Cost Efficient Ranked Query Services in The Cloud
Shivaputra S. Panchal¹, Priyanka M. Bandenavar ²

¹Assistant Professor, Department of Computer Science and Engineering, BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering & Technology, Vijayapur, Karnataka, India
²M.Tech Student, Department of Computer Science and Engineering, BLDEA’s V.P.Dr.P.G.Halakatti College of Engineering & Technology, Vijayapur, Karnataka, India

ABSTRACT

Today distributed storage has turned out to be notable innovation. Each of all large and small associations depend onto the cloud as this give effortlessly available administrations from anyplace by simply utilizing web. In worthwhile cloud computing, the client may sustain a specific amount of time from retrieving data from remote storage to minimize the costs. Efficient Information Retrieval for ranked Query (EIRQ) schema reduces questioning complexity acquired on the cloud. In this system questions are characterised to multiple ranks, maximum ranked query can retrieve a maximum level of similar documents. Consume retrieve documents on request specifying queries of different ranks. It accommodating when there are a far reaching number of comparative archives, however the customer simply needs a little subset of them.

Keyword: Differential query services, cost efficiency, Cloud computing.

1. INTRODUCTION

Cloud computing has most widely preferred, specially for storing and fetching the documents from it. This advantages makes everyone to use the cloud. In day today life every industry buys the cloud administration and provides its member to use the cloud to deploy there documents and retrieve those from it. This makes an problem of privacy in the cloud, that is the cloud can know the accessing party and what information is the party is accessing and all. To Prevent this negative impact the proposed system provided the ADL facility so that it can hide the overall information from the cloud as well as the ADL makes the system run faster and secure way. Another problem with the cloud is delay in the fetching the information from system that is if the clients want only the small amount of the information from the large dataset which are belongs to the query which the client has asked. Client can wait large amount of time in fetching the information from this system, to overcome this drawback the EIRQ technique. EIRQ schema enables the clients to assign the rank to the question so that the cloud can fetch those amount of documents from the cloud. This enables the clients to reduce the communication time as well as the complexity in executing the large amount of the data. The present paper is developed based on the Ostrovsky schema and provided the solutions to those query which all are not covered in it.

2. LITERATURE SURVEY

Matthieu Finiasz et.a[1] described Private Stream Search it allows the clients to a search queries on the bases of keywords without enhancing the clients information about what they are searching in the cloud.

Cong Wang et.al[2] presented the secured ranked keyword search over the encrypted data to achieve effective utilization of data stored in the remote system. And described the statistical measure approach and developed a one to many order preserving mapping techniques.

Megha Babu et.al[3] introduced a technique to search a data in the cloud based on the keyword frequency. If he frequency of keyword is high it returns maximum matched files. It also reduces the communication complexity.

Deke Geo et.al[4] investigate the advancement approach and three network applications of bloom filters, Namely bloom joins, informed search and global index implementation. The information searched on bloom filters can get higher achievement rate of query than the blind searching.

Vittario Giovanneti et.al[5] explored Quantum private query protocol for the security analysis. It allows a client o retrieve the information from the database without revealing is privacy as well as is also ensures the privacy of the database.

J.Bethencount et.al[6] presented new technique for the private keyword search on streaming data and exists the communication between the client and server to return the data from the remote storage and the information which are retrieved by the system are stored in the separate compact buffer.
S.Yiu, C. Wang et al. [7] aims at fine-grained data access control in cloud computing and addressed the problems in his context is to achieve data confidentiality, scalability, and proposed a scheme of proxy encryption and lazy re-encryption techniques. Their scheme can enable the data owner to delegate the most computation overhead to powerful cloud computing.

A.Berl et al. [9] proposed a different energy and power models and developed a model for green cloud with the help of SLA's these all minimizes the energy and power utilization in the cloud.

P.Gole et al. [10] defined a security model for conjunctive keyword search over encrypted data and proposed a schema for which communication cost is linear in the number of documents.

3. OBJECTIVE

- The proposed three EIRQ technique is to provide the cost efficient search in the cloud using the ADL as the intermediaries.
- The EIRQ technique can protect user privacy while providing a differential query service that allows each user to retrieve matched files on the demand.
- To provide the solution to adjust related parameters one is based on the the Bloom filter technique.

4. SYSTEM ARCHITECTURE

Fig: 1 System architecture

Fig: 1 shows the architecture of the EIRQ schema. It consists of three entities such as ADL, Cloud, and the users. The ADL layer placed between the user and the cloud, it act as a mediator between cloud and the user. It receives the request from the users and aggregates those requests and send to the cloud and cloud will execute the queries and process the result to ADL, and ADL distributes the result to each user. In the above figure we have shown a single ADL layer. We can deploy any number of ADL in the system. To summarizes the queries, this system require ADL to hold a small amount of timestamp before running queries, that may cause a specific questioning postponement. To additionally leverage the interaction time, different ranked service are allow every client to retrieve similar documents on request, client selects his interested rank for his query to retrieve the amount of data that is result in to the asked query in the cloud. This element is helpful when we have a more number of documents that similar to a client's query, yet the client just needs a little subset of them.

5. CONCLUSION

The proposed EIRQ schema enables the ADL to give differential inquiry organizations while guaranteeing customer security. By using our plans, a customer can recuperate different rates of facilitated reports by deciding request of different positions. By furthermore decreasing the correspondence cost caused on the cloud, the EIRQ designs allow secure looking for methodology more apropos to a cost-profitable cloud condition. In any case, in the EIRQ designs, basically choose the rank of each record by the most highest rank of queries it matches.

REFERENCES

[1] M. Finias and K. Ramchandran, “Private stream search at the same communication cost as a regular search: Role of LDPC codes” in proc.of IEEE ISIT 2012

[2] Cong Wang, Kui Ren, Ning Cao "Enabling secure and efficient ranked keyword search over outsourced cloud data" IEEE transaction on parallel and distributed system vol 23, no 8, August 2012


