# Learning Structure in Cloud

## (Implementing SaaS)

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Abstract- To Re manipulative the educational system to meet industrial needs better introduce cloud computing concepts in education organization. Cloud computing is one of today's most exciting technologies due to its ability to reduce costs associated with computing while escalating plasticity and scalability for computer processes. Research and Development (R&D) head of the organization will update the in order into the cloud. The completed research work of any project will uploaded into cloud. Where the students from different colleges can access the information and think better than that work. Students can access all the information required to their disciplines like engineering students can get there information and medical students can get their information. At In this paper, main attention is given to possible realization of Cloud computing equipment in the educational system, especially for the students in different disciplines can access required information to develop their knowledge.

*Keywords*- cloud computing, Education system, Research and Development (R&D), Information.

#### I .INTRODUCTION

Computers play a outstanding role in the educational sector, as well as in business and industry sectors. The availability of high-end software rarely matches students need in a typical institution. Industries expect institutions to turn out well-educated and trained students, so that their own efforts in training can be reduced. In India, the quality of education is not homogeneously distributed due to the changes in economical conditions. With the help of cloud computing the required information for students in

different disciplines will place in cloud. The education institutes can access to the cloud for students to get required information for their academic year at very low cost. All the information that is mandatory by the students is placed in cloud

#### II.CLOUD COMPUTING

Cloud computing gets its name as a allegory for the Internet. Typically, the Internet is represent in network diagrams as a cloud. Cloud computing promises to cut outfitted and capital costs and, more importantly, Cloud technology provides calculation, software, data access, and storage services that do not require end-user knowledge of the physical location and configuration of the system that delivers the services. Cloud computing distributed is dispensation, parallel processing and the development of web computing, or commercial implementations of these concepts of computer science. In the cloud computing model is the basic structure of which, the core part is composed of more than one computer server "cloud." It gathers all the resources together to form large data storage and processing center. Let IT department focus on strategic projects instead of keeping the datacenter running. Cloud compute provides the most reliable and secure data storage center. Users do not have to worry about data hammering, virus attack and other problems. The "cloud" manage information by a professional team. Besides, strict rights administration strategy can help to share data.

#### **III.TYPES OF CLOUD COMPUTING**

- A. Public cloud
- B. Private cloud
- C. Hybrid cloud



Fig: 1 Types of cloud

#### A. Public cloud

Public cloud is cloud service provided by a third party (vendor). They exist beyond the company firewall, and they are fully hosted and managed by the cloud provider. Public clouds attempt to provide consumers with hassle-free IT elements. Whether it is software, application infrastructure, or physical infrastructure, the cloud provider takes on the responsibilities of installation, administration, provisioning, and maintenance. Customers are only electric for the resources they use, so under-utilization is eliminated. . Another thing to keep in mind is that since consumers have little control over the infrastructure, processes requiring tight security and authoritarian compliance are not always a good fit for public clouds.

#### B. Private Cloud

Private cloud (also called internal cloud or corporative cloud) provides service within the enterprise. These clouds exist within the company firewall and they are managed by the enterprise. Private clouds offer many of the same benefits that public clouds do with one major difference: the enterprise is in lay the blame on of setting up and maintaining this cloud. The trouble and cost of establishing an internal cloud can sometimes be prohibitive, and the cost of repetitive operation of the cloud might exceed the cost of using a public cloud.

C. Hybrid cloud

Hybrid cloud is a combination of public and private clouds. These clouds would typically be created by the enterprise, and management responsibilities would be split between the enterprise and public cloud provider. The hybrid loud provides services that are in both the public and private space. Services from unlike sources must be obtained and provisioned as if they originated from a single location, and interactions between private and public components can make the implementation even more complicated. Since this is a relatively new architectural concept in cloud computing, best practice and tools about this pattern continue to emerge, and there could be a general lack of enthusiasm to adopt this model until more is known.

