

Book Review

Cloud based RDF Data Management

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RDF as a framework for representing information in the web has gained influence over many domains in the last years leading to increasing applications. One reason for the increased applications is due to the cloud environment and hence the authors in this synthesis, has addressed the RDF data management in cloud applications.

This book has 7 brief chapters starting from the introduction till the conclusion. In the initial chapter on Introduction the authors have outlined the content of the book. Open data, linked data and data volume are perhaps constitute three major causes for such significant rise of the RDF influence. The scope of it is outlined In the first chapter based on this growth.

In the second chapter on Preliminaries, the background of the RDF data model and SPARQL query language where the data architecture is built is explained. The descriptive data model component is outlined followed by distributed file system and storage distribution grammar.

The storage of the existing cloud data RDF management is described by the authors in the third chapter. The first part of this chapter explains the two partitioning strategies and the next one speaks about the storage alternatives used for storing data. In the fourth chapter on the authors highlighted the fact that in RDF data management the crucial part is the query where the system evaluates the query and provide the answer. The taxonomy given for related style query processing strategies provide a comprehensive understanding of the query processing systems. For the SPARQL query evaluation joins are important where the join operator works as the core operation. Join operators are detailed with good illustrations.

In the next chapter on SPARQIL, Query Optimization for the Cloud, the authors presented the concepts and algorithms required for the query planning. In this chapter initially authors explained the spaces of logical plans considered in cloud RDF processing systems. Planning algorithms form the next part of this chapter. The chapter 6 on RDFS Reasoning in the Cloud, have classified the cloud based systems which support the RDFS reasons according to the categories arrived by the authors.

As per the authors' words in the last conclusion chapter, we found that the authors addressed the state of the art in RDF data management in a cloud environment and the new developments in RDF data management in the parallel or distributed architecture. This book is supported with a comprehensive related references and the list of resources used in this book. This book is very lucid and helps users to gain understanding of RDF data management. Users may found this book as a useful addition in the data management literature.

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