Abstract

RDF has gained great interest in both academia and industry as an important language to describe graph data. With the increasing amount of RDF data which is becoming available, efficient and scalable nowadays has become a challenge to achieve the semantic web vision. The RDF model has attracted the attention of the database community and researchers to propose various methods to store and query the RDF data efficiently. However, current RDF database suffer from several problems, like, poor performance behavior for querying RDF data. This paper provides a comparative analysis made on selective RDF databases storages. It provides a precise study on the various means of having a persistent storage and access of RDF graphs. Recently there has been a major development on initiatives in query processing, access protocols and triple-store technologies. In the evaluation the use of a non-memory and a non-native store Sesame, a native store Allegro graph and Jena API a main-memory based RDF storage system, specifically designed to support fast semantic association discovery. The framework and applications with the ability to store and to query RDF data are analyzed and investigated. Moreover, this paper gives an overview of the features of techniques for storing RDF data and the main purpose of study is to find suitable
storage system to store RDF data.

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Index Terms

Computer Science  Information Sciences

Keywords

W3C  API  RDF  RDFS  Native Store  OWL  SPARQL  DAML  OIL  API  SDB/TDB