

Ontology-based Data Management

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Ontology-based data management aims at accessing and using data by means of a conceptual representation of the domain of interest in the underlying information system. In this talk I will provide an introduction to ontology-based data management, by illustrating the main ideas and techniques for using an ontology to access the data layer of an information system. After an introduction to the notion of ontology in this context, I will describe an architecture for ontology-based data access, I will discuss the issue of choosing the appropriate language for expressing the various components of the architecture, and I will illustrate the main advantages one gains in managing the information system through the ontology. Finally, I will discuss the issue of developing methodologies and tools for the design and usage of ontology-based data management solutions.

Categories and Subject Descriptors

H.2 [**Database Management**]: Miscellaneous;
I.2.4 [**Knowledge Representation Formalisms and Methods**]: Predicate Logic

General Terms

Theory