DETACHING AND REPRODUCTING OF DATA IN A CLOUD FOR EXCELLENT PERFORMANCE AND SECURITY

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Abstract:

Cloud computing can be defined as it is a new tune, which are the collection of technologies and a means of supporting the use of large scale Internet tunes for the remote applications with good quality of tune (QoS) levelsThis paper mainly proposes the core concept of secured cloud computing i.e. it suggests the cloud computing based on detach encryption and decryption tunes from the storage tune. This paper introduces a user interface .One tune provider operates the encryption and decryption system while other providers operate the storage Even for security and data integrity we supposed to implement the One Time Password Authentication (OTP) including email updates and application systems, according to the core concept of the proposed computing copy. This Project usually store data in internal storage and install firewalls to protect against intruders to access the data. They also standardize data access procedures to prevent insidersto disclose the information without permission. In cloud computing, the data will be stored in storage provided by tune providers.

Keywords: Cloud, OTP, Qos, Email.

1. INTRODUCTION

Tune providers must have a viable way to protect their clients' data, especially to prevent the data from disclosureby unauthorized insiders. Storing the data in encrypted form is a common method of information privacy protection. If a cloud system is responsible for both tasks on storage and encryption/decryption of data, the system administrators may simultaneously obtain encrypted data and decryption keys. Thisallows them to access information without authorization and thusposes a risk to information privacy. This study proposes aindustrycopy for cloud computing based on the concept of separating the encryption and decryption tune from thestorage tune. Furthermore, the party responsible for the data storage system must not store data in plaintext, and the party responsible for data encryption and decryption must delete alldata upon the computation on encryption or decryption is complete. A CRM (Customer Relationship Management) tuneis described in this paper as an example to illustrate the proposed industrycopy. The exemplary tune utilizes three cloud systems, including an encryption and decryption system, astorage system, and a CRM application system. One tuneprovider operates the encryption and decryption system whileother providers operate the storage and application systems, according to the core concept of the proposed industrycopy. As per the concept of cloud computing, the critical data of industry was stored in storage internally which are then protected by firewall to prevent from outside and unauthorized source. In the cloud computing concept, storage tune providers must have data security provisions to ensure that their client"s data is safe from unauthorized access. But in this case the use of firewall is not so reliable and

secured. Tune provider must follow certain kinds of policies and regulations to protect user's data. These policies are mainly based on some specific terms and conditions which have to satisfy the basic goals of the system. Cloud computing is a new computing paradigm and the latest megatrend in IT industry developed as a result of the convergence of numerous new and existing technologies. It is characterized by provision of rapidly scalable and measurable IT capabilities as a tune ondemand and self-tune basis over the network from common resource pool. The study was carried out as a single case study in a global company offering IT tunes for largeProjects and public organizations and currently preparing to introduce its own cloud tunes. Ten semi-structured interviews were conducted with managers of the case company for exploring the financial aspects of cloud tunes. Qualitative data analysis was employed for processing and summarizing the findings.Findings of the study suggested that each cloud tune should have a distinct industrycopy.The industrycopy is a mediating construct that translates the new technology to the tune's value proposition.

2. RELATED WORKS

The industrycopy's are based on tunes provider's position in Cloud computing value chain. A cloud computing industry logic framework was created to illustrate the interaction between the value chain, industrycopy's and its elements The key cost types of tunes do not necessarily change much with cloud computing. Cloud computing has still potential to significantly reduce tunes provider's costs through reengineering of production architecture. A cloud computing cost accounting copy was created toillustrate how production costs should be aggregated and distributed. In a cloud computing environment, the tune content offered by tune providers can be adjusted according to theneeds of the user. For example, the applicant can request different amounts of storage, transmission speeds, levels ofdata encryption and other tunes.

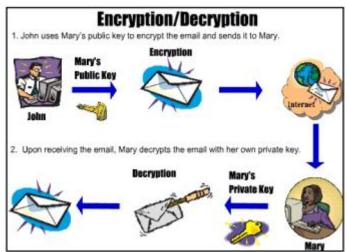


Fig.1.Struture

In addition to defining thetune items, the agreement normally also notes the time, quality and performance requirements provided with thetune. Generally, these tune agreements are referred to asTune Level Agreements (SLA) [4]. By signing an SLA, theuser shows that he has understood and agreed to the contents of under the industrycopy proposed in this study, the datastorage cloud system provider is authorized to

store the user's encrypted data, but does not have access to the DecryptionKey. Thus, the storage system can only retrieve encrypted userdata, but is unable to decrypt it. The cloud computing systemresponsible for encrypting user data has authority over allencryption keys required for data encryption but, given that the encryption provider does not store the user's data, internalmismanagement of the decryption keys still poses no risk ofunauthorized disclosure of the user's data. Given that encryption is an independent cloud computingtune, a unique feature of the industrycopy is that differenttunes are provided by multiple operators. For example, theEncryption as a Tune provider and the "Storage as a Tune" provider cooperate to provide a Cloud Storage System with effective data protection. This study provides a draft SLA for this type of industrycopy of combining multiple providers in a single tune, which can establish the cooperation copybetween operators and the division.

3. CLOUD COMPUTING

In this paper, we collectively approach the issue of security and performance as a secure data replication problem. We present Detaching and reproducing of Data in the Cloud for Excellent Performance and Security that judicially fragments user files into pieces and replicates them at strategic locations within the cloud.

