A comparison between MediaWiki, TWiki and XWiki communities

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MediaWiki, TWiki and XWiki Summary

- MediaWiki is a free software open source wiki package written in PHP [https://www.mediawiki.org](https://www.mediawiki.org).
- XWiki is a platform for developing collaborative web applications using the wiki paradigm. [http://www.xwiki.org/](http://www.xwiki.org/).

<table>
<thead>
<tr>
<th>Project</th>
<th>Start</th>
<th>License</th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaWiki</td>
<td>Jan 2001</td>
<td>GPL</td>
</tr>
<tr>
<td>TWiki</td>
<td>Jul 1998</td>
<td>GPL</td>
</tr>
<tr>
<td>XWiki</td>
<td>Jan 2003</td>
<td>LGPL</td>
</tr>
</tbody>
</table>

Cuadro : Main facts

All of them more than 10 years history projects, with different technologies.
Lines of code for core platform

- **MediaWiki core**: PHP project
- **XWiki** xwiki-platform, xwiki-enterprise, xwiki-rendering, xwiki-commons: Java project
- **TWiki** svn trunk/core: Perl project. The smallest core.

<table>
<thead>
<tr>
<th>Project</th>
<th>Javascript</th>
<th>CSS</th>
<th>HTML</th>
<th>PHP</th>
<th>Perl</th>
<th>Java</th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaWiki</td>
<td>43K</td>
<td>7K</td>
<td>0.6K</td>
<td>900K</td>
<td>0.7K</td>
<td>-</td>
</tr>
<tr>
<td>TWiki</td>
<td>1.3K</td>
<td>0.7K</td>
<td>1.8K</td>
<td>-</td>
<td>51K</td>
<td>-</td>
</tr>
<tr>
<td>XWiki</td>
<td>81K</td>
<td>7K</td>
<td>4K</td>
<td>-</td>
<td>-</td>
<td>400K</td>
</tr>
</tbody>
</table>

Cuadro: Main technologies
Lines of code for core platform + extensions

- MediaWiki core + Wikimedia key extensions
- XWiki core + xwiki-contrib extensions (133 of 659)
- TWiki svn trunk

<table>
<thead>
<tr>
<th>Project</th>
<th>Javascript</th>
<th>CSS</th>
<th>HTML</th>
<th>PHP</th>
<th>Perl</th>
<th>Java</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaWiki</td>
<td>882K</td>
<td>93K</td>
<td>83K</td>
<td>2.2M</td>
<td>133K</td>
<td>12.5K</td>
<td>233</td>
</tr>
<tr>
<td>TWiki</td>
<td>470K</td>
<td>65K</td>
<td>600K</td>
<td>107K</td>
<td>270K</td>
<td>-</td>
<td>470</td>
</tr>
<tr>
<td>XWiki</td>
<td>670K</td>
<td>165K</td>
<td>37K</td>
<td>0.6K</td>
<td>1.5K</td>
<td>956K</td>
<td>133</td>
</tr>
</tbody>
</table>

Cuadro: Main technologies
Why metrics?

- It’s about truth. Facts.
- Show me the code? Show me the metrics too!
- You can measure things and compare (tendencies).
- Numbers are pretty objective.
Organizations already using Grimoire Tools

- Wikipedia Foundation
- Cenatic
- OpenStack
- Puppet Labs
- Inktank
- Liferay
- Red Hat
MediaWiki, TWiki and XWiki reports

- All available on http://bitergia.com/public/previews/2014_01_fosdem/
- Data updated yesterday.
- Based in Grimoire* tools, easy to reproduce. Do you want to play? Open Source and Open Data technologies.
- Speech about Grimoire tools on Sunday 11:20, Lightning talks (Room: Ferrer).
What to analyze?

- Git/SVN
- Bugzilla/JIRA
- Mailman

TWiki tickets and messages cannot be analyzed because the project uses in-house tools (TWiki extensions) not supported in MetricsGrimoire.
Source code repositories

Mediawiki: Jan 2002

<table>
<thead>
<tr>
<th>Code Developers</th>
<th>747</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>67</td>
</tr>
<tr>
<td>Regular</td>
<td>103</td>
</tr>
<tr>
<td>Occasional</td>
<td>562</td>
</tr>
</tbody>
</table>

Facts: Sep 2011 x2 Jun 2011 commits (¿svn-¿git?). Authors grows more steady. Year tendencies positive. Large development community.

