Open Source Software Vis-à-Vis Cloud Computing: Healthy Requirement for Social Development: A Brief Case Study

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ABSTRACT

Cloud Computing is one of the important computing platform in today's age which is responsible for virtualization of several Information Technology product which including hardware, software, application, packages, utilities and operating systems. The developments of Information Technology rejuvenate by the application of Cloud Computing application and promotion. Practically Cloud Computing is a consortium based computing service, in which most of the cases, a service provider build all the facilities and provides services of software, hardware, and others to the remote based organization and institutions. This paper is briefly discuses about the Open Source Software dedicated to cloud platform creation and promotion in very simple manner.

Keywords: Cloud computing, information technology, information services, open source, software, systems, IT application, information centers

The concept of Service Science is increasing day by day and Information Technology sector is also moving towards much more advance services and facilities. Open Source System is actually an important example of Service Science [04, 09]. In simple sense, Open Source Software is comes with all products and software details to the user and consumer and accessible to every one and most of the cases free or very much nominal charge.

In other words, the source, coding and method or style of development of a particular computer programme or software is mainly fall under the open source software category. This is based on open standards and in market so many software, database, networking and multimedia applications are available which are open source and service based. In Cloud Computing arena, huge opportunities are there and including future possibilities [12, 18].

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Objective

The main aim and objective of this paper is includes but not limited to as follows:

- To know basic about Cloud Computing; including its basic feature as well as characteristics;

- To know about the Cloud Computing and its need and importance is very brief manner;

- To learn about the Cloud Computing service with open source platform as well as its need in simple manner;

- To know about features, facilities and importance of some open source software dedicated to virtualized platform creation;

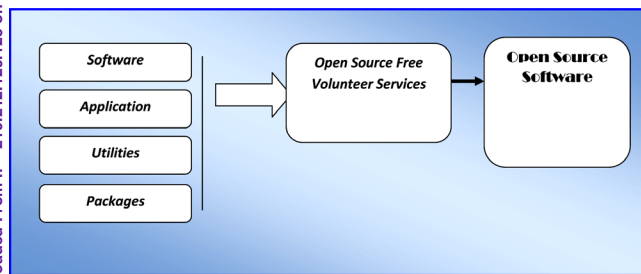- To learn about the main challenges and measure to offer open source cloud computing services in brief manner.

Fig. 1: Showing application zone of Open Source System and software

Open Source and Cloud Computing: An Overview

Cloud Computing is actually a platform which is mainly needed for virtualization of IT product which is including hardware, software, application and packages. Cloud Computing is mainly comes with service providers which are facilitate so many hardware, application and software by the internet and similar platform. In most of the cases, it is comes with Public Cloud, Private Cloud and Combinational Platform i.e. Hybrid Cloud. Hence each has some advantage and disadvantages too [14, 19, 23]. Public cloud mainly provides by the

Third party and called as Data Centre; depending upon Pay and need, such services are offered to the organization. In Private Cloud, organizations separately need to build all the facilities in-house manner. Hence it is costly and tough to manage, but for much more security, many organizations use such platform. In some cases Public and depending upon need Private platform are used. Hence software and application with free and open source platform really important to build Private Cloud easily in any kind of institutions; regardless of big or small. Such system is also cost effective; hence many NGO and IT companies are offering such facilities freely to many users [24].
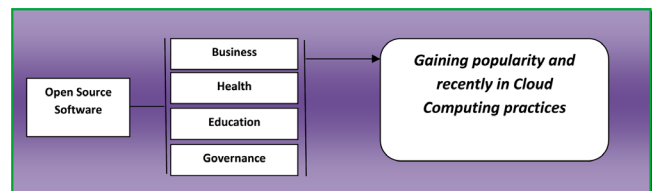

Fig. 2: Showing application and domain of cloud based Open source software

Popular and available software, systems and application of open source cloud platform

Due to wider benefit of Cloud Computing services, many NGO and IT companies are launching free, open source application which support and promote cloud based services to any one and instead of Public *Cloud [which are costly and need time to pay and management]* or much costly Private Cloud. According to a study majority of MNC and companies are interested to use Open source cloud platform and the percentage is 41% and around 30% planning to use close based VMware services; which around 41% planning of both open source and VMware based services *[According to right scale, Inc].* Cloud Computing is mainly comes with the operating system and in market some open standard based operating system are emerged which are web based.

