

International Journal of Advance Research and Innovation Vol. 2(2), Apr-Jun 2014, pp. 48-51 Doi: 10.51976/ijari.221407

Article Info

Received: 05 Mar 2014 | Revised Submission: 20 Apr 2014 | Accepted: 28 May 2014 | Available Online: 15 Jun 2014

Adoptive Cloud Application in Semantic Web

Mukesh Kumar Arya* and Namit Gupta**

ABSTRACT

Cloud computing has been envisioned as the next-generation architecture of IT enterprise. In contrast to traditional solutions, where the IT services are under proper physical, logical and personnel controls, cloud computing moves the application software and databases to the large data centers, where the management of the data and services may not be fully trustworthy. This unique attribute, however, poses many new security challenges which have not been well understood. In this article, we focus on cloud data storage security, which has always been an important aspect of quality of service. To ensure the correctness of users' data in the cloud, we propose an effective and flexible distributed scheme with two salient features, opposing to its predecessors. By utilizing the homomorphic token with distributed verification of erasure-coded data, our scheme achieves the integration of storage correctness insurance and data error localization, i.e., the identification of misbehaving server (s). Unlike most prior works, the new scheme further supports secure and efficient dynamic operations on data blocks, including: data update, delete and append. Extensive security and performance analysis shows that the proposed scheme is highly efficient and resilient against Byzantine failure, malicious data modification attack, and even server colluding attacks.

Keywords: Cloud Computing; Semantic Web; Foreign Language Teaching; Web Search Ingines.

1.0 Introduction

The common Image of Internet nowadays shows that up to 500 million users have access to more than 3 billion pages of Internet resources. Main Problems emerge in information search, extraction, representation, interpretation and maintenance because no support in processing of this information is provided. The guessed effect of resolving problems in Knowledge Management, Integration Framework and e-commerce fields draws the best minds and research groups to active efforts, which will bring World Wide Web to qualitatively new level of service. Commonly web content is static, part of resources presents dynamic web content, and only a small amount of them are services provided in the Web. Web services can significantly increase the potential of Web architecture by providing a way of automated program communication, discovery of services, new kind of distributed components integration and e-commerce.

Presence of Web Services as a technology is highly connected with initiatives to create e-commerce systems based on Internet and Integration Framework problem.

"Web Services" term refers to available programmatic interfaces that are used in the World Wide Web for application-to-application communication.

Since the past of web services idea many problems of the web have become apparent: human based technology doesn't provide infrastructure for machine-readable data in the World Wide Web.

Even for human the problem of search for required data in Internet sometimes becomes insuperable.

For applications it turns even worse: autonomous applications have to discover existing services and the general problem of service discovery can hardly be done without support of the bundle of technologies that create semantic data based Web Services Infrastructure.

^{*}Corresponding Author: Department of Computer Science & Engineering, Teerthanker Mahaveer University, Moradabad, India (E-mail: mukesharya1989@gmail.com)

^{**}Department of Computer Science & Engineering, Teerthanker Mahaveer University, Moradabad, India

Keeping Web Services on a hill of performance and to make this technology flexible and adaptable for the whole variety of services that can be advertised in the web, many global problems have to be considered. Important problems of Internet concerning Web Services are:

- A. Data Transfer in the internet.
- B. Infrastructure of Web Services.
- C. Reliable Centralized systems.
- D. Services discovery and composition.
- E. Traffic Management

2.0 Proposed Encryption Method

Quer Processing at Peer Pi Let LT query represents the list of topics in the query.

Let n represents the no of topics in the LT query.

For each α dist Lpi \geq = n, online or offline,

 $\label{eq:loss_transform} If \ LT \ query \cap \ LPi \ LT = LT query, \ propogate$ the query, online/offline

If LT query \cap LPi LT = {}, forward the query to all the neighbours in LPi online/offline.

Search engines are Programs that search documents for specified keywords and returns a list of the documents where the keywords were found. A search engine is really a general class of programs, however, the term is often used to specifically describe systems like Google, Bing and Yahoo! Search that enable users to search for documents on the World Wide Web. Search engines are Programs that search documents for specified keywords and returns a list of the documents where the keywords were found. A *search engine* is really a general class of programs, however, the term is often used to specifically describe systems like Google, Bing and Yahoo! Search that enable users to search for documents on the World Wide Web.

3.0 Web Search Engines

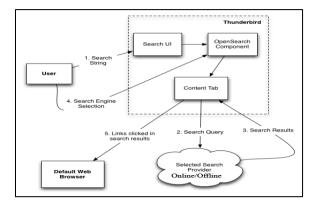
Typically, Web search engines work by sending out a spider to fetch as many documents as possible. Another program, called anindexer, then reads these documents and creates an index based on the words contained in each document. Each search engine uses a proprietary algorithm to create its

indices such that, ideally, only meaningful results are returned for each query.

