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Multi Cloud Access Using RFID

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Abstract— Cloud is a data center that supplies hosted services to the people and it provides a scalable access to computing resources. At present, Cloud based Large Scale Big Data integration is still in Research Purpose. That too Cross Cloud is the most complex integration. Such analyses are not feasible to solve the problem. In our proposed system, we use Balanced Partition algorithm uses a easy way to classify a given data set through a certain number of clusters. This algorithm is used to prioritize the cloud data center. Cross Cloud is implemented by assigning Tasks to the various Web services. Different Tasks or same can be attained by different Cloud based on its availability. The future is our Implementation. We deploy Two Cloud Servers (Drop Box & Google drive) and one Big Data Database Storage (Mango DB). We Deploy Multi Access Smart Card Application. We Deploy Ration, Passport & Hospital Applications for User Access. User Personal Authentication included User Name, Password, Primary Key & RFID Card are all stored and Verified in Mango DB. Entire Data is splitted and stored in two servers parallelly. User request is handled by the first Cloud and balance part is handled by another cloud in all Applications.

Keywords—Authentication, Privacy, Cross Cloud, Security, Balanced Partition Algorithm.

I. INTRODUCTION

Cloud Computing and big data receives enormous attention internationally due to various business-driven promises and expectations such as lower upfront IT costs, a faster time to market, and opportunities for creating value-add business . As the latest computing paradigm, cloud is characterized by delivering hardware and software resources as virtualized services by which users are free from the burden of acquiring the low level system administration details. Cloud computing promises a scalable infrastructure for processing big data applications such as the analysis of huge amount of medical data. Currently, Cloud providers including Amazon Web Services (AWS), Sales force.com, or Google App Engine, give users the options to deploy their application over a network of a nearly infinite resource pool. By leveraging Cloud services to host Web, big data applications can benefit from cloud advantages such as elasticity, pay-per-use, and abundance of resources with practically no capital investment and modest operating cost proportional to actual use. In practice, to satisfy different security and privacy requirements, cloud environments usually consist of public clouds, private clouds and hybrid clouds, which lead a rich ecosystem in big data applications. Generally, current implementations of public clouds mainly focus on providing easily scaled-up and scaled-down computing power and storage. If data centers or domain specific services center tend to avoid or delay migrations of themselves to the public cloud due to multiple hurdles, from risks and costs to security issues and service level expectations, they often provide their services in the form of private cloud or local service host . For a complex web-based application, it probably covers some public clouds, private clouds or some local service host For instance, the healthcare cloud service, a big data application illustrated in , involves many participants like governments, hospitals, pharmaceutical research centers and end users. As a result, a healthcare application often covers a series of services respectively derived from public cloud, private cloud and local host. In practice, some big data centers or software services cannot be migrated into a public cloud due to some security and privacy issues. If a web-based application covers some public cloud services, private cloud services and local web services in a hybrid way, cross-cloud. Collaboration is an ambition for promoting complex web based applications in the form of dynamic alliance for value-add applications lead a rich ecosystem in big data applications . Generally, current implementations of public clouds mainly focus on providing easily scaled-up and scaled-down computing power and storage. If data centers or domain specific services center tend to avoid or delay migrations of themselves to the public cloud due to multiple hurdles, from risks and costs to security issues and service level expectations, they often provide their services in the form of private cloud or local service host . For a complex web-based application, it probably covers some public clouds, private clouds or some local service host For instance, the healthcare cloud service, a big data application illustrated in , involves many participants like governments, hospitals, pharmaceutical research centres and end users. As a result, a healthcare application often covers a series of services respectively derived from public cloud, private cloud and local host. In practice, some big data centers or software services cannot be migrated into a public cloud due to some security and privacy issues. If a web-based application covers some public cloud services, private cloud services and local web services in a hybrid way, cross-cloud. Collaboration is an ambition for promoting complex web based applications in the form of dynamic alliance for value-add applications.

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Confidentiality With the storage service provided by the cloud server, the Out sourced data should not be leaked even if malware or hackers infiltrate the server. Besides, the unauthorized users without enough attributes to satisfy the access policy could not access the user details.

Verifiability. During the delegation computing, a user could validate whether the cloud server responds correct information. Namely, the cloud server could not respond false information that authorized user that he/she is unauthorized. Thus, in this paper, we will attempt that the cloud to consider the data confidentiality.

II. CLOUD COMPUTING

Cloud computing is a technology to access the resources available in the servers through Internet. Cloud computing technology becomes popular in the recent years due to its several advantages over traditional methods, like flexibility, scalability, agility, elasticity, energy efficiency, transparency, and cost saving. Cloud resources are shared resources which can be accessed by any one, anytime and anywhere. It is accessible through any devices like mobile, desktops, laptops, tablets etc... The resources and information are provided for the users based on on-demand services. It allows the users to pay only for the resources and workloads they use. Cloud is nothing but a server and a number of servers interconnected through it. Cloud providers are the one who own large data centers with massive computation and storage capacities. They sell these capacities on-demand to the cloud users who can be software, service, or content providers for the users over the internet. In the recent years the major cloud providers are Google, Microsoft, and Amazon etc...

III. OBJECTIVE

The objective of the project is to evaluate the cross cloud using Balanced Partition algorithm and to obtain the data available in Google Drive and Drop Box to updates the values automatically with complete probability distribution of response time provided by scalable cloud system to the clients.

