

SWIB20

Semantic Web in Libraries

23 - 27 November 2020
on the web



Semantic MediaWiki

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Bernhard Krabina




Semantic MediaWiki



- ❑ **Collaborative data curation tool**
- ❑ **Metadata tool (Content + Metadata)**
- ❑ **Annotate data in texts**
- ❑ **Knowledge Graph Interface**
- ❑ **Web-based database / content management system**
- ❑ **Uses Semantic Web Standards (e. g re-use ontologies/ vocabularies, RDF/JSON output, API)**
- ❑ **Internal querying of data (SPARQL optional)**
- ❑ **Importing, exporting and visualization (~70 formats)**
- ❑ **Business logic can be implemented by customization, without PHP programming**
- ❑ **Open-Source, with vibrant community**

www.semantic-mediawiki.org

Managing data in MediaWiki

Feature	 Semantic MediaWiki ↗	 Wikibase ↗	 Cargo ↗
Main usecase	Managing data within a MediaWiki installation, based on Semantic Web standards.	Powering Wikidata	Managing data within a MediaWiki ins
Approach	Data (properties) are annotated within regular wikitext or by templates. With the datatype "reference", properties can be used to describe items using statements. ^[1]	Properties are defined and used to describe Items using statements.	Data is stored in database tables, with table corresponding to a template.
Available since	2005	2012	2015
Active installations	1500s ^[2]	10s ^{[3][4]}	200s ^[5]
Community	134+ developers ^[6]	146 developers ^[7]	51 developers ^[8]
Storage	MediaWiki database, Elasticsearch, 5 different SPARQL stores ^[9]	MediaWiki database, Elasticsearch, SPARQL store (Blazegraph for wikidata.org)	MediaWiki database (or a separate database) ^[10]
Property definition	By typing wikitext. Properties can be invented freely. They will be of datatype page by default and can be defined later.	Properties have to be defined before usage.	Instead of using properties, data table defined with a predetermined (but reconfigurable) set of fields per table
Value declaration	Inline (<code>[[MyProperty::MyValue]]</code>) or with templates. Form based data entry with Page	Wikibase default form-like input	With parser functions in templates. F

Contact



Bernhard Krabina

✉ krabina@kdz.or.at

🌐 www.kdz.or.at

🐦 [@krabina](https://twitter.com/krabina)

🌐 [Linked in](#)