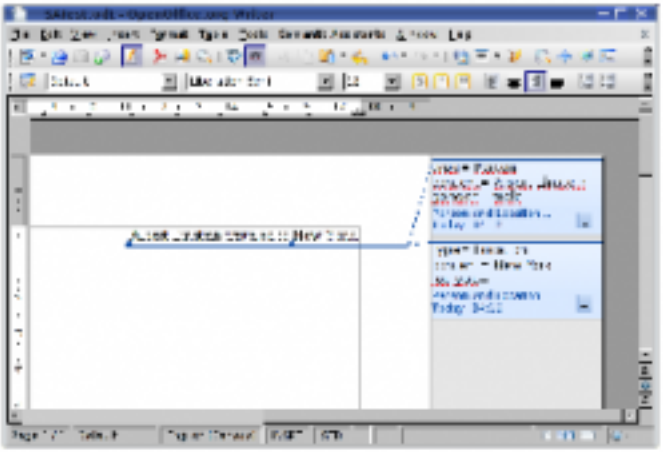
SA-Flyer: OpenOffice

Semantic Assistants: OpenOffice.org Writer Plug-In

The OpenOffice.org Writer plug-in for the Semantic Assistants architecture provides for calling text analysis services directly from within the word processor. Results are either displayed as new documents or as annotations (using side notes) on an existing document.



Background

Today's knowledge workers are often overwhelmed by the vast amount of readily available natural language documents that are potentially relevant for a given task. Natural language processing (NLP) and text mining techniques can deliver automated analysis support, but they are still not integrated into commonly used desktop clients, such as word processors.

Our Semantic Assistants plug-in for the OpenOffice.org word processor *Writer* allows to access any kind of NLP analysis service deployed in the Semantic Assistants architecture. Example services that can help managing large amounts of textual content include information extraction, question-answering, index generation, and automatic summarization. NLP services are executed in the background (asynchronously), allowing users to continue with their work.

Design

Our primary goal for the *Writer* extension was to be able to perform text analysis on a given document. This text can, for instance, be a large document from which information should be extracted, or a problem statement consisting of a few questions, which serves as input for a question-answering (QA) Semantic Assistant. Especially for the last use case, it also allows a user to highlight parts of a document (e.g., a question) and pass only the highlighted part as input to a language service. The plug-in also offers the possibility to specify parameters that need to be passed to a selected NLP service (such as the length of a summary to be generated).

Features

Our plug-in creates a new menu entry "Semantic Assistants:" In this menu, the user can inquire about available services, which are selected based on the client (here *Writer*) and the language capabilities of the deployed NLP services. The integration of a new service does not require any changes on the client side—any new NLP service created and deployed by a language engineer is dynamically discovered through its OWL metadata maintained by the architecture and so becomes immediately available to any connected client. After the service is executed, the result is displayed in *Writer* depending on the type of the server response: either as a new document, as annotations on the existing document, or by opening an external viewer (e.g., a Web browser for HTML documents).

More Information, Software Download, and Contact

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Open Source Software Download (AGPL3): http://www.semanticsoftware.info/semantic-assistants-writer-plugin

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