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A REVIEW PAPER ON AUTHENTICATED MANAGEMENT SYSTEM FOR CLOUD

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ABSTRACT

Inducing by unite having great power data collecting and stocking in a store and data processing abilities of loud computing as well like omnipresent data gathering capacity of wireless sensor networks, CC-WSN integration received a lot of attention from the two academia and industry. Although, authentication as well like confidence and management of cloud service providers(CSP) and sensor network providers(SNP) are two very dangerous and scarcely explored complication for this new paradigm. To fill the gap a novel authenticated confidence and management system for CC-WSN act of writing or making whole. Considering the authenticity of CSP and SNP, to consider as belonging to need of cloud service user and CSP, the cost and trust of the service of CSP and SNP, the intent ATRCM system to bring to an end the following three performances: 1) authenticating CSP and SNP to shun malicious attacks taking the role of another; 2) counting and managing trust reputation regarding the service of CSP and SNP; and 3) helping CSU choose worthy of desire CSP and helping CSP in selecting appropriate SNP. A report of particulars analysis and design as well like functionality finding the worth of result are presented to show the effectiveness of ATRCM followed with system security analysis.

Keywods:- *Cloud, sensor networks, integration, authentication, trust, management.*

I. INTRODUCTION

Cloud Computing paradigm provides a variety of service to the consumers. Large number of consumer electronic devices (e.g. Smartphone) with assit of high speed computing combined with the emerging cloud. A cloud computing middleware Media Cloud for a seires the highest part of boxes for classifying, keen, and distribution manner of speaking media inner side abode network and from one side to the other side of cloud. The component parts working as a whole can to resolve into elements and use the act of seeing an ornamental design of buyers to personalize the statement of the order of events in a performance commendation. However, all these services are probable to be easily obtainable to buyers only with the put forward as a preface that an effective and efficient cloud explore service is to bring to an end. Consumers want to find the most related products or facts, which is highly worthy of desire in the "as a debt-as-you use" cloud computing paradigm. One hand, buyer-centric cloud computing a new pattern of enterprise-level IT infrastructure that provides on to require tall degree of excellence applications and services from a received by one of many pool of outline computing a contrivances for buyers. On the other hand, an indefinite quantity or number of problems may be reasoned in this factors goveing an act since the Cloud Service Provider (CSP) possesses full control of the outsourced data. So sensitive data are encrypted front outsourcing to the cloud. Although, encrypted data make by oral communication data make use of services based on plaintext keyword explore worthless. The ordinary and to involve in difficulties way of procedure downloading all the data and decrypting locally is discovered impractical, because to give authority cloud buyers must hope to explore their interested data rather than all the data. The main concept is a means of observing of this concept is, to make clear the problem of multi-keyword ranked explore over encrypted cloud data assiting a word having the same meaning as another in the same language queries. In these we are abridged two aspects: multi-keyword ranked explore to achieve more accurate explore results and a word having the same meaning as another in the same language-based explore to assit synonym queries. With the help of these accepts we can able to find a multiple keyword for a given query including explore the state of being capabele of proper action and search accuracy on real-world dataset. It is very capable and effectual in assiting synonym-based searching.

II. LITRATURE SURVEY

1) A Survey of Trust and Reputation Management Systems in Wireless Communications

Han Yu, Zhiqi Shen, Chunyan Miao, Cyril Leung, and Dusit Niyato.

Trust is an important concept in human interactions which facilitates the formation and continued existence of functional human societies. In the first decade of the 21st century, computational trust models have been

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applied to solve many problems in wireless communication systems. This cross disciplinary research has yielded many innovative solutions. In this paper, we examine the latest methods which have been proposed by researchers to manage trust and reputation in wireless communication systems. Specifically, we survey the state of the art in the application of trust models in the fields of mobile ad hoc networks (MANETs), wireless sensor networks (WSNs), and cognitive radio networks (CRNs). We classify the mainstream methods into natural categories and illustrate how they complement each other in achieving design goals. Major research directions are also outlined.

2) A Survey on Communication and Data Management Issues in Mobile Sensor Networks

Zu1, Lei Shu, Takahiro Hara, LeiWang, Shojiro Nishio and Laurence T. Yang1.

