International Journal of Recent Engineering Research and Development (IJRERD)
Volume No. 02 – Issue No. 04, ISSN: 2455-8761
www.ijrerd.com, PP. 17-22

Use of Cloud Computing in Business entities

Sandeep Bankar, NehaPatwari, ShrutiMathur, SudhirDhekane
Assistant Professor, IT Department, Thakur College Of engineering and Technology
Mumbai (Maharashtra)

Abstract: Cloud computing is a vast area in the development of IT sector. To use MIS applications with high level infrastructure is cost effective & space consuming. To avoid this problem instead of normal or high level infrastructure we are using Cloud Computing Concept. In which will use IAAS service to gives the control of infrastructure to user.as well as instead of wasting money in buying MIS applications we can use SAAS service to handle this software's.

1) use of IAAS service to access infrastructure of cloud system
2) Use of PAAs service to provide a platform
3) Use of SAAS service to access and use MIS applications.
4) Use of DAAS to access and handle database

Keywords: Cloud computing, Hybrid cloud, Services, EC2

I. Introduction

Cloud Computing is a model for enabling ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g. storage, applications, and services) that can be rapidly provisioned and released with minimal management effort OR SERVICE PROVIDER INTERACTION[8].CLOUD COMPUTING IS A PRACTICAL APPROACH TO EXPERIENCE DIRECT COST BENEFITS. THE IDEA OF CLOUD COMPUTING IS BASED ON REUSABILITY OF IT CAPABILITIES RESOURCE SHARING THAT DRAMATICALLY SIMPLIFIES INFRASTRUCTURE PLANNING IS THE CLOUD COMPUTING. ADVANTAGES OF THIS SYSTEM ARE EASE-OF-USE & COST EFFECTIVENESS[9].Cloud computing, to put it simply, means Internet Computing. The Internet is commonly visualized as clouds; hence the term "cloud computing" for computation done through the Internet. With Cloud Computing users can access database resources via the Internet from anywhere, for as long as they need, without worrying about any maintenance or management of actual resources. Besides, databases in cloud are very dynamic and scalable.

It is a very independent platform in terms of computing. The best example of cloud computing is Google Apps where any application can be accessed using a browser and it can be deployed on thousands of computer through the Internet.

II. Literature Survey

The MIS Applications sector in India is divided into many segments in various offices with different levels. Many offices and Companies are usingMIS Applications. These necessity different requirements of MIS Applicationsresources (h/w, s/w, study material etc) for each of these level off user. Recently the govt.is giving maximum budget for the growth of Customers and educate the peoples and to increase the literacy rate by using such a MIS Applicationstool. Cloud computing is a technology binds the resources into a single domain under one roof, we believe this technology can be a prominent solution for solving MIS Applications problems in india[9].

III. Existing System

It is an important component of life because it equips us with all that is needed to make our Dreams come true. This research provides an MIS Applications platform that is a common denominator for a wide range of these definitions. Cloud computing applications provide flexibility for all the MIS Applications universities, schools and institutions. The platform services and applications in cloud
Computing may be on the institution campus. It should provide an effective infrastructure and deployment model for their dynamic demands. The benefits of cloud computing can support MIS Applications to resolve some of the common challenges, such as reduction of cost, quick
and effective communication, security, privacy, as well as ensuring flexibility and accessibility [10,11,12]. This research is organized as follows: the next section describes the background of the MIS Applications cloud computing [9].

IV. Proposed System

The MIS Applications cloud computing can focus the power of thousands of computers on one problem, allowing researchers to search, find models, make discoveries faster than ever and help build a smarter planet The organizations can also open their technology infrastructures to Hybrid and public sectors for research advancements. The efficiencies of cloud computing can help organizations keep pace with ever-growing resource requirements and energy costs [8, 10]. Researchers want instant access to highperformance computing services, without the responsibility of managing a large server and storage farm based on the cloud computing applications in MIS Applications. First, the Microsoft software and services strategy are about the power of choice a hybrid model of resources that enables the students and researcher to move to the cloud. Second, Google Apps MIS Applications in cloud computing which is available at no cost to the organizations, industries and MIS Application focused groups. Third, the Amazon Web Service has provided organizations & Industries of all sizes with an infrastructure web services platform in the MIS Applications cloud. Fourth, the IBM Cloud Academy is an application for MIS Applicationsinstitutions that are actively integrating IBM cloud computing technologies into their infrastructures for production and technical projects. Fifth, the HP Cloud System consists of servers, storage, networking, and security together with automated system and hybrid service delivery management, combining the security of the Hybrid cloud with the convenience and cost-effectiveness of the public version. It provides an ecosystem of thought leaders who can share best practices, ideas and technology around the design and use of cloud computing capabilities for MIS Applications.

