# Bridging Social and Data Networks in Collective Behavior

# S. N. Vinodh<sup>1</sup>, S. G. Gino Sophia<sup>2</sup>

<sup>1.2</sup>School of Computing Sciences, Hindustan University vinodhrj@yahoo.com sgsophia@hindustanuniv.ac.in

Abstract: Social networking applications have emerged as the platform of choice for carrying out a number of different activities online. In addition to their primary target of social interaction, it also employs applications to search for information online or to share multimedia content with friends and families. For instance, according to recent statistics, each of us spends on average 15 min on YouTube every day. Similarly noteworthy is the daily rate of queries that Twitter's search engine receives: 600 million. This project describes how social and data networks can be integrated to enable enhanced and cost-effective performance. Such an integrated approach to systems design will become even more important in the near future due to the ongoing convergence of computer-communication technologies that will further increase the diversity of data-intensive social networking activities. Social Customer Resource Management Tools brings powerful Social Media by allowing seamlessly integrate and import Facebook, Twitter, and LinkedIn information of your leads, accounts, and contacts into Salesforce.Com. Salesforce.com is a cloud-based Customer Resource Management system that allows sales people to track their sales, support people to track their cases, and the entire company's employees to collaborate with each other. Salesforce.com is also a Customer Resource Management platform on which one can build new applications for purposes other than Customer Resource Management.

Keywords: Social CRM, cloud computing, Facebook, twitter, sales force

## 1. Introduction

Cloud computing is location-independent computing, whereby shared servers provide resources, software, and data to computers and other devices on demand. Details are abstracted from consumers, who no longer have need for expertise in, or control over, the technology infrastructure "in the cloud" that supports them. Cloud computing is still considered in its infancy, there are many challenging issues waiting for tackling. The cloud suffers much from data loss, privacy, security and revocation problems. To overcome these problems an efficient Knowledge Based - Click Point Authentication and Multi-Authority proposed with some modifications. The disadvantages of the traditional approach outlined above can be overcome by keeping track of the information preferences affiliated with each peer computer in the system and the relative distances between the peers in the underlying network topology. The former quantities can be obtained from the membership profiles affiliated with the peer computers in the online community in which their corresponding users participate. Business is increased with less number of human efforts. Single user interface itself can do all the operation. The methods and systems presented in this article can lead to similar synergies between online communities, networked systems applications, and ISPs. In particular, they simultaneously enable enhanced application performance and data transport efficiency, to the benefit of the end user and the network operator as well.

#### **1.1 Introduction to the project**

Distributed network directory systems feature a collection of peer computers interested in exchanging information of interest. Each peer hosts a set of information items, e.g., data files that may be shared with other peers in the network upon demand. There is a registry server that maintains a directory of all hosts in the system. When the system is queried for information, it returns a subset of hosts, which are then directly contacted for the item of interest. The procedure is repeated until the search is successfully concluded. Since the hosts to be queried are selected at random by the tracking server, they may not always have the desired information item. Therefore, multiple rounds of query may need to be initiated for detection to occur. In addition, the selected hosts may exhibit extensive distances from the querying peer in the topology of the underlying transport network, which in turn would make the exchange of information between the hosts and the peer quite inefficient and costly. The disadvantages of the traditional approach outlined above can be overcome by keeping track of the information preferences affiliated with each peer computer in the system and the relative distances between the peers in the underlying network topology. The former quantities can be obtained from the membership profiles affiliated with the peer computers in the online community in which their corresponding users participate. A preference vector pi characterizes the preferences of used over a collection of information themes, e.g., types of movies, images, or audio content. The latter quantities, describing the distance dij between two nodes i and j in a network, are increasingly available today through network operators such as Internet service providers (ISPs). By exploiting the above context, an intelligent tracking server could provide a suitable subset of information hosts to be queried.