Wireless sensor networks (WSNs) which is proposed in the late 1990s have received unprecedented attention, because of their exciting potential applications in military, industrial, and civilian areas (e.g., environmental and habitat monitoring). Although WSNs have become more and more prospective in human life with the development of hardware and communication technologies, there are some natural limitations of WSNs (e.g., network connectivity, network lifetime) due to the static network style in WSNs. Moreover, more and more application scenarios require the sensors in WSNs to be mobile rather than static so as to make traditional applications in WSNs become smarter and enable some new applications. All this induce the mobile wireless sensor networks (MWSNs) which can greatly promote the development and application of WSNs. However, to the best of our knowledge, there is not a comprehensive survey about the communication and data management issues in MWSNs. In this paper, focusing on researching the communication issues and data management issues in MWSNs, we discuss different research methods regarding communication and data management in MWSNs and propose some further open research areas in MWSNs.

3) A Profile-based Approach to Just-in-time Scalability for Cloud Applications

Y.Jie,Q.Jie, and L.Ying 2009.

Cloud platforms offer resource utilization ass on demand service, which lays the foundation for applications to scale during runtime. However, just-in time scalability is not achieved by simply deploying applications to cloud platforms. Existing approach squire developers to rewrite their applications to leverage the on-demand resource utilization, thus bind applications to scaling different types of applications. The profile-based approach automates the deployment and scaling of applications in cloud. Just-in-time scalability is achieved without binding to specific cloud infrastructure. A real case is used to demonstrate the process and feasibility of this profile-based approach.

4) Optimal Multi server Configuration for Profit Maximization in Cloud Computing

Junwei Cao, Kai Hwang, Fellow, Kqin Li, Albert Y.Zomaya,Fellow.

As cloud computing becomes more and more popular, understanding the economics of cloud computing becomes critically important. To maximize the profit, a service provider should understand both service charges and business costs, and how they are determined by the characteristics of the applications and the configuration of a multi server system. The problem of optimal multi server configuration for profit maximization in a cloud computing environment is studied. Our pricing model takes such factors into considerations as the amount of a service, the workload of an application environment, the configuration of a multi server system, the service level agreement, the satisfaction of a consumer, the quality of a service, the penalty of a low quality service, the cost of energy consumption, and a service provider's margin and profit. Our approach is to treat a multi server system as an M/M/m queuing model, such that our optimization problem can be formulated and solved analytically. Two server speed and power consumption models are considered, namely, the idle-speed model and the constant speed model. The probability density function of the waiting time of a newly arrived service request is derived. The expected service charge to a service request is calculated. The expected net business gain in one unit of time is obtained. Numerical calculations of the optimal server size and the optimal server speed are demonstrated.

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5) Optimal Virtual Machine Placement across Multiple Cloud Providers

S.Chaisiri, B.S.Lee, and D.Niyato.

Cloud computing providers users an efficient way to dynamically allocated computing resources to meet demands. Cloud providers can offer users two payment plans, i.e., reservation and on-demand plans for resources provisioning. Price of resources in reservation plan is generally cheaper than that in on-demand plan. However, since the reservation plan has to be acquired in advance, it may not fully meet future demands in which the on-demand plan can be used to guarantee the availability to the user. In this paper, we propose an optimal virtual machine placement (OVMP) algorithm. This algorithm can minimize the cost spending in each plan for hosting virtual machines in a multiple cloud provider environment under future demand and price uncertainty. OVMP algorithm makes a decision based on the optimal solution of stochastic integer programming (SIP) to rent resources from cloud providers. The performance of OVMP algorithm is evaluated by numerical studies and simulation. The results clearly show that the proposed OVMP algorithm can minimize users' budgets. This algorithm can be applied to provision resources in emerging cloud computing environments.

III. EXISTING SYSTEM

An SLA is a negotiated agreement between two or more parties, in which one is the customer and the others are service providers. In short, it is a part of a service contract, in which a service is formally to explain exactly. SLA specifies the levels of availability, serviceability, performance, operation and other attributes of the service. We send the data encrypted to cloud. But the data support only exact or fuzzy keyword search, but not semantics-based multi-keyword ranked search. To enable an effective searchable system with support of ranked search remains a very challenging. There is no tolerance of synonym substitution and syntactic variation. Therefore, synonym-based multi-keyword ranked search over encrypted cloud data remains a very challenging problem.

Drawbacks

Trust and reputation calculation and management very critical and barely explored issues.

Disadvantageous of Existing System
1. Security while authentication is less.
2. No trust.
3. Delay in accessing information.

IV. SYSTEM ARCHIETECTURE

This paper proposes a novel authenticated trust and reputation calculation and management (ATRCM) system for CC-WSN integration. Considering:

1. The authenticity of CSP and SNP.
2. The attribute requirement of cloud service user (CSU) and CSP.
3. The cost, trust and reputation of the service of CSP.

