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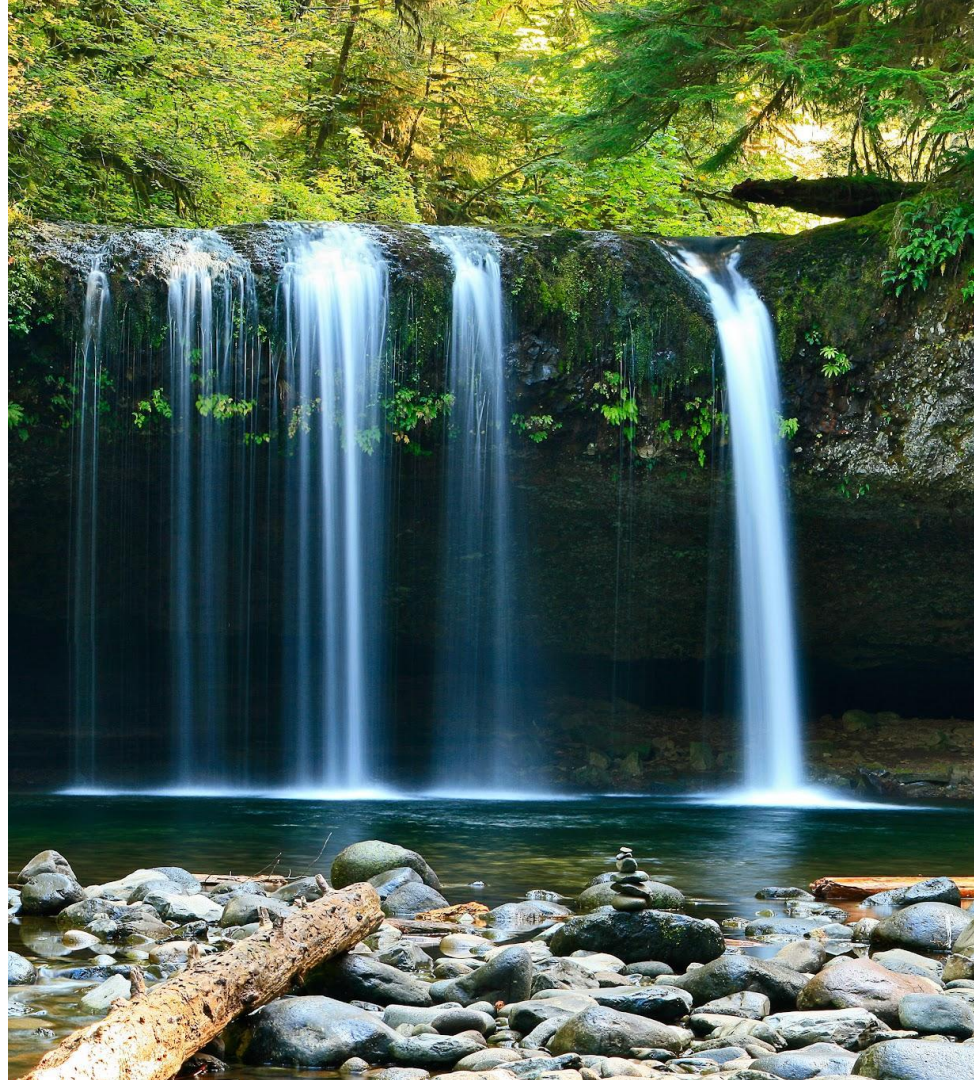
MediaWiki product ramp-up: direction and approach to sustainability

Birgit Mueller
Wikimedia Hackathon, 2024

A sustainable future

MediaWiki, the software platform and interfaces that allow Wikipedia and other projects to function, needs ongoing support for the next decade in order to provide creation, moderation, storage, discovery, and consumption of open, multilingual content at scale.

