(IBSE) – IBSE

Contact information

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Technological Offers type

Software

Research and innovation areas

- Tecnologías digitales, Inteligencia Artificial, ciberseguridad, 5G, robótica

Where?

Artificial Intelligence R&I Centre (AI.nnovation Space) Ontology Engineering Group

Software description

Description:
The IBSE (Interoperability Benchmark Suite Executor) program is an assessment infrastructure that automatically runs interoperability experiments between semantic technologies using RDF(S) and OWL as interchange languages. The tool makes it possible to run experiments as well as include new tools into the infrastructure in a simple way.
IBSE also includes two sets of tests to assess the interoperability of the semantic technologies. The RDF(S) Import Benchmark Suite, which serves to assess interoperability using RDF(S) as the interchange language, and OWL Lite Import Benchmark Suite, which serves to assess interoperability using OWL as the interchange language.
For each of the ontologies included in the test sets, the ontology is imported by the tool of origin, is exported to the interchange language, is imported, in turn, by the destination tool, and is then exported again. The results of the experiments are obtained by comparing the ontologies arising in each step.

Programming language:
The software is wholly developed in Java script, and specifically uses version 5.0 of the J2SE platform.

Operating environment:
As it is developed in Java, it can be run on any system that has the Java virtual machine in version 5.0 or higher, although it has only been tested on Windows XP and Mac OSX operating systems. IBSE uses the Jena (version 2.3) ontology management library and the Pellet (version 1.5.2), KAON2 OWL (0.27) and rdf-utils (0.23b) programs as a support for comparing ontologies.

Reference

M-004546/2009