

LOUD PLATFORM AND THE VIRTUALISED WORLD: TAKE A LOOK

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ABSTRACT

Cloud Computing (CC) is actually an Electronics or kind of digital grid which is an important name for virtualization. The virtualization is includes software, hardware, IT Recourses, and IT Infrastructure. Fundamentally, in other words, is allows possibilities of active technological solution, sharing of resources, software and other electronics gadgets with out their physical movement. Practically cloud computing allows their physical movement. Practically Cloud Computing allows people to do things they want to do on an infrastructure for each and every organization. It is actually a service which provides by some centralized IT infrastructure to its client. It is actually considered as next big IT revolution after Internet Technology, this paper is talks about Cloud Computing (CC) and its basics, its origin and differences from Grid Computing. Paper also mentions the IT Infrastructure requirement for Cloud Computing (CC).

Keywords : Cloud Computing, Computing, IT Infrastructure, Virtualization, Information sharing, technological sharing, technological trend, advance computing, Information Science and Technology

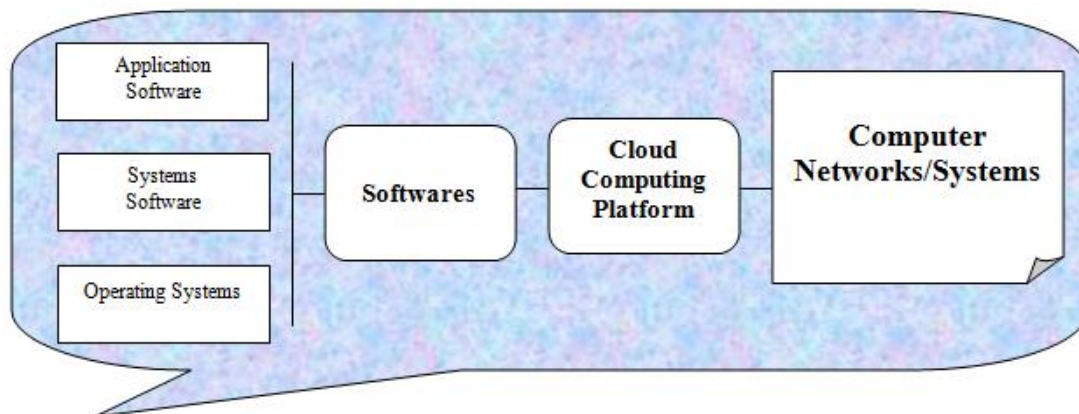


Fig: 1 Depicted the way of virtualization

INTRODUCTION

Cloud Computing (CC) today has come out as one of the important gift of Information Technology. This is also treated as an important buzzword. Cloud Computing (CC) can customise and deliver a new type of environment basing on IT for the common users (i.e. IT user). Practically, Cloud Computing (CC) is responsible for creating a wonderful era for

virtualization. Cloud Computing (CC) and its services fully depends on internet and network technology. Cloud Computing (CC) is actually provides and maximise facilities efficiency and obviously fulfils minimum input and maximum strategy. Cloud Computing (CC) is more clearly is a set of hardware, software, network, storage and interface that combined to deliver aspects of computing as a service. Cloud Computing (CC) is an important tool for IT Services development. Cloud Computing (CC) is important for overall information and technological infrastructure. Practically organizations are now start to use Grid and Virtualization technologies to mlesh ideal computing capacity to accessible virtual business process and to optimise and improve resiliency of their IT Infrastructure. Cloud Computing is adopting almost all type of Big Organization and industries [10,12].

OBJECTIVE

The main aim and objective of this study is includes:-

- To learn basic about Cloud Computing (CC) and its characteristics;
- To know advantages and role of Cloud Computing (CC);
- To learn the physical and logical infrastructure required for Cloud Computing (CC);
- To find out the stakeholder of Cloud Computing (CC) and virtualization;
- To know the challenges, opportunities in developing countries;
- To learn about cloud based information infrastructure and similar activities.