#### 1.2 Motivation for the work

Cloud Computing is the most recent technology where many challenges are there to be tackled. Therefore it motivates in solving some issues regarding authentication, encryption and attribute revocation in Customer Resource Management

Volume 2 Issue 3, March 2013 www.ijsr.net

# 2. Literature Survey

## 2.1 Internet service providers and peer-to-peer

According to "A. Bagherjeiran" et. al. proposed that P4P is a framework that can be used to enable Internet service providers (ISPs) and peer-to-peer (P2P) software distributors to work jointly and cooperatively. The P4P framework can be used to ascertain appropriate and voluntary best practices to accelerate distribution of content and optimize utilization of ISP network resources in order to provide the best possible performance to enduser customers. Peer-to-peer (P2P) is not restricted to technology, but covers every social process with a peer-topeer dynamic, whether these peers are humans or computers. Peer-to-peer as a term originated from the popular concept of P2P distributed application architecture that partitions tasks or workloads between peers. The concept has inspired new structures and philosophies in many areas of human interaction. P2P human dynamic affords a critical look at current authoritarian and centralized social structures. Peer-to-peer is also a political and social program for those who believe that in many cases, peer-to-peer modes are a preferable option. These stages are often referred to collectively as the software development lifecycle, or SDLC. Different approaches to software development may carry out these stages in different orders, or devote more or less time to different stages. The level of detail of the documentation produced at each stage of software development may also vary. These stages may also be carried out in turn (a "waterfall" based approach), or they may be repeated over various cycles or iterations (a more "extreme" approach). The more extreme approach usually involves less time spent on planning and documentation, and more time spent on coding and development of automated tests. More "extreme" approaches also promote continuous testing throughout the development lifecycle, as well as having a working (or bug-free) product at all times. More structured or "waterfall" based approaches attempt to assess the majority of risks and develop a detailed plan for the software before implementation (coding) begins, and avoid significant design changes and re-coding in later stages of the software development lifecycle planning.

## 2.2 Global economy and Internet Merging

According to "A. S. Tanenbaum" et.al proposed that we envision a future in which the global economy and the Internet will merge and evolve together into an information economy bustling with billions of economically motivated software agents that exchange information goods and services with humans and other agents. Economic software agents will differ in important ways from their human counterparts, and these differences may have significant beneficial or harmful effects upon the global economy. It is therefore important to consider the economic incentives and behaviors of economic software agents, and to use every available means to anticipate their collective interactions. Beyond the minimum standard of concerning value in production, use, and exchange on the planet Earth, definitions, representations, models, and valuations of the world economy vary widely. It is common to limit questions of the world economy

exclusively to human economic activity, and the world economy is typically judged in monetary terms, even in cases in which there is no efficient market to help valuate certain goods or services, or in cases in which a lack of independent research or government cooperation makes establishing figures difficult.

## 2.3 Twitter Activities and Functions

"J.Edmonds" et.al. proposed that we also monitored hourly twitter activity for event speakers (messages that contained the speakers username) as well as identifying the top 10 most active #chirp tweeter's, re tweeter's and top tweeted links over the two day event. If you compare the two lists, you'll not only discover who was a very active participant, but also very generous in spreading tweets from others. And being able to identify and track brand evangelists is always a good thing. Bootstrap has relatively incomplete support for HTML5 and CSS 3, but it is compatible with all major browsers. Basic information of compatibility of websites or applications is available for all devices and browsers. There is a concept of partial compatibility that makes the basic information of a website available for all devices and browsers. For example, the properties introduced in CSS3 for rounded corners, gradients and shadows are used by Bootstrap despite lack of support by older web browsers. These extend the functionality of the toolkit, but are not required for its use.

## 2.4 Communication between Peers

According to "H.A.David" et. Al proposed that aBitTorrent tracker is a server that assists in the communication between peers using the BitTorrent protocol. It is also, in the absence of extensions to the original protocol, the only major critical point, as clients are required to communicate with the tracker to initiate downloads. Clients that have already begun downloading also communicate with the tracker periodically to negotiate with newer peers and provide statistics; however, after the initial reception of peer data, peer communication can continue without a tracker. When two entities are communicating and do not want a third party to listen in, they need to communicate in a way not susceptible to eavesdropping or interception. This is known as communicating in a secure manner or secure communication.

# 3. Existing System

As mobile computing requires more computation as well as communication activities, existing system not supporting the Social CRM Content, to increase the Sales of our Organization. Existing system fully depends on the human resources. If need increase your business and earn more profit means need to increase your organization size. More works involved in the existing business, even thought we can't earn the more profit in our business. Integration methods are also not applicable in the existing system. In order to overcome the above all status move to the proposed system.

