A Simple and Secure Data Transfer Over Location Based Cloud Services

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Abstract:
We propose a novel model of secure location based query search implementation with Path server to identity the route and spatial system or location based server identifies the spatial query results. Even though various models proposed by various researchers from the years of research, every model has its own advantages and disadvantages. Initially user makes the spatial query request, in turn it forwards to location based server and followed by path or route server. It computes the path and forwards to LBS and gets the respective spatial results and forwards to requested user. Our proposed model gives efficient results than traditional models.

I. INTRODUCTION

Conventional database frameworks have been intended to give rectify (i.e. sound and finish) answers for database questions. Plainly for some developing conditions, for example, remote computing it is not one or the other functional nor important to hold fast to such a stringent necessity. In a portable computing condition, attributes, for example, accessibility, network, low-band width, information quality, utilization cost and question imprecision force new imperatives on database frameworks. In such a computing situation, clients may not acquire consummate solutions to their inquiries inside a satisfactory time. In any case, inside known points of confinement of accuracy and exactness, a surmised answer may get the job done for some versatile clients.

In some environments there are some arguments like there is a necessary to provide accurate and exhaustive answers to queries. as these it may not be important to give both precise and thorough responses to inquiries. Because of the impediments of memory and processing power, it is sensible to answer inquiries utilizing a dense type of the primary database. Synopsis databases are normally requests of greatness littler than the principle database. What's more, subsequently would more be able to effortlessly be put away on the portable host. Amid detachment or powerless associations, five techniques can be utilized[1][2].

- Query can denied.
- At the time of execution strong connectivity is available.
- Due to poor connection query processing will be slow and takes more response times.
- Summary Data can be used to reply to the queries results approximate answer.
- The processor at mobile host may decide to phrase the query to use only summary data to get an answer to different query.

In computing Scheduling alludes to an arrangement of approaches which characterize the request of execution of procedures. From the greater part of the accessible assets of a PC framework that requirements planning before utilize, the CPU is a standout amongst the most condemning of them. Multiprogramming is one of the essential and critical planning method. The booking in CPU is done to keep it as occupied as could be allowed. In parallel computing, numerous processors must be planned, and it needs to deal with the assets for every one of the processors. In dealing with the assets for various processors, it ought to be guaranteed that, there ought not be any covering of the assets, and it ought to not give any clashing outcomes. So the booking in multiprocessors is more troublesome than booking in a solitary processor unit[3][4].

In scheduling of numerous processors it ought to be guaranteed that any processor ought not be over-burden and any processor ought not be under stacked. So the general framework ought to be adjusted. In multi-modified memory frameworks, at the point when there are different prepared procedures in the primary memory, the scheduler must choose the request of execution of forms. Be that as it may, in parallel preparing framework, as there will be numerous processors, there will be different lines, so there is need of scheduling numerous lines all the while. The scheduling calculations for numerous processors ought to be fit for scheduling every one of the lines ideally[5].

II. RELATED WORK

Various traditional approaches proposed by various authors from years of research, every approach has its own advantages and disadvantages. Performance and time complexity are the major factors while community searches. Nodes should be grouped based on the weights and edges existence between the nodes.Traditional community based approaches is more complex to group from the source node and there is no further practical search implementation. Identification of neighbor with simple edge does not retrieve optimality.

1. More time complexity if route api computes path with all available nodes for every request
2. Less performance and additional overhead to location based service
3. User may receive irrelevant results if response if slow

Our current set of natural language techniques for query enhancement are:

• deletion of potentially misleading text;

• grouping of proper names and interrelated noun phrase concepts;

• automatic concept expansion;

• simple rule-based interactive query modification.

Future experiments will use more extensive automatic noun phrase processing and paragraph level retrieval. In addition to the traditional recall/precision table, we show tables of the precision for the top n documents retrieved, for 5 values of n. The recall/precision table measures the ability of the system to retrieve all of the documents known to be relevant. The precision for the top n documents gives a better measure of what a person would experience in using the system[6][7].