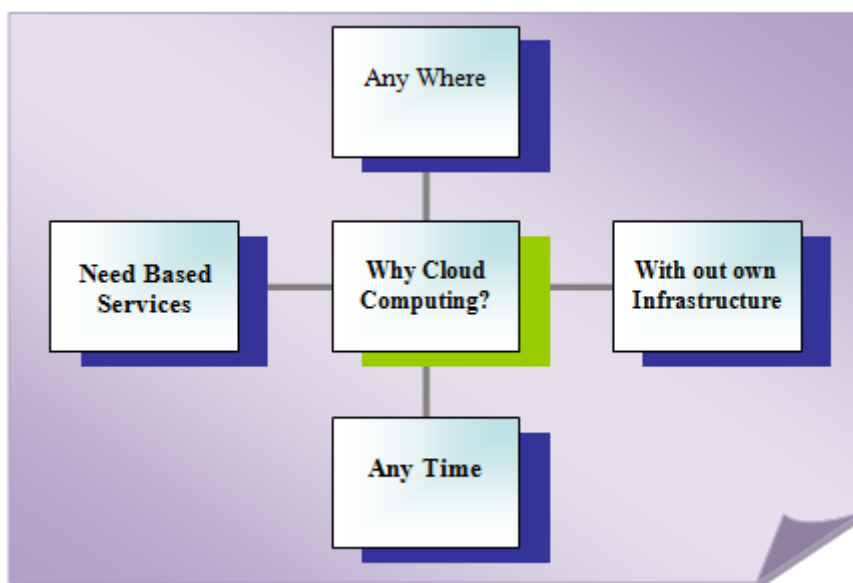


Fig: 2. Showing some important benefits of Cloud Computing at a glance

Cloud Computing (CC) and origin

Cloud Computing (CC) the term may look like new but actually the concept of cloud computing not fully new. Virtually the concept of Cloud Computing (CC) may trace its root to the Grid Computing systems which allows rapid provision for resources. In many cases Cloud Computing (CC) may involve with Grid Computing benefit or features; though

depending upon user and types, Cloud Computing (CC) and Grid Computing integrated services may avail a single client. Actually several problems of Grid Computing was responsible for the origin of Cloud Computing (CC). In Grid Computing several components need to be run at a time. If one fails them then the whole system may be damaged; thus Cloud Computing (CC) is the based alternative over the solution with the advent of internet, computing cost, geographical boundaries and networks [11]. Thus the distributed problem may solve. Cloud Computing (CC) features when internet with Grid Computing, then the services are developed generally and provide several facilities such as provide logical views of data with out knowing the actual storing place of data. Cloud Computing (CC) also allows controls, configures and remove component and services on a Grids which may based on automated or physical methods. Thus, Grid Computing may gain higher metering, billing, as well as software licensing when it upgraded to cloud computing. More over the advance authenticated system authorization and integrity provides the faster evolution of cloud computing to the industries and private organization and even government houses [12].

Cloud Computing:-The virtualized content and knowledge:-

There are several reason for which Cloud Computing (CC). It is reduces IT cost and complexities, many ways. Cloud Computing (CC) initially treated as services for the industry, MNC's and other big organization. However, it is important to not that, several services we are adopting are actually based on Cloud Computing (CC) or Cloud Architecture; these services are social networking site, Retail Informatics, Online photo sharing, Music/Video download and sharing, banking through mobile phones and so on[13].

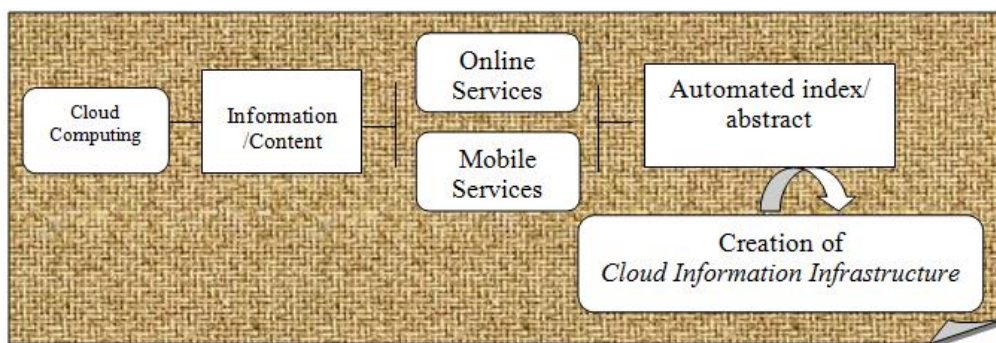


Fig: 3. Showing the way of building Virtualised Information World

Practically Cloud Computing (CC) is actually treated as super scalable, self service delivery model which helps to access processing, storage, networking as well as Applied Science over the Broadband based internet. Cloud Computing reduces capital expenditure and other operational cost, it provides general services and new services with the help of internet services, cloud computing allow the independent payment model where one user may avail only their respective service or services by demand. This is called as 'Pay-for-what-you-use' platform. Thus, Cloud Computing (CC) provides several opportunities such as:-

- Massive and scalable IT infrastructure at any where and any time;
- Allows dynamic allocation, scaling, movement of applications;
- From the concerned organizational perspective, no need to install hardware or software;

- It allows operating systems and independent application architecture;
- Hassle free engagement and maintenances of data and recourses is also a good reason for Cloud Computing;
- Creating a sustainable competitive differentiation;
- It allows and increase ability it quickly delivery new services to capitalise on opportunities while containing costs and managing risk;
- Allows virtual collaboration to other organisation to avail the IT Infrastructure of such organization of needed.