Volume 2 Issue 3, March 2013 www.ijsr.net

## 4. Proposed System

Using proposed method to solve all the above problems, is possible to integrate all the social networks with less time. The existing method does not perform multiple operations in single user interface in the case of proposed system perform the multiple operation in single user interface. Lookup Facebook, Twitter information on your account, contact, and Lead as well as Import twitter & Facebook Information in to our application. Using proposed system we can reduce the human effort, as well as time effort. We can increase our business with less number of human efforts. Single user interface itself we can do all the operation. System analysis is the process of analyzing the existing system and its features and identifying the drawbacks and areas where improvements can be made in the proposed system to make the effort worthwhile. This is a very crucial and an important phase because it will give a clear idea to the system developers about the areas where more attention is needed. Also the system analysis is used to check the feasibility of the system that is going to be developed. The feasibility check is performed to check whether the developing system is viable or not .This is the phase where the ideas for the proposed system are formulated for further development and analyzed whether implementing them will be possible or not.

#### 4.1Advantages of Proposed System

- Now social sites like Facebook, twitter, LinkedIn can be integrated.
- Since each and every data are uploaded and integrated one by one at a time there is no network traffic and data loss.

# 5. System Architecture

It represents the Architecture of Bridging Social and Data Network in Collective Behavior.

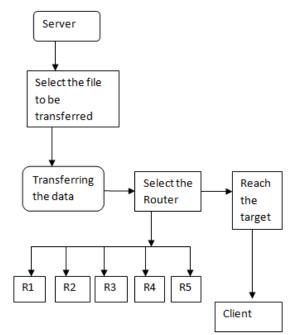


Figure 1: Architecture of Bridging Social and Data Network in Collective Behavior

#### 5.1 Problem Definition

As the social and data networks implied into cloud computing have their own server and client functions some efficient amount of limitations and drawbacks are faced by it. Cloud computing which is more secure also has limitations like more memory and time consumption. Also to avoid internet traffic only a single data can be interrupted at a time. This takes more time to save whole amount of data into the server. The default options given in sales force.com is limited. So to have own options one has to create each and every tabs required with coding.

## 5.2 Overview of the Project

Designing a system mainly focuses on the detailed implementation of the proposed systems. It emphasizes on translating performance specifications recorded at the time of system study in to design specification. System design phase is a transition from a user-oriented document on the methods adopted for developing the system. Design part is the pivotal points in the system development life cycle. In this phase, the architecture of the proposed system is conceived and developed. It is a very important phase as it will help the developer to the basic requirements on both user and system fronts. The architecture diagram helps in a smooth transition between the design stage and the implementation stage. The various factors that are considered before developing the system architecture are reliability, accuracy. security, integration, cost. expandability, availability and acceptability. The elegant design achieves its objectives with minimum use or resources. The system analyst must have clear understanding of the objectives that the design is aiming to fulfill. There is usually more than one way of the achieving a desired a desired set of results. It consist of five modules. They are

## **Object Design**

Client-server computing or networking is a distributed application architecture that partitions tasks or workloads between service providers (servers) and service requesters, called clients. Often clients and servers operate over a computer network on separate hardware. A server machine is a high-performance host that is running one or more server programs which share its resources with clients. A client also shares any of its resources; Clients therefore initiate communication sessions with servers which await (listen to) incoming requests.

#### Mapping the Field

The RUT scheme is adopted to solve the boundary finding problem, and the combination of the GF and the RUT scheme (i.e., the GAR protocol) can resolve the void problem, leading to the guaranteed packet delivery. The definition of boundary and the problem statement are described as follows: Definition 1 (boundary). If there exists a set B such that 1) the nodes in B form a simple unidirectional ring and 2) the nodes located on and inside the ring are disconnected with those outside of the ring, B is denoted as the boundary set and the unidirectional ring is called a boundary.

Volume 2 Issue 3, March 2013 www.ijsr.net

#### **User Interface Design**

The objective of the GAR protocol is to resolve the void problem such that the packet delivery from NS to ND can be guaranteed. Before diving into the detail formulation of the proposed GAR algorithm, an introductory example is described in order to facilitate the understanding of the GAR protocol, the data packets initiated from the source node NS to the destination node ND will arrive in NV based on the GF algorithm. The void problem occurs as NV receives the packets, which leads to the adoption of the RUT scheme as the forwarding strategy of the GAR protocol. A circle is formed by centering at SV with its radius being equal to half of the transmission range R/2.

