Semantic MediaWiki
Current Status and New Features in 3.0.0

Karsten Hoffmeyer, December 13, 2018

SMWCon Fall 2018
December 12 to 14, Regensburg
Semantic MediaWiki

- Current Status
- New Features
- How you can contribute?!
Current Status of semantic-mediawiki.org
Evolution of documentation

- Extending and improving documentation
  - Ongoing effort by a few community members
  - Getting the missing documentation in [https://www.semantic-mediawiki.org/wiki/semantic-mediawiki.org:Documentation_status](https://www.semantic-mediawiki.org/wiki/semantic-mediawiki.org:Documentation_status)
  - Less overwhelming in size and information
  - More annotations, queries and templates for easier display and exploration
  - Integration with the “Translate” extension for general information pages
Semantic MediaWiki

Current Status

- Revolution of the wiki’s skin
  - Radical change of look and feel
    - Now using Chameleon
    - Modern yet conservative
    - Adapted color scheme
    - Better mobile support
    - Better user guidance
    - Still room for improvement
Current Status of Semantic MediaWiki
Releases since SMWCon Fall 2017

- SMW 2.5.x – 4 releases
  - 2.5.0, 2.5.1, 2.5.2, 2.5.3, 2.5.4, 2.5.5, 2.5.6, 2.5.7, 2.5.8

- SMW 3.0.x – 1 release
  - 3.0.0
GitHub Commits

July 2016 – June 2017
987 commits
12 developers

July 2017 – June 2018
822 commits
17 developers

Sources:
- git log 86a87217f7178b82bda02f9c9348a0d0d88ad7e4...080c188c795a4cfccf87b97c497825c768eccb69 --pretty=oneline | wc -l
- git shortlog -sn 86a87217f7178b82bda02f9c9348a0d0d88ad7e4...080c188c795a4cfccf87b97c497825c768eccb69
Semantic MediaWiki
Current Status

Integration and Unit Tests, Assertions

March 2017  –  SMW 2.5.0
4,660 tests
14,917 assertions

October 2018  –  SMW 3.0.0
6,808 tests
17,978 assertions

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

Average monthly installs

September 2017

~ 80,500 total
~ 2,600 month

December 2018

~ 116,000 total
~ 2,600 month

Source: https://packagist.org/packages/mediawiki/semantic-media-wiki/stats
Semantic MediaWiki
Current Status

Daily installs, averaged monthly

Source: https://packagist.org/packages/mediawiki/semantic-media-wiki/stats
Semantic MediaWiki 3.0.0
Released on October 12, 2018
• Some Breaking Changes

  Internal code as well as user facing semantic syntax.

• Many New Features

  Hold your horses. Slides to come.
GitHub Commits

March 2017 – October 2018

SMW 2.5.0 – SMW 3.0.0

1,413 commits
25 developers

Sources:
- git log dbbf3d1e465f95c912da2ef421db729ad90f993e...abdec882fc57dd5b54cab15e8f419056164ee66a --pretty=oneline | wc -l
- git shortlog -sn dbbf3d1e465f95c912da2ef421db729ad90f993e...abdec882fc57dd5b54cab15e8f419056164ee66a
Tested Compatibility

- MediaWiki 1.27.x to MediaWiki 1.31.x
- PHP 5.6.x to PHP 7.2.x
- Several relational stores (MySQL/MariaDB 5+, PostgreSQL, SQLite)
- Several RDF stores (Blazegraph 1.5.2+, Jena, Virtuoso, etc.)
- ElasticSearch store 5.6+
## Test matrix (voting)

<table>
<thead>
<tr>
<th>Build jobs</th>
<th>View config</th>
</tr>
</thead>
<tbody>
<tr>
<td># 11133.1</td>
<td>PHP: 7.1</td>
</tr>
<tr>
<td># 11133.2</td>
<td>PHP: 5.6</td>
</tr>
<tr>
<td># 11133.3</td>
<td>PHP: 5.6</td>
</tr>
<tr>
<td># 11133.4</td>
<td>PHP: 5.6</td>
</tr>
<tr>
<td># 11133.5</td>
<td>PHP: 5.6</td>
</tr>
<tr>
<td># 11133.6</td>
<td>PHP: 7.2</td>
</tr>
<tr>
<td># 11133.7</td>
<td>PHP: 5.6</td>
</tr>
</tbody>
</table>