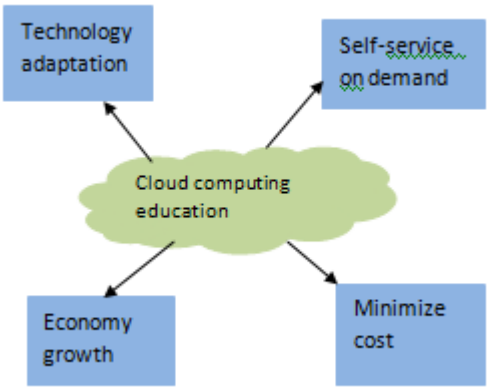

Fig no 1. Cloud Computing MIS Applications

Simplified Structure of Services for Cloud Computing MIS Applications

Cloud computing offers different services at application, platform and infrastructure levels in MIS Applications and academic areas are IAAS, SAAS,PAAS,HAAS As shown in fig.

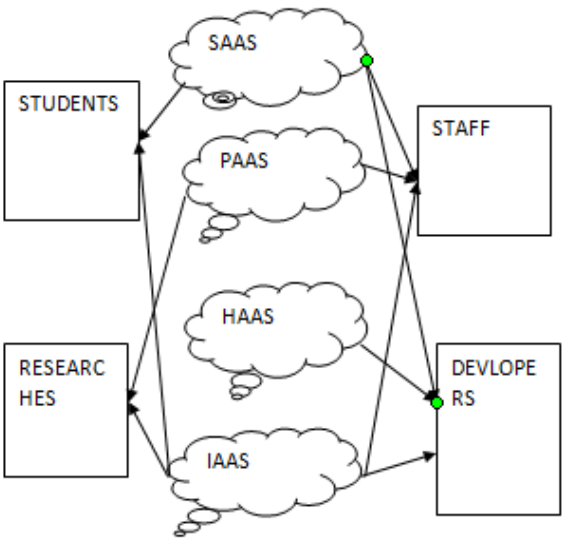

Fig no 2.Simplified structure

Servvices can be split into four main types:-

1) IAAS to minimize the cost of resources, infrastructure required in college**,** offers virtual services via this mode, including the remote delivery of a full computer infrastructure. Using services and products for MIS Applications means
scaling with ease and speed to provide the infrastructure needs of universities or schools.

2) SAAS instead of buying multiuser copies for one software we will buy single copy and share it with other nodes, hosts online services that offer a consistentexperience across multiple devices for the faculty, staff and students for example googlemarket,googlesoftwares which are available at server still we can use it on our PC without installing it.

3) PAAS instead of using or buying separate platform we can use cloud platform for research and other purpose **,** platform provides familiar
services and developments to test, deploy and support team collaboration for developers for eg. Microsoft Azure.

4) Storage as a service we can store all the institutional data at one place and by applying some algorithm we may remove the redundancy & due to which by using less storage also we can share more data

V. Cloud Computing MIS Applications Applications & Features

features of cloud computing system are

1) Improve economies of scale
2) Improve rapport and ease assignments
3) Easy access to MIS Applications resources and effective sharing

Applications:-

1) Amazon Cloud Services in MIS Applications: Amazon Web

Services represent the most extensive cloud service to date that provides resizable compute capacity in the cloud. It is designed to make web scale computing easier for developers.

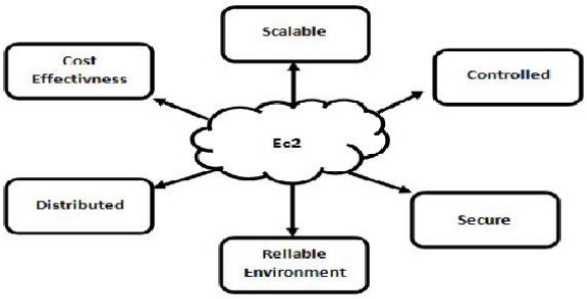

Fig. 3. Amazon EC2 Services[13]

Amazon offers many cloud services, including:_ Amazon Elastic Compute Cloud (Amazon
EC2): A web service that offers virtual machine and extra CPU cycles for the institutional organization. Figure 5 presents the services of Amazon EC2[13]

2) Microsoft MIS Applications Cloud Computing

It lets the researchers to arise workloads across the infrastructures and complement their actual IT assets with Web-based services. Microsoft cloud services give students and researchers the ability to make full use of the same Microsoft technologies in the MIS Applications institution