## **Integrating Twitter API**

The performance of the proposed GAR algorithm is evaluated and compared with other existing localized schemes via simulations, including the reference GF algorithm, the planar graph-based GPSR and GOAFR++ schemes, and the UDG-based BOUNDHOLE algorithm. It is noted that the GPSR and GOAFR++ schemes that adopt the GG planarization technique to planarize the network graph are represented as the GPSR(GG) and GOAFR++(GG) algorithms, while the variants of these two schemes with the CLDP planarization algorithm are denoted as the GPSR(CLDP) and GOAFR++(CLDP) protocols.

## **Integrating Facebook API**

The performance of the proposed GAR algorithm is evaluated and compared with other existing localized schemes via simulations, including the reference GF algorithm, the planar graph-based GPSR and GOAFR++ schemes, and the UDG-based BOUNDHOLE algorithm. It is noted that the GPSR and GOAFR++ schemes that adopt the GG planarization technique to planarize the network graph are represented as the GPSR(GG) and GOAFR++(GG) algorithms, while the variants of these two schemes with the CLDP planarization algorithm are denoted as the GPSR(CLDP).

# 6. Conclusion

In this paper, a UDG-based GAR protocol is proposed to resolve the void problem incurred by the conventional GF algorithm. The RUT scheme is adopted within the GAR protocol to solve the boundary finding problem, which results in guaranteed delivery of data packets under the UDG networks. The BM and the IMS are also proposed to conquer the computational problem of the rolling mechanism in the RUT scheme, forming the direct mappings between the input/output nodes. The correctness of the RUT scheme and the GAR algorithm is properly proven.

The HCR and the IN mechanisms are proposed as the delay-reducing schemes for the GAR algorithm, while the PUC mechanism is utilized to generate the required topology for the RUT scheme under the non-UDG Networks. All these enhanced mechanisms associated with the GAR protocol are proposed as the enhanced GAR

(GAR-E) algorithm that inherits the merit of guaranteed delivery. The performance of both the GAR and GAR-E Protocols is evaluated and compared with existing localized routing algorithms via simulations. The simulation study shows that the proposed GAR and GAR-E algorithms can guarantee the delivery of data packets Under the UDG network, while the GAR-E scheme further improves the routing performance with reduced communication overhead under different network scenarios.

# 7. Future Enhancement

In future, we will upgrade the application to integrate into more social sites like Google +. The number of adding customers will be increased to reduce time and energy. The default options will be increased and made easy for users to use them without any difficulties.

# References

- [1] (2010, May). YouTube facts and figures. [On-line]. Available: http://www.websitemonitoring.com/blog/2010/05/17/youtube-facts-andfigures-history-statistics/
- [2] "Twitter statistics," in Proc. Chirp: The Official Twitter Developer Conf., Apr. 2010.
- [3] A. S. Tanenbaum, Computer Networks, 4th ed., Englewood Cliffs, NJ: Prentice-Hall, Aug. 2002.
- [4] Enable ISP and P2P to work together. [Online], Available: www.openp4p.net
- [5] A. Bagherjeiran and R. Parekh, "Combining behavioral and social network data for online advertising," in Proc. Int. IEEE Conf. Data Mining Workshops, Dec. 2008, pp. 837–846.
- [6] H. A. David and H. N. Nagaraja, Order Statistics, 3rd ed. New York: Wiley-Interscience, Aug. 2003.
- [7] G. Casella and R. L. Berger, Statistical Inference, 2nd ed. Pacific Grove, CA: Duxbury Press, June 2001.
- [8] J. Edmonds, "Optimum branchings," J. Res. Natl. Bur. Stand., vol. 71B, no. 4, pp. 233–240, Oct.–Dec. 1967.
- [9] D. P. Bertsekas, Constrained Optimization and Lagrange Multiplier Methods. Nashua, NH: Athena Scientific, Jan. 1996 [SP]

# **Author Profile**

**S. N. Vinodh** received bachelor's degree (Bharath University) in Computer Science and Engineering from Deemed University, Chennai, India in 2011 and doing Master's degree in Computer Science and Engineering from Hindustan University, Chennai.