

Survey on Novel Optimization Algorithm Using ACOSIO

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ABSTRACT: Big data is the data sets whose size is vast when compared to the capability of a advanced guard and assumption to imprison, orgnize, and procedure these data about data an endureable lapsed moment. The structural and unstructured records are the fast growth in ontology based challenges in performance more scalability and efficiently. The ant-colony algorithm is a probabilistic technique for solving large data sets problems which can be reduced time to find particular data sets. The issues in a traditional centralized reasoning methods is using in small datasets (TIF/EAT) the performance is less. In this paper new algorithm i.e Ant Colony Swarm Intelligence Optimization (ACOSIO) has been proposed for optimizing the unstructured big data to structured data. The proposed algorithm gives better performance in terms of scalability, less time and efficiency compared to Traditional centralized reasoning methods.

KEYWORDS: Ant Colony algorithm, Big Data, Map Reduce, Swarm Intelligence Optimization.

I. INTRODUCTION

The large volume of World Wide **Web** Consortium (W3C) information & vast development, varied real applications enclose emerge of a variety of the sectors for examples like a social networks, public sectors, hospital and existence sciences [1], commerce development organization [2], specialist system e-marketplace [3]. The Semantic Web [4] was predictable to include 7.7 billion thrice in 2010 & has now grewed over 40 billion thrice. Its increase rate is still growing. As it is developing into a worldwide information-based framework to promise a kind of swarm intelligence, supporting data researching over such a large and growing dataset has become an important issue. But the Big data means the data sets whose size is vast when compared to the capability of advanced guard and assumption to imprison, orgnize, and procedure these data about data an endureable lapsed moment. Now day, Big Data organization provides viewpoints as a face up to for all software company. The result to such a face up to is moving more and more from providing hardware to provisioning more convenient IT result [5]. Big data also provide original opportunity and grave challenges to company and academic world [6] [7].

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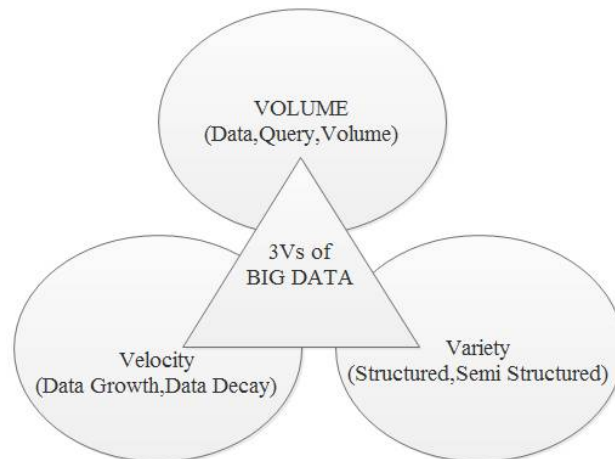


Figure 1 Big data definition

II. LITRATURE SURVEY

JayavardhanaGubbi, RajkumarBuyya, [8] proposed system is been set up big data, It will support for operating syatem, WSN(wireless sensor network) this information organization & dispensation, analytics. In this paper is quite and advantages data about data transform the data from the database through the internet.

Marisol García-Valls, Pablo Basanta-Val, proposed were the level of hardware, networked embedded systems (NES) are becoming a cloud of hundreds, and even thousands, of heterogeneous nodes connected by means of heterogeneous networks as well; they are now used in various domains such as cloud or grid.

Keling DA, Marc DALMAU, Philippe ROOSE, proposed system is context collector first collects information on the operating environment from the operating system and the user context.

III. RELATED WORK

Regulations implication has concerned more helpfulness beginning of both academic & company present days. More implication engines have been developed to maintain the reasoning over Regulations(semantic) Web, structured web, unstructured web. Grau *et al.* existing an incremental reasoning method from modules that can reclaim the data obtained from the before versions of an ontology. This method is used for OWL but not suitable to the mounting RDF data.