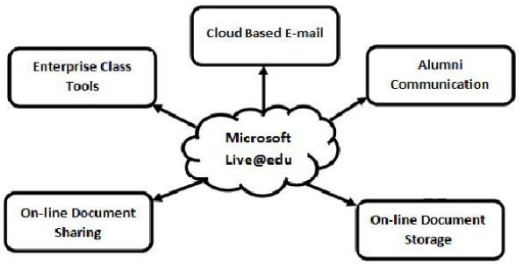

Fig. 4. Features of Microsoft Live@edu[10]

3) Google Applications

GAE provides a range of online tools and services that give secure communication and collaboration capabilities to the institutional schools and let the faculty, researchers and students choose the solutions that suit their unique needs. Table 1 shows the GAE services [9]

Service	Service Details
Support	Phone Support
Application	3rd party application
Video	Google Video
Cost	Free
Scheduling	Resource Scheduling
Storage	Enough Space
Usage	No limit

Table 1. GAE Services

4) IBM Cloud Services to MIS Applications

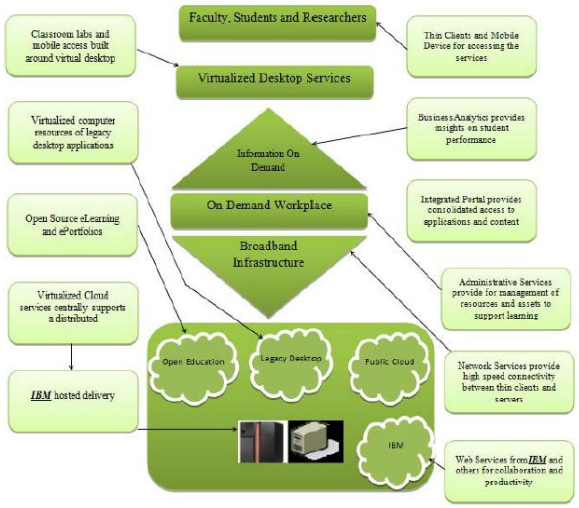

Figure 5. IBM Cloud Computing Components for MIS Applications[13]

MIS Applications institutions, universities and schools face constant demands from the students, staff, faculty and researchers for stable, quick and security rich access to labs and computing resources. However, setting up and maintaining the IT environment for this purpose can affect several challenges
such as high costs and lack of scalability to perform fluctuating demand and quality of service challenges despite budget constraints.

VI. Methodology

The existing systems specified earlier in the synopsis are all public clouds that are deployed on the Internet and are geographically located far away. These systems provide transparency to the users that access the services via the World Wide Web. Whereas, the system proposed in our project is a Hybrid cloud, which is deployed on the intranet of our college. This cloud will enable the users to access resources and applications on the cloud, built on the systems of the college itself. This cloud would be accessible only from a system on the college intranet and not via the World Wide Web.

The volumes attached to the user instance would be independent of the instance which the user is running. Each user has got his/her own volume (storage space) which can be attached to any of the instances launched by the user.

The system will constantly monitor the load on the Node Controllers and automatically perform appropriate tasks of Creation or Termination of Instances on the node.

The system starts the Node Controller if the load exceeds a certain specified threshold (Threshold is assumed at 80%) and shuts down a running Node Controller if the load is below the specified threshold for certain predetermined period of time.

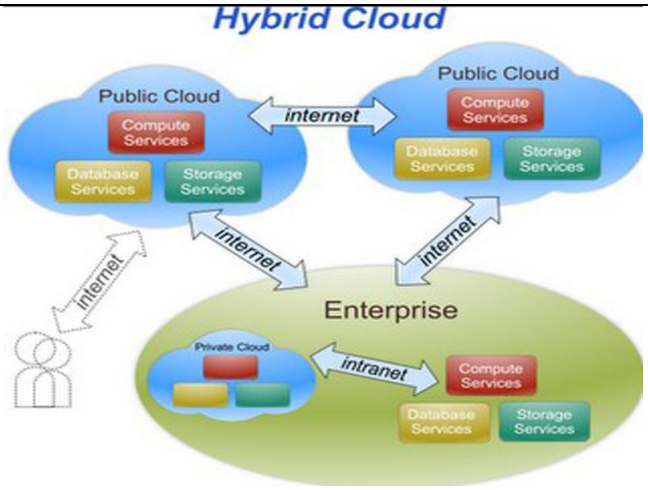

Fig no 5: Building A Hybrid Cloud

MAIN ALGORITHM

The main algorithm of the project is the implementation algorithm for configuring the cloud.

