Open Web Docs Impact and Transparency Report 2021

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Executive Summary

After 12 months of existence, Open Web Docs is a collective of 9 organizations and employs 4 full-time Senior Technical Writers who have extensive experience with Web standards documentation and MDN Web Docs.

The collective received \$790,000 in donations from organizations and 130 people backed or donated to Open Web Docs individually.

Open Web Docs' main focus has been contributions to MDN Web Docs, the premier platform for Web platform documentation. It is estimated that it has about 18 million monthly users and therefore OWD contributions reach the vast majority of web developers.

In September 2021, OWD staff were responsible for nearly half of the commits and more than half of the reviews to the mdn/content GitHub repository.

Open Web Docs, working with a growing set of organizations getting involved in supporting MDN Web Docs, has established a quarterly prioritization process to work on key infrastructure and content work. Projects in 2021 included: Migrating MDN content to Markdown, Collaborating with the W3C to integrate specification data into browser compatibility data (BCD) and MDN, co-leadership for the BCD project, improvements to the information architecture of API docs, making API docs more beginner friendly, and documenting WebXR.

Outset

In October 2020, Open Web Docs was created by Coil, Google, Microsoft, Samsung, the W3C, Jory Burson, and Florian Scholz, followed by the public launch on January 25, 2021. Created to ensure the long-term health of web platform documentation on critical resources like MDN Web Docs, independently of any single vendor or organization. Through full-time staff, community management, and a network of partner organizations, Open Web Docs enables these resources to better maintain and sustain documentation of core web platform technologies. Rather than create new documentation sites, Open Web Docs is committed to improving existing platforms through our contributions.

Public launch

On January 25, 2021, Open Web Docs was launched publicly with an overall very positive reaction from the Web community. The <u>launch tweet</u> had 473,760 impressions, and the <u>launch blog post</u> has over 25,000 views. There are now <u>147 contributors on Open Collective</u>, the <u>Twitter account @OpenWebDocs</u> counts 1,915 followers and the project repository has <u>298 stars on GitHub</u>. OWD also spent a long time being the #1 news on Hacker News and the story was picked up on over 20 international press sites.

Organizational growth

In 2021, the following organizations joined the Open Web Docs collective and actively participated in OWD committees.

Initial members:

- Coil
- Google
- Microsoft
- Mozilla
- Samsung Internet
- W3C

Additional members:

- Igalia (starting January 2021)
- Facebook (starting May 2021)
- JetBrains (starting July 2021)

This increases the total number of organizations participating to 9 from the initial 6 organizations. Open Web Docs provided an entry point for these organizations to get involved with Web platform documentation and contributing to MDN Web Docs. The regular exchange of knowledge and expertise has been very beneficial for all parties involved.

Facebook:

"We are honored to support the Open Web Docs initiative as it leads the way in shaping the future of inclusive, extensive and quality web documentation." - <u>Joel Marcey</u>, Staff Developer Advocate, Facebook

Google:

"Accessible, high-quality documentation benefits all web developers, and we're excited to support Open Web Docs and its mission. It's been fantastic to see the progress made in this first year." – Philip Jägenstedt, Staff Software Engineer

Microsoft:

"We are proud to support Open Web Docs to help secure sustainable, browser-agnostic, community-driven web developer documentation." – Kyle Pflug, Principal Group PM Manager, Microsoft Edge

Samsung Internet:

"We're <u>proud to be part</u> of Open Web Docs to help ensure high quality cross-browser documentation for the web." – Dan Appelquist, Head of Developer Advocacy

W3C:

"MDN provides a critical service to Web developers world-wide, and W3C is proud to have helped with getting Open Web Docs in place to provide broader and resilient

community support to this mission, and elated by the progress accomplished in just a few months". – Dominique Hazael-Massieux, W3C

OWD staff team

The Open Web Docs Governing Committee successfully hired four talented Technical Writers & Developer Advocates with prior experience of Web Standards documentation and MDN Web Docs:

- Florian Scholz joined in November 2020.
- Will Bamberg joined in February 2021.
- Jean-Yves Perrier joined in August 2021.
- Estelle Weyl joined in August 2021.

Florian Scholz and Will Bamberg were hired to preserve talent from the former Mozilla MDN Content team. The public and open hiring process for positions 3 and 4 was started in April 2021 and was completed in August 2021, with Jean-Yves Perrier and Estelle Weyl joining the team.

The first guarter with a full workforce will be Q4 2021.