IV. PROPOSED SYSTEM

In this proposed the new algorithm i.e Ant Colony Swarm Intelligence Optimization (ACOSIO) has been proposed for optimizing the unstructured big data to structured data. The proposed algorithm gives better performance in terms of scalability, less time and efficiency compared to Traditional centralized reasoning methods.

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V. RESOURCE DISCRIPITON FRAMEWORK

Semantic Web is based on resource discription framework, it is integrate the assortment the application by with XML into language rules and (URI) into naming [12]. RDF is an assertion language envisioned has been recycled to state proposition via specific recognized vocabulary [11]. A Resource description framework information flow is parallel to abstract model method, and it base on the knowledge as create statement concerning possessions. This primary element as RDF is a thrice that is used to express the association linking two things.

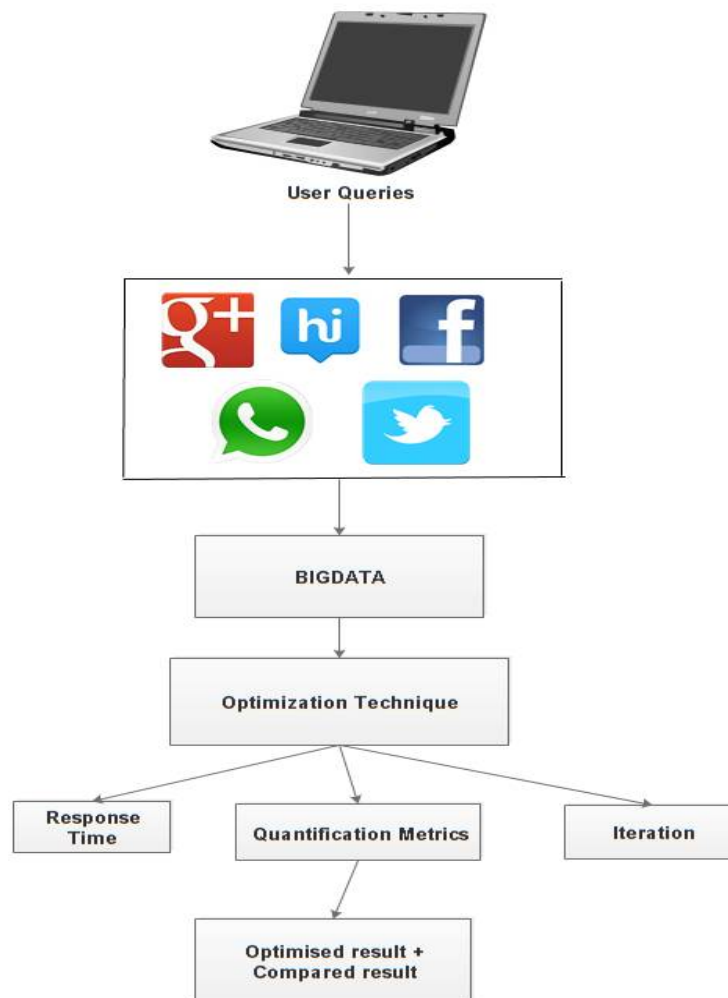


Figure 2 Proposed System Architecture

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VI. MAP REDUCE

It is a programming model. It will process a large amount of data or large amount of data sets will be executed by MongoDB database. The data executed query at parallel process manner [10]. From HDFS the data will be retrieved by MongoDB query language.