1. Configuration of Interfaces on the Cloud Controller
2. Restarting the Network Services on the Cloud Controller
3. Install the Hypervisor (KVM OR XEN)
4. Create a Virtual Hard Drive
5. Install preferably a Server Operating System on that Virtual Machine
6. Configuration of Interfaces on the Node Controller
7. Restarting the Network Services on the Node Controller 8. Update and install respective Eucalyptus Services on both the Controllers
9. Synchronize the Cloud and the Node Controllers
10. Disable the Firewalls
11. Bridge the Connectivity Ports
12. Check status for each component (both on CC and NC) 13. Register Services on the Cloud Controller
14. Download Credentials from the Localhost on the Cloud 15. Alter the Virtualized Component Specifications
16. Bundle the Images
17. Launch the Instances
18. For providing security use –SSH command
19. To run and manage the resources use hybrid Firefox.
20.Check for EKI,ERI.EMI files on hybrid Firefox

VII. CONCLUSION

Cloud computing can help communities and nations, cantransform MIS Applications. An entire world of knowledge can now be made available to teachers and students through cloud based services that can be accessed anytime, anywhere, from any device. By helping countries worldwide, lowering the cost and simplifying the delivery of MIS Applications services, cloud computing enables students across the globe to acquire the 21st-century skills and training they need to compete and succeed in the global information society. This paper representscloud computing MIS Applications and how the universities and institutions are already taking advantage of it, not only in terms of cost but also efficiency security, reliability and portability. Several general examples of cloud computing in MIS Applications such as Microsoft, Google App, IBM, Amazon and others were provided.

VIII. References

[1] Setting up of an Open Source based Hybrid Cloud, IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 3, No. 1, May 2011, Dr.G.R.Karpagam, J.Parkavi

[2] Hsu Mon Kyi, Thinn Thu Naing "An Efficient Approach For Virtual Machines Scheduling On A Hybrid Cloud Environment" University of Computer Studies, Yangon, Myanmar IEEE IC-BNMT2011

[3] Shinichiro Kibe Motoi Yamagiwa Minoru Uehara, Kujirai, Kawagoe, Saitama "Proposal for Improving Throughput in Supersaturated Cloud" 350-8585 Japan 2012 26th International Conference on Advanced Information Networking and Applications Workshops

[4] Dr.G.R.Karpagam, J.Parkavi "Setting up of an Open Source based Hybrid Cloud" IJCSI International Journal of Computer Science Issues, Vol. 8, Issue 3, No. 1, May 2011

[5] M. Lawanya Shri1 , Dr. S. Subha "An Implementation Of Elearning System In Hybrid Cloud" Vol 5 No 3 Jun-Jul 2013

[6] Pankaj Arora, Rubal Chaudhry Wadhawan Er. Satinder, Pal Ahuja "Cloud Computing Security Issues in Infrastructure as a Service" International Journal of Advanced Research in Computer Science and Software Engineering Volume 2, Issue 1, January 2012

[7] "The Hybrid Cloud Revolution: Fully Utilizing Your Existing Compute, Storage, and Networking Assets Whitepaper" 2013 Eucalyptus Systems Inc.

[8] "Development of Hybrid Cloud" has been published in International Journal of Scientific and Research Publications for December 2013, Volume 3, Issue 12 under ISSN 2250-3153 by Likhesh Kolhe,Prof. Sachin bojewar.

[9] IJIRS "Promising Pathway For Effective MIS Applications System via Cloud Computing" ISSN 2319-9275 Prof. Rupali Muthhaa,Prof. Amit Mokashi.

[10] Chengwei Yang, Shijun Liu, Lei Wu, Chengle Yang, XiangxuMeng, "The Application of CloudComputing in Textile-order Service", JDCTA, Vol. 5, No. 8, pp. 222 ~ 233, 2011.

[11] P. ShanthiBala, "INTENSIFICATION OF MIS APPLICATIONSAL CLOUD COMPUTING AND RISISOF DATA SECURITY IN PUBLIC CLOUDS", (IJCSE) International Journal on ComputerScience and Engineering Vol.02, No. 03, 2010, 741-745, 2007.

[12] P. ShanthiBala, "INTENSIFICATION OF MIS APPLICATIONSAL CLOUD COMPUTING AND RISISOF DATA SECURITY IN PUBLIC CLOUDS", (IJCSE) International Journal on ComputerScience and Engineering Vol.02, No. 032010, 741-745, 2007.

[13] EFFECTIVE WAYS CLOUD COMPUTING CANCONTRIBUTE TO MIS APPLICATIONSSUCCESSByPranay kumar1, Sumitha kommareddy2, N.Uma Rani3, Advanced Computing: An International Journal (ACIJ), Vol.4, No.4, July 2013