Semantic MediaWiki
Current Status and Next Steps

Karsten Hoffmeyer, October 5, 2017
Current Status and Next Steps

- Status of the SMW project
- New features in SMW 2.5
- What you can expect in SMW 3.0?
- How you can contribute?
Status of the SMW project

→ Community and Users
Statistics – Mailing lists activity

September 2015 – August 2016

- 1,081 posts
- 93 posts

 user
 developer

September 2016 – August 2017

- 994 posts
- 97 posts

Source: https://sourceforge.net
Statistics – Wiki activity

September 2015 – August 2016

~ 5,500 edits
~ 1,300 new pages

September 2016 – August 2017

~ 8,000 edits
~ 1,800 new pages

Sources: https://www.semantic-mediawiki.org
Current Status and Next Steps
Evolution of Semantic-MediaWiki.org

➔ Improvement of documentation
  • Less overwhelming in size and information for easier overview
  • More annotations and queries for easier display and exploration
  • Integration with the “Translate” extension for general information pages

➔ Improvement of look and feel
  • Going Chameleon for mobile usage and better user guidance
  • Slightly adapted color scheme for modern view
Statistics – GitHub Issues

September 2015 – August 2016

201 new
35 still open

September 2016 – August 2017

155 new
26 still open

Sources: https://www.semantic-mediawiki.org
Statistics – Installations (Composer)

September 2016

~ 49,500

~ 1,650

September 2017

~ 80,500

~ 2,300

Source: https://packagist.org/packages/mediawiki/semantic-media-wiki/stats
Statistics – Installations (Composer) cont.

Source: https://packagist.org/packages/mediawiki/semantic-media-wiki/stats
Status of the SMW project

- Semantic MediaWiki
→ Releases since SMWCon Fall 2016

• SMW 2.4.x – 5 releases
  2.4.0, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6

• SMW 2.5.x – 5 releases
  2.5.0, 2.5.1, 2.5.2, 2.5.3, 2.5.4, 2.5.5?
Semantic MediaWiki
Statistics – GitHub Commits

- 1,558 commits
- 16 developers

July 2016 – June 2017
- 987 commits
- 12 developers

Sources: https://www.semantic mediawiki.org
Semantic MediaWiki Statistics
Codebase (Integration Testing)

September 2016 – SMW 2.4
- 3,685 tests
- 12,014 assertions

September 2017 – SMW 2.5
- 4,460 tests
- 14,855 assertions

Source: https://travis-ci.org/SemanticMediaWiki/SemanticMediaWiki
Semantic MediaWiki Statistics

Codebase (Quality)

September 2016  –  SMW 2.4

8.39 (good)

September 2017  –  SMW 2.5

8.49 (good)

Source: https://scrutinizer-ci.com/g/SemanticMediaWiki/SemanticMediaWiki/
Semantic MediaWiki Statistics

Codebase (Coverage)

<table>
<thead>
<tr>
<th>Build Job</th>
<th>PHP Version</th>
<th>Database</th>
<th>MediaWiki</th>
<th>Additional Parameters</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td># 8850.1</td>
<td>PHP: 7.1</td>
<td>MySQL</td>
<td>REL1_29</td>
<td>PUNIT=5.7*</td>
<td>6 min 33 sec</td>
</tr>
<tr>
<td># 8850.2</td>
<td>PHP: 5.5</td>
<td>MySQL</td>
<td>REL1_26</td>
<td>FUSEKI=2.4.0</td>
<td>12 min 14 sec</td>
</tr>
<tr>
<td># 8850.3</td>
<td>PHP: 5.6</td>
<td>MySQL</td>
<td>REL1_25</td>
<td>VIRTUOSO=6.1</td>
<td>9 min 2 sec</td>
</tr>
<tr>
<td># 8850.4</td>
<td>PHP: 5.5</td>
<td>SQLite</td>
<td>REL1_27</td>
<td>SITELANG=ja</td>
<td>8 min 18 sec</td>
</tr>
<tr>
<td># 8850.5</td>
<td>PHP: 5.5</td>
<td>Postgres</td>
<td>REL1_26</td>
<td></td>
<td>8 min 3 sec</td>
</tr>
<tr>
<td># 8850.6</td>
<td>PHP: 5.6</td>
<td>MySQL</td>
<td>REL1_26</td>
<td>BLAZEGRAH=1.5.2; PUNIT=4.8*</td>
<td>13 min 16 sec</td>
</tr>
<tr>
<td># 8850.7</td>
<td>PHP: 5.5</td>
<td>MySQL</td>
<td>REL1_23</td>
<td>SESAME=2.8.7</td>
<td>8 min 51 sec</td>
</tr>
<tr>
<td># 8850.8</td>
<td>PHP: hhvm-3.18</td>
<td>MySQL</td>
<td>REL1_25</td>
<td>TYPE=benchmark; PUNIT=5.7*</td>
<td>5 min 36 sec</td>
</tr>
</tbody>
</table>