TWiki: Jan 2002

<table>
<thead>
<tr>
<th>Code Developers</th>
<th>97</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>0</td>
</tr>
<tr>
<td>Regular</td>
<td>0</td>
</tr>
<tr>
<td>Occasional</td>
<td>0</td>
</tr>
</tbody>
</table>

Facts: Lost authors in Nov 2008 (fork?) and files, but no commits. Activity with lot of peaks.

XWiki: Jan 2004

<table>
<thead>
<tr>
<th>Code Developers</th>
<th>90</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core</td>
<td>6</td>
</tr>
<tr>
<td>Regular</td>
<td>10</td>
</tr>
<tr>
<td>Occasional</td>
<td>72</td>
</tr>
</tbody>
</table>

Facts: Apr 2011 activity go down (-100 %) to current numbers. Activity is declining yearly. Authors less.
**Tickets**

**MediaWiki: Feb 2002**

<table>
<thead>
<tr>
<th>Ticket Participants</th>
<th>9,682</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixers</td>
<td>Submitters</td>
</tr>
<tr>
<td>1.610</td>
<td>7,310</td>
</tr>
</tbody>
</table>

Facts: Closers and activity (more) increased last year. Quality community growing.

**XWiki: Jan 2004**

<table>
<thead>
<tr>
<th>Ticket Participants</th>
<th>871</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixers</td>
<td>Submitters</td>
</tr>
<tr>
<td>83</td>
<td>683</td>
</tr>
</tbody>
</table>

Mailing lists

Mediawiki: Feb 2002

- Discussion Participants: 7,501
  - Sent: 159,945
  - 365 Days Change: 17,958 (+16%)
  - 30 Days Change: 862 (-29%)
  - 7 Days Change: 172 (-36%)

- Thread Initiators: 6,424
- First Repliers: 4,681

Facts: Activity is growing and senders are stable last year. Senders grew until Oct 2005, then are stable. Huge peak of messages in Oct 2013.

XWiki: Jan 2004

- Discussion Participants: 2,273
  - Sent: 57,456
  - 365 Days Change: 5,179 (-21%)
  - 30 Days Change: 219 (-47%)
  - 7 Days Change: 123 (+668%)

- Thread Initiators: 2,118
- First Repliers: 1,466

Facts: The activity is going down. Maybe moving to forums or wiki?

Alvaro del Castillo (Bitergia)
Summary for Communities

Source code developers (core, regular, occasional), people working with tickets (fixers, submitters) and people sending messages.

<table>
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<tr>
<th>Project</th>
<th>Source code</th>
<th>Tickets</th>
<th>Mailing Lists</th>
</tr>
</thead>
<tbody>
<tr>
<td>MediaWiki</td>
<td>747 (67;103;562)</td>
<td>9,682 (1610 fix;7310 sub)</td>
<td>7,501</td>
</tr>
<tr>
<td>TWiki</td>
<td>97</td>
<td></td>
<td></td>
</tr>
<tr>
<td>XWiki</td>
<td>48 (5;8;33)</td>
<td>871 (83 fix;683 sub)</td>
<td>2,273</td>
</tr>
</tbody>
</table>

Cuadro : Basic community description

But this are global numbers. Let’s take a look to demographics.
Demographics for source code

- MediaWiki increasing developers at a higher rate last 2 years. Around 50% retention rate last two years. From 60 new developers in Jun 2011 to 190 in Nov 2013. Activity is not growing at the same rate.
- TWiki only 5 developers, but the last 4 in last 1.5 years. The retention rate is not too high.
- XWiki 21 developers, 2.5 years ago lot of new people (35) retaining (8).
Activity in Wikis: MediaWiki

MediaWiki (updated on 2014-01-22)

291,815 editions

Top Editors last month

#1 MegaAlex
#2 FuzzyBot
#3 Yuki Shira
#4 Seb35
#5 Nemo bis
#6 Wrecked 'im? Damn near kill
#7 Vldandrew
#8 GWicke
More complete studies with Grimoire Tools

- By repositories, companies, countries or people. Comparisons.
- Including more data sources: Wiki, IRC, gerrit ...
- Specific studies: Forks (TWiki vs Foswiki)
- Time to attention, to review ...
- Demographics for all data sources
- http://korma.wmflabs.org/
Bitergia: an spin-off

- TODO by manrique
- "Bridging the gap between developers and stakeholders"
- Company starting operations in June 2012
- Building on the experience of LibreSoft
- Offering professional products and services
- Focused on:
  - Metrics about software development (including community metrics)
  - Specialized support for development forges (including metrics for projects)
- Working with Red Hat, OpenStack, Liferay, MediaWiki, Puppet Labs, CENATIC, Emergya and others.

http://bitergia.com
Have you enjoyed with this Wiki metrics comparison? Learnt something new?

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