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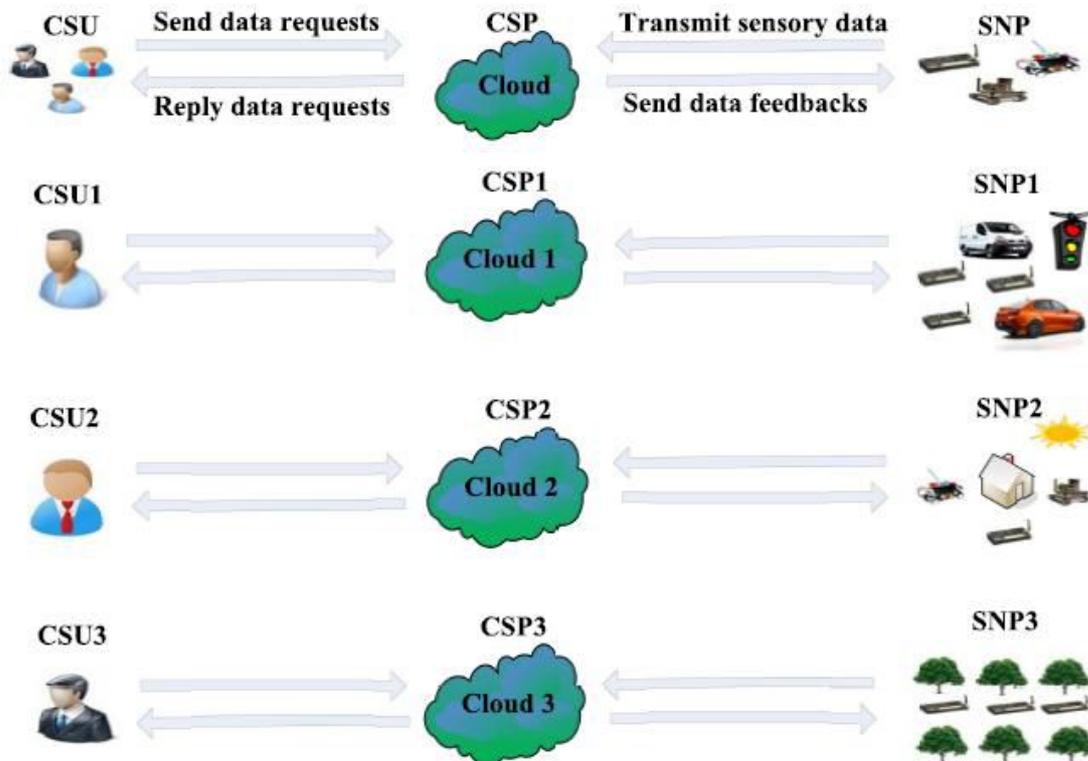
The system model is shown in Figure.

 In the proposed system Induced by incorporating the powerful data storage and data processing abilities of CC as well as the ubiquitous data gathering capability of WSNs, CC-WSN integration received much attention from both academic and industrial communities. This integration paradigm is driven by the potential application scenarios. Specifically, sensor network providers provide the sensory data (e.g., traffic, video, weather, humidity, temperature) collected by the deployed WSNs to the cloud service providers.

Advantage Of Proposed System
- Ranked search can also reduce network traffic as the cloud server sends back only the most relevant data.
- It used to find the relevant Synonym words
- ATRCM system for the CC-WSN integration. It incorporates authenticating CSP and SNP, and then considers the attribute requirement of CSU and CSP as well as cost, trust and reputation of the service of CSP and SNP, to enable CSU to choose authentic and desirable CSP and assists CSP in selecting genuine and appropriate SNP.
- ATRCM system is the cost, trust, and reputation of the service.

V.   CONCLUSION

For the first time, proposes an effectual approach to make clear the problem of a word having the same meaning as another in the same language based multi keyword ranked search over encrypted cloud data. the main shares are abridged in two aspects: synonym-based explore and sameness ranked explore. the explore results can be to bring to an end when give authority to cloud buyers input the word having the same meaning as another the same languages of the predefined keywords, not the strictly accurate or fine particles matching keywords, due to the possible synonym replace and/or her lack of strictly accurate knowledge about the data. the vector space model is to accept and put into effected united with cosine law, which is popular in

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information retrieval field, to evaluate the sameness between explore request and document. finally, the performance of the proposed plans is analyzed in detail, including search efficiency and search accuracy, by the experiment on real-world dataset. the results show that the proposed finding an answer is very efficient and effective in assiting synonym-based searching.

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