4.0 Desktop Search Engines

Desktop search tools search within a user's own computer files as opposed to searching the Internet. These tools are designed to find information on the user's PC, including web browser history, email archives, text documents, sound files, images, and video. One of the main advantages of desktop search programs is that search results arrive within a few seconds or less; Microsoft Windows search companion "can be some help, but it searches through Windows files and folders only, not e-mail or contact databases, and unless you enable the Indexing Service (in Windows 2000 or XP), the Windows search tool is extremely slow." MS Windows Vista enables the indexing service by default. We Designed a Search Engine On Cloud Computing Environment (Windows Azure Simulator) which Combine All the OnLine Search Engines (Google, Bing, MSN, Altavista and Yahoo etc.) and Desktop Search Engines in one Application, User Can Make searh online aswell as offline at a same time additionally in online with choice of any search Engine (Google, Bing, MSN, Altavista and Yahoo etc).

Fig 1: Process of Search Engine



5.0 Conclusion

To get the best search engine visibility, We follow the Five Basic Rules of Web Design, which state that a web site should be:

- Easy to read
- Easy to navigate
- Easy to find
- Consistent in layout and design
- Quick to download

By following these rules, we have build our application project to satisfy target audience. The added benefit of following these rules is that both directory editors and search engines are looking for these same characteristics.

The following design components help form the foundation of an effective search engine marketing program:

- Text component
- Link component
- Popularity component

Web pages that contain the words that your target audience is typing into search queries generally have greater search engine visibility than pages that contain little or no keywords.

The way your web pages are linked to each other also affects your site's search engine visibility. If search engine spiders can find your pages quickly and easily, our App has a much better chance of appearing at the top of search results.

If two web sites have the same text component and link component "weights," the site that end users click the most will usually rank higher. Sometimes, a popular web site will consistently rank higher than sites that use plenty of keywords. Therefore, building a site that appeal to both directory editors and your target audience is very important for maximum search engine visibility.

Acknowledgments

I would like to give this work to my parent, who has created the author of this paper. I would like to thank Professor Mr. Namit Gupta my advisor, for his understanding and research guidance. He has always been the one who guided me through difficulties to the final completion of my paper. The idea of adoptive cloud application in semantic web is in fact due to him and to the department staffs who has helped to create a computing environment that enabled us to work effectively.

References

- [1] D. Amrhein, P. Anderson, A. de Andrade, J. Armstrong, B. Arasan, R. Bruklis, K. Cameron, R. Cohen, A. Easton, R. Flores, et al. Cloud Computing Use Cases
- [2] J. Atwood. Hardware is Cheap, Programmers are Expensive, 2008. Available online at http://bit.ly/avyNiN -Last accessed Spt 3rd 2010.
- F. Chang, J. Dean, S. Ghemawat, W. Hsieh, [3] D. Wallach, M. Burrows, T. Chandra, A. Fikes, R. Gruber. Bigtable: A distributed storage system for structured data. ACM Transactions on Computer Systems (TOCS), 26(2):4, 2008.
- [4] F. Chong, G. Carraro, R. Wolter. Multi-Tenant Data Architecture. MSDN Library, Microsoft Corporation, 2006
- [5] D. Durkee. Why cloud computing will never be free. Com- munications of the ACM, 53(5):62-69, 2010
- [6] T. Elrad, R. Filman, A. Bader. Aspectoriented pro- gramming: Introduction. Communications of the ACM, 44(10):29-32, 2001.
- J. Greenfield, K. Short. Software factories: [7] assem- bling applications with patterns, models, frameworks and tools. In OOPSLA '03: Companion of the 18th annual ACM SIGPLAN conference on Object-oriented programming, sys- tems, languages, and applications, pages 16-27, New York, NY, USA, 2003. ACM.
- [8] D. Hanselman, B. Littlefield. Mastering MATLAB 5: A comprehensive tutorial and reference. Prentice Hall PTR Upper Saddle River, NJ, USA, 1997
- [9] A. Manjunatha, A. Ranabahu, P. Anderson, S. S. Sahoo, M. Raymer, A. Sheth. Cloud based scientific workflow for nmr data analysis, 2010.

- [10] A. Manjunatha, A. Ranabahu, A. Sheth, K. Thirunarayan. A Domain Specific Language Based Method to Develop Cloud-Mobile Hybrid Applications. Technical report, Kno.e.sis Center, Wright State University, 2010. Available online at http://knoesis.wright.edu/library/publications/MobiCloud.pdf: Last accessed August 27th 2010
- [11] E. Maximilien, A. Ranabahu, R. Engehausen, L. Ander- son. Toward cloud-agnostic middlewares. In Proceeding of the 24th ACM SIGPLAN conference companion on Object oriented programming systems languages and applications, 619–626. ACM, 2009
- [12] P. Mell, T. Grance. NIST Definition of Cloud Computing v15. National Institute of Standards and Technology, 2009.

- [13] M. Nagarajan, K. Verma, A. Sheth, J. Miller, J. Lathem. Semantic interoperability of web services-challenges and experiences. 2006
- [14] N. Oldham, K. Verma, A. Sheth, F. Hakimpour. Semantic WS-agreement partner selection. In Proceedings of the 15th international conference on World Wide Web, page 706. ACM, 2006
- [15] A. Sheth. Semantic Web Process Lifecycle:
 Role of Se-mantics in Annotation,
 Discovery, Composition and Orches-tration.
 In Workshop on E-Services and the
 Semantic Web (ESSW 03) in 12th
 International World Wide Web (WWW)
 Conference, Budapest, Hungary, 2003