

CLOUD COMPUTING IN EDUCATIONAL PLACES

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ABSTRACT

In order to use any advanced software in our computers, we need to upgrade our hardware. To skip this upgrade process, we have a platform called “Cloud Computing”. Using cloud storage, we can reduce large storage spaces (i.e., hard drives, primary memories, etc.). Cloud needs no large space of area to store data; instead it needs only a browser with Internet connectivity. Cloud computing enables us to access application software, which are installed in cloud server instead of installed in our node hard drive. This computing gives ease of access to any kind of software anywhere and anytime. Every educational system uses lots of computers and devices to manually keep garbage collection of any particular data and this can be reduced through this cloud computing by means of smart storage, that is, through single server on the Internet. Infrastructure of cloud computing has been constructed to accept any type of software. The conceptual structure of cloud computing is perfect for any such an environment.

Keywords: cloud computing, Internet services, virtual machines, grid computing

1. INTRODUCTION

Cloud computing development has influenced many areas such as institutions and organizations (i.e., government and nongovernment sectors). Cloud computing is the next stage in the evolution of Internet. At most 85 percent of business and government departments at present use different kind of cloud computing-based applications and they reduce infrastructure, the cost we pay for the information technology, increase the convenience, enable joint efforts, and allow institutions to have more flexibility in customizing their products for end users.

With the increasing number in receiving education, a series of new problems has arrived. While using cloud computing it serves a new solution to establish a leagued, open, and flexible-network-teaching platform and reduces the hardware input [1].

Cloud-based applications can be run on Internet browsers, so **students do not need high-end hardware configurations** but most are compatible with smart phones and many platforms (i.e., Windows, Blackberry, Android, iOS, etc.). This means that school students do not necessarily need to own an expensive desktop or laptop, instead mobile devices can access these cloud-based applications just as same as a computer does. Students also do not need to buy external hard disks as there are enough organizations (e.g., Google, that offer free cloud-based applications and storage, Google Apps for education suite comprises Google Talk, Google Calendar, email, docs, sites and videos with no cost and without advertisements) [2]. The cost of Google Apps Education Edition, however, is ₹0 per year [3].

The best ways to use Google applications for academic environments are to create a new Google Doc for subject notes and share with staff and students. Create a site for student groups with

embedded docs, calendars, forms, and gadgets. Data, documents, photos, educational videos, and everything that is stored on the cloud usually requires authentication (e.g., user id and password) so it is not easily accessible by unauthorized persons.

- Benefits of Cloud Computing
 1. Flexibility – cloud based services increase the flexibility of scaling up your cloud capacity
 2. Disaster recovery – cloud based backup helps more small and large organizations
 3. Automatic software updates – the beauty of cloud computing is that the servers of off-premise, out of sight, and out of your hair
 4. Work from anywhere – with cloud computing, if you’ve got an internet connection you can be at work
 5. Security – you can remotely wipe data from lost laptops so it does not get into the wrong hands since data are stored in the cloud
- Not moved to cloud computing yet?

Any three of the above benefits would be enough to convince many businesses to move their business into the cloud. But when you add all ten? It’s approaching no-brainer territory

2. RELATED WORKS

The impact our current trend has got from cloud storage is vast and cloud enables convenient storage for the end users. Ease of access to cloud storage has been enabled by Internet and by the way cloud and Internet share the same blood

3. PURPOSE OF RESEARCH

When there was no better place to store our important data, I faced many problems such as mentioned below and aimed to write them to others to make them notice that there is a way called cloud computing.