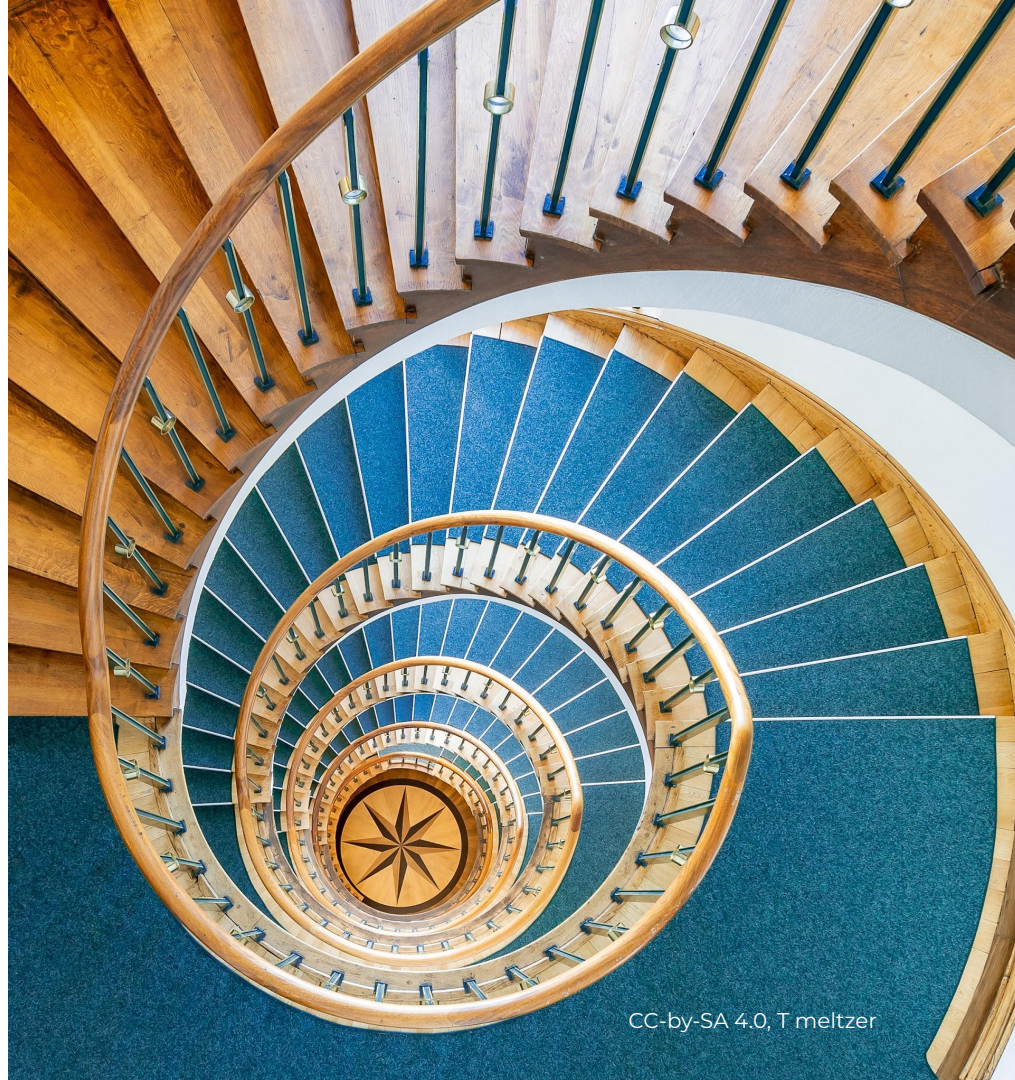
What decisions and platform improvements can we make to ensure that MediaWiki is sustainable?