#### **IV.TYPES OF CLOUD SERVICES**

In cloud skill the information is shared from clients to the organization through the virtual data centers. This virtual data centers has all the vital information.

The cloud technology model includes:

- A. SaaS (Software as a service)
  - B. PaaS (Platform as a service)
- C. IaaS (Infrastructure as a service).

### Cloud Services



Fig: 2 cloud services

A. Software as a Service (SaaS)

SaaS is an application hosted on a remote server and accessed through the internet. In Saas an application is hosted by a service provider and then accessed via World Wide Web by a client. SaaS offerings feature the biggest cost saving over installed software by eliminating the need for enterprises to install and maintain hardware, pay labor cost, and keep up the application.

#### B. Platform as a Service (PaaS)

To follows the heels of SaaS, platform as a service (PaaS) is another application release model. PaaS supplies all the resources required to build applications and services finally from the internet without have to download or install software. Paas services include function design development, testing, deployment, and hosting. It provides infrastructure on which software developers can build new applications or extend existing ones without the cost and complexity of buying and managing the underlying hardware and software and provisioning hosting capabilities.

PaaS in the main offers some support to help the creation of user interfaces, and is normally based on HTML or JavaScript.

#### C. Interface as a Service (IaaS)

This offers remote delivery of an entire computer infrastructure. Managed hosting and development environments are the services included in IaaS. The user can buy the infrastructure according to the requirements at any particular point of time instead of buying the infrastructure that might not be used for months. IaaS operates on a "Pay as you go" model ensure that the users pay for only what they are using.

#### V. METHODOLOGY

Now a day's in India education system is developing very fast. To improve education system introduce cloud computing concepts into it. In India many education institutes didn't have their own Research and Development (R&D) department. That why students in small institutes are not fetching with new technologies. By shear the information with the help of cloud students in different colleges will also fetch with new

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developing areas. The information in the cloud in updated only by the R&D department heads .students of any discipline(any department) any collage can access the information .but the institute of the particular student should be register in cloud to get information for their students. Doing like these all the information for any student of any discipline in India will available in one place .students can share the information and develop themselves by using cloud computing concepts. These spirit develop India very fast.

#### VI. IMPLEMENTATION

#### A. Existing System:

In India the research work information between colleges is not shared. That why students in different colleges are not getting into new research area (or) not into new technologies. Students in small colleges required information at very low cost and student also not receiving new developing research areas.

#### B. Proposed system:

Due the changes in economical conditions and changes in India the educational system is not uniformly distributed in various areas. so to overcome this situation and to improve the educational standards to meet the industry quality we are making use of cloud computing a fastely developing technology through which one can provide better facilities and required in order for the students at very low price. The basic requirements for a student to gain access to the data are he should be a authorized student of a institution the subscribed for the cloud facilities. When each and every institution in the country subscribed for these cloud services every student in the country can gain access to equal data and it will be accommodating in reducing the price that is require for a student to subscribe to these services will be greatly reduced. And can provide more efficient data for the students.



Fig: 3 information sharing into cloud by colleges in India

First the education institutes will register in to the cloud. Students of the institutes will get a login name and password for cloud account to get the required information. Students can only read the information in the cloud they cannot change the information in cloud .if any student want to upload any new ideas of him/her will be uploaded by the R&D head of institute (or) head of the department. Doing like these students can share their new idea with others and which will be of assistance to do new project in developing areas.

#### VII.CONCLUSION

In this paper we introduced a cloud computing technology in education system. It is widely used for students and this technology introduces an easy way to get required information, if any new technology occurred. Here, we utilize the existing development of cloud security protocols for authenticating the information. By using cloud computing will reduce the time required for student to search required information about their studies. Cloud computing will create a major shock on education system, and contribute to an overall improvement in its quality. To conclude that if the encrypted information of the students is uploaded to the cloud, only authenticated receivers (students) can decrypt it there by we can enhance the security to the in order.

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