Nearness and phrase administrators for thing phrases. Straightforward thing phrase handling is done in two ways. Groupings of formal people, places or things are perceived as names and gathered as contentions to a nearness administrator. The nearness administrator requires that its contentions show up in strict request in a record, however permits an interword separation of three or less. In this manner and inquiry, for example, George Bush matches George Herbert Walker Bush in a report[8][9].

Controlled vocabulary: The INQUERY framework has been planned so it is anything but difficult to include discretionary protest sorts to actualize a controlled ordering vocabulary. For instance, when an archive alludes to an organization by name, the report is ordered both by the organization name (words in the content) and the question type.

When we consider natural language text, it is easy to notice that not all words are equally effective for the representation of a document's semantics. Usually, noun words (or word groups containing nouns, also called noun phrase groups) are the most representative components of a document in terms of content. This is the implicit mental process we perform when distilling the "important" query concepts into some representative nouns in our search engine queries. Based on this observation, the IR system also preprocesses the text of the documents to determine the most "important" terms to be used as index terms; a subset of the words is therefore selected to represent the content of a document[10].

III.PROPOSED WORK

We propose a novel model of location based or spatial search implementation with dynamic cluster implementation over location based servers and route or path based servers. End user makes a spatial query which includes object or entity followed by a feature set, this spatial object forwards to location server which internforwards the spatial object or location and requested user location node. Path or route server always be in listening mode and it receives the input request from location or spatial server and applies cluster based implementation to identify the nearest nodes which have similar set of entities and forwards back to location server and search for results by spatial object and forwards to end user. Clustering process reduces the number of nodes while computation of irrelevant paths can be ignored andless time complexity, user can receive query results in optimal time

Route generate server receives the incoming request from spatial server as spatial object which includes entity and feature set or attribute set along with search node. It generates the clusters with available nodes in the route server databse and check the search node location in clusters and returns only those clusters to location based server to search the spatial objects. It obviously improves the performance by eliminating the irrelevant clusters which does not have search node.

Usually various nodes available in various locations or zones can be based on the latitude and longitude of the

nodes.Nodes can be clustered based on latitude and longitudes of the nodes, distance can be computed based distance between the centroid and search nodes and gets the minimum distance node and keeps the node in respective clusters and it eliminates the uncessary clusters which are not in zones.

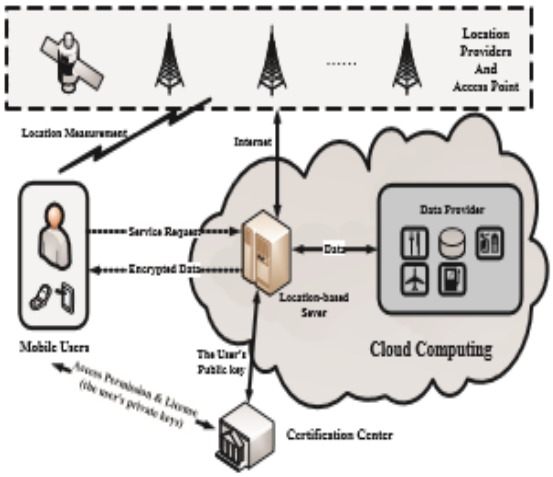


Figure 1: Location-based service architecture.

K Means Cluster Implementation:

Step1 :Load the set of all nodes from various zones and input search node

Step2 :Specify k number of centroids in all nodes (N) and N>=k

Step3 : Compute the euclidean distance between centroid and node N_i

If (O.attribute==Q_i.attribute)

Add 'O' to R_{list}

Next

Next

4. Sort the Result set
5. Return R_{list}

Location based server receives the response and search for user requested spatial object . Verifies in

Step4 : While (Eucl distance(C_i,O_i) <=initial distance) then

Optimal distance:= Euclidean distance;

Centroid_id=Ci;

End while

Step 5: Reinitiate the clusters the with new centroids for every iteration

Step6 .Continue the process or steps from 2 to 5

End user request received at location based server with spatial object and serach results which are received from route server which contains set of nodes. Location based server searches in all set of nodes which meets the requiremsnt of spatial object and feature set and return to end user I order of minimum distance between the search node.

