اسماء المشاركين في البحث: **HodaMokhtarHaytham AL-FeelAhmed Slama Ismail,** , أ

Abstract

DBpedia is considered one of the main data hubs on the web nowadays. DBpedia extracts its content from different Wikipedia editions, which dramatically increase day after day according to the participation of new chapters. It became a big data environment describing 38.3 million things with over than 3 billion facts. This data explosion affects both the efficiency and accuracy of the retrieved data. From this point of view, we propose a new architecture to deal with the DBpedia using big data techniques in addition to the Semantic Web principles and technologies. Our proposed architecture introduces HIVE-QL as a query language for DBpedia instead of the SPARQL Query Language, which is considered the backbone of the semantic web applications. Additionally, this paper presents the implementation and evaluation of this architecture that minimizes the retrieval time for a query in DBpedia.