Investing in MediaWiki and developer experiences

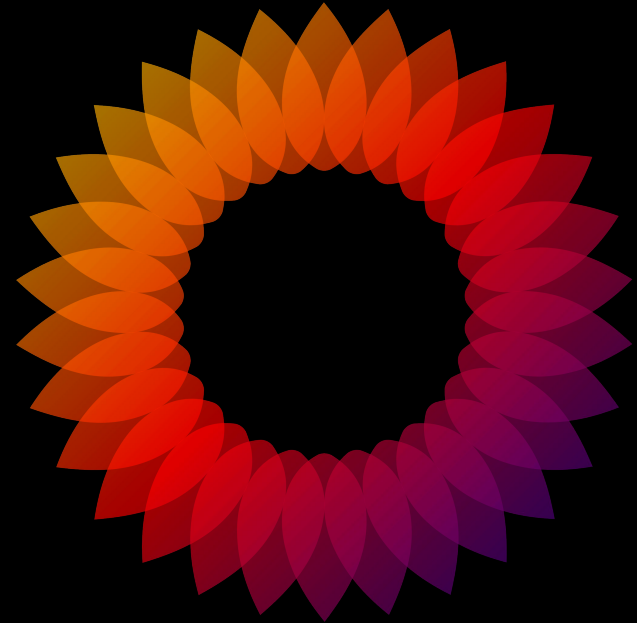
Goals for year 1 (July 2023 - June 2024)

- Build up dedicated product leadership and engineering group for MediaWiki
- Develop a high-level product strategy for MediaWiki
- Make progress on key multi-year initiatives to enable platform sustainability and evolution
- Invest in consultancy and code review to enable people to contribute effectively [MediaWiki core]
- Start tackling a number of open questions, from release to stewardship



We started with questions ...

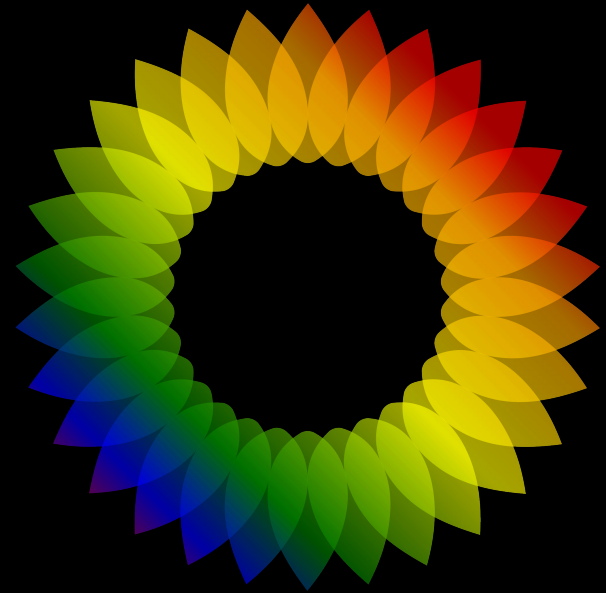
- How do we envision the future of MediaWiki as the essential platform for the Wikimedia projects and as an open source project?
- How can we increase the sustainability of the platform?
- What are our key needs and how can we serve these better?
- What does “core functionality” mean?
- How can we provide easier, faster and cohesive paths to feature development?
- What does effective and responsible stewardship look like?



... and establishing a presence

- Storytelling
- Listening and explore to learn (and to solve)
- Helping people be effective in their work

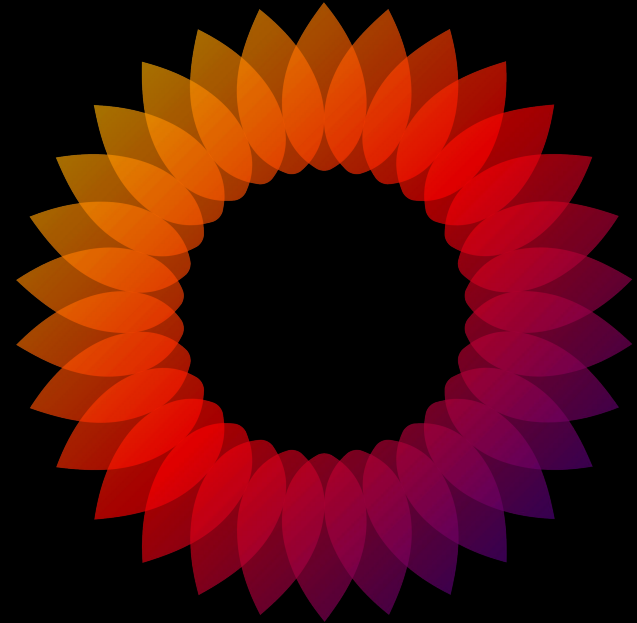
Read: [Monthly MediaWiki insights](#)



