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POZVÁNKA NA PŘEDNÁŠKU

GEOGRAPHIC INFORMATION SYSTEMS INTEGRATION: THE VIRGIS APPROACH

kterou přednese dne **12.července ve 13 hod.**

Dr. Omar Boucelma z University of Aix-Marseille

v Ústavu informatiky AV ČR, Pod Vodárenskou věží 2, Praha 8.

The proliferation of spatial data on the Internet is beginning to allow a much larger audience to share data currently available in various Geographic Information Systems (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. In order to move to a real Web-based spatial data system, we need to provide flexible and powerful GIS data integration solutions. Indeed, GIS are highly heterogeneous: not only they differ by their data representation, but they also offer radically different query languages. The two main problems resulting from the data integration are the data modelling (how to integrate different source schemas) and their querying (how to answer correctly to the queries posed on the global schema).

In this talk, we describe the VirGIS geographic mediation system. A data mediation system provides users with a uniform access to a multitude of (local/remote) data sources, without duplicating the data. The user poses her query against a virtual (global) schema, the query is in turn rewritten into queries sent to the local sources. VirGIS complies with Open GIS Consortium recommendations in using the Geography Markup Language (GML) for the encoding and the transport of geographic information, and the Web Feature Server (WFS) interfaces to perform communications with clients and data sources.

Dr. Omar Boucelma is a Professor at University of Aix-Marseille. He holds a PhD in Applied Mathematics and a "Habilitation à Diriger les Recherches" in Computer Science. From 1993 to 1995, Omar Boucelma worked as a research associate at Colorado University, Boulder, where he was involved in several US ARPA research programs.

Omar Boucelma's main field of research is in the representation and management of information in large and distributed data sources, focusing both on the architectural, language and the implementation aspects of the issue.

Omar Boucelma is conducting his research with application to various domains such as Geographic Information Systems or Bioinformatics. He recently developed a data integration system in using standard technologies such as XML.