Sources: https://travis-ci.org/SemanticMediaWiki/SemanticMediaWiki/builds/281859845
Unit and Integration Testing

October 2018  –  SMW 3.0.0

6,808 tests
17,978 assertions

Source: https://travis-ci.org/SemanticMediaWiki/SemanticMediaWiki
New features and enhancements:

- Supports extension registration via `enableSemantics( example.org );`
- Removes “classic” maintenance scripts
- Adds two utility maintenance scripts (remove duplicate entities, update entity collation)
- Adds new script options to “rebuildData.php” maintenance script (e.g. `--force-update`, `--dispose-outdated`, etc.)
- Adds “smw/schema” namespace to create and maintain JSON specific schemata/profiles (keyword formatting, search profile etc.)
• Adds support for SMW-ElasticStore using Elasticsearch as an efficient query engine
• Adds datatype “Keyword” (normalized to lowercase with 255 characters maximum)
• Provides tighter integration (via SMWSearch) with special page “Search” and adds extended search profile (support for user defined forms)
• Removes “Type” namespace
• Many configuration parameters and their settings overhauled and streamlined
Semantic MediaWiki
Semantic MediaWiki 3.0.0

- Adds support for “compact links” (base64) to special pages “Ask”, “Browse” and “SearchByProperty”
- Improves property pages (user interface) with boxed pagination, a value search field and tabs for usage, improper annotations, synonyms and subproperties as well as a custom tab. Data rows now highlighted on hovering.
- Improves concept pages similarly
- Improves the factbox appearance
Semantic MediaWiki
Semantic MediaWiki 3.0.0

- Overhauls list formats ("list", "ol", "ul" and "template"): 
  - Now also supporting, "propsep" and "valuesep" parameters 
  - Separators now governed by system messages 
  - Now supporting, "class" parameter 
  - "list", "ol" and "ul" formats now with HTML class attributes 
  - "named args" parameter now called without "?" indicator 
  - "userparam" parameters passed to templates now called with "#" indicator 

- Makes "plainlist" format default for queries without printouts

- Adds "templatefile" format for exotic exports into files (defined by templates)
• Adds support for datatable views to result format "table" and "broadtable" using |class=datatable

• Adds 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

• Adds support for query marker "control", |@control=slider

• Adds support for marking an inline query as part of an annotation using query marker |@annotation
Semantic MediaWiki
Semantic MediaWiki 3.0.0

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

- 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).

- Adds phrase: search expression as convenient function where the entire string needs to be matched

- Adds support for `:in` search expression as convenient function (equivalent to `~*...*`)
Semantic MediaWiki
Semantic MediaWiki 3.0.0

- Brings special page “Ask” completely overhauled including going mobile
- Adds possibility to change the entity collation used for sorting (corresponding to MediaWikis category collation)
- Adds two API modules “smwtask” (internal usage) and “smwbrowse” (eventually replacing “browsebyproperty”)
- Added `api_version` to “ask” and “askargs” API modules to switch output generation but keep compatibility with previous outputs
Semantic MediaWiki
Semantic MediaWiki 3.0.0

- Special page “SemanticMediaWiki” was completely overhauled including going mobile
- Special page “SemanticMediaWiki” informs about configuration parameter changes (removals, different settings)
- Support to restrict/limit #ask/#show executions on a per page basis
- Introduces “Authority mode” tied to user group “SMW curator” is to support stricter environments hereby allows to control the property creation process
Many more features and changes

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)
Where are many ways to contribute (cont.)

- Add or enhance documentation (→ click here)
- Add or enhance translations (→ click here)
- Answer questions and participate in discussions (→ click here)
- Organize events (→ click here)
Thank you!