Abstract

The merger of the Semantic Web with the Web Service giving rise to Semantic Web Service, this new technology allows software agents to discover, select, call, compose, invoke, and execute automatically a Web services without the intervention of human beings. In this article, we will apply this new technology in the medical field, specifically in medical analysis, by the
construction of two ontologies: a domain ontology "Medical analysis domain ontology", following
the method METHONTOLOGY and using OWL language and PROÉGÉ tool, and an ontology
of web services medical "Medical analysis Web services ontology", using OWL-S language,
OWL-S EDITOR for PROTÉGÉ tool and the Integrated Development Environment "NetBeans
IDE". The ontology of Web services uses the concepts of domain ontology to define and
describe the IOPEs (inputs/outputs/Preconditions/Effects) of Web service. These two ontologies
are used by a health care system; it includes all those involved in the process of care, human
actors (doctors, patients, lab technicians...), software actors (medical web services, medical
applications...).

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Index Terms

Computer Science
Semantic Web
Key words

Web service  semantic Web service  ontology

OWL-S

WSMO

medical analysis