifts—a low CLS helps ensure that the page is delightful." *https://web.dev/cls/*

CLS problem we found

Even if **currently** not represented in the data…



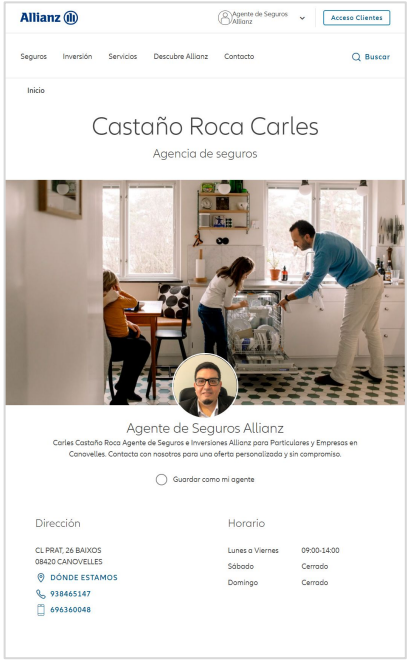
https://www.allianz.es/agencia/joseayerza.html

- CLS is triggered by the stage-image of agencies
- All agency-pages are affected

Outcome No. 6 – Agency CLS-Fix

- Currently, the agency-pages causing a shift. The stage-image size is not styles via css. So, the image itself is responsible for the sizing on the screen. But images are loaded much later than CSS.. The render process starts after CSS (and JS) but before images. This leads to this shift.

- Affects: Agency-pages
- Triggers: CLS
- Impact: High

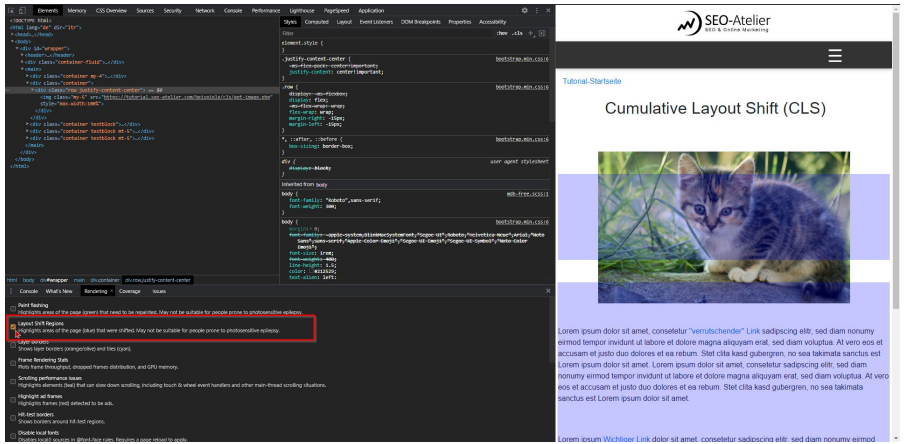


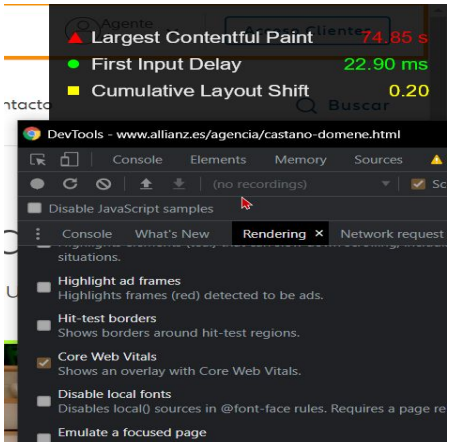
Stage images from agency-pages must be sized via CSS. Add style-rules to fix that problem. Consider using the CSS aspect-ratio-property.

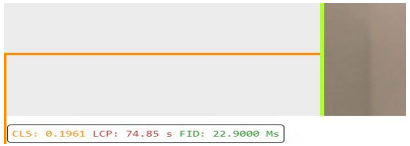
How to find CLS by yourself

There are some Chrome built in functions to find these shifts. But there is also a very nice extension, we recommend to use:

https://chrome.google.com/webstore/detail/adeniimnihmbpgpbljmnohjpoolmgabj

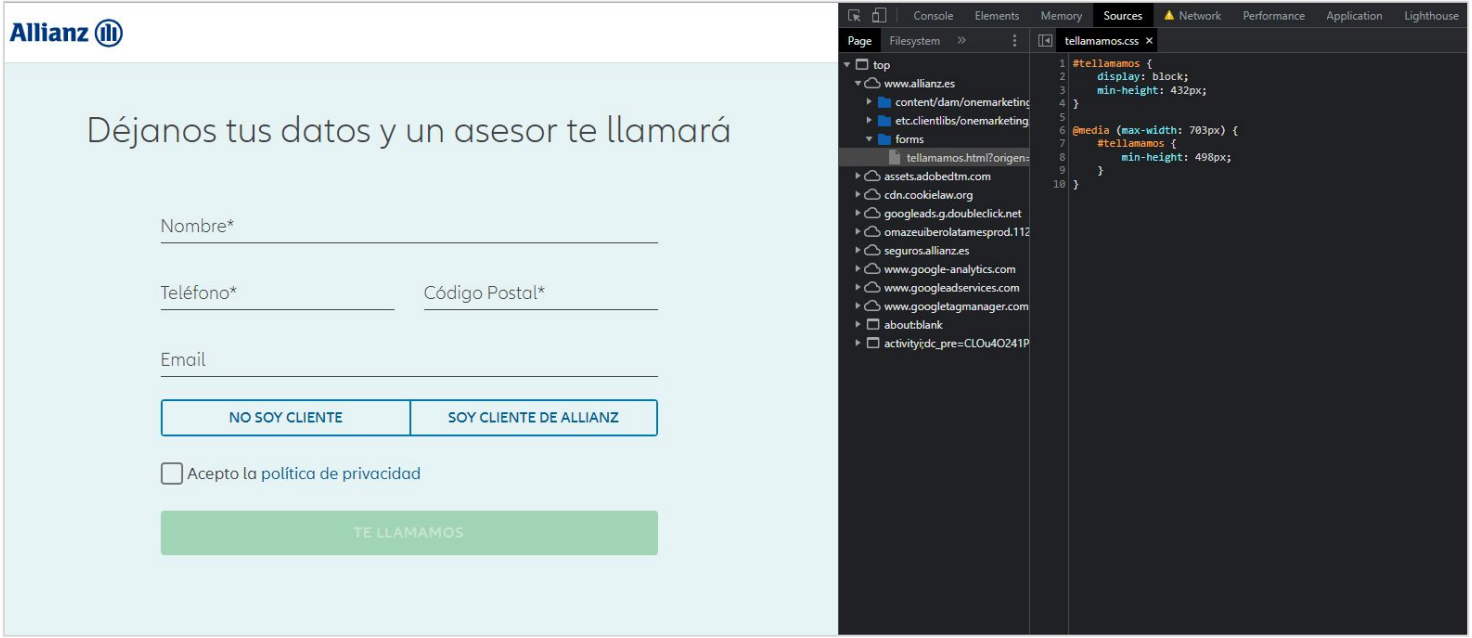






Pay attention: Layout shift can not only appear during the loading process – also while using the page! AZD inpage navigation is a good example for this.

By the way – you did a great job!



Typically, SPAs and Iframes are prone for shifts:

- For this reason, external CSS styles can be integrated at the SPAs component.
- For iframes there is a solution in "Sizes" tab. Here you can add media-queries

Digital Loop

SEO FINDINGS

Further SEO findings during the Analysis

Nofollow

- It is not recommended to use „nofollow“ for internal links at all.
- Also if you want to prevent a page from indexing via noindex, you should not use „nofollow. „noindex, follow“ is totally fine.
- Here you find a list of all pages with „nofollow“:

Address	Meta Robots
https://www.allianz.es/informacion-legal/documentos-legales.html	noindex, nofollow
https://www.allianz.es/centro-respuesta-rapida/otros-servicios/allianzuniverse2.html	noindex, nofollow
https://www.allianz.es/centro-respuesta-rapida/ventajas.html	noindex, nofollow
https://www.allianz.es/dejanos-apoyarte.html	noindex, nofollow
https://www.allianz.es/centro-respuesta-rapida/utilidades/talleres/talleres-ford.html	index, nofollow
https://www.allianz.es/descubre-allianz/patrocinios-allianz/junior-camps/allianz-junior-motor-camp---allianz--seguros.html	noindex, nofollow
https://www.allianz.es/descubre-allianz/mediadores/diccionario-de-seguros/s/que-es-un-siniestro.html	noindex, nofollow
https://www.allianz.es/contacto/contacto.html	noindex, nofollow
https://www.allianz.es/descubre-allianz/mediadores/diccionario-de-seguros/b/que-es-el-banco-central.html	noindex, nofollow
https://www.allianz.es/seguros/futuro/seguros-jubilacion.html	noindex, nofollow

Remove the “nofollow” directive from the pages above.