Diversity & Inclusion

Fostering diversity and inclusion in the tech industry is a core value for Open Web Docs. We have put in place a <u>diversity & inclusion policy</u> regarding what events and communities we will participate in and we have signed on to the <u>Diversity Charter</u>. Our intention is that our program of work, including what we put effort into and how we prioritise our activities, will also reflect this core value.

Steering committee

The <u>Open Web Docs Steering Committee</u> consists of two representatives from each participating organization and the OWD staff team. The group holds weekly meetings for which <u>meeting notes are available throughout the year</u>. The OWD Steering Committee operates in the open with <u>vendor neutral prioritization criteria</u> and has an open prioritization process involving all Steering Committee members on a quarterly basis.

OWD brand & public channels

Open Web Docs represents a community of Technical Writers and advocates for the Open Web. In 2021, the focus hasn't been to build a strong succinct brand and voice. OWD amplified and supported projects like MDN Web Docs and the Open Web in general via our growing channels:

- 1,915 Twitter followers https://twitter.com/OpenWebDocs
- 298 GitHub stars https://github.com/openwebdocs/project
- 147 open collect updates subscribers https://opencollective.com/open-web-docs/updates

To keep OWD backers apprised of ongoing work, monthly worklog posts are published (<u>archive</u>). The OWD team also participates as invited guests on podcasts and presents at Web related conferences. The JS Party podcast is an example for this: https://changelog.com/jsparty/165.

Contributions to MDN Web Docs

Open Web Docs' main focus has been contributions to MDN Web Docs, the premier platform for Web platform documentation. It is estimated that it has about 18 million monthly users and therefore OWD contributions reach the vast majority of web developers.

Open Web Docs is also interested in addressing web development pain points as identified by the MDN Web DNA survey and is working with browser vendors and Steering Committee members alike to identify and solve these problems. With web compatibility being the number one web developer pain point, a focus has been to contribute to mdn/browser-compat-data ("BCD") in particular (a sub-project of MDN Web Docs).

Daniel Beck, MDN Web Docs Content Lead at Mozilla:

"OWD is an important partner in the day-to-day operational success of MDN Web Docs as an open source documentation project. Without OWD's contributions, a range of efforts, from Markdown conversion to routine pull request reviews, would be slowed or delayed. OWD's participation means that MDN is a richer, more dynamic project that it would be otherwise.

Above and beyond that, OWD, through its working relationship with MDN and the collegial atmosphere of the OWD steering committee, brings together a range of perspectives on the web as a developer platform. The community, effort, and documentation shared between MDN and OWD give form to Mozilla's mission "to ensure the Internet is a global public resource, open and accessible to all."

Day-to-day work

On a daily basis, the Open Web Docs staff team contributes to the open source repositories of the MDN Web Docs GitHub organization. The contributions can come in many forms (creating pull requests, filing issues, reviewing pull requests, participating in discussions, triaging issues) on a handful of repositories that are foundational to MDN Web Docs.

In this document, two categories of contributions are presented in more detail: Commits to mdn/content and reviews of pull requests on mdn/content.

Commits to mdn/content

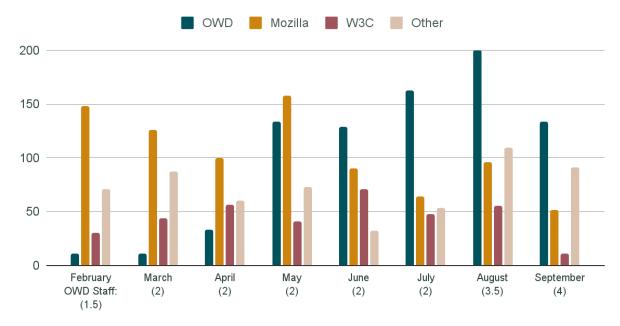
The following chart summarises, for each month from February to September, the number of commits to mdn/content made by every individual who made more than 10 commits in that month¹. It assigns each individual to one of four groups:

- OWD staff
- Mozilla staff
- W3C staff
- Other (volunteers and people paid by other organizations to work on MDN)

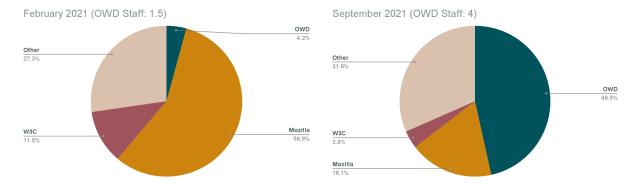
It then sums the commits made by members of group to get an idea of that group's contributions to mdn/content, as measured by number of commits:

	February	March	April	May	June	July	August	September
OWD	11	11	33	134	129	163	200	134
Mozilla	148	126	100	158	90	64	96	52
W3C	30	44	56	41	71	48	55	11
Other	71	87	60	73	32	54	110	91





¹ Note that MDN's policy is to squash commits, so usually 1 commit === 1 PR



Mozilla's lower activity is due to a change of staff, with a position that took several months to backfill; in parallel, Open Web Docs was building its workforce, compensating for it, illustrating the resilience that OWD aims to provide to the ecosystem.

