

Overview about Apache Stanbol

Apache Stanbol provides a set of reusable components for semantic content management. It is important to note that Stanbol itself is NOT a semantic CMS. It extends existing CMSs with a number of semantic services.

While Apache Stanbol was built with CMS in mind it can also be used for e.g. web applications (tag extraction and suggestions, text completion in search fields); 'smart' content workflows (using several Stanbol semantic engines chained together) or email routing based on extracted entities/topics; etc.

Contents

Mission.....	3
1. Content Enhancement	4
1.1. Search & Navigation	4
1.2. Tagging.....	4
1.3. Interaction.....	4
2. Customization	5
2.1. Searching & Exploring	5
2.2. Auto-Completion.....	5
2.3. Clean-Up & Reconciliation	5
3. Multilinguality	6
4. Knowledge & Reasoning.....	7
5. Indexing & Searching.....	8
Administrative Information.....	8

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Apache Stanbol (STNBL)

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Mission

To provide a set of reusable components for semantic content management.

1. Content Enhancement

Extract information from content.

Extracting information from content is the most common use case for Apache Stanbol. To achieve this, you use the RESTful API of the Stanbol Enhancer to send your content to Stanbol. The Enhancer now applies its Semantic Engines to analyze the content. Extracted information is represented as RDF and returned in the Response of the Enhancement Request. For more information about how to use the Stanbol Enhancer please see this Usage Scenario. The enhancements can be used to improve search and navigation. Enhancement results can also be used to support content editors e.g. by suggesting tags or by allowing the editor to directly interact with entities mentioned in the text ..

1.1. Search & Navigation

Improve search and navigation.

1.2. Tagging

Suggest tags or by allowing the editor.

Stakeholder(s):
Content Editors

1.3. Interaction

Support interaction with entities mentioned in text.

2. Customization

Support customization of enhancements for domain-specific data.

Customize Enhancement Results — Different application domains will have different needs for extracting entities from texts. Because of this Apache Stanbol can be customized with domain specific data ... For doing so you can either use the Stanbol Entityhub to manage your vocabulary or import existing data into the Entityhub... As soon as the application specific information is available in Stanbol you can not only use it to extract information with the Stanbol Enhancer. You can also use it for [the following objectives] The Stanbol Enhancer can be configured to use custom vocabularies. This List of Enhancement Engines provides a good overview of the different configuration options. For specific semantic requirements you can also extend the Stanbol Enhancers by implementing your own Enhancement Engine.

2.1. Searching & Exploring

Search and explore domain knowledge.

searching and exploring your domain knowledge using the Apache Entityhub RESTful services e.g. to get more/ related information for entities extracted by the Stanbol Enhancer

2.2. Auto-Completion

Add auto-completion to UIs.

adding auto-completion to your UI by using VIE with the autocomplete widget

2.3. Clean-Up & Reconciliation

Clean up and reconcile your data.

using the Stanbol Entityhub together with Google Refine to clean-up and reconcile your data.

Stakeholder(s):

Google Refine

3. Multilinguality

Provide support for all languages.

Apache Stanbol is built with multilinguality support in mind. While many components support multiple languages users need to be aware that not all features are available for all languages. Especially the Stanbol Enhancer depends on the availability of Natural Language Processing (NLP) functionality for given languages. Also the linking to Entities requires users to provide language-specific labels.

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4. Knowledge & Reasoning

Add features related to Knowledge Models and Reasoning.

Knowledge Models and Reasoning — TODO: Add features related to Knowledge Models and Reasoning.

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5. Indexing & Searching

Support typical semantic search use cases.

Semantic Indexing and Search — TODO: add typical semantic search use cases

Administrative Information

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