Canonical

- If a page is on noindex, you should not use canonicals, which points to another URL. In some cases negative signals can be transferred to the target of the canonical.
- Either a page is on noindex or canonized.
- Here, you can find a example:

https://www.allianz.es/forms/tellamamos.html?origen=sc17901&ramo=1020&campaign=web&refext=seguro-de-coche

Remove the canonical from the page above. In general, you should use a canonical or a noindex-directive.

robots.txt

- You should adjust your robots.txt-file.
- Currently 258 Pages are blocked by robots.txt but there is no reason for that.
- With robots.txt you prevent the page from crawling. But crawling is not indexing. This leads to the point, that search engine cannot read the noindex on the page – because they are not allowed to crawl the page.
- The result is an indexation not despite but because a blocking by robots.txt
- Furthermore, there is an old solution for prevent indexation of XFs. This can be removed also, because the files are sending a “noindex” meanwhile.

```
User-agent: *
Allow: /

### Blog automatic results pages
Disallow: /blog/consejos.result.html
Disallow: /blog/faqs.result.html
Disallow: /blog/coberturas.result.html
Disallow: /blog/motor.result.html
Disallow: /blog/ahorro.result.html
Disallow: /blog/ocio.result.html
Disallow: /blog/empresas.result.html
Disallow: /blog/blog-seguros-hogar.result.html

### Landings&Forms
Disallow: /seguros/landing/
Disallow: /forms/

### XF
Disallow: /content/experience-fragments/
Allow: /content/experience-fragments/*.jpg
Allow: /content/experience-fragments/*.jpeg
Allow: /content/experience-fragments/*.png
Allow: /content/experience-fragments/*.gif

Disallow: /*.pdf

Sitemap: https://www.allianz.es/sitemap.xml
```

Adjust you **robots.txt** as you can see above.

Sitemap.xml

- You sitemap should only point urls which are
  - responding statuscode 200
  - on index
  - not having a canonical to another page
- There are a lot of URLs in your sitemap wich are redirected.
- If you just redirect a page – without unpublishing – you will have a lot of redirects in your sitemap.

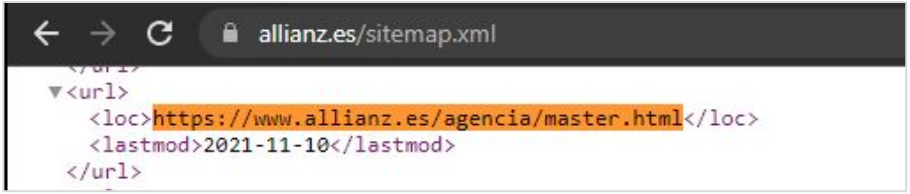
These URLs are causing Redirects:

- https://www.allianz.es/blog/consejos/hogar-sostenible.html
- https://www.allianz.es/blog/coberturas/para-que-seguro-vida.html
- https://www.allianz.es/centro-respuesta-rapida/otros-servicios/tusallia2.html
- https://www.allianz.es/covid-19/faqs-coronavirus/prueba-coronavirus-poliza.html
- https://www.allianz.es/blog/ahorro/perfil-inversor.html
- https://www.allianz.es/blog/consejos/vuelta-al-trabajo-con-seguridad.html
- https://www.allianz.es/blog/motor/triangulos-o-luces-de-emergencia.html
- https://www.allianz.es/blog/faqs/faqs-seguro-vida.html
- https://www.allianz.es/covid-19/faqs-coronavirus/afectacion-cierre-itv.html
- https://www.allianz.es/blog/coberturas/mejor-seguro-vida.html
- https://www.allianz.es/blog/faqs/edad-seguro-vida.html
- https://www.allianz.es/blog/motor/como-limpiar-filtro-moto.html
- https://www.allianz.es/descubre-allianz/sala-pensa.html
- https://www.allianz.es/descubre-allianz/mediadores/diccionario-de-seguros/v/vao-carril.html