Pull request reviews & supporting MDN's move to GitHub

Until 2020, MDN was a Wiki which anyone could edit without any review. This made it very hard to maintain the quality of the documentation, but also meant external contributions were not blocked by getting reviews from maintainers.

In 2020, MDN content <u>moved</u> into the <u>mdn/content</u> GitHub repo, meaning that all contributions would be in the form of pull requests needing manual review before merging. One of the main concerns around this was: would the PR review workload be sustainable for MDN's maintainers?

To keep MDN open and enable community contributions it's essential to be responsive to pull requests, so reviewing and merging pull requests became a critical part of OWD's work, and a careful review of these pull requests is essential to preserving MDN's quality.

Almost a year in from the GitHub move we can say that MDN has successfully and sustainably managed the PR review backlog.

- The number of PRs open at any given time has fluctuated between about 40-70 over the course of the year, and is currently at 54.
- In the last month (August 22, 2021 September 22) 601 PRs were merged from 161 contributors: an average of about 20/day (by comparison, this is more than twice as many as the Microsoft Azure docs).
- This means MDN's PR backlog represents less than three days' worth of pull requests.

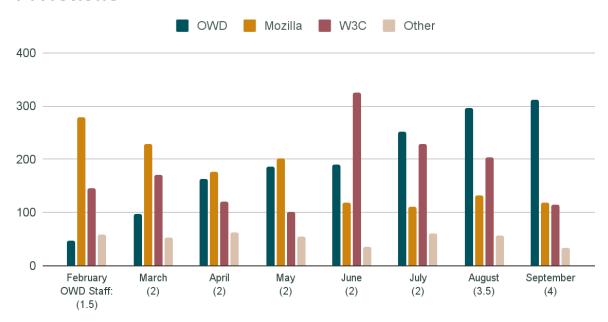
How much has OWD contributed to this? The mdn/content PR review team can be seen as comprising four groups:

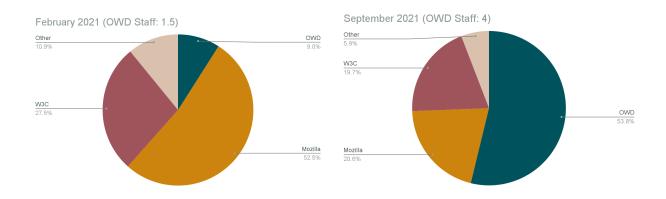
- OWD staff
- Mozilla staff
- W3C staff
- Other (volunteers or people paid by other organizations to work on MDN)

Since the start of the year, the number of PR reviews made by each group, per month, is as follows:

	February	March	April	May	June	July	August	September
OWD	48	98	163	187	190	252	296	311
Mozilla	279	228	177	202	118	111	132	119
W3C	146	170	120	101	326	228	203	114
Other	58	53	63	54	36	60	57	34

PR reviews





Projects

In addition to the day-to-day contributions to MDN Web Docs, Open Web Docs works with its Steering Committee to identify and invest in more substantive quarterly projects to address structural needs or important gaps in the documentation coverage. In 2021, this meant contribution of important content infrastructure projects and writing of large content sets to MDN.

Converting MDN content to Markdown

In Q2 and Q3 Open Web Docs led a project to switch the authoring format for mdn/content from HTML to GitHub-Flavored Markdown.

HTML is a great language for Web pages but a difficult format for writing or reviewing documentation. Switching to a more readable format is essential for MDN's long-term sustainability. OWD led this major infrastructure project, probably the biggest change to MDN content in its history. The OWD staff:

- led a collaborative process to design a Markdown-based authoring format expressive enough to reflect the needs specific to MDN,
- worked with Mozilla's MDN engineering team to implement the changes in the platform to support Markdown,
- updated thousands of pages to simplify the markup and make it Markdown-compatible.

As of October 13, 2021, 9,656 / 1,0016 open Web documentation pages are in Markdown, including all the JavaScript, CSS, Web/API, SVG and HTML documentation. We expect the process to be completed in October.

Integrating W3C data into MDN and BCD

Open Web Docs drives the inclusion of data into documentation, creating and enhancing existing data, and making such data accessible outside of MDN's content. Work in this field has been done in close collaboration with the W3C, a provider of Web platform data. Other organizations have provided feedback into this process as well as data about the Web platform is of interest to browser vendors, developer tooling products, and others alike.