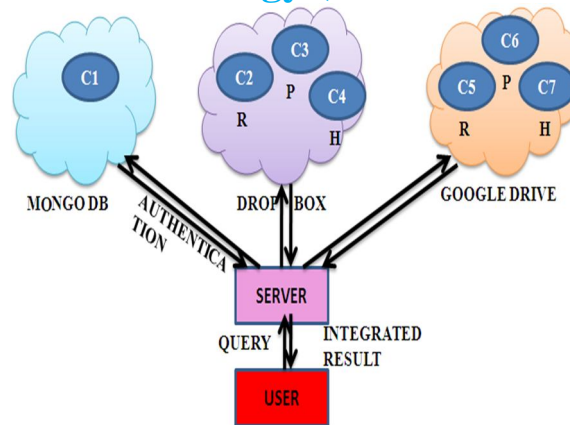
A. Existing System

From a purely technical perspective, the goals of cloud balancing are similar to those associated with traditional GSLB: ensure the availability of applications while simultaneously maximizing performance, regardless of the location or device from which users are accessing the application. Whether that access point is within an organization's data center utilizing private cloud resources or via a cloud provider, DNS requests are sent to the most appropriate location. These technical goals are met through a combination of application and network awareness and collaboration between the global application delivery solution and local load balancing solutions. By coordinating across application deployments in multiple data centers, whether in the cloud or traditionally based, organizations can, through careful monitoring of capacity and performance-related variables, achieve optimal application performance while ensuring availability.

B. Proposed System

An IaaS cloud system, in which user request are enqueue in the system queue. When a resource is available a user request is accepted and can check the details what is needed to update. And the data is stored in respected cloud (Google Drive & Drop Box). Finally the Cloud is divided into two parts where the data is applied into two parts and stored. Cross Cloud is implemented by assigning Tasks to the various Web services. Different Tasks or same can be attained by different Cloud based on its availability. We have Two Cloud Servers (Drop Box & Google drive) and one Database Storage (Mongo DB). We use Multi Access Smart Card Application using RFID card. We Deploy Ration, Passport & Hospital Applications for User Access. User Personal Authentication included User Name, Password, Primary Key & RFID Card are all stored and Verified in Mongo DB. Entire Data is Splitted and stored in Two Servers parallely. User Request is handled by the first Cloud and balance part is handled by another Cloud in all Applications.

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System Architecture for Multi Cloud Access Using RFID

IV. SYSTEM DESIGN

A. System Architecture

The overall system architecture depicts the functionalities carried out in the Application. The architecture of the online portal consists of users like administrator, data owner, and user. It depicts that files uploaded by the user are authorized and stored in database and during the retrieval of files the application authenticates before displaying the information. The code has to be given by the user to read the retrieved file.

V. SYSTEM IMPLEMENTATION

A. User Interface

User wants to create an account and then only they are allowed to access the Network. Once the User creates an account, they are to login into their account and request the Job from the Service Provider. Based on the User's request, the Service Provider will process the User requested Job and respond to them. All the User details will be stored in the Database of the Data Service Provider. By sending the request to Server Provider, the User can access the requested data if they authenticated by the Server. In this module the User has to enter the details for registration then he/she can access the database. After registration the user can login to the site. The authentication and authorization process facilitates the system to protect itself and besides it protects the whole mechanism from the unauthorized user. Here registration of user involves username, email id, password.

B. Mongo DB

MongoDB (from humongous) is a cross-platform document-oriented database. Classified as NoSQL database, MongoDB eschews the traditional table-based relational database structure making the integration of data in certain types of applications easier and faster. Released under a combination.

C. Google Drive And DropBox

Here we have the two real time cloud one is drop box and another one is Google drive, we create a swing like application for the integration of cloud both Google drive and drop box, through the application the user get the registered and login to access the real time cloud.

D. RFID Authentication And User Credentials

Client is an application which created and installed in the User's machine. The Application First Page Consist of the User registration Process. We'll create the User Login Page by RFID and Text Field password to the server. While creating username and password the RFID is stored in the database. Application, we have to design a page to authenticate the RFID to enter into the clouds.

E. Data Poisoning

We implement that user will have the ration card, hospital and passport or organization will maintain the information both private

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and public data .So employee may contain private like customer id, customer name ,salary and the loan applied and loan go and public data like email id and phone number.

VI. CONCLUSION

In a History record-based Service optimization method, named Hire Some-II based on the previous basic one of Hire Some-I, has been developed for privacy-aware cross-cloud service composition for processing big data applications. It can effectively promote cross cloud service composition in the situation where a cloud refuses to disclose all details of its service transaction records for business privacy issues in cross-cloud scenario. Our composition evaluation approach achieves two advantages. Firstly, our method significantly reduces the time complexity as only some representative history records are recruited, which is highly demanded for big data applications. Secondly, our method protects cloud privacy as a cloud is not required to unveil all of its transaction records, which accordingly protects privacy in big data. Simulation and analytical results have demonstrated the validity of our method compared to a benchmark.

VII. FUTURE ENHANCEMENT

We plan to apply our method to some specific cloud systems for processing big data applications. Besides, as the privacy preservation for big data analysis, share and mining is a challenging research issue due to increasingly larger volume of datasets in cloud, we also plan to investigate the scalability of privacy preservation in big data applications with cloud service access.

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