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A Study on Cloud Based Technology Solutions for Education

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ABSTRACT: Edification plays an important function in maintaining the economic growth of a country. Now a days the classroom education is changing and students are becoming more equipment oriented. [1]It's important that we think about the latest technologies to incorporate in the education and learning process. One of the latest technologies current now day is Cloud Based Computing. Cloud computing is applicable in education, but it implies the approval of these services by all involved in the educational process. The application of cloud computing is very broad and increasing daily.

Because of many advantages to the users, and is motivated by the increasing use of away from home of the ordinary mobile devices, smart phones, tablets and laptops and mobile. Cloud computing is the awareness which has built by years of learn in Distributed systems, grid computing etc. we can make accessible the answers to all the small comes and promise to provide quality edification.

Cloud Computing is an Internet based computing, anywhere by mutual resources, software and information access are provide to computers and devices on-demand, like the electricity network Currently, IaaS (Infrastructure as a Service), PaaS (Platform as a Service) and SaaS (Software as a Service) are used as industry model for Cloud Computing equipment solutions for edification.

Education system in India is for all time based on the marks, grades and records But in real life the practical knowledge, powerful thinking, and some familiarity is required to continue in opposition In schools and even in the colleges, the conventional education system is applied which is prove ineffective many years ago. Since of the technology, it is possible to give the revelation of the experiments, using arrangement and the computer graphics it is now very easy to imagine the things.

KEYWORDS: Cloud computing, higher education, IaaS, PaaS, SaaS...

I. INTRODUCTION

Cloud computing based is a model for enabling convenient, on require network access to a shared pool of configurable computing resources networks, servers, storage space applications, and services that can be present rapidly provisioned and released with least management effort or service source interaction.^[2] This cloud based model promotes availability and is composed of five main character three service models, and four special operation models .The usage of cloud based technology with the universities, colleges and schools for teach the training programs are gradually growing.

The need for the networks, servers, storage, applications and services are significantly increasing. Educational Institutions have started investing on the communications platform and software. Educational Institutions have need of for the computing needs keep on shifting from time to time. The student probability is to view the information in his PDA (Personal Digital Assistant) and Mobile Phones.

The character of Cloud Computing is on requiring Self-Service, Wide Network Access, Source Pooling, Rapid flexibility and deliberate Service. The cloud based technology helps ensure that students, teachers, faculty, parents, and staff have on required access to dangerous information using any device from everywhere. Both public and personal institutions can use the cloud based technology to deliver improved services, even as they work with less resources.

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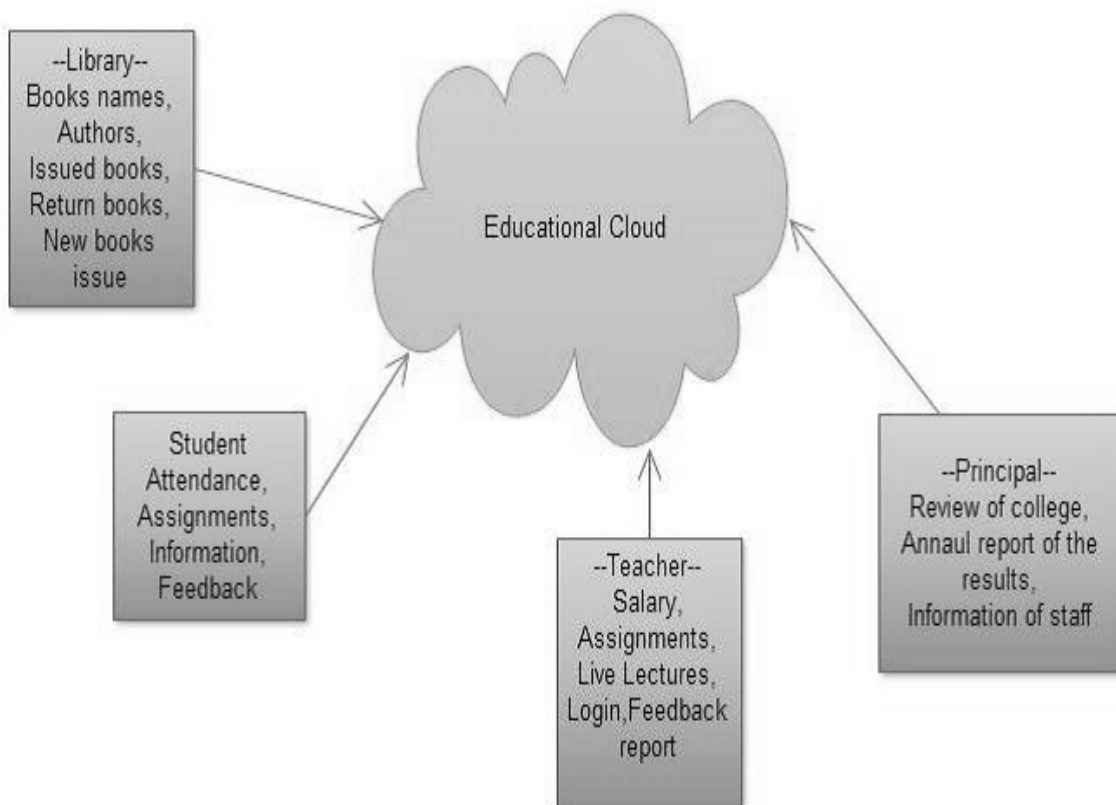
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Term "cloud" is used as a picture for the Internet although it doesn't meeting point where the hardware and software resources that are used as located. Cloud computing has many advantages but also some restrictions both arising from the accuracy that all data and applications are located someplace on the Internet