- **Problems of Students/Teachers**

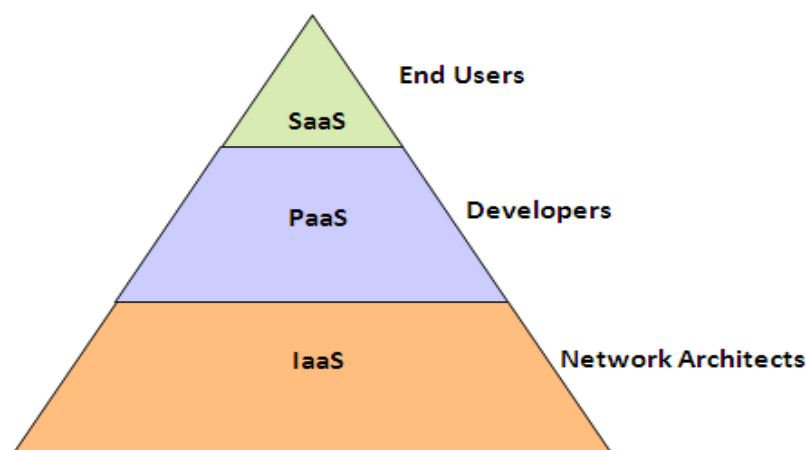
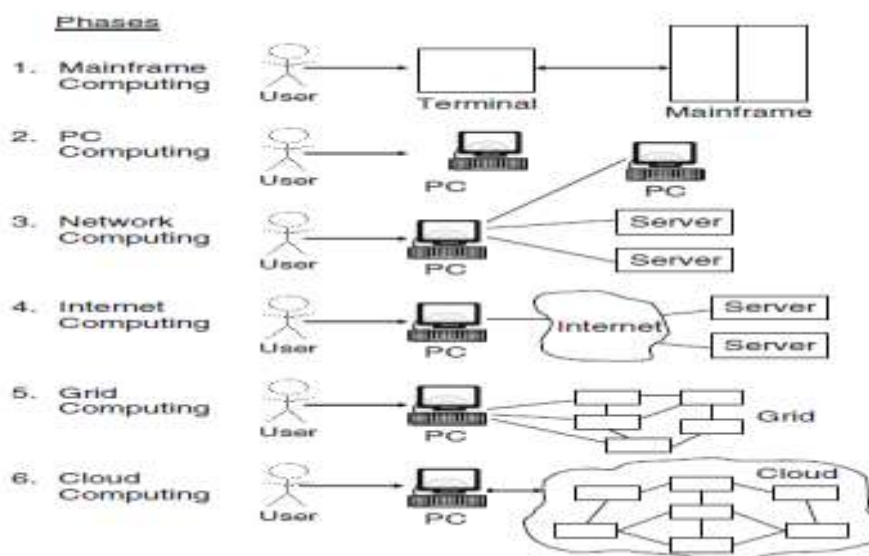
Students depend on teachers highly when coming to sharing study materials, and it is not possible when the materials are collective. But cloud computing makes this convenient for both teachers and students to share things easily from wherever they are or whenever they need. Sharing notes is bit difficult when no cloud storage. Maintaining external storage devices is difficult if the ambient is not so fair in means of suitability. Time consuming when comes the regular updates, but cloud computing does not ask you for regular updates [6]. Expensive software are needed in academic places if cloud computing has not yet influenced them as same as expensive textbooks. Reaching more, and more divers, students/teachers is difficult with no cloud computing, lack of knowledge about cloud will lead definitely to large medium of structured storage; ideal solution called cloud computing would be the source of information to solve these recurring issues.

4. CLOUD COMPUTING

A style of computing in which scalable and elastic IT-enabled capabilities is delivered as a service using Internet technologies. Cloud computing is a general term used to describe a new class of network based computing that takes place over the Internet: basically a step on from Utility Computing, a collection/group of integrated and networked hardware, software, and Internet infrastructure (called a platform), using the Internet for communication and transport provides hardware, software and networking services to clients.