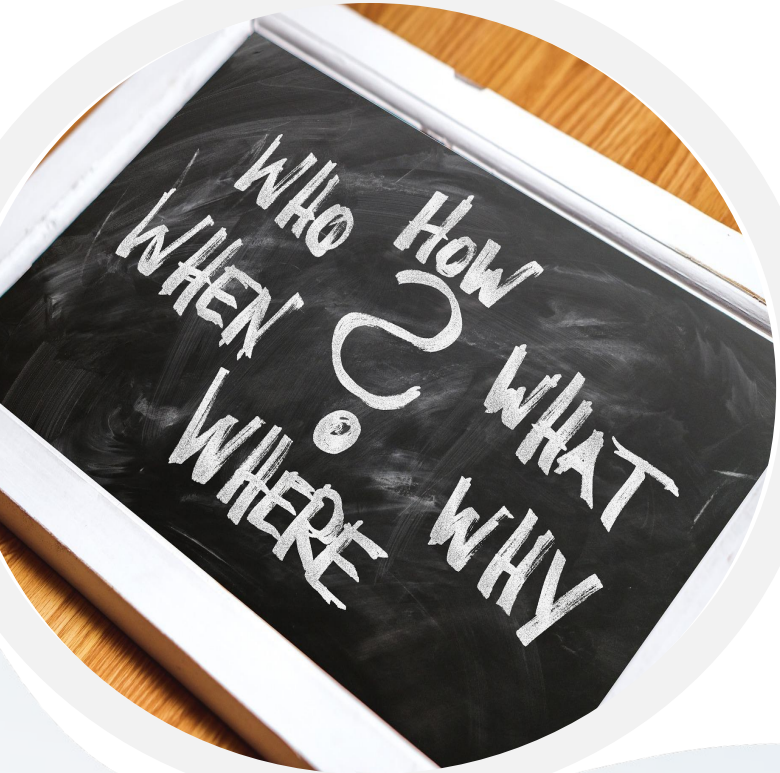
You should **unpublish the URLs** you can find above.

Further Points

- On the pages with forms, the logo link does not work. It points to #. We understand the reason why there is no navigation on these pages. But the link to the logo should still work.
- There is a link in the sitemap, which is resulting in a server-error 500. This link must be excluded. Nevertheless there shouldn't be a possibility to enforce a server error 500. So that behavior should be fixed.



- We would suggest du deactivate the HTML-Sitemap. Many people suggest this, but it actually makes the prioritization of internal linking more difficult and it is also not state of the art. Also orphan pages are more difficult to find by crawl.
    - https://www.allianz.es/mapa-web.html