A few things we learned (and
turned into first actions)

Strengths

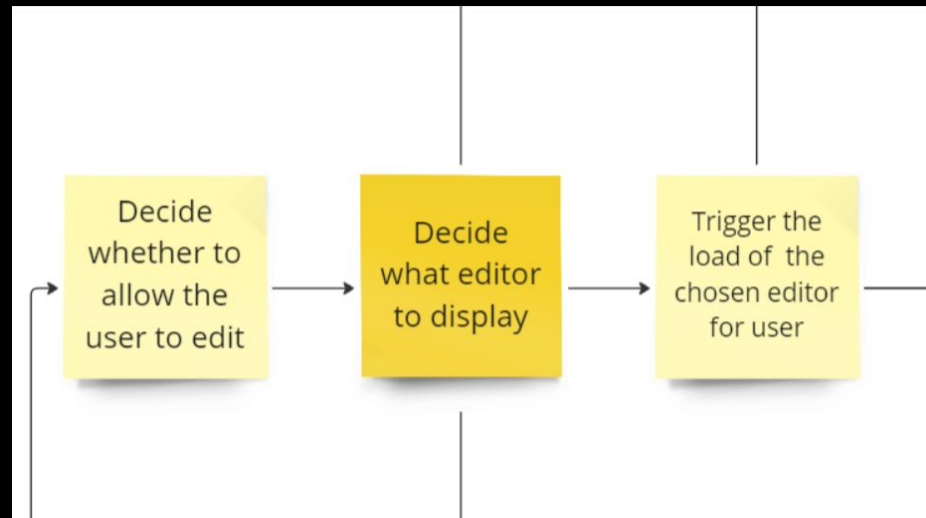
- We made stable technology decisions that enabled us to scale for a top website and kept everything running
- We have expertise: There is always someone who knows how to do something!
- Code quality is much better than 10 years ago
- ... and more!



Challenges

MediaWiki is a large, monolith code base and entangled system. Understanding the system's behaviour is hard, making changes is hard, onboarding people is hard.

Read: [Unraveling complexity: Mapping MediaWiki software components into user-driven workflows](#)



Excerpt from mapping exercise for "An unregistered (not yet temporary) user edits existing wikitext content (fixing typo) on desktop"

Challenges

We have a number of strong contributors with significant knowledge on (parts of) MediaWiki core, but we need more people who can work on key areas in MediaWiki to ensure sustainability of the software. At the same time, it is hard to onboard in MediaWiki.

Read: [Contributor retention and growth](#)

View: [MediaWiki Introduction 2023](#)



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Challenges

Lack of clarity on direction. What are the use cases MediaWiki should be build and optimised for and what not? What is “core functionality”? What should exist (or not) within core, extensions, or the interfaces between them? How does that translate into architectural needs and decisions? What about code review for volunteers? What about release, and other needs of the wider MediaWiki ecosystem?

-> Moving from “project” to “product” enables us to step by step bring clarity to these questions.



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From project to product

MediaWiki needs to support and scale for:

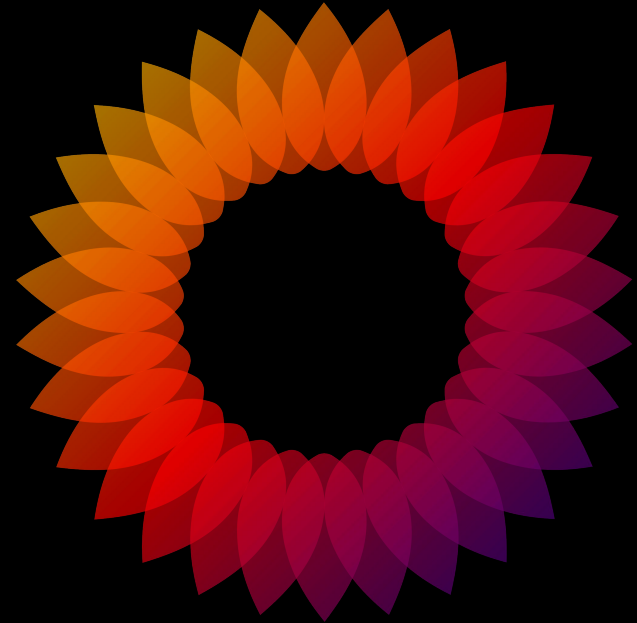
- More than **25 billion global page views** per month
- More than **50 million edits per month**
- Open content in **hundreds of languages**
- A **large collaborative contributor base** of editors and many technical contributors