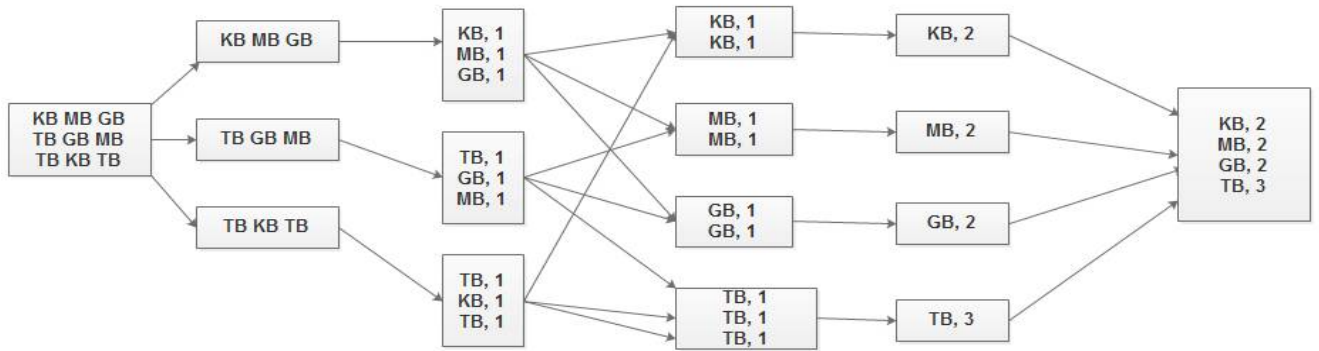


Figure 3 Map Reduce

VII. HADOOP DISTRIBUTED FILE SYSTEM

HDFS were planned to be accessible, distributed more storage system that works carefully with Map Reduce [9]. HDFS will "impartial work" under a structural of carnal and system atmospheres. By using distributed large storage and Computations across to many servers.

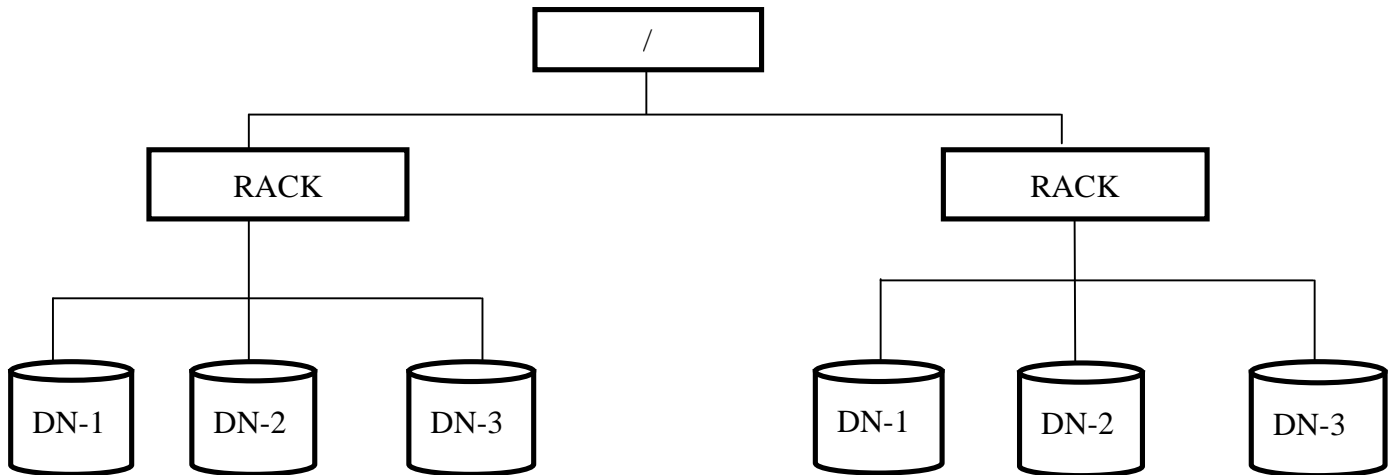


Figure 4 Hadoop distributed system

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VIII. CONCLUSION

The big data, logic at World Wide Web Consortium (W3c) is a progressively stimulating instead of the huge quantity of data Involved and the time and space convolution of the mission. These papers for the primary moment used for (ACOSIO) to agreement in bulky level incremental in RDF datasets to access the information. User will excited their query more effectively. The datasets access by map reduce and hadoop for our method. It will reduce the time complexity and space complexity. It will be update the datasets at simultaneously process.

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