

Contribution of Pr. Omar Boucelma, to IIA4WebEconomies

Omar Boucelma recently developed the VirGIS integration system in the field of Geographic Information Systems (GIS). Indeed, the proliferation of spatial data on the Internet is beginning to allow a much larger audience to share data currently available in various GIS. As spatial data increases in importance, many public and private organizations need to disseminate and have access to the latest data at a minimum (right) cost and as fast as possible. However, GIS are highly heterogeneous and poses challenging problems: the two main problems resulting from the data integration are the data modeling (how to integrate different source schemas) and their querying (how to answer correctly to the queries posed on the global schema). We developed agents that allow automatic schema matching (in using the IBM ABLE platform) and we are currently moving to a MAS solution for using VirGIS in a real environmental problem.

This contribution is twofold: Information integration and Web Ontologies.

- Promote agents for Information Integration (software) architectures
- Investigate agent solutions for automatic schema discovery and matching (in challenging specific application domains)
- Scale up agent-based solutions to wide networks such as P2P or Grid architectures.

Omar Boucelma
LSIS – CNRS, Université d'Aix-Marseille
Domaine Universitaire de Saint-Jérôme
Avenue Escadrille Normandie-Niemen
13397 Marseille Cedex 20

Tel : +33 (0)4 91 05 60 53,
Fax : +33 (0)4 91 05 60 33
email : omar@cmi.univ-mrs.fr
www.lsis.org