Sources: https://travis-ci.org/SemanticMediaWiki/SemanticMediaWiki/builds/281859845
New features in SMW 2.5
Short recap of the new features:

- Support for MySQL and SQLite's "native" full-text search on text and URI typed values including phrase matching
- Reference typed statements to record provenance metadata on individual value annotations
  
  (record like: value - data - source)
- Edit protection via a special property
- Property chain support for printout statements as in

<table>
<thead>
<tr>
<th>?-Located in.Has population.Retrieved on</th>
<th>Has population</th>
<th>Number</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berlin</td>
<td>3,520,061</td>
<td>3,520,061</td>
<td>2 septembre 2016</td>
</tr>
</tbody>
</table>
Semantic MediaWiki
Version 2.5 – Features

- Support for property labels in the user's language
- Support for links in values for datatype "Text" was extended and made stable
- Support for fixed properties was overhauled and made stable
- Special page "SemanticMediaWiki" formerly “SMWAdmin” was overhauled and enhanced
- Query result caching introduced to minimize impact of query processing during and after a page view.
What you can expect in SMW 3.0?
Semantic MediaWiki
Version 3.0 – Planned Features and Changes

→ Semantic MediaWiki 3.0 is planned to be released either in late Q4/2017 or Q1/2018

Some things will go:

- Support for PHP 5.5 and lower
- Support for MediaWiki 1.26 and lower
- Legacy namespace “Type” will be removed
- Special page “Semantic Statistics” will be removed
- Legacy maintenance script aliases will be removed
Semantic MediaWiki
Version 3.0 – Planned Features and Changes

New features and enhancements:

- Adds support for datatable views to result format “table” and “broadtable” using |
  class=datatable

- This comes with a direct result export button

- Adds support for query parameter |
  +width=… (similar to |
  +align=…)

- Adds support for marking an inline query as deferred (“last in line”) from regular parsing using query marker |
  @deferred

- Query marker “deferred” allows for query marker |
  @control=slider
• Adds support for marking an inline query as part of an annotation using query marker `|@annotation`.

• Added `like:` and `nlike:` comparator operators for approximate queries to use standard SQL syntax.

• Adds support for input assistance (suggester) using `[[c:, [[p: and `[[con: which must be enabled by user. Works on text edit field, file upload field and in search field (→SMWSearch).

• Introduces “Authority mode” tied to user group “SMW curator” to control property creation.
- Special page “Ask” was completely overhauled including going mobile

- Adds support for an individual hierarchy depth restriction for an inline query using query parameter `|+depth=...`

- Adds strip marker decoding to support data value annotations containing tags like `<pre>`, etc.

- Will probably add support for mandatory properties including parser function `#mandatory` for fine graned control on subject level

- And most probably many more …
How can you contribute?
Semantic MediaWiki
How can you contribute?

→ Where are many ways to contribute

- Create a quality feature requests (→ click here)
- File quality bug reports on issues you encounter (→ click here)
- Contribute code with tests, tests and tests (→ click here)
- Become part of the testers group and test (→ click here)
- Add or enhance documentation (→ click here)
- Add or enhance translations (→ click here)
Semantic MediaWiki
How can you contribute?

→ Where are many ways to contribute (cont.)

• Answer questions and participate in discussions (→ click here)

• Provide input on following issues:
  – #1218 Support for Docker (→ click here)
  – #2274 Support for ElasticSearch (→ click here)
  – #2684 Support for VisualEditor (→ click here)

• Organize events (→ click here)
Thank you!