Throughout the year, and together with the W3C, Open Web Docs worked on updating MDN Web Docs' *Specification* sections. MDN reference pages use this section to link to the relevant specifications for a Web platform feature. Unfortunately, these sections were outdated most of the time and not machine readable. The manually maintained HTML tables were also getting in the way of the MDN's conversion to Markdown.

Thanks to the data from <u>w3c/browser-specs</u> and adding spec_urls to the browser-compat-data project, MDN's specification links are now validated and up-to-date. A renderer was added to Yari (MDN's backend) allowing for future enhancements to all *Specification* sections at once in the future.

Open Web Docs has also started to investigate integrating and working with additional data for documentation using the <u>w3c/webref</u> project and working with WebIDL files. Long term, Open Web Docs envisions <u>MDN as a provider of structured content</u>.

MDN browser-compat-data (BCD) contributions

Throughout 2021, Florian Scholz continued to act as a co-owner of the mdn/browser-compat-data project and helped Daniel Beck (Mozilla) run the project that powers the compatibility tables on MDN and caniuse.com. Owning this open source project means helping with making strategic decisions, managing releases, and enabling the project to its full potential.

Major contributions to BCD in 2021 project included:

- Helping with PR reviews on a day-to-day basis.
- Giving input and contributing to infrastructure, schema, and governance questions.
- Adopting semver and releasing BCD 3.0.0
- Introducing spec_urls
- Finding a solution to represent compat data for "mixins"
- Adding "preview" browsers and releasing BCD 4.0.0

Improvements to MDN's information architecture

Open Web Docs drives discussions about the information architecture of MDN Web Docs. Over the course of the year, we gave input and fixed a variety of issues, especially concerning the structure of reference documents. This helped unblock the browser compatibility project, allowing it to get closer to reaching 100% accuracy of data for APIs, directly helping developers both on MDN and caniuse.com. Major IA topics included:

- Web API mixins
- Web API dictionaries
- Web API inheritance
- Web API events
- Web API globals
- Sidebars and overall navigability on MDN

Open Web Docs aims to further use its expertise and experience with IA to highly structure Web platform documentation on MDN in the future.

Beginner friendly documentation: syntax boxes

To make documentation easier to understand and more welcoming to new and aspiring web developers and designers world-wide, Open Web Docs continuously investigates how to make content more accessible to beginners.

In Q2 2021, Open Web Docs worked on a <u>project</u> to make MDN reference pages more readable and easier to understand by beginners by simplifying MDN's syntax sections. This change affected all of the JavaScript and Web APIs pages.

Work on enhancing the syntax sections in the MDN CSS docs began in Q3 2021.

Open Web Docs aims to further simplify the MDN reference pages overall, making them useful to a beginner audience and offering a benefit to reading specifications that are targeted at implementers and industry professionals.

Documenting WebXR on MDN

WebXR is a group of standards which are used together to support rendering 3D scenes to hardware designed for presenting virtual worlds (virtual reality, or VR), and for adding graphical imagery to the real world, (augmented reality, or AR). In Q3 2021, the Open Web Docs Steering Committee voted this topic as impactful for the web community and documentation work for features from 10 WebXR specifications got worked on.

As part of this effort:

- 131 new MDN reference pages were added.
- 78 pull requests were submitted to MDN.
- MDN WebXR docs have been converted from HTML to Markdown.
- Community feedback on WebXR docs and guide material needs has been collected.

Future projects

Every quarter, the Open Web Docs Steering Committee organizes an open and community-based process to develop documentation project proposals. This allows more stakeholders to bring their ideas to the table and have an impact on platforms like MDN Web Docs.

For Q4 2021, the projects that came out of this process are:

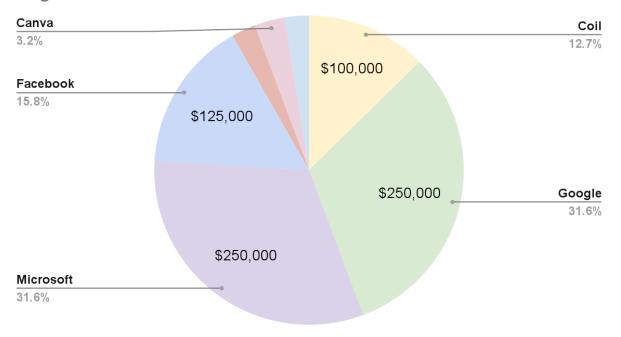
- Documentation of ARIA attributes
- 2. Updating DOM guides (and completing its reference)
- 3. Modernizing the JavaScript Learning Area modules
- 4. Documenting events and representing them in BCD
- 5. Use of webref as the source for CSS formal syntax, instead of mdn/data

In 2022, Open Web Docs will continue to work with the Steering Committee and the community to prioritize projects based on the needs of web developers and the community.