Design goal

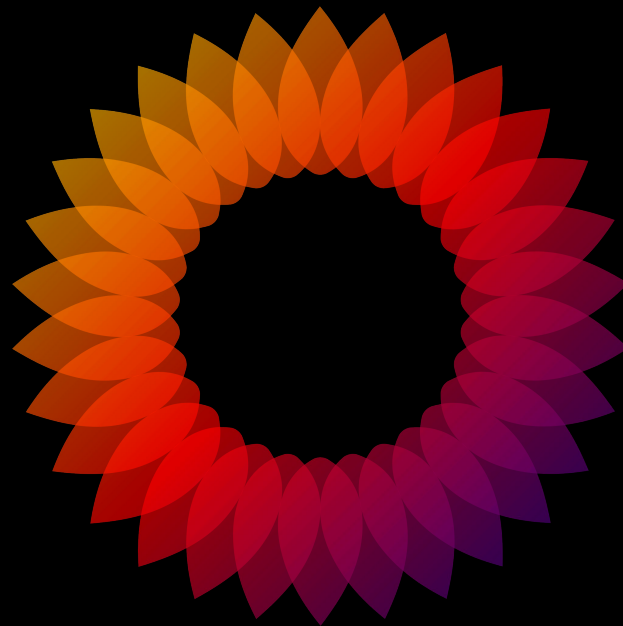
Enable the creation, moderation, storage, discovery and consumption of open, multilingual content **at scale**, while protecting the privacy of its users.

[Manual:What is MediaWiki?](#) does describe some of that.



Platform mission [draft]:

A well defined, secure, performant core platform product that offers curated pathways (APIs ..) to enable volunteer-powered multilingual knowledge creation, curation and consumption on and off the platform at scale and in service of Wikimedia's mission.



Product focus areas



Sustainability

Increase sustainability of the MediaWiki platform (people and code) to ensure the software serves us well as the essential platform for Wikipedia and other key needs. Release is a part of this.



Core capabilities and concepts

Define and evolve architecture of the core software to meet current and future needs of open knowledge production and encyclopedic content.



Integration interfaces

Define and evolve the pathways to expand and customize MediaWiki to clarify and streamline feature development, and empower technical contributors.

