

CLOUD COMPUTING IN LIBRARY SERVICE

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Abstract *Change is the dominant factor of human life. There is immense importance to change in present period and it is the cause of human progress. Now a day's recent technology adapted to every place, The Libraries is also no exception to this, Number of recent technology available in ICT environment, in this paper deal with cloud computing technology and how it's used for libraries. Cloud computing is offering utility oriented IT services to users worldwide. The operational cost is reduced When we use green cloud computing. This paper describes how to use efficient management of cloud computing environments for Libraries.*

Keyword: *Cloud Computing, Recent Trends in Libraries*

INTRODUCTION

Now a day's library is not only confined to the transaction of books but it has become a centre of information. Therefore, it is very necessary to apply the new trends in the syllabi of Library and Information Science. Hence the change is new concepts are coming forward to this cloud computing. In the age of explosion of information science, the task of fulfilling the reader's expectations totally depend upon the skillful librarian. To prepare a skilled librarian in the library administration syllabus in it is very important.

Definition of Cloud Computing

Gartner defines cloud computing as a style of computing where massively scalable IT-related capabilities are provided "as a service" using Internet technologies to multiple external customers.

Leonard Kleinrocks (1969) defines "As of now, computer networks are still in their infancy, but as they grow up and become sophisticated, we will probably see the spread of „computer utilities which, like present electric and telephone utilities, will service individual homes and offices across the country.”

TYPES OF CLOUD COMPUTING

Cloud computing is typically classified in two ways:

1. Location of the cloud computing
2. Classification based upon service provided

Location of the Cloud

Cloud computing is typically classified in three ways: Public Cloud, Private Cloud and Hybrid Cloud.

Public Cloud

In Public cloud the computing infrastructure is hosted by the cloud vendor at the vendor's premises. The customer has no visibility and control over where the computing infrastructure is hosted. The computing infrastructure is shared between any organizations.

Private Cloud

The computing infrastructure is dedicated to a particular organization and not shared with other organizations. Some experts consider that private clouds are not real examples of cloud computing. Private clouds are more expensive and more secure when compared to public clouds.

Private clouds are of two types: On-premise private clouds and externally hosted private clouds. Externally hosted private clouds are also exclusively used by one organization, but are hosted by a third party specializing in cloud infrastructure. Externally hosted private clouds are cheaper than On-premise private clouds.

Hybrid Cloud

Organizations may host critical applications on private clouds and applications with relatively less security concerns on the public cloud. The usage of both private and public clouds together is called hybrid cloud. A related term is Cloud Bursting. In Cloud bursting organization use their own computing infrastructure for normal usage, but access the cloud using services like Sales force cloud computing for high/peak load requirements.

Community Cloud

Community cloud Involves sharing of computing

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infrastructure in between organizations of the same community. For example: the state of California.

Classification Based Upon Service Provided

Clouds are classified as below:

- Infrastructure as a service (IaaS)
- Platform as a Service (PaaS)
- Software as a service (SaaS)

WHY CLOUD COMPUTING IN LIBRARIES

Dr. S. Ranganathan said in the fourth law is save the time of reader by providing information anytime anywhere. Cloud Computing fulfills the 4th Law.

- User gets 24*7 Internet access in cloud computing.
- Distribute the library services with lower cost.

In example: Ophelia project

CLOUD COMPUTING AND LIBRARIES

In this technological era, libraries are improved constantly by adopting many new IT technologies. The theories of conventional libraries have been changed now a day. Libraries to provide better services to the user community with help of cloud Technologies for online databases, large union catalogues. The library community can further use the cloud computing to strengthen library service on the worldwide network. Some examples of Cloud Libraries:

- OCLC
- Library of Congress (LC)
- Columbia Public Library
- Exlibris
- Polaris
- Scribd
- Discovery Service
- Google Docs / Google Scholar
- World cat
- Encore

Cloud Service for Libraries

Cloud Services are Shared Service, under virtualized Management accessible over the internet. There are the following cloud services for libraries.

- **Data:** Bibliography, Multimedia content, Administration, User License, content Access and Repository.
- **Content:** Collections, Subscriptions, Print Publishing.
- **Services:** Library as Place to exploring knowledge and knowledge Creation and developments for Research activities.
- **Experience:** Research, Study Support, Peer based Collaboration and IT Exploration.
- **Resources Sharing in Libraries:** Drop Box, Google Docs, Ever note.
- **Web Conferencing Software:** Skype, Adobe Connect.
- **Web Publishing:** Word Press, Google Sites.
- **Marketing, branding and Communication:** Face book, Twitter, YouTube, and Mobile Social Apps.

APPLICATIONS OF CLOUD TECHNOLOGIES IN LIBRARIES

Library can build own computer software with cloud technology and host their own websites with the help of cloud technologies example: The District of Columbia Public Library. Libraries are applying cloud computing technologies on the library administrative services such as multimedia library, Resources Sharing and Networking.

Cloud technology uses in library to store the library documents by using the unique identification account. It collects responses through online forms, Meeting instruction and arrangement can see Google Calendar. Library Website, library blog and catalogue statistics can see in cloud technology.

FREE CLOUD COMPUTING APPLICATIONS

Some of the Cloud computing Software is freely available to be use. Here some cloud application given below:

1. Photo editing software
2. Online file storage
3. Digital Video
4. Creating your image album
5. Anti-virus applications on the web
6. Editing documents, spreadsheets and power points
7. Finding your way on a map
8. Miscellaneous applications

CONCLUSIONS

Using the Cloud computing services in the library will be flexible, user friendly, cost reduction, quick service, time saving, and no maintenance fee for hardware and software etc. This paper reveals how to use efficient management of cloud computing environments for Libraries. The techniques and methods of cloud computing applied in digital libraries with effective manner.

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