5. CLOUD PLATFORMS AND SERVICES DEPLOYMENT MODELS

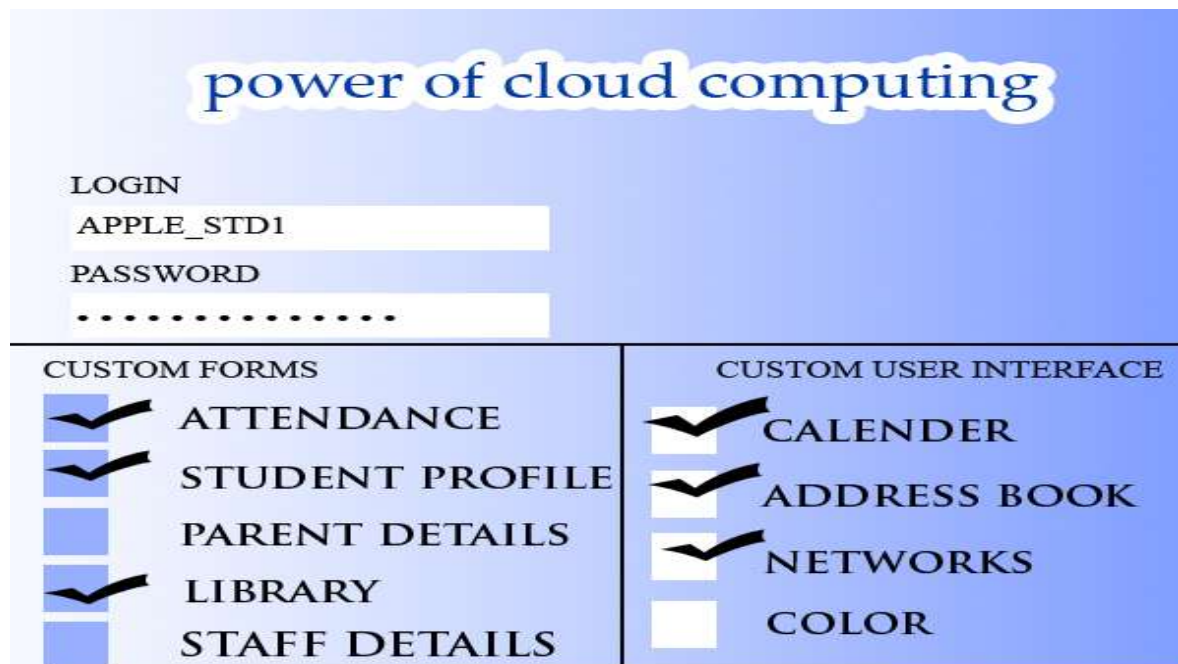
Cloud computing is a broad term that describes a broad range of services. As with other significant developments in technology, many vendors have seized the term “Cloud” and are using it for products that sit outside of the common definition.



6. CLOUD COMPUTING IN EDUCATIONAL PLACES

First thing for the academic institutions to do is to take up cloud services enabled in their premises and the same access should be shared among the authentic users so that they can obtain certain data from their place itself. School/college firstly has cloud computing services to be installed in their official systems and the same can be accessed from their door step anytime. And for students those who belong to the organizations they study with can access from their respective places when the verge of materials to be in their hands.

For example, if a school/college student is taking up a class in his/her school computer lab and is not able to copy the study materials provided to use only inside school/college to laptop/desktop that is in his/her home to study after school/college hours is not now possible. In case of the availability of cloud storage in the above-mentioned organizations, such problems faced by students can be avoided, because cloud gives us the option to access whatever stored is made available on a single click through our browsers on our devices [4].



7. WHY CLOUD COMPUTING IS SO UNIQUE EDUCATIONAL PLACES? INTERNAL CLOUD or CORPORATE CLOUD

Private cloud is a type of cloud computing that delivers similar advantages to public cloud, including scalability and self-service, but through a proprietary architecture. Unlike public clouds, which deliver services to multiple organizations, a private cloud is dedicated to a single organization.

1. Improved reliability
2. Higher privacy and security
3. More control

4. Energy and cost efficiency



8. EXISTING SYSTEM

Students run with paper materials to take back up of their study materials when there is no point of cloud and its storage. At present between staff and students, study materials not being easily shared outside the institutions. Because of lack of suitable communication medium, one (i.e., may be a school/college student) who is not able to access required things and works sometimes becomes not easily accessible. Devices are not easily portable because this is known by everyone that storage devices now we use are different in size and sensitivity. It is not possible for many to share one notebook at a time, time consuming process [5].

9. PROPOSED SYSTEM

I would like to suggest educational places to implement this cloud computing to (i) record events and share with students, (ii) improve evaluation system and database, (iii) move from paper to digital system, (iv) better connect with alumni, (v) better build placement system, (vi) organize events easily, and (vii) find industry ready students.

Through my practical experience which I got from college (i.e., Shanmuga Industries Arts and Science College, Tiruvannamalai, TN, India) I work with is a very convenient solution to the students to access their study materials not only when they are inside the college premises, but also from their homes through cloud computing service (i.e., iSMS, system to maintain attendance of students and staff).

10. CONCLUSION

Cloud computing gives solutions for all variety of problems when dealing with applications directly through Internet based solutions. What we get through cloud computing is more than we think, for example, security of data, reliability, confidentiality, portability, accessibility, and so on. Due to the smart and compact solution by this cloud, nowadays practically all comes to our hand while sitting at home. And cloud computing is best suitable for any type of environment. Reducing the large area of storage medium is the best work of this cloud computing.

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