

**BUILDING OF A SCALABLE DATA MANAGEMENT SYSTEM WITH
EFFECTIVE REQUIREMENTS****Ch.Sangeetha¹, K.Bhavani²**¹M.Tech Student, Dept of CSE, TRR College of Engineering, Hyderabad, T.S, India²Associate Professor, Dept of CSE, TRR College of Engineering, Hyderabad, T.S, India**ABSTRACT:**

The current development in support of structuring an ontology-based data management system is to take advantage of efforts that were made to intend pre-existing data management systems. In our work we expand traditional definitions of modules and we set up new properties of robustness that offer means for checking simply that a robust module-based data management systems evolves securely regarding both schema as well as data of the reference data management systems. Differing from traditional works, we have considered difficulty of safe personalization of modules that are built from existing reference data management systems. In our work, we revisit the reuse of reference ontology-based data management systems in order to put up novel data management systems with precise needs. Conventional definitions of modules in literature basically resort to concept of conservative extension of a schema or else for getting regarding non-interesting relations of a schema.

Keywords: Data management system, Relations, Robustness, Schema, Personalization.

1. INTRODUCTION:

In numerous application domains wide-ranging schemas that re resulting from collaborative initiatives are made obtainable. These schemas which are well-established are often connected with consistent data that have been cautiously collected, and confirmed, as a result providing reference ontology-based data management systems in several application domains. In recent times, efforts which are made in description logics offer various solutions to attain such a re-usage of reference ontology-based data management systems. In fact, current ontological languages are in reality XML-based syntactic variants of renowned description logics. For good practice we have to build on the efforts to propose reference data management systems when we have to build up our own data management systems with particular requirements [1]. An approach to carryout is to take out from reference data management systems the piece of schema applicable to our application requirements, perhaps to personalize it by extra-constrains regarding our application under construction, and subsequently to manage our own dataset by means of the resulting schema. In our work, we revisit the reuse of

reference ontology-based data management systems in order to put up novel data management systems with precise needs [2][3]. We have initiated two notions of module robustness that initiates to build locally relevant queries to request the reference database with the purpose of checking global consistency, and to get hold of global answers for local queries.

2. METHODOLOGY:

The present trend for structuring an ontology-based data management system is to take advantage of on efforts that were made to intend pre-existing well-established data management systems. The method amounts in the direction of extracting from reference data management systems a piece of schema appropriate to the novel application needs a module, perhaps to personalize it by extra-constrains regarding our application under construction, and subsequently to manage our own dataset by means of the resulting schema [4]. In our work we broaden existing definitions of modules and we set up new properties of robustness that offer means for checking simply that a robust module-based data management systems evolves securely regarding both schema as well as data of the

reference data management systems. Traditional definitions of modules in literature basically resort to concept of conservative extension of a schema or else for getting regarding non-interesting relations of a schema. So far, conservative extension has been in consideration for designing a module as subset of a schema. We consider the difficulty of safe personalization of modules that are built from existing reference data management systems. This increases novel issues to confirm that a module-based data management system evolves autonomously but coherently regarding reference data management systems from which it has been built. On the contrary, forgetting has been measured for defining a module as logically implied by means of a schema. It is simple to see that although our module-based data management system is reliable, it is not consistent together with the reference data management systems. Detection of such type of inconsistency, known as a global inconsistency, is significant as it point towards that data contradicts reference data management systems, and therefore is possibly erroneous. Our fundamental idea is consequently to use the complete reference data management systems as additional

constraints to be satisfied by means of module-based data management systems. Instead, we broaden the concept of module to robustness towards consistency checking, with the intention that global consistency checking can be carried out on demand. Robust module-based data management systems present a remarkable peculiarity regarding data storage. An approach of reducing data storage within robust module-based data management systems is to accumulate only data that are not already somehow accumulated in reference data management systems [5].

3. AN OVERVIEW OF MODELLING OF DL-LITE:

The modules that are introduced in our work generalize both modules that are obtained by means of extracting a subset of a Tbox with reference to particular relations or else by means of forgetting about relations. On the contrary with traditional works, we have considered difficulty of safe personalization of modules that are built from existing reference data management systems. This raises novel issues to make sure easily that a module-based data management systems evolves autonomously but coherently regarding reference data management

systems. We have introduced two notions of module robustness that initiates to build locally relevant queries to request the reference database with the purpose of checking global consistency, and to get hold of global answers for local queries. We have to construct on the efforts to propose reference data management systems when we have to build up our own data management systems with particular requirements. In description logics, a schema is known as a Tbox and its connected dataset is called an A box. A Tbox is described on a signature which is disjoint union of unary relations recognized as atomic notions and binary relations renowned as atomic roles. It comprises of a set of constraints known as terminological axioms, usually inclusion constraints among complex concepts, specifically unary or else binary description logics formulae built upon atomic relations by means of constructors approved in description logics under consideration. The most important idea underlying concept of module of a Tbox is to confine several constraints of Tbox, including the entire constraints that are built upon a specified signature, denoted signature of interest. Our contribution is to set up and study new properties of

robustness that offer means for checking simply that a robust module-based data management systems evolves securely regarding both schema as well as data of the reference data management systems. The DL-Lite family has been considered so that data management is first order logic reducible. The most important thought of first order logic-reducibility is to be competent to carry out a data management task in two various steps such as the initial reasoning step that produces first order logic query and a subsequent step which assess that query within a pure relational approach. Actually first order logic queries can be practiced by means of SQL engines, consequently taking benefit of well-established query optimization schemes that are managed by criterion relational database management systems. First order logic-reducibility of data management holds in DL-lite only when forbid functionality [6].

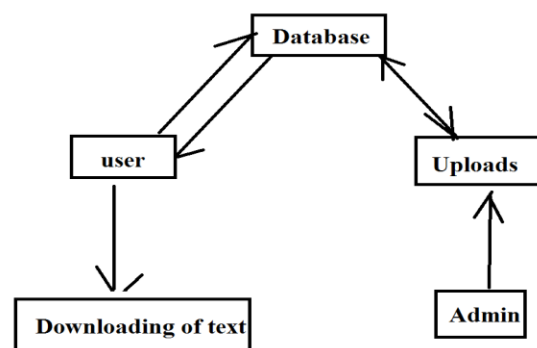


Fig1: An overview of flow diagram.

4. CONCLUSION:

To achieve re-usage of reference ontology-based data management systems in recent times, efforts which are made in description logics offer various solutions. In our work, we revisit the reuse of reference ontology-based data management systems in order to put up novel data management systems with precise needs. Here we expand existing definitions of modules and we set up new properties of robustness that offer means for checking simply that a robust module-based data management systems evolves securely regarding both schema as well as data of the reference data management systems. Up to now, conventional extension has been in consideration for designing a module as subset of a schema. Established definitions of modules in literature basically resort to concept of conservative extension of a schema or else for getting regarding non-interesting relations of a schema. In contrast to the established works, we have considered difficulty of safe personalization of modules that are built from existing reference data management systems. This raises quite a lot of innovative issues to make sure easily that a module-based data management systems evolves autonomously but coherently regarding reference data

management systems. We have considered DL-Lite family so that data management is first order logic reducible.

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