Financial report

In 2021, Open Web Docs was financially backed by organizations and individuals with the goal to pay a competitive salary to four Technical Writers. Substantial contributions from organizations were:

Organizational backers



Google: \$250,000
Microsoft: \$250,000
Facebook: \$125,000
Coil: \$100,000
Canva: \$25,000
Igalia: \$20,0000
JetBrains: \$20,000

Open Web Docs is grateful and appreciates the generosity of the following people who substantially contributed individually:

Paul Kinlan: \$900
Pete LePage: \$900
Daniel Ehrenberg: \$500
Michael[tm] Smith: \$275
Joel Marcey: \$205
Victor Neo: \$200
Chris Heilmann: \$200
Eric Shepherd: \$150
Andy Piper: \$150

• Dominic Cooney: \$130

In total, 130 individuals and 10 organizations contributed \$800,842.54.

We work with a partner, Velocity Global, to process locally compliant payroll. More detail on Open Web Docs' finances may be found on <u>our Open Collective page</u>.

Appendix on mdn/content metrics

This appendix describes how we calculated the metrics for OWD contributions to the mdn/content repository. It's included here in the interest of transparency and as an invitation to check the data.

We showed two metrics:

- Number of commits by OWD staff and by other contributors
- Number of pull request reviews by OWD staff and by other contributors

The data to back up the metrics is in the OWD metrics spreadsheet.

Number of commits

To get these numbers we just looked at the mdn/content contributors page, filtered by months, for each month from February to September 2021:

https://github.com/mdn/content/graphs/contributors?from=2021-02-01&to=2021-02-28&type=c https://github.com/mdn/content/graphs/contributors?from=2021-03-01&to=2021-03-31&type=c https://github.com/mdn/content/graphs/contributors?from=2021-04-01&to=2021-04-30&type=c https://github.com/mdn/content/graphs/contributors?from=2021-05-01&to=2021-05-31&type=c https://github.com/mdn/content/graphs/contributors?from=2021-06-01&to=2021-06-30&type=c https://github.com/mdn/content/graphs/contributors?from=2021-07-01&to=2021-07-31&type=c https://github.com/mdn/content/graphs/contributors?from=2021-08-01&to=2021-08-31&type=c https://github.com/mdn/content/graphs/contributors?from=2021-09-01&to=2021-09-30&type=c https://github.com/mdn/content/graphs/contributors?from=2021-09-01&to=2021-09-30&type=c

For each month, we noted the number of commits by every contributor who made more than 10 commits. Then we grouped contributors into:

- OWD staff
- Mozilla staff
- W3C staff
- Other (volunteers and people paid by other organizations to contribute to MDN)

The process of excluding people who contributed 10 commits or fewer tends to disadvantage occasional volunteers.

Number of pull request reviews

To get these numbers we made a list of active reviewers on MDN:

https://github.com/Elchi3 https://github.com/wbamberg https://github.com/teoli2003

https://github.com/estelle

https://github.com/rumyra

https://github.com/chrisdavidmills

https://github.com/rachelandrew

https://github.com/hamishwillee

https://github.com/ddbeck

https://github.com/sideshowbarker

https://github.com/jpmedley

https://github.com/ericwbailey

https://github.com/Ryuno-Ki

For each reviewer we fetched their activity page, filtered by each month, February to September. For example:

https://github.com/Elchi3?tab=overview&from=2021-02-01&to=2021-02-28

https://github.com/Elchi3?tab=overview&from=2021-03-01&to=2021-03-31

https://github.com/Elchi3?tab=overview&from=2021-04-01&to=2021-04-30

https://github.com/Elchi3?tab=overview&from=2021-05-01&to=2021-05-31

https://github.com/Elchi3?tab=overview&from=2021-06-01&to=2021-06-30

https://github.com/Elchi3?tab=overview&from=2021-07-01&to=2021-07-31

https://github.com/Elchi3?tab=overview&from=2021-08-01&to=2021-08-31

https://github.com/Elchi3?tab=overview&from=2021-09-01&to=2021-09-30

We then noted the number of reviews on the mdn/content repository from that reviewer for that month. Then, as before, we grouped contributors into:

- OWD staff
- Mozilla staff
- W3C staff
- Other (volunteers and people paid by other organizations to contribute to MDN)