ArchWiki – a biased SWOT analysis

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Outline

- 1. Introduction
- 2. SWOT: strengths, weaknesses, opportunities, threats
- 3. Summary
- 4. Discussion

Who? What? Why?

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Who: Members of the Maintenance Team 💪







Vladimir LAVALLADE erus

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What: A glimpse behind the veil 😅

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Who: Members of the Maintenance Team 💪

What: A glimpse behind the veil 😅

Why: We've been kindly asked to 😉

ArchWiki history: Early years

- 2004 first wiki based on PhpWiki
- 2005 migration to MediaWiki (used until today)
- first edits in the main namespace, initial content

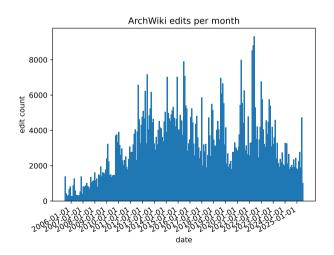
The middle ages

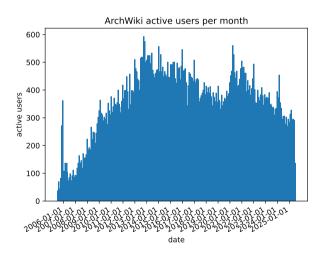
Since about 2010:

- Formation of the first translation teams
- Establishment of the maintenance team
- Formalized guidelines for contributors (Help:Style etc.)

ArchWiki today

- More than 840 000 edits and 86 000 editors
- Approximately 4 100 content pages (28 000 including talks, redirects, etc.)
- Still only a small wiki compared to Wikipedia





Strengths

- Comprehensive content and large topics coverage
- High-quality and up-to-date content
- An involved community
- Outreach even beyond Arch Linux

Outreach even beyond Arch Linux

Greg Kroah-Hartman:

I have not had any problems with anything on Arch, and their wiki is by far the best resource out there that I have ever seen.

Edward Snowden:

Is it just me, or have search results become absolute garbage for basically every site? It's nearly impossible to discover useful information these days (outside the ArchWiki).

Contribution guidelines

Contributors have to follow the three fundamental rules:

- 1. Always properly use the edit summary: what has been done and why
- 2. Do not make complex edits at once
- 3. Announce article rewrites in a talk page: get **feedback** or provide a **draft**

Content guidelines

- Don't Repeat Yourself (DRY)
 - There should be only one place for each topic, use hypertext
- Simple, but not stupid
 - Simple to read and maintain, but not too much hand-holding
 - Readers must be willing to learn
- Arch-centric content
 - No details specific to other distributions or Arch derivatives
 - There is usually only one version of each software

Maintenance templates

Besides talk pages, contributions can be driven by reacting to **flags** in the content:



The factual accuracy of this article or section is disputed.

Reason: The keyboard does not work in rd.emergency so it cannot be used. (Discuss in Talk:Kernel)

```
Status templates: {{Accuracy}}, {{Style}}, {{Expansion}},
  {{Out of date}}, {{Merge}}, {{Move}}, {{Remove}}, {{Archive}}, etc.

Inline templates: {{Dead link}}, {{Broken package link}},
  {{Broken section link}}
```

Some problems can be identified and/or fixed automatically by a bot 🤖

The review process

This is the most important task that assures high quality of the content on the wiki. **Everybody** can participate in the review 500

How it works:

- 1. Add pages to your watchlist, or if you're feeling adventurous check the Special:RecentChanges page and subscribe to its Atom feed
- 2. Review new changes as they appear
- 3. When you find a problem:
 - ∘ fix it **%**
 - \circ flag the content to draw attention to the problem Λ
 - o revert the change

Maintainers make the authoritative decisions and mediate disputes.

Guidelines for patrolling

- Assume good faith
- When in doubts, discuss the changes with others
- Always explain the reason when reverting a change
- Avoid edit wars

Community management

There's an Arch Wiki page with your answer 🤓 🤞

If there isn't a page for it, "an Arch user" 🧆 will write one

Weaknesses

- Steep learning curve
- MediaWiki
- Popularity-driven content
- Transition from support channels to documentation

Steep learning curve

Reading the wiki is not easy

- It is not prose, there are technical conventions
- Knowledge is spread across multiple pages
- Read Help:Reading and follow all cross-references

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Editing the wiki is not easy

- Know the topic *and* the guidelines/conventions
- Even if you are not a master of conventions, be bold and just improve the content
- Read Help:Editing to get started

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MediaWiki is the software that powers the ArchWiki, Wikipedia, and other wikis.

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Strengths 6

- A battle-proven and *de facto standard* platform
- Configurable, extensible, web API for integration with external applications

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Weaknesses 😩

- Its development follows the Wikipedia-first approach
- Weird and antiquated markup language

Popularity-driven content

- some pages don't see edits for years due to lack of interest, while others are touched weekly
- the "popularity" of pages is not obvious to the readers
- similarly, it is not obvious if some content was updated recently
- there are many stale discussions on talk pages

Support channels vs documentation platform

Arch Linux has many communication channels and platforms:

- **Documentation:** wiki (editable), GitLab pages (not editable)
- **User support:** forums, IRC, etc. (**not** the wiki)

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There is no tight integration between these platforms which causes some problems:

- some questions land on the wiki and go unanswered
- some answers from the support channels might not end up on the wiki immediatly

Opportunities

- Community involvement
- Translations
- Better tooling

Community involvement

- Better transition from user support to documentation
- Collaboration with other communities: Arch derivatives, non-x86_64 platforms, local communities, etc.
- More educational and multimedia content

Translations

- Most translations are incomplete and less frequently updated
- Opportunity for collaboration between translators and English editors
- Hosting dilemma: one wiki or separate instances?

Better tooling

Existing software assistants:

- wiki-scripts Python scripts for automating common tasks and data analysis
- WikiMonkey editor assistant running directly in the browser

Missing functionality:

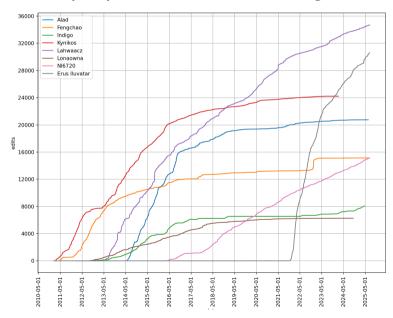
- linting: grammar checking and ArchWiki guidelines compliance
- incorporate machine learning or AI into the editor workflows

Threats

- Contributor burnout
- Wiki time runs slowly
- AI/LLM

Contributor burnout

- The wiki benefits from small, regular contributions more than from large onetime contributions
- Unfortunately, all most people burn out after losing the initial interest



Wiki time runs slowly

- Arch Linux is known for providing the latest release software quickly
- Updating the wiki content can be challenging
 - For example, Dovecot 2.4 significantly changed the configuration syntax
 - Transition period for two most recent versions?
- Changing the way we do things is even more challenging
 - Meta-discussions often become stale

AI/LLM

- Al-generated content does not meet the expectations of our style guidelines
- In principle, using AI for problem solving prevents people from fully understanding the solution it is a **poor shortcut** to the steep learning curve
- Also a technical problem: due to AI scrapers we had to put the wiki behind Anubis for ~2 months

Summary

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- Take on the opportunities and eliminate the threats
- We thank the DebConf organizers for inviting us here

Discussion