GLIDE is actually such type of open source platform in which simple registration and accessibility is possible and it is basically consist with virtual interface with desktop nature and computer with so many value added services such as:

Some Important Service Providers of GLIDE
Integrated Office Suite
Media Player
Web Mail
Address Note System
Search System
Blogging Services

Fig. 3: Showing application zone of Open Source System and software

Even it is free from spam email, advertisement, banner and even comes with wider storage and useful of up-to six in house client at a time and maximum storage capacity of 250 GB and free from bombardment of Pop ups; hence, useful in many organization and institutions.

KOHIVE is another Cloud Computing platform available Open Source manner and create collaborative workshop. It is available with Kohive.com URL with online desktop. It is deals with the option like Message, Book Mark, Strikes, Tasks, Notepad, Chartroom, setting, File Cabinet and Feedback and so on. In 'HIVE' feature, different people can communicate each other and share content, audio, video and text. It comes with simple search platform and even most advance App Platform. In KOHIVE, we can use task, image galleries, file and video directories and very good Usability Engineering based interface. It is also comes with the attachment or embedded photos from Flckr, video from Social Site such as YouTube [24, 29].

As far as *ZIMDESK* is concerned, it is also provide a virtual CPU environment and combines with desktop, operating system. It is available in some platform i.e. business, Government and education. It is easy and online available with simple registration process, here one client may also update their account for more advance services with Payment option. In generally it comes with unlimited work space, numerous group and invitation and sophisticated 12B bit SSL security and up to 2 GB personal work space. It is easily allow uploading, reloading, management of audio, video file, Wikis, work related blog and wonderful image gallery

depending upon need. Availability and inbuilt word processor and spreadsheet is another feature of this Cloud Computing platform [21, 28].
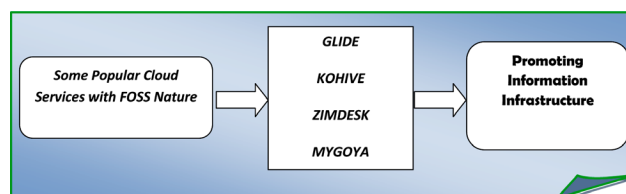

Fig. 4: Showing some FOSS for developing Information System more properly

MYGOYA is another Cloud Computing based operating system which has no boundaries on location or geographical space. In conventional computing we need to store and upload so many applications but in MYGOYA so many services are comes free of cost and with beta version and hence Data can be save online manner.

Free Open Source software is most important and valuable name in the field of Cloud Computing as most of the organization are moving towards cost effective IT services. Information Centre are today using so many tools and electronic gadget to delivery up to date service and thus Cloud Computing in open source and free platform will be best and most modern choice [21, 29].

Findings:

◆ Among so many Cloud based operating systems, GLIDE, MYGOYA, KOHIVE, ZIMDESK, CLOUDO treated as most modern and up to date;

◆ Many cloud platform is comes with huge storage capacity from 30 GB to 250 GB;

◆ Internet is the most important and valuable tool and requirement for up to date computer and IT services;

◆ Proper funding, planning is very much essential for value added service [11, 14].

Suggestion:

◆ With the help of Cloud Computing libraries and

information centre may grow up many ways and will provide so many value added services;

♦ Information and knowledge management become easy with the help of cloud based information services;

♦ Still people and organizations are not aware about the Cloud Computing and particularly open source system; hence proper awareness may helpful to promote information services at pr international standards [17, 19].
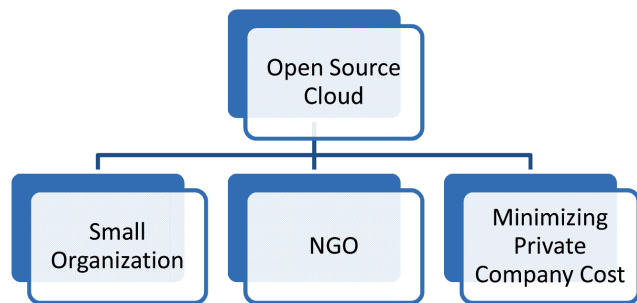
Fig. 5: Showing application of FOSS based Cloud software and their applications

Conclusion

Cloud Computing is comes with so many service platform and out of such Infrastructure-as-a-Service, Software-as-a-Service are treated as important and valuable [14, 19]. Today so many software and packages are available with such platform. In conventional system, information centric running independent systems collaboration between information foundations is actually difficult and cost effective, many ways hence Cloud Computing no doubt an important tool for offering such services.

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