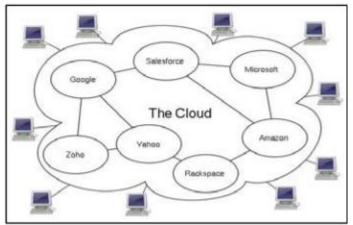


Fig.2.Cloud Environment

The division of a file into fragments is performed based on a given user criteria such that the individual fragments do not contain any meaningful information. Each of the cloud nodes (we use the term node to represent computing, storage, physical, and virtual machines) contains a distinct fragment to increase the data security. In addition we added two algorithms are used first one is FS- Drops (Fragment and Snuffle - Drops) Which will fragment a file into 4 pieces and shuffled And store in different server So in future some Server is not available are Hacked we can get back our original data from remaining Server. The second is to forward the data to others in secure manner. So the user request to forward the data from cloud to others mean the server generates a key for a specific file and provided to the cloud user. The random function used to generate a key. The keys are shared by the sender and receiver. By using the secret key the receiver can fetch data from the cloud securely. In a cloud computing environment, the equipment used forindustry operations can be leased from a single tuneprovider along with the application, and the related industrydata can be stored on equipment provided by the same tuneprovider. This type of arrangement can help a company save on hardware and software infrastructure costs, but storing thecompany's data on the tune

provider's equipment raises the possibility that important industry information may be improperly disclosed to others. Encrypting data prior to storage is a common method of data protection, and tune providers may be able to build firewallsto ensure that the decryption keys associated with encrypted user data are not disclosed to outsiders. However, if the decryption key and the encrypted data are held by the same tune provider, it raises the possibility that high-leveladministrators within the tune provider would have access to both the decryption key and the encrypted data, thus presenting risk for the unauthorized disclosure of the user data.

4. ANALYSIS

After this authentication process is completed and user had been successfully completed the login procedure, he or she will send the request for the data retrieval to the CRM. Then the CRM will send the user ID to the Storage system. By sending that Id, it becomes convenient for the storage system to found the data which exactly user wants to retrieve. But here the data is stored in the encrypted form. So it is not readable by the user or say client. Hence, this encrypted data is then transmitted to the Encryption and Decryption by the Storage System with the user ID. In our cloud computing tunes there are n number of users or Now we will understand the concept of how the data should get stored in the storage system. The Data Storage System.

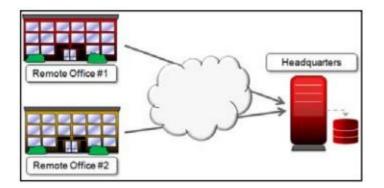


Fig.3. Analysis

Here also we require the three cloud tune systems which seem to mainly focus on storage system. Now we will understand the concept of how the data should get stored in the storage system. The Data Storage System diagram. Here also we require the three cloud tune systems which seem to mainly focus on storage system. The main function of a infrastructure as a tune is that they offer hardware, software, and equipments which are mostly at the unified resources layer or part of a fabric layer, which mainly used for to deliver software application environments having resource usage-which is totally based on pricing copy. Infrastructure can scale up and down dynamically based on application resource needs. Scientists investigate cloud computing into "We are not programming a single machine, rather the World Wide Computer". It means infrastructure is as Tune.

CONCLUSION

The Basic methods include the Storage as Tune provider includes storing user data which has already been encrypted through an Encryption/Decryption Tune System. But does not allow this tune provider to the Decrypted Key or allow for the storage of decrypted data. We are trying to provide the best security ways for data leakage and data integrity. Cloud computing has a low- cost tunes to provide the possibility, while there are a large number of manufacturers and establisher behind core concept of cloud computing, here is no doubt that cloud computing has a bright future. But among all above the scenario, security and data integrity are the very vital aspect which has to be in deep considerations. Because user used to put his private data on cloud and expects that his data is in the secured condition. So, for the Projects, it is very important to overcome the user demands and try to enhance them.

REFERENCES

[1] N. Hawthorn, "Finding security in the cloud", Computer Fraud & Security, Vol. 2009, Issue 10, pp. 19-20, October 2009.

[2] Salesforce.com, Inc., "Force.com platform", Retrieved Dec. 2009, [Online] Available: <u>http://www.salesforce.com/tw/</u>

[3] Eoin Gleeson, "Computing industry set for a shocking change", Apr 2009, Money Week. "Draft NIST Working Definition of Cloud Computing", 2009.

[4] Quality of tune: [Online] Available: http://osun.org/ http:// www.sciencedirect.com/

[5] Amazon EC2 and S3, [Online] Available: http://aws.amazon. com/ Cloud computing: [Online] Available: http://www.springerlink.com

[6] Sales force Customer Relationships Management (CRM) system, [Online] Available: http://www.salesforce.com/

[7] Enomalism elastic, [Online] Available: http://www.enomaly. com. Computing infrastructure, [Online] Available: http:// <u>www.springerlink.com</u>

[8] Eucalyptus systems, [Online] Available: http://eucalyptus.cs.ucsb.edu!.

[9] "Amazon simple storage tune", [Online] Available: http:// aws.amazon.comls3/. [Online] Available: http://www.salesforce.com/tw/

[10] M. Baker, R. Buyya, D. Laforenza, "Grids and grid technologies for wide-area distributed computing", International Journal of Software:Practice and Experience, Vol. 32, pp. 1437-1466, 2002.