Enabling more people to know MediaWiki and contribute effectively



Contributions to MediaWiki core, July 1st, 2023 - March 31st, 2024



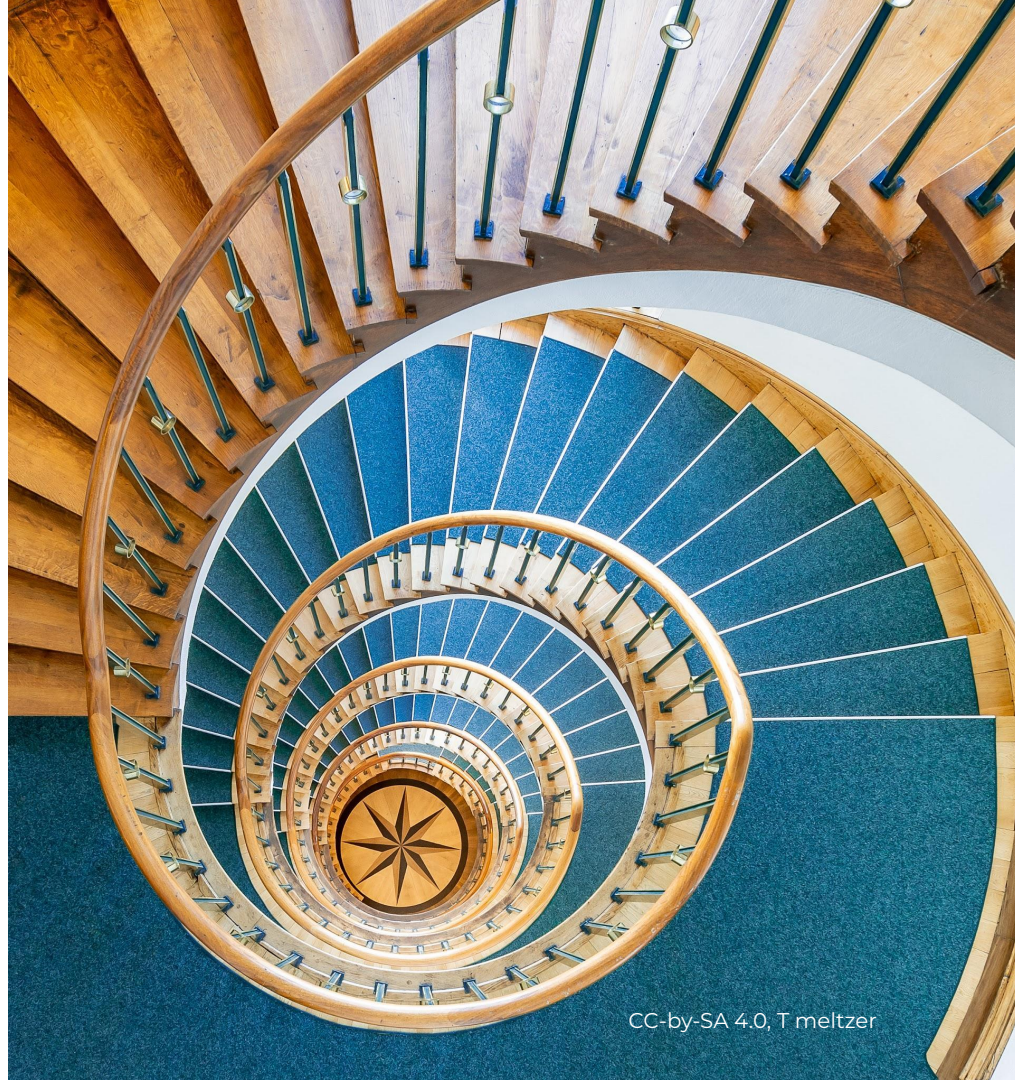
field	value
author_org_name: Descending	Wikimedia Deutschland 189 (4.66%)

field	value
author_org_name: Descending	Independent 824 (20.32%)

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author_org_name: Descending	Wikimedia Foundation 3,036 (74.87%)

A classic journey of a volunteer MediaWiki core contributor

- Joins as contributor to Wikipedia
- Runs into limitations on what they want to do
- Starts write and run code onwiki
- Starts contributing to an extension relevant to the field they contribute to, or starts writing patches for mediawiki/config
- First patch to MW core



MediaWiki Core	July 1, 2022 - March 31, 2023	July 1st, 2023 - March 31, 2024
Contributors who submitted > 5 changesets	61	71
Average time to first review (days)	13.8	6.4
Median time to first review (days)	0.9	0.6

Next steps

[DRAFT] Knowledge Platform in FY 24/25:

MediaWiki platform evolution to better serve Wikipedia's core needs (WE5) + developer workflows and services to enable Wikimedia's developers (WE6)

5.1	Improve sustainability of the MediaWiki platform
5.2	Simplify and streamline feature development
5.3	Support current and future needs of encyclopedic content
5.4	Improve process for release and synchronize with php upgrades
6.1	Enable efficient decision making on developer workflows and services
6.2	Better serve developers' testing needs
6.3	Improve sustainability of Toolforge ecosystem

Thank you all for listening.

- What are your thoughts on the plan for the upcoming months?
- What motivates you to contribute?

Regular updates:

https://www.mediawiki.org/wiki/MediaWiki_Product_Insights/Reports

