OntoLP Plugin

1. BASIC INFORMATION

1.1 Tool name

OntoLP Plugin.

1.2 Overview and purpose of the tool

The OntoLP system is a plug-in for the construction environment of the ontologies Protégé. The plug-in intents to be an assistant for the engineer of ontologies for Portuguese during the execution of initial steps concerning the ontologies construction: extraction of terms which are candidates for concepts; and their organization in a hierarchical way. The system uses methods of ontologies construction from texts based on statistical measures and linguistic information. Therefore, in order to run, it's necessary a corpus as input in a XCES format and a syntactic parser, that should be PALAVRAS (available at: `http://visl.sdu.dk/visl/pt/`) , which gives a linguistic analysis.

The plug-in is organized in three steps: (1) tab for loading the corpus; (2) tab for the extraction of the terms; and (3) tab for the hierarchical organization of the terms (see Junior 2012).

The OntoLP tool was implemented as a plug-in for the Protégé (available at `http://protege.stanford.edu`), an editor for ontologies and an environment widely used in the scientific community that supports the constructions of ontologies based on Semantic Web Technologies, as the construction of Web Ontology Language (OWL) ontologies, in accordance with the pattern defined by the World Wide Web Consortium (W3C).

1.3 A short description of the algorithm

Not applicable.

2. TECHNICAL INFORMATION

2.1 Software dependencies and system requirements

Protégé version 3.3.1 in any operative system.

2.2 Installation

A) Uncompress the <OntoLP.zip> file

B) Copy the <meta-info> folder and OntoLP_v3.6B.jar file in to the <plugins> folder of the Protégé installation.

2.3 Execution instructions

A) Run the Protégé

B) Select "new Project" or an existing project

C) Open the menu Project

1. Configure → Tab Widgets

2. Mark the check box of the OntoLP → click O

D) Select the <OntoLP v3.3Beta> tab to start the plug-in.

E) Loading the corpus:

1. Select the <Corpus> tab
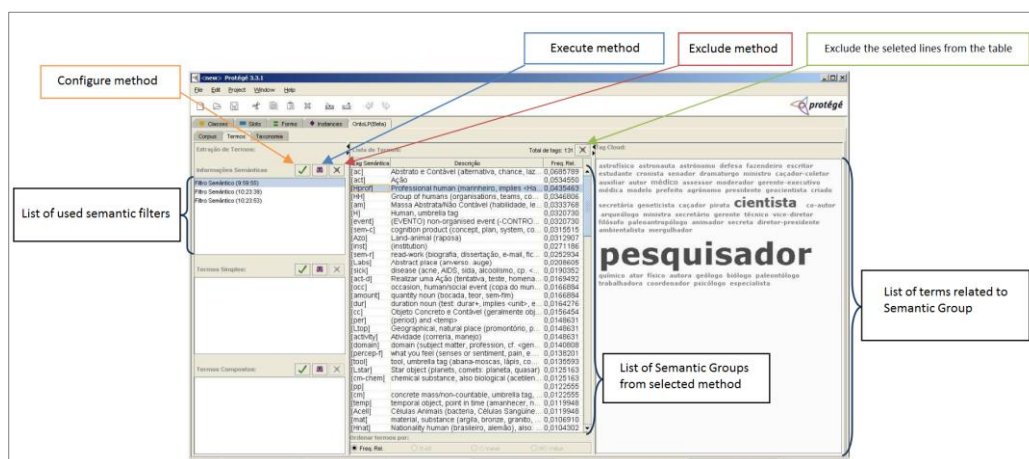
2. Click the button <Carregar Corpus (loading corpus)>

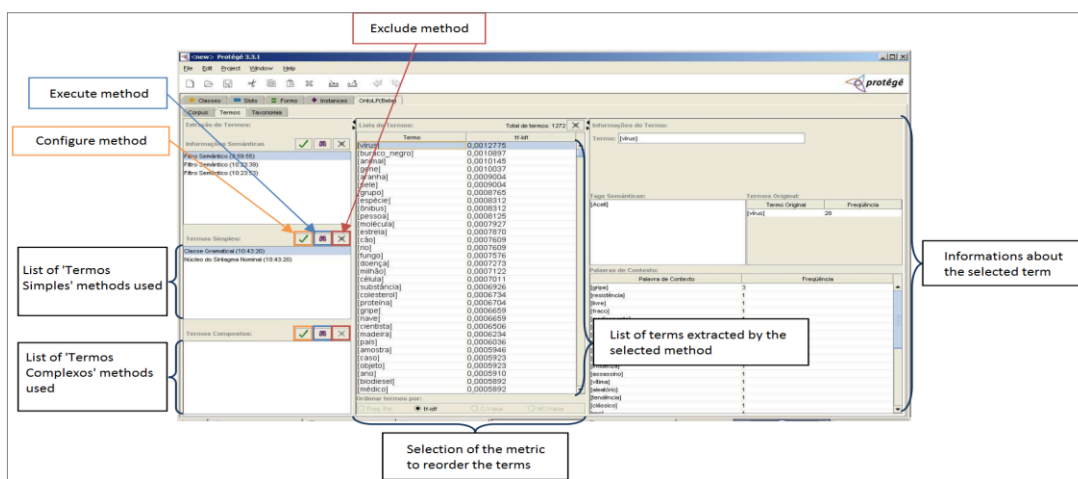3. Select the archives list in XCES format and click <Open>

4. Open the archives presented, by clicking on them.

F) Terms extraction:

1.   Filter by semantic group:

2. Simple and complex terms:

For more information about how to work with OntoLP functionalities and how to deal with ontologies organization, see please the *Manual* (Junior, 2012).

2.4 Input/Output data formats

Input corpus in XCES format.

Not applicable.

2.5 Integration with external tools

Not applicable.

2. CONTENT INFORMATION

3.1 A test input file

Not applicable.

3.2 The output file

Not applicable.

3.3 Approximation of the time necessary to process the test input file.

Not applicable.

3. ADMINISTRATIVE INFORMATION

4.1 Contact person

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4. LICENSE

This tool is free for research only. It will be available on the META-SHARE platform.

5. RELEVANT REFERENCES AND OTHER INFORMATION

Junior, Luiz Carlos Ribeiro; Vieira, Renata (2008). "OntoLP: Engenharia de Ontologias em Língua Portuguesa". In *Anais do XXVIII Congresso da SBC - SEMISH - Seminário Integrado de Software e Hardware*, Belém do Pará, Porto Alegre.

Junior, Luiz Carlos Ribeiro (2008). *OntoLP: Construção Semi-Automática de Ontologias a partir de Textos da Língua Portuguesa.* Dissertação de Mestrado.

Junior, Luiz Carlos Ribeiro (2012). *Manual OntoLP Plugin.* Available at http://www.inf.pucrs.br/ontolp/downloads-ontolpplugin.php.