

Semantic mediation of observation datasets through Sensor Observation Services

Título Semantic mediation of observation datasets through Sensor Observation Services

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Abstract This paper describes a first effort for the semantic mediation between heterogeneous environmental observation datasets through the Sensor Observation Service (SOS) standard proposed by the Open Geospatial Consortium. The solution enables application domain experts to provide an ontology with semantic data integration knowledge, which is next combined with data source knowledge during the evaluation of global SOS GetObservation requests. This enables the development of a more general purpose solution that may be adapted to different application domains by just changing the ontology. Besides, users without specific application domain skills and knowledge may now develop new semantically enabled applications. Finally, the design of the framework is based in the well-known Mediator/Wrapper architecture and follows a Local As View data integration approach, which simplifies the incorporation of new datasets without having to change the existing data integration knowledge.

Palabras clave Observation Data, Sensor Data, Environmental Data, Semantic Mediation, Web Service, Semantic Web

LIGAZÓNS

 [Versión da editorial](#)

DESCARGAS

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PROXECTOS DE INVESTIGACIÓN

KEYSTONE: Semantic KEYword-based Search on sTructured data sOurcEs

OFERTA TECNOLÓXICA

SOS-SM: Mediación semántica de fontes de datos de sensores

SOFTWARE

SOS Semantic Mediation - SOS-SM: Mediación semántica de fontes de datos de sensores

PROGRAMAS CIENTÍFICOS

Procesamento aproximado