Location Query Search Implementation:

Input: Qi—Input Spatial Query, DO_{list}(Total Data objects)

Output: R_{list} (result set)

1. User provides the spatial query which involves the spatial object and feature
2. Load DO_{list} from database(LBS)
3. For i=0;i<List_Nodes ;i++

   For each Object O in DO_{list}

   If(O== Q_i.objectname)

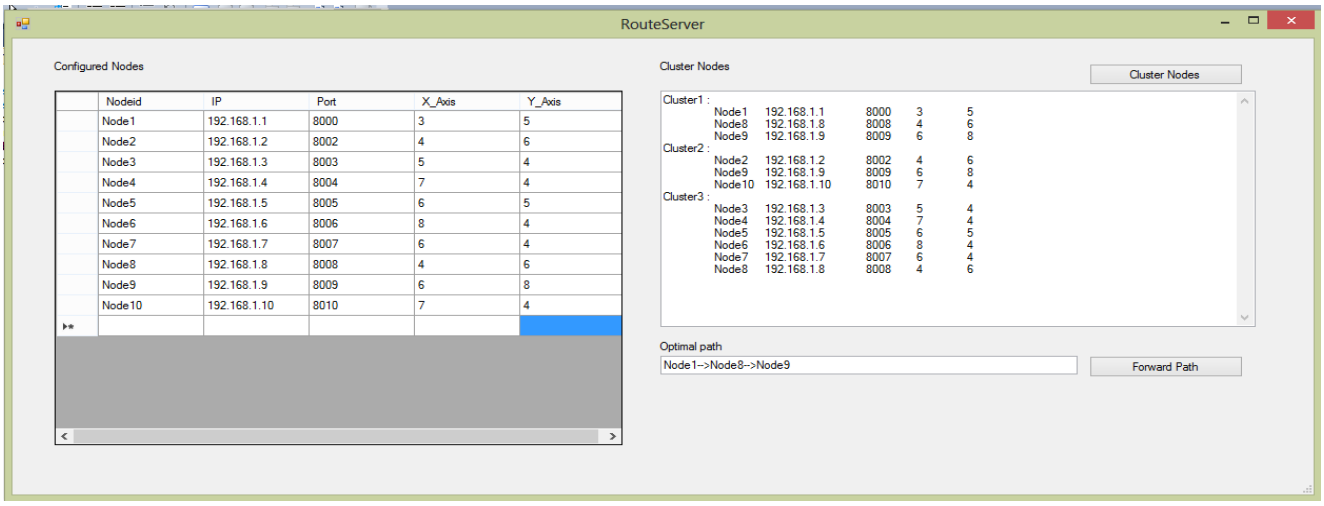
   Add to Object_List

   Next

   For each object O in Object_List

all set of clustered nodes and maintains the sequence based on the minimum distance. LBS retrieve the results from the nodes and check the required threshold, if it does not meet check for next immediate neighbor, until it meets threshold value.

Output Analysis:



For programmatic implementation we clustered some set of nodes with clustering implementation based on Conclusion:

We have been concluding our current research work with efficient location based search implementation various intermediate level of implementation. End user makes a spatial query which includes object or entity followed by a feature set, this spatial object forwards to location server which intern forwards the spatial object or location and requested user location node. We can improve our current cluster based approach with dynamic cluster implementation ,in our current approach we implemented node clustering based on the geo locations with static number of clusters but in real time application data should be grouped or clusters based on data dynamically and if it can support multi dimensional data then we can improve performance.

the centroids and results returned to center and makes the spatial search with required attribute set as follows

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