Apart from technology transfer and IT, Information Transfer also an important role and benefit of Cloud Computing (CC); such as:-

- Provide and allow efficient Information Transfer Cycle in between Information Networks and similar foundation;
- Save money in terms of Information Technology equipment as well as software;
- For less time, in terms of information and infrastructure engagement;
- It allows hassle free technology transfer and easy transfer of software and even technologies through online media;
- Better in house communication between information systems and networking, documentation centre and so on;
- It is helps in Digital Archive and Museums for their data digitalization and data delivery;
- Digital repositories with thousands of formal information pack or handbook or similar data file [08,12].

Cloud Computing (CC) and Infrastructure:-

Cloud Computing (CC) needs several infrastructure and requirement such as:-

- Cloud Computing (CC) needs solid internet based backup; particularly sophisticated broadband services; which should be speedy and powerful;
- Cloud Computing (CC) need a connected IT Infrastructure; which should be reliable and robust in terms of security[22];
- Cloud Computing (CC) need a reliable and believed organization which should support a healthy IT Infrastructure to its client;
- The Cloud Computing (CC) service provider should also provide the Pay-as-you-go services; by which one client may choose only their required service/s based on need;
- For Governmental organization, Finance and Defence department should allows Hybrid Computing for better secrecy;
- Infrastructure storage and planning is also an important task of cloud service provider;

- A proven service management systems embedded with cloud services to provide visibility, control and atomization across IT and business services;
- Proper cloud relationship, return or investigation assessment by workload;
- There should be a Governance and regulatory compliance for all type of client and need based services;
- Integration and interoperability is most important aspects [05,08,12].

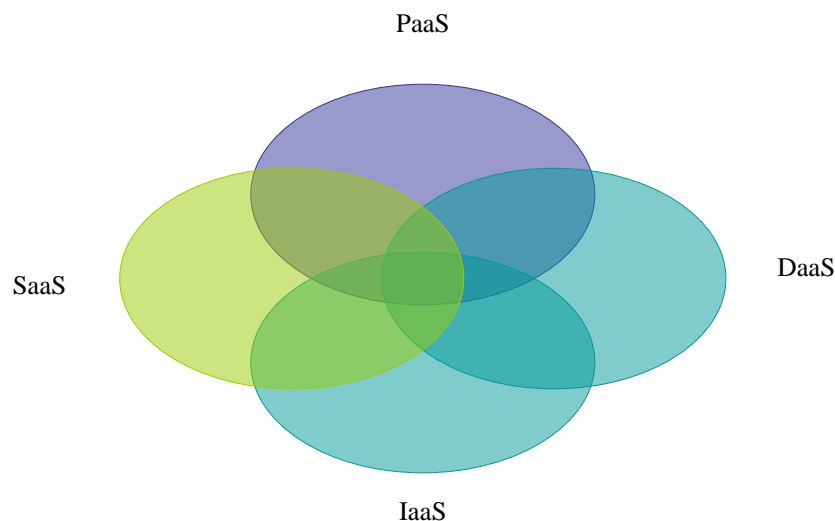


Fig: 4. Depicted main platform of Cloud Computing- PaaS (Platform-as-Service), SaaS (Software as-a service), IaaS (Infrastructure as Services, DaaS (Desktop-as-a Services)

FINDINGS

- Cloud Computing (CC) is big IT venture after internet and Cloud Computing (CC);
- Apart from virtualization, robust security, need based services, no-need of hardware/software are the key for Cloud Computing (CC);
- Cloud Computing (CC) and its awareness about benefit is unknown among small organization and institutions;
- PaaS (Platform-as-Service), SaaS (Software as-a service), IaaS (Infrastructure as a Services, DaaS (Desktop-as-a Services) are the main platform of Cloud Computing (CC).

SUGGESTION

- There should be proper Cloud Computing (CC) awareness, governmental grant and assistance;
- Information foundation need to interact with CC tools and techniques;
- It is better to select Cloud Service provider based on their reliability and secrecy;

- Government organization may choose hybrid cloud computing platform for need and value based work.

CONCLUSION

Cloud Computing is actually provides new and creative way of IT service delivery. Though still CC services is tough enough for developing countries due to less availability of Cloud Service provider; but a proper step and plan may solve the whole systems good for healthy sophisticated virtualization. Apart from private houses, Government houses need to use this service for the advancement in many sector and domain.

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