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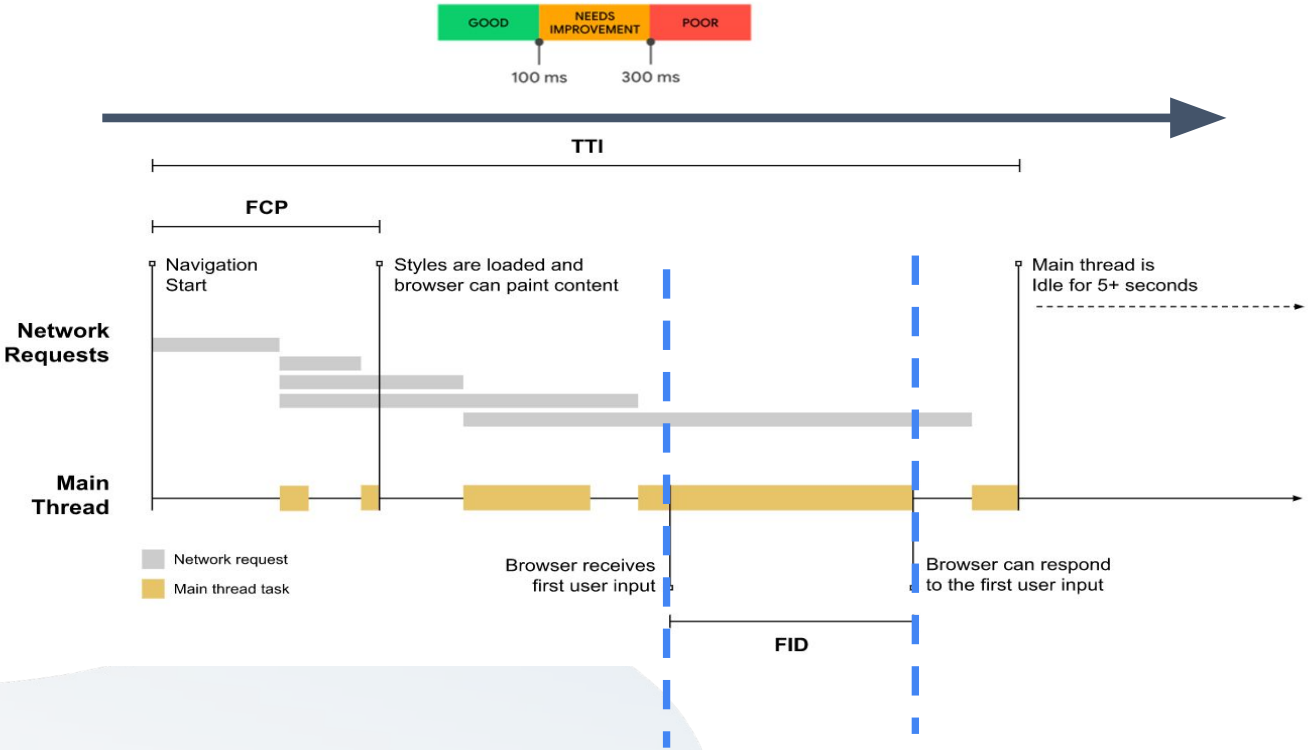
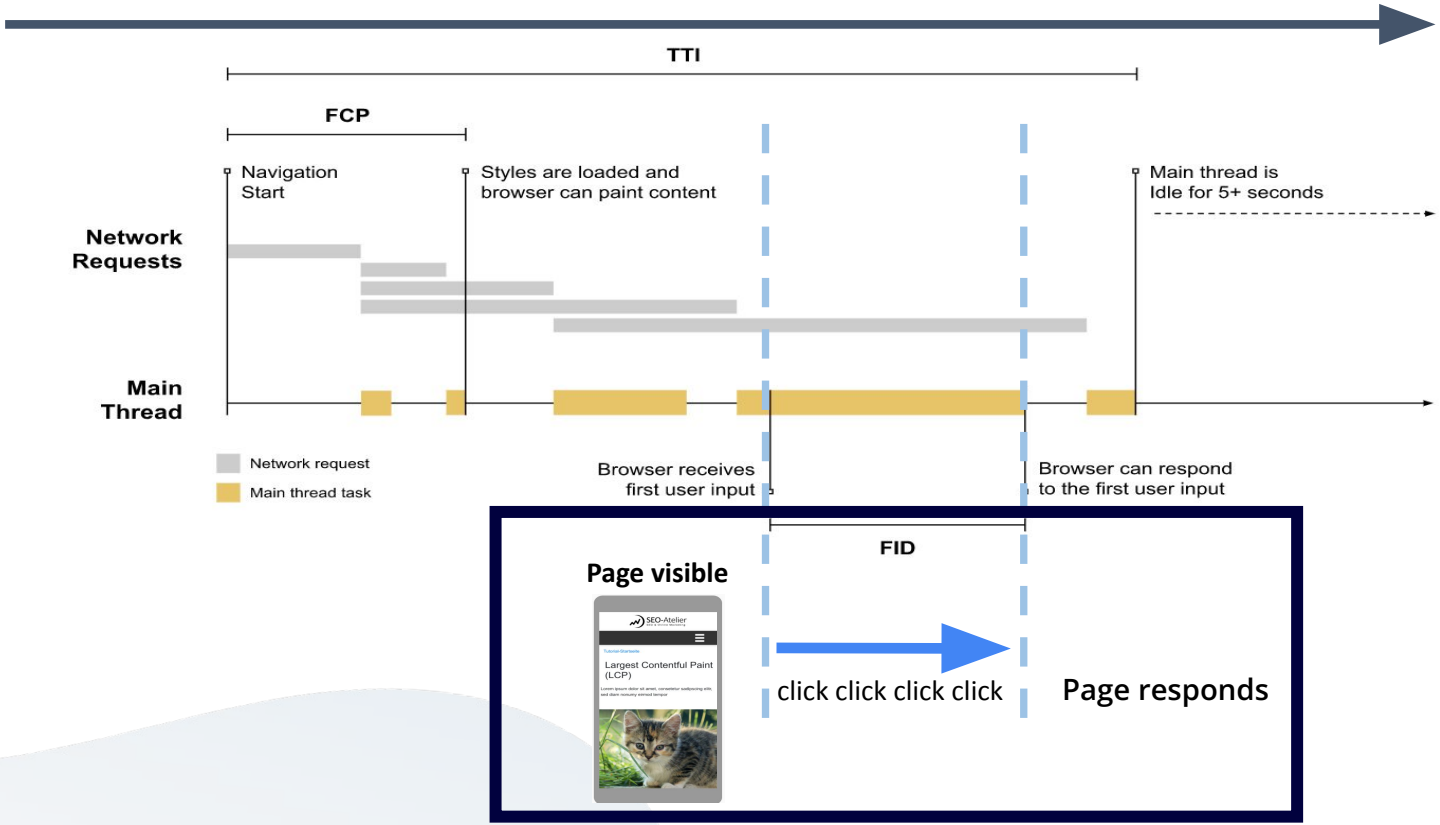
Q&A

FID

First Input Delay



FID

First Input Delay