II. EDUCATION AND THE CLOUD

The far above the ground rate at which IT technology change will continue to place a large deal of pressure on organizations' budgets. [3]Continuous upgrade of software and hardware have become important things on many of those organizations' source meetings and will continue to put stress on the budgets of those institute This situation is likely to be made worse in the recent difficult economic situation following the close to fail of the world's economic systems.



EDUCATION AND THE CLOUD

III. IMPLEMENTATION OF CLOUD TECHNOLOGY

Cloud computing technology promise to provide solutions for all the most wanted problems mention above^[4] Once any of the computer system connected with internet get started then it force intended for the student, teacher or in better terminology a whole institution to the cloud. In cloud together the students and teachers have to login with their detach id and from here the first best quality that is to monitor attendance of teacher and student is potential secondly be alive and record both type of the lecture can be seen by the student. The best part of this capability is that a student studying at any school and an additional student studying at any big name school both are attending the same seminar from a greatly skilled faculty at the equal time. Thirdly entire examination process is changed and now the exams will be conduct on cloud and the results of each and every examination that is level a class test is reported directly to the concerned authority.



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IV. CLOUD COMPUTING BEING APPLIED IN EDUCATION

Several educational institutions have begun their progress to cloud computing by out sourcing their student email provision.^[5] Email is a basic, fairly regular service, can be provided easily by third parties, and is arguably not center to the educational task. Both Google and Microsoft present email services for free of charge to the educational sector in many countries. These two companies provide email as a part of better application suites which are regularly made available to students alongside email.

V. PRESENT EDUCATION SYSTEM

Most of the private educational institution has become extremely dependent on information technology to service their requirements.^[6] These services are more and more provided using Internet technologies to staff and students and accessed from web browsers. The services are accessible cheaply or freely to education, often with much advanced availability than can be provided by the educational institution.

This policy brief has analyzed some of the talented benefits and challenge of cloud computing for the educational zone but in most of the government schools and colleges in India IT plays very restricted role. Most of the work is complete manually from attendance to classroom teaching to examination system.

VI. BENEFITS OF CLOUD COMPUTING FOR INSTITUTIONS AND STUDENTS

- Personalized Learning: Cloud computing afford opportunities for greater student choice in learning.^[7] Using an Internet-connected device, students can right to use a wide array of resources and software tools that suit their education styles and interests.
- Reduced Costs: Cloud-based services can help organization reduce costs and accelerate the use of latest technologies to meet developing educational needs. Students can use office applications for free without having to buy install and maintain these applications up to date on their computers. It also provides the facility of give per use for some applications.
- Accessibility: Availability of the services is the mainly important and desired by the user use the education cloud. 24 X7 is the availability that is required by this system without failure. From wherever one can login and access the information.
- No added Infrastructure: Colleges and governments are currently free to focus on their goals that are making other research facilities available to the students and manufacture the environment worldwide in spite wasting time on worrying about the buildings, labs, teacher etc.
- Go Green: Education cloud will surely decrease the carbon footprint.
- User Friendly: This new capability is user friendly and no need to worry about the difficulty. It is easy to understand and easy to operate.

VII. APPLICATIONS OF CLOUD IN EDUCATION

Education cloud computing services represent a rising variety of useful services accessible on the internet, and the most innovative and quickly developing element of technology and education.^[8] It also promises to provide multiple services that will be very helpful to the students; faculty and staff. The task of cloud computing in university education must not be underestimate as it can give important gains in offering direct access to a wide range of special academic resources, investigate applications and educational tools.

