OpenWIMs.org Mission Statement

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Welcome to OpenWIMs.org - this document will describe, at a high level, what a WIM is, what OpenWIMs.org is all about, and how you can get involved. Thanks for checking us out!

- The team at OpenWims.org

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Introduction

OpenWIMs.org is a community and organization dedicated to creating and maintaining a free and open semantic text analyzer. This semantic analysis transforms natural language texts into highly structured machine-tractable data. Our approach to semantic analysis is *knowledge-based* - our processor relies on large repositories of linguistic and world knowledge to determine the meaning of texts.

OpenWIMs.org is also a standards organization. We maintain standards for both what text processing algorithms are used to create WIMs, as well as standards for how knowledge is represented and used.

On WIMs

WIMs, or "Weakly Inferred Meanings", are a frame-based meaning representation derived from lightweight semantic analysis. The production of a WIM from text is referred to as a macrotheory - this is a theory that defines a way of assigning meaning to words.

While macrotheories handle the general rules of text processing, microtheories handle their exceptions - a microtheory defines how to identify certain linguistic phenomena (such as temporality or causality).

WIMs can have attitudes - this describes the context or optionality of a WIM (e.g., domain) and will specify any macrotheories or microtheories used to produce the WIM.

OpenWIMs.org

OpenWIMs.org, founded in 2013, is focused on defining standards for semantic text analysis, providing open-source implementations of those standards, and offering a common meeting point for discussion and efforts that further the goal of robust text understanding.

Analyzers

OpenWIMs.org orients its center around the WIMs format - discussions and implementations of text analysis engines are anchored by WIMs. To help corral the community, OpenWIMs.org defines a set of standards to use when creating or using WIMs; a WIM processor must announce what standards it conforms to, such that a client of that processor can know what to expect (both as output format and output coverage).

These standards include implementation-level details (such as input / output file formats) as well as theoretical linguistic phenomena coverage (such as *macrotheories* and *microtheories* used). OpenWIMs.org provides a common ground to host implementations of WIM analyzers, and to search for ones that meet the needs of a client - a WIM analyzer that is capable of producing WIMs of the needed *attitude*.

Knowledge

In addition to defining standards and hosting implementations of analyzers, OpenWIMs.org provides a community-driven, moderated and open knowledge base designed specifically for use in textual semantic analysis. The lexicon and ontology can be updated for community benefit and forked for custom implementations - while we provide a general purpose set of knowledge repositories, the standards definition allows the user to select the lexicon and ontology of their choice.

Ontology
The ontology serves as a sort of semantic "medium", that is, the ontology provides a common language and context for the semantic representations of text. It is the ontology that allows one to perform useful reasoning about a WIM. We provide a standard format for an ontology to be WIM-compatible. This standard allows the ontology to be used in WIM processing, and to be referenced from a lexicon.

Lexicon
If the ontology is a "medium" then the lexicon is the linguistic "mediator." The lexicon allows the WIM processor to translate an input text into WIMs by applying *macrotheories*. Our lexicon standards allow the meaning of words to be expressed in terms of a WIM-compatible ontology, and provide a means for connecting lexicon entries microtheories about word usages.

Getting Involved

If you'd like to be involved in the OpenWIMs movement, here are some ways you can lend a hand:

1. Get involved in the discussion. Head over to our blog and forums (coming soon) and discuss theory, implementation and use of WIMs.
2. Develop or maintain open source packages. We have implementations in several languages, but could always use more! Pick your favorite language and get started - or help maintain the existing packages to conform to as many standards as possible!
3. Acquire lexicon or ontology. Check out our knowledge acquisition platform (coming soon) to help manually acquire lexical senses or ontological concepts. The platform will point you towards knowledge that is underspecified or has been flagged as needing attention - or sign on to moderate and help direct the actions of acquirers!
4. Support the cause. Donations to OpenWIMs.org will help keep the servers up and running which helps to host all that delicious knowledge!

Head on over to http://www.openwims.org to get involved, help out, or just download the latest packages and knowledge to play around with!