VIII. CLOUD COMPUTING IN EDUCATION IN INDIA

Currently ICT in Indian education sectors restricted to class rooms or labs of private/government organizations^[9] As per the survey 80% of teaching in India is done from side to side traditional methods/ tools. For improving the education services in India administration has taken the serious steps towards the improvement of basic transportation. Therefore, by improved infrastructure, utilize of Cloud computing in education division has to be promoted as it offers

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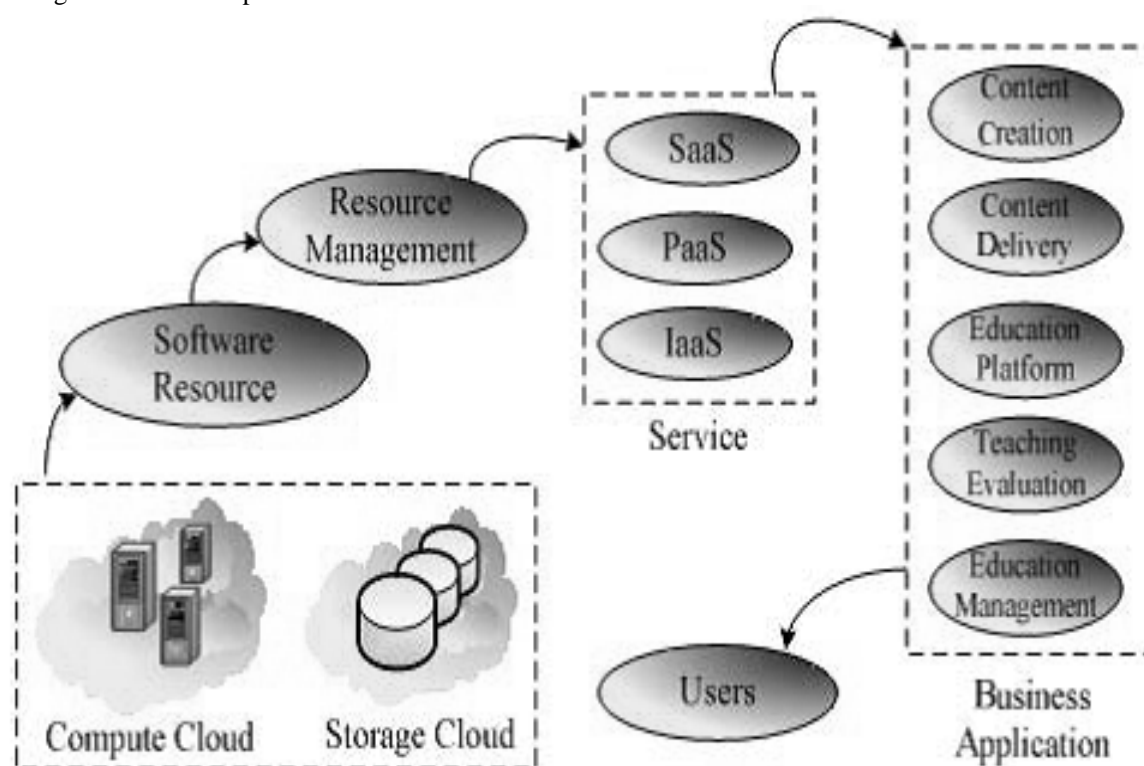
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infrastructure, software's and platforms at inferior costs. The SaaS model of cloud could enables the use of school management software's at low costs, presently these software's requires a very high license fees.

IX. CLOUD ARCHITECTURE FOR EDUCATION

Due to the higher accessibility, availability and efficiency of cloud services a lot of universities, businesses are trying to make use of these services.^[10] Today's cloud computing provider are present higher education, the chance to substitute their data and information in the 'cloud' for universities with obtainable data centers, servers and application replacing these usual campus machines.



Architecture of e-learning cloud

X. CONCLUSION

The cloud allows us to right of entry our work everywhere anytime and share it with anyone. It frees us from need an exacting machine to right to use a file or an application similar to a word processor or spreadsheet program. In the cloud education system is introduced and how it is helpful for students, faculty and the learning institute for providing quality education.

Cloud computing is an emerging computing model which promises to provide opportunity for delivering a mixture of computing services in a way that has not been well-informed before. It was demonstrated in this article how institute both small and large are previously taking advantage of which this technology is bringing, not only in terms of price but also efficiency and the environment.

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